



**FINAL
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT
SECTION 4(f) EVALUATION
PERRIS VALLEY LINE
RIVERSIDE COUNTY, CALIFORNIA**

VOLUME 1 OF 2

**PREPARED FOR:
FEDERAL TRANSIT ADMINISTRATION
AND
RIVERSIDE COUNTY TRANSPORTATION COMMISSION**

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The proposed Perris Valley Line project is located in western Riverside County, extending approximately 24 miles, between the cities of Riverside and Perris. The proposed project would extend commuter rail service into the Interstate 215 corridor.

FINAL SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to: Federal 42 USC 4332(2) C and 49 USC 303

**Federal Transit Administration Region 9
and
Riverside County Transportation Commission**



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0.1 INTRODUCTION AND SUMMARY

The Final Supplemental Environmental Assessment (SEA) has been prepared in accordance with Federal Transit Administration (FTA) and National Environmental Policy Act (NEPA) procedures. Per the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 et seq.), the purpose of the Environmental Assessment is to determine if an Environmental Impact Statement (EIS) is necessary, and to meet compliance with NEPA when an EIS is not required.

The FTA is considering a grant application for financial assistance to the Riverside County Transportation Commission (RCTC) for the Perris Valley Line project pursuant to 49 U.S. C. 5309 Small Starts. The project is a potential federal action and must comply with NEPA and FTA procedures.

0.1.1 Format of the Final SEA

The PVL SEA is organized as follows:

Section 0.1 Introduction

This section describes NEPA requirements and content of this Final SEA.

Section 0.2 Revisions, Updates, and Corrections

This section lists revisions, updates, and corrections made to the Draft SEA and its supporting Technical Reports subsequent to its release for public review.

Section 0.3 Responses to Comment Received on the Draft SEA

This section presents comment letters received and individual responses to written comments. The responses will conform to the legal standards established by FTA for environmental documents.



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0.2 REVISIONS, UPDATES, AND CORRECTIONS

This section of the Final SEA lists revisions to information included in the Draft SEA December, 2010 based upon: (1) additional or revised information required to prepare a response to a specific comment; (2) updated information required due to the passage of time; and/or (3) typographical errors.

0.2.1 Schedule Revisions

The anticipated start of construction in 2011 and opening year of PVL service in 2012 were revised following public circulation of the Draft SEA to 2012 and 2014, respectively. The analyses were reviewed and it was determined the schedule revisions do not result in any substantive changes that warrant revising the analyses; therefore, these analyses remain valid. It should be noted that the revised construction year and opening year are reflected throughout the document as appropriate.

0.2.2 Selection of Hunter Park Station Location

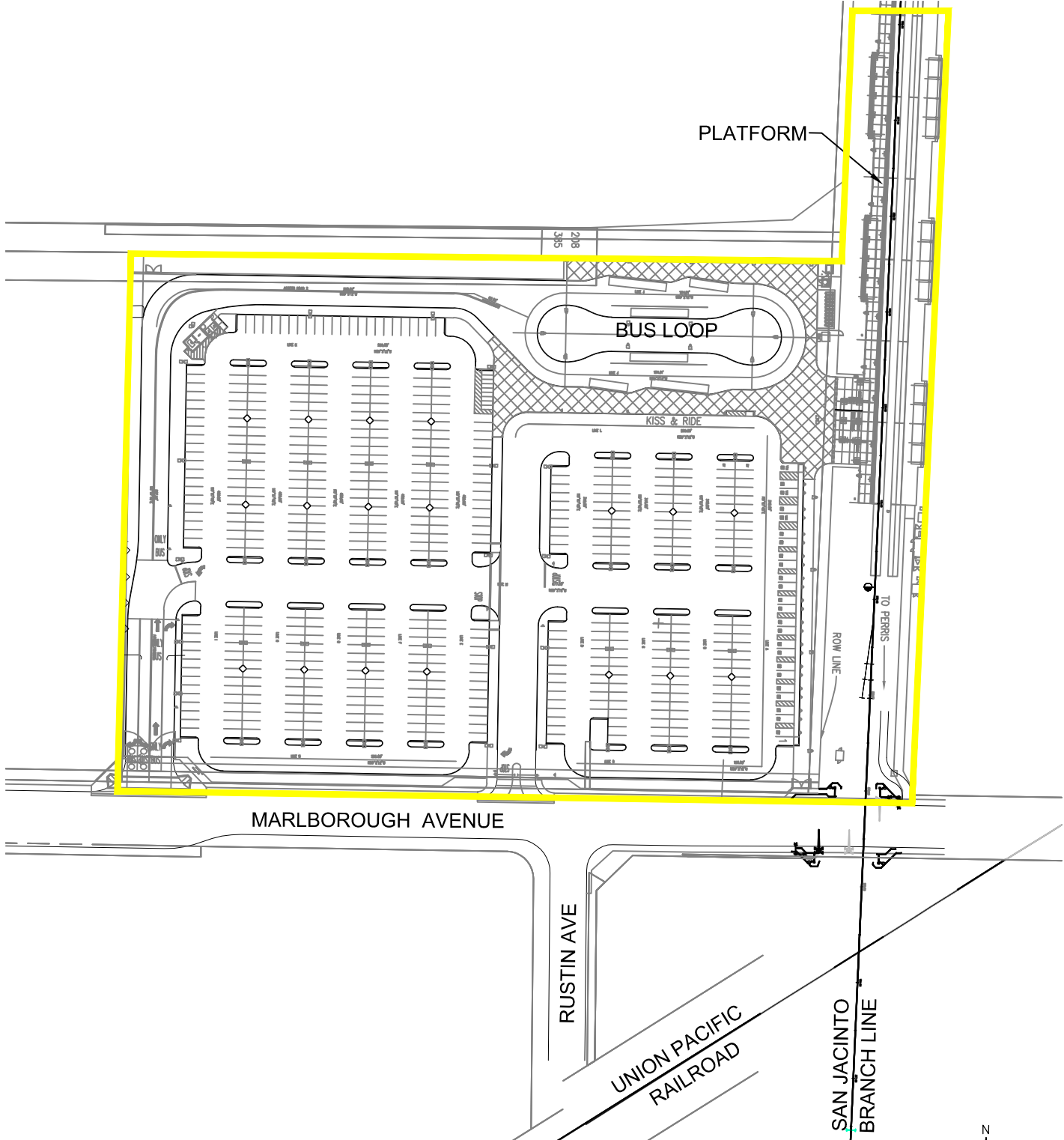
Three station sites were analyzed and considered for the Hunter Park Station in the SEA. The Palmyrita option was proposed for the east side of the SJBL track at Iowa Avenue between Palmyrita and Columbia Avenues. The Columbia and Marlborough options were proposed for the west side of the SJBL track, with entry and exit from Columbia and Marlborough Avenues, respectively. Each of the three options were evaluated in the SEA, subsequently, RCTC during the development of the Final SEA has selected the Marlborough site to be the Hunter Park Station.

The environmental setting and existing site conditions for each of the three proximate sites is described herein. The Palmyrita site is currently under development with the construction of a warehouse building. A second track for the Palmyrita site would need to be constructed east of the existing SJBL to accommodate freight activities. The Columbia site is currently hosts industrial facilities and a citrus orchard. The citrus orchard at the Columbia station site is bordered on three sides by commercial buildings. Low levels of pesticides were detected in the soil at this site, and any off-site soil disposal may need to be managed as hazardous waste.

The Marlborough site is located on cleared, disturbed vacant land. The current owner obtained approval of a development plan for multiple office buildings for the site from the City of Riverside. After a thorough review of the potential sites, while weighing the site access, engineering and cost considerations for all sites, the Marlborough site has been identified as the most suitable site location for the Hunter Park Station.



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LEGEND

SITE BOUNDARY



NOT TO SCALE

SOURCE:

90% DESIGN DRAWING UPDATE



PROJECT NO.	92666
DRAWN:	7/5/11
DRAWN BY:	JP
CHECKED BY:	RM
FILE NAME:	92666marE_SEA.dwg

**HUNTER PARK STATION
MARLBOROUGH AVENUE OPTION
ENGINEERING SITE PLAN**

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
PERRIS VALLEY LINE
RIVERSIDE, CALIFORNIA

FIGURE
0.2-1



0.2.3 Corrections, Revisions, and Additions

**Table 0.2.3-1
Corrections, Revisions, and Additions**

Draft SEA Section	Page Number(s)	Action
Table of Contents, Technical Reports	Page viii	Added Technical Report I – Zeta Tech Report.
Acronyms and Abbreviations	Page xiii	Corrected acronym for State Office of Historic Preservation.
Executive Summary, Section 1.0	Page ES-1	Revised the construction and opening year date for the project.
Executive Summary Section 1.0	Page ES-2	Updated text regarding comment period for the Draft SEA and public review period for the Final SEA.
Executive Summary Section 2.0 Proposed Project	Page ES-5 Figure ES.2-1	Updated Figure ES.2-1 to reflect the selected Hunter Park Station site.
Executive Summary, Section ES.2.0 Proposed Project	Pages ES-7 to ES-8 Table ES.2-1	As part of Noise and Vibration Mitigation Measure NV-1, corrected length of Noise Barrier #7. Clarified Noise and Vibration Mitigation Measures NV-1, NV-3, and NV-4.
Executive Summary, Section ES.2.0 Proposed Project	Pages ES-9 to ES-10 Table ES.2-1	Clarified Traffic and Parking Mitigation Measures TP-1 through TP-4. Revised Traffic and Parking Mitigation Measure TP-1 in response to comments on the Draft EIR received from representatives of Riverside Unified School District. Traffic and Parking Mitigation Measure TP-3 was eliminated as a result of project refinement subsequent to circulation of the Draft SEA. With the San Jacinto Avenue crossing improvements in place, the intersection of San Jacinto Avenue and C Street would not experience any significant traffic impacts. Therefore, mitigation at this intersection would not be needed. Traffic and Parking Mitigation Measure TP-4 was eliminated as a result of project refinement subsequent to circulation of the Draft SEA. The signalization of the San Jacinto Avenue and D Street intersection is now proposed as a PVL project feature. Therefore, mitigation at



Draft SEA Section	Page Number(s)	Action
		<p>this intersection would not be needed.</p> <p>Renumbered and clarified Traffic and Parking Mitigation Measures TP-5 and TP-6 to TP-3 and TP-4, respectively, due to the elimination of two mitigation measures (TP-3 and TP-4).</p> <p>Revised text to reflect fewer intersections requiring mitigation as a result of fewer intersections experiencing significant traffic impacts. Clarified text regarding mitigation measures expected to be implemented by other projects unrelated to the PVL.</p>
Executive Summary, Section ES.2.0 Proposed Project	Page ES-10 Table ES.2-1	Clarified Aesthetics Mitigation Measure AS-1.
Executive Summary, Section ES.2.0 Proposed Project	Pages ES-10 to ES-11 Table ES.2-1	<p>Reorganized Cultural Resources Mitigation Measures CR-1 and CR-2 for clarity and enforceability.</p> <p>Also added a Native American monitor to CR-1 in response to a comment letter.</p> <p>Clarified Mitigation Measure CR-3.</p>
Executive Summary, Section ES.2.0 Proposed Project	Pages ES-11 to ES-12 Table ES.2-1	<p>Clarified Hazards and Hazardous Materials Mitigation Measures HHM-1 through HHM-4.</p> <p>Also, included addition of coordination with local emergency response agencies (HHM-3).</p> <p>Mitigation Measure HHM-4 was deleted as a separate measure. Instead, revisions to HHM-3 adequately address HHM-4. As such, HHM-3 is referenced.</p>
Executive Summary, Section ES.2.0 Proposed Project	Pages ES-13 to ES-15 Table ES.2-1	Clarified Biological Resources Mitigation Measures BR-1 through BR-17.
Executive Summary, Section ES.2.0 Proposed Project	Page ES-16 Table ES.2-1	Clarified Paleontological Resources Mitigation Measures P-1 and P-2.
Chapter 1.0 Proposed Project Section 1.1 Introduction	Page 1-1	Updated text regarding comment period for the Draft SEA and public review period for the Final SEA.
Chapter 1.0 Proposed Project Section 1.2 Identification of the Proposed Project	Page 1-2	Updated text regarding certification of the EIR for the project. Revised the opening year date. Updated text to indicate which site was selected for the Hunter Park Station.



Draft SEA Section	Page Number(s)	Action
Chapter 1.0 Proposed Project Section 1.3 Project Area and Background	Page 1-3	Defined the acronym for CEQA.
Chapter 1.0 Proposed Project Section 1.3 Project Area and Background	Pages 1-3 to 1-9	Updated text to reflect the Highgrove Station option.
Chapter 1.0 Proposed Project Section 1.6 Regional and Local Planning Context	Page 1-12	Updated text to include the Federal Transportation Improvement Program and when the project met air quality conformance.
Chapter 1.0 Proposed Project Section 1.7 Project Details	Page 1-15	Revised the opening year date.
Chapter 1.0 Proposed Project Section 1.7 Project Details	Pages 1-15, 1-19 and 1-20	Updated text to reflect current project features and locations.
Chapter 1.0 Proposed Project Section 1.7.2 Stations and Layover Facility	Pages 1-20 to 1-21	Revised the opening year date. Updated text to indicate which site was selected for the Hunter Park Station. Updated text for Moreno Valley/March Field Station.
Chapter 1.0 Proposed Project Section 1.7.2 Stations and Layover Facility	Pages 1-31, 1-33, 1-35, and 1-37 Figures 1.7-6, 1.7-7, 1.7-8, and 1.7-9	Updated figures to indicate which site was selected for the Hunter Park Station.
Chapter 1.0 Proposed Project Section 1.7.2 Stations and Layover Facility	Page 1-51	Revised the opening year date. Corrected the acronym for CPUC since it was previously defined.
Chapter 1.0 Proposed Project Section 1.7.5 Grade Crossings	Page 1-52	Clarified text regarding the closure of an existing grade crossing at Poarch Road and added text regarding the closure of Commercial Street due to project refinement subsequent to circulation of the Draft SEA. Clarified text regarding the closure of the grade crossing at 6 th Street.
Chapter 1.0 Proposed Project, Section 1.7.8 Landscape Walls	Page 1-53	Clarified text for the landscape walls related to the schools.
Chapter 1.0 Proposed Project Section 1.7.9 Construction	Page 1-65	Revised the construction and opening year dates.
Chapter 1.0 Proposed Project Section 1.7.10 Operations	Pages 1-66 to 1-67 Table 1.7-1	Revised the opening year date within the text and in Table 1.7-1 heading.



Draft SEA Section	Page Number(s)	Action
Chapter 1.0 Proposed Project, Section 1.8 Acquisitions and Relocations	Pages 1-69 to 1-70 Table 1.8-1	Added text to further explain acquisitions for the PVL project that resulted from project refinement subsequent to circulation of the Draft SEA. In addition, text was revised to indicate the site selected for the Hunter Park Station.
Chapter 1.0 Proposed Project Section 1.8 Acquisitions and Relocations	Page 1-73 Figure 1.8-2	Updated figure to indicate which site was selected for the Hunter Park Station.
Chapter 1.0 Proposed Project, Section 1.9 Environmental Permits	Pages 1-81 to 1-82 Table 1.9-1	Reorganized Agency Actions and Approvals table.
Chapter 3.0 Environmental Evaluation	Page 3-1	Updated text to explain revisions to the construction and opening year dates.
Chapter 3.0 Environmental Evaluation, Section 3.2 Agricultural Resources	Page 3.1-2	Updated text to include the Federal Transportation Improvement Program and when the project met air quality conformance.
Chapter 3.0 Environmental Evaluation, 3.2 Agricultural Resources	Pages 3.2-4, 3.2-5 and 3.2-9 Figure 3.2-1	Updated text and figure to indicate which site was selected for the Hunter Park Station.
Chapter 3.0 Environmental Evaluation, Section 3.3 Air Quality	Page 3.3-1	Revised publishing date of Air Quality Technical Report B.
Chapter 3.0 Environmental Evaluation, Section 3.3 Air Quality	Page 3.3-3	Provided a reference to the new Appendix F in the Air Quality Technical Report, which includes the TCWG review form.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-16	Revised explanatory text regarding air quality impact determination.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Pages 3.3-16 to 3.3-17	Updated discussion on construction period air quality evaluation based on soil export information. Corrected a misspelling.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-18	Deleted two bullets under "other project control measures" as the same information is shown on Page 3.3-16 in the Draft SEA.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-20	Typographical error corrected regarding level-of-service. Revised publishing date of Traffic Technical Report D.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Pages 3.3-21 to 3.3-22	Typographical errors (numerical) corrected in distances described between certain sensitive receptors and PVL alignment.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-24	Provided a reference to the new Appendix F in the Air Quality Technical Report, which includes the TCWG review form.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-25	Clarified text regarding the health risk assessment.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-26 Table 3.3-7	Deleted third footnote as it is not relevant to the table.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-27	Deleted 2012 due to revised opening year date.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-31 Table 3.3-8	Revised publishing date of Traffic Technical Report D.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-33	Deleted text regarding the reference to Table 3.3-11 as the correct reference to Table 3.3-11 is already provided on this page.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-34 Table 3.3-11	Corrected numerical value for greenhouse gas related to passenger vehicles.
Chapter 3.0 Environmental Evaluation Section 3.3 Air Quality	Page 3.3-35 Table 3.3-12	Updated quantities for construction emissions table and text based on soil export information. Clarified text regarding soils.
Chapter 3.0 Environmental Evaluation Section 3.4 Noise and Vibration	Page 3.4-1	Revised publishing date of Noise and Vibration Technical Report C.
Chapter 3.0 Environmental Evaluation Section 3.4 Noise and Vibration	Page 3.4-6	Clarified project construction activities.
Chapter 3.0 Environmental Evaluation Section 3.4 Noise and Vibration	Page 3.4-22 Table 3.4-7	Clarified school name in table.
Chapter 3.0 Environmental Evaluation Section 3.4 Noise and Vibration	Page 3.4-23	Clarified the reduction in noise with the use of wayside applicators. Typographical error corrected.
Chapter 3.0 Environmental Evaluation Section 3.4 Noise and Vibration	Page 3.4-24	Updated opening year text.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation Section 3.4 Noise and Vibration	Pages 3.4-25, 3.4-31, 3.4-48, and 3.4-50	Typographical error corrected regarding reference to Highland Elementary School.
Chapter 3.0 Environmental Evaluation Section 3.4 Noise and Vibration	Page 3.4-30 Table 3.4-11	Typographical error in table corrected regarding the tabulated train speeds nearby Highland Elementary School. All noise and vibration calculations for this school were performed using the speed of 60 mph in the Draft SEA. Based on the Zeta Tech Report subsequent to circulation of the Draft SEA, train speeds nearby Highland Elementary School would be limited to 30 mph, which does not result in new impacts or mitigation.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Pages 3.4-31 and 3.4-32	Added text regarding soil export information.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Pages 3.4-32 to 3.4-33	Added text regarding project construction activities and examples of noise control measures. Clarified Noise and Vibration Mitigation Measure NV-1.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Page 3.4-34 to 3.4-35 Table 3.4-12	Corrected length of Noise Barrier #7.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Page 3.4-43 Table 3.4-13	Typographical error corrected regarding footnotes.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Pages 3.4-47 to 3.4-48 Tables 3.4-15, 3.4-16, and 3.4-17	Clarified heading in table.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Page 3.4-48 Table 3.4-17	Typographical error in table corrected regarding the tabulated train speeds nearby St. James School. All noise and vibration calculations for this school were performed using the speed of 46 mph in the Draft SEA.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Page 3.4-49	Added text regarding construction period vibration impacts.
Chapter 3.0 Environmental Evaluation, Section 3.4 Noise and Vibration	Page 3.4-50	Clarified Noise and Vibration Mitigation Measure NV-3. Clarified text regarding implementation of the vibration mitigation measures.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-1	Revised publishing date of Traffic Technical Report D.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-1 Table 3.5-1	Clarified heading for level-of-service table.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-3 Figure 3.5-1	Updated text and figure to indicate which site was selected for the Hunter Park Station.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-13	Added text to clarify that SR-74 is known as 4 th Street in downtown Perris.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-16	Deleted 2012 due to revised opening year date. Added a description of the 3rd Street grade separation project (already included in Section 3.19, Indirect and Cumulative Effects). Revised the completion dates of the grade separation projects.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-18	Added name of a major roadway improvement project to widen Cactus Avenue (project already included and described in the Draft SEA and Traffic Technical Report). Added description of proposed roadway changes by 2012 for D and C Streets in Perris.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-20	Corrected error (direction) and level-of-service.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-21	Revised text to include a definition of modal split. Peak periods for morning and afternoon are defined.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-22 Table 3.5-4	Clarified heading in auto-trip generation table.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-24	Clarified text regarding the closure of an existing grade crossing at Poarch Road and added text regarding the closure of the northern end of Commercial Street due to project refinement subsequent to circulation of the Draft SEA. Clarified text regarding the closure of the grade crossing at 6 th Street.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-25	Clarified level-of-service conditions.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Pages 3.5-27, 3.5-29, and 3.5-31 Table 3.5-5	Added table headings. Added footnotes to table to clarify traffic terminology.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-32 Table 3.5-6	Typographical error corrected regarding the V/C ratio in the PM peak hour for Alessandro Boulevard.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Pages 3.5-33 and 3.5-35 Table 3.5-7	Revised text – Downtown Perris Station. Updated roadway system changes to be implemented by 2012 in the City of Perris in response to comments on the PVL Draft EIR and a subsequent email (dated June 28, 2010) received from the City of Perris Public Works Department that provided new information related to the signalization of D Street and San Jacinto Avenue and the striping plans at the D Street/SR-74 and C Street/San Jacinto Avenue intersections. This new information required updating the level-of-service analyses (including text and tables) for the Downtown Perris Station area 2012 conditions without and with the project. Also, incorporated PVL project features to be implemented for the improvement of the San Jacinto Avenue crossing into the 2012 conditions with the project. This analysis did not reveal any new significant impacts and did not show an increase in severity of an environmental impact.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-35 Table 3.5-7	Added San Jacinto Avenue at D Street – Signalized. Removed Unsignalized.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-36	Corrected mitigation measure numbering.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-37	Clarified PVL station parking demand for opening year.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Page 3.5-38	Clarified construction period. Revised the discussion under Construction Period Impacts based on soil export information. Revised Traffic and Parking Mitigation Measure TP-1 in response to comments on the Draft EIR received from representatives of the Riverside Unified School District.
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Pages 3.5-38 to 3.5-40	Renumbered Traffic and Parking Mitigation Measure TP-5 to TP-3 due to the elimination of two mitigation measures at Downtown Perris Station (TP-3 and TP-4).
Chapter 3.0 Environmental Evaluation,	Pages 3.5-39	Traffic and Parking Mitigation Measure TP-3 was eliminated as a result of project



Draft SEA Section	Page Number(s)	Action
Section 3.5 Traffic and Parking		<p>refinement subsequent to circulation of the Draft SEA. With the San Jacinto Avenue crossing improvements in place, the intersection of San Jacinto Avenue and C Street would not experience any significant traffic impacts. Therefore, mitigation at this intersection would not be needed. Traffic and Parking Mitigation Measure TP-4 was eliminated as a result of project refinement subsequent to circulation of the Draft SEA. The signalization of the San Jacinto Avenue and D Street intersection is now proposed as a PVL project feature. Therefore, mitigation at this intersection would not be needed. Renumbered and clarified Traffic and Parking Mitigation Measures TP-5 and TP-6 to TP-3 and TP-4, respectively, due to the elimination of two mitigation measures (TP-3 and TP-4).</p> <p>Revised text to reflect fewer intersections requiring mitigation as a result of fewer intersections experiencing significant traffic impacts. Clarified text regarding mitigation measures expected to be implemented by other projects unrelated to the PVL.</p>
Chapter 3.0 Environmental Evaluation, Section 3.5 Traffic and Parking	Pages 3.5-41 to 3.5-44 Table 3.5-9	Renumbered Traffic and Parking Mitigation Measure TP-5 to TP-3 due to the elimination of two mitigation measures (TP-3 and TP-4). Typographical error corrected regarding the overall intersection control delay in the PM peak hour for Bonnie Drive and southbound I-215 Ramps. Deleted 2012 due to revised opening year date.
Chapter 3.0 Environmental Evaluation Section 3.6 Aesthetics	Page 3.6-3	Added text to indicate Hyatt Elementary School as a sensitive resource.
Chapter 3.0 Environmental Evaluation Section 3.6 Aesthetics	Page 3.6-10	Updated text to indicate which site was selected for the Hunter Park Station.
Chapter 3.0 Environmental Evaluation Section 3.6 Aesthetics	Pages 3.6-12 to 3.6-13	Added text to further explain the landscape wall at Hyatt Elementary School. Added text to indicate landscape wall would block view of railroad right of way and I-215 from Nan Sanders School.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation, Section 3.6 Aesthetics	Page 3.6-18	Clarified Aesthetics Mitigation Measure AS-1.
Chapter 3.0 Environmental Evaluation, Section 3.7 Cultural Resources and Section 106 Compliance	Page 3.7-1	Corrected the name and acronym for State Office of Historic Preservation.
Chapter 3.0 Environmental Evaluation, Section 3.7 Cultural Resources and Section 106 Compliance	Page 3.7-4 Table 3.7-1	Defined acronym for National Register of Historic Place in table heading. Updated text regarding historic properties determination for the project.
Chapter 3.0 Environmental Evaluation, Section 3.7 Cultural Resources and Section 106 Compliance	Page 3.7-5	Deleted footnote in Table 3.7-2.
Chapter 3.0 Environmental Evaluation, Section 3.7 Cultural Resources and Section 106 Compliance	Page 3.7-7	Updated text to reflect that no adverse effects were proposed and no additional historic properties identified within the revised DEER.
Chapter 3.0 Environmental Evaluation, Section 3.7 Cultural Resources and Section 106 Compliance	Pages 3.7-8 to 3.7-9	Corrected acronym spelling. Updated text to reflect the process RCTC underwent with SOHP for the project.
Chapter 3.0 Environmental Evaluation, Section 3.7 Cultural Resources and Section 106 Compliance	Pages 3.7-9 to 3.7-10	Reorganized Cultural Resources Mitigation Measures CR-1 and CR-2 for clarity and enforceability. Also added a Native American monitor to CR-1 in response to a comment letter. Clarified Mitigation Measure CR-3.
Chapter 3.0 Environmental Evaluation, Section 3.8, Hazards and Hazardous Materials	Page 3.8-7 Figure 3.8-1	Updated figure to indicate which site was selected for the Hunter Park Station.
Chapter 3.0 Environmental Evaluation, Section 3.8, Hazards and Hazardous Materials	Page 3.8-10	Updated text to indicate which site was selected for the Hunter Park Station. Updated text to include information from additional testing that was done for the Citrus Connection and Marlborough site.
Chapter 3.0 Environmental Evaluation, Section 3.8, Hazards and Hazardous Materials	Page 3.8-11	Updated text to include Positive Train Control as a project feature.
Chapter 3.0 Environmental Evaluation, Section 3.8, Hazards and Hazardous Materials	Pages 3.8-12 to 3.8-15	Text added to include the conditions of approval from the Riverside County Airport Land Use Commission.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation, Section 3.8, Hazards and Hazardous Materials	Pages 3.8-16 to 3.8-17	Clarified Hazards and Hazardous Materials Mitigation Measures HHM-1 through HHM-4. Also, included addition of coordination with local emergency response agencies (HHM-3). Mitigation Measure HHM-4 was deleted as a separate measure. Instead, revisions to HHM-3 adequately address HHM-4. As such, HHM-3 is referenced.
Chapter 3.0 Environmental Evaluation, Section 3.10, Section 4(f) Evaluation and Parklands	Page 3.10-7	Updated text for Stephens' Kangaroo Rat Habitat Conservation Areas.
Chapter 3.0 Environmental Evaluation, Section 3.10, Section 4(f) Evaluation and Parklands	Page 3.10-8 Table 3.10-2	Corrected typographical error in the numbering of the table. Corrected the footnote in the table since concurrence from SOHP has been obtained for the project.
Chapter 3.0 Environmental Evaluation, Section 3.10, Section 4(f) Evaluation and Parklands	Page 3.10-10	Corrected typographical error in the numbering of the table.
Chapter 3.0 Environmental Evaluation, Section 3.10, Section 4(f) Evaluation and Parklands	Page 3.10-11	Updated text to reflect that no property takes or easements (permanent or temporary) as a result of the PVL being located near park areas. Added text "direct or" to indicate no direct or constructive use of a wildlife area.
Chapter 3.0 Environmental Evaluation, Section 3.10, Section 4(f) Evaluation and Parklands	Page 3.10-12	Corrected the acronym for State Office of Historic Preservation.
Chapter 3.0 Environmental Evaluation, Section 3.10, Section 4(f) Evaluation and Parklands	Page 3.10-13	Updated text to indicate which site was selected for the Hunter Park Station.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Pages 3.11-1 to 3.11-2	Added text to describe USDOT Order 5610.2.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Pages 3.11-2 to 3.11-4	Clarified text regarding the study area and methodology for the EJ analysis. Added a reference for Figure 3.11-1. Added text to clarify the appropriateness of using Census determinations of poverty status (by individual) rather than using HHS guidelines (weighted by family size) for use in determining the percentage of total population living in poverty.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Pages 3.11-4 to 3.11-5	Revised text based on the determined thresholds for low-income and minority communities.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Page 3.11-6	Revised text to clarify public involvement effort.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Page 3.11-7 Figure 3.11-1	Updated figure based on the determined thresholds for low-income and minority communities.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Page 3.11-9	Inserted "quality" after air for clarification.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Page 3.11-10	Identified improvements related to the project. Added statement that project acquisitions do not require displacements. Added statement that County and City land use plans have included the PVL in local planning documents.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Pages 3.11-11 to 3.11-12	Defined acronym for BMPs. Added section 3.11.4 Summary.
Chapter 3.0 Environmental Evaluation, Section 3.11 Environmental Justice and Socioeconomics	Page 3.11-12	Included text regarding noise, vibration, and traffic mitigation measures relative to the EJ assessment.
Chapter 3.0 Environmental Evaluation, Section 3.12 Safety and Security	Pages 3.12-2 to 3.12-3	Added text regarding the Mini-High Platform features of the PVL project.
Chapter 3.0 Environmental Evaluation, Section 3.12 Safety and Security	Page 3.12-3 Table 3.12-1	Clarification of grade crossing device type.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation, Section 3.12 Safety and Security	Page 3.12-5	Clarified text regarding the closure of an existing grade crossing at Poarch Road and added text regarding the closure of the northern end of Commercial Street due to project refinement subsequent to circulation of the Draft SEA.
Chapter 3.0 Environmental Evaluation, Section 3.13 ADA Compliance	Page 3.13-2	Updated text regarding the Mini-High Platform features of the PVL project.
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Page 3.14-2	Added a footnote to include Section 7 requirements and process for the project.
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Page 3.14-3	Clarified text related to non-Federal projects..
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Page 3.14-13	Updated information regarding the Stephens Kangaroo Rat Conservation Areas.
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Page 3.14-17 Figure 3.14-5	Updated Figure 3.14-5 to indicate the selected Hunter Park Station.
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Pages 3.14-24 to 3.14-28	Updated text to include Western Riverside Multiple Species Habitat Conservation Plan, Narrow Endemic Plant Species, Western Burrowing Owl, and riparian bird surveys that were performed for the project. Added Table 3.14-3 to identify Narrow Endemic and Criteria Area Survey Plant Species.
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Page 3.14-28	Updated text for Jurisdictional Determination analysis done for the project.
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Page 3.14-33 Table 3.14-5	Updated text in the table to describe the type of culverts.
Chapter 3.0 Environmental Evaluation, Section 3.14, Biological Resources	Pages 3.14-34 to 3.14-36	Clarified Biological Resources Mitigation Measures BR-1 through BR-17.



Draft SEA Section	Page Number(s)	Action
Chapter 3.0 Environmental Evaluation, Section 3.15, Geology and Soils	Page 3.15-9 Table 3.15-1	Revised table heading to define acronym for NRCS.
Chapter 3.0 Environmental Evaluation, Section 3.15, Geology and Soils	Page 3.15-20	Corrected misspelling of liquefaction.
Chapter 3.0 Environmental Evaluation, Section 3.18, Paleontological Resources	Page 3.18-5	Clarified Paleontological Resources Mitigation Measures P-1 and P-2.
Chapter 3.0 Environmental Evaluation Section 3.19 Indirect and Cumulative Effects	Pages 3.19-3 to 3.19-5	Added text to clarify the Riverside Grade Separation projects. Added No Build projects (already described in Section 3.5, Traffic and Parking) to the list of cumulative projects in Section 3.19, Indirect and Cumulative Effects.
Chapter 3.0 Environmental Evaluation Section 3.19 Indirect and Cumulative Effects	Page 3.19-9	Corrected typographical error.
Chapter 3.0 Environmental Evaluation Section 3.19 Indirect and Cumulative Effects	Page 3.19-10	Clarified text.
Chapter 4.0 Agency Coordination	Page 4-1	Corrected a typographical error. Added Riverside Unified School District to the list of Regional/Local Agencies.
Chapter 5.0 Public Outreach	Pages 5-2 to 5-3	Update text to reflect the status of the CEQA and NEPA process for the project.
Chapter 7.0 References	Page 7-3	Corrected a typographical error.
Chapter 7.0 References	Page 7-6	Revised publishing dates of the technical reports for Air Quality, Noise and Vibration, and Traffic.
Appendix C – Environmental Justice	Appendix C	Reformatted the table to show summary totals for Study Area Block Groups and correct typographical errors.



0.2.4 Corrections, Revisions, and Additions to Technical Reports

Technical Reports for Air Quality, Noise and Vibration, and Traffic were revised since the publication of the Draft SEA on December 1, 2010. The revisions to the Technical Reports are based upon: (1) additional or revised information required to prepare a response to a specific comment; (2) updated information required due to of the passage of time; and/or (3) typographical errors.

**Table 0.2.4-1
Corrections, Revisions, and Additions to Technical Reports**

SEA Technical Report	Page Number(s)	Corrections and Additions
Air Quality Technical Report – Technical Report B		
Air Quality Technical Report	Cover page	Updated publishing date based on revisions made in response to comments on the Draft EIR and Draft SEA.
Air Quality Technical Report	Page i	Updated the list of Appendices based on the addition of a new appendix (Appendix F – SCAG TCWG Interagency Review Form For PVL Project).
Air Quality Technical Report	Pages 3, 22, and 31	Provided a reference to the new Appendix F in the Air Quality Technical Report, which includes the TCWG review form.
Air Quality Technical Report	Page 16	Clarified the air quality evaluation methodology.
Air Quality Technical Report	Page 18	Typographical error corrected regarding Level-of-Service. Revised publishing date of Traffic Technical Report.
Air Quality Technical Report	Pages 19 to 20	Typographical errors (numerical) corrected in distances described between certain sensitive receptors and PVL alignment.
Air Quality Technical Report	Page 23	Clarified text regarding the health risk assessment and the construction period. Corrected a misspelling.
Air Quality Technical Report	Page 24	Updated discussion on construction period air quality evaluation based on soil export information.



SEA Technical Report	Page Number(s)	Corrections and Additions
Air Quality Technical Report	Page 25	Deleted two bullets under “other project control measures” as the same information is shown on Page 24 in the Air Quality Technical Report.
Air Quality Technical Report	Page 33 Table 13	Updated construction emissions table and analysis based on soil export information. Clarified text regarding soils.
Air Quality Technical Report Appendix D	Page 14	Updated construction emissions table based on soil export information.
Air Quality Technical Report Appendix D	Page 28	Added the new 90% Mass Haul Diagram Exhibit.
Noise and Vibration Technical Report – Technical Report C		
Noise and Vibration Technical Report	Cover page	Updating publishing date based on revisions made in response to comments on the Draft EIR and Draft SEA.
Noise and Vibration Technical Report	Page 12 Table 2	Added to third footnote under Table 2 to clarify length of noise measurement period.
Noise and Vibration Technical Report	Page 27 Table 7	Typographical error in table corrected regarding the tabulated train speeds nearby Highland Elementary School. All noise and vibration calculations for this school were performed using the speed of 60 mph in the Noise and Vibration Technical Report. Based on the Zeta Tech Report subsequent to circulation of the Draft SEA, train speeds nearby Highland Elementary School would be limited to 30 mph, which does not result in new impacts or mitigation.
Noise and Vibration Technical Report	Page 35	Clarified the reduction in noise with the use of wayside applicators.
Noise and Vibration Technical Report	Pages 37 to 38 Table 13	Clarified text regarding noise mitigation measures. Corrected length of Noise Barrier #7.
Noise and Vibration Technical Report	Page 40	Added a new discussion regarding soil export under Construction Noise Impacts.



SEA Technical Report	Page Number(s)	Corrections and Additions
Noise and Vibration Technical Report	Pages 40 to 42	Added text regarding project construction activities and examples of noise control measures.
Noise and Vibration Technical Report	Page 45	Added text regarding the construction noise assessment.
Noise and Vibration Technical Report	Page 46	Clarified the noise impacts of the total project construction period.
Noise and Vibration Technical Report	Page 54	Typographical error in table corrected regarding the tabulated train speeds nearby St. James School. All noise and vibration calculations for this school were performed using the speed of 46 mph in the Noise and Vibration Technical Report.
Noise and Vibration Technical Report	Page 57 Table 21	Typographical error corrected regarding footnotes.
Noise and Vibration Technical Report	Page 59	Clarified text regarding vibration mitigation measures. Typographical error corrected regarding reference to Highland Elementary School.
Noise and Vibration Technical Report	Page 60	Added text regarding construction vibration impacts.
Traffic Technical Report – Technical Report D		
Traffic Technical Report	Cover page	Updated publishing date based on revisions made in response to comments on the Draft EIR and Draft SEA.
Traffic Technical Report	Page 7 and 56	Added text to clarify that SR-74 is known as 4 th Street in downtown Perris.
Traffic Technical Report	Pages 23 to 24	Added a description of the 3 rd Street grade separation project. Revised the completion dates of the grade separation projects. Added name of a major roadway improvement project to widen Cactus Avenue (already included and described in the Draft SEA and Traffic Technical Report).



SEA Technical Report	Page Number(s)	Corrections and Additions
Traffic Technical Report	Pages 25, 30, 32 to 38, 56, 58 to 69, and 72 to 75 Tables 3, 7, and 8	Updated roadway system changes to be implemented by 2012 in the City of Perris in response to comments on the Draft EIR and a subsequent email (dated June 28, 2010) received from the City of Perris Public Works Department that provided new information related to the signalization of D Street and San Jacinto Avenue and the striping plans at the D Street/SR-74 and C Street/San Jacinto Avenue intersections. This new information required updating the level-of-service analyses (including text and tables) for the Downtown Perris Station area 2012 conditions without and with the project. Also incorporated PVL project features to be implemented for the improvement of the San Jacinto Avenue crossing into the 2012 conditions with the project. This analysis did not reveal any new significant impacts and did not show an increase in severity of an environmental impact.
Traffic Technical Report	Page 30	Corrected error (direction).
Traffic Technical Report	Page 39	Clarified the AM and PM peak periods for the modal split of passengers. Added definition for modal split of passengers.
Traffic Technical Report	Page 40 Table 6	Clarified heading in auto-trip generation table.
Traffic Technical Report	Page 42	Clarified text regarding the closure of an existing grade crossing at Poarch Road due to project refinement subsequent to circulation of the Draft SEA. Clarified text regarding the closure of the grade crossing at 6 th Street.
Traffic Technical Report	Page 43	Added text to reflect the closure of the northern end of Commercial Street due to project refinement subsequent to circulation of the Draft SEA. Deleted the paragraph about the existing grade crossings at 2 nd and 5 th Streets in downtown Perris as the same information is now shown in a footnote on Page 42.



SEA Technical Report	Page Number(s)	Corrections and Additions
Traffic Technical Report	Pages 56, 72 to 75 Table 8	Renumbered Traffic and Parking Mitigation Measure TP-5 to TP-3 due to the elimination of two mitigation measures at Downtown Perris Station (TP-3 and TP-4).
Traffic Technical Report	Pages 70 to 71	<p>Clarified Traffic and Parking Mitigation Measures TP-1 through TP-4.</p> <p>Revised Traffic and Parking Mitigation Measure TP-1 in response to comments on the Draft EIR received from representatives of the Riverside Unified School District.</p> <p>Traffic and Parking Mitigation Measure TP-3 was eliminated as a result of project refinement subsequent to circulation of the Draft SEA. With the San Jacinto Avenue crossing improvements in place, the intersection of San Jacinto Avenue and C Street would not experience any significant traffic impacts. Therefore, mitigation at this intersection would not be needed.</p> <p>Traffic and Parking Mitigation Measure TP-4 was eliminated as a result of project refinement subsequent to circulation of the Draft SEA. The signalization of the San Jacinto Avenue and D Street intersection is now proposed as a PVL project feature. Therefore, mitigation at this intersection would not be needed.</p> <p>Renumbered and clarified Traffic and Parking Mitigation Measure TP-5 to TP-3 due to the elimination of two mitigation measures (TP-3 and TP-4).</p> <p>Revised text to reflect fewer intersections requiring mitigation as a result of fewer intersections experiencing significant traffic impacts. Clarified text regarding mitigation measures expected to be implemented by other projects unrelated to the PVL.</p> <p>Added Traffic and Parking Mitigation Measure TP-4 (Traffic Management Plan) to the Traffic Technical Report (already included and described in the Draft SEA).</p>



0.3 RESPONSE TO COMMENTS

0.3.1 Master Responses

These Master Responses address several of the recurring topics raised in comments on the SEA:

- #1. Quiet Zones
- #2. Kinder Morgan Pipeline Segment Near Highland Elementary School
- #3. Derailment (General)
- #4. Hazardous Materials Transport
- #5. Freight Operations
- #6. Noise
- #7. Emergency Planning and Response
- #8. Grade Crossings
- #9. Highland and Hyatt Elementary Schools (Increased Train Traffic)
- #10. Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment)
- #11. Grade Separations

It should be noted that these Master Responses provide additional information on key project topics and do not propose any additional mitigation measures.

Master Response #1 – Quiet Zones

Many of the comment letters submitted in response to the SEA raised concerns regarding the noise impacts of the PVL project. Specifically, the comments encouraged RCTC to consider quiet zones at grade crossings within the City of Riverside. In addition, some comments questioned why RCTC donated money to the City of Riverside to study the potential for establishing quiet zones rather than unilaterally establishing and implementing quiet zones as part of the PVL project.

Implementation of quiet zones, defined as designated areas where train horns (the primary source of train noise) would not be sounded at highway/rail grade crossings, is not part of the PVL project. The noise analysis in the SEA shows that all potentially significant project-related noise impacts are mitigated with the construction of noise barriers and implementation of noise insulation measures, as outlined at the end of Sections 3.4.4 and 3.4.8. Additionally, the train tracks will be improved through new rail/ballast and lubrication, both of which will reduce the project's operational noise. Because the noise impacts of the PVL project can be mitigated, it is unnecessary for RCTC to provide additional noise mitigation measures.

Chapter 40 in the Code of Federal Regulations (CFR) requires lead agencies to adopt all feasible and practicable mitigation measures that would avoid or minimize environmental harm caused by a proposed project (40 CFR §§1502.14[f], 1502.16[h], and 1505.2[c]). Since the mitigation measures for the PVL project would reduce project noise to below FTA criteria levels, no further actions are required.



However, because RCTC is sensitive to the concerns of residents, RCTC voluntarily increased the project scope to include design and construction of the physical improvements necessary for supporting the implementation of quiet zones (which for the PVL project would be considered “New Quiet Zones” according to 49 C.F.R. § 222.43) at the Marlborough Avenue, Spruce Street, Blaine Street, and Mount Vernon Avenue grade crossings in the UCR neighborhood, should quiet zones be implemented in the future. Section 3.4.1 and 3.4.5 of the SEA introduces the federal regulations governing noise emissions from transit sources and Section 1.3 explains that RCTC has previously donated \$26,000 to the City of Riverside to study the potential for establishing quiet zones at grade crossings in the City of Riverside.

Establishing a New Quiet Zone involves coordination between multiple entities regarding two main types of requirements: administrative work and the construction of physical structures. Administrative work includes: providing a written Notice of Intent (49 C.F.R § 222.43[a][1] and § 222.43[b]) to the railroads that operate over the proposed quiet zone, the state agency responsible for highway and road safety and the state agency responsible for grade crossing safety; inviting the State agency responsible for grade crossing safety and all affected railroads to participate in a diagnostic review of pedestrian crossings; and, if using the Public Authority Application to FRA method of obtaining a New Quiet Zone (the other option is to designate a New Quiet Zone without FRA approval), compiling an application to FRA for approval of a quiet zone (49 C.F.R. Appendix C to 49 C.F.R Part 222).

According to the Locomotive Horn Use Rules, the administrative work must be completed by a Public Authority (Appendix C to 49 C.F.R Part 222), only a “Public Authority may establish quiet zones,” and quiet zones may only be established at “public highway-rail grade crossings.” (71 Fed. Reg. 47640; 49 C.F.R. § 222.37.) A “Public Authority” is a public entity responsible for traffic control or law enforcement at the public highway-rail grade or pedestrian crossing. (71 Fed. Reg. 47636; 49 C.F.R 222.9). The construction of physical structures can be completed by any entity but can only be submitted for approval by the Public Authority. In the case of the PVL project, the Public Authority is the City of Riverside.

RCTC is a special district that does not have broad police powers and is not responsible for traffic control or law enforcement at public highway-rail grade or pedestrian crossings. Instead, cities and counties have the general type of police powers referred to in the definition of “Public Authority.” Consequently, cities and counties would most likely have authority under the federal rules to establish quiet zones. Therefore, under a strict reading of the federal rule, RCTC is not considered a Public Authority and therefore does not have authority to complete the administrative work necessary to establish quiet zones. Accordingly, RCTC’s previous donation of funding to the City of Riverside was appropriately intended to assist the City, as the “Public Authority” under the Locomotive Horn Use Rules, to establish the quiet zones that RCTC lacks the authority to establish itself.

Assuming, however, that the definition of “Public Authority” could be broadly interpreted to include RCTC, as stated in the SEA, RCTC does not have authority to unilaterally establish quiet zones at highway-rail grade crossings (71 Fed. Reg. 47640; 49 C.F.R § 222.37.) According to the Locomotive Horn Rules, if more than one Public Authority would have authority and control over the highway-rail grade crossing where a quiet zone is proposed, then the Public Authorities must agree to establishing the quiet zone and must jointly, or by delegating their authority to one another, take actions required by the federal rules to implement the quiet zone (71 Fed. Reg. 47640; 49 C.F.R. § 222.37). Hence, in order to establish and implement a



New Quiet Zone within the PVL project area, the City of Riverside, RCTC, and any other Public Authority with responsibility for traffic control or law enforcement at the public highway-rail grade or pedestrian crossing would have to jointly agree to the New Quiet Zone and jointly take action to establish it.

As stated above, RCTC is able to, and has agreed to, include in the engineering design for the PVL project the physical structures required for the establishment of a New Quiet Zone. According to the plans, these designs include pedestrian swing gates, pedestrian warning devices and gates, pedestrian barricades and metal hand railings, concrete raised medians, double yellow medians and island noses, warning devices, safety lighting, and signs. Because these improvements are considered part of the design for the PVL project, they were included in the environmental analysis, which found that no significant, unmitigable impacts are anticipated as a result of the PVL project. RCTC does not have control over the administrative work that also must be completed in order to establish a New Quiet Zone. However, the City of Riverside has agreed to undertake that administrative work pursuant to a Memorandum of Understanding with RCTC.

The PVL project would have no noise impact with mitigation measures incorporated and therefore no further mitigation is required under NEPA. RCTC would complete one of two main requirements necessary for the establishment of quiet zones by constructing the necessary physical safety and crossing improvements. The second main requirement, the administrative component, is the responsibility of the City of Riverside. Specifically, the City of Riverside has the obligation to file a Notice of Intent ("NOI") with the Federal Railroad Administration, which would allow for the completion of this administrative component.

Master Response #2 – Kinder Morgan Pipeline Segment Near Highland Elementary School

Several comments submitted in response to the SEA raised concerns regarding the potential for hazard and safety impacts caused by adding commuter trains to the existing rail line. A portion of the existing SJBL/RCTC ROW contains a six-inch jet fuel line owned and operated by Kinder-Morgan. The pipeline operates within the SJBL/RCTC ROW under a lease agreement and extends from the Colton Terminal to the March Air Reserve Base (SEA, Section 3.8.2). In one limited location, the jet fuel line is approximately 50-feet west of an existing school, Highland Elementary School (e.g., RUSD Comment Letter [dated January 6, 2011] at page 3; SEA, Section 3.8.2). The railroad tracks are approximately 45 feet beyond the pipeline, making them a total of approximately 95 feet from the school. Based upon a field survey in which potholes were dug above the fuel pipeline in order to confirm the pipeline's depth, the pipeline is buried at depths ranging to 5'-2" in the area near Highland Elementary School. The concerns expressed by the comments regarding the pipeline center around the potential for the PVL project (during construction and operation) to damage the existing pipeline and to result in rupture and release of jet fuel.

In response to concerns raised about the proximity of the rail line to the existing Kinder Morgan pipeline, RCTC commissioned a focused technical study to evaluate potential safety and/or hazard impacts specifically associated with the pipeline. (Analysis of Safety Issues for the Proposed Commuter Rail Service on the Riverside County Transportation Commission's Perris Valley Line in the Vicinity of Highland and Hyatt Schools, dated March 22, 2011 (the "Zeta Tech Report") included as Technical Report I).



The Zeta Tech Report evaluated two questions. For purposes of this Master Response, the relevant question addressed in the Zeta Tech Report was whether the addition of commuter rail to the existing line would significantly increase the safety risks in the vicinity of the Highland Elementary School and the Kinder-Morgan pipeline near that school (Zeta Tech Report, page 2).

Zeta Tech's evaluation of the risks in the vicinity of Highland Elementary School were based on a derailment risk analysis (Zeta Tech Report, page 5). The derailment risk analysis examined general derailment risk related to Class 1 railroad (e.g., BNSF) operations, as well as derailment risk associated with the introduction of passenger trains; Zeta Tech further considered derailment risk in the context of a derailment energy analysis. The derailment energy analysis compared the maximum available energy at the time of derailment of a freight train to that of a passenger train on the Perris Valley Line (Zeta Tech Report, page 7). This analysis took into account the mass of a given train as well as the speed of that train.

With regard to derailment risk associated with current BNSF operations, the Zeta Tech Report used derailment classes in the Federal Railroad Administration's ("FRA") accident database for years 2007-2009. (Id.) Based upon this analysis, Zeta Tech determined that the average derailment probability for these four Class 1 railroads, which include BNSF, is approximately 0.00084 total derailments per million gross ton miles per year (total derailments/MGTM/year). Further, Zeta Tech considered the risk of Class 1 railroad derailment in the vicinity of each school. By applying these data to operations within one half mile of the school, in each direction, Zeta Tech determined that the total risk of BNSF derailment under current operations is approximately 0.000672 risk per train mile in the vicinity of each school, which, in other words, would approximate 1 derailment every 1500 years (Zeta Tech Report, page 6).

With regard to passenger train derailment risk, the Zeta Tech analysis used all derailment classes in the FRA accident database for the years 2007-2009. Based on this analysis, the passenger train average derailment probability is approximately 0.00032 total derailments/MGTM/year. This represents the incremental increase in risk associated with the introduction of passenger service. By applying these data to operations within one half mile of the school, in each direction, Zeta Tech determined that the risk of derailment associated with passenger service is approximately 0.00032 total derailments/MGTM in the vicinity of each school, which, in other words, would approximate 1 derailment every 3,000 years (Zeta Tech Report, page 6). Zeta Tech concluded that the increased risk is "small" (Zeta Tech Report, page 6) and supports the Zeta Tech conclusion that "...the addition of commuter rail to the existing railway line does not significantly increase the safety risks in the vicinity of the Highland Elementary School and the Kinder-Morgan pipeline near that school" (Zeta Tech Report, page 5).

The conclusions regarding "safety" risk are based on consideration of both the risk for derailment and the likelihood that the Kinder-Morgan pipeline compromised if a derailment were to occur in its proximity. Thus, notwithstanding the foregoing assessment of derailment risk, since both the school and the pipeline are adjacent to the railroad right of way, Zeta Tech also performed a derailment energy analysis to assess the risk associated with the additional passenger trains (Zeta Tech Report, page 6). The derailment energy analysis compared the maximum available energy at the time of derailment of a freight train to that of a passenger train on this line (Zeta Tech Report, page 7). As a result of this analysis, Zeta Tech concluded that if a derailment were to occur adjacent to Highland Elementary School, the passenger train would



develop 63% of energy that would be developed by a freight train (i.e., approximately 37% less energy). Thus, Zeta Tech concluded, “This more than compensates for the small increase in derailment risk associated with the addition of the passenger trains, with a resulting combined risk of the order of 90% of the current freight operations” (Zeta Tech Report, page 7).

Accordingly, the Zeta Tech Report concludes that the addition of commuter rail to the existing railway line would not significantly increase the safety risks in the vicinity of Highland Elementary School and the Kinder-Morgan pipeline near that school (Zeta Tech Report, page 7).

School Siting Requirements

Comments were received stating that RCTC had an obligation under state law to prepare a particular type of safety study discussing the potential risks to the school from the existing railroad and pipeline operations. The basis for these comments appears to be current state law, which provides that newly proposed schools may be sited within 1,500 feet of a railroad track or within 1,500 feet of a hazardous pipeline easement only upon the completion of certain safety studies (5 CCR § 14010). The responsibility for preparing those safety studies falls – not on the railroad or pipeline operator – but on the school district that is proposing the location of the new school (see *ibid.*; Educ. Code, § 17213). Highland Elementary School is not a newly proposed school, but rather one that has been in this location for over 50 years. Accordingly, the plain language of these regulations and code requirements make clear that they do not apply to the PVL project.

Additionally, comments were received stating that RCTC “must” prepare a railroad safety study and pipeline risk assessment in the manner provided for in the California Department of Education’s (CDE) Guidance Protocol for School Site Pipeline Risk Analysis (see Enclosure to RUSD Comment Letter [dated January 6, 2011]). However, the CDE Protocol is, by its own terms, inapplicable to the PVL project. First, the Protocol states that it is only “recommended guidance,” and is not mandatory (California Department of Education Guidance Protocol for School Site Pipeline Risk Analysis (February 2007) at p. ii available at: <http://www.cde.ca.gov/ls/fa/sf/protocol07.asp>)¹. It also states that “its sole purpose” is to assist in analyzing the potential location of new schools (*ibid.*) Further, the Protocol states that it “is not directly required by any regulation or code.” (*ibid.*) These limitations are confirmed by the sample analysis provided by in the comment letters, in that the specific Risk Analysis provided by RUSD states (1) it was prepared in order to analyze potential risks to future residents of a new project, not to analyze existing conditions, (2) it was based on the CDE’s recommended protocol, not on any statutory or regulatory requirement, and (3) it was based on CDE’s 2002 protocol, not on the 2007 protocol that CDE currently recommends. Finally, the Protocol makes clear it is “for use by California local educational agencies,” and not for general use by all agencies proposing projects nearby existing schools (Protocol at p. ii).

In summary, neither the Education Code nor its implementing regulations require the preparation of any particular type or format of study; the Protocol referenced by the comments is not binding and does not apply to the PVL project; and to the extent that either the law or the

¹ Per a discussion with the California Department of Education’s Protocol Director, Michael O’Neill, the February 2007 version of the Protocol is the most recent version of the Protocol. (Pers. Communication 12/13/10).



Protocol can be read to impose a duty to study impacts in a particular way, that duty falls upon the local educational agency – the Riverside Unified School District – and not RCTC. Ultimately, and as discussed below, RCTC’s analysis of potential hazard and safety impacts was thorough, complete, and fully complies with applicable requirements.

Pipeline Compliance With Existing Safety Regulations

Comments were received claiming that the pipeline was buried at an insufficient depth to ensure that it could continue to be operated safely during PVL project operations.

Federal law extensively regulates the maintenance and operation of fuel pipelines, including the Kinder-Morgan fuel pipeline. Although these regulations do not appear applicable to existing pipelines like the one at issue here, the Code of Federal Regulations does state that all new hazardous materials pipelines – including those carrying fuel – must be located at least three feet below the surface of the ground in all residential, commercial, and industrial areas (49 CFR § 195.248). This standard was developed and imposed by the Department of Transportation’s Pipeline and Hazardous Materials Safety Administration in order to “prescribe safety standards and reporting requirements for pipelines” (49 CFR § 195.0). Because there are exceptions to this three-foot minimum depth under federal law in the event of certain engineering constraints, such as where pipelines cross waterways, a pothole study was conducted by RCTC, in early 2010, to verify the actual depth to the top of the Kinder-Morgan pipeline in the area of the Highland Elementary School. The results of that study show that for the most part the depth to the top of the pipeline ranges to 5’-2” in the area adjacent to the school. If during construction the pipeline is found to be buried less than three (3) feet beneath the ground surface, a non-permeable material will be placed over the fuel line where soil erosion has taken place. This will reduce further erosion in the immediate area of the pipeline. This Project feature will not result in any new environmental impacts, given that the area around the pipeline is already disturbed and compacted. This verifies that the pipeline is being maintained in the manner required by federal safety regulations.

Duffy Street Accident

It should also be noted that several comments referenced the “Duffy Street Accident” and expressed concern that a similar pipeline accident could occur along the SJBL-RCTC owned ROW. The Duffy Street occurrence, however, is readily distinguishable from the PVL project, and has no bearing on the PVL project’s potential impacts for several reasons.

First, the Duffy Street pipeline carried a different fuel type, gasoline, rather than jet fuel. Gasoline has a National Fire Protection Association (“NFPA”) Flammability rating of 3 and a flashpoint (the lowest temperature at which a volatile liquid can vaporize to form an ignitable mixture in air) of less than -49° F. In contrast, the jet fuel carried in the Kinder-Morgan pipeline (JP5) has a NFPA Flammability rating of 2 (moderate) and a flashpoint of 100° F. This means that, even in the speculative event that a pipeline breach occurred, the fuel in the Kinder-Morgan pipeline has a much lower likelihood of causing a fire than would the gasoline in the Duffy Street pipeline.

Second, the National Transportation Safety Board’s (“NTSB”) official report on the Duffy Street incident confirms that among the major reasons for derailment were that the train did not have functioning dynamic brakes and that, given the inadequacy of the brakes, the train was too



heavy for the incline down which it was traveling (NTSB's Railroad Accident Report [addressing derailment on May 12, 1989] at p. vi). Further, one of the major contributing causes to the subsequent breaching of the pipeline was the failure to exercise sufficient care during wreckage clearing operations, the repeated driving of excessively heavy machinery (e.g., cranes etc.) over the top of the pipeline, and the failure to verify the strength of the pipeline prior to conducting cleanup operations (id. at pp. vii, 25, 36). It was the combination of all of these factors that led to the pipeline explosion. The breach of the pipeline was not caused by the derailment itself, but instead by the wreckage cleanup activities occurring after the derailment (see id). It is speculative to assume that the PVL project Metrolink trains (which are much lighter than the Duffy Street freight train) will derail from the track (particularly given that the Zeta Tech Report found derailment to be unlikely and that the PVL project includes track upgrades to increase the track's safety and that (as described in the Zeta Tech Report), passenger trains have a much lower rate of derailment as compared to freight trains), travel the approximately 45 feet to the pipeline, and dig five feet into the ground.

Third, the Duffy Street incident occurred in 1989, over twenty years ago. Since that time, additional regulations have been placed on train and pipeline operations to increase safety, as follows. As a result of the Duffy Street incident, Assembly Bill 385 was passed and signed into law in 1989. This bill called for the State Fire Marshal to conduct and prepare a risk assessment study addressing hazardous liquid pipelines within 500 feet of a railroad track. The results of this study indicated that pipelines within 500 feet of a railroad do not pose a higher risk of breach than those located further away from a railroad (Hazardous Liquid Pipeline Risk Assessment, California State Fire Marshal, March 1993). Other factors, such as external corrosion and age of the pipeline, caused the majority of leak incidents. In the years since, additional federal and state regulations have been implemented to further monitor, protect, and enforce pipeline safety. One example of this is the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (Pub. Law 109-468). This Act states that participating agencies have the responsibility for ensuring that the elements of the program (research, development, demonstration, and standardization to ensure the integrity of pipeline facilities – 49 CFR Chapter 601 § 60101) are implemented in accordance with the law. These elements include materials inspection, stress and fracture analysis, detection of cracks, abrasion, and other abnormalities inside pipelines that lead to pipeline failure, and development of new equipment or technologies that are inserted into pipelines to detect anomalies (49 CFR Chapter 601, § 60101).

Likewise, improved technology with regard to track construction and train safety features have also increased overall operating safety. Examples of these features include: wayside detectors, which identify defects on passing rail cars, including overheated bearings and wheels, deteriorated bearings, and cracked wheels; improved metallurgy and fastening systems to enhance track stability, which reduces the risk of track failure that may lead to derailments; and trains with electronically-controlled pneumatic brakes, an electronic signal that applies the brakes immediately and results in shorter stopping distance, reduced slack, and improved train control (High-Tech Advances Improve Safety & Efficiency, Association of American Railroads, May 2009).

For all these reasons, it is not reasonably foreseeable that a repeat of the Duffy Street incident would occur in connection with the PVL project.

The SEA's Analysis of Potential Pipeline Risks Complies with NEPA



NEPA regulations state that the lead agency has an obligation to consider the direct and reasonably foreseeable indirect impacts of their proposed projects (e.g., 40 CFR 1508.8). The SEA for the PVL project does just that, providing an analysis of potential derailment and pipeline-associated risks (e.g., SEA, Sections 1.7.12 and 3.8). Based on that analysis, the SEA concluded that there would be “no impact” from the PVL project with regard to these issues.

In contrast to NEPA requirements, the concerns raised in comments do not seem to focus on potential risks associated with the PVL project, but instead center on perceived risks associated with existing freight usage on the track – usage that has been ongoing for many years, and which will not be affected or altered by the PVL project (see discussion in SEA, Section 1.7.12).

Finally, some mitigation measures recommended in comments included relocating the pipeline away from the school and neighborhood or outside of the SJBL; protecting the pipeline in place by increasing the depth of cover over the pipeline (either by adding additional material on top or by burying it deeper); encasing the pipeline; or by placing a protective concrete slab over the pipeline. NEPA only requires the imposition of mitigation measures for potentially significant impacts (e.g. 40 CFR §§1502.14[f], 1502.16[h], and 1505.2[c] requires lead agencies to adopt all feasible and practicable mitigation measures that would avoid or minimize environmental harm caused by a proposed project) and, here, the analysis in the SEA confirms that there are no potentially significant impacts. Accordingly, no mitigation is required to address perceived derailment or pipeline risks. Moreover, the pipeline already complies with applicable safety requirements, as discussed above, such that burying the pipeline deeper underground or providing additional casing is not required. Additionally, relocating the pipeline is infeasible because it would inflict significant environmental impacts on the surrounding community, as a new pipeline would require trenching through or under existing homes and businesses.

Master Response #3 – Derailment (General)

A number of concerns were raised regarding the possibility of project-induced derailments. The presumption evidenced in the comments is that implementation of the PVL project would contribute to an increased possibility for derailments. A derailment generally may include one of the following; a train leaving the tracks, just one set of wheels leaving the tracks, side swiping another train, or general damage to a train while on the tracks.

Section 3.8, Hazards and Hazardous Materials, in the SEA discussed derailment statistics that were calculated for the PVL project based on data up to fiscal year 2006/2007. This section stated that, based on information obtained from the FRA Safety Database (<http://safetydata.fra.dot.gov/officeofsafety/>) and local resident information, there were 4.5 million freight train miles on SCRRRA tracks since 1993, and that there have been three freight train derailments in this time period. This equates to approximately one derailment per 1.5 million train miles or 0.000000667. The derailment risk for BNSF freight trains on the SJBL alignment is 0.00801, which equates to a derailment approximately once every 124 years.

Since the SEA was submitted to the public for review, additional statistics were calculated for fiscal year 2007/2008. These updated data also are used to compute the derailment exposure risk on SCRRRA’s lines and to compare this risk to the estimated risk currently experienced by the SJBL with freight only. Relevant findings include:



First, the SCRRA had 455,684 freight train miles operated over their lines in fiscal year 2007/2008, and this is assumed to be typical of operations since the start of SCRRA operations. This yields a freight history of about 6.8 million freight train miles since 1993 (first full year of operation). There have been three main track freight train derailments (not counting the collision at Chatsworth because this was a collision and not a derailment).

Second, this calculates to an exposure ratio of about one derailment per 2.28 million train miles or 0.00000044.

Third, the BNSF operated 11,440 freight train miles on the SJBL in fiscal year 2007/2008, and this rate of train miles has been consistent over the years. From 1993 to 2008, this would total 171,600 train miles.

Fourth, the annual future (after completion of the project) freight train derailment risk is then the product of 0.00000044 (risk per train mile) and 11,440 annual train miles, or 0.00502.

Fifth, assuming that there have been two freight train derailments on the main line of the PVL since 1993, the risk is two divided by 171,600 (the total train miles BNSF has operated since 1993) or 0.0000116 per train mile.

These calculations show that the SCRRA derailment risk is 0.00000044, while the BNSF freight train derailment risk is 0.0000116. The reason for this difference is that, because the SCRRA tracks are used for commuter rail, the tracks are maintained to high standards of safety and ride quality due to their role in public passenger transport.

The PVL project includes track improvements throughout its length because a commuter train would be added to the track (see SEA, Section 1.7.1). These track improvements would upgrade the existing physical condition of the rail line, which would result in a stronger infrastructure, a higher level of maintenance, and enhanced operational safety. Therefore, not constructing the PVL project continues the much higher risk of freight train derailment exposure.

The comments also referenced a third derailment in BNSF history, which occurred in 1990 near Hyatt Elementary School. As the derailment occurred outside of the 17-year window of SCRRA experience, it was not included in the analyses. However, even if it were included in the derailment calculations, it would increase the freight train risk factor, further strengthening the argument that the PVL project benefits the community by improving infrastructure on which existing freight would continue to travel. Therefore, the analysis in the SEA is correct and no additional analysis is required.

Derailment Risks Near Schools

Notwithstanding the foregoing, and in an abundance of caution, RCTC commissioned a focused technical study to specifically evaluate the potential risk of derailment that would result from the proposed project's addition of commuter trains to the existing Perris Valley Line. (*Analysis of Safety Issues for the Proposed Commuter Rail Service on the Riverside County Transportation Commission's Perris Valley Line in the Vicinity of Highland and Hyatt Schools*, dated March 22, 2011 [the "Zeta Tech Report"]).

The Zeta Tech report evaluated the following two questions (Zeta Tech Report, page 2):



1. Will the addition of commuter rail to the existing line significantly increase the safety risks in the vicinity of the Highland Elementary School and the Kinder-Morgan pipeline near that school?
2. Will the addition of commuter rail to the existing line significantly increase the safety risks in the vicinity of Hyatt Elementary School?

Highland Elementary School

Zeta Tech's evaluation of the risks in the vicinity of Highland Elementary School were based on a derailment risk analysis (Zeta Tech Report, p. 5). The derailment risk analysis examined general derailment risk as well as derailment risk specific to passenger trains. The derailment energy analysis compared the maximum available energy at the time of derailment of a freight train to that of a passenger train on the Perris Valley Line (Zeta Tech Report, page 7).

With regard to derailment risk associated with current BNSF operations, the Zeta Tech study used derailment classes in the Federal Railroad Administration's ("FRA") accident database for years 2007-2009. (Id.) Based upon this analysis, Zeta Tech determined that the average derailment probability for these four Class 1 railroads, which include BNSF, is approximately 0.00084 total derailments per million gross ton miles per year (total derailments/MGTM/year). Further, Zeta Tech considered the risk of Class 1 railroad derailment in the vicinity of each school. By applying these data to operations within one half mile of the school, in each direction, Zeta Tech determined that the total risk of BNSF derailment under current operations is approximately 0.000672 risk per train mile in the vicinity of each school, which, in other words, would approximate 1 derailment every 1500 years (Zeta Tech Report, page 6).

With regard to passenger train derailment risk, the Zeta Tech analysis used all derailment classes in the FRA accident database for the years 2007-2009. Based on this analysis, the passenger train average derailment probability is approximately 0.00032 total derailments/MGTM/year. This represents the incremental increase in risk associated with the introduction of passenger service. By applying these data to operations within one half mile of the school, in each direction, Zeta Tech determined that the increased risk of derailment associated with passenger service is approximately 0.00032 total derailments/MGTM in the vicinity of each school, which, in other words, would approximate 1 derailment every 3,000 years (Zeta Tech Report, page 6). Zeta Tech concludes that this increased risk is "small" (Zeta Tech Report, page 6) and supports the Zeta Tech conclusion that "...the addition of commuter rail to the existing railway line does not significantly increase the safety risks in the vicinity of the Highland Elementary School and the Kinder-Morgan pipeline near that school" (Zeta Tech Report, page 5).

The conclusions regarding "safety" risk are based on consideration of both the risk for derailment and the likelihood that the Kinder-Morgan pipeline would be compromised if a derailment were to occur in its proximity. Thus, notwithstanding the foregoing assessment of derailment risk, since both the school and the pipeline are adjacent to the railroad right of way, Zeta Tech also performed a derailment energy analysis to assess the risk associated with the additional passenger trains (Zeta Tech Report, page 6). The derailment energy analysis compared the maximum available energy at the time of derailment of a freight train to that of a passenger train on this line (Zeta Tech Report, page 7). As a result of this analysis, Zeta Tech concluded that if a derailment were to occur adjacent to Highland Elementary School, the



passenger train would develop 63% of energy that would be developed by a freight train (i.e., approximately 37% less energy). Thus, Zeta Tech concludes, “This more than compensates for the small increase in derailment risk associated with the addition of the passenger trains, with a resulting combined risk of the order of 90% of the current freight operations” (Zeta Tech Report, page 7).

Accordingly, the Zeta Tech Report concludes that the addition of commuter rail to the existing railway line would not significantly increase the safety risks in the vicinity of Highland Elementary School and the Kinder-Morgan pipeline near that school (Zeta Tech Report, page 7).

Hyatt Elementary School

The derailment risk analysis performed for Hyatt Elementary School used all derailment classes in the FRA accident database for years 2007-2009 for Class 1 freight railroad operations and for passenger rail operations. Given the severe nature of the track alignment, the severe grade, and the severe curvature conditions in the vicinity of Hyatt Elementary School, the derailment risk analysis for Hyatt Elementary School focused on key potential high severity derailments (Zeta Tech Report, pages 10-11).

According to the derailment risk analysis, focusing on high severity derailments, the derailment risk for passenger train operation in all cases was less than the derailment risk for freight operations. In most instances, the passenger train derailment risk was 5-10 times lower than the freight train risk (Zeta Tech Report, page 12). The Zeta Tech study focused on three major types of derailments: Mechanical Caused Derailments, Human Factor Caused Accidents and Derailments, and Track Caused Derailments (Zeta Tech Report, pages 12-13). In all cases, the passenger trains would have less derailment risk as compared to the freight trains.

Finally, with regard to Track Caused Derailments, the Zeta Tech report concluded that in the vicinity of Hyatt School, the increase in derailment associated with the addition of passenger trains on the existing route is 0.0001255 total derailments/MGTM per year or, in other words, approximately one derailment every 8000 years (Zeta Tech Report, page 13).

Thus, the Zeta Tech report supports the conclusion that the addition of commuter rail to the existing railway line does not significantly increase the derailment risk at or near Hyatt Elementary School.

Master Response #4 – Hazardous Materials Transport

A number of comments were received regarding the movement of and potential release of hazardous materials within the corridor. The concern is not with the PVL project commuter rail service, but with the existing BNSF freight operations. This issue is addressed in the SEA in Section 3.8.3: “As a commuter rail line, PVL service is passenger only. As such, there would never be an occasion when hazardous materials would be transported on the commuter trains.”

The BNSF currently uses the SJBL for freight deliveries to its customers within the corridor and would continue to do so, regardless of whether or not the PVL commuter rail project goes forward. As such, the comments are not relevant to the PVL project because NEPA requires lead agencies to analyze the impacts of their proposed projects and to mitigate for any potential



significant impacts (e.g., 40 CFR §§ 1508.8, 1502.14[f], 1502.16[h], and 1505.2[c]), not on alleged risks resulting from existing freight usage on the track – usage that has been ongoing for many years, and which will not be affected or altered by the PVL project (see discussion in SEA, Section 1.7.12 and 3.8).

However, the PVL project is expected to contribute to the reduction of the existing, baseline risk associated with occasional freight train transport of hazardous materials. This is because PVL project implementation includes replacing existing track, welding the rail, replacement ties, and improving the overall condition and safety of the rail (see SEA, Section 1.7.1).

Additionally, see Master Response #5, Freight Operations for further information regarding BNSF freight operations.

Master Response #5 – Freight Operations

Several comments on the SEA claimed that PVL project improvements to the track would encourage additional freight traffic or allow existing freight traffic to increase their speed. Both of these issues were discussed in the SEA, Section 1.7.12, Freight Usage.

The SEA, in Section 1.7.12 describes the freight study that was conducted in 2008 to “inventory the current freight usage along the SJBL and to determine whether track improvements planned for commuter rail service would facilitate the expansion of freight service along the SJBL.” The study found that track improvements and other upgrades proposed as part of the PVL project are not needed to accommodate existing freight operations, “as the existing SJBL track and sidings can already carry the heaviest car weight of 286,000 pounds. Because no additional weight capacity would be added, or is even needed for existing users of the BNSF, PVL-related track improvements would not create conditions that could either increase the volume of freight shipped per carload or the number of weekly carloads” (SEA, Section 1.7.12).

Freight operations are based on the economics of providing the service, the controlling factor being customer demand, a direct function of economic conditions. The PVL project does not influence the economic conditions that dictate increased or decreased freight operations. Future economic conditions and demand for freight service are speculative and would occur regardless of whether or not the PVL project is implemented. The PVL project would add and operate six trains twice a day, making a total of 12 trips per day (six trains in each direction). Under terms of its joint use agreement with RCTC, BNSF is authorized to operate freight trains on the existing SJBL and would continue to do so after project implementation with the only limitation being that commuter rail would have priority over freight. Therefore, no impacts are anticipated and the SEA was not changed.

The SEA, Section 1.7.12 also discusses the PVL project’s potential impact on train speeds on “... freight trains are limited to traveling at 20 miles per hour (mph) north of Perris. Southbound freight trains would continue to operate at lower speeds to maneuver the climb through Box Springs Canyon. The current freight inventory indicates that freight shipments often travel thousands of miles, and therefore any upgrades to the existing 21-mile-long SJBL segment to allow for even minor increases in train speed have little overall impact on the total travel time of the shipment.” Since a maximum 20 mph speed limit is currently in place, the terrain in certain areas of the track necessitate a slower speed, and there are no additional economic incentives



for freight trains to travel at faster speeds, the PVL project would have no impact on the speeds of freight trains.

Master Response #6 – Noise

Three environmental clearance efforts for the PVL project have been prepared between 2004 and 2010 for which noise monitoring data were collected and analyzed. These three evaluations included a NEPA Draft Environmental Assessment (EA) prepared in 2004, a CEQA Draft Environmental Impact Report (EIR) prepared in 2010, and a NEPA Draft Supplemental Environmental Assessment (SEA) prepared in 2010. Both the 2010 Draft EIR and the 2010 Draft SEA represent the most recent updates to the 2004 Draft EA. The Draft SEA, prepared for the Federal Transportation Administration, relies upon the same noise baseline information and analyses as those included within the Draft EIR.

Each of the separate noise analysis efforts was based on the use of representative and up-to-date environmental noise data. Existing noise conditions in the field were collected for a 24-hour period at sensitive residential properties and for a 1-hour period at institutional land uses (such as schools and churches). In addition, ongoing and developing engineering design elements associated with the project were also incorporated into the analyses. As such, these noise analyses have relied upon information that has evolved as the project has progressed. A history of noise analyses and documentation is provided here.

The noise analysis for the 2004 EA followed the FTA's general assessment methodology (see the 1995 FTA *Transit Noise and Vibration Impacts Assessment Manual*, now superseded by FTA's 2006 *Transit Noise and Vibration Impacts Assessment*, the "FTA Manual," page 5-1) and used a very conceptual level of engineering design for the analysis of potential impact, the only available level of engineering design at the time. With use of the FTA general assessment methodology, this represented a very broad and conceptual first approach at determining potential noise impacts. The 2004 EA noise study was conducted utilizing monitoring data collected in 2002. However, the 2002 noise-monitoring program only included short-term noise measurements and did not include the collection of 24-hour monitoring data. The results of the assessment indicated that 111 homes in the UCR area would be potentially affected by PVL train noise. As no detailed calculations for precise mitigation were conducted for this assessment, only a generalized list of recommended mitigation measures was included in the draft report (i.e., no mitigation was developed for specific properties). Consequently, while this was an acceptable procedure for determining potential noise impacts at this conceptual stage of design, when noise impacts have been predicted, more accurate monitoring data is typically required to refine the noise assessment and more accurately disclose potential impacts.

For the 2005 EA, the principal changes over the 2004 EA included: (1) utilizing the FTA detailed assessment methodology (1995 FTA Manual, page 5-1) and (2) incorporating additional noise measurements collected in 2005 (which included more accurate 24-hour monitoring data at numerous locations along the entire corridor). The 2005 EA detailed noise assessment results indicated that 74 residences would be impacted by train operations (*Perris Valley Line Noise and Vibration Technical Report*, March 2006). These impacts were predicted to occur at properties at various locations along the alignment. These impacts also included impacts along the BNSF to SJBL connection option alternatives, which were under consideration at that time (though no longer considered in the latest Draft SEA).



The decrease in the number of impacted properties predicted in the 2005 EA, compared to the 2004 EA, represents the increased refinement in the assessment which was based on more accurate noise measurements and input data than had been utilized in the 2004 EA. This allowed for a more accurate identification of potentially affected properties so that specific mitigation measures could be developed. Mitigation measures for potential noise impacts were recommended in the form of noise barriers, wayside applicators, and sound insulation. However, sound insulation was only recommended for one property in Perris and, although the use of wayside applicators is mentioned, no exact criteria pertaining to its use were incorporated.

For the Draft SEA, the baseline noise monitoring data included several measurements of noise sensitive locations previously monitored for the 2004 and 2005 EAs. However, the overwhelming majority of the noise monitoring data utilized for the Draft SEA was monitored and collected in 2008 and 2009 and included data acquired at new locations or re-measurements of locations monitored for the 2005 EA. Specifically, for the noise monitoring program in 2008 and 2009, schools (during the school session) and homes along the SJBL alignment were re-monitored to ensure the most recent data was used. In addition, noise monitoring data was collected at new residential and institutional locations to ensure more complete coverage of sensitive neighborhoods. Consequently, all monitoring data utilized for the Draft SEA were reasonable and consistent with the existing noise environment.

Changes in both the number of trains that would operate on the PVL alignment and the PVL train schedule were also incorporated into the new 2010 assessment. While the FTA detailed assessment methodology was used again for the Draft SEA, based on a specific request from the FTA, it was slightly altered to follow more conservative assessment procedures than had been utilized for the 2005 EA. Accounting for the updated input data and PVL project information, including preliminary engineering drawings developed to the 30 percent level, the refined noise assessment methodology of the Draft SEA predicted that a total of 83 residential units would be impacted by noise from the proposed PVL project. At the 30% engineering level, no appreciable changes to the project layout will occur. Thus, the analysis of noise impacts based on the 30% drawings provides a detailed and accurate assessment of potential project impacts.

The noise mitigation analysis conducted for the Draft SEA in Section 3.4.4 indicated that the use of noise barriers and sound insulation would be required at certain locations along the PVL alignment to mitigate for operational noise impacts (see Draft SEA, Tables 3.4. 9, 3.4.10 and 3.4.11). While not proposed as mitigation, a wayside applicators program to reduce wheel squeal would also be implemented as part of the PVL project. Once the FTA noise criteria were re-applied to the noise sensitive properties mitigated by the proposed noise barriers, it was determined that no impacts would result with the noise barriers in place (see SEA, Table 3.4.12). Sound insulation was also proposed for seven homes and St. George's Episcopal Church (eight properties in total) at locations where noise barriers are not feasible and/or would not totally eliminate potential impacts, a condition resulting from the topographic and engineering constraints on some of the noise sensitive properties near rail crossings. Building sound insulation typically involves caulking and sealing gaps in the building envelope, wall insulation and installation of acoustical windows and solid-core doors. Because sound insulation often requires a complete closed window condition to be effective, the sound insulation process may also involve the installation of a central conditioning system. Improving the sound insulation



of these properties will reduce interior noise levels to below the FTA impact criteria, such that there would be no impacts.

Although the Draft SEA proposes sound insulation at only seven homes and one church, this represents a notable increase in the number of properties recommended for sound insulation, compared to the 2005 EA report (no specific properties were recommended for sound insulation in the 2004 EA). As part of the implementation of the project, wayside applicators are required at all short radius curves to reduce noise from wheel squeal. These short-radius curves are specifically defined in the Draft SEA as having a radius of curvature less than 900 feet, in accordance with FTA determinative methodologies (see Draft SEA, Section 3.4.3 and Table 3.4.8).

As a result, based on the subsequent improvements and refinements in the analysis procedures, data assumptions, and methodologies, the results of the 2004 EA, 2005 EA and Draft EIR are not directly comparable. Rather, each subsequent analytical effort represents a refinement over its predecessor. With respect to the prediction of noise impacts and the identification of focused noise mitigation, the Draft EIR presents a complete analysis and disclosure of potential impacts.

Section 4.10.4 of the Draft SEA discusses the potential noise and vibration impacts predicted as a result of the PVL project. The FTA criteria was used in all PVL noise analyses as it was deemed to be the most appropriate for assessing rail noise impacts. Unlike local noise ordinances, which are based solely on absolute noise limits, the FTA criteria is based on both absolute and relative noise annoyance levels for humans and is specifically tailored towards noise impacts related to rail transportation projects such as the PVL (FTA Manual, Figures 2-9 and 10). The criteria are based on extensive human response noise study data conducted by the EPA and other federal agencies. In addition, because the FTA Manual represents a uniform noise assessment procedure meant to be utilized on a national level, it applies a factor of conservatism to its criteria to encompass a variety of conditions that local jurisdictions would not require. Accordingly, the use of the FTA impact criteria was deemed most appropriate for determining any potentially significant operational and construction noise impacts from the PVL project (see Draft SEA, Section 3.4.1). The FTA impact criterion is related to exterior community annoyance noise levels (FTA Manual, Figures 2-9 and 2-10). For residential properties where project noise levels fall below this noise criteria, it is assumed that noise sensitive activities within the home would not be significantly impacted. This conclusion would be valid whether the property had an open window condition or not. However, as stated above, for those properties where impacts were projected and noise barriers could not be provided as feasible mitigation, sound insulation was proposed for mitigation. In these cases only, an absolute maximum interior noise level (FTA Manual, page 6-44) was then used as the criteria for effective mitigation.

With respect to PVL construction noise, although the FTA Manual noise criteria were used for the construction noise assessment, local noise ordinances were also consulted to determine the allowable hours of day during which PVL construction activities would be permitted and the maximum noise levels that construction activities should not exceed. Construction would be limited to the hours permitted by local ordinance. Because these local codes allow construction only during day-time hours, if any project-related night-time construction activity would be required, RCTC shall obtain from the municipality written consent for an exemption, or variance, from these local noise requirements. In addition, although no impacts from construction were predicted with respect to the FTA criteria, individual construction activities around noise



sensitive areas such as residences and schools could result in temporary noise increases. However, these increases would not be considered a significant noise impact. These increases would be based on potential occurrences of atypical events, given the inconsistent and transitory nature of some construction activities and equipment usage, and would not constitute a significant impact. However, for all construction activities contractors will use standard construction noise control measures such as temporary construction noise barriers, low noise emission equipment, and the use of acoustic enclosures for particularly noisy equipment to reduce the likelihood of any increases in construction noise above the local noise ordinance maximum levels.

With respect to limiting construction noise near schools, some of the comments on the SEA included requests that PVL construction activities be limited to non-school hours. However, this type of noise control measure would neither be reasonable nor feasible given the resulting limited time within which the project would have to be constructed. In addition, the hours of operation for a typical school are not limited to the school day, and subsequently may include evening and early morning hours thus further reducing available construction time. As a result, if the hours of allowable operation for construction activities were to be restricted, the construction period would be extended and the ability to complete the proposed project within a reasonable period of time would be significantly compromised.

The construction activity that would create the most noise and vibration is pile driving associated with the bridge replacements near the South Perris Layover Facility, around the San Jacinto River. However, since there are no noise sensitive receptors located within almost one mile of the proposed Layover Facility and the pile driving sites, construction-related noise impacts would not occur.

Master Response #7 – Emergency Planning and Response

The issue of emergency planning and response was raised by residents of the UCR neighborhood. One concern was with regard to the possibility of a train blocking all three crossings in the neighborhood. The primary concern, however, focused on how an emergency involving a train along the SJBL would be handled.

With regard to the first concern, with the implementation of the PVL project, the SJBL corridor will become a shared corridor with the Metrolink and BNSF trains under control of SCRRA. Because of the shared nature of the operations, it is not anticipated that freight trains would be allowed to stop in areas of single track and thus block other trains from passing. The added benefit of this is that the BNSF trains could only stop in the areas of bypass track along the I-215 corridor and not in the UCR neighborhood. Moreover, PVL project trains will not significantly worsen access to the UCR neighborhood. This is because, first, the PVL project does not propose any train stops (at a station or otherwise) in the UCR neighborhood, and second, the PVL project's trains are commuter trains of only a few cars each. Thus, their length is far too short to block multiple access points into the UCR neighborhood.

With regard to the primary concern, as stated in the SEA, the PVL project will not significantly impact emergency access and public services with the implementation of mitigation measures (HHM-3, HHM-4, and TT-4). The PVL project will be in compliance with applicable requirements specified by the Federal Railroad Administration (FRA), Department of Homeland Security



(DHS) and the California Public Utilities Commission (CPUC) to maintain safety and security along rail corridors.

To comply with Federal and state requirements and to incorporate safety measures and precautions into system wide rail operations, SCRRRA/MetroLink developed a System Safety Program Plan (SSPP) as a means of integrating safety into all facets of SCRRRA (SCRRRA, 2009). The SSPP establishes mechanisms for identifying and addressing hazards associated with the SCRRRA commuter rail system. It also produces a means of ensuring that proposed rail modifications are implemented with thorough evaluation of their potential effect on safety. Where SCRRRA determines an immediate and serious hazard exists, the Director of Operations or the Manager of Safety and Security has the authority and responsibility to order hazardous conditions corrected or hazardous practices halted. Accordingly, the Manager of Safety and Security is empowered to order the cessation of unsafe activities or operations that are evaluated as created an immediate and serious hazard within the system.

In addition, RCTC, in concert with FTA, is preparing a PVL Safety and Security Management Plan (SSMP) to continue to integrate safety and security specifically into the PVL project. The SSMP implements FRA and CPUC required elements for the PVL project (RCTC, 2010). These elements include adopting and complying with a written emergency preparedness plan approved by FRA (49 CFR 239.101) and providing a risk assessment to the CPUC (Public Resources Code § 7665.2). The SSMP confirms the Commission and PVL's commitment to safety and security as described in FTA's Circular 5800.1, Safety And Security Management Guidance For Major Capital Projects, published August 1, 2007. The SSMP is also consistent with the SCRRRA/MetroLink SSPP and MetroLink Security and Emergency Preparedness Plan (SEPP).

RCTC will implement the SSMP (the draft of which is currently in a second revision) to assure the integration of safety and security into the PVL project design, construction and operational testing, up to the start of revenue operations. Once in revenue operation, the SSPP and SEPP define safety and security during PVL operations.

The SSMP shall guide the integration of safety and security into the PVL project development process including (RCTC, 2010):

- Ensure the safety of the employees, contractor co-workers, passengers and the communities that the Perris Valley Line will travel through. Use Safety Certification to ensure that the design, construction, installation and testing of all critical system safety elements are evaluated for conformance with the PVL project's safety and security requirements and that all of the PVL project elements are ready and properly functioning to integrate with the new MetroLink revenue service.
- Promote employees' daily safety and security awareness and work practices. Ensure that a mechanism is provided to follow to completion the resolution of any restrictions to full safety and security certification.
- Ensure compliance with requirements specified by the FRA, Department of Homeland Security (DHS) and the California Public Utilities Commission.



As with any emergency, the first response to a train-related incident would be the designated first responders, the fire department with jurisdiction over the affected area. Knowing this, in addition to the SSPP and SSMP, SCRRRA/Metrolink established a Safety and Security Division that is dedicated to ensuring that the railroad system is prepared to manage disasters (SCRRRA, 2010). In support of Metrolink's goal of achieving safety excellence, the Safety and Security Division is responsible for training and educating the emergency first responders, as well as Metrolink employees and contractors. Participants are trained in Incident Command principles and Metrolink's emergency response plan.

In addition to the preparation of a SSMP, there are additional FRA rules for Passenger Train Emergency Preparedness (49 CFR Part 239). The purpose of 49 CFR 239 is to ensure that railroads conducting passenger train operations can effectively manage passenger train emergencies, such as derailments and other unexpected events during service operations. Under these rules (49 CFR 239.101), each railroad needs to adopt and follow a FRA approved written emergency preparedness plan, and outlines the standards and provisions for the preparation, implementation, and administration of railroad emergency preparedness plans.

The plan requires coordination with emergency responders. In order to establish and maintain a relationship with emergency responders, it is necessary for railroads to develop and offer a training program for all emergency responders who are likely to respond during an emergency situation (49 CFR Sec. 239.101). It is further prescribed that the training program shall cover access to railroad equipment, location of railroad facilities, and an emergency simulation. These requirements are excerpted below.

§ 239.101 Emergency Preparedness Plan.

(5) Liaison with emergency responders. Each railroad to which this part applies shall establish and maintain a working relationship with the on-line emergency responders by, as a minimum:

(i) Developing and making available a training program for all on-line emergency responders who could reasonably be expected to respond during an emergency situation. The training program shall include an emphasis on access to railroad equipment, location of railroad facilities, and communications interface, and provide information to emergency responders who may not have the opportunity to participate in an emergency simulation. Each affected railroad shall either offer the training directly or provide the program information and materials to state training institutes, firefighter organizations, or police academies;

(ii) Inviting emergency responders to participate in emergency simulations; and

(iii) Distributing applicable portions of its current Emergency Preparedness Plan at least once every three years, or whenever the railroad materially changes its plan in a manner that could reasonably be expected to affect the railroad's interface with the on-line emergency responders, whichever occurs earlier, including documentation concerning the railroad's equipment and the physical characteristics of its line, necessary maps, and the position titles and telephone numbers of relevant railroad officers to contact.



The rules even require full-scale emergency simulations (49 CFR Sec. 239.103), as excerpted below:

§ 239.103 Passenger train emergency simulations

(a) General. Each railroad operating passenger train service shall conduct full-scale emergency simulations, in order to determine its capability to execute the Emergency Preparedness Plan under the variety of scenarios that could reasonably be expected to occur on its operation, and ensure coordination with all emergency responders who voluntarily agree to participate in the emergency simulations.

These rules prescribe Federal safety standards for the preparation, adoption, and implementation of emergency preparedness plans by railroads connected with the operation of passenger trains, and require each affected railroad to instruct its employees on the provisions of its plan. The rules also prescribe Federal safety standards on how the railroad shall establish and maintain a working relationship with the on-line emergency responders.

The PVL project also falls under the oversight of the Riverside County and the City of Riverside emergency management departments. As stated in the SEA, Section 3.8.2, Riverside County and the City of Riverside have Emergency Operations Plans written to address the planned emergency responses associated with natural disasters and technological incidents. Each specifies its own level of response within their jurisdiction.

The Emergency Management Office within the Riverside Fire Department coordinates emergency response and has prepared an Emergency Operations Plan (EOP) for the City of Riverside (Riverside Fire Department, 2002). The EOP provides for the mobilization of the resources of the City, both public and private, to meet conditions constituting a local emergency, state of emergency or state of war emergency. It also provides for the organization, powers and duties, services and staff of the emergency organization. Currently the City of Riverside is updating its EOP and associated evacuation plan (Anthony Coletta, Program Administrator for the Riverside UASI Regional Homeland Security Program, personal communication).

According to the Fire Department, Disaster Preparedness website, the Emergency Operation Center (EOC) for the City of Riverside is a secure facility where City department heads are able to work in the event of a large disaster. The facility provides centralization of City response to major events. The EOC allows for City departments to work closely together to make recovery more efficient for the community.

The Riverside County Operational Area Emergency Operations Plan (EOP), which is an extension of the State Emergency Program, focuses on defining and coordinating the appropriate departments that are directly involved with Riverside County emergency response activities. This plan is a multi-agency plan and also serves as a Multi-Hazard Functional Plan for the City of Perris. The EOP is designed to establish the framework for implementation of the California Standardized Emergency Management System (SEMS) for Riverside County, which is located within Mutual Aid Region IV as defined by the Governor's Office of Emergency Services (State OES). By extension, the plan will also implement the National Incident Management System (NIMS), which is being integrated into SEMS at the Governor's directive (Executive Order S-2-05).



The crossing improvements at Marlborough Avenue, Spruce Street, Blaine Street, and Mount Vernon Avenue are the physical requirements to support Riverside County's potential future implementation of a quiet zone (See Master Response #1). These improvements include pedestrian swing gates, pedestrian warning devices and gates, pedestrian barricades and metal hand railings, concrete raised medians, double yellow medians and island noses, warning devices, safety lighting, and signs. Poarch Road in Riverside and West 6th Street in Perris would be closed by the PVL project.

Overall rail corridor safety at grade crossings would also be enhanced by implementation of "Operation Lifesaver," a safety education program for schools and communities near tracks operated by SCRRRA/Metrolink (SEA, Section 3.12.3). Operation Lifesaver "is a non-profit international public education program established in 1972 to end collisions, deaths, and injuries at rail grade crossings and along railroad ROWs. The program addresses rail safety and teaches students at age-appropriate levels to understand rail signage, the importance of avoiding the railroad ROW, and safe driving skills near railroads. Operation Lifesaver provides free presentations to schools and community groups." The majority of the PVL operations would not occur during the school session because most scheduled runs occur either before the start of the school day or after its completion. SCRRRA/Metrolink with RCTC encourages school and community group participation in Operation Lifesaver.

Since the PVL project is in full compliance with CPUC regulations regarding grade crossings and safety, Operation Lifesaver is not required as mitigation but is additional safety education. The SEA was not changed because the PVL project would not result in significant impacts to grade crossing locations or operations and no mitigation measures are required.

Master Response #9 – Highland and Hyatt Elementary Schools (Increased Train Traffic)

The PVL project would add and operate six commuter trains twice a day, making a total of 12 trips per day (six trains in each direction). Nine of these trains would operate outside of school hours. One morning train and two mid-day trains would operate during school operating hours. The morning train would not impact students arriving at Hyatt Elementary School because the nearest grade crossing, Mt. Vernon Avenue, is over 0.75 miles away and of great enough distance that the students would not likely be walking that far to school. Students arriving at Highland Elementary School may be required to wait no more than 45 seconds at the grade crossing at W. Blaine Street for a commuter train to pass. Students leaving both schools in the afternoon would not be significantly impacted because there are no scheduled trains during that time. In addition, the PVL project includes grade-crossing improvements at Spruce Street, Blaine Street, and Mt. Vernon Avenue (described in Appendix D of the SEA), which would result in a safer environment for pedestrian and vehicular movement.

Master Response #10 – Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment)

Several comments expressed concern that the location of the existing track relative to the adjoining Hyatt Elementary School poses a risk to the school from potential derailments; specifically, the potential that a derailment could result in rail cars and cargo (including release of hazardous materials) rolling down the slope and onto school property. The same concern was also expressed by several residents in the immediate area regarding their properties.



This issue is addressed in the SEA, Section 4.7.4: "As a commuter rail line, PVL service is passenger only. As such, there would never be an occasion when hazardous materials would be transported on the commuter trains." Therefore, the PVL project would have no impact specifically on the transport of hazardous materials or the potential for derailment of a train carrying these materials. See also Master Response #4.

With regard to train derailments in general, the PVL project would replenish ballast, and replace ties, and rail next to Hyatt Elementary School, which would improve the current track condition and subsequently reduce the risk of derailment. Section 3.8, Hazards and Hazardous Materials, in the SEA discussed derailment statistics that were calculated for the PVL project based on data until fiscal year 2006/2007. This section stated that there were 4.5 million freight train miles travelled on SCRRA tracks since 1993, and that there have been three freight train derailments during that same period. This equates to approximately one derailment per 1.5 million train miles or 0.000000667. The derailment risk for BNSF freight trains on the SJBL alignment is 0.00801, which equates to a derailment approximately once every 124 years.

In the year since the SEA was submitted to the public for review, another set of statistics was calculated for fiscal year 2007/2008. This updated data also computes the derailment exposure risk on SCRRA's lines and then compares this risk to the estimated risk now experienced by the PVL.

- First, the SCRRA had 455,684 freight train miles operated over their lines in fiscal year 2007/2008, and this is believed to be typical of operations since the start of SCRRA operations. This yields a freight history of about 6.8 million freight train miles since 1993 (first full year of operation). There have been three main track freight train derailments (not counting the collision at Chatsworth, which was not a derailment).
- Second, this calculates to an exposure ratio of about one derailment per 2.28 million train miles or 0.00000044.
- Third, the BNSF operated 11,440 freight train miles on the SJBL in fiscal year 2007/2008, and this rate of train miles has been consistent over the years. Since 1993, this would total 171,600 train miles.
- Fourth, the annual future (after completion of the project) freight train derailment risk is then the product of 0.00000044 (risk per train mile) and 11,440 annual train miles, or 0.00502.
- Fifth, assuming that there have been two freight train derailments on the main line of the SJBL since 1993, the risk is two divided by 171,600 (the total train miles BNSF has operated since 1993) or 0.0000116 per train mile.

These calculations show that the SCRRA derailment risk is 0.00000044, while the BNSF freight train derailment risk is 0.0000116. The reason for this difference is that, because the SCRRA tracks are used for commuter rail, the tracks are maintained to high standards of safety and ride quality due to their role in public passenger transport.

The PVL project includes track improvements throughout its length because a commuter rail would be added to the track (see SEA, Section 1.7.1). These track improvements would



upgrade the existing physical condition of the rail line, which would result in a stronger infrastructure, a higher level of maintenance, and enhanced operational safety. Therefore, not constructing the PVL project continues the much higher risk of freight train derailment.

Comments referenced a third derailment in BNSF history, which occurred in 1990 near Hyatt Elementary School. As the derailment occurred outside of the 17-year window of SCRRRA experience, it was not included in the initial analyses. However, even if it were included in the derailment calculations, it would increase the freight train risk factor, further strengthening the argument that the PVL project benefits the community by improving infrastructure on which existing freight trains would travel.

The distance between the track and school is between 95 and 125 feet, as depicted in the pictures shown below. Train speeds in that area are estimated at less than 20 miles per hour.





Therefore, the analysis in the SEA is correct - there are no impacts and no mitigation is required. The SEA was changed to further clarify this issue. No additional analysis was required and no additional mitigation measures were added.

Derailment Risks Near Hyatt Elementary

Notwithstanding the foregoing, and in an abundance of caution, RCTC commissioned a focused technical study to specifically evaluate the potential risk of derailment that would result from the proposed project's addition of commuter trains to the existing Perris Valley Line. (*Analysis of Safety Issues for the Proposed Commuter Rail Service on the Riverside County Transportation Commission's Perris Valley Line in the Vicinity of Highland and Hyatt Schools*, dated March 22, 2011 [the "Zeta Tech Report"]).

The Zeta Tech Report evaluated two questions. For purposes of this Master Response, the relevant question addressed in the Zeta Tech Report was whether the addition of commuter rail to the existing line significantly increases the safety risks in the vicinity of Hyatt Elementary School (Zeta Tech Report, page 2).

The derailment risk analysis performed for Hyatt Elementary School used all derailment classes in the FRA accident database for years 2007-2009 for Class 1 freight railroad operations and for passenger rail operations. Given the severe nature of the track alignment, the severe grade, and the severe curvature conditions in the vicinity of Hyatt Elementary School, the derailment risk analysis for Hyatt Elementary School focused on key potential high severity derailments (Zeta Tech Report, pages 10-11).

According to the derailment risk analysis, focusing on high severity derailments, the derailment risk for passenger train operation in all cases was less than the derailment risk for freight operations. In most instances, the passenger train derailment risk was 5-10 times lower than the freight train risk (Zeta Tech Report, page 12). The Zeta Tech study focused on three major types of derailments: Mechanical Caused Derailments, Human Factor Caused Accidents and Derailments, and Track Caused Derailments (Zeta Tech Report, pages 12-13). In all cases, the passenger trains would have less derailment risk as compared to the freight trains.

Finally, with regard to Track Caused Derailments, the Zeta Tech report concluded that in the vicinity of Hyatt School, the increase in derailment associated with the addition of passenger trains on the existing route is 0.0001255 derailments per year or one derailment every 8000 years (Zeta Tech Report, page 13).

Thus, the Zeta Tech report supports the fact that the addition of commuter rail to the existing railway line does not significantly increase the derailment risk at or near Hyatt Elementary School.

Master Response #11 – Grade Separations

Several comments included requests that RCTC construct grade separation at different locations along the PVL alignment. According to the BNSF/Union Pacific Rail Road Guidelines for Railroad Grade Separation Projects, a grade separation project is defined as a project that includes an overpass or underpass structure that crosses railroad ROW. As explained in the SEA, all impacts related to traffic, rail, and safety at rail crossings are already fully mitigated.



Accordingly, no further mitigation in the form of grade separations or other measures is required. (See 40 CFR §§1502.14[f], 1502.16[h], and 1505.2[c] - mitigation measures must be developed where it is feasible and practicable to do so.) Moreover, grade separations are infeasible along the PVL alignment for engineering, environmental, economic, and legal reasons.

First, grade separations are infeasible from an engineering perspective, particularly within the UCR neighborhood. Grade separations are space-intensive and require substantial amounts of land in order to properly maintain approach distances, roadway grades, and clearance heights. (23 CFR 646.212(a)(3); 23 CFR Part 646 Appendix to Subpart B.) To provide the space, the downward slope, and the cut-away areas necessary for a grade separation, the residences along both sides of the street would have to give up their street access (e.g., the houses would abut a steep trench containing the roadway undercrossing). Without any street access, and given that these homes are largely surrounded by other residences such that secondary access is not available, these residences would have to be acquired, and the residents would have to be relocated in order to accommodate a grade-separation.

A roadway overpass structure crossing over the track would need to provide a minimum of 23' – 4" of vertical clearance above the existing track to comply with BNSF/Union Pacific Railroad Guidelines for Railroad Grade Separation Projects and CPUC clearance requirements. Adding the depth of the bridge structure, the roadway surface would be in excess of 30' above existing grades. Assuming a 6% roadway slope (a general roadway design maximum) and accounting for minimal length vertical curves, the roadway approaches to the grade separation structure would extend approximately 600' to 700' away from the crossing on both sides before rejoining existing grades. In all cases (Spruce Street, Blaine Street and Mt. Vernon Avenue), other roads exist within this range that would also need to be raised to match. Another site-specific factor that particularly makes a grade separation at Spruce Street and Blaine Street impractical is the proximity and orientation of Watkins Drive, which runs parallel to (and southwest of) the PVL track. In addition to Spruce and Blaine Streets having to be reconstructed for a minimum of 600' (both east and west of the PVL track) to rise to the required 30' above track elevation, Watkins Drive would similarly need to be reconstructed for that same length (both north and south of the crossing locations) to also meet the 30' rise. Driveway access to businesses and residences would be cut off in numerous instances.

A roadway underpass crossing under the track would result in slightly fewer property/access impacts. In this configuration, the roadway would need 16'-6" of vertical clearance as it crosses under the railroad (which would be supported by a new bridge). The railroad bridge would add an approximate minimum of approximately 7'-6" of depth, thereby necessitating a lowering of the roadway surface to approximately 24' below existing grade. Using a 6% roadway slope to transition down the required 24' results in a minimum required 500' of roadway reconstruction on each side of the crossing. While this is less than needed for the overpass configuration, it is still impacts the access to a large number of businesses and residences. Similar to the overpass option, for the Spruce Street and Blaine Street crossings, Watkins Road would also need to be lowered (in a trench) by 24' as it approaches the crossing from both directions to tie in.

Moreover, the construction of a grade separation would result in increased emissions associated with construction, increased geological impacts due to need to stabilize the undercrossing and rail lines, and increased construction traffic impacts because the street would have to be closed during the construction of any grade separation. Due to these space



constraints, the severe impacts to existing private residences, and the increased environmental impacts that a grade separation would inflict, RCTC determined that the construction of grade separations would result in greater impacts to the community than would the proposed PVL project. Accordingly, a grade separation is infeasible both from an engineering and an environmental impact perspective.

Grade separation is also cost prohibitive for the proposed PVL project. The approximate cost of an average grade crossing is \$25 million. The grade separations at Spruce Street and Blaine Street would be substantially higher than average due to the complexity of physical and property impacts as summarized above, and would likely be in the \$40 to \$60 million range each. The engineering costs alone for a grade separation would amount to approximately 3% to 4% of the total project cost. Particularly where all impacts are already fully mitigated, the engineering of a grade separation is not economically feasible. In addition, the construction, maintenance, and property acquisition costs would likely amount to between \$100 to \$150 million for three grade separations at Spruce Street, Blaine Street and Mt. Vernon Avenue, further evidence the economic infeasibility of grade separations. Even considering potential external funding sources, the construction of grade separations would remain economically infeasible. Specifically, Streets & Highways Code section 2452 requires the CPUC, by July 1 of each year, to establish the priority list for highway rail crossing projects, including grade separations, and furnish it to the California Transportation Commission for use in the fiscal year beginning on that date. Interested local agencies are responsible for submitting nominations of projects to the CPUC with the required information. Section 190 of the Streets & Highways Code requires the State's annual budget to include \$15 million for funding qualified projects on the Grade Separation Priority List Program as ranked by the CPUC. Projects may change in ranking from one year to the next, as new nominations may show a greater public need for grade separation or improvement. The system is not one where the first on the list is necessarily the first to be funded. The current priority list of projects is located at http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/102079.pdf and none of the current projects on the priority list fall along the PVL alignment. Thus, even potential external sources of funding (such as that provided by the CPUC) are unavailable for the PVL crossings -- apparently because either the CPUC or the local jurisdictions have not designated the rail crossings in the UCR neighborhood to be priority project.

Further, the construction of a grade-separation is legally infeasible. The CPUC has jurisdiction over the safety of highway-rail crossings in California (CPUC, General Order 88-B). Construction of new grade separation is governed by CPUC General Order 88-B. According to General Order 88-B, the public agencies with jurisdiction over the roadway must be in agreement with regard to the grade separation and the grade separation must comport with all CPUC General Orders. As explained in Master Response #1 – Quiet Zones, RCTC is a special district that does not have broad police powers and is not responsible for traffic control or law enforcement at public highway-rail grade or pedestrian crossings. Therefore, RCTC does not have legal authority to approve a grade separation, nor does it have unilateral land use authority to construct a grade separation even if approved. Therefore, grade separations were not proposed for the PVL project.



0.3.2 Comment Letters

Table 0.3. 2-1
Comment Letters

Letter No.	Commenter	Date	Page No.
1.	Marina Gleeson	12/08/2010	0.3.2-3
2.	Austin E. Sullivan	01/03/2011	0.3.2-7
3.	Barney Barnett	01/04/2011	0.3.2-31
4.	Stephanie Pacheco	01/05/2011	0.3.2-55
5.	Gurumantra Khalsa	01/05/2011	0.3.2-57
6.	Gareth Funning	01/05/2011	0.3.2-65
7.	RTA - Mark Stanley	01/05/2011	0.3.2-69
8.	Robert A. Phillips	01/05/2011	0.3.2-71
9.	Pechanga Cultural Resources - Anna Hoover	01/06/2011	0.3.2-85
10.	Gresham & Savage - Tracy Owens	01/06/2011	0.3.2-103
11.	March Joint Powers Authority - Adam Collier	01/06/2011	0.3.2-161
12.	Johnson & Sedlack - Raymond W. Johnson	01/06/2011	0.3.2-165
13.	Len Nunney	01/06/2011	0.3.2-211
14.	City of Moreno Valley - John Terell	01/06/2011	0.3.2-215
15.	Carl F. Cranor	01/10/2011	0.3.2-217



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3

Letter 1
Marina Gleeson
December 8, 2010

90259 ER,
SK, EE

12/6/10
Ms Rosso -
I'm not happy about whether
rail service - I live on Campus
View Drive - what is annoying
is the Engrs. blowing their horns
@ the R.R. crossing on 3rd St. at
all hours - with another rail for
Metrolink - more annoying horns -
Marina Gleeson

L1-1

B.02.02.11.10



SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

3

Letter 1 (cont'd)
Marina Gleeson
December 8, 2010

RECEIVED
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MARINA GLEESON



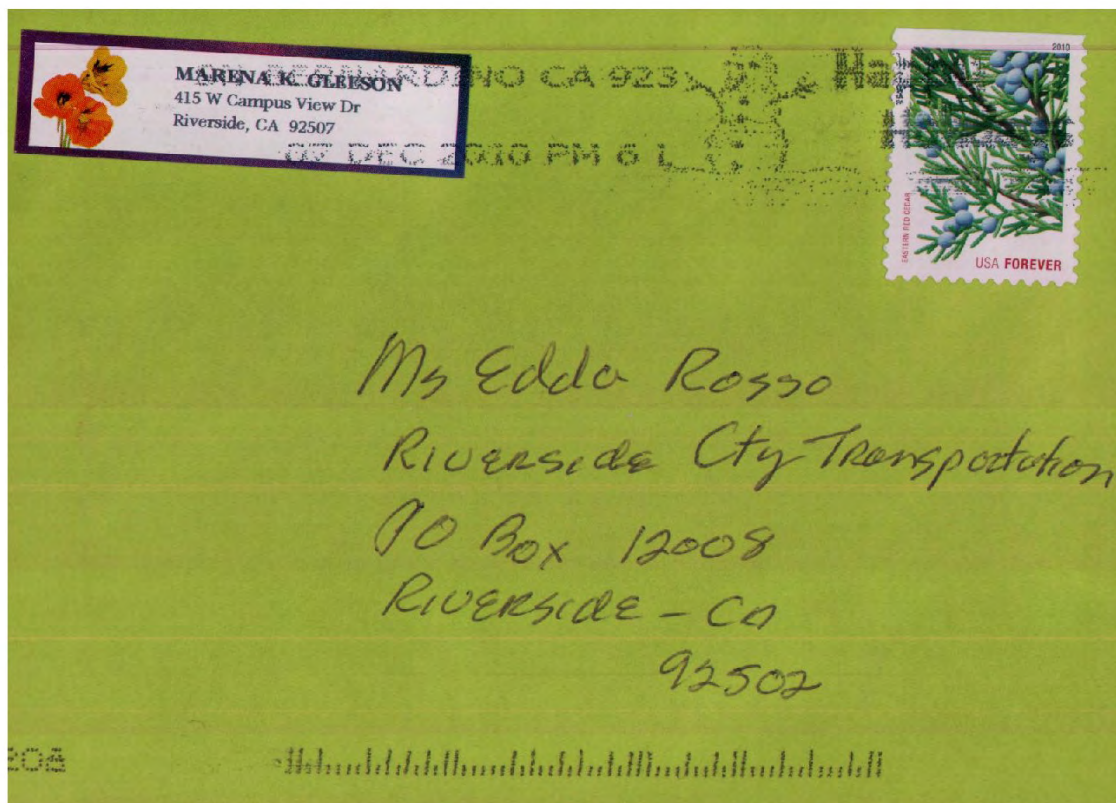
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

3

Letter 1 (cont'd)
Marina Gleeson
December 8, 2010





3

Response to Letter 1
Marina Gleeson
December 8, 2010

- L1-1. The sounding of horns at a rail grade crossing is required by the FRA (see Noise and Vibration Technical Report - Section I). Based on Guidance from the FTA, the SCRRA/Metrolink horns that would be used for the proposed PVL project would not be as loud as the existing freight train horns that are presently sounded. The PVL project will introduce commuter rail service within the corridor and will operate at the times identified in Table 1.7-1 (see Volume 2). The analyses in the Noise and Vibration Technical Report were used to determine if the proposed PVL project would result in noise and vibration impacts to sensitive community properties as defined by the FTA Manual. Noise barriers are proposed as mitigation for impacted homes along West Campus View Drive. As a result of the noise barrier mitigation, predicted impacts at this location would be reduced to levels that are not significant. Because 415 West Campus View Drive is two housing rows away from the alignment, additional noise attenuation would be provided by the row of existing homes along West Campus View Drive.
([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))



3

Letter 2a
Austin E. Sullivan
January 3, 2011

P3800-CI-00281

03Jan2011

Ms Edda Rosso
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

RECEIVED
JAN 05 2011
RIVERSIDE COUNTY
TRANSPORTATION COMMISSION
RECEIVED
JAN 06 2011

Dear Ms Rosso:

BECHTEL INFRASTRUCTURE
CORPORATION

I am writing in response to the Supplemental Environmental Assessment (SEA) for the proposed Perris Valley Line (PVL) project. There is little or nothing here which differs from the Draft Environmental Impact Report (DEIR) which was circulated some months ago in support of the PVL proposal. As such, I have attached my comments in response to the DEIR. My intention is that these comments should be taken as in response to the SEA as well as the DEIR. However, the following observations and comments also seem in order, and I specifically request that they be addressed in the final versions of each document.

L2a-1

As I indicated verbally at the public hearing for the DEIR, I reexamined the Environmental Assessment (EA) which was made for an earlier version of this project in 2005. The EA was conducted with a project description which assumed eight train passages per day on each week day. That document goes on to identify 111 homes as impacted by that project (EA p. 3-101). The current proposal has been increased by 50% to twelve train passages, and, in spite of that, only seven homes are proposed for mitigation. In light of this clear inconsistency, I request that you to justify the low level of mitigation which is proposed in the SEA (knowing full well that you cannot). Therefore, my real questions are: (1) given the obvious and documented inadequacy of this proposed mitigation, please provide a more realistic mitigation regimen consistent with the finding of the EA; and (2) failing that, please provide justification for any of this review process as anything other than a sham which invites legal action by the community.

L2a-2

L2a-3

L2a-4

L2a-5

Yours truly,

Austin E. Sullivan,
Co-Chair, UCR Area Train Subcommittee
275 W. Campus View Drive
Riverside, CA 92507

951/788-3812
austineps@gmail.com



3

**Response to Letter 2a
Austin E. Sullivan
January 3, 2011**

- L2a-1. The letter refers to comments (dated May 17, 2010) originally prepared for the California Environmental Quality Act Draft Environmental Impact Report are also applicable to this SEA. As such, the comments are included as Letters 2a, 2b, and 2c and are addressed as applicable to the SEA.
- L2a-2. The 2005 EA proposed to add eight SCRRA/Metrolink trains to the PVL alignment.
- L2a-3. See Master Response # 6 - Noise.
- L2a-4. See responses L2a-2 and L2a-3, and Master Response # 6 - Noise. The SEA fully and accurately describes and discloses potential noise impacts to the proposed PVL project. The identified mitigation measures are adequate to reduce impacts to the affected properties to levels that are not significant.
- L2a-5. The SEA for the PVL project was made available for public review in accordance with 23 CFR §771.119. In addition, the required 30-day public review period was extended by approximately one week (December 1, 2010 through January 6, 2011) to allow for the holiday season. Therefore, the SEA is fully compliant with applicable regulations.



3

Letter 2b
Austin E. Sullivan
January 3, 2011

May 17, 2010

Dear Sirs:

These are my written comments evaluating the Perris Valley Line (PVL) Environmental Impact Report's (EIR) noise analysis. (EIR 4-10-1). My observations here are limited to issues of noise and associated impacts. I will comment on issues of vibration, air quality, and safety under separate cover. My comments on noise are provided here because it is an area with which I have a greater familiarity.

} L2b-1

PROJECT DESCRIPTION

The EIR indicates that "initial service" would include twelve train passages on each week day. This represents a 50% increase over projects which had been proposed earlier. It is not clear whether this project alternative is intended to include subsequent, additional trains and, if so, what scheduling would be likely, but, since the proposed number of passages has already been increased, there is no reason to assume that subsequent trains will not be put into service. It should be specifically stated that **any additional service would require a new EIR**. Furthermore, neither the project description nor any of the analyses take into account the likely time shifting to night hours of the freight passages which already occur. As such, the analysis included in the EIR is limited to the initial case. **Since the project has been so narrowly defined and analyses, therefore, so limited, any further increase, beyond the proposed twelve train passages, or any resultant increase in night time freight passages beyond those in the assumptions, would need to be accompanied by subsequent environmental review, evaluation, and associated public hearings.** If a more expansive project description is intended, now is the time to make that clear so that analyses based on this larger project might be conducted.

} L2b-2
} L2b-3

EIR NOISE METHODOLOGY AND RECOMMENDED MODIFICATIONS

The authors of the *Noise and Vibration* section of the EIR indicate that they have complied with the Federal Transit Administration's (FTA) guidelines. This is a minimal standard and not sufficient to assess the true noise impacts which the commuter line option would create. The standard set forth in the Federal Aviation Administration (FAA) FAR Part 150, (in general use and certainly known to the authors) would provide a much more accurate and rigorous analyses of these impacts, especially as to establishing an accurate baseline condition. Moreover, these standards also require more complete mitigation. These are the standards which are currently being employed in noise programs elsewhere in Southern California (Ontario, El Segundo, Inglewood, Westchester, and Playa del Rey; for further information on these standards and related matters, FAA El Segundo Office, Los Angeles World Airways, and the City of Ontario). The residents of western Riverside County deserve no less. Without this accurate

} L2b-4



3

Letter 2b (cont'd)
Austin E. Sullivan
January 3, 2011

baseline no subsequent analysis can be accurate, either. The methodology which is in general use in FAA Part 150 studies includes fourteen day continuous noise monitoring of both interior and exterior locations and at sites which can be assumed to represent the areas of maximum impact. The authors of this noise analysis indicate that noise monitoring was only conducted over short periods and over a span of several years. The limited nature of this monitoring is no small matter. Moreover, the locations at which monitors were placed were somewhat limited.

L2b-4 (cont'd)

Neither are the criteria used to assess impacts appropriate. In my experience, some objective standard (like 65 or 70 Ldn) has always been used to assess levels of impact. (Actually, these standards do not really assess impact; what they do is provide an objective standard to determine which impacted properties are eligible for some sort of mitigation and relief). In any case, though not stated anywhere in the document, one must assume that the authors are using some noise standard (70 Ldn?) as the cut off point for proposed mitigation. These standards are important because, ultimately, they will determine which properties should be mitigated and how. The standards should be clearly stated in some objective fashion which they are not.

L2b-5

In a noise study, the very first step should be to decide which noise metric is most appropriate. The authors have chosen the Ldn (level, day-night) standard; however, the CNEL (Community Noise Equivalence Level) metric would clearly have been better. Ldn is used in all of the states but California where CNEL is the accepted standard. Since we are in California, the use of CNEL is indicated. The two metrics are similar in that both provide a 10X increase in assumed noise impact for the period from 10:00 PM to 7:00 AM, hours during which a quiet environment is thought to be especially important. However, the Ldn standard understates noise impacts relative to CNEL because the latter also includes a 3X increase in noise impact for the period from 7:00 PM to 10:00 PM. This 3X increase usually results in only minor differences between the two standards. However, in this case, the result is likely to be fairly great because proposed evening train passages are anticipated for this 7:00 PM to 10:00 PM period. Therefore, the use of Ldn considerably understates the impacts which can reasonably be assigned to both current conditions and to the project. The use of the single event metric would be even better and would certainly produce a higher impact level even than those which would be derived by using CNEL.

L2b-6

The authors also state that: *An increase of 1 dBA cannot be perceived* (EIR, p 4.10-4). This statement is both true and misleading, because the dBA metric assumes that noise is averaged over a 24 hour period. In that average 24 hour case, it is, indeed, true that noise increases of one dBA cannot be perceived. Another way to describe what the authors are saying is that, if a given sound *is occurring*, an increase of 1 dB cannot be perceived by the human ear. That is technically correct. The authors and acoustical engineers in general, use this fact to suggest that no impact exists where there is an increase of 1 dBA or less. Nevertheless, it defies common sense to suggest that residents would not be aware of two additional train passages per day which would be about the equivalent of 1 dBA if averaged over 24 hours. This slight of hand is very common in noise studies and should never be taken as a serious basis for policy recommendations.

L2b-7



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Letter 2b (cont'd)
Austin E. Sullivan
January 3, 2011

Of equal importance, this deceptive analysis calls into question the good faith with which this entire study is being conducted.

L2b-7 (cont'd)

PROPOSED MITGATIONS

The proposed mitigation program cannot be taken seriously. RCTC's Environmental Assessment (EA) which was conducted in 2004 identifies 111 homes as impacted and of these 55 are in the category of "severe impact" (EA p. 3-101). Noting that the EA was conducted with a project description assuming only eight train passages per day as compared to the present proposal of twelve, one can only imagine that at least this number would be impacted by this project. Therefore, one must conclude that the current proposal to insulate seven homes is an attempt to do as little as the community will tolerate and is not made in good faith. (Even in the earlier EA, no objective standard was provided to indicate how these 111 homes were identified. The EA's authors state the following with reference to the Belvedere Heights area: "The three sites (sic) include 111 residences that are subject to 'Impact', 55 of which would be categorized as subject to 'Severe Impact.')" A proper mitigation program needs to be established and completed before the first trains roll. Such a program should include the following elements in addition to sound walls, and the limited insulation which has been proposed.

L2b-8

First, quiet zones should be established along the line. It is not sufficient to indicate that this is a City of Riverside issue. It is an RCTC project. RCTC owns the line, and it is the RCTC's project which is causing the impacts. If RCTC chose to provide this mitigation I doubt that the City would object.

L2b-9

Second a meaningful home, noise insulation program needs to be conducted. Using well established federal noise evaluation criteria, a projected, future 65 CNEL noise contour needs to be created. Then, again using well established federal guidelines, if **any part** of a lot falls within that contour, then the use on that lot should be considered eligible for noise insulation relief. This contour should be established by monitoring in approximately ten locations, in each affected neighborhood, over a continuous, fourteen-day period in order to establish an accurate picture of the existing condition. Then, modeling can be done to make assumptions about the with-project noise levels.

L2b-10

As part of this program, there also needs to be pre- and post-insulation **interior** noise monitoring designed to determine the effectiveness of the mitigations. At a minimum, 25% of eligible homes (and all eligible churches, schools, daycare centers, etc.) should be sampled as part of this pre- and post-monitoring. (Monitoring of every eligible property would be better and is frequently done in such cases.) The standard which has been used elsewhere and which is appropriate here, as well, is an interior noise reduction to a with-project level of no greater than 45 dBA. If this standard is not achieved, then additional measures would need to be taken. **The noise insulation program should be designed to truly mitigate all impacts of the project.** This standard mitigation package is spelled out in several federal guideline documents. Its primary elements are: insulating walls and

L2b-11

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Letter 2b (cont'd)
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ceilings, providing solid core doors, installation of special noise-resistant windows, baffling other noise paths (such as fireplaces, vents, mail slots, etc.), adding weather stripping, and providing ventilation. With reference to ventilation, the minimum which the federal government requires is a system which allows two air exchanges per hour with the windows and doors closed. The climate is such in inland Southern California, that, as a practical matter, this has usually meant the inclusion of central air conditioning where it does not already exist. For example, central air and heating have been standard in Ontario's Part 150 noise mitigation program. Of course, many of the homes in the affected neighborhoods already have central air. Yet, the requirement to keep windows and doors closed would still represent an economic burden. Most residents keep windows open at night to allow the cool, night air to enter the house, thereby greatly reducing costs of electricity. This cost would be partially mitigated by the energy saving aspects of the insulation which would be provided primarily for noise reduction purposes. In those cases where homes have older, less energy efficient air conditioning systems, it could be totally mitigated by replacing condensers with newer, more efficient-units. In those cases, where energy-efficient units are already in place, the inclusion of a whole house fan as part of the package would be appropriate. Home owners would be able to have window cracked open and the fan on only briefly in the morning and derive the same benefit as if they had left the windows open all night.

L2b-11 (cont'd)

SECONDARY IMPACTS

Being a long-time resident of the UCR (Belvedere Heights) area, I am especially familiar with that community and the concerns of its residents. This community is decidedly middle class in character while it is demographically stable yet ethnically, religiously, and racially diverse. In short, it is one of the few examples in the entire county of a real-life, working community where the American ideal of diversity has been achieved. Because of this unique and exemplary character of the UCR neighborhood, every effort needs to be made to maintain its quality of life. However, residents see the impacts of the proposed Metrolink line as a threat to this success story, and, it is clear, that this project does have the potential to disrupt the harmony which has, heretofore, characterized the neighborhood.

L2b-12

A major concern of homeowners whose houses do not abut the rail line is the indirect impact which this project is likely to have on the neighborhood, in general. The scenario which troubles them is the one where, owing to noise impacts, our good neighbors whose homes do abut the track become so frustrated that they sell to speculators. These new non-residents would most likely over-fill these homes with UCR students at high rents. Such speculators are not known for proper property maintenance, hence the concern that the general quality of the neighborhood will deteriorate. **If the project is carried forward, the best way to stop this negative future scenario from becoming reality is to incorporate adequate mitigation measures.**

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Letter 2b (cont'd)
Austin E. Sullivan
January 3, 2011

THE PUBLIC HEARINGS PROCESS

Environmental review and associated public hearings are, in theory, intended to provide policy makers with information and opinions so that they might better make informed decisions. Since RCTC has already identified a prospective start of operations for the PVL, it seems that this environmental review and these public hearings are being conducted in order to fulfill legal requirements, and there is little real interest in determining impacts and proper mitigation. Decision makers have contended that the approval of this project is, by no means, a forgone conclusion. However, one would have to be blind not to notice that on the order of a million dollars has **already** been spent to upgrade right-of-way along the proposed Metrolink line. In addition, approximately \$130,000 was spent to signalize Campus View Drive at Blaine. These expenditures only make sense if one anticipates high speed trains in the near future. These preemptive actions leave the clear impression that the main purpose of this environmental assessment is to satisfy the legal requirement, only. The largest expenditure (and actual commitment to this project) probably occurred years ago, when the right-of way was purchased. (The entire process would have been more legitimate if that discretionary act had been the basis for the environmental review which we are currently seeing.) Therefore, the entire process takes on an unreal aspect, not unlike a kangaroo court.

L2b-13

One fears that we are seeing a contemporary case similar to the infamous transportation planning conducted by the New York Port Authority under the leadership of Robert Moses. In the most notorious case of the Cross-Bronx Expressway, a freeway was built which caused the destruction of numerous communities. One also fears that the availability of this proposed commuter line will be used as justification for further, undesirable tract house construction in the Moreno Valley and Perris areas, in spite of the fact that the ridership on these lines has only rarely met expectations and always has to be highly subsidized.

L2b-14

Neither does the *Noise* portion of the EIR allay these fears. Rather than being a complete noise assessment, this document represents a clear effort to get away with as little as possible. This, in spite of the fact that the EIR identifies noise as one of the greatest impacts associated with the proposed Metrolink project. Since RCTC has finally tipped its hand with this unserious mitigation proposal, it has become the job of, we, the community residents, to do whatever it take to see that these corners are not cut.

L2b-15

RECOMMENDATIONS

Given the real impacts of the proposed Metrolink train, and the great expense associated with the train, itself, as well as the cost of proper mitigation, it seems that the express bus option might be better. Not only does this proposal avoid the impacts associated with the train, it is far more flexible. That is, additional, or fewer, buses could be employed on the line, as needed. Since no one really knows how many riders this project will attract, that seems like a very significant advantage for that approach. Nevertheless, as indicated

L2b-16



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Austin E. Sullivan
January 3, 2011

above, it seems clear that the RCTC is strongly predisposed to approve the proposed PVL. That being the case, the project should incorporate the following provisions.

1. The RCTC should commit itself to new environmental review and public hearings, etc. if subsequent trains, beyond the 12 daily passages which are the basis upon which the analyses in this EIR was conducted.
2. Similarly, any further displacement of freight train passages into the more sensitive night hours beyond those assumed in the EIR (if resulting in an increase of 1 CNEL or greater) should trigger new hearings and supplemental environmental review.
3. The noise monitoring study should be redone using those same federal standards which have been employed elsewhere in Southern California and as outlined in these comments (see FAA Part 150).
4. This new study (and all subsequent noise monitoring and projections) should use the single event metric or the CNEL metric rather than Ldn.
5. All mitigations should be implemented before the first trains roll. This would include the construction of sound barriers, home noise insulation, and relocations.
6. Eligibility for noise insulation should be based on a projected, future 65 CNEL contour as outlined in these comments.
7. Homes (and other sensitive uses) should be insulated to a maximum interior noise level of no greater than 45 dBA.
8. The sound insulation program should include new air conditioning condensers and whole house fans, where appropriate in order to offset the cost of keeping homes closed at night.
9. The RCTC should state whether the recent shift to night hours of freight passages has anything to do with this project. If it does not, then the RCTC should determine and make public why this change has occurred and should use their good offices to require the freight lines to revert to their prior operating practices.
10. The mitigation of this project should include the development of quiet zones for the intersections of the rail line and Spruce Street, Blaine Street, and Mount Vernon Avenue.

L2b-16 (cont'd)

Thank you for this opportunity to comment on the *Noise* portion of the EIR. I expect to comment on the *Vibration, Safety, and Air Quality* portions under separate cover.

L2b-17

Yours truly,

Austin E. Sullivan
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SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

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**Letter 2b (cont'd)
Austin E. Sullivan
January 3, 2011**

austineps1@hotmail.com



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Response to Letter 2b
Austin E. Sullivan
January 3, 2011

- L2b-1. This comment is introductory. No response is necessary.
- L2b-2. The environmental analysis completed was for reasonably foreseeable operations as is required by NEPA. If ridership increases in the future, RCTC may build additional stations to meet this demand. RCTC has committed to conducting additional environmental reviews for any additional stations added in the future
- L2b-3. See Master Response #5 – Freight Operations. The PVL project is the introduction of commuter rail service. Freight operations will continue on the SJBL whether the PVL project is constructed or not. The frequency and quantity of materials, as with all freight operations, is dependent on customer demand.

The PVL noise study assumes that no time shifting of freight trains to night-time hours would be required because of the PVL project implementation. This is based on the 2008 freight study commissioned by RCTC, which found no evidence that shifting freight trips to night-time hours was a reasonably foreseeable result of the PVL project. A detailed noise assessment was conducted for project SCRRA/Metrolink trains at representative sensitive properties along the entire project rail alignment. Where potential significant noise impacts were predicted, noise mitigation, including noise barriers and sound insulation, was proposed (see SEA, Section 3.4.4) to reduce these impacts to levels that are not significant.

See Master Response #6 – Noise. Section 3.4 of the SEA discusses the potential noise and vibration impacts as a result of the PVL project. Accordingly, the FTA impact criteria were used to determine significant impacts as a result of the PVL project. As per the FTA Manual (FTA Manual, page 6-43), sound insulation was proposed at seven homes and one church along the alignment where the use of a noise barrier would not be feasible.
([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))

- L2b-4. The comment suggests that Federal Aviation Administration (FAA) noise standards be used to assess the PVL project. As an FTA commuter rail project, potential project-related noise and vibration impacts were analyzed and mitigation measures were developed in accordance with the prescribed 2006 “Transit Noise and Vibration Impacts Assessment,” FTA (FTA Manual). The FTA Manual is specific to rail transit noise and vibration and its use is required by FTA for commuter rail projects. To apply FAA noise standards to a commuter rail project is inappropriate and contrary to FTA requirements.

The FAA FAR Part 150 is the recognized federal regulation for aviation noise. Conversely, the 2006 “Transit Noise and Vibration Impacts Assessment,” FTA (FTA Manual) is the industry recognized federal guideline for rail transit noise and vibration. Both regulatory directives are legitimate when properly applied. However, use of the FAA regulations on a rail project is inappropriate. The very nature of rail versus airplane noise necessitates different methods of evaluation. As a result, the



proposed PVL noise and vibration assessment methodology (which includes relevant noise monitoring procedures and assessment criteria) and the subsequent mitigation recommendations were based on FTA procedures (FTA Manual, Chapters 3 and 6 as well as Appendix D). (See SEA, Section 3.4.1). ([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))

L2b-5. Please see Master Response #6 - Noise and responses L2b-6 and L2b-7. The noise analysis completed for the PVL project was in accordance with the 2006 "Transit and Vibration Impacts Assessment," FTA (FTA Manual). As indicated in Section 3.4 of the SEA the FTA categorizes land use and designates thresholds as Moderate and Severe per land use type (FTA Manual, Table 3-1).

L2b-6. With respect to noise descriptors, the FTA Manual calls for the use of L_{dn} as the appropriate descriptor for transit-related noise as it relates to residential uses where sleep is required and L_{eq} for "primary daytime" land uses such as schools and churches (FTA Manual, Section 2.5.5 and Table 3-2). As the comment acknowledges, the L_{dn} descriptor (as with CNEL) weighs night-time noise more heavily than daytime noise. Concerning the CNEL descriptor suggested by the comment, although it also adds an additional decibel penalty for noise during evening hours, it is geared primarily towards describing overall community noise for potential development projects. Therefore, while the project is located in California where the CNEL descriptor is used in the assessment of many non-transit based projects, because the PVL project is related to rail usage, the L_{dn} descriptor based on FTA Manual guidance was used here. See Master Response #6 - Noise. ([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))

L2b-7. The comment includes the statement, "An increase of one dBA cannot be perceived..." which is correct in its proper context. However, it is also important to note that the FTA Manual noise criteria is based on EPA studies which have been adapted by major federal agencies such as the U.S. Department of Housing and Urban Development (HUD) (FTA Manual, Sections 2.4 and 2.5.5). Specifically, the HUD absolute criteria recognize that 65 dBA and 75 dBA noise levels would result in acceptable and unacceptable living environments, respectively, which correlate with FTA criteria (FTA Manual, page 3.1.2). In addition, the FTA noise criteria also incorporate relative criteria; therefore, the possibility that a cumulative noise increase of one dB would result in a project noise impact is valid (see SEA, Section 3.4.1). This results when a community's existing noise exposure is already high. ([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))

Noise monitoring data were updated several times to ensure that the most up-to-date data were used (see Master Response #6 – Noise). Therefore, although individual train events may be objectionable to residents, the FTA criteria effectively utilizes absolute and relative criteria to identify the relationship between the percentage of highly annoyed people and the noise levels in the community environment. The incorporation of night-time noise sensitivity is also critically important and is accomplished by using the L_{dn} descriptor. ([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))



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- L2b-8. See Master Response #6 – Noise. The noise analysis prepared for the SEA predicts 83 residential units would be impacted by noise from the proposed PVL project. This represents a reduction in the number of impacted properties compared to the previous 2004 noise study. However, the most recent study includes the use of more up-to-date noise monitoring data, revisions in the proposed train schedule, and improvements in the way “wheel squeal” will be handled at short radius curves (see SEA, Section 3.4.3). The SEA proposes noise barriers for the majority of impacted homes and sound insulation at seven homes and one church. This represents more than twice the number of properties recommended for sound insulation as was proposed in the 2004 report. The identification of eight properties for sound insulation was based on the fact that these particular properties would either not be properly protected by noise barriers or the existing terrain would make the use of noise barriers unfeasible (FTA Manual, page 6-43). All eight properties are located near grade crossings. Because these grade crossings naturally create noise barrier discontinuity (since the barrier cannot traverse the intersection), homes nearby the crossings are often left either unprotected or under-protected – thus the need for sound insulation at these properties. Where this discontinuity occurred, sound insulation was recommended. The requirements for building insulation (such as window sound transmission glass, insulation techniques/materials, required interior noise decibel reductions and interior noise levels) are further described in the Noise and Vibration Technical Report and the FTA Manual, pages 6-43 to 6-44. Extensive industry-wide use of sound insulation products and installation techniques have demonstrated that sound insulation is an effective mitigation measure for reducing interior noise levels.
([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))
- L2b-9. See Master Response #1 - Quiet Zones.
- L2b-10. The comment refers to application of aviation noise criteria to a rail project. As explained in responses L2b-2, L2b-3, and L2b-4, FAA guidance is not applicable.
- L2b-11. In predicting where potential noise impacts would occur as a result of the PVL project, exterior noise criteria described in the FTA Manual, Section 3-1 was used to assess properties along the entire length of the project. The 45 dBA interior noise level mentioned in the comment is the basis for the exterior noise level criteria developed by the FTA (FTA Manual, Section 2.4). However, for those properties that would be impacted by train noise but could not be mitigated using exterior mitigation measures (such as noise barriers), sound insulation was proposed. As a result, for the eight properties where sound insulation is proposed, the FTA interior transit noise criteria level of 65 dBA is applicable (FTA Manual, page 6-44). This interior criterion is different from the FTA noise criteria applied to the exterior of properties (FTA Manual, Section 3-1) because it applies to the required interior noise level for occurrences of noise from project-related transit sources only (in this case, the noise from SCRRRA/Metrolink trains). Therefore, the 65 dBA interior noise criteria level was correctly applied to properties where sound insulation was proposed. As a consequence, sound insulation provided as mitigation must provide a net interior noise level reduction of at least 5 dBA while also providing an absolute interior noise level of 65 dBA or less. In addition, because the eight properties proposed for sound insulation are at grade crossings, the interior noise levels specifically related to train



horn noise must be 70 dBA or less (FTA Manual, page 6-44). With respect to specific sound insulation measures, see response L2b-4. Post-operational noise monitoring is not an FTA requirement.

With respect to central air conditioning, if the installation of sound insulation would result in residences not having any means of ventilation, then these homes would require central air conditioning as part of the sound insulation process (FTA Manual, page 6-43).

([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf))

- L2b-12. Implementation of the proposed PVL project will provide noise mitigation measures and safety improvements that would not be available to the community under any other circumstances. It is expected that with the mitigation measures associated with the PVL project, freight train impacts would also be reduced and therefore provide an overall benefit to the community. It should be noted that the comment includes speculation about changes in neighborhood stability and character due to the PVL project from inadequate mitigation measures. Thus, no further response is required.
- L2b-13. The comment is not relevant to the SEA.
- L2b-14. This comment provides no substantial support to the claim that the PVL project is similar to the New York case. RCTC has studied this project extensively (see response L2b-13). The comment includes speculation that the PVL project would induce additional housing development. Instead, however, the project would accommodate levels of growth assumed in local planning documents.
- L2b-15. See Master Response #6 - Noise.
- L2b-16. An Express Bus Alternative was considered in the San Jacinto Branchline/I-215 Corridor Study Alternatives Analysis (STV Incorporated, 2004), included as Technical Report A to the SEA, but was rejected because the Express Bus Alternative would not reduce highway congestion in the SJBL/I-215 corridor and automobile and bus modes would still be tied to the congested roadway network. However, all three commuter rail alternatives would allow commuters to decrease their travel time in the corridor and decrease personal vehicles usage in the corridor, reducing congestion. Therefore, a commuter rail option was selected to provide mobility through the corridor without relying on or adding to the congestion of the area highways.

The ridership projections for this study were developed using the forecasting for the Alternatives Analysis that was performed by the Southern California Association of Governments (SCAG) utilizing the existing and approved SCAG regional travel demand model. The model was run for different scenarios at different time intervals: base year, start-up year, and forecast year. The forecast year for the study was 2025. Please refer to Technical Report A (Chapter 4) for a discussion of ridership for the proposed alternatives. Exhibit 25 in Chapter 4 depicts the boardings by stations for the Express Bus Alternative and three commuter rail alternatives. The selected commuter rail option shows a ridership in 2025 (7,472 boardings) which is slightly more than double the ridership for the Express Bus Alternative (3,705 boardings).



SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

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- L2b-17. This comment summarizes the concerns raised in the letter. These concerns have been addressed above.



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Letter 2c
Austin E. Sullivan
January 3, 2011

May 24, 2010

Dear Sirs:

I am writing regarding the DEIR which is currently in review for the proposed Perris Valley Metrolink Line (PVL). I have provided an assessment of its *Noise* element under separate cover. I am writing here to express my concerns with the *Vibration, Safety (Hazards), Air Quality, Traffic, Growth Inducement, and Cumulative Impacts* components. I will address each of these issues in turn. However, prior to that, it is my observation that all of the studies in the DEIR have a generic, "off the shelf" feel to them. Many of the included observations seem to have little or no application to this specific case and amount to boilerplate derived from similar, earlier studies. For example, the claim that derailments can be expected only every 124 year (EIR, p. 4.7-11) on average ignores or has been made with no knowledge of this line's history which has seen three derailments, near schools, within the last twenty-five years. (I'm sure that the Riverside Unified School District will provide much more data on these events.)

L2c-1

VIBRATION

First, some of the initial assumptions upon which this portion of the study is based are in error. For example, the study assumes no increase in rail traffic since 2005 (EIR p. 4.10-19). This initial assumption is factually in error as any resident along the line can attest. (It is likely that this error occurred because it was assumed that the only train passages were pick-ups and deliveries. In fact, many trains traverse the line simply to store unused box cars in the siding along I-215.) With this and other initial assumptions in error, clearly, one cannot trust conclusions.

L2c-2

Second, the EIR states: "...mitigation measures such as the use of ballast mats or resiliently supported ties would significantly reduce the level of predicted vibration." (p. 4-10-21). Nowhere is it stated that these mitigations would reduce impact to below levels considered significant. It then goes on to state: "When assessing vibration mitigation it is important to consider both degree of impact and the cost as any mitigation should be both reasonable and feasible."(Ibid.). CEQA case law and black letter law are both very clear, that matters of cost should not be taken into consideration when determining impacts or the levels thereof. Therefore, one can only assume that the authors are truly unfamiliar with the basics of CEQA or, more likely, they have received marching orders to make this project look as benign as possible. In either case, the reliability of the entire EIR must be called into question.

L2c-3

L2c-4



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Letter 2c (cont'd)
Austin E. Sullivan
January 3, 2011

SAFETY (HAZARDS)

I commented earlier on the failure of the DEIR to identify the three derailments which have occurred recently on the proposed route. All of these occurred on or near the Box Springs grade where a speed limit is currently in effect. This grade is unusually steep, the adjacent Box Springs Regional Park is the home to rodents whose burrows regularly compromise the safety of the track. (This analysis was not provided in the EIR.) Therefore, one can reasonably assume that this is the most hazardous reach along the proposed line. Unfortunately, this is exactly the location where adjacent land uses are most sensitive. It includes numerous homes, and most important, Hyatt School with the playground just below the inclined track and the school building, itself, below that. The true hazard which this project poses was not identified or evaluated.

L2c-5

The fact that the track separates the UCR community from the Box Springs Regional Park is another source of hazard which the DEIR did not address. The track, itself, is routinely used as a play area by children. Moreover, the track blocks most access from the neighborhood to the Park. Therefore, it is unrealistic to expect children and others to do other than to cross the track to enter the Park. As such, the track clearly would constitute an attractive nuisance were it to be used by 12 higher speed trains per day. The DEIR fails to address any of these considerations. The DEIR also ignores the risk which is inherent in the operation of both freight and passenger trains on a single line, especially one with this extremely steep grade. Therefore, the Safety (Hazard) portion of the DEIR provides another example of the careless way in which the entire study was conducted.

L2c-6

AIR QUALITY

It is a truism that *the solution to pollution is dilution*. However, the reverse is also true. That is, higher concentrations of pollutants represent greater risk. The proposed Metrolink line passes directly through the UCR community, and, as such, each house and other sensitive land use which lines the track would be exposed to high concentrations of pollutants even though the regional effect would not be great. The *Air Quality* analysis in the DEIR glosses over this fact. We have reliable reports from residents of the area that their vegetable gardens have frequently been covered by particulate matter generated by passing freight trains. The Metrolink trips would make this situation worse. The cumulative impact of these multiple sources has not been addressed, either. Moreover, the line in question is owned by the RCTC. Therefore, that agency is already responsible for the air pollution to which the community is already being subjected. The Metrolink proposal cannot reasonably be separated from the existing rail traffic. Both are the RCTC's responsibility. It is disingenuous to do an analysis

L2c-7



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Letter 2c (cont'd)
Austin E. Sullivan
January 3, 2011

which disaggregates these sources and then concludes that neither reaches a level of significance while it is clear that, taken together, both do. The analysis of exposure to sensitive receptors is similarly flawed in that the pollution generated by current and projected freight traffic is not considered, either as part of the project or as part of a cumulative assessment.

L2c-7 (cont'd)

These "sensitive receptors" are given short shrift in the air quality analysis, in other ways, as well. Several of these are listed in the DEIR. I will only address concerns related to Hyatt and Highland Schools and the UCR Child Development Center, but many of the same observations could be made of all those sensitive receptors identified in the study. The DEIR assumes that these receptors must be either near intersections which are projected to be congested because of the project or parking lots which are part of the project with the *project* defined as the proposed Metrolink usage. Because these receptors are already subject to degraded air quality, much of which is caused by traffic on the line, any additional pollution load is problematic.

L2c-8

Furthermore, it is dumbfounding that the DEIR's analysis identifies "sensitive receptors" as groups which include both athletes and children under 14 years of age (DEIR p. 4.3-29) and then goes on to defines the "schools" as the school buildings only. In all of the aforementioned cases the schoolyards are immediately adjacent to the track. While it is true that a narrow definition of "athletes" might exclude the students in these playgrounds, it is clear that they would be inhaling great quantities of air as they run and play, and in all meaningful ways they would suffer the same exposure as would individuals on a track team. As such, the DEIR should have identified these schools as being zero feet from the right-of-way, and all analyses should have been conducted on that basis. (In the case of Hyatt School, the playground is not only adjacent to the track, it is elevated so that particulate matter would be disbursed widely over the entire area.)

L2c-9

As is true throughout the DEIR, in the case of the *Air Quality* study, the analysis seems generic and has little application to the specific case of this project and the UCR community.

TRAFFIC

Based on the restricted project definition under which the *Traffic* portion of the DEIR analysis was made, the impacts which are identified seem somewhat reasonable. The problem lies in the project definition. Forgoing discussion as to whether current freight train traffic would appropriately be considered part of this project, it is clear that the track improvements which are an essential part of the project will, necessarily, result in an increase in freight passages on the line. These increases will, in turn, not only impact local traffic but most other area studies in the DEIR including, especially issues of *Safety, Noise, Vibration, Safety, and Air Quality*.

L2c-10



3

Letter 2c (cont'd)
Austin E. Sullivan
January 3, 2011

Nowhere in the DEIR is this increase in freight traffic addressed even though it would be a certain, direct result of the proposed project. It is important that the Final EIR address this increased freight traffic, as it would affect all potential impacts. It should use reasonable assumptions as to what levels of increased traffic will result including a high, low, and moderate increases in freight traffic.

} L2c-11

GROWTH INDUCEMENT

This section of the DEIR uses about half a page to dismiss concerns about growth inducements out of hand. It is not credible that the writers do not understand that the presence of the proposed commuter line would be used by those in the Perris Valley and elsewhere who hope to create housing tracts as a presumed mitigation for the traffic that these new homes would generate. In fact, the line would not likely be used by these new residents. It is much more likely that they would create even more freeway congestion. Thus, the commuter line has the real potential to become the linchpin upon which new development rests. This fact is not addressed in the DEIR.

} L2c-12

However, this is not the primary problem with this section of the DEIR. Rather, it does not even address the increase in freight traffic on the line which this project would make possible. It is clear that there is a maximum amount of freight which the line can currently carry because of the steep grade and poor condition of the track. This cap would be eliminated if the track improvements which are proposed here actually are carried to completion. The current use agreement which RCTC signed in 1993 places no limit on the amount of freight which can be transported over the line. As such, RCTC has no way of insuring that a massive increase in freight traffic will not result if this project is carried to completion. This issue needs to be addressed in detail.

} L2c-13

CUMMULATIVE IMPACTS

As is common in similar studies, the *Cumulative Impacts* section of the report is not thorough and barely addressed any of the potential, cumulative impacts. Most obviously, the cumulative impact of increased noise is only addressed in one paragraph and in no detail. It is clear that many homes, two schools, and a child development center are already impacted by noise. It is true, that, with a constant source (not the case here) additional noise only increases impacts marginally. Even so, if a sensitive use which is currently impacted is subjected to additional noise, one has to conclude that the cumulative effect is significant. This issues has been completely ignored in the DEIR and needs to be addressed.

} L2c-14



SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

3

Letter 2c (cont'd)
Austin E. Sullivan
January 3, 2011

Thank you for this opportunity to respond to the DEIR. I look forward to your responses in the Final EIR.

} L2c-15

Yours truly,

Austin E. Sullivan

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Riverside, CA 92507

951/788-3812

austineps1@hotmail.com



3

Response to Letter 2c
Austin E. Sullivan
January 3, 2011

- L2c-1. Although this comment letter is in regard to the Draft EIR, the following responses will address the comments in the context of the SEA. See Master Response #3 - Derailment (General).
- L2c-2. Although the number of freight trains would occasionally fluctuate up or down, based on the best information available from RCTC along with field observations and information from local engineers familiar with the SJBL, the SEA's characterization of freight movement along the SJBL is accurate.
- L2c-3. As described in Section 3.4.8 of the SEA, the proposed vibration mitigation measures would be effective at mitigating the impacts to below a level of significance.
- L2c-4. The comment refers to the quote "...when assessing vibration mitigation it is important to consider both the degree of impact and the cost as any mitigation should be both reasonable and feasible." A full analysis of vibration impacts was conducted and the assessment procedure and the resulting outcome were both influenced only by the available data and not by costs. Further, two separate vibration mitigation options were provided, independent of costs (see SEA, Section 3.4.4).
- L2c-5. See Master Response #3 – Derailment (General) and Master Response #10 – Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment). The PVL project will improve track conditions along the project alignment, and therefore make it safer for both the commuter and freight operations. These improvements include tie replacement, welded rail, and ballast replenishment where necessary. The comment also mentions rodents impacting the tracks berm structure in the park area. As part of ROW maintenance, BNSF controls vegetation and removes rodents and fills burrows on the railroad berm that could impact the track.
- L2c-6. The ROW has been in existence for over 100 years and the City of Riverside and the County of Riverside developed these parks without providing access across private property (the SJBL/RCTC ROW). If unauthorized people enter the ROW to cross the tracks, they are trespassing. The PVL project does not include adding additional track in this area or affecting existing access to parks in any way. The existing track will remain in its current location.

This comment also states that, "the DRAFT EIR [sic.] also ignores the risk which is inherent in the operation of both freight and passenger trains on a single line, especially one with this extremely steep grade." This comment is incorrect. The PVL project includes track improvements that would upgrade the existing physical condition of the rail line, which would result in a stronger infrastructure, a higher level of maintenance, and enhanced operational safety. Therefore, no significant impacts were identified as a result of this issue area.



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L2c-7.

Because existing freight operations would not be affected by the proposed PVL project, the air quality assessment for the SEA is related only to the future operation of SCRRA/Metrolink passenger trains. Consequently, Section 3.3 of the SEA (and the accompanying Air Quality Technical Report) outlines the methods used to calculate the expected localized and regional emissions due to the implementation of the PVL project. The air quality analysis for the PVL accounted for all relevant project parameters and conditions. The analysis was done in compliance with the most up-to-date local, state, and federal air quality regulations and guidance from the SCAQMD, CARB, and the USEPA. Tables 3.3-7 to 3.3-12 of the SEA show that emissions projected for criteria pollutants from sources such as local traffic intersections (CO hotspots), greenhouse gases, localized mobile source air toxics (from project locomotives), construction activities and parking operations all fall below local thresholds of significance for state and federal emissions.

The use of Localized Significance Thresholds (LSTs) is voluntary (SCAQMD Fact Sheet LSTs). Based on the SCAQMD Fact Sheet, it is recommended that proposed projects larger than five acres in area undergo air dispersion modeling to determine localized air quality. For operational impacts, LSTs are more appropriate for stationary source projects. With respect to the proposed project, this was applied to proposed stations and their parking lots. As noted in the above referenced LST Fact Sheet for construction impacts, LSTs are more appropriate for a medium to large size project that would have a longer-term influence on specific sensitive receptors neighboring the construction site. None of the stations to be constructed as part of the PVL project would be larger than two acres, so the PVL would be considered a smaller project. The overall project construction is estimated at approximately 18 months. However, because of the linear nature of rail construction, the actual construction period at any one individual sensitive receptor would be substantially shorter, approximately two to three months. As a result, the assessment of localized air quality impacts for the proposed project did not utilize LSTs.

The discussion of cumulative impacts in Section 3.19 of the SEA accurately assesses cumulative impacts of the proposed PVL project in the context of past, present, and probable future projects in the PVL study area. Specifically, the emissions of the existing freight trains are already accounted for by inclusion of the PVL project in the RTIP since the PVL project is being implemented on an existing rail line. In addition, emissions from the existing freight trains are included in measurements taken at local air quality monitoring stations (see SEA, Table 3.3-5), none of which report a violation of any existing state or federal air quality standard for any pollutant (see SEA, Table 3.3-5 for standards and evaluation periods). The SCAG Transportation Conformity Working Group (TCWG) has reviewed the health risk assessment and determined that the PVL is not a POAQC (Project of Air Quality Concern), as shown in the TCWG review form in the Air Quality Technical Report, Appendix F. Therefore, the existing emissions were included in this assessment and the discussion of air quality within the Indirect and Cumulative Effects section (see SEA, Section 3.19) is correctly addressed.

L2c-8.

As noted in Section 3.3 of the SEA, sensitive receptors were identified using the criteria outlined by CARB. Some examples of sensitive receptors analyzed in the study area include Highland, Hyatt, and Nan Sanders elementary schools, UCR



Child Development Center, Highland Park, and the City of Perris Senior Center. The air quality analysis accounted for the buildings identified as sensitive receptors and also included adjacent parking lots, yards, and outdoor play areas. (CEQA does not require a lead agency to correct conditions in the existing environment.) The lead agency is only required to mitigate project impacts or cumulative impacts. See response L2c-7 above.

- L2c-9. The air quality analysis performed for the PVL is not “generic” but instead examined project-specific parameters that could potentially cause an air quality impact. The schoolyards of the two schools in the UCR area are considered sensitive receptor areas. The distances from sensitive properties to the proposed PVL alignment identified in Section 3.3.3 of the SEA are only reference distances that represent the approximate location of the property. The distances referenced are from the tracks to the nearest edge of the schoolyards and they do not exclude any segment of the overall property boundaries. They do not exclude any segment of the overall property boundaries. In addition, as mentioned in Section 3.3 of the SEA, none of the school properties are located close to congested intersections or proposed PVL parking areas. The distances are between the alignment and the schools (approximately 150 feet for Highland Elementary School and 500 feet for Hyatt Elementary School, as referenced in Section 3.3) are from the tracks to the nearest edge of the schoolyards. Pollutant concentrations decrease as the distance from the pollutant source to a receptor increases; therefore, if the analysis determined that there would be no significant impact at a reference distance from the source, then it is expected that there would be no significant impacts to receptors located further away from the source. For example, the health risk assessment shows that near Highland Elementary School, the maximum pollutant concentration from the rail line occurs at a distance of 78 feet. As a result, it can be expected that there will not be a significant impact at Highland Elementary School which is located approximately 150 feet from the rail line. The maximum pollutant concentration is below the threshold for significant impacts.
- L2c-10. The methodology utilized in predicting air quality impacts from the PVL project was adopted from guidance within the USEPA, California DOT, FHWA and CEQA as is required in California. Specific aspects of the PVL project, as it pertains to pollutant emissions, were taken into consideration for all communities abutting the alignment. This includes but is not limited to pollutant emissions from existing local sources (highway vehicles, freight trains, industry) and future project related sources (PVL related locomotive and vehicular emissions).
- L2c-11. See Master Response #5 - Freight Operations. The SEA, Section 1.7.12 provides a description of the freight usage for the corridor. The freight traffic is dictated by local economic conditions and not the proposed PVL track improvements.
- L2c-12. The PVL project is the introduction of commuter rail service. The project is intended to reduce existing vehicle traffic along the I-1215 corridor. Additionally, RCTC, as the regional transportation agency, does not have land use authority and therefore cannot increase planned land use densities in areas already planned for housing developments. The claim made in the comment that the PVL project would induce additional housing development is speculative.



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- L2c-13. See Master Response #5 - Freight Operations. The SEA, Section 1.7.12 provides a description of the freight usage for the corridor. The freight traffic is dictated by local economic conditions and not the proposed rail, tie, and ballast improvements.
- L2c-14. See Comment L2c-7. Cumulative noise impacts have been addressed (FTA Manual, Section 2.5.5). The effects of existing noise (including noise from freight traffic, vehicular traffic and other environmental sounds) were accounted for in the PVL noise assessment by utilizing the data collected from the extensive noise monitoring program conducted for the project (see SEA, Section 3.4.1). These existing noise levels were then used as a baseline for relative impact criteria (see SEA, Table 3.4.2).
[http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA%20Noise%20and%20Vibration%20Manual.pdf))
- L2c-15. The comment is conclusory in nature and does not raise specific environmental concerns. Therefore, no response is necessary.



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SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

3

**Letter 3
Barney Barnett
January 3, 2011**

EP, AM, CB, JST, EE

On 1/3/11 I Received 2 articles about the Perris Valley Line from R. A. Barnett
Date

The first 5 page article contained: Copy of letter to FTA dated Dec. 20, 2010
Contents of information submitted to FTA
Complaints against Riverside County Transportation Commission

The second 10 page article contained: Copy of Feb. 2009 Highgrove Happenings Newspaper
RCTC misleading Public, Politicians, & Transportation Agencies
Press Enterprise Article dated May 13, 2009
7 color photos of the warehouse construction on the Perris Valley Line Railroad at Palmyrita Avenue.
Supplemental Environmental Assessment dated Nov., 2010
Figure 1.7-7 showing RCTC plan for Metrolink Station between Palmyrita Ave. and Columbia Avenue.
Photo of warehouse taken on Jan. 3, 2011.

7 photos

J. Hainley
Received by

1/3/11
Date

RECEIVED
JAN 06 2011
BECHTEL INFRASTRUCTURE CORPORATION

RECEIVED
JAN 03 2011
RIVERSIDE COUNTY TRANSPORTATION COMMISSION



3

Letter 3 (cont'd)
Barney Barnett
January 3, 2011

Mr. Leslie Rogers
Regional Administrator
Federal Transit Administration
Region 9
201 Mission St. Suite 1650
San Francisco, Ca.
94105-1839

Dec. 20, 2010

Dear Mr. Rogers,

For over 9 years public input through city resolutions, letters, written comments and oral testimony at RCTC meetings have requested that a Metrolink stop be built next to the # 3 BNSF railroad track in Highgrove where there is vacant land next to the track used by Metrolink commuter trains 7 days a week. But RCTC continues to insist that the station be located in the Hunter Park Area that would only serve commuters between Riverside and Perris when the Perris Valley Line is re-built for passenger service sometime in the future.

On July 15, 2006 Metrolink commuter train service between San Bernardino and Riverside was increased to 7 days a week. That increased the number of commuter trains going through Highgrove without stopping, to 62 commuter trains per week.

For the past several years, there have been 3,224 commuter trains per year that could have stopped at a platform in Highgrove where there is ample room for parking. These figures are before the addition of any future trains planned on the Perris Valley Line between Riverside and Perris.

Thousands of these trains could have served thousands of commuters in both directions!

July 15, 2006 to Dec. 31, 2006 there were 1,612 commuter trains that passed through Highgrove

Table with 7 columns: Year, Trains, and 5 empty columns. Rows show data for 2007, 2008, 2009, and 2010, all with 3,224 trains.

There have been 14,508 commuter trains that have passed through Highgrove since July 15, 2006 when Metrolink commuter train service was increased to 7 days a week. The Colton crossing that has just been approved, will allow even more future commuter trains that could use the Highgrove station that would benefit the entire region on both sides of the county line.

But the station in the Hunter Park Area planned by RCTC, will not transport any commuters between San Bernardino and Riverside counties. If RCTC is allowed to build a future station in the Hunter Park Area of the Perris Valley Line, existing and future commuter trains will continue pass through Highgrove without stopping.

Here are the facts:

- 1. THE PURCHASE OF THE VACANT 19 ACRES AT HIGHGROVE BETWEEN THE BNSF TRACKS AND THE PERRIS VALLEY TRACK IS MANDATORY TO CONNECT THE 2 RAILROADS FOR FUTURE PVL METROLINK TRAINS.
2. SINCE RCTC HAS TO HAVE THE 19 ACRE PROPERTY TO CONNECT THE 2 RAILROADS, A STATION COULD BE PLACED ON THE WEST SIDE OF THIS SAME PROPERTY RIGHT NEXT TO THE BNSF TRACK WHERE THERE ARE EXISTING METROLINK TRAINS.



3

Letter 3 (cont'd)
Barney Barnett
January 3, 2011

3. THE SAME 19 ACRE PROPERTY COULD BE USED FOR THE CURVED TRACK CONNECTION AND A STATION ON THE WEST SIDE.
4. NO OTHER PROPERTY WOULD HAVE TO BE PURCHASED FOR ANOTHER STATION IN THE HUNTER PARK AREA.
5. THE 25 ACRE PROPERTY BETWEEN PALMYRITA AVE. AND COLUMBIA AVE. ON THE PERRIS VALLEY LINE IS NOT AVAILABLE FOR A METROLINK STATION BECAUSE IT IS NOW OCCUPIED BY A 507,000 SQ. FT. WAREHOUSE.
6. THE SAME STATION PLATFORM AT HIGHGROVE COULD BE USED FOR FUTURE COMMUTERS WHEN THE PERRIS VALLEY LINE IS FINISHED.
7. RCTC's PLAN DOES NOT INCLUDE STOPPING ANY OF THE EXISTING OR FUTURE METROLINK COMMUTER TRAINS THAT CONTINUE TO GO THROUGH HIGHGROVE BETWEEN SAN BERNARDINO AND RIVERSIDE.

THIS \$232 MILLION DOLLAR PROJECT WILL USE FEDERAL TAX DOLLARS AND TRANSPORTATION MONEY THAT SHOULD BENEFIT THE ENTIRE REGION ON BOTH SIDES OF THE RIVERSIDE/SAN BERNARDINO COUNTY LINE!

We are not trying to stop the Perris Valley Line project. Station placement is the only issue due to the difference in destinations and existing commuter trains. The Highgrove Station could serve commuters between Riverside and San Bernardino counties now, and later between Riverside and Perris when the Perris Valley Line is completed.

I am requesting a review of the enclosed information and asking you to look at the map and the written supporting documentation of 59 pages. I am also enclosing a 2 page article titled: **Complaints against Riverside County Transportation Commission**, for your review.

Please feel free to call if there are any questions.

Thank you,

R. A. "Barney" Barnett
Editor; Highgrove Happenings Newspaper
Chairman, Highgrove Municipal Advisory Council
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For additional information please visit our web site: www.highgrovehappenings.net

- | | |
|--------------------------------|--------------------------------------|
| Cc: Senator Diane Feinstein | City of Loma Linda |
| Senator Barbara Boxer | City of Colton |
| Senator Bob Dutton | University Neighborhood Association |
| Senator Bill Emmerson | North Side Improvement Association |
| Congressman Ken Calvert | Highgrove Municipal Advisory Council |
| Congressman Joe Baca | WRCOG |
| Assembly member Brian Nestande | SCAG |
| Assembly member Kevin Jeffries | SCRRA |
| City of Riverside | SANBAG |
| City of San Bernardino | RCTC Commissioners |
| City of Grand Terrace | (continued next page) |



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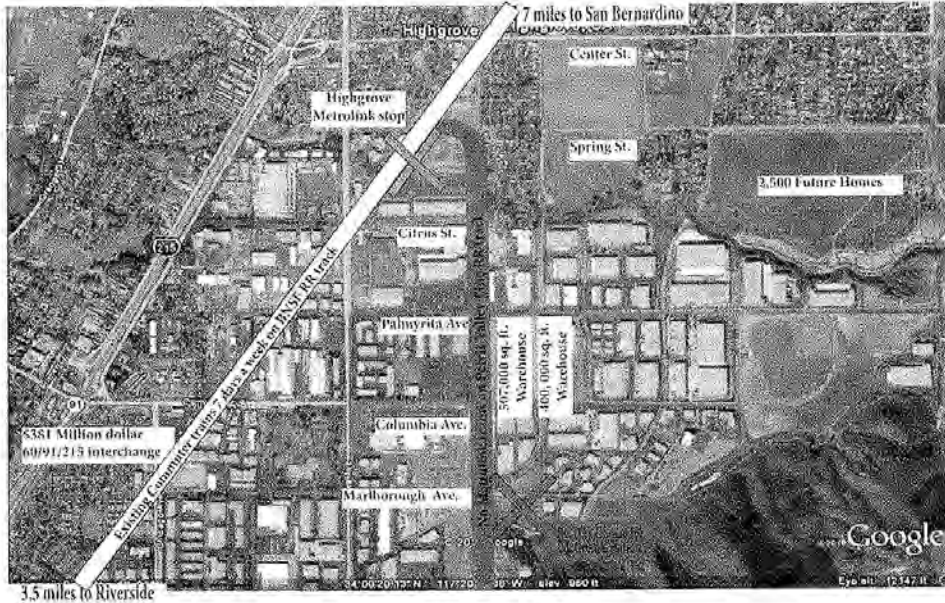
Letter 3 (cont'd)
Barney Barnett
January 3, 2011

Contents of information submitted to Federal Transit Administration:

Prepared by Highgrove Happenings Newspaper Dec. 20, 2010

Colored map: **Public's choice for a Metrolink Station shown at Green X**

RCTC's choice for a Metrolink Station shown at Red X



<u>Date</u>	<u>Article</u>
Dec. 13, 2001	Resolution from City of Grand Terrace supporting Highgrove Metrolink (2 pages)
June 2001 to Feb. 2009;	Misc articles that appeared in Highgrove Happenings Newspaper (22 pages)
Jan. 24, 2002	Unanimous support from Loma Linda City Council (1 page)
Oct. 21, 2005	Letter of support from University Neighborhood Association (1 page)
June 21, 2006	Letter of support from Hugh Grant (1 page)
June 23, 2006	Letter of support from Tony Petta (1 page)
Aug. 14, 2006	Letter of support from Assemblyman Bill Emmerson (1 page)
Oct. 11, 2006	Comments from Supervisors Buster and Ashley and former RCTC Executive Director Eric Haley (1 page)
Dec. 2006	Public outcry expressed at RCTC meeting (5 pages)
Dec. 31, 2006	"Wanted-New Metrolink Station" San Bernardino Sun article (2 pages)
Feb. 14, 2009	"He wants Metrolink to stop in Highgrove" Press Enterprise article (3 pages)
Undated	Letter from The Transit Coalition (1 page)
Jan. 2010 issue	P. 7 Highgrove Happenings Newspaper: Grand Terrace updates support for Highgrove Metrolink Station (1 page)
Jan 14, 2010	Highgrove Metrolink comments over the last 8 years (5 pages)



3

**Letter 3 (cont'd)
Barney Barnett
January 3, 2011**

Feb. 2010 issue Front page and P. 4 Highgrove Happenings Newspaper: **Highgrove Metrolink site rejected by committee.** (2 pages)
April 2010 issue Front page and P. 8 Highgrove Happenings Newspaper: **"Wrong track-Wrong location"** (2 pages)
July 2010 issue P. 6 & 7 Highgrove Happenings Newspaper: **Palmyrita/Columbia not available due to construction and Robin Lowe from Hemet continues to receive criticism.** (2 pages)
Aug. 2010 Front page & P. 5 **2 Important Notices, What is SCAG and Primary issues on station location** (2 pages)
Sept. 2010 P. 3 **Copy of un-answered letter** (1 page)
Oct. 2010 P. 4, 5, and 9 **RCTC responds to letter and editor's comments about Ann Mayer letter** (3 pages)

Highgrove Happenings Newspaper
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Complaints against Riverside County Transportation Commission

Dec. 20, 2010 *By R. A. "Barney" Barnett, Editor- "Highgrove Happenings Newspaper"*

The following is a list of complaints against RCTC for their past inappropriate actions:

Aug. 16, 2004 30 packets were given to RCTC for distribution to the commissioners.

They contained: 1. Resolution of support for a station at Highgrove from CSA 126
2. Resolution of support for a station at Highgrove from City of Grand Terrace
3. Resolution of support for a station at Highgrove from Highgrove PAC
4. Letter of unanimous support from City of Loma Linda

THESE 30 PACKETS WERE NOT DISTRIBUTED TO THE RCTC COMMISSIONERS FOR 14 MONTHS.

Sept. 15, 2006 Due to local objections from Highgrove and the University Neighborhood Association near UCR, the Perris Valley Line "WORKSHOP" was held in La Quinta, Ca. which is 77 MILES AWAY.

Oct. 11, 2006 Eric Haley, RCTC Executive Director at that time stated: *"Highgrove station would be too close to the county line"; "Buying the Highgrove property would be land banking and RCTC is not in the business of land banking"; "The Colton Flyover costs would have to be added to the Highgrove station"; "The residents of San Bernardino County would be using the Highgrove station!"*

Nov. 28, 2006 RCTC Commissioners instructed staff to arrange for a tour of the Highgrove location but Eric Haley scheduled it on the same day as the Board of Supervisors meeting. The 5 members of the Board of Supervisors are also RCTC Commissioners but none of them could attend. And instead of a bus load of commissioners visiting the site as requested, two on track SUVs (Hi-Rail cars) were put on the Perris Valley Line track at Center St. and the 2 SUVs DID NOT STOP AT THE HIGHGROVE.



3

Letter 3 (cont'd)
Barney Barnett
January 3, 2011

SITE. This property is not visible from the track due to a dirt bank on the west side of the track. That is why a bus was requested.

Jan. 10, 2007 "Additional Information" was handed out to the RCTC Commissioners just before the RCTC meeting on Jan 10, 2007 dated Jan. 18, 2007 which was 8 days into the future. It was labeled "Minute Action" and contained information stating how SANBAG would support RCTC's staff's position at their upcoming meeting.

Jan. 18, 2007 The exact same wording from RCTC's meeting on Jan. 10, 2007 was read into the minutes at the SANBAG meeting held in San Bernardino on Jan. 18, 2007.

April 4, 2007 SCAG (Southern California Associated Governments) wanted to initiate a feasibility study of the Highgrove Metrolink station which was an independent study from the RCTC study. At the April 4, 2007 SANBAG meeting, SANBAG decided to not vote on the Highgrove Station Location but instead voted to:
"Reconsider the matter based upon the results of the SCAG feasibility study"

April 5, 2007 The following day after the SANBAG meeting RCTC EXECUTIVE DIRECTOR ERIC HALEY AND ROBIN LOWE, RCTC COMMISSIONER FROM HEMET, WENT TO THE LOS ANGELES SCAG MEETING AND STOPPED THE SCAG INDEPENDENT STUDY.

(I have a tape recording of this meeting)

June 26, 2008 Several community members attended an RCTC Ad Hoc meeting but we were not allowed to speak. I requested a tape recording of the meeting but RCTC said it was not available.

April 27, 2009 I was invited to RCTC meeting and given 13 reasons why the Highgrove location would be denied. The 13 reasons were prepared by RCTC's consultants- STV Incorporated. I was not allowed to show our power point at the meeting.

Aug. 10, 2009 R. A. Barnett gave written response to each of STV's 13 reasons in a 12 page article with photos.

Oct. 9, 2009 Denis Kidd wrote a 1 page rebuttal to STV's 13 reasons for denial.

Jan. 25, 2010 Special Ad Hoc meeting held by RCTC to hear presentation by R. A. Barnett and William Addington. Mr. Addington is a Retired Civil Engineer with 54 years experience and volunteered to assist in my presentation. I explained that station location is our only concern and we are not trying to stop the project. Mr. Addington confirmed the Highgrove site is possible with good engineering.

April 5, 2010 The Draft EIR was advertised as available at the RCTC office, and 4 libraries, Riverside, Moreno Valley, Perris and Woodcrest. But No EIR was supplied to the Library which is only ½ mile away from the Highgrove Metrolink site.

Later the Highgrove library was furnished a copy after I contacted RCTC.

(Documentation of all above information available upon request)

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Letter 3 (cont'd)
Barney Barnett
January 3, 2011

RCTC misleading Public, Politicians, & Transportation Agencies!

Jan. 3, 2011

For many years RCTC has stated that they want to build a Metrolink Station on the Perris Valley Line at Palmyrita Ave. over the objections of the surrounding cities and local organizations.

Examples:

- 2-1-2009 Feb. issue of Highgrove Happenings Newspaper showed plans for giant warehouse to be built on property at the Perris Valley Line Railroad track at Palmyrita Avenue.
- 2-11-2009 Video shows that all 4 corners of Palmyrita Ave. and the Perris Valley Line Railroad will not be available due to existing buildings, insufficient room, or new construction. (Go to: www.highgrovehappenings.net, Metrolink, & You Tube Video)
- 5-13-2009 Press Enterprise printed map of RCTC's proposed station sites that showed Palmyrita station as a Metrolink station site.
- 6-24-2010 Photos show warehouse under construction on S/E corner of Perris Valley Line railroad track and Palmyrita Avenue.
- 6-29-2010 Photo shows warehouse construction at Palmyrita Avenue. The 1 on the post indicates it is 1 mile from Highgrove where there are existing Metrolink commuter trains.
- 8-11-2010 The warehouse will occupy 25 acres between Palmyrita Ave. and Columbia Avenue.
- 8-11-2010 Palmyrita Ave. is in the foreground and the warehouse is shown on the S/E corner.
- 9-26-10 Another view was taken from Mile Post 1 on the Perris Valley Line Railroad.

The **Nov. 2010** Perris Valley Line "SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT VOLUME 1" shows figure **1.7-7** as the plan for a station on the east side of the Perris Valley Line railroad track between Palmyrita Ave. and Columbia Avenue. The date shows 1/18/10.

THIS IS THE EXACT LOCATION WHERE THE NEW WAREHOUSE IS BUILT!

Not only is it misleading but it is untrue for RCTC to show the location between Palmyrita Ave. and Columbia Ave. as the site for a future Metrolink Station when it is not available. Federal and State authorities, the public, and other Transportation Agencies will not know there is a giant warehouse on this same exact location!

RCTC was advised by the "Highgrove Happenings Newspaper" and the You Tube video about the new warehouse in February 2009, almost 2 years ago!

This is another example that should be added to the article: "**Complaints against Riverside County Transportation Commission**". Please review other complaints that can be seen on our web site: www.highgrovehappenings.net and read the letter sent to the Federal Transit Admin.

R. A. "Barney" Barnett
Editor Highgrove Happenings Newspaper
Chmn.: Highgrove Municipal Advisory Council
(951) 683 4994 highgrovenews@roadrunner.com



3

Letter 3 (cont'd)
Barney Barnett
January 3, 2011

PRESS ENTERPRISE

A8 • WEDNESDAY, May 13, 2009

NATION | STORY FROM A1

PERRIS LINE

CONTINUED FROM A1

PHOTO COURTESY OF THE METROLINK RAILROAD

ditional construction along the rail line will add to the project's estimated \$168.8 million cost, but said some increases are inevitable.

Further study and added construction will also likely delay trains running the route north from Perris, north to downtown Riverside, because federally required approval of the project will take longer.

Standiford said preliminary engineering of the project will continue as the environmental report is compiled, but the analysis and changes could put off trains running the route for three or four months. Officials previously expected service to start in late 2011.

"Yeah, I could see this shifting to the early part of 2012," he said.

MORE STUDY

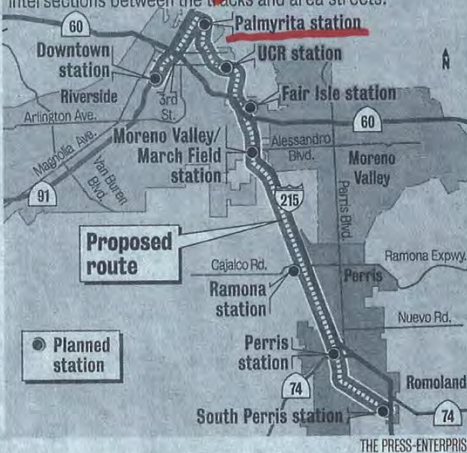
Conducting a more thorough analysis of the 24-mile Metrolink extension's air quality, public safety and noise is among a handful of changes transportation officials are considering.

Edda Rosso, capital projects manager for the transportation commission, said safety improvements south of Riverside through Moreno Valley and Perris have also been added, notably nine miles of new track that will be laid beside the existing tracks.

Officials will discuss the environmental report today during the transportation commission's monthly meeting.

Standiford said some additional

PERRIS LINE: The proposed 24-mile Metrolink extension to Perris includes up to seven stations, but not all will be open when trains start operating on the line in 2012. Officials will likely add railroad tracks along some of the route, and improve intersections between the tracks and area streets.



Some of the data in the report were based on information that was three years old and federal officials wanted more current information, he said.

Coupled with the concerns residents near the line voiced at a February public hearing, Standiford said a more complete assessment was warranted.

MORE FIXES

Further environmental study will also allow the transportation commission to formalize exactly where certain safety improvements will go. Rosso, with the transportation commission, said pedestrian gates intended to alert walkers to stop at the crossing will be installed at the intersection at Watkins Drive, and could be added at other locations.

complications. Squeezing another set of tracks along the route might mean moving the current line so both can fit under some bridges, Rosso said. She said new overpasses will not need to be built, but some retaining walls might be necessary.

As officials add tracks and plan for more safety fixes to the route, they are also considering delaying when a station near UC Riverside opens.

"It makes sense to have a station at the campus," Standiford said. "But does it make sense at the (beginning of service)? We're going to look at that. We might phase the UC Riverside station in at a later date."

But residents such as Mark Hanson said the station would bring unnecessary traffic and parking to the area, already contending with students parking on

morning at UCR?" he asked. "The campus doesn't even open until 8."

SCHOOL'S OUT

All of the fixes are necessary but do not assuage safety concerns, nearby residents suggested.

"I would hope further study would address our concerns, because most of what we have gotten is lip service," said Jill Johnson-Young, an opponent of the Metrolink extension.

Until officials address noise and air quality concerns, and offer solutions to minimize the effects on the neighborhood, Hanson said neighbors will be wary.

"We would really like to see what this environmental report comes up with," he said.

With Highland and Hyatt elementary schools adjacent to the tracks, officials with Riverside Unified School District said the improvements don't go far enough.

"What we would like to see is a long ways beyond what we have seen so far," said district Superintendent Rick Miller, who added "significant" improvements such as fencing the entire route might be necessary.

School officials sent letters opposing the Perris Valley Line during the comment period earlier this year.

That was before Arlington High School student Samuel Sung-Jae Shin, 14, was killed when he stepped in front of an eastbound Metrolink train at the Jackson Street crossing April 22, on his way to school.

"Whatever our concerns were at that point, they only got accelerated," Miller said.

Johnson-Young noted officials are only now starting to address safety concerns



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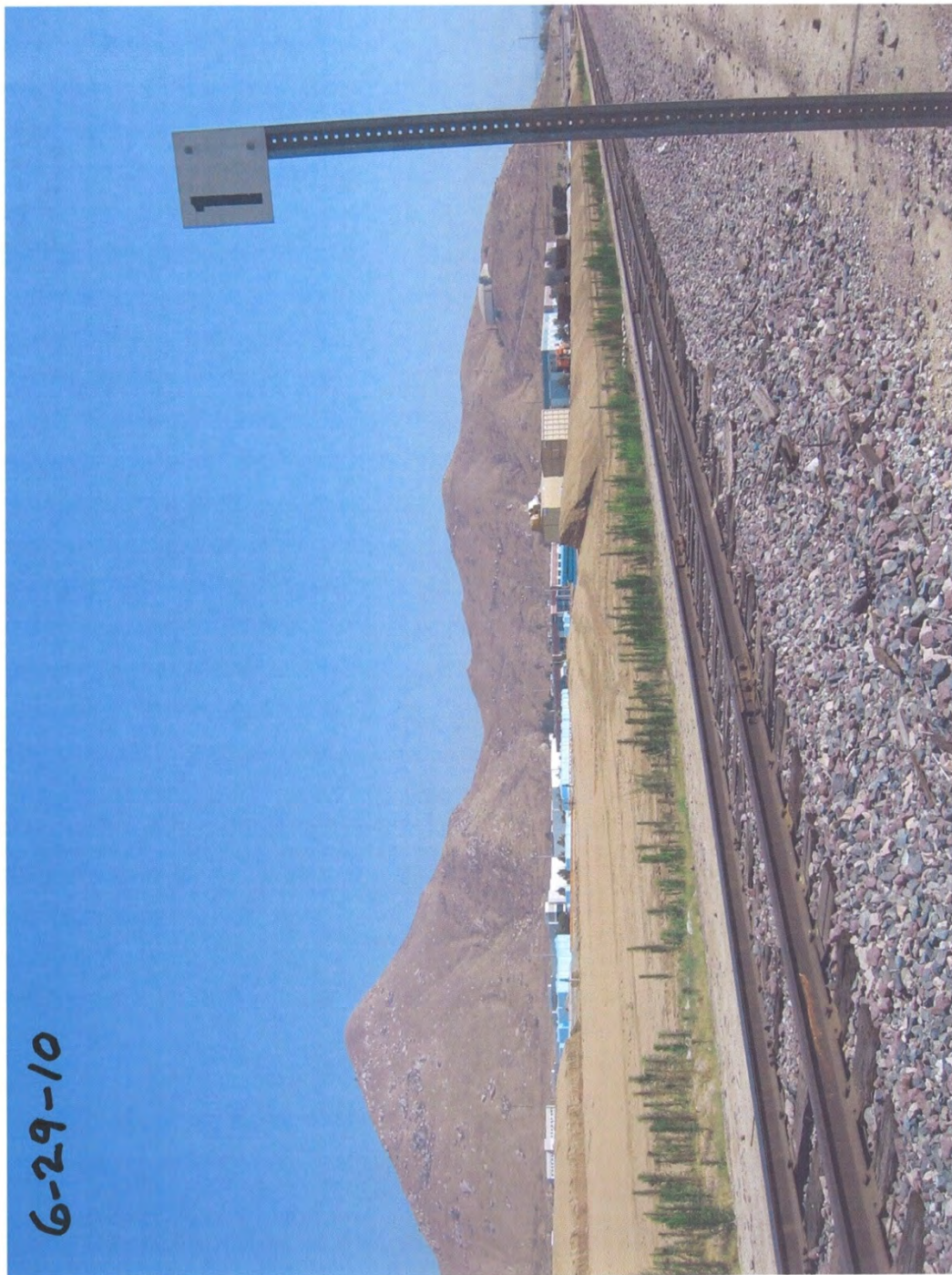
Letter 3 (cont'd)
Barney Barnett
January 3, 2011





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Letter 3 (cont'd)
Barney Barnett
January 3, 2011





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Letter 3 (cont'd)
Barney Barnett
January 3, 2011





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Letter 3 (cont'd)
Barney Barnett
January 3, 2011





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Letter 3 (cont'd)
Barney Barnett
January 3, 2011





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Letter 3 (cont'd)
Barney Barnett
January 3, 2011





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Letter 3 (cont'd)
Barney Barnett
January 3, 2011





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Letter 3 (cont'd)
Barney Barnett
January 3, 2011

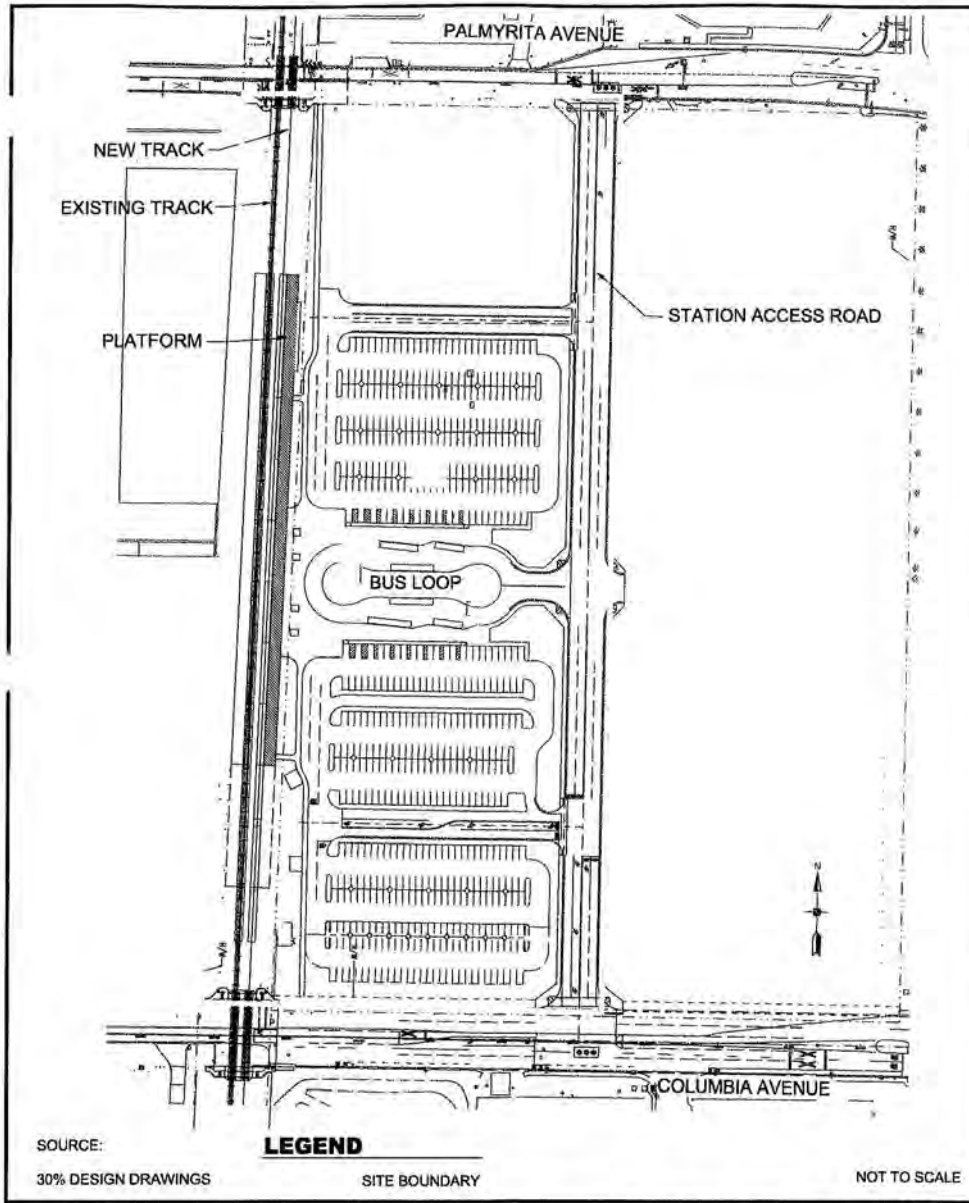
Supplemental Environmental Assessment
Volume 1 of 2



November 2010



3
Letter 3 (cont'd)
Barney Barnett
January 3, 2011



		PROJECT NO. 92666	HUNTER PARK STATION PALMYRITA AVENUE OPTION ENGINEERING SITE PLAN	FIGURE
		DRAWN: 1/18/10		SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT RIVERSIDE COUNTY TRANSPORTATION COMMISSION PERRIS VALLEY LINE RIVERSIDE, CALIFORNIA
DRAWN BY: JP				
CHECKED BY: RM				
FILE NAME: 92666PalmE.dwg				



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Letter 3 (cont'd)
Barney Barnett
January 3, 2011

HIGHGROVE HAPPENINGS

NORTHEAST CORNER



The northeast corner is already occupied by West Coast Wire and Steel Co.

NORTHWEST CORNER



And the northwest corner appears to be an orange grove but is only 4 rows of trees deep. This is the narrow part of Palmyrita Ave. just west of the RR track.

PALMYRITA AVE. FROM WIDE TO NARROW



These trees will be gone when Palmyrita is widened to match the existing width of the street. Notice how the trees extend into the right-of-way where the road narrows? Palmyrita is wider at both ends of this small orange grove.

(Photo looking east toward the new warehouse that is under construction).



For details please visit: www.masterdevelopment.com (Hunter Park)

The photo at the left states that it will be a warehouse with 530,000 Sq. Ft. but the floor plan says 520,000 Sq. Ft. Either way this is a big warehouse! If this was the location that RCTC wanted for their Palmyrita Ave. station then they are out of luck! Only 1/2 mile away is where there are still 19 acres of vacant land that could be the Highgrove Metroink Station that is the same land needed to connect the 2 railroads.

Metroink questions directed to
Riverside County Transportation Commission
Question from Highgrove Happenings: (R. A. "Barney" Barnett)

- 1. Has any Federal money been withdrawn from the Perris Valley Line project during 2008 or 2009? Yes ___ No ___
- 2. If so, how much was taken back and what date did that occur? \$ _____ Date _____

Answer from RCTC: (John Standiford)
1 & 2) No federal money has been "taken back." The facts are quite simple: \$50 million was included in the Appropriations Bill for Fiscal Year 2009. The PVL was listed with many other projects to be funded in that particular bill. Congress did not approve an Appropriations Bill for FY 2009 and instead approved a continuing resolution. The bottom line is that the \$50 million was never approved because the bill never made it to the President's desk. However, we continue to hold our favorable rating with the Federal Transit Administration and will certainly receive as much as \$75 million in funding for the project as long as the Small Starts program is funded. In addition to the federal Small Starts funding, RCTC has already received more than \$2 million in federal funding for the project from sources other than the Small Starts program. The key points to remember are: 1) Congress approved \$50 million for the project, 2) Congress' bill which funded all kinds of projects was shelved 3) the project enjoys a favorable rating from the FTA which keeps it in line for federal funding, and the project has a demonstrated track record of already receiving federal funding.

- Question:
3. Has RCTC purchased the vacant property to connect the PVL railroad to the BNSF railroad south of Villa St. and north of the arroyo? Yes ___ No ___

Answer:
3) We are working closely with Burlington Northern Santa Fe Railroad on a number of issues regarding this project and our commuter rail service. Most recently, the discussions have been productive and cooperative, but it is premature to reveal the exact details of what are legally-privileged negotiations. We hope to have details finalized in the near future and will announce it when we are able to do so. The same is true regarding the land for the connection.

- Question:
4. Where is the exact location of the Palmyrita Ave. station site that is planned by RCTC?

- 5. Does RCTC own the property for the Palmyrita Station site? Yes ___ No ___

Answer:
4 & 5) We are considering multiple locations for the Palmyrita station. As we have repeatedly explained, the purchase of land at any location in this area depends on the approval of our environmental document. Much like our negotiations with BNSF, we will provide details and information as soon as it is appropriate to do so.

- Question:
6. Do you have an agreement with the BNSF to run commuter trains between Riverside and Perris? Yes ___ No ___

Answer:
6) We already have the right to run commuter trains along the San Jacinto Rail Line toward Perris, because RCTC owns it. Our main concern with BNSF is between Highgrove and Riverside and that is something that we are negotiating.

- Question:
7. Will there be a 4th main line to accommodate trains between Highgrove and Riverside? Yes ___ No ___

Answer:
7) Once again this involves working with BNSF and that continues to take place. Constructing another track is an important component in solidifying the approval to run service between Highgrove and Riverside.

The RCTC web site shows 460 parking spaces at the Palmyrita Station with a proposed start-up date of 2011 that increases to 550 spaces in the year 2030. But where will the Palmyrita station be located to accommodate this much parking? 3 out of 4 corners are already taken and the other corner has orange trees that are only 4 rows deep that will be eliminated when Palmyrita is widened. Only 1/2 mile north of Palmyrita are 19 acres of vacant land in Highgrove, that is mandatory for the curved track to connect the 2 railroads. Highgrove is an ideal location for a Metroink stop and the station would be on RCTC property. The curve would be part of the Perris Valley Line. Highgrove now has 62 commuter trains per week that pass right through Highgrove on the BNSF tracks. The station needs to be where the commuter trains are now, and not where others may be in several years when the Perris Valley Line is completed!



3

Response to Letter 3
Barney Barnett
January 3, 2011

L3-1. The first page of this comment letter provides a list of attachments: copy of letter to FTA dated December 20, 2010; contents of information submitted to FTA; complaints against RCTC; copy of February 2009 Highgrove Happenings Newsletter; Press Enterprise article dated May 13, 2009; color photocopies; SEA coversheet and a copy of SEA Figure 1.7-7. The Draft SEA in Section 1.3 provides a description of the Highgrove Station and reasons why it is not being considered as part of the proposed project. This response provides the most up to date information regarding why a station at Highgrove is not part of the PVL project.

The submittal is a compilation of material in support of a new Highgrove station. Most of the materials are signature cards or internet postings or newspaper articles that express opinion on the need for a station at Highgrove. With regard to those materials that do raise environmental comments/issues, responses are provided below. The responses below are presented in a discussion format to avoid repetition.

The concept of a Metrolink Station in the Highgrove area has been raised by members of the public throughout RCTC's commuter rail planning process. In response, RCTC studied the concept on a number of occasions between 1994 and 2010. The evaluations consistently reaffirm that a Highgrove area station is not a feasible option for the PVL project. Below is an explanation of why the Highgrove area station is not feasible.

During the planning period for the proposed project, site conditions have changed at the commenter's Highgrove area station site. The previously undeveloped 34± acres of private land now has an approved Parcel Map and Design Review (Planning Case P06-1506 and P06-1508) from the City of Riverside (November 2007) for development of the Citrus Business Park. Improvements to the property will include constructing four new industrial buildings. Access was approved via Citrus Street; emergency access is via Villa Street.

With public access to the site limited to Citrus Street, access across Springbrook Wash is the only way to access the two designated parcels north of the Wash. This area, north of the wash, was approved for two industrial buildings as part of the approval for the Citrus Business Park. The approved access is from a new crossing constructed on the western portion of the site, adjacent to the BNSF right-of-way. Since the approval of the Citrus Business Park, the two industrial buildings south of Springbrook Wash have been constructed. As such, the existing condition for the Highgrove station site proposed in the comment consists of two industrial buildings with access from Citrus Street and a crossing at Springbrook Wash at the western boundary of the property adjacent to the BNSF.

The proposed PVL project would construct the Citrus Connection on the two parcels north of Springbrook Wash. As discussed in the SEA, the Citrus Connection would connect the BNSF main line with the SJBL/RCTC ROW via a short curved track. It would replace the two industrial buildings proposed for this northern area.



In addition to the approved Citrus Business Park, the City of Riverside is scheduled to start construction of a railroad grade separation at Iowa Street on the BNSF main line. The planned grade separation would allow Iowa Street to be raised over the BNSF main line between Palmyrita Street and Spring Street. Citrus Street would remain in its current configuration but only a right turn in/right turn out would be allowed to and from Iowa Street.

It should also be noted that construction has started on the Spring Mountain Ranch development, along the northern section of Pigeon Pass Road. The Riverside County Transportation Department (RCTD) is currently studying alternatives for roadway alignment through the development to connect Pigeon Pass Road with the City of Riverside. Currently, neither Center Street nor Villa Street (Highgrove area) connect to the east to provide access to the Spring Mountain Ranch area. The closest connection for Pigeon Pass Road would be at Marlborough Street which allows access to the Hunter Park Station. These alignments will continue to be studied by RCTD.

The planning history of the PVL began in 1988 when RCTC initiated studies of potential station sites on the BNSF main line to serve future commuter rail service to Orange County. As a result, RCTC decided to purchase passenger rail operating rights on the BNSF. As the Metrolink system expanded within Riverside County, existing stations were reaching capacity and various station selection studies were undertaken. Unlike other Metrolink member agencies, RCTC takes responsibility to fund the capital and operating costs for Metrolink Stations within the county. As such, RCTC takes into account both capital, operation, and maintenance costs when evaluating station locations.

Commuter rail station siting and selection considerations are based on a number of factors, including projected ridership and revenue; operational requirements; geographic spacing in relation to other stations; right-of-way requirements and availability; local conditions such as surrounding land use and traffic circulation; and rail configuration. Additionally, both the BNSF and the CPUC prefer the Marlborough Station location over the Highgrove site. The BNSF is concerned the Highgrove station location would cause increased congestion on the main line and not be a feasible option (Project Meeting, February 25, 2009). The CPUC identifies the Marlborough Station as the preferred location because of the existing roadway access. The Highgrove station would require two new grade crossings while Marlborough would not require any (email communication, February 2, 2011).

From an engineering perspective, the Highgrove area station is infeasible for the reasons enumerated below:

Prior to planning the PVL project, RCTC received public input concerning the construction of transit facilities in the Highgrove area. The desired facilities included locating a station on the BNSF main line near Citrus and Villa Streets. RCTC has revisited the feasibility of this option numerous times in the past (1994, 1999, 2003, 2007, and 2009). In general, the limitations identified by RCTC in early evaluations have not changed over the years. During a January 2006 evaluation, RCTC



identified the following key reasons to decline development of a Metrolink commuter rail station at Highgrove on the BNSF:

1. Public preference was to expand existing stations (38%) compared to construction of brand new stations (only 6% of the public wanted a Highgrove option when compared to three other station sites);
2. Constrained Operating Environment – Highgrove weekday volume ranks the lowest in comparison to the current train volumes for the five existing RCTC Metrolink stations. The closest station (existing Riverside Downtown Station) to the Highgrove area is only 3.7 miles away. The Riverside Downtown Station train volume is more than 4 times that of a potential Highgrove option. Riverside Downtown serves three commuter lines while Highgrove would serve just one line.
3. It was determined that the opportunity to have a station site on the RCTC owned SJBL alignment, at a location just south of the Highgrove area (Hunter Park region), would be a better solution instead of purchasing property from BNSF.

The Hunter Park Station would allow for commuters from the Spring Mountain Ranch the shortest access via Marlborough Avenue or Palmyrita Street (which connects to the Ranch development directly). Neither Citrus Avenue nor Villa Street connect east across the SJBL/RCTC ROW to allow access to a station from the east.

After the January 2006 presentation, members of the public requested additional evaluations to determine the viability of the Highgrove station option as part of the PVL project. In February 2009 RCTC requested STV Incorporated to prepare a Highgrove Station Site Plan Study. The results of this study indicated 13 impediments to the construction of a Highgrove Station. On September 19, 2009, Barney Barnett submitted a letter rebutting STV Incorporated's study. STV Incorporated prepared a response to Mr. Barnett's rebuttal by letter dated January 11, 2010. A summary of STV's response is outlined below:

1. Reconfiguration of the Villa Street grade crossing would be necessary. This would include extensive and costly safety and engineering enhancements and poses potential vehicular and pedestrian safety issues. In addition, the City of Riverside will not allow regular truck and vehicular access from Villa Street to the northern parcels in the Parcel Map and Design Review document dated November 8, 2007 (Planning Cases P06-1506 and P06-1508) that would cause adverse impacts the existing adjacent residential neighborhood. The CPUC has indicated, in a project email, dated February 2, 2011, that they will not allow a station at Highgrove because of the need to improve two at-grade crossings when none require improvements at Hunter Park.
2. Extending Spring Street westward through an existing vacant residential property and creating a new vehicular and pedestrian grade crossing creates risks of train and vehicular/pedestrian collisions and is not feasible for the same reasons as accessing the site from Villa Street. In addition, the CPUC has reviewed the Highgrove alternative and prefers the Hunter Park Station



(Marlborough alternative) because of the close proximity of the two sites and existing crossings provide access to the Hunter Park Station (Marlborough alternative). The CPUC implementation practice for General Order Number 88-B is to not allow the construction of new at-grade crossings when not absolutely necessary. The CPUC views new at-grade crossings at Spring Street or over the Citrus Connection track as not absolutely necessary because of the option for a station to be located at Hunter Park (email communication, February 2, 2011).

3. The existing topography and evidence of substantial ponding on either side of the crossing within the right-of-way (ROW) indicate serious drainage and visibility problems that would need to be addressed by extensive excavation and grading. Such work would add substantial construction and operational/maintenance costs and would also introduce new impacts to soils, geology and air quality during excavation.
4. Diverting traffic into the Villa Street neighborhood to access the station parking on the northern parcels is not viable because the City of Riverside will not allow regular truck and vehicular access from Villa Street to the northern parcels. This limitation was stated as a condition of approval in the Parcel Map and Design Review document dated November 8, 2007 (Planning Cases P06-1506 and P06-1508). The City of Riverside indicated that Villa Street could only be used for emergency access into the site.
5. The original estimate in the 2009 Site Plan Study of 7 acres of available land for parking was based upon utilizing only the parcel north of the Citrus Connection track. Due to further design development and moving the Citrus Connection track further north to avoid the Springbrook Wash conservation easement, the northern parcel area available for parking has been reduced. STV Incorporated has reevaluated the available land for parking and included a portion of the parcel south of the Citrus Connection track in parking land area calculation netting approximately 9.3 acres total available land for parking. Considering the size, shape and configuration of the parcels available, a less than efficient parking plan would be the result. The current total area north of Springbrook Wash is 17.22 acres. This 17.22 acres would then have the Citrus Connection track through the center of it which would result in a net usable area of 6.6 acres. Access to the approximately 6.6 acres on the north parcel would be dependent upon a vehicular undercrossing beneath the Citrus Connection track due to the access restrictions at Villa Street discussed above. The land area needed for an undercrossing would severely restrict the 6.6 acres available.
6. RCTC cannot limit access to the western driveway to only Metrolink passengers. The existing western driveway is shared access with the current property owner of the parcels (currently an existing industrial warehouse use) south of the Springbrook Wash, forcing passenger traffic to mix with semi-truck traffic and creating an unsafe condition for access to the station parking. Per an easement in the Covenants, Codes and Restrictions for the purchase of the property by RCTC, access from this western driveway must be maintained for the owner of existing warehouse development. Any parking facilities located within the parcel



area south of the Citrus Connection track are limited by the California Department of Fish and Game 50 foot setback from the Springbrook Wash due to Condition 22 of the Agreement Regarding Proposed Stream or Lake Alteration imposed on the subject property dated 5/30/08.

7. The only viable location for disabled parking is immediately adjacent or in the near vicinity of the platform and the ticket vending machine which would be in the western drive and does not fit due to the placement of the adjacent warehouse building. The alternative is to place the disabled parking north of the Springbrook Wash which would impose an unreasonable travel distance (in excess of 800 feet) from the closest parking spaces to the ticket vending machine and platform for disabled passengers.
8. BNSF representatives have stated that they prefer not to have a platform in their ROW in this location due to operational congestion and track capacity because of the high volume of freight traffic on their Main Line (Project Meeting, February 25, 2009).
9. The Highgrove station would require an inner-track fence to separate the station track (4th track) from the three BNSF Main Line tracks for safety reasons. This would move the 4th track further east, thus requiring a design modification to the Citrus Connection curve increasing the degree of the curve causing decreased train speed, higher wheel noise, and higher maintenance due to the increased wear on the track. In addition, the minimum width with required clearances (approximately 44 feet) would force the platform to encroach into the driveway. Per an easement in the CC&R's for the purchase of the property by RCTC, access from this western driveway must be maintained for the owner of the warehouse development on the southern parcels.
10. There is adequate bus service to the area proposed for the Highgrove station alternative, but there would be no on-site bus drop-off area near the platform because of the constrained space between the platform and the existing open access driveway. Bus passengers would be dropped off curb-side on either Iowa Avenue or Citrus Street.
11. Reconfiguration of Citrus Street would be required. It is agreed that the Citrus Street connection to Iowa Avenue will remain unchanged. Because of the length of the platform and the required distance (150') from the switch for the Citrus Connector track, reconfiguration, including real property acquisition on the east side of the street, would be required to move Citrus Street eastward where it curves adjacent to the BNSF Main Line ROW. This would result in an increase in project cost related to the property acquisition and the road reconfiguration. These costs would not be required for the Hunter Park station location.
12. A possible option to attempt to accommodate a station in the Highgrove location just south of the Citrus Connection is for RCTC to purchase the western-most building and property of the existing warehouse development on Parcel 4, demolish the building, and convert the property to on-site bus drop-off, disabled parking, and kiss-and-ride (drop off area with no parking) drop-off. This option



presents traffic and congestion challenges due to the single entry and exit for passenger vehicles and buses. This would also require the demolition of the newly constructed industrial buildings at the site. Additionally, the vehicular access issues discussed above for the parcels north of the Citrus Connection would remain unchanged due to restrictions from the City of Riverside and CPUC.

As a result of additional study subsequent to the Site Plan Study prepared by STV Incorporated dated 2/27/09, the difference in cost to locate a station at this Highgrove site is now estimated at an additional \$35 Million to \$45 Million.

Some comments suggested that the “existing” depot in Highgrove could be used as a station site to avoid the cost of constructing a new station. However, there is no existing Highgrove depot. The Highgrove depot was originally located just south of Center Street and was demolished in 1953 (Applied Earthworks, 2009). The former depot location is located approximately 2,300 north of Citrus Street and adjacent to where the BNSF mainline and the SJBL currently connect. This location would only allow for access to the BNSF mainline and not the proposed PVL project, since the PVL project does not travel that far north. Additionally, this area is an environmental justice community that would be significantly and adversely impacted by moving services north of Villa Street.

For all the above stated reasons, the Highgrove station option was not included as a component of the PVL project or as a feasible alternative, and therefore is not evaluated further within this SEA.



3

Letter 4
Stephanie Pacheco
January 4, 2011

04 January 2011

Ms. Edda Rosso, PE
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

Subject: Comments on Draft Supplemental Environmental Assessment (SEA) and Section 4(f) Evaluation, Perris Valley Line, Riverside, California dated November, 2010.

Dear Ms. Rosso:

Please find as follows my comments on the subject document presented to evaluate project impacts from the proposed Perris Valley Line project in a document seeking compliance with the National Environmental Policy Act (NEPA).

} L4-1

Comment 1: The Draft SEA does not provide an evaluation of Environmental Justice with respect to the impacts from the proposed action. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" provides that federal agencies shall make achieving environmental justice part of its mission (Council on Environmental Quality 1997). Identifying disproportionately high and adverse human health or environmental effects of its activities on minority populations and low income populations has been incorporated into NEPA evaluations of environmental impacts from proposed actions. Environmental justice evaluations help to ensure that all communities, including minority communities and low-income communities, live in a safe and healthful environment.

} L4-2

Both Hyatt and Highlander Elementary Schools are located within the preferred action area of potential effect. Both elementary schools provide educations to students where a majority is part of underserved and disadvantaged minority populations. As a result of this population dynamic, both schools qualify for Title I funds. Title I is a federal program that provides supplemental funds to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on State academic achievement standards and state academic assessments (Riverside Unified School District, 2010¹). The intent of Title I funding is to meet the educational needs of low-achieving students enrolled in the highest poverty schools and to close the achievement gap between high- and low-performing children, especially the achievement gaps between minority and non-minority students, and between educationally disadvantaged children and their more advantaged peers. No analysis of impacts from the proposed action or alternatives and environmental justice concerns as represented by the minority, disadvantaged students at either Hyatt Elementary School or Highlander Elementary School is presented in the Draft SEA.

} L4-3

Comment 2: The SEA was not identified as a draft document. It almost seems to the Reader that this proposed action is a "Done-Deal" and that Riverside County Transportation Commission is just going through the motions to achieve compliance with NEPA for the Federal Transit Administration.

} L4-4

Sincerely,

Stephanie Pacheco

Stephanie Pacheco
255 West Campus View Drive
Riverside, California 92507

¹http://www.rusd.k12.ca.us/



3

Response to Letter 4
Stephanie Pacheco
January 4, 2011

- L4-1. This comment is introductory in nature. No response is required.
- L4-2. Section 3.11 (Environmental Justice and Socioeconomics) of the SEA addresses issues of environmental justice (EJ) and evaluates the proposed PVL with respect to Executive Order 12898. As all potential impacts from the PVL would be avoided or mitigated through measures to address specific impacts, there would be no disproportionately high or adverse effects on EJ communities. Significant adverse air quality impacts would not occur, and there would be a net benefit to regional air quality through the reduction of greenhouse gases. In addition, positive environmental consequences are also considered in an EJ analysis. The most significant positive impact from the PVL would be the provision of a new mode of transportation.
- L4-3. The study area for the EJ analysis represents the physical range within which environmental effects of the PVL may be experienced by the resident population. The study area comprised 28 whole census tracts that intersect or are contiguous with the alignment and the proposed stations and Layover Facility. Additionally, the study includes each tract having at least 50 percent of its area located within one mile of the PVL alignment. The schools lie within the study area for the EJ analysis, and the students attending Hyatt and Highland Elementary Schools are considered in the EJ analysis if they are part of the resident population identified within the census tracts.
- L4-4. The SEA for the PVL project was made available for public review in accordance with 23 CFR §771.119 and was properly identified as prescribed under NEPA.



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Letter 5
Gurumantra Khalsa
January 5, 2011

January 5, 2011

Ms. Edda Rosso
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

RE: Supplemental Environmental Assessment and Section 4(f) Evaluation

I have several concerns about public safety and environmental impacts from this project.

} L5-1
} L5-2
} L5-3

- 1. the impact of noise, vibration, and air pollution on health.
- 2. the safety of our school children due to the increased rail traffic.
- 3. public safety due to hazardous materials now being carried by BNSF.

The biggest missing is that there is no consideration for a grade separation in regard to the failure to mitigate for the possibility of a long freight train blocking the three access points into the majority of our neighborhood.

} L5-4

This is not an unforeseen circumstance. We have all been on either one side of the tracks or another when our access has been blocked by an 80 to 100 car freight train. Trains of this length block all three access points into the main residential area of our neighborhood. Since there are no assurances or guarantees this will not happen in the future, we can reasonably expect additional occurrences in the future.

We have an earthquake fault line, a high pressure jet fuel line and the possibility of hazardous toxic freight being routed through our neighborhood.

} L5-5

As the possibility of a long freight train exists, it is also foreseeable that we could experience an earthquake, a train derailment or a rupture of the high-pressure jet fuel line adjacent to the tracks and Hyatt Elementary School.

} L5-6

Should any of these disasters occur while a long train is blocking access to the neighborhood, thousands of lives would be at immediate risk, with no possibility of first responder assistance.

} L5-7

If a chlorine tank ruptured or an explosion occurred with the wind blowing in the wrong direction, the University Neighborhood would become an instant mega disaster.

} L5-8

We can't prevent earthquakes but we design and plan for surviving them. The very least mitigation for such a real event happening in the future is a grade separation. This mitigation measure would at the very least, give our first responders a shot of getting to a neighborhood in dire peril.

} L5-9



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Letter 5 (cont'd)
Gurumantra Khalsa
January 5, 2011

We have had a couple of derailments in recent memory. Given the dangerous cargo now being transported along this line, it is important that the rail line right-of-way be constructed to contain derailments or spills where the rail is elevated above schools (like Hyatt elementary) and residences. A three foot berm or block wall fence is inadequate to contain a 30 ton locomotive or six or seven as the case has been shown to be.

L5-10

These are foreseeable and mitigable events arising out of this project and its route through our residential neighborhood and they should be adequately planned for and adequately addressed.

L5-11

We've seen any number of recent preventable disasters for example, the gas line explosion in San Bruno, the BP oil spill or the mine explosion in West Virginia. All preventable and all allowed to happen because of profit. We see no reason that our neighborhood should risk a similar fate because it's expensive to build in the highest level of public safety possible. We are taxpayers and demand better from our public servants. It is we the people we're talking about here.

L5-12

RCTC needs to develop with partnering agencies a master emergency plan for derailments and spills. This plan should be reviewed annually with partnering agencies, adjusting for changing cargo risks and operations.

L5-13

RCTC needs to develop a plan to address the possible situation of all three crossings being blocked by a parked freight train. We have seen this situation occur before and it is a public safety issue as it blocks Police and Fire from a major portion of our neighborhood. These are all unnecessary risks and unforgivable breaches of public trust.

L5-14

The recent rains left a massive impact on the wilderness areas of Islander Park and the adjacent rail corridor. Much of the runoff washed down the hill and gouged out new arroyos. The drain course flowed directly into the tracks and was diverted along the track bed, carving out more of the hillside as there was no drainage under the track leading into Islander Park at the major run off point. ([see video footage](#)). This contrasted markedly with the drainage provided at Big Springs. The riparian area kept much of the debris away from the drain and it performed well.

L5-15

Another public safety issue is in crossing the rail right of way to access the county park. The PVL project bisects our community, including the City and County trails network. Access to the park and trails requires a safe, environmentally sound solution to connect with and enjoy the historic trails into the Box Springs Mountain Park. A soft bottom underpass for pedestrians and equestrians between Islander Park and the County flood plain is required. It is also consistent with published City policy concerning "How We Get Around", the transportation component.

L5-16

There are 111 homes directly impacted. In addition to appropriate sound mitigation, including multi pane window glazing, soundproofing, (sound walls need to be

L5-17



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Letter5 (cont'd)
Gurumantra Khalsa
January 5, 2011

landscaped with clinging vine to discourage graffiti) and quiet zones, we have several sensitive receptor uses immediately adjacent to or within 500 feet the PVL .There are two elementary schools, two city parks, a county park, and several day care facilities.

} L5-17 (cont'd)

The school district feels strongly enough to pursue legal action, and the incoming school board president has safety concerns as well.

} L5-18

Enhancements at existing grade crossings could include flashing warning devices, gates, raised center medians, striping, signing and pavement markings, crossing safety lighting.

} L5-19

RCTC should provide manned crossing guards for school children.

} L5-20

RCTC should install air quality monitoring equipment at the two elementary schools to establish pre- and post- project data concerning rail related airborne particulate matter.

} L5-21

Landscaping and hardscapes in our area need to conform to the University Neighborhood Specific Plan, developed by the University Neighborhood, the City of Riverside, UCR and others.

} L5-22

Our community continues to support the Highgrove station concept because that location seems to offer greater overall flexibility. In addition to servicing Metrolink traffic from the PVL, the Highgrove station establishes services to existing Riverside and San Bernardino traffic, and opens opportunities to increase the number of potential riders through the expanded capacity and the flexibility to serve them.

} L5-23

Further, Highgrove has adequate land for a station and parking. Plus, the people of Highgrove want the station and support the PVL.

} L5-24

Most importantly: Expanded passenger rail options maximize taxpayer dollars. The development of rail corridors must be looked at in a context that is bigger than a single project. The PVL provides an opportunity to do that with the Highgrove option

} L5-25

Gurumantra Khalsa
Chair, University Neighborhood Assn.
4108 Watkins Dr.
Riverside CA 92507-4701



3

Response to Letter 5
Gurumantra Khalsa
January 5, 2011

- L5-1. This comment is introductory in nature. No response is required.
- L5-2. See Master Response #6 - Noise. Vibration related issues with respect to the proposed PVL project were assessed in accordance with methodologies contained within the FTA Manual.

Section 3.3 of the SEA (and the accompanying Air Quality Technical Report) outlines the methods used to calculate the expected emissions due to the implementation of the PVL project. The air quality analysis for the PVL accounted for all relevant project parameters and conditions and ensured that the analysis was done in compliance with the most up to date local, state, and federal air quality regulations and guidance. Tables 3.3-7 thru 3.3-12 of the SEA show that emissions projected for criteria pollutants, local intersections (CO hotspots), greenhouse gases, mobile source air toxics, construction activities and locomotive and parking operations all fall below local thresholds of significance and state and federal emissions standards.

- L5-3. See Master Response #4 - Hazardous Materials Transport and Master Response #5 - Freight Operations. There are no significant impacts as a result of this issue area.
- L5-4. See Master Response #11 - Grade Separations and Master Response #7 - Emergency Planning and Response. This comment expresses concern that freight trains can block every grade crossing in the UCR neighborhood. The project's trains would be commuter trains of only a few cars. These trains are too short to block more than a single crossing. Thus, even in the unlikely event that a PVL train stops in the neighborhood, there would be no significant impact because only one of three ingress/egress locations would be affected.

Additionally, with the implementation of the PVL project, the corridor will become a shared corridor with the Metrolink and BNSF under control of SCRRA. Due to the shared nature of the operations, it is not anticipated that trains would be allowed to stop in areas of single track (including the UCR neighborhood) because this would block other trains from passing through. Instead, trains would stop in the areas where there is a bypass track (between MP 7.50 to MP 16.90) and not in the UCR neighborhood.

- L5-5. See Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response #4 - Hazardous Materials Transport, and Master Response #5 - Freight Operations. This comment also states that, "we have an earthquake fault line." The City of Riverside General Plan, Public Safety Element states that "There are no identified geologic hazards pursuant to Government Code 65302[g] in the Planning Area" and that "no known faults traverse the City or its sphere of influence." Therefore, the statement in the SEA, Section 3.15.3 is correct: "Because no known faults intersect the existing rail corridor, implementation of the PVL commuter rail service would not expose people or structures to adverse effects



related to surface fault rupture. Therefore, there would be no impacts from a known earthquake fault.”

- L5-6. See Response to Comment L5-4 and Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School and Master Response #3 - Derailment (General). The PVL project is proposing to improve track conditions along the project alignment. These improvements include tie replacement, welded rail, ballast replenishment where necessary. These improvements will improve the safety of both the Metrolink and freight trains. The improved operating conditions are anticipated to reduce the risk of derailment.
- L5-7. See Master Response #7 – Emergency Planning and Response. Currently, the RCTC ROW is used exclusively by BNSF freight trains. With the implementation of the PVL project, the corridor will become a shared corridor with the Metrolink and BNSF under control of SCRRRA. Because of the shared nature of the operations, it is not anticipated that any trains would be allowed to stop in areas of single track and thus block other trains from passing. The added benefit of this is that BNSF trains would only stop in the areas of bypass track along the I-215 corridor and not in the UCR neighborhood. Therefore, response by emergency personnel would not be impeded by the proposed project.
- L5-8. See Master Responses #4 – Hazardous Materials Transport and #5 – Freight Operations. The PVL project is a commuter rail project that will not transport hazardous materials along the route. However, hazardous materials will likely continue to be shipped along the RCTC ROW by freight whether the PVL project moves forward or not. The frequency and quantity of materials, as with all freight operations, is completely dependent on customer demand. The track improvements provided as part of the PVL project would also reduce the noise and vibration from the freight trains, and improve overall safety along the corridor.
- L5-9. See Master Response #7 – Emergency Planning and Response and Master Response #12 – Grade Separations. Grade separations, where roadways go under or over railroad tracks, require a specific approach distance to maintain appropriate grades and clearance heights for the tracks. For grade separations to be possible within the UCR neighborhood, many houses would lose driveways and vehicular access.
- L5-10. See Master Response #4 - Hazardous Materials Transport and Master Response #3 - Derailment (General). As stated in the SEA in Section 3.8.3: “As a commuter rail line, PVL service is passenger only. As such, there would never be an occasion when hazardous materials would be transported on the commuter trains.” There are no significant impacts associated with this issue area and therefore mitigation measures are not required.
- L5-11. See responses L5-4 through L5-10. The SEA found that there are no significant impacts as a result of these issues.
- L5-12. See responses L5-4 through L5-11. Safety is a primary concern of both RCTC and SCRRRA (the operators of the Metrolink service) for implementation and operation of



the project. The PVL project does not increase safety risks. Instead, the project would upgrade the existing physical condition of the rail line, which would result in an enhanced infrastructure, more consistent maintenance, and improved safety.

Additional safety measures would be provided as well, though not required as mitigation. Grade crossing improvements would enhance safety and include pedestrian swing gates, pedestrian warning devices and gates, pedestrian barricades and metal hand railings, concrete raised medians, double yellow medians and island noses, warning devices, safety lighting, and signs. Overall rail corridor safety at grade crossings would also be enhanced by implementation of "Operation Lifesaver," a safety education program for schools and communities near tracks operated by SCRRRA/Metrolink (SEA, Section 3.12.3). Operation Lifesaver is not required as mitigation but is offered by RCTC as a gesture of "good will" and to provide additional safety education. The SEA found that there are no significant impacts as a result of these issues.

L5-13. See Master Response #7 - Emergency Planning and Response. A coordinated master emergency plan, as this comment requests, does not exist even at a regional level. A disaster could occur on highways, streets, or in the air as well, but there are no coordinated emergency plans specific to any such transportation means. First responders are trained uniformly across the region for all emergencies, not on individual SCRRRA segments of track. Since first responders in the state have this universal training, the response to emergencies anywhere in the state would be the same.

L5-14. See response L5-4.

L5-15. There are at least two identified drainages that flow into Islander Park from Box Springs Reserve. These drainages are contained on the west side of the tracks and directed to Box Springs Road. There is no underground drainage; runoff water is conveyed via a concrete swale between the east and west bound lanes. There are existing culverts at approximately Mile Post 3.40 and 3.90. If these culverts were enlarged, or new culverts added, to allow the full volume of runoff through, there would be flooding downstream in residential areas within the City of Riverside.

The track has been in existence for over 100 years. If large mudflows were a continuing problem, measures would have already been taken to minimize the risk. This mudflow is therefore an unusual and unforeseeable event that is unlikely to occur frequently.

L5-16. The SJBL has existed on its current alignment for more than 100 years, well before the establishment in 1965 of Box Springs Mountain Park as a recreational resource. The main park entrance is located at 9699 Box Springs Mountain Road in Moreno Valley, approximately 14,000 feet east of the SJBL. Crossing the SJBL at other than a legal crossing is unsafe and is trespassing, regardless of circumstances.

The PVL project does not include adding additional track in this area or affecting existing access to parks in any way. The existing track will remain in its current location.



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- L5-17. See Master Response #6 - Noise.
- L5-18. See Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School; Master Response #9 - Highland and Hyatt Elementary Schools (Increased Train Traffic); and Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment).
- L5-19. See Master Response #8 - Grade Crossings. The PVL project would enhance grade crossings with improvements including pedestrian swing gates, pedestrian warning devices and gates, pedestrian barricades and metal hand railings, concrete raised medians, double yellow medians and island noses, warning devices, safety lighting, and signs (SEA, Section 1.7.5).
- L5-20. See Master Response #8 - Grade Crossings and response L5-19. The PVL project is designed in full compliance with CPUC regulations regarding grade crossings and safety. No significant impacts to grade crossing safety were identified in the SEA and no mitigation measures are required.
- L5-21. The comment suggests that RCTC should install air quality monitoring equipment at the two elementary schools to establish pre- and post-project data concerning rail related particulate matter. As indicated in the SEA, the proposed project is not considered a project of air quality concern with respect to PM_{2.5} and PM₁₀ emissions as defined by 40 CFR 93.123(b)(1) (SEA, Section 3.3.1) Moreover, according to the health risk assessment, the calculated risk at point of greatest concentration of diesel exhaust particulate and acrolein was below the threshold of significance (SEA, Table 3.3-10.) Therefore, the SEA did not identify a significant impact with regard air quality and no mitigation was required.

Division 26 of the Health and Safety Code places specific responsibility for air pollution control at the local level on air pollution control and air quality management districts. According to the Health and Safety Code, the air pollution control and air quality management districts have primary responsibility for controlling air pollution from non-vehicular sources (Health & Safety Code §§ 39002, 40000). A "non-vehicular source" includes all sources of air contaminants, including the loading of fuels into vehicles, except vehicular sources (Health & Safety Code § 39043). A "vehicular source" is a source of air contaminants emitted from motor vehicles (*Id.* at § 39060). A "motor vehicle" is a device that is self-propelled and by which a person or property may be propelled, moved or drawn on a highway, except for a device moved exclusively by human power or used exclusively on stationary rails or tracks (*Id.* at § 39039). A locomotive is a device that moves on a stationary rail or track and is therefore not considered a "motor vehicle" and is consequently a "non-vehicular source." As a result, regulation and control of air pollution from locomotives falls within the purview of the air quality management district, subject to the limitations set forth in the Clean Air Act § 209(e)(1). (42 U.S.C. § 7543(e)(1).)

In addition, the SCAQMD regularly monitors air quality within its jurisdiction, which includes the PVL alignment. According to SCAQMD's Annual Air Quality Monitoring Network Plan dated July 2010, the District operates 35 permanent monitoring sites for purposes of collecting data on air quality. The Network Plan includes monitoring



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sites in Perris and Riverside (Magnolia). The Annual Air Quality Monitoring Network Plan is submitted to the Environmental Protection Agency annually.

- L5-22. Functional landscaping will be provided at the four stations. As a railroad owner, RCTC is not required to comply with local specific plans because of the potential to limit commerce.
- L5-23. The SEA in Section 1.3 provides a description of the suggested Highgrove Station and reasons why it is not being considered as part of the PVL project.
- L5-24. The SEA in Section 1.3 provides a description of the Highgrove Station and reasons why it is not being considered as part of the PVL project. The project designers evaluated a number of factors for considering commuter rail station siting and selections and found that the Highgrove Station Option failed to adequately meet these considerations.
- L5-25. See response L5-24. The PVL project was proposed to meet the need of an improved transportation system independent of the ever growing and increasingly congested roadway system. The Locally Preferred Alternative was chosen because it most closely meets the purpose and need of the project, while having fewer environmental impacts than the other options.



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Letter 6
Gareth Funning
January 5, 2011

P3800-CI-00282

795 Glenhill Drive
Riverside
CA 92507

January 5th 2011

Ms. Edda Rosso
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

RECEIVED

JAN 06 2011

BECHTEL INFRASTRUCTURE
CORPORATION

Dear Ms Rosso,

RE: Supplemental Environmental Assessment and Section 4(f) Evaluation

I am writing in response to the call for comments on the proposed expansion of the Metrolink to Perris. I live close to the railroad tracks and although I am not opposed in principle to the Metrolink expansion, I believe that without explicit provision for noise mitigation for my house and for my neighbors' houses, such an expansion of service could adversely affect my quality of life and the value of my property.

L6-1

I live on Glenhill Drive in Riverside, opposite Highland Park. My house is on the north side of the road, but there are no buildings on the south side, just the park. The railroad tracks run along the far side of the park. I have a direct, unobstructed line of sight (and line of sound) to the railroad. Both the noise of the locomotives and the sound of the horns they use can be heard clearly throughout my house at all times of day and night whenever a freight train is passing. Thankfully, at present the passing of trains is relatively infrequent, but an expansion of the Metrolink and corresponding improvement of the tracks will likely increase the amount of train traffic significantly.

L6-2

L6-3

I have read the draft and supplemental environmental impact reports specifically pertaining to the noise and vibration aspects, and am concerned that noise levels at my property and those of my neighbors were not monitored or modeled. Since we are not, in essence, shielded from the noise by buildings across the street, I am sure that the noise impacts will be similar to those experienced by the block labeled 'Kentwood 4' (e.g. Figure A-15), who are projected to experience a 'moderate noise impact' with the proposed expansion. I am curious why impacts along Glenhill Drive (the continuation of Kentwood Drive) were not even considered within these impact studies, especially given the exposure to noise is likely to be very similar.

L6-4

I would urge the Transportation Commission to consider the potential impact on my house and those of my neighbors. The current proposed extent of the noise barriers that would run parallel to Watkins Drive and protect Kentwood Drive residences (Figure D) are ended right at the point where Kentwood Drive becomes Glenhill

L6-5



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Letter 6 (cont'd)
Gareth Funning
January 5, 2011

Drive – exactly at the location of my house, essentially, and at the location where the measurements and models of noise impacts were arbitrarily ended. My assertion is that the barriers should be extended such that they protect my house and my neighbors also.

} L6-5 (cont'd)

I would also urge that the RCTC continue to lobby the City of Riverside to introduce a quiet zone in the neighborhood, specifically by upgrading the railroad crossing at Spruce St. Noise barriers may help with the mitigation of locomotive noise, but the reduction in train horn noise that a quiet zone could introduce would be substantial and go a long way to reducing the noise impact of additional train traffic.

} L6-6

Many thanks for your assistance with this matter.

Yours sincerely,

Gareth Funning, MSci, MSc, DPhil



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Response to Letter 6
Gareth Funning
January 5, 2011

- L6-1. See Master Response #6 - Noise. A detailed noise assessment (FTA Manual, page 3-10) was conducted for project SCRRA/Metrolink trains at representative sensitive properties along the entire project rail alignment. Where impacts were predicted, noise mitigation including sound insulation and noise barriers were proposed at specific locations (see SEA, Table 3.4-10) to reduce impacts to levels that are not significant. Second row buildings from the alignment were also considered. Second row residences, such as 795 Glenhill Drive, have the benefit of an intervening building between itself and the proposed alignment. As a result, noise levels at this type of receiver would be reduced in three ways: 1) the proposed noise barrier, 2) the intervening building that also acts to attenuate noise, and 3) the added distance between the PVL alignment and the property that increases the noise attenuation for the property. By definition, noise barriers are effective when they block the line of sight between the receiver and the noise-generating source (FTA Manual, Section 6.8.3). Although no noise impacts were projected to occur at 795 Glenhill Drive, a noise barrier is proposed in the vicinity of 795 Glenhill Drive along Kentwood Drive (see Noise and Vibration Technical Report, Appendix D). This barrier will reduce predicted impacts along Kentwood Drive to levels that are not significant. As an added benefit, it will also result in a reduction in PVL and existing freight train noise levels at 795 Glenhill Drive.
([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf))
- L6-2. See response L5-1 above. The sounding of horns at a rail grade crossing is required by the FRA (see SEA, Section 3.4.1). However, while train horns represent the loudest component of train noise, based on guidance from the FTA, the SCRRA/Metrolink horns that would be used for the proposed PVL project would not be as loud as the existing freight train horns that are presently sounded.
- L6-3. See Master Response #5 - Freight Operations and Master Response #9 - Highland and Hyatt Elementary Schools (Increased Train Traffic). The PVL project would add and operate six commuter trains twice a day, making a total of 12 trips per day (six trains in each direction). The SEA evaluated the potential impacts that could occur as a result of this increase and found no significant impacts with mitigation measures incorporated. As stated in the SEA, Section 1.7.12, freight operations are dictated by customer demand; in turn, customer demand is a function of economic conditions. The business decision to provide freight service along the alignment is profit driven. As long as the customer demand for freight service is low, there is no reason to assume BNSF would increase operations on the SJBL, regardless of the PVL project (SEA, Section 1.7.12).
- L6-4. Representative noise measurements were conducted in the area of Glenhill Drive along Kentwood Drive (see SEA, Table 3.4-7). Concerning potential impacts to homes along Kentwood Drive and Glenhill Drive, a comparison of the two locations is not relevant since the distance from 795 Glenhill Drive to the proposed PVL alignment (approximately 315 feet) would be almost three times that of homes along Kentwood Drive (approximately 80 feet). This results in homes along Glenhill Drive



having more noise attenuation due to distance and thus, based on noise fundamentals, they would not be affected by PVL train noise to the same degree as homes along Kentwood Drive. Consequently, the PVL noise assessment did not result in the prediction of noise impacts for any home along Glenhill Drive and therefore, mitigation was not required or proposed.

However, the FRA's new horn rule (see Noise and Vibration Technical Report, Section I) was taken into account when designing the noise barriers in the Kentwood Drive location. Consequently, the placement of the proposed noise barriers along Kentwood Drive would shield homes along both Kentwood and Glenhill Drives from PVL horn noise even though the homes along Glenhill Drive do not require noise mitigation.

- L6-5. See responses L5-1, L5-2 and L5-4 above. The proposed noise barrier along Kentwood Drive was not designed in an arbitrary manner. It was designed specifically to shield homes that would be impacted by project-related train noise. The length of the noise barriers was based primarily on where the proposed PVL locomotives would begin blowing their horns (see SEA, Section 3.4.2), in addition to the position of the horns on the trains and existing site topography and constraints. This determination was made utilizing the FRA new horn rule and procedures within the FTA manual (see Chapter 6). The home at 795 Glenhill Drive would not experience noise impacts as defined by the FTA Manual and, as a result, any design modification to proposed PVL noise barriers is not required.
- L6-6. See Master Response #1 - Quiet Zones.



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Letter 7
RTA - Mark Stanley
January 5, 2011



Riverside Transit Agency
1825 Third Street
P.O. Box 59968
Riverside, CA 92517-1968
Phone: (951) 565-5000
Fax: (951) 565-5001

January 5, 2011

Ms. Edda Rosso
Capital Projects Manager
Riverside County
Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

RE: Perris Valley Line Supplemental Environmental Assessment

Dear Ms. Rosso:

Thank you for the opportunity to review the supplemental environmental assessment for the Perris Valley Line. } L7-1

RTA currently has service in the area where the Hunter Park station is proposed to be located. Transit customers will mostly use the station as a convenient point to transfer between modes. As you continue to evaluate the three alternatives, the Columbia Avenue and Palmyrita Avenue site options appear to be more favorable to transit. Both sites illustrate a bus loop with what conceptually will provide adequate space for several bus lines to serve the center at once. } L7-2

To aid in the control of traffic flow, traffic lights or stop signs would assist the movement of buses in the area, specifically, the intersections along Columbia Avenue, Marlborough Avenue and Palmyrita Avenue. } L7-3

Please do not hesitate to contact me with any questions by phone at (951)565-5130 or email at mstanley@riversidetransit.com. } L7-4

Sincerely,

Mark Stanley
Director of Planning

MS/ar



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**Response to Letter 7
RTA - Mark Stanley
January 5, 2011**

- L7-1. Comment is introductory. No response is necessary.
- L7-2. The SEA evaluated three Hunter Park Station options and RCTC with FTA concurrence eventually selected the Marlborough Station option. According to the 90% plans, the Hunter Park Station at the Marlborough site will also have a bus loop.
- L7-3. Intersection control measures are currently in place at intersections along Columbia, Marlborough, and Palmyrita Avenues. In addition, as part of the project, RCTC proposes to install traffic signals at the station entrance/exits at Palmyrita and Columbia Avenues for the Palmyrita Station option and at Columbia Avenue for the Marlborough and Columbia Station options.
- L7-4. This comment does not raise specific environmental concerns. Therefore, no response is necessary.



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Letter 8
Robert A. Phillips
January 5, 2011

January 5, 2011

Robert A. Phillips
3511 Watkins Drive
Riverside, California 92507-4654

Ms. Edda Rosso, P.E.
Capital Projects Manager
Riverside County Transportation Commission
4080 Lemon Street, 3rd Floor
Post Office Box 12008
Riverside, California 92502-2208

Dear Ms. Rosso,

Following are my comments on several aspects of the Supplemental Environmental Assessment (SEA) and Section 4(f) Evaluation for the Perris Valley Line (PVL) project.

} L8-1

GENERAL COMMENTS

In reviewing the SEA and the studies on which it is based, I found numerous fallacious arguments (e.g., the discussion of the express bus alternative), deliberate omissions (e.g., neglecting key sites in the measurement of noise and vibration, and neglecting to include future increases in freight traffic in the environmental analysis), and manipulations of data (e.g., the ludicrous calculation of derailment probability), contrived to support the desired finding of "no significant impact." It is abundantly clear that, even with the proposed mitigation measures, the PVL will have a tremendous impact on the environment, and **a full Environmental Impact Statement (EIS) should be prepared.**

} L8-2

ES.3.0—PURPOSE AND NEED

On page ES-17, "ES.3.2—Need" indicates, "It is not expected that existing roadway facilities would be able to keep pace with the projected demand resulting from population, employment, and development growth in the study corridor." The SEA presents no data to substantiate a claim that the PVL would result in a noticeable improvement in roadway traffic volumes. According to Page 3.5-20, "The PVL is expected to carry 3,705 passengers during each of the AM and PM peak periods in 2012, based on ridership projections." There is no basis for these projections, but if one assumes that they are valid, one wonders whether the absence of 3,705 vehicles, spread over a period of several hours in the morning or evening, would noticeably improve congestion on Interstate 215 and State Route 60, based on the high peak traffic volumes on those roadways. In these tough economic times, taxpayer dollars must be spent with the utmost care, and potential minor improvements in freeway traffic from the PVL do not justify its enormous cost.

} L8-3

ES.4.0—ALTERNATIVES CONSIDERED



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Letter 8 (cont'd)
Robert A. Phillips
January 5, 2011

On page ES-18, "ES-4.2—Express Bus Alternative" indicates, "This alternative was not selected because the several crossings of mixed-flow traffic resulted in significant increases in travel time and the performance of the alternative was deemed insufficient to meet the needs of commuters in the corridor, therefore not meeting the Purpose and Need established for the project." According to Table 2.3-1 in the SEA, the projected travel time for the buses would be only 16 minutes longer than the travel time for the PVL. In addition, buses can deliver passengers to numerous locations that trains cannot directly reach. **The express bus alternative should be implemented first**, and then the demand for commuter service can be accurately assessed, based on actual data, not fanciful projections. If the demand proves minimal, then the tremendous expense of building the PVL can be avoided.

L8-4

1.0—PROPOSED PROJECT

Page 1-3 indicates, "... further input from the neighborhood during the public review and comment period for the IS/MND resulted in the removal of the UCR Station as part of the PVL. It should be noted, the General Plan for the City of Riverside does identify a station in the UCR neighborhood." It is my sincere hope that the UCR Station has been permanently scrapped, but the language in the foregoing quotation and elsewhere in the SEA is unclear. Several factors raise doubts in my mind: at the May 17, 2010, public hearing, members of RCTC commented that the UCR Station would not be part of the initial construction but might be added later; Section 1.7—Project Details in the SEA, on page 1-10, indicates, "**For the opening year of 2012**, the PVL would include ... construction of four stations ..." (what about later years?); and a 1,100-foot gap remains in the sound barrier along Watkins Drive at the location previously proposed for the UCR Station. The reasons against building that station are numerous and compelling and have been repeatedly and thoroughly explained to RCTC by many local residents, myself included. **PVL project documents must be absolutely clear in indicating that the UCR Station on Watkins Drive has been jettisoned, now and forever.**

L8-5

1.7.5—Grade Crossings

The SEA includes no provision for a grade separation at any of the three crossings in the UCR neighborhood (Spruce Street, West Blaine Street, and Mount Vernon Avenue). The trains that pass through the UCR neighborhood are sometimes over 100 cars long and block all three crossings simultaneously, completely preventing emergency access to the neighborhood north and east of the tracks. This is an extremely dangerous situation that can be mitigated only by installing at least one grade separation. (I have counted the train cars, so I know firsthand that the train-length statistics given in the SEA—two trains per day, typically consisting of three diesel locomotives and 25 freight cars—are a gross and misleading underestimation.) Further, industrial development along the I-215 corridor will substantially increase freight traffic and the length of freight trains. The SEA utterly fails to address these inevitable increases, which are already in the works. According to *The Press-Enterprise* ("Meridian plan approved but not without rail reservations," July 23, 2010), "The developer of the Meridian business park near March Air Reserve Base has been given the go-ahead to shift its focus to attracting larger industrial users. ... Prior environmental impact reports didn't account for potential rail traffic at the business park. The changes approved Wednesday, though, would allow tenants on two

L8-6



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Letter 8 (cont'd)
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parcels that have rail spurs to add a maximum of 12 rail cars each day to trains traveling through Meridian.” This is only the beginning of what will surely come.

L8-6 (cont'd)

1.7.8—Landscape Walls

Page 1-49 indicates, “Several comments expressed concerns that the location of the existing track relative to the adjoining Hyatt Elementary School poses a risk to the school from potential derailments. ... The proposed project does nothing that correlates with an increased potential for derailments. As such, there are no impacts, and no mitigation is required. ... To be clear, the provision of this supplemental measure [to be proposed by a railroad design/safety professional] is not required to reduce potential impacts to a level of less than significant. To the contrary, the SEA thoroughly analyzed the potential for derailment and concluded that no significant impact would result (see Section 3.8, Hazards and Hazardous Materials).” These statements completely ignore the fact that, as the volume of freight traffic increases (and it will), so does the potential for derailment. (See my comments at 3.8 below.)

L8-7

1.7.12—Freight Usage

RCTC has again trotted out the useless Wilbur Smith Associates 2008 study to support its contention that there will be negligible increase in freight traffic as a result of the PVL project. That study is based on inquiries of a few existing businesses and totally ignores the inevitable upswing in construction and industry that will occur along the Interstate 215 corridor when the economy improves. The preparers of the study did not ascertain what commercial developments are proposed for March Air Force Base or at numerous other locations in that rapidly growing area, nor did they consider RCTC’s desire eventually to connect the PVL to the Temecula area, which would certainly increase the volume of rail traffic.

In addition, use of the tracks for Metrolink during the day would shift freight usage to nighttime hours. Currently, several trains rumble through the UCR neighborhood each night, awakening residents with whistles, noise, and vibration. Any increase in nighttime freight travel through the neighborhood would be intolerable.

Years ago, the freight hauled on the tracks consisted mainly of grain and lumber. Now, increasing amounts of toxic materials are being transported on the tracks, including tankers of chlorine for the new water treatment plants south of Perris. A derailment or spill from a damaged car could be deadly for neighborhood residents.

RCTC needs to establish an upper limit for freight traffic, beyond which further environmental review and mitigation will be mandated. Despite the dismissive statements in the SEA, everyone knows that the freight traffic on the proposed PVL will increase, creating hazardous situations and further degrading the quality of life for those who live near the tracks. As the creators of the project that brings such hazards and degradation, RCTC is responsible for continued monitoring, assessment, and mitigation as the conditions of track usage change over time.

It is outrageous for the SEA’s authors to claim that freight shippers won’t expand service to take advantage of the “track improvements and other upgrades. ... safety benefits. ... improvements

L8-8



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in communications, ... [and] reduction in potential schedule conflicts" from the PVL. An improving economy will result in increased customer demand for freight service, and BNSF will assuredly increase freight operations on the SJBL. } L8-8 (cont'd)

3.3—AIR QUALITY

On Page 3.3-20, athletes are listed as a primary group of "sensitive receptors" with regard to air quality. However, the list of sensitive receptors fails to include the UCR intramural fields on the southwest corner of Watkins Drive and Valencia Hill Drive. These fields are the same distance from the tracks as the UCR Child Development Center and are in daily use at the times when evening Metrolink trains would be traveling through the UCR neighborhood on the PVL. These fields should definitely be analyzed as a sensitive receptor in the environmental document. } L8-9

According to page 3.3-23, "... MSAT emissions in the study area are likely to be lower in the future. ... Therefore, the PVL has low potential for impacts from MSATs and falls under category (2) of the FHWA guidance above and only requires a qualitative assessment." This statement is incorrect because it assumes that the increase in emissions from Metrolink trains would be "offset somewhat" by reduced commuter traffic and increased speeds on freeways. "Offset somewhat" is awfully vague, and it scarcely justifies abandoning a quantitative analysis. Once again, the statements in the SEA fail to account for the substantial increases in freight traffic that will result, whether RCTC is willing to admit it or not, from the PVL. **A thorough quantitative analysis—including increased freight traffic—must be performed for the EIS.** The PVL definitely has "higher potential MSAT effects." } L8-10

The air quality impacts shown in Table 3.3-7 are based on the start-up volume of 12 Metrolink trains per day. The analysis is wholly inadequate and should include provisions for additional Metrolink trains, as well as a substantial increase in freight traffic. Page 3.3-31 indicates, "The additional commuter rail activity contemplated as part of the PVL would have a negligible effect on diesel particulate matter or acrolein emissions in the vicinity of nearby homes, schools and businesses along the PVL alignment." Although that statement is dubious, a much greater impact on air quality will come from increased freight traffic, which was entirely omitted from the analysis. } L8-11

3.4—NOISE AND VIBRATION

In general, the noise analysis in the SEA for the SJBL segment is foundationally flawed because it relies on the assumption that there are "about two freight trains ... daily, ... typically consist[ing] of three diesel locomotives and about 25 freight cars and travel[ing] at maximum speeds of 20 mph" (page 3.4-14). As stated above, this is a gross understatement of the size and frequency of the trains. } L8-12

There are glaring omissions in the selection of noise-monitoring locations in the 2002, 2005, and 2009 studies. Of particular interest to me is the segment of Watkins Drive between Blaine Street and Valencia Hill Drive, where no measurements were taken in any of the studies. My home is on the southeast corner of Watkins Drive and Valencia Hill Drive, directly across the street from the tracks. In the SEA, no sound barrier is planned between the tracks and my home. I cannot } L8-13



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provide decibel measurements for comparison with federal standards, but I know that, when the trains pass by on the SJBL, my house shakes and my windows rattle loud enough to wake me up, often several times in a single night. I have to raise my voice to converse with others in my home, and it is difficult to hear the television. The train whistles are alarmingly loud.

L8-13 (cont'd)

The analysis in the SEA grossly underestimates the observable impacts of noise and vibration in the UCR neighborhood and, again, fails to account for the eventual substantial increases in freight traffic. Somehow, between the IS/MND and the SEA, the number of homes requiring mitigation was reduced over 80 percent. Obviously, data are being manipulated to excuse RCTC from paying for the severe negative impacts that its project will cause.

L8-14

In the aerial photographs in Appendix "A" of the Noise and Vibration Technical Report, moderate and severe impacts are identified at West Campus View 1 and 4 and at West Campus View 3, but not at West Campus View 5 and 2, which lie between 4 and 3. The noise and vibration at all of these locations would be identical, so why would 5 and 2 be immune from impact? The curvature of the track is consistent, and the noise from the train whistles does not stop at property lines. West Campus View 5 and 2 happen to correspond to the 1,100-foot gap in the noise barrier, which happens to correspond to the proposed location of the UCR Station. Obviously, RCTC wants to keep this segment free of walls for future installation of a station. Again, for numerous reasons, that station needs to be abandoned and proper noise mitigation needs to be provided. **The gap in the noise barrier needs to be closed to reduce noise levels at numerous homes along that stretch of track, including mine. In the EIS, the noise impacts need to be analyzed thoroughly, not selectively with a hidden agenda.**

L8-15

Noticeably absent from the sites analyzed in Table 3.4-14 (Summary of Vibration Measurements (2005)) is Watkins Drive. As I mentioned earlier, I am frequently awakened by the vibration of my home as freight trains rumble past it on the SJBL. The vibration analysis needs to be far more thorough and include properties along Watkins Drive. Page 3.4-44 indicates, "According to Chapter 8 of the FTA Manual, the number of existing daily freight train events along the SJBL is too few to warrant inclusion in the analysis. When existing rail corridors have less than five freight train trips per day, the existing environment would not include a significant number of perceptible GBV events. As a result, the FTA vibration assessment for the PVL project would only be related to future Metrolink trains traveling along the SJBL." Again, the quantity of freight trains on the SJBL is being grossly (deliberately?) underestimated, and freight traffic (present and future) needs to be included in the vibration analysis.

L8-16

3.8—HAZARDS AND HAZARDOUS MATERIALS

According to page 3.8-11, the operation of Metrolink trains will not significantly impact the underground jet fuel and gas pipelines along the PVL. As always, the analysis ignores freight trains and the fact that their frequency will increase.

L8-17

Page 3.8-11 indicates, "Derailment could cause an accidental spill from the SCRAA/Metrolink train engines or diesel fuel tanks." Again, the hazardous materials hauled by freight trains are not considered, and their potentially disastrous impacts in the event of an accident are ignored. In the SEA, there follows a fallacious calculation to demonstrate that there is a risk of one

L8-18



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Robert A. Phillips
January 5, 2011

derailment on the PVL every 124 years. The calculation is flawed because it assumes that there have been only three freight-train derailments on BNSF's entire track inventory since 1993. In fact, there have been three such derailments in the UCR neighborhood alone in recent memory. The calculation then assumes that the derailment rate on the totality of BNSF's tracks will be the same as the derailment rate on the PVL. Obviously, this is dishonest, since the section of track passing through the UCR neighborhood contains several tight curves and grades (which increase the potential for derailment) and is therefore not comparable to a company-wide average. This type of specious calculation casts doubt on all of the data and studies that RCTC commissions to support its goal of building the PVL.

L8-18 (cont'd)

3.15—GEOLOGY AND SOILS

Regional Faulting and Seismicity

The SEA fails to mention the earthquake fault located at the intersection of Watkins Drive and Valencia Hill Drive. This fault is identified in UCR's Long-Range Development Plan. I am well aware of its existence, because it emitted a sound like a rifle shot and created a large dust cloud at the onset of the Landers quake. This fault's location at the proposed PVL poses a significant danger to the UCR neighborhood. It is conceivable that, during a major earthquake, a train carrying toxic chemicals could derail on the curve at the UCR Child Development Center and within a few feet of numerous residences. Of course, the possibility of such disasters already exists, but increased freight traffic will dramatically increase their probability. It would be equally disastrous if a rupture of the fault caused a Metrolink train to derail. The statement on page 3.15-20 that "there would be no impacts from a known earthquake fault" is dismissive and downright silly, and is based on a wholly inadequate analysis.

L8-19

Sincerely,

Robert A. Phillips
(951) 788-1694



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Response to Letter 8
Robert A. Phillips
January 5, 2011

- L8-1. This comment is introductory. No response is necessary.
- L8-2. The comment raises specific issues with regard to the SEA, which are addressed in the following responses L8-3 through L13-5. In accordance with § 1501.4 of the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA, as well as 23 CFR 771.119 of FTA's NEPA implementing regulations, an Environmental Assessment (EA) was prepared for the proposed project. Because the project-related impacts were either found to not be significant, or would be mitigated to a level that is not significant, an Environmental Impact Statement (EIS) does not appear appropriate for this project, and a Finding of No Significant Impact (FONSI) is anticipated. However, the final determination will be made after the public review period for the Final SEA has ended.
- L8-3. The expectation that existing roadway facilities would not be able to keep pace with projected demand, is based on the historical population growth in Riverside County along with the forecasted projected growth to 3 million persons in Riverside County by 2025. On page 3.5-20, it is noted that the PVL is expected to carry 3,705 passengers during each of the AM and PM peak periods in 2012 based on ridership projections.

The SJBL/I-215 corridor has been the focus of several studies that have examined transportation needs and solutions for the growing population and that address the associated traffic congestion problems. In the San Jacinto Branchline/I-215 Corridor Study Alternatives Analysis (STV Incorporated, 2004), included as Technical Report A to the SEA, it is described that the major transportation facilities in the corridor, I-215 and State Route 60 (SR-60), are currently experiencing unsatisfactory levels of services, a measure based on factors such as travel times and speed, and evidenced by increasingly poor volume/capacity (V/C) ratios. V/C ratios are a measure of traffic demand on a facility (expressed as volume) compared to its traffic-carrying capacity so that a V/C ratio over 1.0 indicates that a facility is over capacity. As stated in the Alternatives Analysis, between 1997 and 2025, traffic volumes are forecasted to increase up to a 68.8% increase on the combined segments of I-215; a 91.4% increase on SR-60 (East Junction to Gilman Springs Road); and an 85.1% increase on I-215 (East Junction to Perris/Romoland) further increasing congestion on the roadways. Similarly, the V/C ratios are expected to range from 1.02 to 1.3 on I-215/SR-60, from 1.2 to 1.44 on I-215 and are predicted to increase by up to 0.59 on some segments of SR-60. These facilities are forecasted to continue with unsatisfactory levels of service even with programmed roadway improvements over the coming years, including additional lanes and the implementation of HOV lanes. As existing freeway facilities have not been able to accommodate the growing trip volumes without experiencing extensive congestion, a new transportation alternative will be needed to accommodate the future growth. With most major highways in the corridor having limited expansion potential, the PVL offers a public transit option to accommodate current and future mobility needs that would be independent of the ever growing and increasingly congested roadway system. In addition, with the PVL,



travel choices and utilization of existing transportation facilities in the corridor would be improved.

- L8-4. Neither the No Project Alternative nor the Express Bus Alternative would reduce highway congestion in the SJBL/I-215 corridor as automobile and bus modes would still be tied to the congested roadway network. However, all three commuter rail alternatives would allow commuters to decrease their travel time in the corridor and decrease personal vehicles used in the corridor reducing congestion. Therefore, a commuter rail option was selected to provide mobility through the corridor without relying on or adding to the congestion of the area highways.

The ridership projections for this study were developed using the forecasting for the Alternatives Analysis that was performed by the Southern California Association of Governments (SCAG) utilizing the existing and approved SCAG regional travel demand model. The model was run for different scenarios at different time intervals, base year, start-up year, and forecast year. The forecast year for the study was 2025. Please refer to Technical Report A (Chapter 4) for a discussion of ridership for the proposed alternatives. Exhibit 25 in Chapter 4 depicts the boardings by stations for the Express Bus Alternative and three commuter rail alternatives. The selected commuter rail option shows a ridership in 2025 (7,472 boardings) which is slightly more than double the ridership for the Express Bus Alternative (3,705 boardings).

- L8-5. The UCR Station was not evaluated for impacts in the SEA (see Section 1.3) and is not part of the proposed project. It should be noted that consideration of that station was specifically removed in response to public comments after the initial CEQA IS/MND was circulated. However, the General Plan for the City of Riverside does identify a station in the UCR neighborhood. RCTC has committed to new environmental review should the UCR station be proposed in the future.

A detailed noise assessment was conducted for project SCRRA/Metrolink trains at representative sensitive properties along the entire project rail alignment (FTA Manual, page 3-10). This includes several locations near 3511 Watkins Drive. Where impacts were predicted, noise mitigation including sound insulation and noise barriers were proposed at specific locations (see SEA, Section 3.4.4) to reduce potential impacts to levels that are not significant. Locations of proposed noise barriers were based on the project as defined in the SEA. Nonetheless, based on the locations of grade crossings in the UCR area, and the FRA horn blowing requirement (see SEA, Section 3.4.1), horns from PVL trains would not be sounded within the gap in question between civil stations 311+00 and 322+00. As a result, the noise assessment indicated that predicted future noise levels at 3511 Watkins Drive would not result in any noise impact and therefore would not trigger a requirement for any mitigation.

- L8-6. See Master Response #7 – Emergency Planning and Response and Master Response #12 – Grade Separations. Grade separations, where roadways go under or over railroad tracks, require a specific approach distance to maintain appropriate roadway grades and clearance heights for the tracks. For grade separations to be possible within the UCR neighborhood many homes would lose vehicle and driveway access. This comment also expresses concern regarding the fact that freight trains



can block every grade crossing in the UCR neighborhood. The project's trains would be commuter trains of only a few cars. These trains are too short to block more than a single crossing. Thus, even in the unanticipated event that a PVL train stops in the neighborhood, there would be no significant impact because only one of three ingress/egress locations would be affected.

Additionally, with the implementation of the PVL project, the corridor will become a shared corridor with the Metrolink and BNSF under control of SCRRA. Due to the shared nature of the operations, it is not anticipated that trains would be allowed to stop in areas of single track (including the UCR neighborhood) because this would block other trains from passing through. Instead, trains would stop in the areas where there is a bypass track (between MP 7.50 to MP 16.90) and not in the UCR neighborhood.

This comment also states that the "SEA fails to address these inevitable increases" in freight traffic caused by industrial development along the I-215 corridor. This comment is based on an unsupportable assumption. As explained in the SEA, Section 1.7.12 and Master Response #5 - Freight Operations, freight trains are not a part of the PVL project and RCTC has no jurisdiction over freight traffic. Freight operations are dictated by customer demand; in turn, customer demand is a function of economic conditions. The business decision to provide freight service along the alignment is profit driven. As long as the customer demand for freight service is low, there is no reason to assume BNSF would increase operations on the SJBL, regardless of the PVL project (SEA, Section 1.7.12). Therefore, the PVL project will have no significant impact on freight traffic.

- L8-7. See Master Response #3 - Derailment (General) and Master Response #5 - Freight Operations. Freight trains are not a part of the PVL project and RCTC has no jurisdiction over freight traffic. The PVL project includes track improvements that would upgrade the existing physical condition of the rail line, which would result in an enhanced infrastructure, more consistent maintenance, and improved operational safety.
- L8-8. See Master Response #4 – Hazardous Materials Transport, Master Response #5 – Freight Operations, and Master Response #7 – Emergency Planning and Response. The SEA discusses freight operations in Section 1.7.12. This comment indicates disagreement with the findings of the Wilbur Smith Associates 2008 study and suggests it should have included interviews with potential freight customers. As stated in the SEA, Section 1.7.12, freight operations are dictated by customer demand; in turn, customer demand is a function of economic conditions. The relationship between track improvements and increased freight operations is tenuous, at best. The business decision to provide freight service along the alignment is profit driven. As long as the customer demand for freight service is low, there is no reason to assume BNSF would increase operations on the SJBL, regardless of the PVL project (SEA, Section 1.7.12). For the reasons discussed above, the SEA, and the Wilbur Smith Associates 2008 freight study that was used to evaluate the potential environmental impacts are considered valid. - There are no significant impacts and no mitigation is required for this issue. In response to the request that RCTC "establish an upper limit for freight traffic ...," this is not feasible.



The freight is delivered by BNSF as part of interstate commerce. This cannot be constrained on a local level. It should also be noted that freight will not be shifted to the night because there is time available during the day for freight deliveries.

- L8-9. The comment incorrectly indicates that the UCR intramural fields are located the same distance from the alignment as the UCR Child Development Center and the UCR intramural fields should have been included in the list of receptors which are closest to the PVL alignment.

The alignment is located approximately 175 feet from the UCR Child Development Center and, is located approximately 225 feet away from the closest edge of the intramural fields. As a result, the UCR intramural fields are approximately 30% (50 feet) further away from the alignment than the UCR Child Development Center. Pollutant concentrations decrease as distance from the pollutant source to a receptor increases; therefore, if an analysis determines that there would not be an impact at a sensitive receptor closest to the alignment, then it is expected that there would be no impact to receptors located further away from the emissions sources. Therefore, because impacts were not predicted to occur at the UCR Center, impacts would not occur at the intramural fields which are much further away. As shown in Section 3.3.3 of the SEA, the UCR Child Development Center and intramural fields are both located beyond the distance of maximum concentration of diesel particulates as noted in the health risk assessment.

- L8-10. Section 3.3 of the SEA (and the accompanying Air Quality Technical Report) outlines the extensive methods used to calculate the expected emissions due to the implementation of the PVL project. The air quality analysis accounted for all relevant project parameters and conditions. The analysis was done in compliance with the most up-to-date local, state, and federal air quality regulations and guidance from the SCAQMD, CARB, and the USEPA. Tables 3.3-7 to 3.3-12 of the SEA show that emissions projected for criteria pollutants, local intersections (CO hotspots), greenhouse gases, mobile source air toxics, construction activities and locomotive and parking operations all fall below local thresholds of significance and state and federal emissions standards. The discussion of cumulative impacts in Section 3.19 of the SEA accurately assesses cumulative impacts of the proposed PVL project in the context of past, present, and probable future projects in the PVL study area. Specifically, the emissions of the existing freight trains are already accounted for due to the project being included in the RTIP. All potential emissions from projects included in a RTIP meet the transportation conformity requirements outlined in that RTIP. This means that all of the emissions from projects included in the RTIP have been accounted for in the regional emissions burden. The proposed PVL project is included in SCAG's 2008 RTIP (Project ID RIV520109), as shown in Appendix A of the Air Quality Technical Report, which means the project's operational emissions (including the O₃ precursor emissions reactive organic compounds [ROC] and NO₂) meet the transportation conformity requirements imposed by USEPA and SCAQMD. Emissions from the existing freight trains are also measured by the local air quality monitoring stations which do not report a violation of any existing state or federal air quality standard for any pollutant. The SCAG Transportation Conformity Working Group has reviewed the health risk assessment and determined that the PVL is not a POAQC (Project of Air Quality Concern). Therefore, the existing emissions were



included in this assessment and the discussion of air quality within the Indirect and Cumulative Effects section (see SEA, Section 3.19) are fully addressed.

L8-11. The proposed project would add twelve (12) passenger commuter train trips to the proposed PVL alignment. Freight train trips were not included in the health risk assessment because they are not a part of the proposed PVL project. Additional SCRRA/Metrolink trains, above those proposed for the PVL project year 2012, were correctly not included in the health risk assessment, as they too are not a part of the PVL project. Please refer to response L8-10, above.

L8-12. Although the number of freight trains would occasionally fluctuate up or down, based on the best information available from RCTC along with field observations and information from local engineers familiar with the SJBL freight line, the SEA's characterization of freight movement along the SJBL is considered accurate.

L8-13. See Master Response #6 - Noise and response L7-5 above. The comment asserts that noise measurements were not taken on Watkins Drive, between West Blaine Street and Valencia Hill Drive. This assertion is incorrect, because as part of the 2009 noise monitoring program, noise measurements were taken at the UCR Day Care located at 3338 Watkins Drive between West Blaine Street and Valencia Hill Drive (see SEA, Table 3.4-7).

The comment states that heavy trains "shake windows" while the noise makes communication difficult. Existing vibration in this area is based on freight traffic, with each train containing several older locomotives that include suspension systems that are in general stiffer than the newer SCRRA/Metrolink passenger locomotives. Rigid locomotive suspension systems often translate into higher levels of vibration (FTA Manual, Section 7.2.1). This stiffer suspension in turn causes more vibration. A vibration assessment based on FTA vibration criteria (see SEA, Table 3.4-13) was also performed for the entire PVL alignment. The results demonstrated that the proposed PVL project rail operations would not result in any vibration impacts in the area of 3511 Watkins Drive (see SEA, Table 3.4-15). However, as part of the PVL project, the tracks along the entire project alignment will be improved to all welded rail which will reduce wheel vibration and noise from both future PVL trains and existing freight traffic.

The comment states that train whistles (which are from freight trains) are alarmingly loud. However, the sounding of horns at a rail grade crossing is required by the FRA. In addition, while train horns represent the loudest component of train noise, based on Guidance from the FTA, the SCRRA/Metrolink horns that would be used for the proposed PVL project would not be as loud as the existing freight train horns that are presently sounded.

L8-14. See Master Response #6 - Noise. A detailed noise assessment (FTA Manual, page 3-10) was conducted for project SCRRA/Metrolink trains at representative sensitive properties along the entire PVL alignment. Where impacts were predicted, noise mitigation including sound insulation and noise barriers were proposed at specific locations (see SEA, Section 3.4.4) to reduce impacts to levels that are not significant. Cost was not a consideration during the development of noise mitigation measures.



The data utilized to assess the potential noise and vibration impacts from the proposed PVL project were taken for what they were; there was no manipulation of data.

The PVL project is the introduction of commuter rail service. As such, freight movement is not a part of the proposed project and freight operations will continue on the SJBL whether the PVL project is constructed or not.

- L8-15. See response L8-14 above. The comment states that future noise conditions at locations West Campus View 1, 2, 3, 4 and 5 (see Noise and Vibration Technical Report - Appendix A) would be identical and questions why mitigation would be provided for homes along West Campus View 1, 3 and 4 and not provided for West Campus View 2 and 5. The comment incorrectly states here that noise conditions would be the same. The primary reason that noise mitigation is not proposed for locations West Campus View 2 and West Campus View 5 is that these two sections represent areas where there would not be any horn blowing by PVL trains, hence they would not be the same. This assumption is based on the FRA's new horn rule (see Noise and Vibration Technical Report - Section I). Second, horns represent one of the loudest noise elements with respect to train operations. Therefore, at the two locations where horns would not be blown (West Campus View 2 and 5), residents would only be directly exposed to noise from PVL SCRRA/Metrolink train wheel rail interaction and locomotive engine noise. As such, the noise assessment did not predict any noise impacts at these two locations and therefore, no noise mitigation was required.

A vibration assessment based on FTA vibration criteria (see SEA, Table 3.4-13) was performed for the PVL project. This assessment did not result in the prediction of any vibration impacts for the areas adjacent to West Campus View 2 and 5 (see Noise and Vibration Technical Report - Appendix A) and 3511 Watkins Drive (see SEA, Table 3.4-15). As a result, vibration mitigation was not required at these locations.

With regard to the concern over the approximate 1,100 foot gap near West Campus View 2 and 5, and whether or not potential noise impacts were thoroughly analyzed, please see response L8-5 above. The PVL does not include the construction of a rail station for the UCR area near West Campus View 2 and 5.

- L8-16. The comment refers to the 2005 EA where it asserts that the vibration assessment did not include properties along Watkins Drive. However, the SEA provides several locations along Watkins Drive at which potential for vibration impacts were considered (see SEA, Table 3.4-15). No impacts were predicted for any of the studied locations along Watkins Drive. Vibration impacts were predicted to occur along portions of Kentwood Drive east of the alignment, just south of Spruce Street and north of Highland Park. As a result, mitigation measures were recommended to reduce predicted vibration impacts for these properties to levels that are not significant (see SEA, Section 3.4.8). As stated, no vibration impacts were predicted for properties along Watkins Drive, however, some properties along Watkins Drive which are to the west of the PVL alignment and opposite the residences along Kentwood Drive would benefit from the vibration mitigation proposed for residences



along Kentwood Drive (approximately from civil station 263+00 to 275+00). This would represent an added benefit to several properties along Watkins Drive.

Concerning comments about existing freight trains, please see responses L8-12 and L8-13 above.

L8-17. See Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School and Master Response #5 - Freight Operations.

L8-18. See Master Response #3 - Derailment (General), Master Response #4 - Hazardous Materials Transport, and Master Response #5 - Freight Operations. The PVL project is proposing to improve track conditions along the project alignment. These improvements would include tie replacement, welded rail, ballast replenishment where necessary. These improvements will provide for a safer operating environment for both Metrolink and freight trains.

L8-19. See Master Response #4 - Hazardous Materials Transport and Master Response #5 - Freight Operations. As stated in the SEA, Section 1.7.12 freight operations are not part of the PVL project but would benefit from it by improving the rail, ties, and ballast. Freight operations are tied to local economic conditions and would increase or decrease as a result of goods shipment, not the PVL project or track condition.

It should also be noted that the City of Riverside, General Plan does not identify an earthquake fault at the intersection of Watkins Drive and Valencia Hill Drive.



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Letter 9
Pechanga Cultural Resources - Anna Hoover
January 6, 2011



PECHANGA CULTURAL RESOURCES
Temecula Band of Luiseño Mission Indians

Post Office, Box 2183 • Temecula, CA 92593
Telephone (951) 308-9295 • Fax (951) 506-9491

January 6, 2011

VIA E-MAIL and USPS

Edda Esther Rosso, P.E.
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, California 92502-2208

Re: Pechanga Tribe Comments on Supplemental Environmental Assessment and
Section 4(f) Evaluation for the Perris Valley Line Project

Dear Ms. Rosso:

Thank you for inviting us to submit comments on the above named Project. This
comment letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter, "the
Tribe"), a federally recognized Indian tribe and sovereign government. The Tribe is formally
requesting to continue to be notified and involved in the entire environmental review process for
the duration of the above referenced project (the "Project"). The Tribe requests to be directly
notified of all public hearings and scheduled approvals concerning this Project. The Tribe also
requests that these comments be incorporated into the record of approval for this Project as well.

L9-1

The Tribe is submitting these comments concerning the Project's potential impacts to
cultural resources in conjunction with the environmental review of the Project. The Tribe
reserves the right to fully participate in the environmental review process, as well as to provide
further comment on the Project's impacts to cultural resources and potential mitigation for such
impacts. Further, the Tribe reserves the right to participate in the regulatory process and provide
comment on issues pertaining to the regulatory process and Project approval.

L9-2

THE FEDERAL TRANSIT ADMINISTRATION (FTA) MUST INCLUDE
INVOLVEMENT OF AND CONSULTATION WITH THE PECHANGA TRIBE IN ITS
ENVIRONMENTAL REVIEW PROCESS

L9-3

It has been the intent of the Federal Government¹ and the State of California² that Indian
tribes be consulted with regard to issues which impact cultural and spiritual resources, as well as

¹ See Executive Memorandum of April 29, 1994 on Government-to-Government Relations with Native American Tribal
Governments and Executive Order of November 6, 2000 on Consultation and Coordination with Indian Tribal Governments.

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other governmental concerns. The responsibility to consult with Indian tribes stems from the unique government-to-government relationship between the United States and Indian tribes. This arises when tribal interests are affected by the actions of governmental agencies and departments. In this case, it is undisputed that the project lies within the Pechanga Tribe's traditional territory. Therefore, in order to comply with Federal and California law, it is imperative that the Lead Agency and the Project Applicant consult with the Tribe in order to guarantee an adequate basis of knowledge for an appropriate evaluation of the project effects, as well as generating adequate mitigation measures.

L9-3 (cont'd)

Despite an earlier "glitch" in the Project consultation process with regard to the Pechanga Tribe, the Tribe feels that RCTC has generally acknowledged and been responsive to the Tribe's concerns through the consultation process.

THE FTA AND RCTC ARE REQUIRED TO CONDUCT ADEQUATE SECTION 106 CONSULTATION WITH THE PECHANGA TRIBE CONCERNING THIS PROJECT.

The requirements of Section 106 of the NHPA, set forth in 36 CFR Part 800, clearly requires consultation with Indian tribes, regardless of the location of the project (36 CFR 800.2(c)). The regulations go on to state that the agency official shall ensure that consultation provides an Indian tribe "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects." Id. Further, consultation must occur early in the planning process in order to "identify and discuss relevant preservation issues and resolve concerns about the confidentiality of information on historic properties." Id. Delegation of these obligations cannot be made except where there is a clear statutory basis for a Federal agency delegation of its legal responsibility to a non-Federal party (ACHP Guidelines).

L9-4

It is the Tribe's request that the Lead Agencies commit to working with the Tribe to ensure it has meaningful participation in the environmental review process. The Tribe thanks RCTC and the FTA for the ability to comment on the archaeological work plan, excavation report for CA-RIV-805, and the proposed mitigation, and looks forward to continuing consultation throughout the development of the Project.

PECHANGA CULTURAL AFFILIATION TO PROJECT AREA

As we have stated in previous comment letters, the Pechanga Tribe asserts that the Project area is part of Luiseño, and therefore the Tribe's, aboriginal territory as evidenced by the existence of Luiseño place names, tóota yixélvál (rock art, pictographs, petroglyphs), and an extensive Luiseño artifact record in the vicinity of the Project. The Tribe further asserts that this

L9-5

2 See California Public Resource Code §5097.9 et seq.; California Government Code §§65351, 65352, 65352.3 and 65352.4
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culturally sensitive area is affiliated with the Pechanga Band of Luiseño Indians because of the Tribe's cultural ties to this area as well as extensive history with other projects within the area.

D. L. True, C. W. Meighan, and Harvey Crew³ stated that the California archaeologist is blessed "with the fact that the nineteenth-century Indians of the state were direct descendents of many of the Indians recovered archaeologically, living lives not unlike those of their ancestors." Similarly, the Tribe knows that their ancestors lived in this land and that the Luiseño peoples still live in their traditional lands. The Tribe's knowledge of our ancestral boundaries is based on reliable information passed down to us from our elders; published academic works in the areas of anthropology, history and ethno-history; and through recorded ethnographic and linguistic accounts. Many anthropologists and historians who have presented boundaries of the Luiseño traditional territory have included the Project area in their descriptions (Drucker 1937; Heiser and Whipple 1957; Kroeber 1925; Smith and Freers 1994), and such territory descriptions correspond with what was communicated to the Pechanga people by our elders. While we agree that anthropological and linguistic theories as well as historic accounts are important in determining traditional Luiseño territory, the Pechanga Tribe asserts that the most critical sources of information used to define our traditional territories are our songs, creation accounts and oral traditions.

Luiseño history originates with the creation of all things at 'éxva Teméeku, known today as the City of Temecula, and dispersing out to all corners of creation (what is today known as Luiseño territory). It was at Temecula that the Luiseño deity *Wuyóot* lived and taught the people, and here that he became sick, finally expiring at Lake Elsinore. Many of our songs relate the tale of the people taking the dying *Wuyóot* to the many hot springs at Elsinore, where he died (DuBois 1908). He was cremated at 'éxva Teméeku.

Many traditions and stories are passed from generation to generation by songs. Three songs, called *Montivol*, are songs of the places and landmarks that were destinations of the Luiseño ancestors, several of which are located near the Project area. They describe the exact route of the Temecula (Pechanga) people and the landmarks made by each to claim title to places in their migrations (DuBois 1908:110). Another song recounts the travels of eagle, as he searches for a place where there was no death. His travels begin at Temecula, flying north to San Bernardino, to the east, south, and west through Julian, Cuyamaca, and Palomar, and returning to Temecula (DuBois 1908). His path most likely passed over the current Project.

In addition, Pechanga elders state that the Temecula/Pechanga people had usage/gathering rights to an area extending from Rawson Canyon on the east, over to Lake Mathews on the northwest, down Temescal Canyon to Temecula, eastward to Aguanga, and then along the crest of the Cahuilla range back to Rawson Canyon. The Project area is located within the northern and eastern portion of this culturally affiliated territory. The Native American

L9-5 (cont'd)

³ D. L. True, C. W. Meighan, and Harvey Crew. Archaeological Investigations at Molpa, San Diego County, California, *University of California Press* 1974 Vol: 11; 1-176
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Heritage Commission (NAHC) Most Likely Descendent (MLD) files substantiate this habitation and migration record from oral tradition. These examples illustrate a direct correlation between the oral tradition and the physical place; proving the importance of songs and stories as a valid source of information outside of the published anthropological data.

Tóota yixélval (rock art) is also an important element in the determination of Luiseño territorial boundaries. *Tóota yixélval* can consist of petroglyphs (incised) elements, or pictographs (painted) elements. The science of archaeology tells us that places can be described through these elements. Riverside and Northern San Diego Counties are home to red, black and white-pigmented pictograph panels. Archaeologists have adopted the name for these pictograph-versions, as defined by Ken Hedges of the Museum of Man, as the San Luis Rey style. The San Luis Rey style incorporates elements which include chevrons, zig-zags, dot patterns, sunbursts, handprints, net/chain, anthropomorphic (human-like) and zoomorphic (animal-like) designs. Tribal historians and photographs inform us that some design elements are reminiscent of Luiseño ground paintings. A few of these design elements, particularly the flower motifs, the net/chain and zig-zags, were sometimes depicted in Luiseño basket designs and can be observed in remaining baskets and textiles today.

An additional type of *tóota yixélval*, identified by archaeologists also as rock art or petroglyphs, is known as cupules. Throughout Luiseño territory, there are certain types of large boulders, taking the shape of mushrooms or waves, which contain numerous small pecked and ground indentations, or cupules. Many of these cupule boulders have been identified within a few miles of the Project. Additionally, according to historian Constance DuBois:

When the people scattered from Ekvo Temeko, Temecula, they were very powerful. When they got to a place, they would sing a song to make water come there, and would call that place theirs; or they would scoop out a hollow in a rock with their hands to have that for their mark as a claim upon the land. The different parties of people had their own marks. For instance, Albañas's ancestors had theirs, and Lucario's people had theirs, and their own songs of Munival to tell how they traveled from Temecula, of the spots where they stopped and about the different places they claimed (1908:158).

Multiple *tóota yixélval* have been recorded within a one (1)-mile radius of the Project. This culturally sensitive area is connected to a larger network of extensively used habitation, ceremonial and subsistence areas that extends for many miles in every direction. There are several place names and village complexes located close to the Project, including one of the densest Luiseño village complexes known as *Qaxáalku*. The etymology of the Spanish word Cajalco derives from the Luiseño word for "place of quail". The suffix "ku" is considered a more archaic form of the suffix "anga," which means place of (as in Pechanga...place of dripping water). Throughout the region containing *Qaxáalku* there are still quail but almost as important are the *kukínulam*, or burrowing owl, that once lived there in large amounts. The areas separated by low-lying bedrock boulders provide an ideal habitat for the owls. J.P. Harrington's/Pechanga

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informant Celestine Ahuayo relates: "the (that type of) area was known as kukiulum pomki, which means where the ground owl houses." Kukiul/burrowing owl is important for the Luiseño because of his status in our Creation Story. Father Boscana wrote of the burrowing owl's role in the Story: 'It was determined by (the lower animals) that Father Wuyóot should received his death by means of poison. Kukiulmal (the small burrowing owl) perceived this and immediately gave the information to Wuyóot.' Eventually, Wuyóot did succumb to poison but the burrowing owl gained a distinction in our Luiseño songs as a good messenger. The Payómkawichum (Luiseño people) would have revered the area where this "good apostle" lived by living there as well.

Within the Qaxáalku complex, there are at least seven (7) recorded tóota ytxélval. As well as numerous bedrock mortars and slicks, there are four (4) ancestral quartz quarries. Quartz points were important to the Pechanga People because it is taught that Suukat (deer), who gave his life for the starving People in our Creation Story, could only be taken by a point made of quartz.

Additional traditional names within the vicinity of the Project include Húlvulpa which is equivalent to mean "sagebrush there." This place name was known as a gathering area and is located 200-300 yards from the Santa Ana River, approximately one and one-half (1 1/2) miles from the Project area; Pocháppa, which is a term referring to "they crossed there." This hilly area lies approximately one (1) mile to the southwest of the start of the rail line in Riverside. We also know that the prefix "Po" usually connotes being located at that place or village; and Saywaras Pachappa, a flower gathering location. This area is located between Pocháppa and the Project as it passes by the Box Springs Mountain Reserve. The Project also passes next to a village complex located in Sycamore Canyon as well as additional domestic activity areas located off of Alessandro Boulevard, within March Air Reserve Base, Oleander Road and south to Motte Reserve.

Thus, our songs and stories, our indigenous place names, as well as academic works, demonstrate that the Luiseño people who occupied what we know today as the City of Riverside, Perris and the unincorporated areas in between are ancestors of the present-day Luiseño people, and as such, Pechanga is culturally affiliated to this geographic area.

The Tribe welcomes the opportunity to meet with the FTA/RCTC to further explain and provide documentation concerning our specific cultural affiliation to lands within your jurisdiction if so desired.

COMMENTS ON THE SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

As described above, the proposed Project is located in a highly sensitive region of Luiseño territory and the Tribe believes that the possibility for recovering subsurface resources, including the possibility of human remains, during ground-disturbing activities is high. The Tribe has over thirty-five (35) years of experience in working with various types of construction

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L9-5 (cont'd)

L9-6



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projects throughout its territory. The combination of this knowledge and experience, along with the knowledge of the culturally-sensitive areas and oral tradition, is what the Tribe relies on to make fairly accurate predictions regarding the likelihood of subsurface resources in a particular location.

L9-6 (cont'd)

The November 2010 Supplemental Environmental Assessment for this Project has been received and reviewed. The Tribe was concerned that the Federal Transit Administration (FTA) and Riverside County Transportation Commission (RCTC) had failed to include Native American monitoring in the Cultural Resources Mitigation Measures for the Project despite assurances of such during prior consultations. However, after further discussion with Environmental Manager Steven Keel via telephone on January 5, 2011, we were assured that this was just an oversight. He stated that the mitigation measures would be revised to reflect joint tribal and archaeological monitoring in the final document. Previous consultation with RCTC, FTA and their consultants as well as the March 15, 2010 Response to Comments letter guaranteed tribal monitoring in specific areas in conjunction with archaeological monitoring.

L9-7

Additionally, given the sensitivity of the area, inadvertent discoveries are foreseeable impacts and thus need to be appropriately mitigated for within the confines of the Project. While monitoring in the select areas is helpful in this regard, it does not adequately address potentials for inadvertent discoveries in other areas. The identification of surface resources during an archaeological survey should not be the sole determining factor in deciding whether mitigation measures for inadvertent discoveries are required. The cultural significance of the area should play a large part in determining whether specifications concerning unanticipated discoveries should be included. The Tribe believes that the potential for inadvertent discoveries, including human remains, increases because of the known resources within the ROW, the location of the Project within the San Jacinto River floodplain, the high number of previously documented village complexes and domestic activity areas adjacent to the proposed rail line, as well as prior experience with identifying human interments beside constantly flowing large waterways.

L9-8

The Tribe believes that adequate cultural resources assessments and management must always include a component which addresses inadvertent discoveries. Every major State and Federal law dealing with cultural resources includes provisions addressing inadvertent discoveries (See e.g.: CEQA (Cal. Pub. Resources Code §21083.2(i); 14 CCR §1506a.5(f)); Section 106 (36 CFR §800.13); NAGPRA (43 CFR §10.4). Moreover, most state and federal agencies have guidelines or provisions for addressing inadvertent discoveries (See e.g.: FHWA, Section 4(f) Regulations - 771.135(g); CALTRANS, Standard Environmental Reference - 5-10.2 and 5-10.3). Because of the extensive presence of the Tribe's ancestors within the Project area, it is not unreasonable to expect to find vestiges of that presence. Such cultural resources and artifacts are significant to the Tribe as they are reminders of their ancestors. Moreover, the Tribe is expected to protect and assure that all cultural sites of its ancestors are appropriately treated in a respectful manner. Therefore, as noted previously, it is crucial to adequately address the potential for inadvertent discoveries. The Tribe's suggested revisions to the mitigation measures are provided below.

L9-9

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REQUESTED TRIBAL INVOLVEMENT AND MITIGATION

The proposed Project is on land that is within the traditional territory of the Pechanga Band of Luiseño Indians. The Tribe is not opposed to this Project. The Tribe's primary concerns stem from the Project's proposed impacts on Native American cultural resources. The Tribe is concerned about both the protection of unique and irreplaceable cultural resources, such as Luiseño village sites, sacred sites and archaeological items which would be displaced by ground disturbing work on the Project, and on the proper and lawful treatment of cultural items, Native American human remains and sacred items likely to be discovered in the course of the work.

L9-10

The Tribe would like to note that the Mitigation Measures as written in the Project Matrix (pages ES-10 to ES-11) are not consistent with the Mitigation Measures within Section 3.7. To ensure the utmost protection of the cultural resources identified within and adjacent to the APE and avoid any future confusion, the Tribe requests that the Mitigation Measures for the Project be updated as presented below throughout the environmental document(s), to ensure consistency and compliance during Project construction and to include the afore agreed upon tribal monitoring (underlines are additions, strikeouts are deletions).

L9-11

CR-1:

A Secretary of the Interior and Riverside County qualified archaeologist and professional monitors from the Pechanga Tribe will monitor ground disturbing construction activities between MP 3.50 and 4.50, and between MP 5.60 and 6.50. The monitors will have the authority to temporarily halt or divert construction equipment to examine potential resources, assess significance, and offer recommendations for the procedures deemed appropriate to either further investigate or mitigate any adverse impacts. CA-RIV-2384, CA-RIV-4497/H and AE-CB-2 sites will be avoided during project construction. Site avoidance shall be accomplished through establishing ESAs and monitoring all construction in the vicinity of these sites by a Secretary of the Interior and Riverside County qualified archaeologist and professional monitors from the Pechanga Tribe

L9-12

CR-2:

If project construction activities exceed the depth of past agricultural impacts (4 feet), monitoring would be required at the following locations: the Citrus Connection, South Perris Station, and Layover Facility, as well as two of the three potential locations for the Hunter Park Station (Columbia Avenue Station option and the Palmyrita Avenue Station option). Part-time monitoring shall be conducted by a Secretary of the Interior and Riverside County qualified archaeologist and professional monitors from the Pechanga Tribe during the construction phase to determine whether significant buried cultural deposits are present. The monitors shall have the power to temporarily halt or divert construction equipment in order to examine potential resources, assess their significance, and offer recommendations for the procedures deemed appropriate to

L9-13

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either further investigate or mitigate adverse impacts to those cultural resources that have been encountered. } L9-13 (cont'd)

CR-3:
At least 30 days prior to beginning project construction, the Pechanga Tribe shall be contacted for notification of grading, excavation and the monitoring program, and to coordinate with the RCTC/FTA and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The Agreement shall address the treatment of known cultural resources, the designation, responsibilities, and participation of Native American Tribal monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. } L9-14

CR-4:
Prior to beginning project construction, the Project Archaeologist shall file a pre-grading report with the RCTC/FTA (if required) to document the proposed methodology for grading activity observation. Said methodology shall include the requirement for a qualified archaeological monitor to be present and to have the authority to stop and redirect grading activities. In accordance with the agreement required in CR-3, the archaeological monitor's authority to stop and redirect grading will be exercised in consultation with the Pechanga Tribe in order to evaluate the significance of any archaeological/cultural resources discovered on the property. Tribal monitors shall be allowed to monitor as indicated in CR-1 and shall also have the authority to stop and redirect grading activities in consultation with the Project archaeologist. } L9-15

CR-3 -5:
In the unlikely event of the accidental discovery of human remains during project construction, the procedures outlined in §15064.5(e) of the CEQA Guidelines shall be strictly followed. These procedures specify that, upon discovery, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains can occur. The county coroner must be contacted to determine if the remains are Native American. If the remains are determined to be Native American, the coroner shall contact the NAIIC within 24 hours. The NAHC shall identify the Most Likely Descendent (MLD). The MLD shall make recommendations for the appropriate treatment and disposition of the remains and any associated grave goods in accordance with PRC §5097.98. } L9-16

CR-6:
If inadvertent discoveries of subsurface cultural resources are discovered during grading, the Project Archaeologist and the Pechanga Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. } L9-17

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If the Project Archaeologist and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the RCTC/FTA for decision. The RCTC/FTA shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe.

} L9-17 (cont'd)

The Pechanga Tribe looks forward to working together with the FTA and RCTC in protecting the invaluable Luiseño cultural resources found in the Project area. Thank you.

} L9-18

Sincerely,

Anna Hoover
Cultural Analyst

Cc Pechanga Office of the General Counsel
Tomaras & Ogas, LLP

Attachment

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Letter 9 (cont'd) - Attachment
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LSA

LSA Associates, Inc.
Environmental Analysis
Transportation Engineering
Biology and Wetlands
Habitat Restoration
Resource Management
Community and Land Planning
Landscape Architecture
Archaeology and Paleontology

February 16, 1999

Recipients

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Lee Card
David Clark
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Art Harrington
Larry Kinnings
Laura Taylor
Carolyn Lohall
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Cynthia Collier
Steven W. Conkling
Renee Hubertson
Gary Dow
Jack Estess
Richard Erickson
Kerita Fincher
Clint Gallen
Brenda Lee
Judith H. Malcom
Kathleen Nichols
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Lynette Stanchina
Jill Wilson
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Ms. Chris Carlson Buydos, AICP
Assistant Director
March Joint Powers Authority (MIPA)
P.O. Box 7480
Moreno Valley, CA 92552

Subject: Consultations with Native Americans on Sphere of Influence
of the Area previously known as March Air Force Base

Dear Ms. Buydos:

The consultations with Native American groups regarding their interest in the property formerly known as March Air Force Base and now under the authority of the March Joint Powers Authority (MIPA) has been completed. A previous complaint had suggested that not all interested Native American bands had been contacted. A preliminary assessment of the area concluded that the area could have been held by the Gabriellino, Luiseno, Serrano, or Cahuilla tribes, depending upon which ethnographic description was used. In order to include all Native American groups that could conceivably be interested in the property, a list consisting of all groups within the Gabriellino, Luiseno, Serrano, and Cahuilla tribes was requested from the Native American Heritage Commission on September 28, 1998. A list of 36 bands/persons was received from Gail McNulty on October 2, 1998 (see Attachment A).

On October 17, 1998, letters dated October 20, 1998, were sent by certified mail to 34 groups/persons requesting that they contact LSA Associates, Inc. (LSA) within 30 days, if they were interested in the MIPA area (see Attachment B). Since the San Manuel Band of Mission Indians and the Pechanga Band of Luiseno Indians had previously expressed an interest in the area, they were sent different letters requesting a conference (see Attachment B). Of the 36 contact letters, three letters were returned as undeliverable; those addressed to Vera Rocha, Gabriellino; Carmon Mojado, Luiseno; and Maryann Martin, Cahuilla. One letter to Paul (Valenzuela) Varela is being tracked by the postal service as neither the letter nor the return receipt have been received by LSA. All other letters (n=32) were received and receipt of delivery signed (see Attachment C).

Subsequently, seven of the groups contacted LSA expressing interest in conferences to discuss the property: the San Manuel Band of Mission Indians (Serrano), the Pechanga

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LSA Associates, Inc.

Band of Luiseno Indians, the Gabrielino/Tongva Tribal Council of San Gabriel, the Soboba Band of Mission Indians (Luiseno), the Cahulla Band of Mission Indians, Katherine Saubel of the Native American Heritage Commission (Cahuilla), and the Pauma/Yulma Band of Mission Indians (Luiseno). Through numerous telephone conversations, dates and places for meetings with these groups were scheduled (see Attachment D). Samuel Dunlap (representative for the Gabrielino/Tongva Tribal Council of San Gabriel and the Coastal Gabrielino/Dicgueño Band of Mission Indians), who had also requested a conference, agreed to merge his meeting with that of the Gabrielino/Tongva Tribal Council of San Gabriel. One group, the Gabrielino/Tongva Tribal Council of Los Angeles responded after the deadline for a conference. They requested and were sent a copy of the *Draft General Plan*. The *Draft General Plan* and the *Review of Traditional Cultural Properties and Ethnography of the March Joint Powers Authority Planning Area* were given to each of the seven groups. At each meeting, a review of the *Draft General Plan* was presented, the purpose of the conference was discussed, and the Native American group or person was asked to provide any additional data for determining the tribe whose sphere of influence included the MJPA area during prehistoric times.

CONSULTATIONS WITH VARIOUS NATIVE AMERICAN GROUPS

San Manuel Band of Mission Indians (Serrano)

The conference with the San Manuel Band of Mission Indians (Serrano) took place at the Tribal Center on November 24, 1998. Henry Duro, Chairperson, presided. Along with several members of the Tribal Council, the meeting was attended by Adella Schroth and Ivan Strudwick from LSA, Andrew Pignolo and Michael Baksh from Tierra, and Lowell Bean. Three main points were emphasized by the San Manuel Band. First, they requested that archaeological sites in three main concentrations be preserved and that access to those sites by all Native Americans be allowed for such ceremonies as dances and presentation of bird songs. They noted that not all of the archaeological sites had been tested and that the MJPA area was the only federal land in this region with this type of resource. They agreed to provide a map outlining those areas that they believe to be most important.

Secondly, they suggested that a cultural center be part of the plan for use by all Native American groups. Thirdly, they asked Lowell Bean to present his findings on the Serrano sphere of influence. According to Lowell Bean, his research on the San Gabriel Mission records is not complete and will require the expertise of a linguist.

Based on Lowell Bean's preliminary findings, it appears that Serrano populations occupied the settlements of Riverside and Soboba and the area in between during the Mission Period. This does not necessarily equate to occupation during the Late Prehistoric Period or when the archaeological sites within the MJPA area were used.

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Gabrielino/Tongva Tribal Council of San Gabriel

The conference with the Gabrielino/Tongva Tribal Council of San Gabriel took place on December 9, 1999 at the Denny's banquet hall in Pomona, with Anthony Morales, Chairperson presiding. Along with members of the Tribal Council, Steve Albright of MIPA and Adella Schroth of LSA attended. According to Anthony Morales, their main concern at this time is achieving recognition from the federal government as a Native American tribal group.

In regard to the MIPA area, Anthony Morales remembered his grandfather talking about trips to San Jacinto and Mount Palomar for religious ceremonies. This would have necessitated moving through the region but not necessarily through the MIPA area, nor can it be construed to equate to inhabiting the area. The Cocopa-Maricopa Trail (approximately Highway 60 and Interstate 10) was nearby and was used by all tribal groups.

Cahuilla Band of Mission Indians

The conference with the Cahuilla Band of Mission Indians took place on January 5, 1999 at the Tribal Center with Anthony Madrigal, Tribal Secretary, presiding. Along with two member of the band with experience in cultural resource management, Chris Buydos of MIPA, Michelle Oullette of Best Best and Krieger, LLP, and Adella Schroth from LSA were in attendance. According to Anthony Madrigal, the band's greatest concern is with possible impacts to the archaeological sites. They were assured that monitoring would be required around known archaeological sites as appropriate. They emphasized that the area had been Cahuilla prior to Euroamerican settlement.

Katherine Saubel (Native American Heritage Commission, Cahuilla Elder)

The meeting with Katherine Saubel took place on January 12, 1999 at her home. No other members of the group were present. Present at the meeting were Steve Albright and Charles White from the MIPA, Michelle Oullette of Best Best and Krieger, LLP, and Adella Schroth from LSA. Katherine Saubel emphasized that she was a member of the Native American Heritage Commission and an elder of the Cahuilla tribe.

According to her, the MIPA planning area was part of the traditional Cahuilla territory. Their creation myth describes Coyote circling the area, with stopping places identified in the Santa Ana Mountains, the San Bernardino Mountains, and the San Jacinto Mountains. One resting place where Coyote left an imprint of his body occurs just south of the MIPA area near the Ramona Expressway.

She disagrees with Lowell Bean's interpretation of the mission records. She described the southern boundary of the Serrano as from Colton to San Bernardino and the San Bernardino Mountains. She described a white line of granite marking the northern

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Letter 9 (cont'd) - Attachment
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boundary, in the foothills near Oak Glen. She personally had lived where Arlington is now. She noted that Soboba had been Cahuilla. The Luiseno from Palomar Mountain moved to Soboba as ranch hands and married into the Cahuilla group, eventually changing the settlement to Luiseno. She recommended protecting the grinding areas and any area containing cremations, and to curate any artifacts at Malki Museum.

Soboba Band of Mission Indians (Luiseno)

The conference with the Soboba Band of Mission Indians (Luiseno) took place on January 13, 1999 at the Tribal Hall with Robert Saigado, Sr., Chairperson, presiding. Along with members of the council and two tribal members, Chris Buydos of MIPA, Michelle Oullette of Best Best and Krieger, LLP, and Adella Sohroth from LSA attended. The members of the tribal council explained that according to their elders, the Cahuilla had always lived on the eastern side of the hills (San Jacinto Mountains?) and that tribal members roamed the region containing the MIPA area. They relied heavily on the Pechanga Band of Mission Indians (Luiseno) to protect their interests.

Pechanga Band of Mission Indians (Luiseno)

The meeting with the Pechanga Band of Mission Indians (Luiseno) took place on January 14, 1999, with Raymond Basquez, Sr., Chairman of the Cultural Resource Committee, presiding. Ben Masiel, consultant and coordinator of the Pechanga Cultural Resources, presented several sets of information to show that the MIPA area had been held by Luiseno prior to Euroamerican settlement. The first set consisted of references to ethnographic accounts, and included the maps of Kroeber (1925), Gifford (1918), Sparkman (1908), and Bean and Saubel (1972). In addition, J. P. Harrington's notes (1907-1957) were included which also supported the use of the MIPA area by the Luiseno. Further supporting evidence was given through reports by early explorers and expeditions. The creation myth of the Luiseno includes the MIPA area.

Evidence for prehistoric use of the area by the Luiseno consisted of mapping those archaeological sites where the Luiseno rock art style was present. Elements of the rock art style that were emphasized as uniquely Luiseno included pit and groove petroglyphs, mazes, unique painted designs, and ringing rocks. Although pits (cupules) occur in other areas of California, cupula boulders with grooves encircling them appear to be uniquely Luiseno and are related to the night sky. The groove represents the Milky Way "where spirits go" and has ceremonial significance. Pictographs unique to the Luiseno are sometimes called "the San Luis Rey style" and include painted hand prints and circles with a large dot or opening in the center. Mazes (pecked and/or painted) and ringing rocks are unique to the Luiseno area and are found at sites surrounding the MIPA area. These are related to their mythology and are used during ceremonies/religious gatherings. In conclusion, Mr. Masiel gave ethnographic descriptions of territories of the surrounding tribes (Cahuilla, Serrano, and Gabrielino) that excluded the MIPA area.

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LSA Associates, Inc.

Pauma/Yulma Band of Mission Indians (Luiseno)

The conference with the Pauma/Yulma Band of Mission Indians (Luiseno) took place on January 27, 1999, at the Tribal Hall with Ben Megante, Chairperson, presiding. Along with Bennae Calac, Repatriation Committee Chair, and Chris Devers, Repatriation Committee member, Chris Brydies of MIPA and Adella Schrott from LSA were in attendance. The band expressed concern over impacts to the cultural resources by any development. Items of interest included identification of finds during construction, repatriation of human remains if any were discovered, and protection of archaeological sites. They suggested a cultural center/museum be planned for the area and that a joint meeting be held with all interested Native American groups for a consolidation of the issues and to ensure a united effort.

SUMMARY

The evidence presented by the Pechanga Band of Mission Indians (Luiseno) that consists of the rock art styles and the mapping of their locations appears to be the only indisputable evidence for occupation/use of the area by a tribal group. Ethnographic descriptions, which were obtained more than 150 years after the missionaries entered the area, rely on memories of elders who may be repeating what they were told by their parents. Mission records only record the settlement pattern as it was after disruption by the church, diseases, and relocations. The mapping of site locations where the unique Luiseno rock art style occurs offers the most convincing evidence for occupation of the MIPA area.

If you have any further questions, please call me at the number given below.

Sincerely,

LSA ASSOCIATES, INC.

Adella Schrott, Ph.D.
Project Manager

Attachments

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**Response to Letter 9
Pechanga Cultural Resources - Anna Hoover
January 6, 2011**

- L9-1. FTA and RCTC will continue to notify the Tribe of public hearings and scheduled approvals concerning the PVL project. The comments provided in this letter are addressed in the following responses L9-2 through L9-18.
- L9-2. FTA and RCTC agree with this comment.
- L9-3. FTA and RCTC will continue to include the involvement of and consultation with the Pechanga Tribe in the environmental review process for the PVL project.
- L9-4. FTA and RCTC have conducted adequate Section 106 consultation with the Pechanga Tribe and will continue to consult as necessary throughout the development of the PVL project.
- L9-5. This comment relates to the Tribal history of the project area. FTA and RCTC have evaluated the project area and conducted adequate Section 106 consultation with the Pechanga Tribe.
- L9-6. This comment is informational.
- L9-7. Mitigation measure CR-1 was revised to include tribal and archaeological monitoring, as warranted, during construction.
- L9-8. FTA and RCTC understand that inadvertent discoveries are possible. Subsurface deposits were analyzed for their potential to yield cultural resources, in addition to the archaeological surveys that were conducted along the surface. As a result, mitigation measure CR-3 and CR-4 are in place to mitigate potential inadvertent discoveries.

CR-3 states: "In the event cultural resources are encountered during construction, ground-disturbing activity shall cease in the immediate area. A qualified archaeologist shall be retained to examine the materials encountered, assess significance, and recommend a course of action to further investigate and/or mitigate adverse impacts to those resources that have been encountered."

CR-4 states: "In the event that unanticipated discovery of human remains occurs during project construction, the procedures outlined in §15064.5(e) of the CEQA Guidelines shall be strictly followed. These procedures specify that upon discovery, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains can occur. The county coroner must be contacted to determine if the remains are Native American. If the remains are determined to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the Most Likely Descendent (MLD). The MLD shall make recommendations for the appropriate treatment and disposition of the remains and any associated grave goods in accordance with PRC §5097.98."



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- L9-9. See response L9-8.
- L9-10. FTA and RCTC understand the concerns presented in this comment. The SEA has identified three mitigation measures (CR-1, CR-2, and CR-3) to reduce potential impacts to cultural resources to less than significant levels.
- CR-1 states: "A qualified archaeologist and Native American monitor shall monitor ground disturbing construction activities between MP 3.50 and 4.50, and between MP 5.60 and 6.50. The monitors shall also be present at the Citrus Connection, South Perris Station and Layover Facility where excavation is anticipated to be greater than four feet.
- CR-2 states: "The archaeological monitors shall have the authority to temporarily halt or divert construction equipment to examine potential resources, assess significance, and offer recommendations for the procedures deemed appropriate to either further investigate or mitigate any adverse impacts. CA-RIV-2384, CA-RIV-4497/H, and AE-CB-2 sites shall be avoided during project construction through the establishment of ESA and delineated by exclusionary fencing."
- CR-3 states: "In the event cultural resources are encountered during construction, ground-disturbing activity shall cease in the immediate area. A qualified archaeologist shall be retained to examine the materials encountered, assess significance, and recommend a course of action to further investigate and/or mitigate adverse impacts to those resources that have been encountered."
- CR-4 states: "In the event that unanticipated discovery of human remains occurs during project construction, the procedures outlined in §15064.5(e) of the CEQA Guidelines shall be strictly followed. These procedures specify that upon discovery, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains can occur. The county coroner must be contacted to determine if the remains are Native American. If the remains are determined to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the Most Likely Descendent (MLD). The MLD shall make recommendations for the appropriate treatment and disposition of the remains and any associated grave goods in accordance with PRC §5097.98."
- L9-11. The discrepancy identified has been corrected as indicated in comment responses L9-12 to L9-17. These changes only clarify the mitigation measures.
- L9-12. Mitigation Measure CR-1 has been revised. These changes only clarify the mitigation measures.
- L9-13. Mitigation Measure CR-2 has been revised. These changes only clarify the mitigation measures.
- L9-14. A Cultural Resource Treatment and Monitoring Agreement will be developed jointly by RCTC and the Tribes. This Agreement will be executed by both parties and will include the condition that the Tribes be notified a minimum of thirty (30) days before any ground-disturbing construction activities occur.



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- L9-15. As indicated above, a Cultural Resource Treatment and Monitoring Agreement will be developed jointly by RCTC and the Tribes. Additionally, Mitigation Measure CR-1 states that a qualified archaeologist and Native American monitor shall monitor in specified locations and shall have the authority to temporarily halt or divert construction equipment while the significance of any discovery can be determined. Significance of any discovered cultural artifact will be completed by; the project archeologist, Native American representatives, RCTC and FTA. It is anticipated that the process of determining significance will be outlined within the monitoring agreements.
- L9-16. This comment restates mitigation measure CR-4, with regards to the unanticipated discovery of human remains.
- L9-17. Mitigation Measures CR-1 and CR-2 are in place to mitigate for inadvertent discoveries of cultural resources. FTA and RCTC will continue consultations with the Pechanga Tribe throughout the remainder of the project life (final design and construction) and will remain in compliance with applicable regulations. It is anticipated that within the monitoring agreements with the local Tribes a process for determining significance of discoveries will be outlined. These processes will be in compliance with both NEPA and CEQA.
- L9-18. FTA and RCTC will continue consultations with the Pechanga Tribe throughout the remainder of the project life (final design and construction).



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Letter 10
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January 6, 2011

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CORPORATION

January 6, 2011

VIA FIRST CLASS MAIL

VIA HAND DELIVERY

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Riverside County Transportation
Commission
P.O. Box 12008
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Ms. Edda Rosso
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Riverside County Transportation
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4080 Lemon Street, Third Floor
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Re: Comments to Perris Valley Line Supplemental Environmental Assessment

Dear Ms. Rosso:

This office represents Riverside Unified School District ("RUSD"), and is submitting this comment letter on behalf of RUSD regarding the Supplemental Environmental Assessment ("SEA") for the Perris Valley Line ("PVL" or "Project") passenger rail service expansion. We have previously provided comments to the Perris Valley Line Draft EIR ("DEIR", State Clearinghouse No. 2009011046) prepared under the California Environmental Quality Act ("CEQA"), to which we have not yet received a formal response.

L10-1

RUSD continues to have concerns regarding the PVL and its potential adverse impact on the safety of children attending both Hyatt and Highland Elementary Schools, located short distances from the existing rail-line. As discussed in further detail below, RUSD believes that the SEA highlights the numerous potential impacts to the safety and well-being of the students and staff from the addition of passenger rail service, and that a full Environmental Impact Statement ("EIS") should be prepared.

L10-2

RUSD has been actively involved in the environmental review process for the Project, meeting with RCTC staff on numerous occasions, as well as submitting a formal letter commenting on the prior Initial Study/Mitigated Negative Declaration (dated February 25, 2009), identifying concerns for student and staff safety and requesting additional analysis and mitigation. A number of RUSD's concerns were not adequately addressed in the subsequent DEIR which was prepared for the Project, which prompted RUSD's prior comment letter dated May 21, 2010.

L10-3



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RUSD is dismayed that the defective environmental analysis contained in the DEIR is continued in this SEA, in some places verbatim, despite the prior correspondence and comments from RUSD identifying these deficiencies. For that reason, this correspondence reiterates many of our prior comments.

L10-4

The SEA is being prepared pursuant to the National Environmental Policy Act ("NEPA"). NEPA requires public disclosure of the potential environmental effects of federal agency decision making. NEPA is intended to ensure that decisions about federal actions are made only after responsible decision makers have fully disclosed the environmental consequences of the proposed action, and have decided that the public benefits flowing from the actions outweigh their environmental costs.

L10-5

Whether a proposed action significantly affects the quality of the human environment is determined by considering the context and intensity of the action and its effect. This includes unique characteristics of the surrounding area, including the built environment and a project's proximity to sensitive receptors (i.e., schools).

L10-6

The purpose of an Environmental Assessment is to determine whether the proposed action has the potential to cause significant environmental effects, and whether an EIS or Finding of No Significant Impact ("FONSI") should be prepared. A FONSI is only appropriate where the Environmental Assessment determines that the action has no potential for significant effects.

L10-7

Upon review of the SEA, it is apparent that the Project has the potential to cause significant environmental effects, and that the Federal Transportation Administration ("FTA") should require preparation of a full EIS prior to approving the expenditure of federal funds for the Project.

L10-8

RUSD has serious concerns about the methodology and analysis in the SEA, particularly with regard to safety, air quality, and noise impacts at two (2) elementary schools: (1) Hyatt Elementary School, located at 4466 Mount Vernon Avenue, and (2) Highland Elementary School, located at 700 Highlander Drive, both in Riverside, California. These specific concerns are outlined as follows:

L10-9

1 40 CFR § 1508.27.

2 40 CFR § 1508.9(a); Blue Mountains Biodev. Proj. v. Blackwood (9th Cir. 1998) 161 F.3d 1208, 1212.

3 40 CFR §§ 1501.4(e), 1508.13



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- 1) Hazards and Hazardous Materials.
a) High-Pressure Jet Fuel Pipeline.

Section 3.8 of the SEA purports to discuss the potential presence of hazardous materials and exposure to hazardous materials during construction and operation of the Project. Section 3.8 discusses potential for exposure to hazardous materials incidental to construction and operation of the PVL. However, similar to the analysis included in the DEIR, the SEA fails to analyze the potential for exposure to hazardous materials from a rupture or breach of the six-inch, high-pressure jet fuel line that runs parallel to Highland Elementary School (incorrectly referred to as Hyatt Elementary within Section 3-8 of the SEA) within the railroad right-of-way, either as a result of project construction activities or derailment of a commuter train.

L10-10

Instead, the SEA merely states that "the pipelines located within the existing rail ROW were installed in accordance with the safety requirements of the owners. The pipelines are buried at a minimum of three feet below ground surface, or deeper if they are closer than 40 feet to the rail line, and/or are encased." (SEA at 3.8-11).

L10-11

The fact that the pipelines were installed in accordance with safety requirements is irrelevant, and does nothing to acknowledge or analyze the potential hazards to students and staff should the Project result in the rupture or breach of the pipeline, which is located approximately 50 feet from Highland Elementary. A project may have significant environmental impacts where its effects are "highly uncertain or involve unique or unknown risks."

L10-12

Considering the potential gravity of such an event and potential catastrophic impact on children attending school in proximity to the pipeline, RCTC and the FTA are legally obligated to analyze such an impact. As discussed below, Metrolink statistics, as well as recent history of events on this very track, suggest that such an event is not as remote as indicated.

L10-13

RCTC and the FTA should prepare a Railroad Safety Study and Pipeline Risk Analysis to detail the potential risk of student and staff safety from potential rupture or breach of the high-pressure jet fuel pipeline. Included with this letter is an example of a Railroad Safety Study and Pipeline Risk Analysis prepared for another project analyzing the risk to new development from the rupture of a Kinder Morgan jet fuel pipeline located within the Union Pacific railroad right-of-way. That analysis specifically considered potential for property damage, injury or death for the area within 1500 feet from the pipeline. The 1500-foot zone of analysis was selected based

L10-14

4 40 C.F.R. § 1508.27(b)(5).



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on the California Department of Education (CDE) protocol for assessing risk associated with hazardous material pipelines near school sites. The objective of the CDE protocol is to assess the probability of a fatality among school students, faculty, and staff in the event of a pipeline release. The CDE has established a one-in-one million risk as the target risk level. Considering Highland Elementary is located a mere 50 feet from the railroad right-of-way, a detailed Railroad Safety Study and Pipeline Risk Analysis should be prepared for this project and discussed in greater detail within the EIS.

L10-14 (cont'd)

i. Risks to Pipeline from Construction.

As mentioned above, Section 3.8 of the SEA only discusses the risk of hazards from spills due to derailment or construction (i.e., spills of diesel, gasoline or oils in small amounts). With regard to risks to the high-pressure jet fuel pipeline from construction, the SEA merely states:

L10-15

"There would not be an adverse affect on the environment, on-site workers, or the public during operation and maintenance of the PVL trains in these areas; therefore, there will be less than significant impacts through the implementation of the project from these pipelines." (SEA at 3.8-11).

There is no specific discussion of the potential rupture of the high-pressure jet fuel line due to construction, and the SEA fails to discuss the proposed construction activities in enough detail to allow the reviewing public to determine whether such activities will present a risk of rupture or damage to the pipeline. Initially, the SEA fails to adequately document the depth of the line. The SEA mentions that it is buried a minimum of 3 feet below ground surface, or "or deeper if they are closer than 40 feet to the rail line. (SEA at 3.8-11). However, RCTC personnel have also stated that the pipeline is only 2 feet, 4 inches deep in some locations. (RCTC presentation to Board, May 3, 2010).

L10-16

The SEA also fails to describe the precise construction activities that could impact the high-pressure jet fuel pipeline, or whether there will be any risk of rupture or damage to the pipeline and fails to analyze the potential impact of any damage or rupture on the children at Highland Elementary (i.e., risk of combustion, noxious fumes, etc). For example, the type of construction equipment that will be used in the vicinity is not specified, and is only described as "specialized track equipment [that] will be used to place the concrete ties on the ballast and install the rail." (SEA at 1-62). The depths required to dig or drill in order to secure the new track ballasts and railroad ties are not provided in the SEA.

L10-17

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ii. Risks to Pipeline from Derailment

RCTC has previously acknowledged the potential risk of rupture of a gas line in connection with a derailment, or from the cleanup of a derailment. On May 3, 2010, RCTC made a presentation to the RUSD Board of Education that acknowledged the 1989 Duffy Street incident. In 1989, a Southern Pacific train derailed in a residential neighborhood. During cleanup efforts, construction equipment punctured a fuel pipeline. Notably, the pipeline punctured near Duffy Street was 7 to 8 feet below the surface—deeper than the high-pressure jet fuel pipeline currently adjacent to Highland Elementary, and thus presented an even lower risk of rupture. The 1989 Duffy Street pipeline rupture resulted in the death of two people and destruction of eleven homes. However, the PVL Project SEA makes no mention of such risk to the high-pressure jet fuel pipeline *occurring from derailment*, or from construction operations.

L10-18

Because it is unclear whether the track upgrades and rehabilitation will involve going any depth below the surface of the soil immediately over and surrounding the pipeline, RUSD requests in addition to the preparation of the aforementioned Pipeline Risk Analysis, the addition of the following mitigation measures:

- "Construction activities adjacent to Highland Elementary school shall be limited to hours when school is not in session, and shall in no event take place during the hours of 8:00 a.m. to 3:30 p.m., provided, however that construction may take place during these hours on weekends, holidays or during periods when school is not in session. RCTC shall be required to include this provision in each and every construction contract and shall monitor to ensure compliance."
- "RCTC shall be required to coordinate with Kinder Morgan to either: (1) bury the pipeline at a greater depth to avoid accidental rupture; or (2) arrange for temporary shut-off of the pipeline while construction activities are occurring which would present a risk of impact to the pipeline; or (3) construct a concrete encasement or cover for the pipeline to protect it from impact."

L10-19

The second mitigation measure is critical because both Highland and Hyatt Elementary Schools offer after-school programs, some of which do not end until 6:00 p.m. These mitigation measures would assist in limiting the identified risk in a practical and achievable manner.

ENCLOSURE



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b) Risk of Derailment and Fatal Train Accidents.

The DEIR acknowledges that "derailment could cause an accidental spill from the SCRAA/Metrolink train engines or diesel fuel tanks". (SEA at 3.8-11). However, the SEA fails to analyze this risk in terms of the close proximity of the rail right-of-way to the elementary schools, and the resulting risk to students and staff. If a train derailes, particularly if a derailment occurs near Hyatt or Highland Elementary, accidental spills of diesel fuel will be the least of the community's concern. Yet, the SEA does not discuss derailment within its analysis of "Vicinity to Schools", or discuss derailment risks associated with commuter Metrolink trains, which tend to travel at much higher speeds than the freight trains which currently operate within the corridor. (SEA at 3.8-11, 12).

L10-20

The SEA essentially dismisses the risk of derailment by simply stating that "the annual derailment risk is then the product of 0.000000667 (risk per train mile) and 11,440 miles, or 0.00801. This derailment risk equates to about once every 124 years". (SEA at 3.8-11). Ironically, this statistic is for freight, rather than commuter service, although the SEA claims that the PVL Project is unrelated to freight service. (SEA at 1-64).

L10-21

The derailment statistic cited within the SEA also fails to account for the fact that a derailment occurred near Hyatt Elementary School in 1990. Although no students were injured, this derailment caused the evacuation of the school. This derailment also involved a freight train, rather than a commuter train, which travels at higher speeds. Furthermore, "general statements about "possible" effects and "some risk" do not constitute a "hard look" absent a justification regarding why more definitive information could not be provided."

L10-22

According to the SEA, the proposed PVL trains are estimated to travel past Hyatt Elementary at speeds of 30 miles per hour, and to travel past Highland Elementary at speeds as high as 35 miles per hour. (SEA Table 3.4-11). Please note, this is inconsistent with the anticipated speeds cited in the DEIR, which were listed as 60 miles per hour and 30 miles per hour, respectively. (See DEIR at Table 4.10-14). Such a derailment involving a high-speed commuter train could be devastating, particularly near the playground at Hyatt Elementary, which is actually at least 20 feet below the grade of the rail right-of-way as shown on the attached photo (Exhibit "A"). However, the SEA simply states that: "the proposed project does nothing that correlates with an increased potential for derailments." (SEA at 3.6-13). However, this is not merely a question of whether there is an increased potential for derailments to occur, but the risks associated with a fast-moving commuter train derailment in close proximity to the elementary schools.

L10-23

Neighbors of Cuddy Mountain v. United States Forest Service (9th Cir. 1998) 137 F.3d 1372, 1380.



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The SEA acknowledges the risk to Hyatt Elementary School:

"Several comments expressed concerns that the location of the existing track relative to the adjoining Hyatt Elementary School poses a risk to the school from potential derailments; specifically, the potential that a derailment could result in rail cars and cargo (including release of hazardous materials) rolling down the slope and onto school property. The track is about 15-20 feet higher than the school property and about 95-125 feet away. The same concern was also expressed by several residents in the immediate area regarding their properties." (SEA at 1-49).

L10-24

Nonetheless, the SEA dismisses this risk and goes on to state:

"That being said, RCTC is sensitive to public concerns associated with this project and has engaged the services of a railroad design/safety professional to review and assess the situation, and to provide recommendations. These recommendations will be weighed with additional input from the local community before undertaking any supplemental measures." (SEA at 1-49).

L10-25

An assessment by a railroad design/safety professional should have been completed prior to approval of the Project, in order to provide both lead agencies considering the Project (FTA and RCTC) and the concerned public with information regarding potential hazards and steps to be taken to mitigate these risks. Such analysis cannot be deferred.⁶ Once completed, all recommendations should be included within the EIS prepared for the Project. NEPA's implementing regulations require a discussion in an EIS of measures to mitigate environmental consequences "not already included in the proposed action or alternatives."⁷ Specifically, under 40 C.F.R. § 1505.2(c), "A monitoring and enforcement program shall be adopted and summarized [in the record of decision] where applicable for any mitigation." The discussion of mitigation must contain "sufficient detail to ensure that environmental consequences have been fairly evaluated."⁸

L10-26

RUSD also disagrees with the SEAs characterization of this "supplemental measure" as optional, in that additional safety measures would not be required in order to offer

L10-27

⁶ *Center for Biological Diversity v. Bureau of Land Management* (N.D. Cal. 2006) 422 F. Supp. 2d. 1115, 1136 [holding that deferring any mitigation measures until after significant degradation has occurred does not "address the threats to the species in a way that satisfies the jeopardy and adverse modification standards."]

⁷ 40 C.F.R. §§ 1502.14(f); 1502.16(h); 1508.25(b)(3);

⁸ *Robertson v. Methow Valley Citizens Council* (1989) 490 U.S. 332, 350.



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supplemental derailment protection to Hyatt Elementary School: "the provision of this supplemental measure is not required to reduce potential impacts to a level of less than significant." (SEA at 1-49). Section 3.8 of the SEA does not contain adequate analysis of the risks in order to make such a finding of significance. In fact, the actual safety analysis has not even been performed yet. Aside from unsubstantiated, conclusory statements, there is no evidence to support the conclusion that no mitigation is required. Further discussion and specific mitigation measures should be included within an EIS.

L10-27 (cont'd)

Furthermore, RCTC Executive Director Ann Mayer already committed to the installation of a 10-foot landscape wall along the perimeter of Hyatt Elementary School at the RUSD Board meeting held on May 3, 2010.

L10-28

Had the SEA included safety statistics for commuter trains, this number may not have painted as pretty of a picture. According to federal reports, Metrolink has amassed the most fatalities among commuter railroads of similar size in the United States over the last decade. In September 2008, 25 passengers were killed in a head-on collision between a Metrolink train and an oncoming freight train in Chatsworth, California. Over the 15 years leading up to the deadly crash in Chatsworth, accidents involving trains running on Metrolink's system killed 218 other people for a total of 244 fatalities, according to an examination of accident records by The Los Angeles Times. Hundreds more people sustained nonfatal injuries.

L10-29

Cars and pedestrians at the 464 street-level crossings on Metrolink's right of way are a key factor in the fatalities, but the agency also stands out from some counterparts in how much it shares tracks with freight trains.

L10-30

As a local example, on April 22, 2009, a 14-year old student was killed while walking to Arlington High School in Riverside after being struck by a Metrolink train at a crossing, where crossing arms blocked the roadway—but not the sidewalk. A similar layout can be observed near Highland Elementary on Blaine Street. Based upon the potential catastrophic consequences of a pedestrian-train conflict, the SEA should have identified potential safety hazards to students and staff as a potentially significant impact.

L10-31

For the foregoing reasons, RUSD has implored RCTC to collaborate with the City of Riverside to provide funding for additional crossing guards at those rail crossings that are proposed to be improved as part of the PVL Project, at Spruce, Blaine and Mt. Vernon, and to incorporate the funding of crossing guards as a mitigation measure.

L10-32

9 Doug Smith, Los Angeles Times, "Metrolink system's toll: 244", September 27, 2009.

10 Steve Hymon, Los Angeles Times, "Metrolink's grim national record", September 15, 2008.



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There is also particular risk to Hyatt Elementary due to the fact that based on the current RCTC schedule, the train bound for Perris from Los Angeles would pass by Hyatt Elementary School at approximately 7:58 a.m.—just twelve minutes before the school’s start time at 8:10 a.m.—when children are likely to still be on the adjacent playground before classes begin. This risk illustrates the need for an upper limit on the number of trains which may eventually pass by the school, as well as a speed limit for trains as they approach both school sites, which would reduce the risk of derailment and other accidents.

L10-33

As currently proposed, there are no mitigation measures provided to protect against or reduce the risk of derailment and resulting impact to the school sites. Although RCTC originally proposed a landscape wall at Hyatt Elementary School during circulation of the DEIR, these would not be adequate to impede spilled cargo or the movement of falling or sliding rail cars in any way. Although the SEA project description describes the “landscape wall” that will be constructed next to Highland Elementary School as a “free-standing, masonry block wall to be deployed for reasons other than noise mitigation”, the SEA otherwise fails to elaborate on the materials or construction. (SEA at 1-10).

L10-34

RUSD is also concerned that discussion of the landscape walls in the context of protection from derailment is misleading (SEA at 1-49), particularly since the prior DEIR made clear that: “The landscape walls are not intended to provide any function beyond that of a visual screen. They are neither a noise barrier, nor shall they be construed as a safety measure.” (DEIR at 2-43, 2-44, emphasis added).

L10-35

The discussion in the SEA is also contradictory to statements made by Anne Mayer, RCTC Executive Director during meetings with RUSD, that the landscape wall, in addition to acting as a visual screen, is intended to replace the three-foot earthen berm (which was originally proposed in the PVL Initial Study but not included in the DEIR or the SEA) to stop spilled cargo from entering the playground at Hyatt Elementary. If the landscape wall is in fact intended to serve any other purpose beyond a visual screen, this utility must be analyzed in the SEA. Likewise, the removal of the three-foot berm must also be analyzed.

L10-36

Furthermore, the ability of public safety and emergency crews to access the school sites in the event of a derailment or other train stoppage must be analyzed. The discussion in Section 3.8 of the SEA only accounts for “routine” operation and maintenance, but does not account for blockage due to an accident or unexpected train stoppage. (SEA at 3.8-13). Highland Elementary School has only three streets providing ingress and egress to the area, all of which are bisected by the rail right-of-way. Should a train derail or otherwise stop on the tracks in this area, the ability of police, fire and other emergency services to access Highland Elementary from a main

L10-37



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arterial roadway will be severely impacted. Until a traffic management plan is prepared, it is unclear whether Mitigation Measure IHM-3 is adequate to reduce this impact to a less than significant level.

L10-37 (cont'd)

c) No Improvements to Uncontrolled Crossings.

Despite RUSD having informed RCTC of several illegal railroad crossings in the vicinity of Hyatt Elementary, the SEA makes no mention of this condition. Nothing has been done to prevent the use of such crossings, even in the face of prior student deaths. The existence of illegal railroad crossings should be analyzed in the SEA, particularly due to the proposed addition of commuter trains which travel at much higher speeds than the existing freight trains.

L10-38

Overall, Section 3.8 of the SEA highlights the potential for significant impacts related to Hazards and Hazardous Materials, and supports the conclusion that an EIS must be prepared for the Project.

2) Air Quality Impacts.

The analysis within the Air Quality Section of the SEA fails to adequately consider potential health impacts to children at the elementary schools, which are both identified as sensitive receptors (SEA at 3.3-20):

- Highland Elementary School - located approximately 46 meters (150 feet) east of the alignment near the intersection of Watkins Drive and Blaine Street near the campus of UC-Riverside.
Hyatt Elementary School - located in the Box Springs area near Watkins Drive approximately 152 meters (500 feet) west of the alignment.

L10-39

First, the SEA completely fails to analyze the impact of construction emissions on the sensitive receptors closest to the alignment, and instead simply relies on the fact that "the proposed Project would avoid exceeding SCAQMD criteria." (SEA at 3.3-15, 3.3-34. Merely relying on compliance with state and regional air quality requirements is inadequate in this case, and a localized construction emissions analysis should be prepared. Children at elementary schools are particularly vulnerable to construction emissions from vehicular exhaust and dust emissions, because they are often outside due to scheduled outdoor activities, recess, lunch, etc. The rail alignment is located adjacent to the playgrounds of both schools, thereby exposing children to construction emissions. Mitigation measures to reduce these impacts should include timing the "peak" construction period to coincide with times when school is not in session.

L10-40

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Second, the SEA acknowledges that both schools will be impacted by "emissions from trains traveling along the alignment, as well as those idling within temporary layover yards". (SEA at 3.3-21). However, although the air quality modeling indicated that the health risk to sensitive receptors within the Project corridor from train operations would be below the SCAQMD threshold of significance, the analysis is incomplete because the number of existing freight train trips is not accounted for or analyzed anywhere in the SEA.

L10-41

Children at both elementary schools will be exposed to emissions from a combination of existing freight and new PVL locomotive operations. Emissions from existing freight operations constitute the baseline conditions; thus, the SEA may not analyze Project-related emissions alone. However, the Air Quality analysis only accounts for train emissions from 6 diesel engines, operating one 168 mile round trip per day between South Perris and Los Angeles (for a total of twelve daily train trips). (SEA at 3.3-24). It should be noted that the Cumulative Impacts discussion in Section 3.19 is also deficient for this reason.

L10-42

Finally, the SEA does not analyze emissions in terms of Localized Significance Thresholds (LST's), and instead relies solely on regional thresholds. Reliance on regional thresholds for criteria pollutants fails to take into account localized health impacts resulting from construction and operation of the Project. Considering the close proximity to school grounds, utilization of an LST analysis is appropriate. LSTs are applicable to the following criteria pollutants: oxides of nitrogen (NO_x), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter (PM₁₀) and particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. Although the use of LSTs is voluntary, SCAQMD recommends that proposed projects larger than five acres in area undergo air dispersion modeling to determine localized air quality. Based on the SCAQMD's recommendations and the Project's close proximity to school grounds, RUSD urges that a LST analysis be conducted to assess the health risks to those closest to the source of emissions.

L10-43

Overall, Section 4.3 of the SEA highlights the potential for significant impacts related to Air Quality, and supports the conclusion that an EIS must be prepared for the Project.

L10-44



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3) Noise Impacts.

The detailed noise impact assessment for Category 3 land uses at Table 3.4-11 indicates a moderate noise impact to Highland Elementary, and recommends a noise barrier as mitigation. According to Mitigation Measure NV-1 (SEA at 3.4-33), the noise barrier is to be 680 feet long and nine (9) feet in height. } L10-45

The analysis should specify, to the extent possible, the precise location of the wall, as well as other performance standards such as the construction material of the wall and the corresponding decibel reduction, in order to determine whether this mitigation will be adequate. The SEA only states that the noise walls would "closely resemble a masonry block freeway noise barrier." (SEA at 3.6-11) Because the sound walls have not yet been engineered, their effectiveness as noise mitigation cannot be determined. The height and length of the sound wall may not be sufficient to mitigate the noise impacts. } L10-46

Further, the relationship between the sound wall and the landscape wall at Highland Elementary is not clear, and must be clarified as to the location(s) of each wall (i.e., whether any overlap is proposed or whether the placement will be staggered). } L10-47

Project construction noise is not quantified within the DEIR. Although noise emission levels for various pieces of equipment are provided in Table 14 to the Noise and Vibration Technical Report, it is not clear which of these construction equipment/vehicles would be used in the vicinity of the elementary schools. The SEA merely indicates "although the overall length of construction would be approximately 18 months, disturbances at individual receptor locations would not last for more than several months. Any potential construction noise impact on schools and churches would be sporadic and temporary." (SEA at 3.4-31). This type of conclusory statement is unsupported by any evidence included in the SEA or its technical appendices. } L10-48

Overall, Section 3.4 of the SEA highlights the potential for significant impacts related to Noise, and combined with the foregoing analysis, supports the conclusion that an EIS must be prepared for the Project. } L10-49

8/05/00 11:40:00



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We welcome the opportunity to discuss these concerns further. Please contact me if you have any questions. } L10-50

Very truly yours,

Tracy M. Owens, for
GRESHAM SAVAGE
NOLAN & TILDEN,
A Professional Corporation

TMO:

Enclosure

- cc: Dr. Rick L. Miller, RUSD Superintendent
Dr. Kirk Lewis, RUSD Assistant Superintendent, Operations
Mr. Michael H. Fine, Deputy Superintendent
Ms. Janet Dixon, RUSD Director, Planning & Development
Riverside Unified School District Board of Education
Mr. Bob Buster, 1st District Supervisor-County of Riverside
Mr. Ronald O. Loveridge, Mayor-City of Riverside
Mr. Brad Hudson, City Manager- City of Riverside
City of Riverside-City Council

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SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

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**RAILROAD SAFETY STUDY
AND PIPELINE RISK ANALYSIS
700 UNIVERSITY AVENUE
BERKELEY, CALIFORNIA**

November 8, 2005



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January 6, 2011**

A Report Prepared for:

Christopher A. Joseph & Associates
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610 16th Street, Suite 514
Oakland, California 94612

**RAILROAD SAFETY STUDY AND PIPELINE RISK ANALYSIS
700 UNIVERSITY AVENUE
BERKELEY, CALIFORNIA**

Kleinfelder Job No. 60838

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November 8, 2005



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FIGURE

- 1 Site Vicinity

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- 1 Inspection Ratio or Defects per Unit
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- 3 Qualitative Estimates for a Pipeline Incident

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- A Calculation of Fatality Risk Due to Leak Fire or Rupture Fire



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1.0 INTRODUCTION

Christopher A. Joseph & Associates (CAJA), the environmental impact report (EIR) consultants for a development project proposed by the Urban Housing Group for the 700 University Avenue site, has retained Kleinfelder to prepare a railroad safety study and pipeline risk analysis for the property bounded by Addison Street, 4th Street, University Avenue, and railroad tracks in Berkeley, California. Union Pacific operates the railroad tracks that border the west side of the property. Kinder Morgan operates two steel pipelines that primarily transport jet fuel: an 8-inch pipeline is located on the west side of the property and a 10-inch pipeline is located on the east side of the property (Figure 1). The purpose of this risk analysis is to assess the likelihood that the operation of the railroad or the integrity of the pipeline could be compromised in a location, and to a degree, that poses an unacceptable hazard to the future residents of the site as proposed in Kleinfelder's scope of work dated September 9, 2005, Contract Amendment No. 1. Kleinfelder understands that CAJA will use this report as part of the EIR for the proposed development at 700 University Avenue.

1.1 RAILROAD HAZARD ASSESSMENT

A risk analysis methodology was developed for the evaluation of railroad operations. The methodology was used to assign subjective determinations of the probability of a hazardous situation (e.g., low, medium, high) based on:

- Normal or likely railroad operations (e.g., materials transported, use frequency)
- The presence of control measures (e.g., engineering controls)
- Preparation of emergency response plans by owner/operators
- Preparation of emergency response plans by local emergency response agencies (e.g., fire department)
- Local agency records of compliance or violations, and permitting
- Information from industry-wide reporting agencies (e.g., Federal Railroad Administration, and surveys of incident rates)

For example, a determination of low probability of a hazardous situation would be based on non-hazardous materials being transported, low frequency of track use, the presence of control measures within a system, the existence of emergency response plans, the existence of federal, state, or local agencies that inspect and permit these businesses, and a low rate of emergency incidents in the industry as a whole.



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1.2 PIPELINE HAZARD ASSESSMENT

A risk analysis methodology was also developed for the two jet fuel pipelines based on a protocol developed for the California Department of Education for evaluating hazardous material pipelines aligned near school sites (URS 2002). The pipeline risk analysis is based on the following information:

- Pipeline alignment
- Use characteristics (flow rate and operating pressure)
- Engineering design and safety features
- Records of past incidents
- Failures in similar systems (frequency, magnitude, consequences)
- Risk management and emergency response plans of the pipeline owner and local emergency response agencies

Pipeline risk analyses proceed in two stages: first, the probability of a pipeline failure (e.g., leak or rupture) is estimated and compared to an acceptable failure rate; second, the magnitude of the consequences (e.g., pool fire or explosion resulting in fatalities) is estimated and compared to an acceptable level (e.g., one in one million chance of a fatality).



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2.0 RAILROAD HAZARD ASSESSMENT

This section presents the railroad hazard assessment. The likelihood of railroad incidents in general and the likelihood of railroad incidents near the 700 University Avenue proposed development are discussed.

2.1 RAILROAD ALIGNMENT

Union Pacific Railroad operates two railroad tracks on Third Street running parallel to the western boundary of the subject site and that pass within 120 feet of the center of the subject site. For the purposes of this risk analysis, any railroad incident within 1,500 feet of the subject property may result in adverse consequences on the subject property. Adverse consequences are defined as property damage, injury, or death. Given that the western property boundary is approximately 390 feet and there is a potential impact zone 1,500 feet north of the northwest property corner and 1,500 feet south of the southwest property corner, the total segment of track considered in this risk analysis is 3,390 feet (0.64 miles). An impact zone of 1,500 feet was selected based on the California Department of Education protocol for assessing risk associated with hazardous material pipelines near school sites (see Section 3).

In the qualitative evaluation of railroad hazards, as the track segment under consideration increases in length, the likelihood of an incident that results in an adverse consequence somewhere along that segment also increases.

2.2 RAILROAD USE CHARACTERISTICS

According to a Union Pacific operations representative contacted on September 30, 2005, 32 passenger trains and 28 freight trains use these tracks per day. Passenger trains operate at a maximum speed of 50 miles per hour and the freight trains operate at a maximum speed of 40 miles per hour. The Union Pacific Railroad would not release more specific information regarding cargo type.

According to a City of Berkeley Fire Department representative, a wide variety of cargo is transported on the trains, including hazardous materials. The two tracks evaluated in this risk analysis are considered to be heavily used, supporting approximately 60 runs per day.

2.3 RAILROAD ENGINEERING DESIGN AND SAFETY CONTROLS

Railroad engineering design and the presence of safety controls affect the probability of a hazardous event. For example, accidents are more likely on curved than on straight track, more likely at railroad switch locations (switches direct trains from one track to



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another), and less likely at crossings that have automatic gates, audible warning devices, and warning lights.

The Union Pacific line in Berkeley is a Class 3 Railroad, as defined under the Code of Federal Regulations (Title 49, Subtitle B, Chapter 2, Part 213). The Federal Railroad Administration promulgates maximum speeds for railroads based on track strength and curvature; Class 3 track speed limits are 40 miles per hour (mph) for freight trains and 60 mph for passenger trains. Patrick Ker, a representative of Union Pacific, stated that the track gage is a standard track gage, track alignment does not deviate from uniformity more than the amount prescribed for a Class 3 Railroad, and that Union Pacific inspects the tracks periodically for vegetation, drainage, crosstie integrity, defective rails and joints, turnouts and track crossings in accordance with federal and state regulations.

The Union Pacific tracks adjacent to the subject site are straight with an unobstructed view. There are no switches at this location. A railroad crossing is located on Addison Street near the intersection of Addison and Third Streets on the south boundary of the site. The crossing is equipped with active warning devices including an automatic gate and lights.

2.4 RAILROAD REGULATORY AGENCY RECORDS OF PAST INCIDENTS

In the qualitative risk analysis of railroad hazards, the record of past incidents on a given track and the record of violations or deficiencies noted by inspection agencies about a railroad operation provide a basis for estimating the probability of future incidents. In 2004, there were seven train accidents in Alameda County. No deaths and only one injury were reported as a result of these accidents. Six of the seven train accidents were on Union Pacific tracks. Three of the accidents on Union Pacific tracks were attributed to track defects, two of the accidents were attributed to human factors, and one accident was attributed to miscellaneous causes. No information regarding the location of the seven train accidents could be obtained, however, a representative of the Berkeley Fire Department was unaware of any railroad accidents at the location of the subject site (personal communication with David Orth, Deputy Captain, City of Berkeley Fire Department, September 27, 2005)

Nationwide, over the five-year period from 1999 to 2003, there was an average of 15,444 railroad accidents on the approximately 233,000 miles of track in use. This yields an accident frequency of 0.066 accidents per mile. An estimate of the frequency with which a railroad accident could occur on the railroad tracks evaluated in this report is:

$$0.066 \text{ accidents/mile/year} * 0.64 \text{ miles} = 0.04 \text{ accidents per year}$$

Which is approximately four accidents per 100 years or one accident every 25 years. No information regarding accidents on the railroad tracks adjacent to the subject site could be obtained.



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The Federal Railroad Administration (FRA) conducts regular inspections of all aspects of railroad operations. FRA inspectors specialize in five safety disciplines: hazardous materials, motive power and equipment, operating practices, signal and train control, and track integrity. Table 1 presents the results of FRA inspections on Union Pacific operations nationwide and compares the ratio of defects per unit inspected for Union Pacific to all of the railroads in the United States from January 1999 to December 2004.

The national Union Pacific Railroad ratio of defects per unit inspected is slightly above the national ratio for all railroads for track, mobile equipment (locomotives, cars, etc.), and miscellaneous areas inspections, but below the national average for signal, operating practices, and hazardous material defects.

2.5 PROBABILITY OF A RAILROAD ACCIDENT RESULTING IN A HAZARDOUS MATERIALS RELEASE

For the purposes of this risk analysis, a train accident is defined as an event involving on-track rail equipment that results in monetary damage to the equipment or track, any impact between rail equipment and a highway user, or any other event that results in injury or death. Railroad accidents that may result in adverse consequences for individuals residing or working on the subject site are likely to involve the release of hazardous materials.

Given that there is an annual average rate of 15,444 railroad accidents on the approximately 233,000 miles of railroad track in use in the United States (DOT 2005), the estimated number of accidents per mile is 0.066 per year. Based on statistics from the California Public Utilities Commission for the ten-year period from 1990 to 1999, there are an average of 29.8 accidents each year involving trains transporting hazardous materials. Of those accidents, an average of 2.5 resulted in releases of hazardous materials. Therefore, an estimate of the number of railroad accidents resulting in hazardous materials releases per year per mile of track can be calculated as follows:

$$\frac{2.5 \text{ hazardous materials releases}}{29.8 \text{ accidents-year}} \times \frac{0.066 \text{ accidents}}{\text{mile}} = \frac{0.006 \text{ hazardous materials releases}}{\text{mile-year}}$$

Assuming that the estimated length of track at the site is 0.64 miles (as established in Section 2.1), the frequency with which a hazardous materials release may occur can be calculated as follows:

$$\frac{0.006 \text{ hazardous materials releases}}{\text{mile}} \times 0.64 \text{ miles} = \frac{0.004 \text{ hazardous materials releases}}{\text{within 1,500 feet of the subject site}} \text{ per year}$$

The frequency provides an assessment of how often a given event has occurred in the past. We can also convert the known frequency of, for example, hazardous material releases to a statement of probability, which indicates the likelihood that an event may occur in the future. The probability of a hazardous materials release within 1,500 feet of



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the subject site can be calculated from the release frequency (0.004), the time period of interest (1 year), and the following equation:

$$P_0 = 1 - e^{(-F_0 \cdot t)}$$

Where:

P_0 = probability of event
 F_0 = release frequency
 t = time period of interest

Thus:

$$P_0 = 1 - e^{(-0.004 \cdot 1)}$$
$$P_0 = 0.004$$

The probability (P_0) of a hazardous materials release within 1,500 feet of the subject site is 0.004 or approximately one release every 250 years.

The probability of an accident resulting in a hazardous materials release is likely to be less than 0.004 based on track and local conditions, such as:

- There are no switches at this location reducing the likelihood of a derailment
- The tracks are straight and the view is unobstructed
- The signage and warning systems at the Addison Street rail crossing include gates and lights
- Freight train speeds are limited to 40 miles per hour or less
- The train carries audible warning devices

2.6 RAILROAD RISK MANAGEMENT AND EMERGENCY RESPONSE PLANS

In the qualitative risk analysis of this railroad, appropriate risk management and emergency response plans can mitigate the consequences of a railroad incident. The railroad owner and the local emergency response agencies were contacted to assess their risk management and emergency response plans. Union Pacific Railroad has emergency response plans for this stretch of track. According to a Union Pacific Railroad representative the emergency response plan conforms to all regulations. The Berkeley Fire Department has not prepared any specific emergency response plans for this stretch of track. The fire department maintains a general emergency response plan for large-scale disasters that may be caused by earthquakes, floods, pipeline accidents, train accidents and other catastrophic events (personal communication with David Orth, Deputy Captain, City of Berkeley Fire Department, September 27, 2005).



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2.7 SUMMARY AND CONCLUSIONS

The likelihood of a railroad incident that could result in adverse consequences was estimated based on the following six criteria:

- Railroad alignment
- Use characteristics
- Engineering design and safety controls
- Regulatory agency records of past incidents
- Probability of a hazardous materials release
- The availability of appropriate risk management and emergency response plans

Qualitative estimates of the likelihood of a railroad incident and the basis for those estimates are presented in Table 2. The likelihood of a railroad incident resulting in an unacceptable hazard to future residents at the proposed 700 University Avenue development is low based on the qualitative evaluation presented in this section and summarized in Table 2, and based on the estimated probability of a railroad accident resulting in the release of hazardous materials at this location.



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3.0 PIPELINE HAZARD ASSESSMENT

This section presents the pipeline hazard assessment. The probability of a pipeline leak or rupture and the consequences of such an event are discussed both in general and in relation to the 700 University Avenue proposed development.

3.1 PIPELINE BACKGROUND INFORMATION

The following subsections present background information on pipeline use, past incidences, and risk management.

3.1.1 Pipeline Alignment, Design, Use Characteristics, And Safety Features

Kinder Morgan operates an 8-inch and a 10-inch steel transmission pipelines that primarily transport jet fuel. The 8-inch pipeline is located on the west side of the property. The 10-inch pipeline is located on the east side of the property. The 8-inch and 10-inch pipelines are buried at a depth of three to four feet. Both of the pipelines are operated at a pressure of 800 pounds per square inch. The valve stations (shut-off valves) for the pipelines are located to the north and the south approximately 1 mile from the site (personal communication, Mr. David Orth, Deputy Fire Chief, City of Berkeley Fire Department, Berkeley California, September 29, 2005).

3.1.2 Records Of Past Pipeline Incidents

The Berkeley Fire Department was not aware of any past recorded leaks, accidents, or other incidents that resulted in injuries or property damage within one mile of the proposed site (telephone conversation with Mr. David Orth, City of Berkeley Fire Department, Deputy Fire Chief, Berkeley California, September 29, 2005).

3.1.3 Failures In Similar Pipeline Systems (Frequency, Magnitude, Consequences)

U.S. Department of Transportation (DOT) Office of Pipeline Safety (OPS) figures show that in 2000 there were 288,586 miles of liquid transmission pipeline in operation. In that same year, 80 incidents were reported that had a fatality or injury, or resulted in property damage. The incident rate per mile, therefore, is one incident per 3,607 miles. The causes of the 80 reported incidents were corrosion (39%), unspecified cause (28%), damage by outside force (25%), and construction/material defect (9%). Over the fifteen-year period from 1986 to 2000, there was an average of 286,154 miles of liquid transmission pipeline in operation. During that same time period, there were 1,202 incidents reported that had a fatality or injury, or resulted in property damage for an average incident rate of 80.1 per year and one incident per 3,571 miles of transmission pipeline (DOT 2005).



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3.1.4 Pipeline Risk Management And Emergency Response Plans

According to their website, Kinder Morgan is committed to public safety, protection of the environment, and the operation of its facilities in compliance with applicable rules and regulations. In addition, Kinder Morgan designs, installs, tests, operates, and maintains their pipelines to meet or exceed regulatory standards and maintains a comprehensive risk management program designed to reduce the probability of a pipeline accident and minimize the consequences of such an accident should one occur. Kinder Morgan's risk management and emergency response plans are mandated by state and federal law and enforced by the California Public Utilities Commission (CPUC) and the federal Department of Transportation. Kinder Morgan asserts that their transmission facilities, which include the 8-inch and 10-inch steel pipelines, meet or exceed the state and federal requirements. Furthermore, the company maintains an emergency response plan for the two transmission lines aligned on the east and west sides of the subject site.

The local fire department also maintains a general emergency response plan for large-scale disasters that may be caused by earthquakes, floods, pipeline accidents, train accidents and other catastrophic events (personal communication with David Orth, Deputy Captain, City of Berkeley Fire Department, September 27, 2005).

3.2 PIPELINE RISK ANALYSIS

The DOT-OPS classifies pipeline incident causes into four categories:

- Damage by outside force (third-party dig-ins);
- Corrosion (external and internal)
- Ground movement (e.g., earthquakes)
- Construction or material defects

The likelihood of each type of incident are ranked low, medium, or high with respect to the site.

3.2.1 Pipeline Damage By Outside Force (Third-Party Dig-Ins)

Damage by outside force, or third-party dig-ins, are defined as pipeline damage caused by an entity (e.g., construction contractor) other than the pipeline owner. Incidents in this category generally occur during construction or maintenance projects that include subsurface excavation and result from inaccurate or incomplete knowledge about the subsurface alignment of the pipeline.

The likelihood of third-party dig-ins is largely based on the level of development in a given area along the pipeline alignment. Third-party dig-ins are most likely in areas where new construction is expected or underway or in areas being re-developed or



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where subsurface utility work is being conducted. Dig-ins are least likely in undeveloped areas that are unlikely to be developed soon. This estimate is consistent with pipeline safety statistics reported by the federal DOT-Office of Pipeline Safety (OPS) wherein damage by outside force ranged from 25% to 49% of the annual pipeline incident causes over the period 1994 to 2000.

At the time of this report, the likelihood of third-party dig-ins appears to be low in the vicinity of the subject site. A representative with the City of Berkeley Fire Department was contacted regarding development plans for the vicinity of the subject site (personal communication, David Orth, Deputy Fire Chief, City of Berkeley Fire Department, October 6, 2005). The City representative indicated that the areas northeast and southeast of the proposed site are likely to be developed in the future. Based on this information, Kleinfelder expects that the likelihood of a third-party dig-in the area near the site is medium.

3.2.2 Pipeline Corrosion

Internal and external corrosion is also a leading cause of pipeline accidents. The primary causes of internal corrosion are the naturally high water content of liquid when it is pumped from a well and the presence of naturally-occurring hydrogen sulfide often found in liquid sources. External corrosion causes also include soil moisture and microbes. DOT-OPS reports a range of annual pipeline incident rates due to corrosion from 19% to 41% over the time period between 1994 and 2000.

Pipeline incidents due to corrosion and deterioration can be avoided by operating the pipeline within its design capacity and by implementing a regular program of leak surveys, cathodic protection monitoring, and pipeline patrolling for evidence of conditions that might affect safe operation. Maintenance of Kinder Morgan transmission lines, including the 8-inch and 10-inch transmissions adjacent to the subject site, is defined and mandated by state and federal laws. Kinder Morgan district personnel perform annual leak surveys, monitor cathodic protection, and regularly patrol the pipeline to monitor external conditions. Based on this information, Kleinfelder expects the likelihood of pipeline incidents due to corrosion and deterioration to be low.

3.2.3 Ground Movement

Earthquakes may trigger ground movement that manifests as ground shaking, liquefaction, or landslides. A Geologic and Seismic Hazards Report posted on the City of Berkeley's Planning and Development web site described an analysis of potential earthquake activity at the subject site. The subject site is located in an area expected to be tectonically and seismically active. Four faults were identified and discussed:

- The Hayward Fault System, which runs directly beneath the city of Berkeley; no seismic activity information was provided for this fault system; however this fault presents a serious seismic hazard



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- The San Andreas Fault System located about 15 miles west of the subject site; two earthquakes of magnitude 8.3 have occurred in the San Andreas Fault System, including the 1857 Fort Tejon earthquake and the San Francisco earthquake of 1906
- The Calaveras Fault located approximately 18 miles southeast of the subject site; seismic activity of up to magnitude 6.2 has been measured on the Calaveras fault near Morgan Hill
- The Rogers Creek Fault lies approximately 20 miles northwest of the subject site; this fault system is considered seismically active

The Working Group on California Earthquake Probabilities estimated that there is a 70 percent probability that one or more large earthquakes (M_L 6.7 or greater) will occur in the San Andreas, Hayward, or Calaveras faults during the period of 1990-2020. The proposed site is within an Alquist-Priolo special studies zone for the Hayward Fault. In the vicinity of the proposed site, the likelihood of ground rupture triggered by seismic activity on a known fault is high. The subject site is identified as being in a California Geological Survey (CGS) Seismic Hazard Zone of Potential Liquefaction, the likelihood of liquefaction on the subject site is medium. The subject site is not identified as being in a CGS Seismic Hazard Zone of Potential Landslides; therefore, the likelihood of landslides on the subject site is low. However, steel pipelines, like the 8-inch and 10-inch lines, are resilient and generally accommodate ground movement well.

Based on the available information reviewed, Kleinfelder expects the likelihood of ground movement to be high, the likelihood of liquefaction to be medium, and landslides in the vicinity of the subject site to be low. Given the resilience of steel pipelines in general and the likelihood of geological hazards, pipeline damage as a result of these geological phenomena is expected to be low to medium.

3.2.4 Pipeline Construction Or Material Defects

Nationwide, the DOT-OPS reports that the range of reportable incidents attributed to construction or material defects was 9% to 20% over the time period between 1994 and 2000.

Design and construction of pipelines are regulated by state (CPUC General Order 112-E) and federal (CFR 49 Part 192) law. Kinder Morgan pipelines meet or exceed these regulatory standards (Kinder Morgan 2005). As part of their maintenance and operation plan, Kinder Morgan continuously monitors operating pressure, conducts annual leak surveys, monitors cathodic protection, and patrols pipelines for evidence of damage, leaks, or unsafe conditions. All of these measures serve to reduce the likelihood of defects or failures due to construction or pipeline materials. Based on the available information, Kleinfelder expects the likelihood of a reportable incident attributed to construction or material defects to be low.



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3.3 PIPELINE RISK MANAGEMENT

Kinder Morgan maintains a risk management plan to reduce or eliminate the likelihood of a pipeline incident caused by outside force (third-party dig-ins), corrosion and deterioration, ground movement, or construction and material defects. The specific risk management measures Kinder Morgan employs are discussed below. In addition to these specific measures, Kinder Morgan maintains a comprehensive emergency response plan for directing the response to, and reducing the effects of, a reportable pipeline incident.

3.3.1 Pipeline Damage By Outside Force (Third-Party Dig-Ins)

Kinder Morgan maintains a policy that allows third parties to excavate near pipeline easements if the third-party has notified the Underground Service Alert (USA) system. Kinder Morgan will locate and mark the underground lines.

3.3.2 Pipeline Corrosion And Deterioration

Kinder Morgan meets or exceeds the state- and federally-mandated design, construction, operation, and maintenance of their liquid pipelines (Kinder Morgan 2005). Kinder Morgan personnel perform periodic internal inspections using "smart pigs" to confirm wall thickness, monitor cathodic protection of steel pipelines, and regularly conduct visual inspections by ground and air to monitor external conditions.

3.3.3 Ground Movement

Kinder Morgan maintains emergency shut-off valve stations located approximately 1 mile on either side of the subject site. As noted above in, steel liquid pipelines, like the 8-inch line and 10-inch line, are resilient and generally accommodate ground movement well.

3.3.4 Pipeline Construction Or Material Defects

Kinder Morgan meets or exceeds the state- and federally-mandated design, construction, operation, and maintenance of their transmission pipelines (Kinder Morgan 2005). Kinder Morgan district personnel perform annual leak surveys, monitor cathodic protection of steel pipelines, and regularly patrol the pipeline to monitor external conditions.

3.4 RISK OF PIPELINE RELEASES

The probability of two pipeline release scenarios was evaluated: a one-inch hole in the pipeline and a full-bore rupture of the pipeline created by a third-party dig-in, by ground movement, or other cause. The probability that these two release scenarios could result in a leak fire or a rupture fire was evaluated using a protocol developed for the California Department of Education (CDE) to assess hazardous material pipelines



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located within 1,500 feet of a proposed school site (URS 2002). The objective of the CDE protocol is to assess the probability of a fatality among school students, faculty, or staff in the event of a pipeline release that results in a fire. CDE has established a one in one million fatality risk as the target risk level. Therefore, Kleinfelder used the CDE protocol to assess the probability of a fatality resulting from a fire following a pipeline leak or rupture within 1,500 feet of the subject site. Other potential consequence scenarios, pressure-jet fires and explosions, are not likely with jet fuel given its low explosivity; therefore these scenarios were not evaluated for this report.

The estimate for the pipeline release frequency resulting in a fatality is 7.6×10^{-6} and was derived from the federal Department of Transportation Office of Pipeline Safety statistics for incidents between 1990 and 2003 (available on-line at www.ops.dot.gov/stats). The estimate of annual pipeline fatality risk was then normalized based on the miles of hazardous liquid pipeline in use over that time period. Thus,

$$F = N/t$$

Where:

F = fatality frequency (per year)

N = number of fatalities

t = time (years) over which fatalities have been recorded

For N = 6 (number of pipeline release fatalities in the U.S. over the time period 1990 to 2003), and t = 14 years, F = 0.43. Therefore, the probability of a fatality per pipeline mile is the ratio of the fatality frequency, F, to the average number of pipeline miles in operation over the same time period:

$$(0.43 \text{ F/year}) / (156,561 \text{ miles/year}) = \underline{2.7 \times 10^{-6} \text{ fatalities per mile}}$$

This estimate of fatalities per mile was entered into the CDE model (Appendix A), however, it should be noted that no fatalities occurred as a result of a jet fuel pipeline release over the time period for which data are available from the federal Department of Transportation.

Next, the fatality frequency over the segment of pipeline within 1,500 feet of the subject site was estimated using 3,390 feet of pipeline times two pipelines, which is 1.28 miles of pipeline:

$$2.7 \times 10^{-6} \text{ fatalities/mile} * 1.28 \text{ miles} = \underline{3.5 \times 10^{-6} \text{ fatalities}}$$

With this estimate of the fatality frequency, and estimates for probabilities for leaks, ruptures, ignition, and fire upon ignition provided by the Federal Emergency Management Agency (FEMA; cited in URS 2002), an estimate of the fatality risk for an individual was estimated (Appendix A). The fatality risk for an individual was less than



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one in one million: 6.97×10^{-7} , which indicates that the risk of a leak fire or rupture fire at the subject site is within acceptable ranges (URS 2002).

3.5 SUMMARY AND CONCLUSIONS

The likelihood of a pipeline failure that would result in adverse consequences was estimated based on the following six criteria:

- Pipeline alignment, design, use characteristics and safety features
- Regulatory agency records of past incidents
- Failures in similar pipeline systems
- The availability of appropriate risk management and emergency response plans
- Likelihood of failure due to third-party dig-ins, corrosion, ground movement, and construction or material defects
- Probability of a fatality resulting from a leak or rupture

Qualitative estimates of the likelihood of a pipeline incident and the basis for those estimates are presented in Table 3. The likelihood of a pipeline incident was low to medium. In addition, the probability of pipeline release and associated fatality was also evaluated (URS 2002). The probability of a fatality resulting from a pipeline release is below one in one million, which is the generally accepted target level for acceptable risk.



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4.0 CONCLUSIONS AND LIMITATIONS

Based on the evaluation criteria presented in Tables 2 and 3, Kleinfelder's evaluation of the likelihood of a potential railroad or pipeline incident occurring in the vicinity of the proposed development site at 700 University Avenue that might pose an unacceptable hazard to future residents is low. In addition, the probability of a fatality resulting from a pipeline release is less than one in a million.

The railroad and pipeline risk analyses described herein were performed according to the proposal submitted to the Christopher A. Joseph & Associates in our letter dated September 9, 2005. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help to better understand and manage site risks. Since such detailed services involve greater expense, we ask our clients to participate in identifying the level of service that will provide them with an acceptable level of risk. Please contact the signatories of this report if you would like to discuss this issue of risk further.

Land use, site conditions (both on-site and off-site) or other factors may change over time. Since site activities, conditions, and regulations are beyond our control and could change at any time after the completion of this report, our observations, findings and opinions can be considered valid only as of the date of the site visit.

Any party other than Christopher A. Joseph & Associates who would like to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that a revised report be issued. Non-compliance with any of these requirements will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party.

No warranty, either express, or implied is made.



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5.0 REFERENCES

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TABLES



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**TABLE 1
 INSPECTION RATIO OF DEFECTS PER UNIT INSPECTED
 JANUARY 1999 TO DECEMBER 2004**

Types of Inspections	Union Pacific Railroad Ratio of Defects per Unit Inspected	All Railroads Ratio of Defects per Unit Inspected	Ratio of Union Pacific Ratio per All Railroads Ratio*
Track	0.2045	0.1840	1.111
Signal	0.0981	0.1611	0.609
Operating Practices	0.2362	0.3304	0.715
Mobile Equipment (locomotives, cars, etc.)	0.0808	0.0669	1.208
Hazardous Material	0.0282	0.0538	0.524
Miscellaneous Areas	1.0	0.9091	1.100

* Bold indicates Ratio above 1



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TABLE 2
 QUALITATIVE ESTIMATES FOR A RAILROAD INCIDENT

Evaluation Criteria	Likelihood of a Railroad Incident	Comments
Railroad alignment	Low to Medium	As the segment of track within 1,500 feet of the subject site increases, the likelihood of a railroad incident that affects the subject site increases. Because the tracks are immediately adjacent to the subject site, the maximum segment of track (0.64 miles) comprises the impact zone. To reduce the potential impact associated with the railroad alignment, the site would need to be reduced in size or moved farther away from the tracks.
Use characteristics	Medium	The tracks evaluated in this risk analysis are heavily used with approximately 60 runs per day divided between passenger and freight. To reduce the potential impact associated with railroad use characteristics, the number of runs per day on these tracks would need to be reduced.
Design and safety controls	Low	Union Pacific inspects the tracks periodically for vegetation, drainage, crosstie integrity, defective rails and joints, turnouts and track crossings in accordance with federal and state regulations. The tracks are straight with an unobstructed view. There are no switches at this location. A railroad crossing is located on Addison Street near the intersection of Addison and Third Street on the south boundary of the site. The crossing is equipped with audible warning devices, an automatic gate, and warning lights.
Agency records of past incidents	Low	No railroad incidents are known to have occurred at the location of the subject site. Nationwide, the likelihood of a railroad incident on a 0.64-mile segment of track is low. The Union Pacific Railroad is average to below average in regulatory agency reported defects.
Probability of hazardous materials release	Low	Nationwide, the probability of a railroad accident or a railroad accident resulting in a hazardous materials release is low.
Risk management and emergency response plans	Low	The railroad and the local fire department maintain risk management and emergency response plans for railroad emergencies. The presence of risk management or emergency response plans should decrease the likelihood of a railroad incident and the potential magnitude of those consequences.



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TABLE 3
 QUALITATIVE ESTIMATES FOR A PIPELINE INCIDENT

Evaluation Criteria	Likelihood of a Pipeline Incident	Comments
Pipeline alignment, design, use characteristics, and safety features	Low to Medium	The pipelines appear to be in a straight alignment along the perimeter of the subject site and emergency shut-off valves are located approximately 1 mile from the site. Operating pressure is high, which increases the relative risk of a failure.
Regulatory agency records of past incidents	Low	No incidents involving the two pipelines evaluated in this report are on record with the local fire department. Pipeline failure rates in general, and jet fuel pipeline failure rates in particular, are relatively low.
Failures in similar pipeline systems	Low	Failure rates in similar systems are quantitatively low. Fatalities or injuries occur with a frequency of only one incident per 3,571 miles per year.
Risk management and emergency response plans	Low	The pipeline owner and the local fire department maintain risk management and emergency response plans for pipeline emergencies and other catastrophes. The presence of risk management or emergency response plans should decrease the likelihood of a pipeline incident and the potential magnitude of those consequences.
Third-party dig-ins, corrosion, ground movement, construction or material defects	Low to Medium	Third-party dig-ins may occur more frequently in a highly urbanized setting such as the subject site. Corrosion problems and construction and material defects should be limited by the pipeline owners regular inspection and maintenance program. The subject site is located in a zone of relatively high seismic activity, however, steel pipelines are known to be resilient and accommodate ground movement well.



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FIGURE

60838/PWHAZ (OAK5R102)/es

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APPENDIX A
 CALCULATION OF FATALITY RISK DUE TO LEAK FIRE OR RUPTURE FIRE

PARAMETER	Variable	Values	Units	NOTES
Baseline frequency per pipeline mile	FT	2.70E-06	Fatalities/year-mile	OPS Statistics
Baseline segment miles within 1500-ft buffer	SEG	1.28	Miles	3,390 feet x 2 pipelines
Base release frequency	F0	3.46E-06	Releases/year	$F0=FT \times SEG$
Base release probability	P0	3.46E-06	Release Probability	$P0=1-e^{-(F0 \times t)}$
Probability adjustment factor	PAF	1	NA	Default Value
Adjusted base probability	Pb	3.46E-06	NA	$Pb=P0 \times PAF$
Probability of leak	PC1	0.8	NA	FEMA Estimate
Probability of rupture	PC2	0.2	NA	FEMA Estimate
Probability of ignition	PC3	0.3	NA	FEMA Estimate
Probability of fire upon ignition	PC4	0.7	NA	FEMA Estimate
Probability of explosion upon ignition	PC5	0	NA	Explosion hazard for jet fuel is negligible.
Probability of leak-fire	PC6	5.81E-07	NA	$=Pb \times PC1 \times PC3 \times PC4$
Probability of rupture-fire	PC7	1.45E-07	NA	$=Pb \times PC2 \times PC3 \times PC4$
Probability of leak-explosion	PC8	0	NA	Explosion hazard for jet fuel is negligible.
Probability of rupture-explosion	PC9	0	NA	Explosion hazard for jet fuel is negligible.
Leak-fire impact at site center-point - Does LFL extend beyond centerpoint? Yes or No?	NA	YES	NA	Based on analysis of leak fire hazard using the ARCHIE model (Version 1.0)
If LFL extends beyond centerpoint, enter probability of flash fire fatality if exposed. If "No", enter 0.	PC10	1	NA	Default value from guidance (URS 2002).
Rupture-fire impact at site centerpoint - does the LFL extend beyond the centerpoint? Yes or No?	NA	YES	NA	Based on analysis of rupture fire hazard using the ARCHIE model (Version 1.0)
If LFL extends beyond centerpoint, enter probability of flash fire fatality if exposed. If "No", enter 0.	PC11	1	NA	Default value from guidance (URS 2002).
Probability of occupancy	PC16	0.96	NA	$=(24 \text{ hrs/day} \times 350 \text{ days/year})/8760 \text{ hrs/year}$



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PARAMETER	Variable	Values	Units	NOTES
Annual fire fatality individual risk	FFIR	6.97E-07	NA	=PC16*((PC10*PC6)+(PC11*PC7)+(PC12*PC6)+(PC13*PC7))
Annual explosion fatality individual risk	EFIR	0	NA	Explosion hazard for jet fuel is negligible.
Total Individual Risk	TIR	6.97E-07	NA	=FFIR+EFIR
Individual Risk Criterion	IRC	1.00E-06	NA	Default Value
Divide the TIR by the IRC	TIR/IRC	6.97E-01	NA	=TIR/IRC



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L10-1. RUSD will receive responses to its comments on the Draft EIR through the CEQA process.

L10-2. Please see Master Response # 2 - Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response # 3 - Derailment (General), Master Response #7 - Emergency Planning and Response, Master Response #9 - Highland and Hyatt Elementary Schools (Increased Train Traffic), and Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment). The upgrades proposed by the PVL project would provide for safe operation of both the commuter rail as well as the existing freight trains.

The Supplemental Environmental Assessment for the PVL project was prepared in accordance with § 1501.4 of the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA, as well as 23 CFR 771.119 of FTA's NEPA implementing regulations. Because the project-related impacts were either found to not be significant, or would be mitigated to a level that is not significant, an Environmental Impact Statement (EIS) does not appear to be appropriate for this project, and a Finding of No Significant Impact (FONSI) is anticipated. However, the final determination will be made after the public review period for the Final SEA has ended.

L10-3. RUSD will receive responses to its comments on the Draft EIR through the CEQA process.

L10-4. This comment is informational. No response is necessary.

L10-5. This comment is informational. No response is necessary.

L10-6. This comment is informational. No response is necessary.

L10-7. The comment indicates "[a] FONSI is only appropriate where the Environmental Assessment determines that the action has no potential for significant effects." 40 CFR 1501.4(e) and 1508.13 are referenced as support for this statement. Per the CEQ and FTA NEPA implementing regulations (23 CFR 771), an Environmental Assessment (EA) is prepared to evaluate whether a proposed project has significant environmental impacts and an Environmental Impact Statement (EIS) would be required, or whether the proposed project has no significant environmental impacts and a Finding of No Significant Impact (FONSI) will be prepared. Therefore, a FONSI is actually only appropriate if there would be no significant environmental impacts (as opposed to no potential for these impacts), based on the EA.

L10-8. The SEA identified and analyzed the potential impacts of the proposed project and did not identify any significant environmental impacts, as the project design incorporates a number of features to reduce or eliminate many potentially significant impacts. Examples include: use of continuously welded rail and wayside applicators to reduce noise and vibration; upgrading grade crossings by providing the necessary



infrastructure for any future establishment of quiet zones in the City of Riverside (this entails additional improvements and safety features that would only be provided with quiet zones and not for a routine grade crossing improvement); as well as provision of noise barriers and sound insulation where appropriate.

Additionally, the SEA for the PVL project was prepared in accordance with § 1501.4 of the CEQ Regulations for Implementing NEPA, as well as 23 CFR 771.119 of FTA's NEPA implementing regulations. Because the project-related impacts were either found to not be significant, or would be mitigated to a level that is not significant, an Environmental Impact Statement (EIS) does not appear to be appropriate for this project, and a Finding of No Significant Impact (FONSI) is anticipated. However, the final determination will be made after the public review period for the Final SEA has ended.

L10-9. The comment indicates RUSD has "serious concerns" over safety, air quality, and noise impacts and that "these specific concerns" are expressed as comments that follow (L10-10 through L10-50).

L10-10. See Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response #3 – Derailment (General), Master Response #7 - Emergency Planning and Response, and Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment). Kinder Morgan operates a jet fuel (JP5) line that supplies fuel to the March Air Reserve Base. The six-inch pipeline is located within the RCTC ROW adjacent to the Highland Elementary School. The pipeline is considered an existing condition and the PVL project would not relocate or interact with this pipeline in any way (SEA, Section 3.8.3). During construction, a non-permeable material will be placed over the fuel line where soil erosion has taken place in areas within RCTC ROW where the fuel line is found to be less than three feet deep. This will reduce further erosion.

The addition of commuter rail to the existing railway line does not significantly increase the safety risks in the vicinity of Highland Elementary School and the Kinder Morgan pipeline near that school (Zeta Tech Report, page 7). As indicated in the SEA, the PVL project would not create significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

L10-11. This comment reiterates text from the SEA but does not identify specific environmental issues. Therefore, no response is necessary.

L10-12. See Response L10-10 and Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response #7 - Emergency Planning and Response, and Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment).

By agreement, the Kinder Morgan pipeline is within a "work exclusion zone", meaning only Kinder Morgan can conduct work on the pipeline. Therefore, FTA cannot obtain information regarding the pipeline beyond what is provided by Kinder



Morgan. The Kinder Morgan pipeline was required to be initially installed at a depth of three feet.

The pipeline within the RCTC/SJBL right of way was installed according to the applicable regulations and standards. The placement of the pipelines was an approved action by the appropriate licensing and permitting regulatory agencies. The approved installation within operating railroad right of way, in proximity to active tracks, leads directly to the conclusion that safety issues, such as risk of derailment and resultant damage to the pipelines, was considered.

The concern regarding risk associated with the operation of the PVL in proximity to both the Kinder Morgan pipeline and the Highland School is discussed in Master Response #2, as noted above. The pipeline is also discussed in the SEA Section 3.8.2.

- L10-13. Please see Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response #3 - Derailment (General), and Master Response #7 - Emergency Planning and Response. As indicated in the SEA, the PVL project would not create a reasonably foreseeable significant hazard to the public or the environment through upset or accident conditions involving the release of hazardous materials into the environment. Per the Zeta Tech Report, the risk of a derailment of a commuter train in the vicinity of each school is approximately one derailment every 3,000 years. This statistic demonstrates that derailment near the schools is not reasonably foreseeable.

In addition, the improvements proposed by the PVL project would improve the overall safety of rail operations within the corridor. This would include both the existing freight traffic as well as the future commuter trains. By improving the existing track conditions, the current statistics regarding derailment are not representative of future operating conditions. Therefore, the analysis in the SEA is correct.

- L10-14. See Master Response #2 Kinder Morgan Pipeline Segment Near Highland Elementary School. Attached to the comment letter is a report, "Railroad Safety Study and Pipeline Risk Analysis" (Kleinfelder, November 2005, for Christopher Joseph & Associates). This study was prepared in accordance with the California Department of Education's Guidance Protocol for School Site Rail and Pipeline Risk Analysis. This guidance protocol is used for determining the risk associated with siting a new school, not determining the risk at an existing school location. (See Master Response # 2 – Kinder Morgan Pipeline Segment Near Highland Elementary School.) Additionally, the potential school site discussed in the study provided by the comment is located in northern California, which does not provide any local information about derailment risk in the Riverside area. Further, the RUSD schools were sited adjacent to this active rail corridor over 50 years ago. Therefore, although the study provided in the comment is not relevant to the PVL project.

Further discussion of the report can be found within Response to Comment L10-50.

- L10-15. This comment recites a section from the SEA and does not raise specific environmental concerns. Therefore, no further response is necessary. See



Response to Comments L10-16 and L10-17 for further discussions on pipelines and construction.

- L10-16. See response L10-17 and Master Response #2 – Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response #3 – Derailment (General), Master Response #7 – Emergency Planning and Response, and Master Response #10 – Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment). The depth of the pipeline within the ROW varies. In some places it is as deep as 10 feet and in other places it is as shallow as 2 feet 4 inches. In the vicinity of Highland School, the pipeline ranges to a depth of 5 feet 2 inches. The reason for this range of depths is that erosion and weathering slowly remove topsoil and therefore reduce the overall depth of the line. Therefore, the description of the pipeline is not inconsistent or inaccurate.

Per Kinder Morgan's construction oversight and safety requirements described in SEA Section 3.8, Master Response #2, and L10-17, the engineering and construction activities will not impact the pipeline. However, during construction, areas where the fuel line is less than three feet deep, a non-permeable material will be placed over the fuel line where soil erosion has taken place, this will reduce further erosion. Kinder Morgan has specific requirements for work within their pipeline easement. One requirement is that a company representative monitors construction activity within 25 feet of a pipeline. RCTC will fully comply with Kinder Morgan's standard requirements, including monitoring of construction activity.

- L10-17. See Master Response #2 – Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response #3 – Derailment (General), and Master Response #10 – Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment), and SEA Section 3.8. As stated in Response to Comment L10-16, no engineering or construction activities are expected to impact the pipeline during construction. It should also be noted that the drilling associated with the foundation for the landscape walls and noise barriers will require a non-permeable barrier be placed over the fuel line in areas where the pipeline is found to be less than three feet deep. In addition to the wall work, new rail ties and the placement of new ballast would be added to the existing ballast (which is not anchored to the ground) to provide the appropriate support to the ties. The ballast replenishment, and tie replacement (or re-leveling) occurs with the use of a track car that travels on the rails and carries all the materials necessary to install and maintain the track.

Kinder Morgan has specific requirements that must be met if construction is conducted within their easement. These requirements are outlined in Kinder Morgan Guidelines for Design and Construction near Kinder Morgan Hazardous Liquid Operated Facilities (November, 2007), which includes (but is not limited to), the following:

Design:

- Kinder Morgan shall be provided sufficient notice of planned activities involving excavation, blasting, or any types of construction on Kinder Morgan rights-of-way to determine and resolve any location, grade, encroachment problems and



provide protection of Kinder Morgan facilities and the public before the actual work takes place.

- Encroaching entity shall provide Kinder Morgan with a set of drawings for review and a set of final construction drawings shall all aspects of the proposed facilities in the vicinity of Kinder Morgan's right-of-way. The encroaching entity shall also provide a set of as-built drawing showing the proposed facilities in the vicinity of Kinder Morgan's right-of-way.

These Guidelines continue to address specific design issues as well as construction issues including (but not limited to) the following:

Construction:

- Contractors shall be advised of Kinder Morgan's requirements and shall be contractually obligated to comply.
- The continued integrity of Kinder Morgan's pipelines and the safety of all individuals in the area of proposed work near Kinder Morgan's facilities are of the utmost importance. Therefore, contractor must meet with Kinder Morgan representatives prior to construction to provide and receive notification listings for appropriate area operations and emergency personnel. Kinder Morgan's on-site representative will require discontinuation of any work that, in his opinion, endangers the operations or safety of personnel, pipelines or facilities. The Contractor must expose all Kinder Morgan pipelines prior to crossing to determine the exact alignment and depth of the lines. A Kinder Morgan representative must be present. In the event of parallel lines, only one pipeline can be exposed at a time.
- A Kinder Morgan representative shall be on-site to observe any construction activities within 25 feet of a Kinder Morgan pipeline or aboveground appurtenance. The contractor shall not work within this distance without a Kinder Morgan representative being on site. Only hand excavation shall be permitted within two feet of Kinder Morgan pipelines, valves and fittings unless State requirements are more stringent, however, proceed with extreme caution when within three feet of the pipe.
- A Kinder Morgan representative will monitor construction activity within 25 feet of Kinder Morgan facilities during and after the activities to verify the integrity of the pipeline and to ensure the scope and conditions agreed to have not changed. Monitoring means to conduct site inspections on a pre-determined frequency based on items such as: scope of work, duration of expected excavator work, type of equipment, potential impact on pipeline, complexity of work and/or number of excavators involved.

Because construction for the PVL project would comply with all applicable Kinder Morgan construction requirements, the project would not have significant impacts for construction work around the pipeline and no mitigation measures are required.



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- L10-18. Please see Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School and Master Response #3 - Derailment (General). The analysis in the SEA is correct - there are no anticipated significant impacts as a result of this issue.
- L10-19. See responses L10-16 and L10-17 and Master Response #6 – Noise. With respect to limiting construction noise near schools, some of the comments on the SEA have included the request that PVL construction activities be limited to non-school hours. However, this type of noise control measure would neither be reasonable nor feasible given the resulting limited time within which the project would have to be constructed. In addition, the hours of operation for a typical school are not limited to the school day, and subsequently may include evening and early morning hours thus further reducing available construction time. As a result, if the hours of allowable operation for construction activities were to be restricted, the construction period would be extended and the ability to complete the proposed project within a reasonable period of time would be substantially compromised.
- L10-20. See Master Response #3 - Derailment (General). The SEA evaluates the risk of derailment associated with all people, not just students, in several places (Section 1.7.8, Section 3.6.3, Section 3.8.3, and Section 3.12.3). According to the SEA, if a SCRRRA/Metrolink train derails on the SJBL corridor there is a potential that the diesel fuel within the fuel tanks could spill. In the unlikely event that a derailment were to occur, the amount of diesel in a full tank (2,500 gallons) would not be expected to flow outside of the RCTC ROW. Spill cleanup would consist of containing any ponded fuel, and then clean-up the contaminated soil. Therefore, the analysis in the SEA is correct - there are no significant impacts and no mitigation is required for this issue.
- L10-21. See Master Response #2 – Kinder Morgan Pipeline Segment Near Highland Elementary School and Master Response #3 – Derailment (General). The SEA is correct - there are no significant impacts and no mitigation is required for this issue. However, it should be noted that the master responses describe a more recent risk analysis that was completed, the Zeta Tech Report. This report takes into account train speeds of approximately 30 mph at Highland Elementary School and less than 30 mph at Hyatt Elementary School.

It should also be noted that the statistics prepared for the SEA only included freight operations because that is the current condition within the corridor. Since currently there is no Metrolink service on the SJBL corridor the operating risk of derailment could only be inferred from other areas that Metrolink operates.

- L10-22. Please see Master Response #3 - Derailment (General) and Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment).

A supplemental risk analysis was completed and reached the conclusion that the introduction of commuter rail service on the SJBL does not result in a significant impact at Hyatt Elementary School.



It should also be noted that the statistics prepared for the SEA only included freight operations because that is the current condition within the corridor. Since currently there is no Metrolink service on the SJBL corridor the operating risk of derailment could only be inferred from other areas that Metrolink operates.

- L10-23. Please see Master Response #3 - Derailment (General) and Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment). Additionally, the distance between the rail and Hyatt Elementary School is between 95 and 125 feet away from the school property. The photograph within the Master Response #10 – Hyatt Elementary School and Nearby Residences Supplement Protection (Derailment), illustrates a view that accurately represents the distance relationship between the rail and the school.

The comment correctly refers to inconsistencies between tabulated train speeds near Highland Elementary School, as printed in the Draft SEA; a typographical error in the form of mislabeling caused this apparent inconsistency, where speeds for Highland Elementary School in the SEA, Table 3.4-11 were incorrectly labeled (Typo). They should both be 60 mph which is consistent with what is shown in Table 3.4-17 in the SEA. Although the SEA, Table 3.4-11 was mislabeled, all noise and vibration calculations for the SEA were correctly performed near the Highland Elementary School using the 60 mph speed. Therefore, the analysis in the SEA is correct and the typographical error has been corrected for the Final SEA.

Subsequent to the publication of the Draft SEA, a safety report was completed for RCTC by Zeta Tech that recommended reduced train speeds near Highland Elementary School. An additional analysis was performed using the lower 30 mph speed limit and it was confirmed that although the train speed in the UCR area, near Highland Elementary School (Spruce and Blaine Streets) was reduced from 60 mph to 30 mph, it would not affect or change any of the current PVL project noise mitigation requirements.

- L10-24. This comment recites a section from the SEA and does not raise specific environmental concerns. Therefore, no further response is necessary.
- L10-25. This comment recites a section from the SEA and does not raise specific environmental concerns. Therefore, no further response is necessary.
- L10-26. Please see Master Response #3 - Derailment (General). The no significant risk of derailment; therefore, mitigation measures are not required.
- L10-27. See responses L10-20 and L10-21, and Master Response #3 - Derailment (General). The derailment risk is not significant; therefore, mitigation measures are not required. However, in response to the RUSD comment regarding derailment, RCTC chose to engage the services of an independent railroad design/safety professional to review the situation and provide recommendations to specifically address the RUSD concerns. This is not a requirement due to any identified potential impact and any supplemental measures that may be considered or undertaken are exactly that-supplemental, and beyond the requirements of NEPA. Should any supplemental measures be provided, they would not be due to an impact and should not be



categorized as mitigation. There must be an impact in order to apply mitigation. Without an impact, there is no mitigation.

L10-28. The commitment to provide a “landscape wall” at Hyatt School is a supplemental measure provided in response to RUSD’s concerns. The wall would not be mitigation for any identified potential impact. RCTC intends to construct a landscape wall along the east side of the school, forming a visual barrier between the school and the SJBL. This landscape wall will be built to Caltrans requirements identified in “Soundwall Design Criteria with Vehicular Collision Load”. Since this comment does not raise environmental concerns, no further response is required.

L10-29. See Master Response #3 - Derailment (General) and Master Response #8 - Grade Crossings. The statistics this comment cites raises broader issues of safety beyond derailments. For example, the statistic “accidents involving trains running on Metrolink’s system killed 218 other people for a total of 244 fatalities” refers to all accidents, including at grade crossings and suicides.

For a discussion of grade crossings, see Response to Comment L10-30. Additionally, to further increase the awareness of trains and increase safety Metrolink provides “Operation Lifesaver,” a safety education program. Operation Lifesaver provides age appropriate programs for communities and schools within the SCRRA/Metrolink service area. For additional information regarding the program, see the SEA, Section 3.12.3.

Therefore, the analysis in the SEA is correct - there are no significant impacts and no mitigation is required for this issue.

L10-30. See response L10-29, Master Response #1 - Quiet Zones and Master Response #8 - Grade Crossings. With regard to grade crossings, safety is a primary concern of FTA, CPUC and SCRRA (the operators of the Metrolink service) for implementation and operation of the project. Grade crossing improvements are identified along the PVL corridor in the SEA, Section 1.7.5. Two grade crossings, at W. Blaine Street and Mt. Vernon Avenue, are located near Highland (approximately 950 feet away) and Hyatt Elementary Schools (approximately 0.75 miles away), respectively. Improvements to these two grade crossings include pedestrian swing gates, pedestrian warning devices and gates, pedestrian barricades and metal hand railings, concrete raised medians, double yellow medians and island noses, warning devices, safety lighting, and signs. Please note that these grade crossing improvements are not mitigation for an impact; the SEA found no significant, unmitigable impacts as a result of the PVL project. The project does not increase safety risks. Instead, the PVL project would upgrade the existing physical condition of the rail line, which would result in a stronger infrastructure, a higher level of maintenance, and enhanced safety.

To further increase the awareness of trains and increase safety Metrolink provides “Operation Lifesaver,” a safety education program. Operation Lifesaver provides age appropriate programs for communities and schools within the SCRRA/Metrolink service area. For additional information regarding the program, see the SEA, Section



3.12.3. Therefore, the analysis in the SEA is correct - there are no significant impacts and no mitigation is required for this issue.

- L10-31. Please see response L10-29 and L10-30, and Master Response #8 - Grade Crossing. The grade crossing warning systems are being upgraded along the entire PVL corridor. These upgrades are approved by the CPUC and incorporate the most up-to-date safety requirements. The comment includes two examples of accidents that did not occur along the PVL alignment. RCTC will implement the most current Metrolink standards for all grade crossings along the PVL project alignment, but SCRRA/Metrolink cannot control individuals who willfully bypass or ignore safety-warning devices and trespass onto the tracks. The SEA stated that there are no significant impacts as a result of the PVL project and no mitigation is required. For information on the specific grade crossing improvements see Appendix D of the SEA.
- L10-32. Please see response L10-20 through L10-31 and Master Response #9 - Highland and Hyatt Elementary Schools (Increased Train Traffic). The SEA found no significant safety impacts at grade crossings as a result of the PVL project, with the implementation of mitigation measures.
- L10-33. Please see Master Response #3 - Derailment (General) and Master Response #9 - Highland and Hyatt Elementary Schools (Increased Train Traffic). Regardless of when the trains pass the school, the SEA did not identify a significant risk to Hyatt Elementary School from the PVL project. The SJBL/RCTC ROW is located behind the school and would not interfere with students entering the school from the entrance, which is located at the front of the school. The distance from the closest classroom building at Hyatt Elementary School to the rail line is approximately 350 feet. It is also almost 100 feet from the basketball courts at the school to the nearest rail. Additionally, there are no crossings near the school that would direct children to access the school from the back of the property and across the tracks. It should also be noted, because of the curvature of the track near Hyatt Elementary School, that the train speeds will be limited to less than 30 mph.
- L10-34. See Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment), and SEA Section 1.0 and 3.6. There are no project induced potential significant impacts regarding derailment and no mitigation measures are required.

The landscape walls have been integrated into the project as design features, and are provided in response to input received from RUSD, as opposed to being implemented as a mitigation measure.

At Hyatt Elementary School, the landscape wall is anticipated to be located near the RCTC property boundary with the school. The school property boundary/wall location is approximately 95 feet away from the closest rail. The elevation difference between top of the wall to existing ground will be approximately 10 feet. Parallel to the wall will be an excavated ditch on the rail side of the wall. This landscape wall will be built to Caltrans requirements identified in "Soundwall Design Criteria with Vehicular Collision Load". The landscape wall at Highland Elementary School is expected to fill



in the break in the noise barrier wall and be of the same height as the noise barrier (between 8 and 10 feet). However, the landscape wall is not intended to serve as noise mitigation. The landscape wall will also be made of the same materials as the noise barriers so as to create the visual effect of a continuous and uniform visual structure.

RCTC is not planning to provide any vegetation with landscape walls or the noise barriers. RCTC does not have irrigation water available within the ROW to allow for watering of landscaping on the RCTC side of the barrier. The schools and other property owners that abut a noise barrier or landscape wall would be able to provide landscaping on the side of structure that fronts their property, and the landscape irrigation and maintenance would be the responsibility of that local property owner.

L10-35. See Response to Comment L10-34 and L10-36.

L10-36. See Master Response #3 – Derailment (General). The SEA explains that there is no significant risk associated with derailment potential for a commuter train. Therefore, mitigation measures are not required.

The objective of the wall at Hyatt Elementary School has changed slightly from the initial preparation of the SEA because of an agreement reached between RUSD and RCTC in July 2011. The wall is currently being designed to Caltrans standards so that in the event material falls from a passing train it will not leave the RCTC ROW and enter the school property. The wall will be constructed very near the outer limit of the ROW. The elevation difference between top of the wall to existing ground will be approximately 10 feet. Paralleling the wall will be an excavated ditch on the railway-side of the wall. This wall is a supplemental measure only. As stated above, this is not designed as a mitigation measure.

L10-37. Please see Master Response #7 - Emergency Response and Planning. Emergency access to Hyatt Elementary School would be available by Central Avenue and Watkins Drive from the south and along Watkins Drive from the north. Neither of these main roads is bisected by the RCTC ROW. In the unlikely event of a derailment near Hyatt Elementary School, emergency response crews would be able to reach the site of the emergency situation by entering the RCTC ROW at Poarch Road (south of the school), or by entering the ROW at Manfield Street (north of the school).

Emergency access to Highland Elementary School could come from either Spruce Street (north of the school) or from Blaine Street (south of the school). The PVL project's trains would be commuter trains of only a few cars. These trains are too short to block more than a single crossing. Thus, even in the unlikely event that a project train stops in the neighborhood, there would be no significant impact because only one of three ingress/egress locations would be affected.

If either Spruce Street or Blaine Street is blocked for any reason, the other street could be used for access into or out of the area. Emergency response would be able to reach the derailed train by entering the RCTC ROW at the same grade crossings and not having to travel through the school.



Additionally, with the implementation of the PVL project, the corridor will become a shared corridor with the Metrolink and BNSF under the responsibility of SCRRRA. Due to the shared nature of the operations, it is not anticipated that trains would be allowed to stop in areas of single track (including the UCR neighborhood) because this would block other trains from passing through. Instead, trains would stop in the areas where there is a bypass track (between MP 7.50 to MP 16.90, the section that is parallel and adjacent to I-215) and not in the UCR neighborhood.

- L10-38. Please see Master Response #8 - Grade Crossings. There are no reports of student deaths as a result of train traffic along the SJBL in over 150 years of operation. SCRRRA/Metrolink provides a safety and awareness program called Operation Lifesaver (SEA, Section 3.12.3). This program is designed to increase awareness of the trains and the extreme hazards created by illegally crossing the tracks. The program is designed for both students and the general public. It should also be noted that students do not have to cross the ROW, legally or illegally, to reach Hyatt Elementary School. The main road into the area is Watkins Drive.

Contrary to the statement in the comment, there is no record of any student fatalities at crossings near Hyatt Elementary School.

Section 3.8 does not support the conclusion that an EIS must be prepared for the project. Section 3.8 indicates that there should be further investigation of specific areas to determine if construction activities will be impacted. Since the preparation of the SEA, these identified areas have been further investigated and they will not impact the construction, operation, or maintenance of the project.

- L10-39. For the proposed PVL project, a health risk assessment was conducted, following CEQA air quality guidelines, to take into account the effects of air toxic contaminants on human health (see SEA, Section 3.3.3). The results of the health risk assessment are shown in Table 3.3-10 of the SEA and are presented in full detail in the Air Quality Technical Report, Appendix C. Based on the results shown in Table 3.3-7, there would be no exceedances of the impact thresholds for any of the criteria pollutants arising from the operation of the proposed PVL project. Therefore, the SEA adequately considers potential health impacts to children at the elementary schools.

Concerning air quality impacts to sensitive receptors in specific locations, the SEA evaluated carbon monoxide hot spots at six specific locations. Included in those six locations were Highland and Hyatt Elementary Schools (see SEA, Section 3.3.3). The hot spot analysis evaluated the potential impacts to sensitive receptors near congested intersections and parking lots (see Tables 3.3-8 and 3.3-9 of the SEA). Additionally, the health risk assessment evaluated potential impacts to sensitive receptors as a result of diesel emissions (see SEA, Table 3.3-10). Based upon the hot spot analysis and the health risk assessment, it was determined that the risk to sensitive receptors would be below the SCAQMD threshold of significance.

- L10-40. The results of the assessment of construction emissions from the proposed project are shown in Table 3.3-12 (see SEA, Section. 3.3.3). No daily construction activity would exceed SCAQMD's daily construction emissions thresholds and result in an



impact (see SEA, Section 3.3.3). Although significant adverse impacts would not occur during construction, contractors would be required to implement BMPs during the construction period to control fugitive dust emissions in accordance with SCAQMD Rule 403 (see Section 3.3.3 of the SEA and the Air Quality Technical Report).

Information regarding construction is provided in the SEA, Section 1.7.9. Performance standards related to air quality, noise and vibration, and traffic would be applied during construction.

- L10-41. The proposed project would add twelve (12) passenger commuter train trips to the PVL alignment. The addition of 12 passenger commuter train trips was taken into account in the health risk assessment and was found to have a negligible effect on emissions in the vicinity of nearby homes, schools, and businesses along the PVL alignment. Concerning pollutant emissions from existing freight trains, because the PVL project is already included in the RTIP (see Appendix A of the Air Quality Technical Report), existing freight emissions are already accounted for with regard to public exposure. In addition, emissions from the existing freight trains are included in measurements taken by local air quality monitoring stations that have not reported any violations of any existing state or federal air quality standards for any pollutant. Consequently, pollutant emissions from existing freight trains are already accounted for in the baseline condition. Moreover, the AQMD health risk methodology specifically requires that the analysis focus on the project's incremental risk to health, which was properly the focus of the health risk assessment.

In addition, the project underwent a regional-level air quality assessment and it was determined that the PVL is not a POAQC on April 16, 2010. (<http://www.scag.ca.gov/tcwg/projectlist/march10.htm>). Any additional increases in train traffic above that described for the proposed PVL project would have to be evaluated independently of this assessment.

Overall, as shown in Table 3.3-5 of the SEA, with the consideration of existing emissions, the proposed PVL project would result in decreases in emissions for the majority of pollutants, thus producing a cumulative net benefit to the region's air quality.

With regard to the cumulative projects evaluated for the project, they include: Riverside Grade Separations (3rd Street, Columbia Avenue, and Iowa Avenue), Hunter Park Distribution Center, Perris Station Apartments, I-215 Freeway Widening Project, UCR Long Range Development Plan, Centerpointe Industrial and Business Park, Meridian Business Park, Gateway Center, Cactus/Commerce Commercial Center, March LifeCare Campus, The Venue at Perris, Perris Marketplace, Towne Center, and Perris Crossing.

- L10-42. See above response to L10-41.

- L10-43. The discussion of cumulative impacts in Section 3.19 of the SEA accurately assesses cumulative impacts of the proposed PVL project in the context of past, present, and probable future projects in the PVL study area. As indicated above,



freight train emissions were included in the baseline conditions and were appropriately captured by the air quality analysis. The discussion of air quality within the Indirect and Cumulative Effects section (see SEA, Section 3.19) is correctly addressed. Also, see response to L10-41.

The use of Localized Significance Thresholds (LSTs) is voluntary (see SCAQMD Fact Sheet on LSTs, available at:

http://www.aqmd.gov/localgovt/images/lst_fact_sheet.pdf). Based on the SCAQMD Fact Sheet, it is recommended that proposed projects larger than five acres in area undergo air dispersion modeling to determine localized air quality. For operational impacts, LSTs are more appropriate for stationary source projects. With respect to the proposed project, this would apply to proposed stations and their parking lots. As noted in the above referenced LST Fact Sheet for construction impacts, LSTs are more appropriate for a medium sized to large project that would have a longer-term influence on specific sensitive receptors neighboring the construction site. No station constructed as part of the PVL project will be larger than two acres in size, and so the PVL would be considered a "smaller project." The overall project construction period is estimated at approximately 18 months. However, because of the linear nature of rail construction, the actual construction period at any one individual sensitive receptor would be approximately two to three months. As a result, the assessment of localized air quality impacts for the proposed project did not utilize LSTs.

- L10-44. The comment suggests that the SEA indicates the potential for significant impacts related to Air Quality and indicates the need to prepare an EIS. This interpretation is incorrect, however, Table 3.3-7 in the air quality section of the SEA shows there would be decreases in emissions for the majority of pollutants, thus producing a cumulative net benefit to the region's air quality and there would be no exceedances of the impact thresholds for any of the criteria pollutants.
- L10-45. This comment correctly indicates that mitigation measure NV-1 requires the noise barrier to be 680 feet long and nine feet high.
- L10-46. See Master Response #6 - Noise. A noise barrier specifically designed to mitigate project noise levels is proposed for Highland Elementary School (see SEA, Table 3.4-11). The required project noise decibel reduction near the school is less than one decibel (see SEA, Table 3.4-12). However, the noise barrier would provide three decibels of project noise reduction (see SEA, Table 3.4-11). The height and length of the proposed noise barrier can be found in the SEA, Table 3.4-12. The noise barrier will be constructed of masonry block.
- L10-47. See Master Response #6 - Noise. A noise barrier is provided to attenuate the noise impacted school property. The landscape wall is included as a visual barrier only. At Highland Elementary School, the landscape wall is intended to match the noise barrier in material type and height and give the visual effect of a continuous, uniform structure.

The landscape walls are supplemental measures in response to RUSD's concerns. The walls would provide a visual barrier between the SJBL and the schools;



however, the walls have not been analyzed as to potential noise abatement and would not be engineered and constructed to withstand impact. They will be constructed of the same masonry block, consistent with the noise barriers, but they are not being provided as mitigation for any potential impact.

- L10-48. See Master Response #6 - Noise. Although a numerical assessment was not conducted near Highland Elementary School concerning construction noise, a representative numerical assessment based on FTA procedures and criteria (FTA Manual, Section 12.1) was conducted for the proposed rail station in Perris. Local ordinances and noise codes, such as those in the City of Perris, were not used in the assessment because they are typically associated with maximum noise levels (L_{max}) which are not to be exceeded. While this represents useful information limiting noise from a construction site, they are not practical for assessing the noise impact of an actual construction project. Conversely, the FTA construction noise criteria utilize an equivalent noise level (L_{eq}) which is applied over a specific period of time. Because these criteria are assessed over a period of time, they are more effective at identifying impacts on humans' daily activities and annoyance levels.

The assessment for the Perris Station area was based on the examination of potential construction noise impacts at a representative worst-case location. The criteria used for selecting the representative location included the proximity of construction activities to noise sensitive receivers and the extent of construction-related activities in the area. The location at 228 C Street in the City of Perris was chosen because it is directly adjacent to the alignment and the proposed Perris Station. Therefore, it represents the only sensitive cluster location located adjacent to the alignment that would be exposed to both station- and track-related construction activities. This is a worst-case scenario in terms of the potential impact to a sensitive residential receptor, the length of time for construction, the distance to an existing receptor, and the types of equipment that would be used. No impacts were predicted at this location and therefore, it is assumed that no impacts would occur at other locations (such as Highland Elementary School) where less intense construction would occur. With respect to the types of construction equipment that would be used for track and station construction, noise levels and types of equipment are presented in the Noise and Vibration Technical Report, Table 14. The similarity between construction equipment used in rail construction projects and common street and utility projects is also made in the SEA. The construction activity that would create the most noise and vibration is pile driving associated with the San Jacinto River bridge replacement which is adjacent to the proposed Layover Facility. However, as there are no noise sensitive receptors located within approximately one mile of the proposed Layover Facility and the pile driving sites, construction-related noise impacts would not occur.

Construction noise impacts as defined by the FTA construction noise criteria (FTA Manual, Section 12.1.3) would not be expected. However, during the normal allowable hours of construction defined in the local noise ordinances, project-related construction activities could result in increases in noise levels at noise-sensitive areas adjoining the project alignment. These temporary increases would be based on potential occurrences of atypical events given the inconsistent and transitory nature of some construction activities and equipment usage. Contractors are



required to adhere to the local noise code and therefore, they typically implement standard construction noise control measures. Examples of these control measures include temporary construction noise barriers, low-noise emission equipment, and the use of acoustic enclosures for particularly noisy equipment. Consequently, while the project construction noise levels would not surpass the FTA criteria level and thus would not result in a noise impact, occasional and sporadic increases in the construction noise levels above the municipal ordinance levels could occur. ([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf)).

L10-49. See response L10-8.

L10-50. This comment concludes the letter and does not raise specific environmental issues. No response is necessary.

See Response L10-14 and Master Response #2 – Kinder Morgan Pipeline Segment Near Highland Elementary School, Master Response #3 – Derailment (General), Master Response #4 – Hazardous Materials Transport, Master Response #7 – Emergency Planning and Response, and Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment). Attached to the comment letter is a report, Railroad Safety Study and Pipeline Risk Analysis, 700 University Avenue, Berkeley, California, prepared by Kleinfelder, November 2005, for Christopher Joseph & Associates. This study was prepared in accordance with the California Department of Education's Guidance Protocol for School Site Rail and Pipeline Risk Analysis. This guidance protocol is used for determining the risk associated with siting a new school, not determining the risk at an existing school location. (See Master Response # 2 - Kinder Morgan Pipeline Segment Near Highland Elementary School.) Additionally, the potential school site discussed in the study provided in the comment is located in northern California, which does not provide any local information about derailment risk in the Riverside area.

With regard to railroad hazards, the study states that, "For example, a determination of low probability of a hazardous situation would be based on non-hazardous materials being transported, low frequency of track use, the presence of control measures within a system, the existence of emergency response plans, the existence of federal, state, or local agencies that inspect and permit these businesses, and a low rate of emergency incidents in the industry as a whole."

The PVL project is a commuter rail project and would not transport hazardous materials. The SJBL alignment near Hyatt and Highland Elementary Schools currently has about two freight trains traveling on it daily and, including the PVL project commuter trains, 14 train trips would occur along the SJBL alignment. This number is far less than the study's project with 32 passenger trains and 28 freight trains, and could be considered a low frequency of track use. Additionally, the PVL project includes track improvements throughout its length that would upgrade the existing physical condition of the rail line, which would result in a stronger infrastructure, a higher level of maintenance, and enhanced operational safety (see Draft SEA, Section 3.8.1).



As explained in Master Response #7 - Emergency Planning and Response, SCRRA/Metrolink developed a System Safety Program Plan (SSPP) as a means of integrating safety into all facets of SCRRA, and RCTC, in concert with FTA, is preparing a PVL Safety and Security Management Plan (SSMP) to continue to integrate safety and security specifically into the PVL project. Additionally, the Federal Railroad Administration (FRA), Department of Homeland Security (DHS) and the California Public Utilities Commission (CPUC) have a variety of rules and regulations in place to maintain safety and security along rail corridors, with which the PVL project would be fully compliant (explained more fully in Master Response #7 - Emergency Planning and Response). Finally, Master Response #3 - Derailment discusses statistics of past derailments. These calculations show that the risk for train derailments on SCRRA tracks is lower than the risk for train derailments on BNSF tracks. The reason for this difference is that, because the SCRRA tracks are used for commuter rail, the tracks are maintained to high standards of safety and ride quality due to their role in public passenger transport.

The PVL project would not transport hazardous materials and would have a low frequency of track use. Control measures within a system would be present, emergency response plans would exist, federal, state, or local agencies would inspect and permit the project, and the tracks would be upgraded to SCRRA tracks, which would mean a lower risk of derailments than is currently present. Therefore, the PVL project would be considered having a low probability of a hazardous situation occurring.

With regard to pipeline hazards, a separate risk analysis was conducted for the Kinder Morgan pipeline and Hyatt and Highland Elementary Schools because both are already in existence (*Analysis of Safety Issues for the Proposed Commuter Rail Service on the Riverside County Transportation Commission's Perris Valley Line in the Vicinity of the Highland and Hyatt Schools*, Zeta Tech, 2011). This risk analysis supports the finding that no significant impacts would occur with the addition of PVL commuter trains to the tracks.

Response L10-15 describes the risk management procedures Kinder Morgan requires for construction activities near their pipelines, and Master Response #7 - Emergency Planning and Response describes the federal, state, and local, emergency response plans present. As stated in Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School, maintenance and operation of fuel pipelines are defined and mandated by state and federal laws, with which Kinder Morgan is in full compliance. Additionally, unlike the project analyzed in the study, the PVL project is not located within an Alquist-Priolo special studies zone or fault, and the seismic risk is not considered significant. Finally, the calculations determining the probability of a fatality resulting from a leak or rupture presented in the study are specific to that project, and are not appropriate to compare with the PVL project.

The aforementioned explanations further illustrate the validity of the evaluation in the Draft SEA, namely that the implementation of the PVL project would not result in significant impacts to Hyatt or Highland Elementary Schools.



SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

0.3 RESPONSE TO COMMENTS

0.3.2 COMMENT LETTERS

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Also, included with the report attached to comment letter was a photograph taken from Hyatt Elementary School looking east as a freight train was travelling north. The photograph does not accurately represent the actual conditions behind the school. The closest rail is approximately 350 feet from the nearest school building and over 90 feet from the school boundary. A photograph taken from the RCTC/SJBL ROW is included in Master Response #10 - Hyatt Elementary School and Nearby Residences Supplemental Protection (Derailment) to accurately illustrate the relationship of the rail to the edge of the school property.



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Letter 11
March Joint Powers Authority - Adam Collier
January 6, 2011



January 6, 2011

Ms. Edda Rosso, P.E.
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

SUBJECT: REVIEW OF THE PERRIS VALLEY LINE SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT AND TRAFFIC TECHNICAL REPORT DATED NOVEMBER 2010

Dear Ms. Rosso:

The Draft Supplemental Environmental Assessment (Supplemental EA) and Traffic Technical Report (TTR), prepared by Kleinfelder and STV Incorporated, has been reviewed by the March JPA. The following comments are based upon the review of the Supplemental EA and TTR utilizing professional planning judgment, previous engineering studies/warrants, and knowledge of the study area.

L11-1

It should be noted that our review of the above stated documents was conducted for the Moreno Valley/March Field Station only.

- 1. March JPA understands that the Supplemental EA and TTR generally addresses the following areas:
- Minimum level of service (LOS) policies
- Significance criteria
- Intersection level of service analysis methodology and parameters
- Trip distribution
- Traffic forecasting for Opening Day (2012)
- Cumulative projects

L11-2

- 2. The Traffic Technical Report analyzes: 1) Existing Conditions (2008); 2) Year 2012 Conditions without the Project; and 3) Year 2012 Conditions with the Project. The project description further identifies that future conditions were not studied, but the report states that future conditions will be analyzed at a later date when new stations and parking lot expansions are needed to address increased ridership and availability of funding.

L11-3



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Letter 11 (cont'd)
March Joint Powers Authority - Adam Collier
January 6, 2011

3. The Supplemental EA and TTR exhibits do not correctly depict existing streets and intersections adjacent to, and serving, the proposed project. March JPA requests that the exhibits be revised to correctly depict existing streets and intersections. } L11-4

4. Based on the previous comment (3), the Supplemental EA and TTR do not analyze or address traffic impacts to the following street segments and intersections that are adjacent to, and serving, the project:

- Cactus Avenue at Meridian Parkway
- Meridian Parkway at Alessandro
- Meridian Parkway
- Meridian Parkway at Van Buren (under construction)

March JPA requests that these intersections and segments be analyzed for inclusion in the Supplemental EA and TTR, and provide mitigation accordingly. } L11-5

5. Signal timing changes are not generally recognized as appropriate mitigation measures and should not be used as a mitigation measure for this project. Any traffic impacts that are recommended to be mitigated should be mitigated through additional lanes and/or changes in traffic control hardware. } L11-6

6. In accordance with the phone call between Dan Fairbanks and Edda Rosso of the Riverside County Transportation Commission (RCTC) on June 1, 2010, provision of a traffic signal is identified in the 65% construction plans for the primary/bus entrance to the Moreno Valley/March Field Metrolink Station. March JPA requests that the disclosure of this signal be added to the Supplemental EA and TTR in the revised Project Description and/or it be identified as a project mitigation measure. } L11-7

Should you have any questions regarding our review of the Supplemental EA and TTR, please contact me at (951) 656-7000.

Sincerely,

Adam Collier
Planner II

cc: Dan Fairbanks, March JPA Planning Director
Lori Stone, March JPA Executive Director



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Response to Letter 11**March Joint Powers Authority - Adam Collier****January 6, 2011**

- L11-1. This comment is introductory in nature and does not raise specific environmental concerns. Therefore, no further response is necessary.
- L11-2. This comment indicates that March Joint Powers Authority (JPA)'s comments are limited to the Moreno Valley/March Field station only and that the Traffic Technical Report addresses the six listed items.
- L11-3. Future conditions for the opening year of the PVL are analyzed and traffic impacts associated with the PVL project for the opening year are disclosed in the SEA. What is indicated in the SEA with respect to the analysis of future conditions is that the PVL full build-out conditions were not studied since the completion of the full build-out is dependent upon ridership increases and additional funding, and a completion date has not been determined.
- L11-4. Not all roadways and intersections are depicted in the SEA and Traffic Technical Report exhibits due to the small scale of the map. The streets in the vicinity of the project site represent conditions at the time the traffic counts were conducted, prior to the opening of the Meridian Parkway; consequently, Meridian Parkway does not appear on the map, and Brown Street is shown instead.
- L11-5. The street segments and intersections listed in the comment all lie along Meridian Parkway, which is a new roadway built as part of the Meridian Business Park project that was under construction at the time the traffic data collection effort and traffic study. Meridian Business Park was not completed and developments within it were not fully occupied at that time. Thus, existing traffic counts could not be gathered. Therefore, because traffic counts could not be gathered, the incremental background project traffic overlay was identified, as illustrated in Appendix D of the Traffic Technical Report, and included in future year analyses at study area intersections.
- L11-6. Traffic signal timing changes are a low-cost, easily implemented mitigation measure that is widely accepted by the engineering community (*A Toolbox for Alleviating Traffic Congestion and Enhancing Mobility, Institute of Transportation Engineers, 1996*). The proposed mitigation at Cactus Avenue and Old 215 would not require any changes/upgrades to the traffic control hardware, and can be achieved by reprogramming the controller. The addition of travel lanes as a mitigation measure, as suggested in the comment, would be redundant at this location, since all intersection approaches (with the exception of the westbound Cactus Avenue approach, which would experience a significant impact) would operate at acceptable levels-of-service C or better and well below their theoretical travel capacities. Roadway widening is a capital-intensive measure that may entail potential land acquisition and extensive roadway reconstruction. Therefore, adjusting the signal timing to allow more effective use of the signal system and the existing roadway capacity is preferable.



SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

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- L11-7. The traffic signal is not recommended as a mitigation measure, but is incorporated as part of the design for the proposed station (see Figure 1.7-11 of the SEA). The disclosure of this signal was added to the Project Description.



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Letter 12
Johnson & Sedlack - Raymond W. Johnson
January 6, 2011

Johnson & Sedlack
ATTORNEYS at LAW

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Jan. 6. 2011

To: Riverside County Transportation Commission

Re: Comments on Perris Valley Line Supplemental Environmental Assessment and Section 4(f) Evaluation for the Perris Valley Line, Riverside County, California

This comment letter on the Supplemental Environmental Assessment and Section 4(f) Evaluation (SEA) for the proposed Perris Valley Line Metrolink (PVL) is being written on behalf of residents of the UCR neighborhood and on behalf of Friends of Riverside's Hills. The UCR neighborhood is the residential neighborhood extending north and east of the University of California Riverside campus. The route of the PVL, along the San Jacinto Branch Line railroad right of way (SJBL), goes through the UCR neighborhood from about MP 1.7 (north of Spruce St.) to about MP 5.1 (north of Gemert Rd), including passing close by hundreds of residences plus two public elementary schools, child care centers, churches, and parks. Friends of Riverside's Hills is a California non-profit corporation concerned with protecting the environment in the western Riverside County area.

L12-1

The SEA is seriously deficient, with inaccurate and inadequate information and analysis, especially regarding noise, hazards, and park impacts. There will be impacts not mitigated to less than significant, and a full EIS needs to be done after new information has been obtained and better analysis performed. Much of this letter is focused on Project impacts in the University of California Riverside (UCR) neighborhood.

L12-2

Inadequate Project Description/Segmenting of Environmental Review

The Project as described in the SEA involves drainage improvements including replacement or extension of numerous culverts (SEA p. 1-47). SEA p. 3.9-13 states

Storm Water Drainage

Within the PVL corridor, there are 53 culverts of which 30 would be replaced or reconstructed as part of the project."

L12-3



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**Letter 12 (cont'd) – Attachment 1
Johnson & Sedlack - Raymond W. Johnson
January 6, 2011**

The heavy rain in the latter half of December, 2010, resulted in large mudflows onto the tracks where the tracks are adjacent to Islander Park (roughly about 1,100 plus feet north of the end of Big Springs Rd, at roughly MP 3.7), leaving the tracks impassible for an extended period of time. During the week of Dec. 20 and again the following week, local residents observed a tractor busy removing mud from the tracks and dumping it over the embankment on the Islander Park side of the embankment that separates Islander Park from Box Springs Reserve. Regular freight service only restarted about two weeks after the storm; part of that delay may have involved storm damage elsewhere on the SJBL, the remedy for which also needs to be described and analyzed as part of the present Project. The mudflows on the tracks adjacent to Islander Park came from uphill adjacent private and County park property to the east of the tracks where portions of the mountain slope gave way. Since the soil crust there is now weakened, future mudflows can be expected after even much lesser rains. The railroad right of way in this segment is only 100 feet wide, so there is limited space to provide measures protecting against future mudflows. Moreover, providing adequate drainage there would not be simple. More than a culvert is needed because of the fact that on the west edge (i.e., the side away from the mountain slope) of the narrow railroad right of way at this location is a bluff (in Islander Park) towering over the railroad right of way. Some substantial work needs to be done to remedy this situation to attempt to make the tracks suitable for Metrolink use. The public needs to be informed about what is proposed to be done and its environmental impacts. This needs to be examined as part of the environmental review process, and then the documents need to be recirculated. If consideration of planning for the necessary drainage improvement is postponed until after the present SEA consideration, that would constitute improper segmentation and deferral of the environmental review process. The necessary drainage improvements at this sensitive site (adjacent to public parks) needs to be described and considered as part of the Project.

L12-3 (cont'd)

In response to a Dec. 30, 2010 email query concerning the mudflow situation and whether corrective measures would be included in Project environmental review, Ms Echeverria of RCTC has responded by email on Jan. 5, 2011, stating:

"the Perris Valley Line, is currently under environmental review. The environmental documents do include discussion of hydrology and drainage matters and as part of the project, there is a plan to rehabilitate and clean out existing culverts in the area of Islander Park. Also, per Metrolink standards, track drainage ditches (swales) will be constructed on both sides of the track in that area. The culvert work and drainage ditches will apply to the entire corridor."

L12-4

With regard to these comments by Ms Echeverria, there is no existing culvert at or near the mudflow discussed above. While the SEA makes some sporadic general mention of drainage, aside from discussions of culvert work, as at SEA p. 1-47 (where it mentions an evaluation of culverts in an "Existing Conditions Report", 2008 – but the changed situation in the aftermath of the recent mudflow was not an "existing condition" then), it fails to discuss the kind of substantial drainage channel that would be necessary to handle anything like the recent mudflow. And the mention of drainage brings to mind the

L12-5



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Letter 12 (cont'd) - Attachment 1
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biological issue of spadefoot toads, which breed in seasonal ponds that would be affected by such drainage.

L12-5 (cont'd)

Tight curves: speed, wheel squeal noise, and derailment hazard

The SEA at p. 3.4-23 states:

“The prediction of wheel squeal is dependent upon the length of the curve and the rate of speed that the train is traveling along the curve. The “Citrus Connection” curve is the only proposed new curve for the PVL project and, it also represents the longest tight-radius curve along the entire PVL corridor.”

and at p. 3.4-25, 26 it states:

“In addition to noise from train horns, locomotives and crossing bells, wheel squeal on tight radius curves (<10 times the SCRRA/Metrolink locomotive wheel base or 900 feet) can contribute to community noise levels.”

Here is data on the tight-radius rail curves in the UCR neighborhood and for the proposed Citrus Connection are given in, and calculated from, data in the SEA Tech Report C (p. 88, in Appendix B). This data is relevant to the issues of derailment hazards and wheel squeal noise. The data for each curve given in the SEA page just cited includes the length of the curve in feet, the curvature in degrees per 100 feet, and the inches of superelevation (i.e., elevation of the outside rail above the inside rail around the curve, which is used as an aid in counteracting centrifugal forces as the train rounds the curve, and thus affects the amount of wheel squeal). That page also shows the planned Passenger Speed (as well as the lower Freight Speed) along the SJBL segments. Curve 1A is the Citrus Connection, and the other curves listed below are in the UCR neighborhood east of the campus. The radius of a curve is calculated from the degree of curvature by dividing 5,729 by the degree. The standard formula for the federal speed limit for passenger trains around a rail curve (as given in Code of Federal Regulations Title 49, Part 213) is

L12-6

$$V_{max} = \text{square root of the fraction with numerator } (E + 3) \text{ and denominator } \{0.0007d\}$$

where E is the superelevation in inches, d is the degree of curvature in degrees per 100 feet, and Vmax (the maximum permitted velocity) is in miles per hour.



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**Letter 12 (cont'd) - Attachment 1
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Curve	Length	Curvature	Radius	Super-elevation	Vmax	Metrolink planned speed
1A	1,270'	10.00°	573'	2.75"	28.66 mph	30 mph
2B	241'	6.50°	881'	1.5"	31.45 mph	30 mph next to 60 mph
2C	268'	6.50°	881'	1.5"	31.45 mph	30 mph
3B:	955'	9.92°	576'	1.5"	25.46 mph	25 mph next to 30 mph
3C	224'	5.48°	1,045'	0"	27.97 mph	25 mph
3D	231'	9.88°	580'	1.5"	25.51 mph	25 mph
4A:	249'	9.98°	574'	1.5"	25.38 mph	25 mph
4B	158'	6.00°	955'	1.5"	32.73 mph	25 mph
4C:	184'	10.00°	573'	1"	23.90 mph	25 mph
4D:	117'	10.00°	573'	1"	23.90 mph	25 mph
4E:	228'	10.00°	573'	1"	23.90 mph	25 mph
4F:	533'	10.00°	573'	1"	23.90 mph	25 mph
4G:	359'	10.00°	573'	1"	23.90 mph	25 mph
4H	804'	6.10°	939'	1"	30.61 mph	25 mph

L12-6 (cont'd)

With the SEA criterion of <900' radius for what constitutes a tight-radius curve, it can be seen that of these 14 curves, nine are not only tight, but very tight; these nine are listed in the SEA's Table 3.4-8 Summary of Short Radius Locations, which does not list radii or other numerical data. Two more of the curves (2B and 2C) meet the <900' criterion (by a little) but are not listed in Table 3.4-8, and two come close to meeting that criterion. It should also be noted that the SJB/L has steep grades through the UCR neighborhood (as shown in SEA Tech Report C (p. 88, in Appendix B), indeed, as high as 2.6% just south of Spruce St., with grades through the above curves of mostly above 2%, and as high as 2.3% by Curve 4C.

The extent of curvature, especially the fact that it is almost continuous, often curving one way and then the other way with scarcely any room for transition, and its proximity to residences and Hyatt Elementary School, is best seen in SEA Tech Report C Appendix F Figures 42 and 43.

Derailment hazard

The curves are relevant to the issue of hazard of derailment (that's why there is a special federal speed limit, and the greater the degree of curvature (i.e, the tighter the curve), the lower the speed limit, as shown in the formula above.

Here is what the SEA says about derailment hazards, at p. 3.8-11:

“Derailment could cause an accidental spill from the SCRAA/Metrolink train engines or diesel fuel tanks. It should be noted that the BNSF freight history has about 4.5 million freight train miles since 1993 (first full year of operation) and during this time, there have been only three freight train derailments. This equates to about one derailment per 1.5 million train miles or 0.000000667 (STV Incorporated, 2009).

L12-7



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Letter 12 (cont'd) - Attachment 1
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On the SJBL, BNSF operates 11,440 train miles per year. The annual derailment risk is then the product of 0.000000667 (risk per train mile) and 11,440 miles, or 0.00801. This derailment risk equates to about once every 124 years. (STV Incorporated, 2009).

This SEA "analysis" of derailment risk is utterly fallacious. First of all, it is using freight train miles over a much larger portion of the BNSF system than the SJBL (to see that, multiply the 11,440 miles per year times the 18 years since 1993 to get 194,480 miles, far short of 4.5 million miles). Secondly, "during this time" there were many more than "three freight train derailments" over this larger system. In fact, there were 13 BNSF derailments in Riverside County alone since 1993, according to the Federal Railroad Administration Office of Safety Analysis, as shown on their web page <http://safetydata.fra.dot.gov/OfficeofSafety/publicsite/query/inctmap.aspx>. There were three freight train derailments in the UCR neighborhood (one in 2001 scattered overturned grain-filled freight cars near the end of Big Springs Rd, another involved freight cars loaded with lumber). Thirdly, calculating the risk per train mile over even the whole SJBL, much less a larger BNSF system, is simply irrelevant because the danger of derailment depends greatly on the local track conditions, which is obscured by averaging it in with track that is much safer (because straighter and more level and less subject to wear). In the UCR neighborhood, these local track conditions include the very tight and long curves and steep grades to the east and south of the Mt. Vernon crossing, as discussed above, and the accelerated track and tie wear caused by freight traffic under such conditions. Three derailments in 18 years is once every 6 years, not once every 124 years.

L12-7 (cont'd)

The SEA at p. 1-49 states:

"The proposed project does nothing that correlates with an increased potential for derailments. As such, there are no impacts and no mitigation is required. That being said, RCTC is sensitive to public concerns associated with this project and has engaged the services of a railroad design/safety professional to review and assess the situation, and to provide recommendations. These recommendations will be weighed with additional input from the local community before undertaking any supplemental measures.

To be clear, the provision of this supplemental measure is not required to reduce potential impacts to a level of less than significant. To the contrary, the SEA thoroughly analyzed the potential for derailment and concluded that no significant impact would result (see Section 3.8 Hazards and Hazardous Materials). Thus, the provision of any supplemental measure would simply further reduce these already insignificant impacts."

Regarding the SEA claim that "The proposed project does nothing that correlates with an increased potential for derailments.": It was noted in the table above that the planned PVL Metrolink speeds exceed the standard speed limit around tight curves for the long Curve 1A and the long stretch of curves 4C through 4G. For the latter stretch, the planned speed is particularly egregious since a Metrolink train, perhaps 600 feet long or longer, will pass through two or three of the curves simultaneously, with centrifugal forces (not



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**Letter 12 (cont'd) - Attachment 1
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fully compensated for by the very low 1" superelevations – note that for the new Citrus Connection, with the same 10 degrees of curvature, is planned to have 2.75" superelevation) pointing to different sides of the tracks for successive curves. So in fact the proposed project does do something – too-fast passenger trains – that correlates with an increased potential for derailments. The SEA fails to analyze this. The proposal to later weigh supplemental measures to be recommended by "a railroad design/safety professional" constitutes segmentation of the environmental review process. Moreover, the incompetence already displayed in the "one derailment in 124 years" "thorough analysis", and in the claims regarding the jet-fuel pipeline, does not inspire confidence in any such "professional" input.

It should be noted that if the planned Passenger Speed over a segment of the SJBL is say 25 mph, that does not mean that a train's speed will not exceed 25 mph. Trains speed up and slow down for various reasons, including because they have fallen behind or ahead on their schedule. The SEA fails to properly analyze the hazard of derailment of Metrolink trains, including the hazard to the passengers, in particular from speeds exceeding the standard Vmax around the tight curves discussed above..

Also related to passenger train speed, as shown in the SEA Tech Report C (p. 88, in Appendix B), the planned train speed is 60 mph between Marlborough Ave. and Blaine St., sharply transitioning at Blaine St to 30 mph, just before Curve 2B, which, as noted above (although not so noted in the SEA) is in fact a tight-radius curve. The SEA fails to consider the possible impacts of such an abrupt speed change so close to a tight curve with Vmax 31.45 mph.

While as noted the planned passenger train speed is 25 mph in the portion of the UCR neighborhood with the very tight curves, which already exceed the Vmax speed limit there, Table 3.4-9 lists the speed (both inbound and outbound) at the Big Springs cluster (near the end of Big Springs Rd), which is in that very-tight-curve area, as 30 mph. Is it 25 mph or 30 mph there? Either is excessive and dangerous

The Metrolink train speed in Table 4.10-9 is listed as 30 mph for both inbound and outbound, versus 25 mph for the E. Campus View sites, which would have the trains actually accelerating up the steep grade around the long tight curve between the east end of E. Campus View and Big Springs Rd, which would mean increased noise levels.

L12-7 (cont'd)

Wheel squeal noise

The SEA at p. 3.4-23 states

"The prediction of wheel squeal is dependent upon the length of the curve and the rate of speed that the train is traveling along the curve. The "Citrus Connection" curve is the only proposed new curve for the PVL project and, it also represents the longest tight-radius curve along the entire PVL corridor."

and at p. 3.4-25, 26 it states

L12-8



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Letter 12 (cont'd) - Attachment 1
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"In addition to noise from train horns, locomotives and crossing bells, wheel squeal on tight radius curves (<10 times the SCRRRA/Metrolink locomotive wheel base or 900 feet) can contribute to community noise levels."

As already noted, the SEA at p. 3.4-25, 26 states

"In addition to noise from train horns, locomotives and crossing bells, wheel squeal on tight radius curves (<10 times the SCRRRA/Metrolink locomotive wheel base or 900 feet) can contribute to community noise levels."

However, the SEA at p. 3.4-23: states

"Noise from wheel squeal (near the tight radius curve at the proposed "Citrus Connection") was assessed separately since the operation of the PVL train would include wayside applicators as part of the design plans, **which would eliminate noise from wheel squeal for all tight radius curves.**" (emphasis added)

The SEA supports this claim of elimination of wheel squeal at p. 3.4-26:

"As wheel squeal noise can be significant, wayside applicators will be installed as part of project implementation in all areas of the corridor with short radius curves. Wayside applicators apply a friction control material to the top of the rail and the gage face to reduce the metal to metal friction that causes wheel squeal. According to the Transit Cooperative Research Program – "Wheel/Rail Noise Control Manual" (Transportation Research Board, 1997), a report which was sponsored by the FTA, **the use of a petroleum lubricant would reduce squeal while the use of a water lubricant would eliminate squeal.** These steps taken to reduce wheel squeal from the commuter rail operations would also reduce the existing wheel squeal from BNSF freight trains, which do and would continue to operate along the SJBL." (emphasis added)

L12-8 (cont'd)

This is a gross misrepresentation of what the Manual actually says. The "Wheel/Rail Noise Control Manual" that the SEA cites can be downloaded from the following link:

http://onlinepubs.trb.org/onlinepubs/terp/terp_rpt_23.pdf

There is support in the Manual for the SEA's conclusion that "wayside applicators would eliminate noise from wheel squeal for all tight radius curves." Here is the entire section of the Manual (at p. 164) on acoustical benefits.

8.10.2 Acoustical Benefits

Characterizing squeal noise is difficult, because of the intermittent or unpredictable occurrence of squeal. There are two methods: (1) maximum level and (2) root-mean-square, or energy equivalent level, over the duration of curving. The former method addresses the audibility of squeal noise, and also addresses the degree of discomfort experienced by persons located close to the track (e.g., pedestrians at street corners, or transit patrons in vehicles with open windows). The latter procedure addresses the duration and occurrence of the squeal noise, useful for predicting community noise levels such as energy equivalent level (Leq) and day-night level (Ldn). Both peak and energy equivalent measures should be employed, and noise reduction methods should attempt to reduce both.

L12-9

From a practical point of view, the maximum squeal noise level reduction is not as important as elimination or reduction of the duration or



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occurrence of squeal. Once a regenerative system begins to squeal, the amplitude tends to saturate, limited only by material damping and friction in the system. **Still, lubrication does tend to reduce the amplitude and duration of squeal noise, and, thus, is attractive, even if squeal is not entirely eliminated. A lubrication procedure should be deemed at least marginally successful even if it only reduces the occurrence and not the amplitude of squeal. A reduction of the occurrence or duration of wheel squeal by a factor of two will reduce wayside energy equivalent noise levels by 3 dB, even though the maximum level is unaffected.**"

The noise reduction effectiveness of lubrication can be substantial at curved track. Without lubrication, wheel squeal maximum noise levels may exceed 100 dBA (Toronto reports levels as high as 110 dBA, though the measurement distances are not known). With lubrication, passby noise levels have been reduced to those of rolling and auxiliary equipment noise. Thus, typical noise reductions are on the order of 15 to 25 dBA.

An automatic wayside lubricator employed at SEPTA is effective in reducing squeal at a turnaround. Both rails are fitted with flange lubricators, and there is some migration of lubricant to the rail head. Squeal is eliminated for most of the curve. However, at the end of the curve, there is some re-emergence of squeal, attributed to loss of lubricant." (emphasis added)

Thus the gist of the Manual's information on reduction of wheel squeal noise from the use of wayside applicators is that they may be helpful, but the extent of such help is uncertain, and in no way can they be counted on to *eliminate* wheel squeal noise.

The SEA at p. 3.4-26 9below Table 3.4-8) states

"The only location at which the construction of new PVL rail would result in a short radius curve would be the "Citrus Connection" (P-1A). The Citrus Connection curve is also the longest curve along the entire extent of the PVL alignment. This length, along with the required slower train speeds along the curve, would increase the wheel squeal noise exposure time. Therefore, as requested by the FTA, **an analysis of wheel squeal noise was conducted at this location.** The analysis of the noise contribution from wheel squeal was conservatively performed for nearby sensitive residences. A reference SEL of 136 dBA used in the wheel squeal prediction equation was obtained from the FTA Manual, Table 6-7. The resulting analysis indicated that the wheel squeal noise component would result in impacts to residences in the area of Transit Avenue. Predicted project noise levels would surpass the FTA noise impact criteria by one dB. However, as mentioned above, it is important to note that as part of the PVL project, RCTC will include wayside applicators on all short radius curves. These measures would successfully reduce the significance of wheel squeal noise on all segments of the PVL alignment, including the "Citrus Connection" area. As a result, with the wheel squeal noise component successfully

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L12-10

L12-11



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reduced, no noise impacts would result at residences along Transit Avenue.”

Note that this refers to an analysis only to impacts along the Citrus Connection/residences along Transit Ave. However, while the residences along Transit Ave are very close to a portion of the SJBL that will not be part of the PVL, with sound measurements taken at 20 and 30 feet from the SJBL tracks (lines 5 and 24 of Table 3.4-5), which may have prompted the FTA request mentioned, the Transit Ave. residences are far from the Citrus Connection (see SEA Figure 3.4-3 and Google Maps Satellite Photo for Citrus St & Transit Ave.); thus they are not a representative location for analyzing reduction in wheel squeal noise from wayside applicators.

RCTC’s own technical acoustic consultants, ATS consulting, who prepared the 2006 Noise and Vibration Technical Report (Appendix F of SEA Tech Report C) were aware of the problems with predicted reduction of wheel squeal noise from wayside applicators. Thus at p. 10 of the Appendix (= p. 3335 of SEA Tech Report C), it states, in a section on Noise Mitigation Options, that

2. Rail Lubrication: Wheel squeal on tight radius curves can be a particularly annoying community noise. It is usually possible to substantially reduce wheel squeal with wayside applicators that apply a friction control material to the top of the rail and/or a lubricant to the gage face of the rail. Installation of wayside applicators is recommended for all major curves on the PVL. **If the wayside applicators are not sufficient to reduce squeal to an acceptable level, additional reduction may be possible through customized profiling of the rail to reduce the forces required for trains to negotiate the curves.**” (emphasis added)

The SEA fails to analyze this option, simply making a conclusory statement that wayside applicators will eliminate wheel squeal noise from all the tight radius curves.

The SEA fails to provide data as to how much of the existing freight train noise at affected UCR area residential locations (i.e., near tight radius curves) is due to wheel squeal. Hence there is no basis on which to estimate the reduction of that noise from future wayside lubrication applicators.

In addition to the 1997 Wheel/Rail Noise Control Manual report that the SEA cites (but fails to properly convey its content), there is a more recent analysis, citing a great deal of research, all of it since 1997, in “Mitigation of Wheel Squeal and Flanging Noise on the Australian Rail Network”, by D. Anderson and N. Wheatley, in B. Schulte-Werning et al. (Eds.): Noise and Vibration Mitigation, NNFM 99, pp. 399–405, 2008 (copy attached as Exhibit). They state that the more recent practice

“has been to differentiate between tonal “wheel squeal” and the more broad-band metal-on-metal rubbing noise termed “flanging”. Although sharing some features, there are often differences in community response as well as possible differences in the underlying causes and treatments. . . . Rail engineers consider “flanging noise” to arise due to wheel flange contact at the gauge face/gauge corner of the rail. Whether this is true remains to be seen [10], but it is clear that it is gaining

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recognition as a possible separate effect from squeal [2, 11, 12]. Researchers have discussed the frequency characteristics of the two effects [7, 12, 13], although not all agree on the frequency ranges. . . . In the remainder of this paper, the terms “wheel squeal” and “flanging” will be used to differentiate between the effects, while “curve squeal” will be used to describe the combination.” (ibid., p. 400)

The recent research cited by Anderson and Wheatley shows that the results of using wayside applicators is very much a mixed bag. For example, for various locations in Australia, the research shows

“Trackside applicators have been in service at Wollstonecraft since 1997, applying a friction modifier to the top of the rail. Squeal noise complaints are now infrequent here, but complaints continue to increase at other sites, even though friction modifier applicators are installed at many of these locations. Further investigations [19] indicate freight trains are the main squeal noise source in NSW and that friction modifier is only partially effective at mitigation” (ibid, p. 402)

while at a different site,

“Application of friction modifier to the top of the rail was successful.” (ibid, p.402)

while at still more sites,

“Trials with a top of rail friction modifier were not successful . . .

“An Australian research project [13] has developed algorithms for detecting various types of wheel/rail noise, including wheel squeal and flanging. It was developed for on-train monitoring to identify track without effective lubrication, but the same algorithms are now processing wayside noise recordings from simple, low cost, portable battery-powered monitoring systems. This has allowed monitoring for extended periods for minimal cost, which is of particular benefit to studying curve squeal because events can vary randomly between trains, times of day, and meteorological conditions. Numerous studies have now exploited this approach [18], allowing the analysis of thousands of trains at curve sites. . . .

“A temporary speed restriction (from 75 km/h to 40 km/h) on a 315 m radius curve (with 60 kg/m head hardened rail on concrete sleepers) gave a reduction in the number of squeal events, but this was countered by the increased duration of remaining events. At the same curve, extended monitoring was carried out over a 4-month period, spanning the installation, upgrade and duplication of a track-side applicator for top of rail friction modifier. 47% of freight trains generated “moderate” or “severe” squeal with no friction modifier, reducing to 35% with friction modifier, 29% with an improved applicator design, and 24% following the installation of an additional applicator at the mid-point of the curve.

“Monitoring was carried out at a complaint location approximately 25 m from a 240 m radius curve with a 1 in 33 grade. Following the installation of a top of rail applicator, squeal events above 100 dBA were eliminated in coal traffic and reduced by over 50% in container traffic. Flanging noise also reduced considerably, with events above 100 dBA eliminated for all traffic.

“In 2006 an extensive monitoring program over nearly six months involved five simultaneous recording locations spanning four tight reverse curves (300 to 560 m radius). Two track-side applicators for top of rail friction modifier had been

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installed at this location in 2001 and the tests were carried out during the installation of two additional units, intended to improve the coverage of product over the 2 km section. Results showed negligible difference in wheel squeal following the installation of additional applicators and gave a very mixed picture when analysed in terms of particular types of freight train. Some categories showed no change, others showed improvement, while others performed worse. Monitoring at a complaint location 33 m from the 300 m radius curve showed that around 20% of freight trains continue to generate noise levels exceeding 105 dBA." (ibid, 402-3)

Thus there is no evidence that the use of wayside applicators will be effective in reducing the impact of wheel squeal noise in the UCR neighborhood to less than significant. There is a way to measure such potential reduction, as well as the other noise impacts of PVL train operation: install wayside applicators and measure noise levels (including from wheel squeal) during several trial runs of Metrolink cars along the curves in the UCR neighborhood. There appears to be no reason (other than modest expense) that that is not being done. Without that, the community (and decision makers) are left with only suspect and inadequately supported claims as to noise impacts.

One other aspect of the use of petroleum-product based wayside applicators: the petroleum-product residues are discharged into the environment, ending up in the air, water or soil, including in sensitive adjacent areas such a wildlife reserve areas. The SEA fails to consider such impacts.

Jet Fuel Pipeline Hazards

The jet fuel pipeline through the UCR neighborhood is discussed very briefly in the SEA. At page 3.8-2 it is described as a

"six-inch jet fuel transmission pipeline operated by Kinder Morgan. A portion of the jet fuel pipeline extends from the Colton Terminal (2359 South Riverside Avenue) to the MARB (Cactus Avenue). Additional segments of the Kinder Morgan pipeline are located within the SJBL ROW from Service Road southward to Watkins Drive, and then reconnecting near Box Springs Boulevard to Cactus Avenue. A portion of the Kinder Morgan pipeline, within the PVL corridor, runs parallel to Hyatt Elementary School, within approximately 50 feet to the west.

Whoever wrote that can't seem to get it right. The same passage appeared in the DEIR at p. 4.7-1 but with Highland Elementary School instead of Hyatt Elementary School. The pipeline does run by Highland Elementary School as described. The SEA needs to clarify how close it is to each of the schools, as well as residences, where it is between the schools or residences and the tracks, and how close it is to the tracks at all such locations.

The SEA (at Tech Report G p. 52 et seq.) states

"Kinder Morgan petroleum pipeline markers were observed along the railroad alignment to the north of Spruce Street, which indicated the petroleum pipeline

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was located within the Corridor, parallel to the east side of the railroad tracks. [...] Kinder Morgan petroleum pipeline markers were observed along the northern portion of the proposed UCR Station to Valencia Hill Drive, where the pipeline appears to be redirected south of the alignment. [...] A Kinder Morgan pipeline marker was observed along the east side of the Corridor near Poarch Road.”

These sites are marked on Tech Report G Plate 2.

The SEA Tech Report G, at p. 71, states that

“At the time of Kleinfelder’s [RCTC’s Hazards consultant’s Site reconnaissance, Kinder Morgan pipeline markers were observed at various locations to the northeast of the intersection of Villa Street and the railroad tracks, and at numerous locations along the Corridor. Kleinfelder submitted a written request to Mr. Don Quinn of Kinder Morgan requesting specific information pertaining to the Site and whether releases have occurred along the pipeline in the vicinity of the Site. In a June 5, 2008 letter from Mr. Don Quinn, Manager of Pipeline Relations, Mr. Quinn provided pipeline alignment maps for Kinder Morgan’s high pressure petroleum products pipelines in the vicinity of the Corridor. According to the letter, the pipeline is a 6-inch pipeline. Mr. Quinn indicated that there are no known environmental issues concerning the pipeline.”

Note that Kleinfelder’s questions pertained only to “the Site”, presumably referring just to the site near Villa St. As for the pipeline alignment maps, a search of the SEA, including its Hazards Technical Report, found no map. More important, the SEA takes at his word the assurances of a Kinder Morgan official to conclude the absence of hazard. Thus, the SEA, in a section labeled Accident Conditions with Potential to Release Hazardous Materials at p. 3.8-11, states

“The pipelines located within the existing rail ROW were installed in accordance with the safety requirements of the owners. The pipelines are buried at a minimum of three feet below ground surface, or deeper if they are closer than 40 feet to the rail line, and/or are encased. There have been no reported leaks from the previously mentioned pipelines within or adjacent to the PVL corridor. There would not be an adverse affect on the environment, on-site workers, or the public during operation and maintenance of the PVL trains in these areas; therefore, there will be less than significant impacts through the implementation of the project from these pipelines.”

This is simply false. Consider the following testimony received in a Dec. 20, 2010 email from Mrs. Merial Everett, a UCR neighborhood resident (but not close to the SJBL).

To Whom It May concern:

In May 2002 we were enlarging our patio and enclosing part of it with a concrete wall. During this process our contractor discovered a large pipe very close to the surface. He shut the project down while he searched for the owner of the pipeline. The city had no record of such a pipe. After much detective work, the contractor discovered that the pipe belonged to Kinder Morgan. It became clear after engineers with Kinder Morgan came to our house, that they were not aware

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that the pipeline ran through our yard. It ran through the gully and then made a curve up into our yard, through our yard and then up the hill in property that now belongs to UCR. We tried to get them to change the trajectory of the pipeline through the gully, but they refused and agreed to bury it five feet deep through our yard. It was clear that the line was not checked regularly or they would have known exactly where the line was buried. In the meantime, the jet fuel line carrying fuel to support the March Air Force Base planes was halted. Kinder Morgan was under a lot of pressure to get the line properly buried. All jet fuel was being supplied to the base by truck.

The fuel line was a great hazard to us and to our neighborhood. We had a large tree removed prior to putting in the first patio. It was just pure luck that the line wasn't ruptured by the extensive digging and grinding to get the roots out to prepare for the patio.

In September 2002 the pipeline burial was completed. There are now lots of signs identifying where the pipeline is located. We were never happy with the fact that they left the pipeline buried in our yard. It is our assumption that they refused to move the pipeline out of our yard because it would have meant a much longer construction process and would have cost Kinder Morgan much more money.

Respectfully submitted:

Merial Everett
268 West Broadbent Drive
Riverside, CA 92507

It is clear from Mrs. Everett's testimony that Kinder Morgan doesn't really know precisely where (or in whose property) the pipeline is located nor does it really know the condition of the pipeline, including the depth to which it is buried throughout the corridor. Based on Mrs. Everett's letter it is in fact clear that the pipeline is not properly buried at least in some places, and that Kinder Morgan officials, regardless of facts, will claim to know much about the pipeline depth and condition and little about any environmental hazards, perhaps keeping in mind that any required corrective measures would be costly for Kinder Morgan. The letter shows that the situation in the Everetts' yard was a real environmental hazard, even though the Kinder Morgan official "indicated that there are no known environmental issues concerning the pipeline."

JCR neighborhood residents report that closer to the tracks elsewhere in the neighborhood, in a gully in open space south of Hyatt Elementary School, erosion had exposed the pipeline (this was before the recent rainstorm event), but that instead of properly burying the exposed portions of the pipeline, Kinder Morgan merely painted them yellow. (see attached photo showing a length of this exposed yellow pipeline)

Reliance on Kinder Morgan for information about the pipeline is further impugned by the following, from the web site

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<http://thetyee.ca/News/2005/08/23/KinderMorgan/>
from Aug. 23, 2005

"Kinder Morgan, the company that hopes to take over the B.C. gas utility Terasen, is "the poster child for pipeline problems," according to Carl Weimer, executive director of the Bellingham, Washington--based Pipeline Safety Trust.

"Weimer says Kinder Morgan has a poor safety record, which he attributes to the company taking over a huge network of pipelines in a short time frame. "They've expanded rapidly and a lot of the pipelines they took over are older pipelines. And that has undercut some of the safety," he says.

"Weimer, whose trust is funded by a court-ordered endowment created after an Olympic Pipe Line Co. pipeline in Bellingham burst and then exploded in 1999, killing three and destroying Whatcom Creek, says ongoing internal inspection is the best way to stay on top of pipeline maintenance. Weimer adds that Terasen has a good record on this front. "Hopefully the personnel won't go through a dramatic change" during the takeover, he says, given Terasen staff's credible record.

"According to Terasen, many of their pipelines are approaching 50 years of age, and some, particularly under Vancouver, are as old as 70 years. Many of the lines Kinder Morgan took over in the U.S. are around 50 years old, says Weimer, which has resulted in several failures on its network."

This is expert testimony by Mr. Weimer The Kinder Morgan jet fuel pipeline through the UCR neighborhood is also over 50 years old (going back to the heyday of the March SAC base and already here before most residences in the neighborhood were built), and thus also especially subject to failure. Moreover, the Riverside Unified School District reported at the May 17, 2010 Public Hearing that the depth of the pipeline along the rail line near Highland School is only about two feet and asked that it be buried there to a depth of 10 feet.

Thus the SEA's statement that the "The pipelines are buried at a minimum of three feet below ground surface, or deeper if they are closer than 40 feet to the rail line, and/or are encased" is false, and the SEA fails to properly analyze the hazards associated with the pipeline.

There are two types of hazard from the pipeline that the SEA failed to analyze, both related to the fact that this is older pipe of uncertain integrity and questionable depth. One concerns hazards related to the proposed construction work on the tracks (replacement of rail, ties and ballast) in those places where the pipeline is close to the tracks, including near Highland Elementary School. The second type of hazard is the risk to the integrity of the pipe caused by the vibration from passing trains, including the vibration from the project's dozen Metrolink trains a day. A proper analysis requires precise information, obtained independently of Kinder Morgan, as to the age, depth, material, and condition of the pipeline. Appropriate mitigation measures include burying the pipeline at substantially greater depth and encasing it, in those locations where it is adjacent to the

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tracks and near a school, childcare center, residence, church or wildfire-prone area, and an ongoing independently-monitored internal inspection program for the pipeline.

It should be noted that near Highland Elementary School the pipeline is east of the tracks, farther south at Mrs. Everett's property it is west of the tracks, and farther south it is again east of the tracks. Thus the pipeline crosses under the tracks in at least two places, unspecified in the SEA, and at those places is especially subject to rupture from either construction work or train vibration. The SEA fails to consider this.

Last year's San Bruno disastrous gas pipeline explosion is a reminder to take the Kinder Morgan pipeline hazard seriously. Big corporations can be more interested in cost control than in public safety.

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Construction Noise

In the Project Details Section 1.7.1 Track Improvements, p. 1-15, the SEA says "MP 1.40 to MP 5.20 (approximately Marlborough Avenue to Poarch Road): This 3.8-mile segment of track would be upgraded with new concrete ties, new welded rail, and new ballast as required."

It should be noted that this segment, from a point between Marlborough and Spruce to a point north of Poarch/Gernert Rds, is the segment through the UCR neighborhood, with its hundreds of residences near the tracks, some of them as close as about 60 ft from the tracks (as shown in the SEA noise measurement Tables 3.4-5, 3.4-5 and 3.4-7 and in the site descriptions in SEA Tech Report C Appendix F, p. 31 et seq.). The extent of construction on the tracks is further clarified at SEA p. 1-49, where it states

"Project implementation will improve operating conditions by either upgrading (replace ballast, ties, and rail) or replacing existing track throughout its length, including along adjoining Hyatt Elementary School. The one exception is the two mile stretch between Poarch Road and River Crest Road where the track will be rehabilitated (resurfacing and spot tie replacements)."

(Hyatt Elementary School is in the UCR neighborhood).

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SEA p. 3.4-31 states that

"Although the overall length of construction would be approximately 18 months, disturbances at individual receptor locations would not last for more than several months.... According to the PVL Construction Staging Plan, some **nighttime construction is scheduled to occur specifically for new track layout**. Because local codes allow construction only during day-time hours, any project-related night-time construction activity would require the project to obtain from the municipality written consent for an exemption, or variance to these codes." (emphasis added)

Such variances while solving legal problems would result in significant environmental impacts since noise levels would exceed jurisdictional standards.

SEA p. 3.4-32 states



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“Other locations [than for pile driving associated with the bridge replacements near the South Perris Layover Facility] along the alignment would also be potentially impacted by construction noise. **To determine whether construction of the proposed PVL project would result in any noise impacts to sensitive receptors at these locations, an FTA general assessment procedure for construction noise was conducted for a representative residential location at 228 C Street in Perris. This location was chosen because it would be representative of a property which would be affected by typical track laying construction** represented by activities such as culvert modifications and embankment work as well as track and road crossings construction. ...

Importantly, the chosen so called “representative property” is very far from the tracks, and so will not be nearly as much affected by the construction noise as homes in the UCR neighborhood much closer to the tracks. Indeed the house at 228C Street, between 2nd and 3rd Sts in Perris, is so far from the tracks that the noise level is the same with two freight trains in a day as it would be without any trains (SEA Figure 1.7-12 (p. 77) and SEA Tech Report C Appendix F, p. 39). Noise measurements for 228 C. St are listed in SEA Tables 3.4-6, for 2005, and 3.4-7, for 2009, with listed distances from the tracks of 240 feet and 244 feet. As seen in the aerial photo in SEA Figure 1.7-12, the residence there is very close to the property line, with perhaps a 20 foot setback, so that the property line is at about 224 feet from the tracks. The SEA (p. 3.4-32) provides the following information about the construction noise at that property:

“As a result, based on construction noise projections shown in Noise and Vibration Technical Report C, the combined noise level for two of the noisiest pieces of construction equipment **would result in a construction noise level of 79 dBA at the property line of the residential home.** This would be below the FTA construction noise criteria described in Chapter 12 of the FTA Manual. It would also be below the 80 dB noise level set by Section 7.34.060 of the Perris General Plan.”(emphasis added)

In arriving at this 79 dBA figure, the SEA is using the following formula (SEA Tech Report C, p. 45):

“Noise levels are predicted using the following equation for each construction piece
 $Leq (equip) = E.L. + 10 Log(U.F) - 20 log(D/50) - 10Glog(D/50)$
(as given in the FTA Noise and Vibration Manual, here correcting SEA typos)
where,

$Leq (equipment) =$ the Leq at a receiver resulting from the operation of a single piece of equipment

$E.L. =$ The noise emission level of a particular piece of equipment

$U.F. =$ The usage factor that accounts for the fraction of time that a piece of equipment is in use over a specified time period

$D =$ distance from the receiver to the piece of equipment

$G =$ accounts for topography and ground effects

($G = 0$ over hard ground, per FTA Manual)

Since G is taken to be 0, the term here that depends on distance from the receiver is $-20 log(D/50)$. For $D = 224$ at 228 C St., Perris,

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$$- 20 \log(D/50) = - 20 \log(224/50) = - 20 \log(4.48) = - 20(0.651) = - 13.02$$

On the other hand, many of the residences in the UCR neighborhood (including those along E. Campus View Dr., where the railroad right of way is only 100 feet wide, as well as Nisbet Way residences and Citrus St. residences) have property lines only 50 feet (or even slightly less) from the tracks. For these residences, with D = 50, one has

$$-20 \log(D/50) = -20 \log(1) = 0$$

This is a huge 13 dBA difference in applying the formula at the SEA's so-called "representative residential location" and such locations in the UCR neighborhood. Adding this 13 dBA to the 79 dBA at the Perris location, we get 92 dBA, well in excess of even the extremely annoying cutoff levels of Leq dBA levels of 90 day and 80 night listed in the FTA chart at SEA Tech Report C p. 46 and cited at SEA p. 3.4-32.

Moreover, in choosing a so-called "representative residential site" that is in Perris and then noting the 79 dBA is below an 80 dBA level in the Perris General Plan, the SEA ignores that the City of Riverside has a much more stringent restriction on noise, including construction noise. SEA Tech Report C, p. 43, Table 15: City of Riverside – Exterior Noise Standards, notes that for the residential land use category, the Noise Level standard for Night (10 p.m. to 7 a.m.) is 45 dBA and for Day (7 a.m. to 10 p.m.) is 55 dBA, with certain limited exceedance allowed for extremely short periods.. Tech Report C then states, at p. 44,

"Section 7.35.010 [of the Riverside Municipal Code] specifically addresses construction-related activities. Construction work that exceeds the allowable noise standards in Table 15 may not occur between the hours of 7 PM and 7 AM on weekdays, between 5 PM and 8 AM on Saturday, or at any time on Sunday or federal holidays."

This is **grossly misleading**. What Section 7.35.010 actually says pertaining to construction is

"B. It is unlawful for any person to make, continue, or cause to be made or continued any disturbing, excessive or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity. The following acts, among others, are declared to be disturbing, excessive and offensive noises in violation of this section:

5. Construction: Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, grading or demolition work between the hours of 7:00 p.m. and 7:00 a.m. on week days and between 5 p.m. and 8 a.m. on Saturdays or at any time on Sunday or federal holidays such that the sound therefrom creates a noise disturbance across a residential or commercial property line **or at any time exceeds the maximum permitted noise level for the underlying land use category**, except for emergency work or by variance.

This section does not apply to the use of domestic power tools." (emphasis added)

In other words, construction noise that is disturbing is **prohibited not** only at night, but during daytime as well. Exceeding the municipal noise standards even during the daytime, even if it were to be allowed with or without a variance, and even if it does not exceed the extremely high dBA levels in the FTA noise criteria listed in Technical Report C (p. 46, Table 16), is the issue. The issue is not whether or not the FTA Construction

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Noise Criteria are violated (although there is substantial evidence that they will be, as shown above), but whether there will be a significant noise impact on residents by community standards as exemplified in the Municipal Code. Actually, the FTA Manual, at p. 207, regarding Qualitative Assessments for construction noise, states that (among other things) there should be "Commitments to limit noise levels to certain levels, including any local ordinances that apply" (emphasis added) as well as "monitoring of noise". It appears that there no such commitment and no such monitoring provided by the Project. Moreover, merely complying with daytime code requirements does not reduce the environmental impact, it merely eliminates legal liability as a nuisance.

As noted above, the SEA states that "According to the PVL Construction Staging Plan, some nighttime construction is scheduled to occur specifically for new track layout." An excuse for nighttime construction, and more detail, is given at SEA p. 3.12-6:

"Construction

The work would be performed in a manner that allows freight deliveries to continue while the PVL improvements are being undertaken. Freight delivery schedules would be adjusted to accommodate the work, balancing the need to support business activity of the freight shippers/receivers with the need to remove old track and install new track. Some construction work may be performed at night or on weekends and some train operations may shift to nights

or weekends to accomplish the project schedule. In the event that nighttime and weekend work are determined necessary, coordination with the affected local jurisdictions would be undertaken." (emphasis added)

This statement that "some train operations may shift to nights or weekends" raises yet another environmental impact that the SEA fails to analyze. And as regards to any temporary inconvenience to BNSF or freight shippers/receivers, rather than place the additional burden of nighttime construction noise on local residents, BNSF and freight shippers/receivers can live with interruptions, as they did for a couple of weeks after storm damage from the recent storm event of Dec. 20, 2010 interrupted regular freight traffic on the SJBL. And regarding "coordination with the affected local jurisdictions" whether the noise is by day or by night, merely complying with code requirements does not reduce the environmental impact, it merely eliminates legal liability as a nuisance. Similarly, the use of a variance or other such waiver does not diminish the environmental impact, just the legal liability for nuisance.

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Train Noise: The SEA's Predicted Ldn levels are unrealistic

The SEA, in its Table 3.4-9 and 3.4-10, lists Predicted Ldn dBA for a number of sites (or site clusters). One of the sites listed there is called Big Springs. This is the same as what is called the Box Springs Cluster in the Noise Receptor Maps, and consists of 4 residences southerly of the east end of Big Springs Rd, all adjacent to the SJBL ROW. The residence at the north end of the cluster is 396 E. Big Springs Rd, i.e., Site 6 in the 2005 Noise Measurements. The 2005 study lists a distance of 90 feet from the tracks,

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while Table 3.4-9 lists 120 feet, but Table 3.4-9 uses the same 62 dBA figure for its Existing Ldn as that in the 2005 measurements (Table 3.4-6).

The Predicted Ldn for this Big Springs/Box Springs site is listed as 57.3 dBA, whereas from the 2005 study the Ldn without trains is 54 dBA and with 2 trains a day is 62 dBA. Thus the addition of 2 freight trains and 12 Metrolink trains a day is only projected to result in an Ldn increase from 54 dBA to 57.3 dBA, and the addition of 12 Metrolink trains a day to an existent 2 freight trains a day is actually projected to result in an Ldn decrease from 62 dBA to 57.3 dBA. **What can account for such a modest Ldn increase in the no-freight scenario, and a significant decrease in the 2-freights-a-day scenario, each with the addition of 12 Metrolink trains, four of them at night with it 10 dBA nighttime Ldn penalty?**

First of all, the Table lists an impact of "None" for this site, and no mitigation, i.e., no sound insulation or noise barrier. Indeed, the closest noise barrier is the E. Campus View sound wall, on the other side of the tracks, a considerable distance away but if anything reflecting noise to the Big Springs site (so tending to increase the dBA there rather than decrease it). There is already continuous welded rail there, so track improvements will not account for the mysteriously low predicted Ldn. Reduction of horn noise is not a factor since the SEA does not propose quiet zones and anyway the site is about a half mile from the nearest grade crossing at Mt. Vernon. There are tight curves in the area, and hence existing curve squeal, but the contribution of that to the Ldn at this site has not been quantified, and anyway the reduction in such noise attributable to the planned wayside applicators is, as shown above, at best questionable.

So there is no explanation for the SEA claim, in this Table, that the ADDITION of 12 Metrolink trains per day (4 of them at night) to the existing 2 freight trains a day will REDUCE the Ldn from the Table's Existing 62 dBA to 57.3 dBA.

Similarly, for the multifamily residence cluster Watkins 3, Table 3.4-9 lists an existing Ldn of 66 dBA and a projected Ldn of 53.9 dBA. What can account for this huge reduction? Some of it would arise from replacement track improvement, upgrading to continuous welded rail. No sound wall or sound insulation is proposed for this site, and wheel squeal is not an issue there. However, a sound wall is proposed on the other side of the tracks, and train noise would be reflected from that wall to this site, increasing the Ldn. Thus again there is no adequate explanation (even with track improvement) for the SEA claim the ADDITION of 12 Metrolink trains per day (4 of them at night) will REDUCE the Ldn from the existing 66 dBA to 53.9 dBA, a huge reduction of over 12 dBA.

This shows that the Predicted Ldn figure for these site, and thus probably for other sites, is preposterous.

This shows that something is very wrong with the calculation of the SEA's Predicted Ldn figures and thus with its claimed Impact Thresholds. The calculations need to be redone after taking actual measurements on site of Metrolink train noise.

L12-15 (cont'd)



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In addition, claims of mitigation by providing additional insulation or improved windows are inaccurate. These claims ignore the fact that given the climate of the area, often windows are left open, thus negating the value of the mitigation. Additionally this mitigation does nothing to reduce outside noise levels which remain significant and reduce the usability of outdoor spaces for the area residents.

L12-15 (cont'd)

Section 4(f) and Park Access

For generations there has been a well-used hiking trail crossing the tracks and connecting what became the County's Box Springs Reserve and the City's Islander Park. This trail connection can be seen clearly in the aerial photo at SEA Tech Report C Appendix F p. 129 (= 454 of the Tech Report), Figure 42. (in the photo, the trail across the track is just to left of the "940=00" marking on the photo.

This trail joins the County's Box Springs Mountain Reserve on the north side of the tracks with the City's Islander Park on the south side of the tracks, (and also joins the main portion of Box Springs Mountain Reserve to the north of the tracks with a smaller portion along the south side of the tracks). Runners, hikers, dog walkers, bicyclists, adults and children of all ages, use the two parks (both of which are open space parks in essentially natural condition) as a single park connected by this trail. This trail is the only connection between the two parks. Without using this connection, to get from Islander Park to Box Springs Reserve by foot, one would have to walk (perhaps a quarter mile) to Linden St., then west about a tenth of a mile to Mt. Vernon Ave., then north on Mt. Vernon a quarter mile to Blaine St, then east on Blaine St. perhaps a half mile, then south perhaps a quarter mile to get to the part of the park near the tracks. Thus without this trail connection, access to and from the two parks (while not totally denied) is certainly significantly restricted.

L12-16

There is another trail across the tracks that is also relevant, part of the trail to the "Big C" on Box Springs Mountain. The Big "C", on what is UCR's Box Springs Reserve (part of the University of California's Natural Lands System) was constructed in about 1956 as a symbol of UCR. The trail to reach it, which of necessity crosses the tracks, has been in continuous use since by generations of UCR students and others. (This trail is also visible in the Figure 42 photo cited above.) Without this access across the tracks, the only way to reach the Big "C", or the University's Box springs Reserve, would involve a detour miles-long detour. Thus again, without this trail access to the Big "C": and to the Univerisity's Land Reserve is certainly significantly restricted.

There is yet another piece park-related land that would be impacted. The County owns an undivided part interest in a parcel of about 24 acres adjacent to the SJBL right of way on its eastern boudary and extending north about 990 feet from the section line (which the line of Big Springs Rd) . This undivided interest was accepted by the County Board of Supervisors in 1976, with a deed restriction that it was for public park use. Trails across the parcel are much used by hikers, dog walkers, etc. Without crossing the tracks, there is



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no public access to this parcel. The standard way to reach it is by the same trail to the Big "C", which crosses a part of this parcel.

Section 4(f) generally prohibits the "use" of "publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge". One of Section 4(f)'s criteria for "use" is "constructive use", which it defines as

"the proximity of a transportation facility results in impacts so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired."

The impact considered in the present letter is the restriction to access to and from public parks. The SEA at p. 3.10-11 claims

"Access to and from public parks and recreation areas would not be restricted by the proposed project. ... The noise and vibration study prepared for the PVL determined that none of the parks adjacent to the rail corridor would be impaired so as to preclude the use and enjoyment by area residents, and therefore no constructive use of parks or recreation areas would occur as a result of the PVL." (emphasis added)

and, at p. 3.10-14

"As defined by Section 4(f), no direct, temporary, or constructive use would occur as a result of the PVL project, and therefore no mitigation measures are required."

The public use of above-described trails giving access to, from and between parks and reserves would be impacted by the passage of Metrolink Trains, much more frequent (12 a day vs. 2 a day, according to the SEA) and faster (25 mph vs. about half that) than freight trains, thus creating a safety hazard for users of the trails, and this impaction constitutes constructive use, and thus mitigation measures *are* required

Fortunately, simple and effective mitigation measures are available. RCTC could construct an underpass, a soft-bottomed arched culvert, under the tracks at each of the above described trail crossings. This is entirely feasible inasmuch as the tracks at or near those locations are on a very high embankment. Not only would such underpasses substantially benefit the park and reserve users, they would also be a benefit to wildlife, especially significant because of the parks/reserves involved are natural areas.

An alternative to the suggested mitigation would be for RCTC to try to close off the trail connections by gates or drainage construction, which would likely be resisted vigorously by trail users, resulting in ongoing conflict. And let RCTC not talk about trespassing, since their tenant BNSF has freely trespassed over adjacent land, private and park, when it suited their convenience in doing work on the tracks.

Alternatives and Environmental Justice

This Project calls for spending a couple of hundred million dollars for a small number of passengers. These passengers will be people who can afford the high price of train tickets and who will probably have an automobile to get them to one of the far-apart stations.

L12-16 (cont'd)

L12-17



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Poor people won't be able to afford the high price of a train ticket and many won't have a car. Poor people are largely dependent on local bus service, and yet the level of local bus service in the county is abysmal. As a matter of economic justice, RCTC should spend the vast amount of money slated for the PVL instead on providing a fully adequate local bus service. This should be considered as one of the alternatives to the Project. Such an alternative, in addition to promoting environmental justice, would reduce the amount of automobile use (many people would take bus instead) thus benefiting air quality and traffic.

L12-17 (cont'd)

Public Controversy

CEQ Regulations for Implementing NEPA, Sec. 1508.27 states that in evaluating the severity of impact, the following should be considered:

“4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.”

A decision to proceed with the PVL Project, as presently proposed, is in fact highly controversial (and not just likely to be). Evidence of this is what happened at a special evening public hearing held in May, 2010 at the UCR Extension Center. This hearing was held because UCR area residents demanded it since the downtown location a daytime hour of a previous hearing made it difficult for them to attend. Despite the fact that the hearing was held on short notice and was not held in the UCR neighborhood proper but rather on the other side of the freeway and with limited parking, over 100 people attended in a standing-room-only crowd overflowing into the hallway. Except for one person from Perris, all vociferously opposed the project, with 37 people, including Riverside Unified School District (RUSD) officials and school teachers and children, spoke opposing the project. Moreover, the RUSD has submitted lengthy letters opposing the project in its present form, and the its board has voted to oppose the project and litigate against it if necessary. All of this opposition is based on the effects on the quality of the residents' and schools' environment, particularly from noise and hazards. And all this was before people were even aware of planned nighttime construction and 60 mph trains in their neighborhood.

L12-18

Sincerely,

Johnson & Sedlack

By:

Raymond W. Johnson, Esq. AICP



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UCR neighborhood residents report that closer to the tracks elsewhere in the neighborhood, in a gully in open space south of Hyatt Elementary School, erosion had exposed the pipeline (this was before the recent rainstorm event), but that instead of properly burying the exposed portions of the pipeline, Kinder Morgan merely painted them yellow. (see attached photo showing a length of this exposed yellow pipeline)

} L12-19





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RAYMOND W. JOHNSON, Esq. AICP
26785 Camino Seco
Temecula, CA 92590
(951) 506-9925
(951) 506-9725 Fax
(951) 775-1912 Cellular

} L12-20

Johnson & Sedlack, an Environmental Law firm representing plaintiff environmental groups in environmental law litigation, primarily CEQA.

City Planning:

Current Planning

- Two years principal planner, Lenexa, Kansas (consulting)
- Two and one half years principal planner, Lee's Summit, Missouri
- One year North Desert Regional Team, San Bernardino County
- Twenty-five years subdivision design: residential, commercial and industrial
- Twenty-five years as applicants representative in various jurisdictions in: Missouri, Texas, Florida, Georgia, Illinois, Wisconsin, Kansas and California
- Twelve years as applicants representative in the telecommunications field

General Plan

- Developed a policy oriented Comprehensive Plan for the City of Lenexa, Kansas.
- Updated Comprehensive Plan for the City of Lee's Summit, Missouri.
- Created innovative zoning ordinance for Lenexa, Kansas.
- Developed Draft Hillside Development Standards, San Bernardino County, CA.
- Developed Draft Grading Standards, San Bernardino County.
- Developed Draft Fiscal Impact Analysis, San Bernardino County

Environmental Analysis

- Two years, Environmental Team, San Bernardino County
 - Review and supervision of preparation of EIR's and joint EIR/EIS's
 - Preparation of Negative Declarations
 - Environmental review of proposed projects
- Twenty years as an environmental consultant reviewing environmental documentation for plaintiffs in CEQA and NEPA litigation



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Raymond W. Johnson, Esq. AICP

Representation:

- Represented various clients in litigation primarily in the fields of Environmental and Election law. Clients include:
 - Sierra Club
 - San Bernardino Valley Audubon Society
 - Sea & Sage Audubon Society
 - San Bernardino County Audubon Society
 - Center for Community Action and Environmental Justice
 - Endangered Habitats League
 - Rural Canyons Conservation Fund
 - California Native Plant Society
 - California Oak Foundation
 - Citizens for Responsible Growth in San Marcos
 - Union for a River Greenbelt Environment
 - Citizens to Enforce CEQA
 - Friends of Riverside's Hills
 - De Luz 2000
 - Save Walker Basin
 - Elsinore Murrieta Anza Resource Conservation District

Education:

- B. A. Economics and Political Science, Kansas State University 1970
- Masters of Community and Regional Planning, Kansas State University, 1974
- Additional graduate studies in Economics at the University of Missouri at Kansas City
- J.D. University of La Verne. 1997 Member, Law Review, Deans List, Class Valedictorian, Member Law Review, Published, Journal of Juvenile Law

Professional Associations:

- Member, American Planning Association
- Member, American Institute of Certified Planners
- Member, Association of Environmental Professionals



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Raymond W. Johnson, Esq. AICP

Johnson & Sedlack, Attorneys at Law

26785 Camino Seco
Temecula, CA 92590
(951) 506-9925

12/97- Present

Principal in the environmental law firm of Johnson & Sedlack. Primary areas of practice are environmental and election law. Have provided representation to the Sierra Club, Audubon Society, AT&T Wireless, Endangered Habitats League, Center for Community Action and Environmental Justice, California Native Plant Society and numerous local environmental groups. Primary practice is writ of mandate under the California Environmental Quality Act.

Planning-Environmental Solutions

26785 Camino Seco
Temecula, CA 92590
(909) 506-9825

8/94- Present

Served as applicant's representative for planning issues to the telecommunications industry. Secured government entitlements for cell sites. Provided applicant's representative services to private developers of residential projects. Provided design services for private residential development projects. Provided project management of all technical consultants on private developments including traffic, geotechnical, survey, engineering, environmental, hydrogeological, hydrologic, landscape architectural, golf course design and fire consultants.

San Bernardino County Planning Department

Environmental Team
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

6/91-8/94

Responsible for coordination of production of EIR's and joint EIR/EIS's for numerous projects in the county. Prepared environmental documents for numerous projects within the county. Prepared environmental determinations and environmental review for projects within the county.

San Bernardino County Planning Department

General Plan Team
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

6/91-6/92

Created draft grading ordinance, hillside development standards, water efficient landscaping ordinance, multi-family development standards, revised planned development section and fiscal impact analysis. Completed land use plans and general plan amendment for approximately 250 square miles. Prepared proposal for specific plan for the Oak Hills community.



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Raymond W. Johnson, Esq. AICP

San Bernardino County Planning Department

North Desert Regional Planning Team
15505 Civic
Victorville, CA
(619) 243-8245

6/90-6/91

Worked on regional team. Reviewed general plan amendments, tentative tracts, parcel maps and conditional use permits. Prepared CEQA documents for projects.

Broadmoor Associates/Johnson Consulting

229 NW Blue Parkway
Lee's Summit, MO 64063
(816) 525-6640

2/86-6/90

Sold and leased commercial and industrial properties. Designed and developed an executive office park and an industrial park in Lee's Summit, Mo. Designed two additional industrial parks and residential subdivisions. Prepared study to determine target industries for the industrial parks. Prepared applications for tax increment financing district and grants under Economic Development Action Grant program. Prepared input/output analysis of proposed race track. Provided conceptual design of 800 acre mixed use development.

Shepherd Realty Co.

Lee's Summit, MO

6/84-2-86

Sold and leased commercial and industrial properties. Performed investment analysis on properties. Provided planning consulting in subdivision design and rezoning.

Contemporary Concepts Inc.

Lee's Summit, MO
Owner

9/78-5/84

Designed and developed residential subdivision in Lee's Summit, Mo. Supervised all construction trades involved in the development process and the building of homes.

Environmental Design Association

Lee's Summit, Mo.
Project Coordinator

6/77-9/78

Was responsible for site design and preliminary building design for retirement villages in Missouri, Texas and Florida. Was responsible for preparing feasibility studies of possible conversion projects. Was in charge of working with local governments on zoning issues and any problems that might arise with projects. Coordinated work of local architects on projects. Worked with marketing staff regarding design changes needed or contemplated.



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Raymond W. Johnson, Esq. AICP

City of Lee's Summit, MO

220 SW Main

Lee's Summit, MO 64063

Community Development Director

4/75-6/77

Supervised Community Development Dept. staff. Responsible for preparation of departmental budget and C.D.B.G. budget. Administered Community Development Block Grant program. Developed initial Downtown redevelopment plan with funding from block grant funds. Served as a member of the Lee's Summit Economic Development Committee and provided staff support to them. Prepared study of available industrial sites within the City of Lee's Summit. In charge of all planning and zoning matters for the city including comprehensive plan.

Howard Needles Tammen & Bergendoff

9200 Ward Parkway

Kansas City, MO 64114

(816) 333-4800

Economist/Planner

5/73-4/75

Responsible for conducting economic and planning studies for Public and private sector clients. Consulting City Planner for Lenexa, KS.

Conducted environmental impact study on maintaining varying channel depth of the Columbia River including an input/output analysis. Environmental impact studies of dredging the Mississippi River. Worked on the Johnson County Industrial Airport industrial park master plan including a study on the demand for industrial land and the development of target industries based upon location analysis. Worked on various airport master plans. Developed policy oriented comprehensive plan for the City of Lenexa, KS. Developed innovative zoning ordinance heavily dependent upon performance standards for the City of Lenexa, KS.



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Letter 12 (cont'd) - Attachment 3
Johnson & Sedlack - Raymond W. Johnson
January 6, 2011

Toads/Frogs and Noise/Vibration From Trains

"The inner ears of frogs and toads (anurans) are known to be sensitive to both airborne sound and substrate borne vibration." Edwin R. Lewis, et. al., *Do Male White-Lipped Frogs Use Seismic Signals for Intraspecific Communication?*, AMER. ZOOL., 41:1185-1199 (2001) (<http://icb.oxfordjournals.org/cgi/content/full/41/5/1185>)

"The substrate could be 'the ground', or a plant leaf or stem, or the surface of water, or a spider's web, or a honeybee's honeycomb. Animals moving on these substrates typically create incidental vibrations that can alert others to their presence. They also may use behaviors to create vibrational waves that are employed in the contexts of mate location and identification, courtship and mating, maternal care and sibling interactions, predation, predator avoidance, foraging, and general recruitment of family members to work. In fact, animals use substrate-borne vibrations to signal in the same contexts that they use vision, hearing, touch, taste, or smell." Peggy S. M. Hill, *How do Animals Use Substrate-Borne Vibrations as an Information Source?*, July 11, 2009, (<http://www.springerlink.com/content/162348q8t150372h/>)

Male frogs use calls to attract females for breeding purposes and to defend territory from other male frogs. In some species, females prefer a lower-pitched call since this may indicate that a male frog is larger and more experienced. "The advertisement or mating call of a frog contains key information about species identity and an individual's motivation to reproduce." Background noise can cause acoustic interference whereby "the active distance or the distance over which an acoustic signal can be detected" is reduced. In studying two species of frogs, researchers found evidence indicating that in response to this increased noise, male frogs called at a higher pitch in traffic noise in order to increase the distance that their call could travel. This change to a higher pitch may make the males less desirable to female frogs, threatening the responsive of females toward their potential male mates and thus, reducing breeding success. In conclusion, the researchers suggested constructing sound barriers with regular overpasses or tunnels to reduce the noise but still allow for movement of animals so as not to cause isolation of animal populations. Parriss, K. M., M. Velik-Lord, and J. M. A. North. 2009. Frogs call at a higher pitch in traffic noise. *Ecology and Society* 14(1): 25. [online] URL: <http://www.ecologyandsociety.org/vol14/iss1/art25/>

"Noise effects on livestock and wildlife also have been considered. There are no established criteria relating high-speed train noise and animal behavior. However, some characteristics of high-speed train noise are similar to low overflights of aircraft, and researchers generally agree that high noise levels from aircraft overflights can have a disturbing effect on both domestic livestock and wildlife. Some animals get used to noise exposure, while some do not. Documented effects range from simply taking notice and changing body position to taking flight in panic. Whether these responses represent a threat to survival of animals remains unclear, although panic flight may result in injuries to animals in rough terrain or in predation of unprotected eggs of birds. A limited amount of quantitative noise data relating actual levels to effects provides enough information to develop a screening procedure to identify areas where noise from high speed train operations could affect domestic and wild animals. The basis for the screening is shown in Table 3-3. A summary of recent literature related to noise effects on livestock and wildlife is included in Appendix A." U.S. Department of Transportation, Federal Railroad Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*, December 1998, p. 3-2. (<http://www.fra.dot.gov/downloads/RRDev/env/nvman.pdf>)

"The study that has most specifically shown an adverse effect on amphibians related to road noise is that of Brattstrom and Bondello¹ who found spadefoot toads (*Scaphiopus couchi*) undergoing estivation to respond to motorcycle sounds (up to 95 dB(A) at 0.4-4.4 kHz) by leaving burrows, which could have a detrimental effect if it occurred at the wrong time of year." U.S. Department of Transportation, Federal Highway Administration, *Synthesis of Noise Effects on Wildlife Populations*, Publication No. FHWA-HEP-06-016, September 2004, p. 7.

¹ Brattstrom, B.H. and M.C. Bondello. 1983. Effects of Off-Road vehicle noise on desert vertebrates, pp.167-204. In: *Environmental Effects of Off-Road Vehicles*. R.H. Webb and H.G. Wilshire (eds.) Springer-Verlag: New York.

L12-21



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- Estivation is the act of dormancy or sleep in order to escape things occurring in the environment. Often occurs during the summer. } L12-21 (cont'd)

Increased Train Length – Impact on Noise Levels

"Increasing the number of vehicles for moving sources relates to SEL [Sound Exposure Level] on a 10 Log-basis. This results in a three-decibel increase in SEL for each doubling of the number of vehicles. For freight trains, the same relationship exists but is based on the length of cars rather than the specific number of cars." } L12-22
<http://www.fra.dot.gov/downloads/rrdev/020806%20CREATE%20noise%20model%20user%20guide.pdf>



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Response to Letter 12
Johnson & Sedlack - Raymond W. Johnson
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- L12-1. This comment is introductory and does not raise specific environmental concerns. No response is necessary.
- L12-2. This comment states that “the SEA is seriously deficient, with inaccurate and inadequate information and analysis, especially regarding noise, hazards, and park impacts”, and that “there will be impacts not mitigated to less than significant.” However, this comment does not specifically identify what in the SEA is deficient, inaccurate, and inadequate, what the desired mitigation measures are, and what impacts would be minimized by these mitigation measures. Mitigation measures have been identified where a significant impact is identified. Without knowledge of the specific impacts of concern, this comment cannot be addressed further.
- L12-3. The comment heading is “Inadequate Project Description/Segmenting of Environmental Review”. This heading encompasses comment responses L12-3, L12-4, L12-5. The comment starts with describing the total number of culverts within the RCTC/SJBL ROW, and the number of culverts that will be worked on as part of the project.

After the initial comment is a description of a flood/mudflow event in December 2010. The mudflow traveled from east to west, from Box Springs Mountain Reserve into the existing ROW. This mudflow did not occur in an area of an existing culvert, and the resulting mudflow covered the existing rail. West of this area is the City of Riverside Islander Park. The topography in the area of Islander Park slopes up to the east from approximately Mount Vernon Drive (west of Islander Park), past the RCTC/SJBL ROW and increases sharply in Box Springs Mountain Reserve (source of the mudflow). It should also be noted that most of Islander Park, as well as the right-of-way of Big Springs Road, is mapped by FEMA as flood zone (SEA Section 3.17, Figure 3.17-1). Since the RCTC/SJBL ROW is only 100 feet wide in this area, and there are thousands of feet of higher topography to the east of the RCTC/SJBL ROW, there is very little that RCTC can do to control mudslides onto the ROW. RCTC does not own the land east of the ROW and therefore cannot grade, replant, or in any way alter the land up slope in order to minimize the potential for mudflows across the ROW.

The comment leads to saying that since there needs to be “substantial work” in this area to address the concern over the mudflow, that the environmental review process has been segmented. The previous paragraph indicates the width of the existing ROW in this area. RCTC can only plan for improvements within the ROW and to coordinate those improvements with the adjacent jurisdictions, in this case the City of Riverside. If the County of Riverside does plan slope stabilization efforts within Box Springs Mountain Reserve, then that is a separate project from the PVL with a separate project sponsor.

The project is not proposing improvements within Box Springs Mountain Reserve, only improvements within the existing ROW. So the project cannot be accused of



segmenting because the project analysis discloses the proposed project. Should the County of Riverside propose a project within the Reserve, that would be a separate and distinct project with a different lead agency. Because it is not a related action, it would not be considered segmenting of the proposed PVL project.

L12-4. This comment quotes email correspondence from Ms. Echevarria regarding hydrology but does not raise specific environmental concerns. No further response is necessary.

L12-5. See response L12-3. Islander Park encompasses a vast area. There are currently existing culverts at approximately Mile Post 3.40 and 3.90. The PVL project is not planning any changes to the culverts in the vicinity of Islander Park. There are also no changes planned for the areas adjacent to the RCTC ROW because RCTC does not own the land adjacent to the ROW. If mudflows happen in Box Springs Reserve they could enter the RCTC ROW since the ROW is at the base of the steep slopes.

According to the survey generator made available with the MSHCP, there is no available habitat for the spadefoot toad in the Islander Park area, and therefore no surveys required. Islander Park is impacted by the general public, neighborhood pets, and the periodic wildfires which greatly reduce the suitability of the area to native species (personal communication with John Wear, local resident).

L12-6. At the time that the SEA was first undertaken, the preliminary 30% engineering design drawings were the most recent available data with respect to the PVL alignment. Based on these drawings, the short radius data table provided in the comment is confirmed accurate. However, some data in the vicinity of the UCR area referenced by the comment was revised before a more recent drawing revision was available. As a result, alignment curves 2B and 2C, which according to the comment were not addressed in the SEA, were subsequently eliminated as part of the project alignment and were therefore not referenced in the SEA. Curves 4B and 4C were also not included in the SEA because as noted in the comment, while coming close to meeting the < 900 foot short-radius criterion, they did not meet the < 900 foot short-radius criterion.

The comment also states that Table 4 in the Noise and Vibration Technical Report did not have "other numerical data". The technical report includes data deemed necessary to explain the noise and vibration analysis and review process. However, the additional engineering data mentioned in the comment, was referenced at the bottom of Table 4 as being available in the 30% engineering design drawings.

The comment discusses the extent of the curvature in the area of the alignment near the Hyatt Elementary School. All short radius curves in this area and throughout the entire alignment were identified in Table 4 of the Noise and Vibration Technical Report. As part of the proposed PVL project implementation, rail lubrication in the form of wayside applicators will be utilized to reduce wheel squeal noise at all short radius curves. Again, this project component applies to all short radius curves identified in the SEA, regardless of whether they would be located adjacent to one another or not.



3

L12-7. The comment does not agree with the derailment risk assessment presented within the SEA, and because of that, feels the environmental process is being segmented. Because of the concern raised by local residents and the Riverside Unified School District, a second risk assessment was conducted which confirmed the previous that there was not a significant risk of the project causing a train derailment.

This comment also appears to mix freight train data sets. This comment cites a BNSF freight history of 4.5 million miles, which was presented as SCRRA's 17-year history of freight trains on all SCRRA lines (which includes both BNSF and Union Pacific operations). This comment also cites FRA data for 13 BNSF derailments in Riverside County, which presumably includes switching and yard derailments for a much larger and much busier segment of the BNSF than the PVL. The comment continues to report a computed a risk of about one derailment in six years for the UCR neighborhood. The numbers presented in the SEA of a much reduced derailment condition using the overall SCRRA data are projected from historical data, and indicate a factor reduced by about 40, as implied by the comment.

The comment correctly notes that the BNSF has made some improvements to the line and that the PVL project would make further improvements if it were completed as designed. To accommodate for the curves and steep grades, trains reduce speeds to safely traverse those areas. However, the SCRRA service territory includes similar territory on the Antelope Valley line, and so the comparison is not an unreasonable approximation.

An underlying assumption within the comment is the trains are going to increase their speed whenever possible to "make up time". It should be noted that train speeds along the alignment are calculated based on the engineering design of the tracks taking into account curvature, slope, etc. Once the train speeds are calculated for the alignment, then the signal timing is determined. Therefore it is critical for the trains traveling along the corridor to keep to the anticipated speeds. Should the speeds change drastically from what was engineered, then the timing of the crossing gates would be compromised.

Since the publication of the SEA a second risk assessment was completed to determine if there was an increased risk of accident near either Hyatt or Highland Elementary Schools. Also, as part of the risk assessment, train speeds were taken into account for the risk calculations. This updated risk assessment report can be found in its entirety in Appendix I, identified as the Zeta Tech Report.

L12-8. The comment correctly cites the SEA:

"Noise from wheel squeal (near the tight radius curve at the proposed "Citrus Connection") was assessed separately since the operation of the PVL train corridor would include wayside applicators as part of the design plans, which would eliminate noise from wheel squeal for all tight radius curves."

Based on this quote from the SEA the commenter might surmise that wheel squeal noise will be eliminated for all tight radius curves. However, the actual intent of this



statement was to say that “impacts” from wheel squeal would be eliminated; the actual noise from wheel squeal will be reduced to a level that is not significant. This reduction would result in the elimination of predicted noise impacts to residents along Transit Avenue.

To further emphasize the true intent of the SEA with respect to wheel squeal, Section 3.4.3 of the SEA states that

“These steps taken to **reduce** wheel squeal from the commuter rail operations would also **reduce** the existing wheel squeal from BNSF freight trains.” (Bold added for emphasis.)

Later on in the same section it also states:

“These measures would successfully reduce the significance of wheel squeal noise on all segments of the PVL alignment, including the “Citrus Connection” area. As a result, with the wheel squeal noise component successfully reduced no noise impacts would result at residences along Transit Avenue.”

In addition, the comment includes the following quote from the SEA as proof of a “claim of the elimination of wheel squeal” noise.

“According to the Transit Cooperative Research Program - “Wheel/Rail Noise Control Manual” (Transportation Research Board, 1997), a report which was sponsored by the FTA, the use of a petroleum lubricant would reduce squeal while the use of a water lubricant would eliminate squeal.”

As it is clearly pointed out in the above quote, the information comes directly from an FTA sponsored technical report that was produced by the well-respected Transportation Research Board. The statement was included in the SEA to demonstrate the effectiveness of rail lubrication on wheel squeal noise, and not as a way to bolster any claims of wheel squeal noise elimination. Moreover, if RCTC intended to use this statement to bolster a claim of wheel squeal noise elimination (which it did not), RCTC would have specifically referenced water as the type of lubricant to be used with the wayside applicators. However, no specific reference was made to the use of either water or petroleum for wayside applicators in the SEA. The decision on the type of lubricant to be used will ultimately be decided by RCTC.

RCTC asserts that the complete noise and vibration report does not work on a premise that wheel squeal noise will be eliminated. As the above explanatory response clarifies, the implementation of wayside applicators for the PVL project will reduce and not eliminate wheel squeal noise at identified short radius curves along the PVL alignment.

- L12-9. RCTC acknowledges the quotation in this comment from the TCRP Report 23 document. Please see response L12-8 above, and response L12-10 below.



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- L12-10. RCTC agrees that the TCRP Report 23 does not say that wheel squeal can be eliminated by using lubrication. However, the TCRP Report 23 does say that lubrication can reduce noise from wheel squeal. Please see response L12-8 above.
- L12-11. Please see L12-8. The comment states that the Citrus Connection curve is not close to any residences. However, while some short-radius curves along the PVL alignment may be located closer to residences than the Citrus Connection curve, as demonstrated in the table of short radius curves provided within the comment, the Citrus Connection curve has one of the tightest radiuses of curvature and, is significantly longer in its length. The negative consequence of this additional length is an increase in the wheel squeal noise exposure time to nearby residents. Increased exposure time is a critical additive component in the prediction of wheel squeal noise (FTA Manual, Section 6.2.3 and TCRP Wheel/Rail Noise Control Manual, Section 8.10.2). Finally, the Citrus Connection curve, as the comment references from the SEA - Section 3.4.3, is the only short-radius curve location along the entire PVL alignment which would be constructed as part of the project. The remaining short-radius curves identified in the SEA represent the existing rail alignment and therefore would not be constructed as part of the PVL project. As a result of these factors, the FTA requested specifically that the Citrus Connection short-radius curve be analyzed in detail.

The comment states that the 2006 Noise and Vibration Technical Report, prepared by ATS Consulting, suggests the possible use of additional wheel squeal reducing measures in the form of “customized profiling of the rail”. However, it should be noted that this represents a generalized statement written without the benefit at that time, of any type of detailed wheel squeal noise analysis. Conversely, the SEA did perform a detailed analysis on wheel squeal. The conservative results of this analysis indicated that residents nearby the Citrus Connection curve would be impacted by rail noise and, that the wheel squeal component of the noise was a major contributing factor. Based on this knowledge, it was determined that wayside applicators, which would be implemented as part of the project, would successfully reduce wheel squeal such that the predicted noise impacts would be eliminated for nearby residents. Further, there is limited rail industry evidence for the effective use of “profiling” as a wheel squeal reducing measure while the use of wayside applicators has been tried and proven and, as shown in the FTA Manual (Table 6-12), is the recommended default procedure for reducing wheel squeal. As a result, based on the noise assessments quantitative demonstration of the effectiveness of wayside applicators (see SEA, Section 3.4.3), other noise reduction measures for wheel squeal were not discussed.

Concerning the comment pertaining to a “conclusory statement” regarding the elimination of wheel squeal, please see response L12-8 above. The comment also states that there is no basis on which to estimate a reduction of wheel squeal noise using wayside applicators. However, the basis for wheel squeal noise reduction utilized in the SEA can be found in the FTA Manual and the TRCP (FTA Manual, Section 6.8.2 and TCRP Wheel/Rail Noise Control Manual, Section 8.10.2).

- L12-12. The comment includes citation of several additional reports on wheel squeal noise. None of these reports have made definitive assessments regarding the effectiveness



of wheel squeal mitigation; however, the wheel squeal issue presented in the Transportation Research Board (TRB) report is based on extensive research. In addition, although the TRB report is over 13 years old, it is still recognized as one of the standard references in the noise industry (see the 2006 “Transit Noise and Vibration Impacts Assessment,” FTA [FTA Manual], page 6-45). The comment also refers to the “Mitigation of Wheel Squeal and Flanging Noise on the Australian Rail Network” report, and states “trials with top of rail friction modifiers were not successful,” however, the wayside applicators proposed for the PVL project would also include gage face lubrication (see SEA, Section 3.4.3). As a result, the comparison is inappropriate because the techniques to be used are not the same. This same scenario exists when comparing mitigation for the referenced “Australian Research Project” to the PVL mitigation with wayside applicators. It should be noted that the wayside applicators proposed for the PVL project would include gage face lubrication while the Australian research project did not.

Finally as stated in the SEA, Section 3.4.3, the “Citrus Connection curve” was assessed and impacts were predicted to occur, however, impacts surpassed the FTA criteria by only one (1) dB. This indicates that even at minimal effectiveness, the proposed mitigation using wayside applicators would be successful at reducing impacts from PVL SCRRA/Metrolink trains in this area to a level that is not significant. This assertion is based on the dominance of wheel squeal noise at this location when compared to the other elements of train noise (i.e. horn, engine and wheel noise). Testing of wheel squeal noise is not proposed for any segment of the alignment, however, regular maintenance and inspection of the wayside applicator system will be required to ensure the systems effectiveness. Moreover, the FTA Manual shows that wayside applicators are effective at reducing wheel squeal noise (FTA Manual, Table 6-12). In all other areas with tight radius curves, wheel squeal would be reduced for SCRRA/Metrolink PVL trains and as an added benefit would also reduce wheel squeal noise for existing freight trains.

Although the comment suggests that the wayside applicators will result in environmental consequences, any mitigation program involving wayside applicators would involve routine on-site inspection to ensure its proper operation and safety to the public and the environment.

([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf))

- L12-13. See Master Response #2 - Kinder Morgan Pipeline Segment Near Highland Elementary School. This comment requests specific information as to the location of the pipeline within the project area. A portion of the jet fuel pipeline extends from the Colton Terminal (2359 South Riverside Avenue) to the MARB (Cactus Avenue). Additional segments of the Kinder Morgan pipeline are located within the SJBL ROW from Service Road southward to Watkins Drive, and then reconnecting near Box Springs Boulevard to Cactus Avenue. A portion of the Kinder Morgan pipeline, within the PVL corridor, runs parallel to Highland Elementary School (this was misstated in the SEA and corrected here), within approximately 50 feet to the west. The pipeline is not located in the ROW in the vicinity of Hyatt School.

By agreement, the Kinder Morgan pipeline is within a “work exclusion zone”, meaning only Kinder Morgan can conduct work on the pipeline. Therefore, FTA and



RCTC cannot obtain “precise information . . . independently of Kinder Morgan, as to the age, depth, material, and condition of the pipeline”, as this comment requests. Kinder Morgan must abide by federal regulations, and a Kinder Morgan representative stated that the pipeline is in accordance with regulations. It is not within FTA’s power to regulate Kinder Morgan. The PVL technical reports were prepared according to the industry standard of care which requires contacting owners of the facilities that make impact on the proposed project area. The excerpt of the letter cited is from a resident at 268 West Broadbent Drive. This location is west of Watkins Drive which is approximately 2,500 feet from the RCTC/SJBL ROW, and just west of Watkins Drive which is the identified pipeline route in this area.

That the resident at 268 West Broadbent Drive encountered the Kinder Morgan pipeline, apparently without notifying Dig Alert, does not lead to a reasonable conclusion that the pipeline will be a safety hazard to the PVL project. Additionally, the comment quotes a website that calls into question Kinder Morgan’s safety reputation; these comments were not made in the context of the PVL project, however, and have no relation to the project. Mr. Weimer’s reported testimony discusses the Olympic Pipeline Company, which is not relevant to the Kinder Morgan line in Riverside, as there is no discussion of the materials being transferred or the differing site conditions.

This comment also incorrectly claims that the SEA’s statement regarding pipeline depth is false. The depth of the pipeline varies. In some places it is as deep as 10 feet and in other places it is as shallow as 2 feet 4 inches. According to the pothole study conducted by RCTC in early 2010, the depth to the top of the pipeline in the area adjacent to Highland Elementary School ranging up to 5’-2”. The reason for this range of depths is that erosion and weathering slowly remove topsoil and therefore reduce the overall depth of the line.

As stated previously, although the pipeline was originally installed many years ago and is located within the RCTC ROW in some areas, and outside the RCTC ROW in others, the pipeline must still meet current safety requirements. These safety requirements evaluate the overall pipeline integrity, including evaluating for corrosion and joint integrity. Since the pipeline is an existing condition, the engineering and construction activities are expected to conduct work without impacting it.

- L12-14. See Master Response #6 - Noise. The FTA procedure for predicting noise impacts from construction-related activities was used for the PVL project. The FTA identifies this procedure as a reasonable method to assess construction noise impacts. Therefore, because different municipalities may have differing maximum allowable noise levels and as there are no standardized criteria for assessing construction noise impacts, the FTA construction noise assessment procedure was used to determine potential impacts from construction. The assessment results showed that the L_{eq} noise level from project-related construction activities would not surpass the FTA construction noise criteria and thus impacts would not be significant. It is important to understand that municipal ordinance noise levels typically use the L_{max} descriptor. L_{max} represents the maximum noise level for a discrete or single event, and is not a descriptor that effectively indicates sustained public annoyance.



Conversely, the Leq hourly descriptor used in the FTA construction noise assessment is much more representative of annoyance to humans over time.

Concerning variance and exemption procedures for night-time construction, the municipality where construction activities would occur is responsible for such variances in relation to the PVL project scope and their own local noise codes and laws. These local noise codes and ordinances are designed to give local governments flexibility in land use regulation to permit reasonable and appropriate deviations from established regulation when it would be prudent and necessary under the circumstances to do so.

During the normal allowable hours of construction defined in the local noise ordinances, project-related construction activities could result in occasional and sporadic increases in noise levels at noise-sensitive areas adjoining the project alignment. However, a representative construction noise assessment based on FTA guidelines was performed for this project and it was determined that construction-related noise impacts would not occur at any location.

A comparison of the predicted construction noise level with the Perris ordinance maximum allowable noise level was made in the SEA. However, this comparison was provided only to show that the predicted one-hour construction noise Leq in this instance was below the ordinance L_{max} allowable noise level and was not meant to imply that the Perris noise ordinance's maximum allowable noise level represents a significant impact threshold for construction noise. The construction noise significant impact determination used in the SEA is only related to the comparison of the predicted construction noise level to the FTA one-hour Leq construction noise criteria (FTA Manual, Section 12.1.3).

The comment asserts that the property chosen for the construction noise assessment is not representative as it is too far from the alignment. In the assertion there is a quote from the SEA:

“Other locations along the alignment would also be potentially impacted by construction noise. To determine whether construction of the proposed PVL project would result in any noise impacts to sensitive receptors at these locations, an FTA general assessment procedure for construction noise was conducted for a representative residential location at 228 C Street in Perris. This location was chosen because it would be representative of a property which would be affected by typical track laying construction represented by activities such as culvert modifications and embankment work as well as track and road crossings construction”....

However, this does not represent the full text. The complete text statement continues as follows:

In addition, due to the proposed Perris Station, it would also be affected by construction noise from station and parking elements, which include earthwork, utility work and landscaping among others.



The assessment was based on the examination of potential construction noise impacts at a representative worst-case location. The criteria used to select a representative location included: the proximity of construction activities to noise sensitive receivers, and the extent of construction-related activities in the area. The location at 228 C Street in the City of Perris was chosen because it is directly adjacent to the PVL alignment and the proposed Perris Station. While track-related construction in Perris may not be as close to 228 C Street as it would be for some residences in the UCR neighborhood, other station-related construction activities in the Perris area would be considerably closer. For example, elements of proposed station work construction would affect residential locations as close to construction activities as approximately 60 feet, and this is in addition to construction-related traffic activity within the adjacent street network. Therefore, the 228 C Street residence represents the only sensitive cluster location adjacent to the alignment that would be exposed to both station- and track-related construction activities. Since impacts were not projected at this location, impacts along other segments of the alignment that would not also include station locations near sensitive noise receptors would be unlikely.

The comment states correctly that the monitored noise level at 228 C Street in Perris is the same with and without train noise. However, the comment refers to Table 3.4-6 which only includes 2005 monitoring data collected for the 2005 EA. These measurements were superseded by the 2009 measurements, (as described in the SEA, Section 3.4.2) which are 2 dB higher than the 2005 measurements referred to in Table 3.4-7. Moreover, this particular measurement was specifically re-monitored precisely because of the phenomena that the comment suggests. As such, the 2009 measurement is an accurate and up to date representation of the existing noise environment in this section of Perris (see Master Response #6 - Noise).

The comment describes an incorrect attempt to use the distance variable contained within the construction noise prediction equation to prove their assertion that 228 C Street in Perris is not a representative site for PVL construction noise. However, several elements of the argument are inaccurate.

First, the comment reveals the assumption that the noise emission levels for the two noisiest pieces of equipment would be the same for both the UCR neighborhood and the Perris Station area. This is incorrect because, while both the UCR neighborhood and the Perris Station area would include the usage of trucks, the Perris Station area would include the usage of pavers, while the work in the UCR neighborhood would not. Pavers are among the louder pieces of construction equipment (FTA Manual, Table 12-1).

Second, the work presented in the comment is incorrect with the usage of 50 feet for the distance variable of the construction noise prediction equation as the source-to-receptor distance in the UCR neighborhood. The location in the UCR neighborhood where the shortest distances exist between residential buildings and the alignment are the ten homes along East Campus View Drive. While the shortest distance would be approximately 65 feet (see SEA, Table 3.4-7, site #2), this represents only two homes. For the remaining eight homes, the distance is more in the range of 75 feet.



Thirdly, the Usage Factor (U.F.) for trucks in the UCR neighborhood construction areas is likely to be less than the one assumed for the Perris Station. A U. F. of one (1) assumes full power operation for the duration of the one-hour modeling period. While the Perris Station area construction equation conservatively assumes a usage factor of one (1) for trucks, this U.F. is most certainly too high for use in with rail construction in the UCR neighborhood. For construction within the UCR neighborhood ROW, trucks would mostly be delivering and dropping off materials. Any trucks within the ROW would likely be dumping or receiving soils materials, which would require the truck be turned off during loading.

The final issue which is to be considered is the difference between the dynamic characteristics of construction in the UCR neighborhood versus the static characteristics of construction that would be provided in the Perris Station area. The procedures related to track and noise barrier construction that would be provided in the UCR neighborhood would be linear, contained within the ROW and would move quickly along the corridor. As a result, "given the linear configuration of the construction corridor, only small area segments would likely experience construction noise at any given time." This applies for both day and night construction (see Noise and Vibration Technical Report, Section G). Specifically, the construction in the UCR Neighborhood would primarily comprise track construction, progressing at approximately 1000 feet per day, and noise barrier placement progressing at approximately 60 feet per day (see Air Quality Technical Report, Appendix D). According to the FTA Manual, Section 12.1, when the length of construction at noise-sensitive land uses (such as homes in the UCR Neighborhood) would last less than a month, a qualitative assessment (which assumes no construction impacts) is appropriate; and when construction would last less than several months, a detailed construction noise assessment is not required. In addition, some of the construction activities in the UCR neighborhood would require no construction noise assessment at all (FTA Manual, Section 12.1). Based on the rate of progression for the expected construction activities above, the construction in the UCR neighborhood can be viewed as a series of small projects since no one location in would be exposed to major construction activities for more than a few weeks. The one element of construction in the UCR area that would include static construction activities would be for rail crossings. However, the typical construction period at each crossing would only last approximately three weeks. Again, as explained in the FTA Manual, Section 12.1, when the length of construction at noise-sensitive land uses (such as homes in the UCR neighborhood) would last less than a month, a qualitative assessment is appropriate; and when construction would last less than several months, a detailed construction noise assessment is not required. As a result, while all local noise codes and ordinances would still have to be adhered to during construction, construction noise in the UCR neighborhood is not expected to result in significant annoyance or impacts to local residents.

Conversely, in the Perris Station area, the potential for annoyance to residences is more pronounced given the stationary nature of the construction. While track construction would progress in a manner similar to that in the UCR neighborhood, station construction would last for approximately two months. Therefore, because the station is a fixed location, sensitive residential land uses would be exposed to construction noise for the full two-month period. This extended exposure time to



station construction activities in addition to the track construction makes the Perris Station area the most appropriate candidate for the assessment of construction noise impacts.

All of the above factors were taken into consideration when the Perris Station was chosen as a representative construction noise assessment site.

Consequently, when all of the above factors are taken into consideration, construction noise calculations within the UCR neighborhood would result in the FTA construction noise criteria still not being surpassed during allowable hours of construction.

The comment asserts that the SEA improperly represents the significance of local noise codes. In addition, the comment includes quotes from the FTA Manual indicating that for the proposed project, “commitments to limit noise levels, including any local noise ordinances that apply” should be made, and “monitoring of noise” should be performed. It is noted in the SEA that commitments regarding noise ordinances will be made (Noise and Vibration Technical Report, Section G). However, these commitments are made for actual construction operations and do not negate the validity of the FTA construction assessment approach. The FTA Manual, Section 12.1.3 states that:

“.. local noise ordinances are not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project.”

However, as stated above, noise ordinances/codes are provided in L_{max} noise levels; as such they are useful in the determination of an instantaneous annoyance from discrete activities. Consequently, contractors are required to adhere to the local noise codes and ordinances and as a result typically implement standard construction noise control measures. Examples of these control measures include temporary construction noise barriers, low-noise emission equipment and the use of acoustic enclosures for particularly noisy equipment. RCTC will implement all applicable standard construction noise control measures required by the affected jurisdictions. However, temporary increases in noise levels over the maximum allowable noise ordinance could take place. These increases would be based on potential occurrences of atypical events given the inconsistent and transitory nature of some construction activities and equipment usage. These temporary increases, however, would not be significant since the construction noise assessment did not result in the projection of any construction noise impacts. This explanation of the variable nature of construction noise (as recommended in the FTA Manual, page 12-1) was provided in the SEA, Section 3.4.3.

It is acknowledged that the SEA notes the possibility of night-time construction work. However, no significant noise impacts would occur for any of the project's construction activities. Please see above text with regard to complying with code requirements and the use of variances.



In addition, the comment expresses objection to the possible shifting of freight train operations. However, these shifts could only occur with regard to construction activities and would not be caused by future PVL train operations. These construction-related shifts in freight operations, if they occur, would be temporary.

- L12-15. The noise monitor for the 2005 noise measurement in the vicinity of 396 E. Big Springs Road was located at approximately 90 feet from the alignment. As such, this measurement was representative of the entire Box Springs Cluster that includes all of the typical elements of the community noise environment including traffic, trains and loud animals. Therefore, although distances from house to alignment may differ within the same cluster, the existing noise level would be seen as representative for each (FTA Manual, page 3-10). In addition, although the noise measurement was taken 90 feet from the alignment, the actual property at 396 E. Big Springs Road is located at approximately 120 feet from the PVL alignment. As a result, this was the distance used in the actual noise assessment.

At 396 E. Big Springs Road, the PVL project would not result in a decrease in noise levels from 62 dBA to 57.3 dBA. In addition, the direct comparison of these two noise levels, as is presented in the comment, would be incorrect. The 62-dBA noise level represents the overall existing noise from all sources within the area while the 57.3 dBA noise level is the estimated future noise contribution from proposed PVL SCRRRA/Metrolink trains only. In other words, with the inclusion of the proposed PVL project, the actual overall noise level would be greater than 62 dBA. An example of the interaction between an existing noise level and projected noise level in a typical transit project is depicted in the SEA (see Table 3.4-4). As shown in the table, the existing noise will not decrease, as a result of the inclusion of a project rail noise component, as the comment suggests.

In addition, the proposed noise barriers along E Campus View Drive area are over 1,600 feet from the Box Springs Cluster. This is well beyond the distance where a 9 to 13 foot noise barrier would result in any noise reflections (FTA Manual, page 2-12). Welded rail will be added along the entire length of the PVL alignment.

With respect to the comment about the multifamily cluster Watkins 3 from the 2005 EA, the same response given above for 396 E. Big Springs Road is applicable here. The existing L_{dn} will not be reduced in the future to a lower value. That is not possible given the additional train traffic proposed for the PVL project. However, the predicted L_{dn} of the project noise for Watkins 3 would be lower than its existing noise since the project noise does not include ambient neighborhood noise sources (e.g., existing freight and automobiles). For projects where sound reflections off noise barriers are of concern, sound absorptive materials are often proposed for use on noise barriers. However, it is not expected that reflections off noise barriers in the area of Watkins Drive would result in any significant increases in noise levels since the PVL alignment would not be close to any of the proposed noise barriers (FTA Manual, page 2-12). In the area near Watkins Drive, noise barriers proposed on the eastern side of the track alignment would be located approximately 50 feet from the train.

The comment concerns the inability of the residents receiving sound insulation to close their windows. The use of noise barriers for these residents was deemed



infeasible due to engineering and topographical constraints (see Master Response #6 - Noise). Therefore, although impact criteria are based on outdoor conditions, according to the FTA, the only practical noise mitigation measure is to provide sound insulation so that interior noise levels can be reduced to acceptable levels (FTA Manual, Section 6.8.4). For those properties where mitigation would result in a closed window condition, a central air conditioning system would be provided.

The comment indicates that wheel squeal noise is not taken into account with respect to the noise assessment near Mount Vernon Street. This is untrue since the existing noise monitoring program was a reflection of current noise conditions in the area, which included wheel squeal noise from existing freight trains.

([http://www.fta.dot.gov/documents/FTA Noise and Vibration Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf))

- L12-16. The SJBL has existed on its current alignment for more than 100 years, well before the establishment of Box Springs Mountain Reserve, or Islander Park, as recreational resources. The Box Springs Mountain Reserve entrance is located at 9699 Box Springs Mountain Road in Moreno Valley, east of the SJBL. Crossing the SJBL at other than a legal crossing is unsafe and is trespassing, regardless of circumstances. BNSF's maintenance practices are not relevant to the discussion.

The PVL project does not include adding additional track in this area, or requiring temporary or permanent easements, or affecting existing access to parks in any way. The existing track will remain in its current location and would not impact property from either park. Because no park property is required for the project there would be no 'use' as defined by 23 CFR 774.17 of the Section 4(f) regulation. It should also be noted that implementation of the PVL project would not result in any constructive use of either park, as the parks' recreational facilities would not be substantially diminished, per 23 CFR 774.15. Since there would be no changes to the existing environment in this area as a result of the PVL project, the project would not result in any impacts to the recreational areas.

- L12-17. Issues of environmental justice in minority and low-income populations were evaluated as part of the PVL project in Section 3.11 (Environmental Justice and Socioeconomics) of the SEA. For the purposes of EJ assessment, the potential environmental consequences of the PVL are considered in order to determine whether there would be disproportionately high and adverse effects on EJ communities. Positive environmental consequences are also considered in the EJ analysis. With each of the four stations located directly within a EJ community and proximate to others, the PVL would be accessible to the EJ communities and would therefore be of potential indirect socioeconomic value to the EJ communities it serves, providing improved access and mobility within the region. Not only would the EJ communities comprising and represented by the study area not be burdened by adverse effects, these communities would benefit from improved access to jobs, housing, schools, and other community services available with Riverside County and the region as a whole.

An Express Bus Alternative was considered by RCTC as one of the five alternatives discussed in both Section 2.0 (Project Alternatives) of the SEA and the *San Jacinto Branchline/I-215 Corridor Study Alternatives Analysis* (STV Incorporated, 2004),



included as Technical Report A to the SEA. The Express Bus Alternative was rejected, however, because this alternative would not reduce highway congestion in the SJBL/I-215 corridor and automobile and bus modes would still be tied to the congested roadway network whereas all three commuter rail alternatives would allow commuters to decrease their travel time in the corridor and decrease personal vehicles used in the corridor reducing congestion. Also, as a result of the longest travel time from increasing highway congestion throughout the forecast years, impacts to air quality and traffic would be significant. Therefore, a commuter rail option (PVL) was selected to provide mobility through the corridor without relying on or adding to the congestion of the area highways.

- L12-18. All comments received on the Draft EIR and the Draft SEA were considered and responses are provided in the final versions of each document, respectively. In accordance with § 1501.4 of the Council on Environmental Quality (CEQ) regulations for implementing NEPA, as well as 23 CFR 771.115(c) and 23 CFR 771.119 of FHWA/FTA's NEPA implementing regulations, an Environmental Assessment (EA) was prepared for the proposed project. Because the project-related impacts were either found to not be significant, or would be mitigated to a level that is not significant, an EIS does not appear to be the appropriate level of documentation, and a Finding of No Significant Impact (FONSI) is anticipated.

Significance determinations depend on context and intensity. (40 CFR § 1508.27), and one of the factors that the lead agency is encouraged to evaluate when considering intensity of an impact is the degree of public controversy (40 CFR § 1508.27(b)). Understanding the public interest and potential for concern about the proposed project, FTA made the SEA available for public review. Public comments received from the public review have been considered, and are addressed within this Final SEA, which has been made available for public review per FTA's NEPA implementing regulation (23 CFR 771.119(h)). As stated above, a FONSI is anticipated and the final determination will be made after the 30-day review period for this document closes.

- L12-19. Identified as Attachment 1 to the main letters, this comment contains two photographs of what appears to be the Kinder Morgan pipeline, located south of Hyatt School and outside the RCTC-SJBC ROW. The comment associated with the images appears to complain that the pipeline is painted and not buried. It should be noted that the pipeline is identified as an existing condition in the project area. It should also be noted that the pipeline easement has sections both inside and outside the RCTC-SJBL ROW. The segment photograph appears to be outside the rail RCTC-SJBC ROW.
- L12-20. Attachment 2 to the comment letter is the resume of Raymond Johnson, Esq., AICP. Mr. Johnson is the author of the letter. This comment does not raise environmental concerns. No response is necessary.
- L12-21. Attachment 3 is the collection of information that attempts to link increased noise/vibration to reproductive failure in frogs, toads, terrestrial wildlife and livestock. It is implied that these articles are appropriate for this project when in fact they are not. The comment does not reference the developed nature of the existing rail



corridor, and the project's close proximity to both the I-215 and SR-60, both highly traveled freeways. Such close proximity to the freeway causes high levels of ambient noise throughout both day and night. The comment does not acknowledge that the project is only adding limited hour trains and that the frogs, toads, and terrestrial wildlife are active at night.

To support the conclusions presented within the environmental document, various biological surveys were conducted. These surveys were conducted during the appropriate seasons and in compliance with the Western Riverside MSHCP. The results of these surveys can be found in SEA Section 3.14.

The species survey information was compiled and submitted to the Resource Conservation Agency (RCA) per the requirements of the Determination of Biologically Equivalent or Superior Preservation (DBESP) process which supports the Joint Project Review (JPR) application. RCA approved the JPR in July 2011.

Subsequent to the submittal of the JPR to RCA, an informal Section 7 consultation was initiated between FTA and USFWS. This Section 7 consultation requested a finding of "no adverse effect" on the least Bell's vireo which is the only threatened or endangered species located within and/or adjacent to the ROW.

The latest update from USFWS is that the Section 7 consultation process should be completed during the week of January 9, 2012.

- L12-22. The comment appropriately relates noise sources and noise increases in projects that expand existing services, but this condition does not apply to PVL. The PVL project would not result in any operational or physical changes to the existing freight train fleet. Also, there are no passenger trains currently operating on the existing alignment. Finally, the SEL used in the PVL rail noise assessment is a reference value contained in the FTA Manual, Table 6-3.



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Letter 13
Len Nunney
January 6, 2011

To: E.Echevarria, RCTC , 4080 Lemon Street, 3rd Floor, Riverside, CA 92502-2208
Fr: Len Nunney, Secretary, Friends of Riverside’s Hills
Re: Perris Valley Line DEIR.

6 Jan 2011

Thank you for the opportunity of commenting on the proposed development of the Perris Valley line. } L13-1

We would like to point out our concerns over the analysis of the impact of the proposed project to the western spadefoot toad. As noted in your report, this species is covered under the MSHCP (see Table 3-2.1). The mitigation for this species (BR-9) includes only “Should spadefoot toads be identified within the construction area, an approved mitigation program will be implemented.” This is inadequate. This toad breeds in temporary ponds and adults are present at these ponds for just a few nights and tadpoles just for a few weeks (depending on conditions). It is the breeding site that needs to be protected. The breeding sites of this species should be identified and protected, regardless of the presence of breeding individuals – it takes little disturbance a site to seriously affect the water flow to a site and hence the chance of successful reproduction. The risk is that a small change in water flow will result in a temporary pond drying up prematurely, resulting in an increased likelihood of breeding failure. The breeding ponds are scattered throughout the length of the Perris valley line, and no attempt has been made to map their occurrence. For example, there is a major breeding pond next to the tracks just south of the Citrus connection, east of UCR that I have documented on an annual basis. } L13-2

The issues raised by the presence of this covered species are : (1) avoidance of breeding sites where construction is proposed; and (2) the long-term effect of increased train traffic on the breeding of this species due to disturbance due to vibration, light (at night), and noise (like many toads and frogs, calling is a critical part of the breeding system of this species, and mating occurs primarily at night). Over a period of several years, I have personally documented three breeding sites east of UC Riverside that are immediately adjacent to the tracks. The impacts on these breeding sites are not considered in this environmental review – there may well be additional breeding sites (for example near the San Jacinto river) that may be even more seriously impacted, and yet these sites are not mapped or considered to be impacted and hence subject to no environmental mitigation. } L13-3

Comments in this letter are based in part on my own expertise: I am a professor of Biology at the University of California Riverside with expertise in Conservation Biology, and was a member of the Western Riverside County MSHCP Scientific Advisory Committee. } L13-4

This letter supplements our comments submitted on the 24 May 2010. } L13-5

Regards,
Len Nunney

For Friends of Riverside’s Hills
4477 Picacho Dr.
Riverside, Ca 92507.



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Response to Letter 13
Len Nunney
January 6, 2011

- L13-1. This comment is introductory and does not raise environmental concerns. No response is necessary.
- L13-2. A query of the CNDDDB did not produce any occurrences of western spadefoot toad within Proposed Constrained Linkage Area 19. However, focused surveys for western spadefoot toad were conducted by a biologist on March 9 and April 9, 2010, during the known breeding season for this species. Areas of the RCTC ROW within Proposed Constrained Linkage Area 19 and near the San Jacinto River Bridge and Overflow Channel Bridge were surveyed for the purpose of evaluating the potential presence of western spadefoot toad. A potentially suitable breeding pond was present under the bridge near Case Road. On March 9, 2010, the pond measured approximately 0.01 acre (70 feet x 9 feet). Tadpoles for California Chorus Frogs (*Pseudacris cadaverina*) were observed in the ponded area. A night survey was performed and calling California Chorus Frogs were identified. On April 9, 2010, the pond was considerably smaller but still contained adequate water to support tadpoles. No western spadefoot tadpoles were observed on this survey.

RCA was contacted on June 24, 2010 by Kleinfelder to obtain location data of breeding sites reported by Friends of Riverside's Hills to RCA, specifically within RCTC ROW within the MSHCP Proposed Constrained Linkage Area 7 and Criteria Cells 545 and 635. RCA conducted a review of 2005 - 2008 data and found no reported occurrences of Western spadefoot toad within these boundaries. A query of the CNDDDB did not produce any occurrences of the species with the Proposed Constrained Linkage Area 7. The MSHCP survey guidelines for Criteria Cells 545 and 635 do not require surveys for Amphibian species.

As indicated in the SEA, RCTC acknowledges that there is potential for the Western spadefoot toad to inhabit the San Jacinto River area. As a result, there is a potential impact to Western spadefoot toad and mitigation has been imposed to reduce this impact to a level that is not significant. Specifically, RCTC has incorporated mitigation measure BR-9 requiring pre-construction surveys for Western spadefoot toads 30 days prior to site disturbance to determine if western spadefoot toads are present within the designated construction area (SEA, § 3.14.4).

The comment states that breeding sites differ between adults and tadpoles. Ultimately, the MSHCP acknowledges that, "[s]urveys for adult toad are difficult...and tadpoles detections are often accidental" (MSHCP p. A-76 [Species Account for Western spadefoot toad]). In order to provide a complete and full analysis, however, a survey for spadefoot toads was undertaken. During the survey neither Western spadefoot toads nor tadpoles were identified (Western Spadefoot Toad (*Spea Hammondi*) Survey Report, p. 8). However, because of the overall concern for potential project related impacts to Western spadefoot toads, a mitigation measure was included in the SEA, Mitigation Measure BR-9, which indicated that pre-construction surveys are necessary and if any are identified within the construction area, a RCA approved relocation plan would be implemented. The MSHCP species



account acknowledges that Western spadefoot toad eggs normally hatch into tadpoles within six days, with full maturation of toads taking approximately three weeks, although in some instance maturation takes longer depending on temperature and food conditions (MSHCP p. A-71). To the extent that toads may be found during pre-construction surveys, such metamorphoses factors would be accounted for in any relocation plan approved by RCA.

The Western spadefoot toad is neither federally nor state endangered or threatened. It is a state species of special concern (MSHCP, p. A-62). The Western spadefoot toad is a covered species under the MSHCP (MSHCP § 9.2 and Species Account p. A-62 et seq.), and so RCTC as a permittee to the MSHCP will comply with all the MSHCP's requirements with regard to toads, including survey requirements (See, e.g., Mitigation Measure BR-9). As the MSHCP provides full and complete mitigation for all potential impacts to covered species (MSHCP § 1.2.3), the SEA's conclusion that impacts are not significant (particularly with the imposition of mitigation measure BR-9) is fully supported by the record.

- L13-3. See response L13-2.
- L13-4. This comment provides background on the qualifications of the commenter and does not raise specific environmental concerns. Therefore, no response is necessary.
- L13-5. The comment indicates the previous comments were submitted during one of the comment gathering periods for the project.



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Letter 14
City of Moreno Valley - John Terell
January 6, 2011



Community Development Department
Planning Division
14177 Frederick Street
P. O. Box 88005
Moreno Valley CA 92552-0805
Telephone: 951.413-3206
FAX: 951.413-3210

January 6, 2011

Ms. Edda Rosso
Capital Projects Manager
Riverside County Transportation Commission
PO Box 12008
Riverside, CA 92502

Dear Ms. Rosso:

The City of Moreno Valley has reviewed the Perris Valley Line Supplemental Environmental Assessment. The City has no comments or concerns with the document. The City continues to have strong support for the timely construction of the Perris Valley Line to provide the following benefits to its citizens and the region:

1. Increased transportation alternatives for people travelling to and from the cities of Moreno Valley, Perris and Riverside and nearby communities.
2. Reduced travel time, energy use, traffic, vehicle miles travelled and air pollution due to train station locations closer to residences and workplaces.
3. Improved access to transit due to linkages between RTA and MetroLink services.
4. Increased access to employment areas and housing alternatives.

L14-1

Thank you for the continued opportunity to review and comment on the environmental assessment for the Perris Valley Line. The City looks forward to the timely construction of this project and stands ready to assist where possible.

Sincerely,

John C. Terell AICP
Planning Official



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**Response to Letter 14
City of Moreno Valley - John Terrell
January 6, 2011**

L14-1. Comment expresses support of the project and does not raise specific environmental concerns. Therefore, no further response is necessary.



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Letter 15a
Carl F. Cranor
January 10, 2011

20682 Hilltop Drive
Riverside, CA 92707

Ms. Edda Rosso
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

Dear Ms. Rosso,

It has belatedly come to our attention that the Perris Valley Line extension of Metrolink will enormously impact those of us who live on Poarch Road and Hilltop Drive. My family and I live on Hilltop.

L15a-1

As I understand it you will have slow-moving metrolink trains using the tracks that currently are between Poarch and Watkins Drive. Apparently the solution is to close this current railroad crossing permanently so that resident cannot use it. This solution seems like overkill as a matter protecting cars from being hit by trains and imposes enormous costs in terms of time, money, damage to cars and so on.

L15a-2

Yesterday I checked to see how many miles extra we would have to drive if the Watkins-Poarch crossing were permanently closed. To go from Poarch to a point right across the tracks is an additional THREE MILES ONE WAY. Since my family typically makes numerous trips per day per driver, THIS IS AN ADDITIONAL SIX (6) MILES EVERYTIME WE LEAVE AND RETURN TO OUR HOUSE, WHETHER WE ARE MERELY GOING TO THE GROCERY STORE AT CANYON CREST OR TAKING OUR DAUGHTER TO SCHOOL. I do not recall the average number of trips you assume for planning purposes that each driver would make, but I estimate for our family it is typically EIGHT ROUNDTrips PER DAY FOR ALL DRIVERS (3 drivers, soon to be a fourth driver), sometimes more. This is an additional 50 miles per day for our family alone. Over the course of a year this is a substantial distance (18,250 miles per year). If we live at this house another 10 years this is approximately 182,500 miles for the next 10 years, JUST FOR OUR FAMILY, NOT COUNTING OTHER FAMILIES.

L15a-3

Moreover, since much of the road that we would need to use to merely get across the tracks on our usual routes is rough, sometimes washed out, our cars would take a more severe physical beating than they currently do. Consequently we would be required to drive an extra 50 miles per day on a typical day and impose rough roads on our cars for about 1/3 of that distance.

In addition, it seems to me as an outsider that the obvious solution to protecting cars from the trains is simply to install a crossing gate at Poarch/Watkins that is closed when trains are on the tracks at that point and open otherwise. Because it appears that trains will not be able to travel very fast on this section of tracks (20 mph seems to be the estimate), this solution should easily protect cars and their occupants from being hit by trains. It is not as if this track is a high-speed track such as the one that crosses Magnolia, or further out Iowa or Chicago over which long fast freight trains are crossing streets. Nonetheless, at these three crossings there are only railroad crossing gates that raise and lower when trains are passing. Why is not such a solution adequate for the Poarch/Watkins crossing?

L15a-4



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Letter 15a (cont'd)
Carl F. Cranor
January 10, 2011

However, should you decide to go ahead without using a simple crossing gate, you could compensate us for the extra mileage we will put on our cars each year. Currently the Internal Revenue Service uses about \$0.50 per mile for compensation purposes. If we suppose that will go up over time to say, \$0.60 in ten years, for ten years extra driving you could **compensate us between \$91,250 up to \$109,500**. In addition, there would need to be extra compensation for the wear and tear that would be imposed on our cars because of the rough roads over which we would have to drive.

L15a-5

When you add other families who will have extra driving costs, you would have an additional multiplier. There could be a total of 7-10 families who are in the same position we are. If it were ten additional families will several drivers the compensation could well approach **\$1 million dollars over ten years, plus extra wear and tear on cars driving on unimproved roads.**

Frankly I was quite surprised at the great costs your proposed changes would impose on us. Intuitively, I realized it would be a substantial hassle, but putting it in terms of dollar costs that are very standard brings home the vast imposition this will impose on our income, time, damage to cars and so on.

L15a-6

I look forward to hearing from you.

Sincerely yours,

Carl F. Cranor, Ph.D. (UCLA), M.S.L. (Yale Law School)
Distinguished Professor of Philosophy
University of California
Riverside, CA



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Response to Letter 15a**Carl F. Cranor****January 10, 2011**

- L15a-1. This comment is introductory, and therefore no response is necessary.
- L15a-2. As currently configured, the Poarch Road grade crossing does not meet SCRRRA, or CPUC, safety standards and must either be closed or improved prior to introduction of commuter rail service. RCTC has evaluated both options and has determined that closing the crossing is safe, prudent, and cost effective. The inconvenience to nearby residents, while real, does not outweigh the overall benefits to the public. Improving the crossing would entail substantial work, including realigning a section of the track, and would cost an estimated \$2.5 million.
- L15a-3. See response 15a-2. The closure of the Poarch Road crossing would present an inconvenience to the nearby residents that currently use it; however, the increased safety benefit to the public weighs heavily into the decision. The alternate route to Poarch Road is via Gernert/Morton Roads to access I-215/SR-60 and the neighborhoods west of the railroad tracks. This route would require the detour of a small number of trips (fewer than 50 trips per peak hour) generated by the residences on Poarch Road and Hilltop Drive. Therefore, the closure of Poarch Road would not significantly affect traffic volumes in the area and, therefore, create any traffic impacts from an environmental assessment point of view, which is measured by increases in vehicular delay and deterioration in roadway level of service.
- L15a-4. Installing a "crossing gate" at the Poarch Road grade crossing, as this comment suggests, is economically infeasible for the project sponsor. In order for a gate to be installed there would still need to be installation of appropriate warning devices, changes in topography to allow for sight distances, and controls so that vehicles would not be forced to stop on the tracks before entering Watkins Drive.
- 15a-5. See response 15a-3. The closure of the Poarch Road crossing would not significantly affect the traffic volumes in the area to cause impacts, and compensation for residents is not required.
- 15a-6. See responses 15a-4 and 15a-5.



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Letter 15b
Carl F. Cranor
January 11, 2011

20682 Hilltop Drive
Riverside, CA 92707
January 11, 2011

Ms. Edda Rosso
Capital Projects Manager
Riverside County Transportation Commission
P.O. Box 12008
Riverside, CA 92502-2208

Dear Ms. Rosso,

This is an addendum to my letter of January 10 about the adverse effects of the Perris Valley Line extension of Metrolink on those of us who live on Poarch Road and Hilltop Drive. My family and I live on Hilltop.

L15b-1

I appear to have made some mistaken assumptions—compared to how planning agencies think about these issues. As I indicated because of the closing of the Poarch/Watkins crossing those of us who live on Poarch or Hilltop would have to drive nearly six (6) additional miles per roundtrip from our homes. It appears from the internet literature that planners assume that a single family home makes between 9.5 and 13 trips per day, both higher than I assumed. As many trips as 9.5 would result in our driving an extra 57 miles per day, while 13 trips per day would result in an extra 78 miles of driving per day. Over the course of a year this translates into 20,805 miles per year (9.5*365) up to 28,370 miles per year. Over a ten-year period the extra driving would amount to 208,050 up to 283,700 miles during that time. This would wear out several cars just from the EXTRA DRIVING. None of this, of course, takes into account the additional wear and tear of driving on the rough Gernert road.

The cost of the extra driving, calculated using IRS numbers for the per-mile total costs of driving a car (\$0.50/miles) would amount to the following: For one year this would amount to \$10,402.50 up to \$14,185 for our family alone. Over a ten-year period these totals become \$104,025 up to \$141,850. If, over time, the full costs of driving a car increase to \$0.60 per mile because of inflation and costs of gasoline, these numbers become \$12,843 (20,805*.60) up to \$17,044 (28370*.6) in a given year. THIS IS JUST THE AMOUNT FOR EXTRA DRIVING NECESSITATED BY NOT HAVING A CROSSING GATE AT POARCH/WATKINDS THAT CAN BE DROPPED WHEN THE TRAINS ARE APPROACHING.

L15b-2

In addition, there are at least 9 single-family homes (and I am not sure the count is correct; there could be one or two more) that are in the same position. Consequently, the total cost imposed by the extra driving over a ten-year period would range from \$936,225 (9*\$104,0925) up to \$1,276,650 (9*\$141,850), not counting any increase in per-mile costs of using a car. As I noted yesterday the needed compensation could well approach \$1 million dollars or more over ten years, plus extra wear and tear on cars driving on unimproved roads.

Moreover, one of our neighbors has an adult child with autism and they frequently have to take him to the emergency room. I do not know any particulars, but an extra three miles to the emergency room, some of



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Letter 15b (cont'd)

Carl F. Cranor

January 11, 2011

it over slower rough roads, cannot be reassuring to them. However, they will need to provide details to you.

L15b-2 cont'd

Finally, there are other costs that I have probably missed. One is that our property values are almost surely going to go down in value simply because it will be more difficult to reach our homes. Thus, when these properties sell, they will be discounted in value to some extent because of the added burden of living where we do, simply because of the particular remedy you are choosing to provide safety from trains. Yesterday (and above), I suggested that a movable crossing gate that regulated the Poarch/Watkins crossing seemed like the best solution. This still seems to be the obvious solution that does not impose great costs on those of us that live on Poarch and Hilltop. I would be willing to bet that over time, there would be no problems at this crossing because trains will be moving so slowly because of the condition and crookedness of the tracks. However, even if there were, the gate could then be locked, as you are currently proposing.

L15b-3

I look forward to hearing from you.

Sincerely yours,

Carl F. Cranor, Ph.D. (UCLA), M.S.L. (Yale Law School)
Distinguished Professor of Philosophy
University of California
Riverside, CA



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Response to Letter 15b

Carl F. Cranor

January 11, 2011

L15b-1. This comment is introductory and does not raise specific environmental issues. Therefore, no response is necessary.

L15b-2. As currently configured, the Poarch Road grade crossing does not meet SCRRRA, or CPUC, safety standards and must either be closed or improved prior to introduction of commuter rail service. RCTC has evaluated both options and has determined that losing the crossing is safe, prudent, and cost effective. The inconvenience to nearby residents, while real, does not outweigh the overall benefits to the public. Improving the crossing would entail substantial work, including realigning a section of the track, and would cost an estimated \$2.5 million.

In addition, the detour of a small number of trips (less than 50 trips per peak hour) generated by the residences on Poarch Road and Hilltop Drive due to the crossing closure would not significantly affect traffic volumes in the area and, therefore, create any traffic impacts from an environmental assessment point of view, which is measured by increases in vehicular delay and deterioration in roadway level of service. Therefore, compensation for residents is not required.

L15b-3. See response 15b-2.



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0.3.3 References

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