

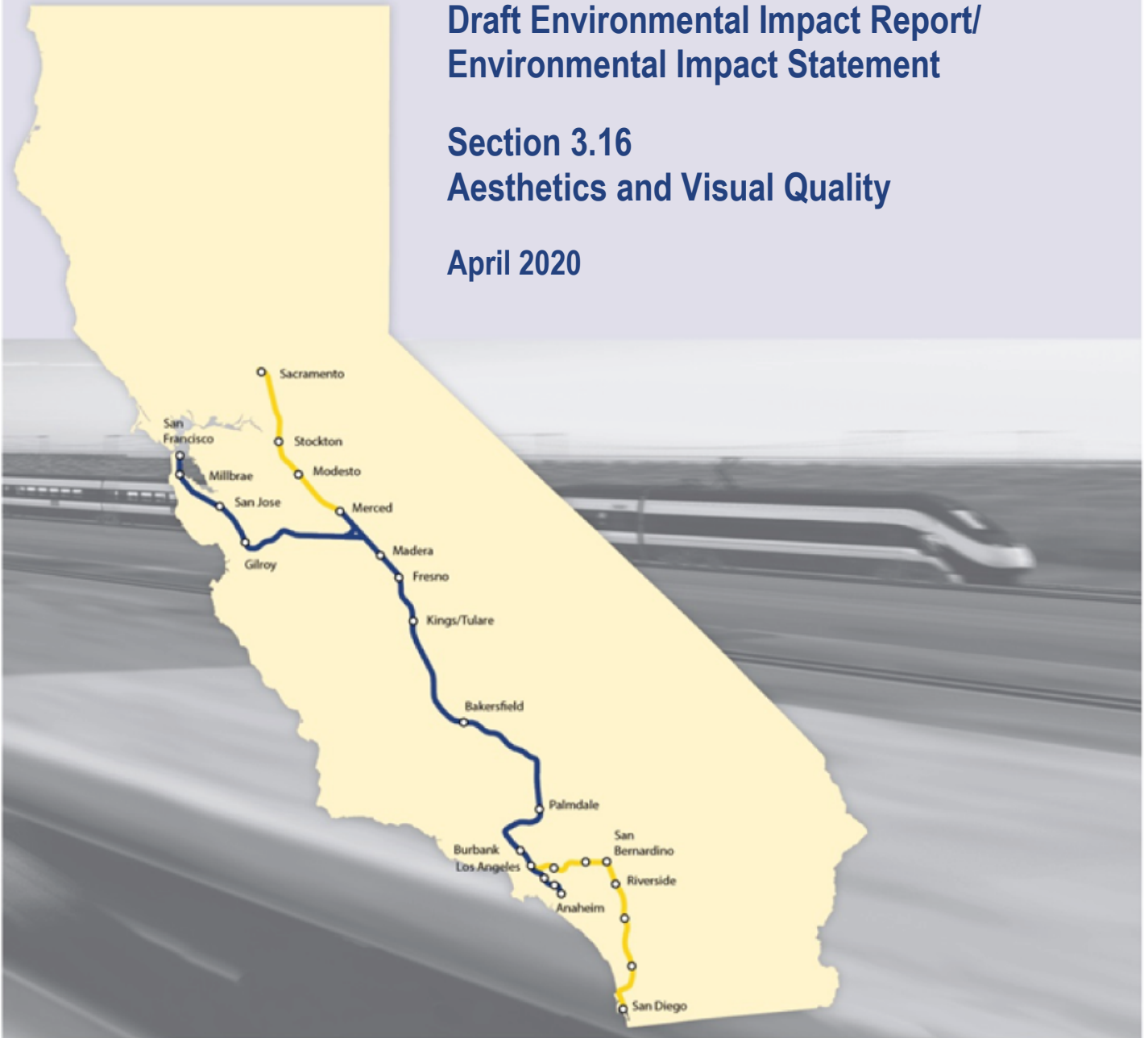
California High-Speed Rail Authority

San Jose to Merced *Project Section*

**Draft Environmental Impact Report/
Environmental Impact Statement**

**Section 3.16
Aesthetics and Visual Quality**

April 2020



The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

TABLE OF CONTENTS

3.16	Aesthetics and Visual Quality	3.16-1
3.16.1	Introduction.....	3.16-1
3.16.2	Laws, Regulations, and Orders.....	3.16-2
3.16.3	Consistency with Plans and Laws.....	3.16-4
3.16.4	Methods for Evaluating Impacts.....	3.16-5
3.16.5	Affected Environment	3.16-13
3.16.6	Environmental Consequences	3.16-76
3.16.7	Mitigation Measures.....	3.16-155
3.16.8	Impact Summary for NEPA Comparison of Alternatives.....	3.16-158
3.16.9	CEQA Significance Conclusions	3.16-168

Tables

Table 3.16-1	Affected Viewer Groups and Associated Sensitivities.....	3.16-10
Table 3.16-2	Santa Clara Landscape Unit Visual Character, Viewer Group Sensitivity, and Visual Quality	3.16-15
Table 3.16-3	Key Viewpoints Representing the Santa Clara Landscape Unit	3.16-18
Table 3.16-4	Diridon Station Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-21
Table 3.16-5	Key Viewpoints Representing the Diridon Station Landscape Unit.....	3.16-23
Table 3.16-6	San Jose Station Approach Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-26
Table 3.16-7	Key Viewpoints Representing the San Jose Station Approach Landscape Unit.....	3.16-28
Table 3.16-8	Communications Hill Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-32
Table 3.16-9	Key Viewpoint Representing the Communications Hill Landscape Unit	3.16-33
Table 3.16-10	Monterey Highway San Jose Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-35
Table 3.16-11	Key Viewpoints Representing the Monterey Highway San Jose Landscape Unit.....	3.16-37
Table 3.16-12	Coyote Valley Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-40
Table 3.16-13	Key Viewpoint Representing the Coyote Valley Landscape Unit.....	3.16-42
Table 3.16-14	US 101 Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-45
Table 3.16-15	Key Viewpoints Representing the US 101 Landscape Unit	3.16-46
Table 3.16-16	Morgan Hill–San Martin Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-49
Table 3.16-17	Key Viewpoints Representing the Morgan Hill–San Martin Landscape Unit..	3.16-51
Table 3.16-18	Downtown Gilroy Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-54
Table 3.16-19	Key Viewpoints Representing the Downtown Gilroy Landscape Unit.....	3.16-56
Table 3.16-20	Pajaro–San Felipe Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-59
Table 3.16-21	Key Viewpoints Representing the Pajaro–San Felipe Landscape Unit.....	3.16-60

Table 3.16-22 Pacheco Pass Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-63
Table 3.16-23 Key Viewpoints Representing the Pacheco Pass Landscape Unit	3.16-64
Table 3.16-24 San Luis Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-67
Table 3.16-25 Romero Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-70
Table 3.16-26 Key Viewpoints Representing the Romero Landscape Unit.....	3.16-71
Table 3.16-27 Henry Miller Landscape Unit Visual Character, Viewer Groups, and Visual Quality	3.16-74
Table 3.16-28 Key Viewpoints Representing the Henry Miller Landscape Unit.....	3.16-75
Table 3.16-29 Summary of Visual Quality Change and Degree of Impact for Project Alternatives	3.16-76
Table 3.16-30 Landscape Unit-Specific Temporary Construction Activities.....	3.16-81
Table 3.16-31 Comparison of Project Alternative Impacts for Aesthetics and Visual Quality	3.16-160
Table 3.16-32 CEQA Significance Conclusions and Mitigation Measures for Aesthetics and Visual Quality	3.16-168

Figures

Figure 3.16-1 Project Alternatives, KVPs, and Regional Scenic Resources	3.16-7
Figure 3.16-2 Visual Effects	3.16-12
Figure 3.16-3 KVPs, Visual Resources, and Viewers in the Santa Clara Landscape Unit ...	3.16-14
Figure 3.16-4 KVPs, Visual Resources, and Viewers in the Diridon Station Landscape Unit.....	3.16-20
Figure 3.16-5 KVPs, Visual Resources, and Viewers in the San Jose Station Approach Landscape Unit	3.16-25
Figure 3.16-6 KVPs, Visual Resources, and Viewers in the Communications Hill Landscape Unit	3.16-31
Figure 3.16-7 KVPs, Visual Resources, and Viewers in the Monterey Highway San Jose Landscape Unit	3.16-34
Figure 3.16-8 KVPs, Visual Resources, and Viewers in the Coyote Valley Landscape Unit	3.16-39
Figure 3.16-9 KVPs, Visual Resources, and Viewers in the US 101 Landscape Unit.....	3.16-44
Figure 3.16-10 KVPs, Visual Resources, and Viewers in the Morgan Hill–San Martin Landscape Unit	3.16-48
Figure 3.16-11 KVPs, Visual Resources, and Viewers in the Downtown Gilroy Landscape Unit.....	3.16-53
Figure 3.16-12 KVPs, Visual Resources, and Viewers in the Pajaro–San Felipe Landscape Unit	3.16-58
Figure 3.16-13 KVPs, Visual Resources, and Viewers in the Pacheco Pass Landscape Unit.....	3.16-62
Figure 3.16-14 Visual Resources, and Viewers in the San Luis Landscape Unit.....	3.16-66
Figure 3.16-15 KVPs, Visual Resources, and Viewers in the Romero Landscape Unit.....	3.16-69
Figure 3.16-16 KVPs, Visual Resources, and Viewers in the Henry Miller Landscape Unit .	3.16-73
Figure 3.16-17 KVP 1 Santa Clara Landscape Unit—Main Street: Existing, Baseline 2029, and Simulated Views	3.16-86

Figure 3.16-18 KVP 2 Santa Clara Landscape Unit—I-880: Existing, Baseline 2029, and Simulated Views..... 3.16-87

Figure 3.16-19 KVP 3 Santa Clara Landscape Unit—West Hedding Street: Existing, Baseline 2029, and Simulated Views 3.16-88

Figure 3.16-20 KVP 4 Diridon Station Landscape Unit—Caltrain from The Alameda: Existing, Baseline 2029, and Simulated Views..... 3.16-92

Figure 3.16-21 KVP 5 Diridon Station Landscape Unit—Caltrain from West Santa Clara Street: Existing, Baseline 2029, and Simulated Views 3.16-93

Figure 3.16-22 KVP 6 Diridon Station Landscape Unit—San Jose Diridon Station: Existing, Baseline 2029, and Simulated Views..... 3.16-94

Figure 3.16-23 KVP 7 San Jose Station Approach Landscape Unit—San Jose Skyline: Existing, Baseline 2029, and Simulated Views..... 3.16-96

Figure 3.16-24 KVP 8 San Jose Station Approach Landscape Unit—Gardner School: Existing, Baseline 2029, and Simulated Views..... 3.16-97

Figure 3.16-25 KVP 9 San Jose Station Approach Landscape Unit—Fuller Avenue: Existing, Baseline 2029, and Simulated Views..... 3.16-99

Figure 3.16-26 KVP 10 San Jose Station Approach Landscape Unit—Delmas Street: Existing, Baseline 2029, and Simulated Views..... 3.16-100

Figure 3.16-27 KVP 11 Communications Hill Landscape Unit—Communications Hill Park: Existing and Simulated Views..... 3.16-102

Figure 3.16-28 KVP 12 Monterey Highway San Jose Landscape Unit—Lick Quarry: Existing and Simulated Views..... 3.16-105

Figure 3.16-29 KVP 13 Monterey Highway San Jose Landscape Unit—Branham Lane: Existing and Simulated Views..... 3.16-106

Figure 3.16-30 KVP 14 Monterey Highway San Jose Landscape Unit—Edenvale Drive: Existing, Baseline 2029, and Simulated Views..... 3.16-107

Figure 3.16-31 KVP 15 Monterey Highway San Jose Landscape Unit—Avenida Rotella: Existing and Simulated Views..... 3.16-108

Figure 3.16-32 KVP 16 Coyote Valley Landscape Unit—Monterey Road Coyote Valley: Existing and Simulated Views..... 3.16-112

Figure 3.16-33 KVP 17 US 101 Landscape Unit—Walnut Grove: Existing and Simulated Views..... 3.16-116

Figure 3.16-34 KVP 18 US 101 Landscape Unit—East Dunne Avenue: Existing and Simulated Views..... 3.16-117

Figure 3.16-35 KVP 19 Morgan Hill—San Martin Landscape Unit—Peebles Avenue: Existing and Simulated Views..... 3.16-120

Figure 3.16-36 KVP 20 Morgan Hill—San Martin Landscape Unit—Caltrain Morgan Hill Station: Existing and Simulated Views 3.16-122

Figure 3.16-37 KVP 21 Morgan Hill San Martin Landscape Unit—San Martin: Existing and Simulated Views 3.16-123

Figure 3.16-38 KVP 22 Downtown Gilroy Landscape Unit—East 6th Street: Existing and Simulated Views..... 3.16-126

Figure 3.16-39 KVP 23 Downtown Gilroy Landscape Unit—Caltrain Gilroy Station: Existing and Simulated Views..... 3.16-127

Figure 3.16-40 KVP 24 Downtown Gilroy Landscape Unit—East 8th Street: Existing and Simulated Views..... 3.16-128

Figure 3.16-41 KVP 25 Pajaro—San Felipe Landscape Unit—Leavesley Road: Existing and Simulated Views 3.16-133

Figure 3.16-42 KVP 26 Pajaro—San Felipe Landscape Unit—SR 152 at Frazier Lake Road: Existing and Simulated Views 3.16-136

Figure 3.16-43 KVP 27 Pajaro–San Felipe Landscape Unit—San Felipe: Existing and Simulated Views.....3.16-137

Figure 3.16-44 KVP 28 Pacheco Pass Landscape Unit—SR 152: Existing and Simulated Views.....3.16-140

Figure 3.16-45 KVP 29 Pacheco Pass Landscape Unit—Casa de Fruta: Existing and Simulated Views.....3.16-141

Figure 3.16-46 KVP 30 Pacheco Pass Landscape Unit—Pacheco Creek Valley: Existing and Simulated Views.....3.16-142

Figure 3.16-47 KVP 31 Romero Landscape Unit—West Loop Road: Existing and Simulated Views.....3.16-144

Figure 3.16-48 KVP 32 Romero Landscape Unit—Pomas Road: Existing and Simulated Views.....3.16-146

Figure 3.16-49 KVP 33 Romero Landscape Unit—Interstate 5: Existing and Simulated Views.....3.16-147

Figure 3.16-50 KVP 34 Henry Miller Landscape Unit—Volta: Existing and Simulated Views.....3.16-149

Figure 3.16-51 KVP 35 Henry Miller Landscape Unit—Henry Miller Road: Existing and Simulated Views.....3.16-150

Figure 3.16-52 KVP 33—Alternatives 1, 2, 3, and 4 Simulation.....3.16-152

ACRONYMS AND ABBREVIATIONS

ACE	Altamont Corridor Express
Authority	California High-Speed Rail Authority
Bay Area	San Francisco Bay Area
C.F.R.	Code of Federal Regulations
CEMOF	Centralized Equipment Maintenance and Operations Facility
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
EIR	environmental impact report
EIS	environmental impact statement
FHWA	Federal Highway Administration
FLPMA	Federal Land Policy and Management Act
FRA	Federal Railroad Administration
GEA	Grasslands Ecological Area
GO	General Order
HSR	high-speed rail
I-	Interstate
IAMF	impact avoidance and minimization feature
kV	kilovolt
KVP	key viewpoint
MOWS	maintenance of way siding
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OCS	overhead contact system
PG&E	Pacific Gas and Electric Company
project extent, project	San Jose to Central Valley Wye Project Extent
RSA	resource study area
SR	State Route
TPSS	traction power substation
UPRR	Union Pacific Railway
U.S.C.	United States Code
VTA	(Santa Clara) Valley Transportation Authority

3.16 Aesthetics and Visual Quality

3.16.1 Introduction

This section describes the existing visual environment of the San Jose to Central Valley Wye Project Extent (project extent or project) resource study area (RSA), including scenic resources, and analyzes the potential impacts on aesthetics and visual quality that would result from the project alternatives. Analysts evaluate aesthetics and visual quality impacts by assessing the compatibility of the project with the environment, combined with the viewer perspective. Aesthetics and visual quality impacts are determined by the extent to which the project would improve the viewer experience of the environment, degrade visual resources, or alter desired views.

Aesthetics and Visual Quality—Key Issues:

- Changes in visual character due to removal of existing structures and landscaping.
 - Changes in visual character due to addition of aerial structures.
 - Effects on sensitive viewer groups.
 - Effects from new sources of light and glare.
-

The *San Jose to Merced Project Section Aesthetics and Visual Quality Technical Report* (Authority 2019) provides additional technical details on aesthetics and visual quality. Appendix A of the technical report provides an aerial map locating each key viewpoint (KVP) analyzed, images depicting the existing view, and a photosimulation of the same view with the project alternatives. Appendix B of the technical report describes the approach used to select and analyze KVPs. Additional details on aesthetics and visual quality are provided in the following appendices in Volume 2 of this Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS):

- Appendix 2-D, Applicable Design Standards, describes the relevant design standards for this project.
- Appendix 2-E, Impact Avoidance and Minimization Features, provides the list of all impact avoidance and minimization features (IAMFs) incorporated into the project.
- Appendix 2-J, Regional and Local Plans and Policies, provides a list by resource of all applicable regional and local plans and policies.
- Appendix 2-K, Policy Consistency Analysis, provides a summary by resource of project extent inconsistencies and reconciliations with local plans and policies.

This section evaluates the direct and indirect impacts on aesthetics and visual quality that would occur with the No Project Alternative and the project alternatives. The following resource sections in this Draft EIR/EIS provide additional information related to aesthetics and visual quality:

- Section 3.2, Transportation, evaluates impacts on the regional transportation system including transportation rights-of-way and transportation corridors.
- Section 3.4, Noise and Vibration, evaluates impacts from installation of noise barriers to reduce noise from passing trains.
- Section 3.12, Socioeconomics and Communities, evaluates impacts related to changes in community character and cohesion.
- Section 3.13, Station Planning, Land Use, and Development, evaluates impacts on land use patterns and development.
- Section 3.14, Agricultural Farmland, evaluates impacts on agricultural farmland.
- Section 3.15, Parks, Recreation, and Open Space, evaluates impacts on natural areas, parks, open space, and recreationists.

- Section 3.17, Cultural Resources, evaluates impacts on resources with cultural or historical significance.

3.16.1.1 Definition of Resources

The following are definitions for aesthetics and visual resources analyzed in this Draft EIR/EIS:

- **Viewer groups**—Viewer groups include people such as roadway/highway/trail users (travelers), agricultural workers, park and trail users (recreationists), and residents.
- **Viewer sensitivity**—Viewer sensitivity is an assessment of the concern viewer groups may have to changes in visual resources based on the relative combined levels of viewer awareness to visual changes and viewer exposure to visual changes.
- **Landscape units**—Landscape units are used to divide long linear projects into logical geographic entities for which impacts from a proposed project can be assessed. They typically have broadly similar visual characteristics.
- **KVPs**—KVPs provide representative examples of existing views of the landscape as seen by viewer groups within each landscape unit and are used to illustrate how a proposed project would change those views.
- **Visual resources**—A visual resource is a component of the natural, cultural, or project environments (e.g., vegetation, buildings, geometrics) that contributes to the visual character of the surrounding area or is important because of its visual characteristics or scenic qualities.
- **Visual character**—Visual character is an impartial description of the landscape's visual features and is defined by the relationships between the existing visible natural and built landscape features.
- **Visual quality**—Visual quality is an assessment of what viewers like and dislike about visual resources that compose the visual character. Elements of visual quality include natural harmony, cultural order, and project coherence.
- **Visual effects**—Visual effects are determined by combining the level of change in visual quality with the viewer sensitivity to those changes.
- **Context-sensitive solutions**—A context-sensitive solution process provides a collaborative, interdisciplinary approach in which all stakeholders identify a transportation facility that fits its setting. The approach leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources while improving or maintaining safety, mobility, and infrastructure conditions (FHWA 2015).

3.16.2 Laws, Regulations, and Orders

This section presents federal and state laws, regulations, orders, and plans applicable to aesthetics and visual resources. The Authority would implement the HSR system, including this project, in compliance with all federal and state regulations. Regional and local plans and policies relevant to aesthetics and visual resources considered in the preparation of this analysis are summarized in Appendix 2-J.

3.16.2.1 Federal

National Environmental Policy Act (42 U.S.C. § 4321 et seq.)

The National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] § 4321 et seq.) requires the consideration of potential environmental effects, including potential aesthetic and visual effects, in the evaluation of any proposed federal agency action. NEPA also obligates federal agencies to consider the environmental consequences in their projects and programs as part of the planning process. General NEPA procedures are set forth in the Council on

Environmental Quality (CEQ) regulations at 40 Code of Federal Regulations (C.F.R.) Parts 1500–1508.

U.S. Department of Transportation Act (Section 4(f)) (49 U.S.C. § 303)

Compliance with Section 4(f) is required for any transportation projects either directly implemented by or receiving federal funding or discretionary approvals from the U.S. Department of Transportation. Section 4(f) protects publicly owned land of parks, recreational areas, wildlife refuges, and historic sites of national, state, or local significance located on public or private land. The FRA may not approve the use of a Section 4(f) property, as defined in 49 U.S.C. Section 303(c), unless there is no feasible and prudent alternative to avoid the use of the property and the action includes all possible planning to minimize harm resulting from such use, or the project has a *de minimis* impact on the 4(f) property consistent with the requirements of 49 U.S.C. Section 303(d).

Federal Railroad Administration, Procedures for Considering Environmental Impacts (64 Federal Register 28545)

The Federal Railroad Administration’s (FRA) *Procedures for Considering Environmental Impacts* states, “The EIS should identify any significant changes likely to occur in the natural environment and in the developed environment. The EIS should also discuss the consideration given to design quality, art, and architecture in project planning and development as required by U.S. Department of Transportation Order 5610.4.”

National Historic Preservation Act (16 U.S.C. § 470 et seq.)

The National Historic Preservation Act (NHPA) establishes the federal government policy on historic preservation. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. Potential adverse effects include change in the physical features of the property’s setting that contribute to its historic significance, or introduction of visual elements that diminish the integrity of the property’s significant historic features.

3.16.2.2 State

State Scenic Highways (Streets and Highways Code §§ 260 to 263)

The State Scenic Highways Program lists highways that are either eligible for designation as a scenic highway or already are designated as a scenic highway. A highway may be designated as scenic based on the amount of natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler’s enjoyment of the view (Caltrans 2017). The Streets and Highways Code establishes state responsibility for protecting, preserving, and enhancing California’s natural scenic beauty of scenic routes and areas that require special scenic conservation and treatment.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) has safety and security regulatory authority over all transit agencies in California. Rules established by the CPUC are called General Orders (GOs). The following GOs are relevant to vegetation clearance along the Caltrain right-of-way.

- GO 95: Overhead Electric Line Construction—This order concerns electrical clearances relative to overhead lines, including vegetation clearances. However, this order does not provide any specific guidance for 25-kilovolt (kV) systems proposed for use by the project.
- GO 118-A: Construction, Reconstruction and Maintenance of Walkways, and Control of Vegetation adjacent to Railroad Tracks—This order concerns safe access and vegetation control relative to physical safe passage. The Caltrain Joint Powers Board presently maintains the right-of-way to provide clearances, including vegetation, consistent with this GO.

The CPUC initiated new rule-making (13-03-009) in 2013 pursuant to Petition 12-10-011 concerning new GO governing safety standards for the use of 25-kilovolt-amp electrical lines to power high-speed trains. The new rule is intended to establish uniform safety requirements

governing the design, construction, operation, and maintenance of 25-kilovolt-amp overhead contact system (OCS), which would be constructed for the operation of high-speed trains in California. CPUC meetings on this GO have resulted in discussions about the GO being specific to a fully grade-separated, dedicated HSR system. The draft GO contains vegetation clearance requirements among other requirements. Because the OCS to be constructed for the project would be used in the future by both Caltrain and HSR, some of the issues addressed in the draft GO may apply to the project's OCS.

As the draft GO proceeds through rule-making, the Caltrain Joint Powers Board would coordinate with CPUC concerning the applicability of the GO to the project and would apply any requirements in the adopted order (as well as additional requirements) to be determined during final design.

3.16.2.3 Regional and Local

City and county plans—including general plans, downtown master plans, community plans, and specific plans—address aesthetics and visual quality. Policies and regulations include design guidelines and designated scenic corridors/routes, and identify areas of particular scenic value. All regional and local policies that are applicable to the project are listed in Volume 2, Appendix 2-J.

3.16.3 Consistency with Plans and Laws

As indicated in Section 3.1.5.3, Consistency with Plans and Laws, the California Environmental Quality Act (CEQA) and CEQ regulations require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, or local plans and laws. As such, this Draft EIR/EIS describes the inconsistency of the project alternatives with federal, state, regional, and local plans and laws.

There are a number of federal and state laws and implementing regulations, listed in Section 3.16.2.1, Federal, and Section 3.16.2.2, State, that direct the analysis of aesthetic and visual impacts for transportation projects, including analysis related to historic resources and state scenic highways and are applicable to this Draft EIR/EIS. A summary of the federal and state requirements considered in this analysis follows:

- Federal direction on analysis of aesthetic and visual impacts for transportation projects. Applicable acts and laws include Section 4(f) of the Department of Transportation Act, the FRA Procedures for Considering Environmental Impacts, and the NHPA.
- State highways designated as scenic in the California Streets and Highways Code.

The Authority, as the lead agency proposing to construct and operate the HSR system, is required to comply with all federal and state laws and regulations and to secure all applicable federal and state permits prior to initiating construction on the selected alternative. Therefore, there would be no inconsistencies between the project alternatives and these federal and state laws and regulations.

The Authority is a state agency and therefore is not required to comply with local land use and zoning regulations; however, it has endeavored to design and construct the HSR project so that it is compatible with land use and zoning regulations. For example, the project would be consistent with design guidelines established to create a minimum aesthetic quality for a long-lasting infrastructure and minimize impacts on aesthetic and visual resources. The Authority reviewed a total of 162 plans and policies, and determined that the project alternatives were inconsistent with 18 policies within the following regional and local plans and laws:

- **Santa Clara County General Plan (Santa Clara County 1994)**—Policies C-GD 17, C-PR 39, R-PR 41, C-RC 61, R-GD 20, R-GD-25, R-RC 101, R-RC(i) 36, SC 16.6, and R-LU 79. The project alternatives would be inconsistent with these policies, which: provide for protection of a scenic corridor in Coyote Valley adjacent to US 101; protect the visual integrity of scenic gateways to the South County including Pacheco Pass, Route 101 south of Gilroy, and a Coyote greenbelt area; and state that public infrastructure in areas of special scenic significance should not create major, lasting adverse visual impacts and that grading and

terrain alterations should not create visible scars on the landscape. Construction of the project alternatives would degrade the visual environment by placing aerial structures and a maintenance facility in the Coyote Valley. Tunnel construction in the Pacheco Pass would also degrade the visual environment through removal of existing topography, regrading, and new land cover.

- **Envision San Jose 2040 General Plan (City of San Jose 2011)**—Policies IN-1.9, CD-9.1, CD-9.3, and CD-10.1. These policies discuss designing public facilities to be aesthetically pleasing, specify that development within Rural Scenic Corridors should preserve and enhance views, and recognize the importance of gateways in shaping perceptions of San Jose. Construction of Alternatives 1 and 3 would be inconsistent with these policies because they would place an aerial structure along Monterey Road in the Coyote Valley that would block views and overwhelm the existing topography with its scale.
- **Coyote Creek Parkway County Park Master Plan (Santa Clara County Parks 2006)**—Objective PR-5. Construction of Alternatives 1 and 3, which would place an aerial structure adjacent to the Coyote Creek Parkway that would block views and overwhelm the existing topography with its scale, would be inconsistent with this policy regarding maintaining opportunities for Coyote Creek Parkway users to experience a sense of remoteness.
- **Morgan Hill 2035 General Plan (City of Morgan Hill 2016)**—Natural Resources and Environment Policies 2.1 and 6.4. These policies protect views of hillsides, ridgelines, and prominent natural features surrounding Morgan Hill, and preserve and protect mature and healthy trees wherever feasible. Construction of all project alternatives would include aerial structures or embankments that would block distant views to prominent natural features surrounding Morgan Hill. Alternatives 1 and 3 would place an aerial structure along US 101 that would block views. Construction of Alternative 2 would remove all Keesling’s Shade Trees along Monterey Road from the northern city limit of Morgan Hill to Cochrane Road.
- **2030 Merced County General Plan (County of Merced 2013)**—Policy NR-4.1. This policy promotes the preservation of agricultural lands as a means of protecting the County’s scenic resources. Construction of the project alternatives would cross through agricultural and open-space lands, which would alter or block views of these scenic resources.

Appendix 2-K further details the project’s inconsistency with these local and regional aesthetics and visual quality policies. Although the project alternatives would be inconsistent with these specific provisions, they would be consistent with the growth and development, parks and recreation, resource conservation, natural resources, and open space objectives of these ordinances and plan policies. For example, the project alternatives would include IAMFs that would make sure that design guidelines are established to create a minimum aesthetic quality for a long-lasting infrastructure, apply context-sensitive solutions, and provide a design review process, all of which would minimize impacts on aesthetic and visual resources.

3.16.4 Methods for Evaluating Impacts

The evaluation of aesthetics and visual quality is a requirement of NEPA and CEQA. The Authority’s Version 5 Environmental Methods used to evaluate aesthetics and visual quality impacts is generally based on the federal guidelines provided in the U.S. Department of Transportation Federal Highway Administration (FHWA) *Visual Impact Assessment of Highway Projects* (FHWA 2015) as tailored and applied to HSR (Authority and FRA 2017). The following sections define the RSA, summarize the methods used to describe the existing visual character and the project’s visual character, and describe the methods used to analyze impacts on aesthetics and visual quality. As summarized in Section 3.16.1, Introduction, seven other resource sections in this Draft EIR/EIS also provide additional information related to aesthetics and visual quality.

The methodology for conducting the aesthetics and visual quality assessment includes the following components:

- Establish the RSA, landscape units, and KVPs within landscape units for visual assessment (Section 3.16.4.1, Definition of Resource Study Area).
- Describe the existing visual character, viewer groups and their sensitivities, and existing visual quality; and identify KVPs and views for visual assessment (Section 3.16.5, Affected Environment). The locations of the KVPs are illustrated on Figure 3.16-1, and viewer groups shown are identified in Table 3.16-1.
- Depict the visual appearance with the project.
- Analyze the project-generated change in visual quality and viewer sensitivity to the change in visual quality to determine the degree of the visual impact (Section 3.16.6, Environmental Consequences).
- Assess the project's direct and indirect visual impacts.
- Identify mitigation measures to address visual impacts (Section 3.16.7, Mitigation Measures).

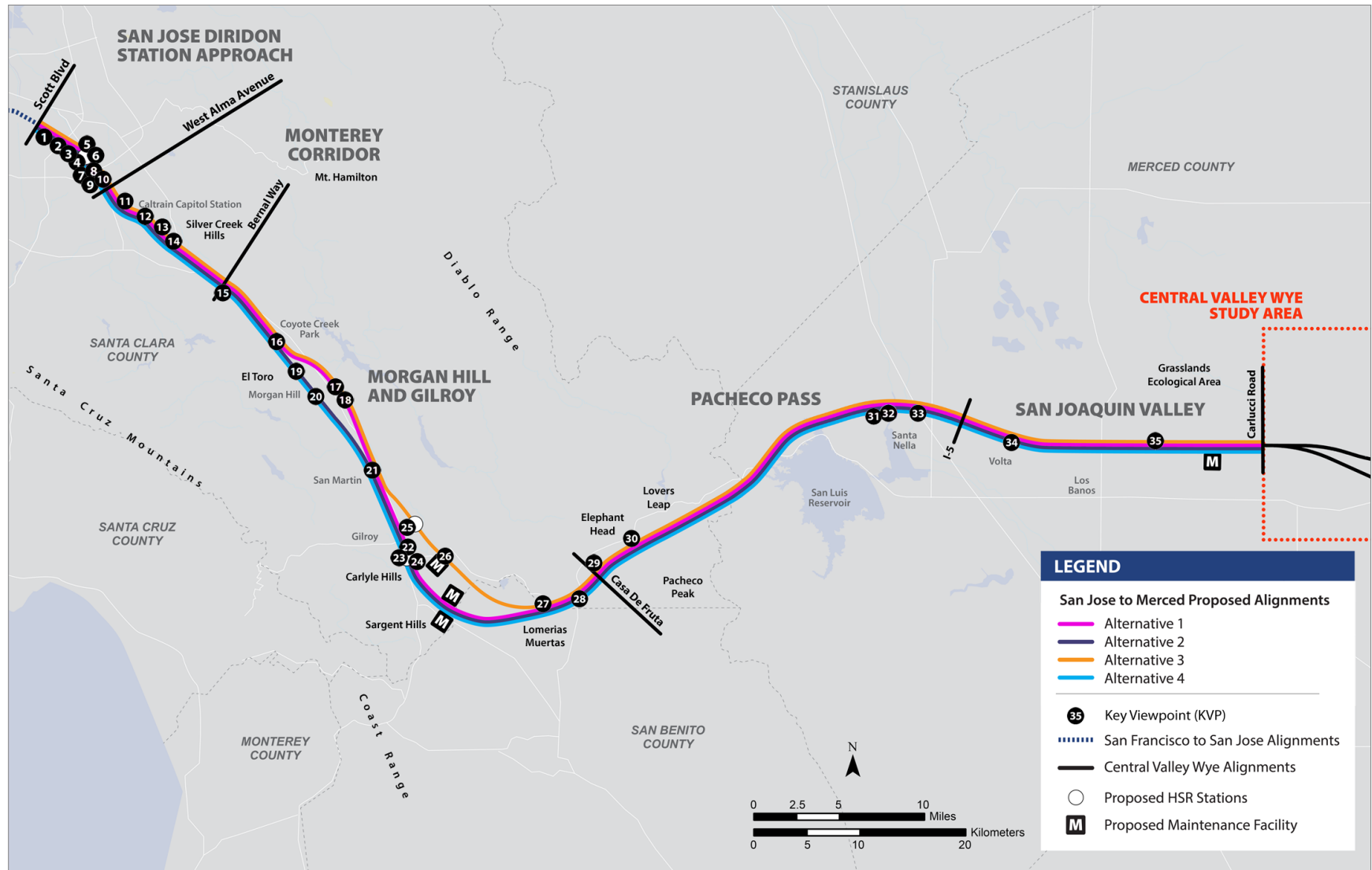
In addition to these steps, a 2029 Baseline condition is provided for the landscape units and KVPs where Caltrain is undertaking electrification through the Caltrain Modernization Program. This geography includes the Santa Clara, Diridon Station, and San Jose Station Approach Landscape Units, and KVPs 1–10. Analysis and visual simulations of the electrified Caltrain railway are then utilized as a baseline against which to compare the HSR alternatives.

3.16.4.1 Definition of Resource Study Area

The RSA is the area in which all environmental investigations specific to aesthetics and visual quality are conducted to determine the resource characteristics and potential project impacts. The RSA for direct and indirect impacts encompasses a 0.5-mile distance from the project footprint in rural areas and a 0.25-mile distance from the project footprint in urbanized areas. Where elevated or more expansive views are present or where there are prominent and regionally important visual and scenic features, such as mountain ridgelines, large iconic structures, or water features, middleground views (up to 3 miles from the project footprint) and background views (beyond 3 miles from the project footprint) are discussed as contributing visual elements to the RSA.

Fourteen landscape units within the RSA have been identified for this analysis. Each landscape unit is defined by a common visual character and viewer groups, and each would be subject to generally uniform visual effects. Visually distinct areas that may be present in a given landscape unit may create minor variations in visual character or a distinct viewer subgroup. Such areas are detailed as part of the landscape unit analysis discussed and depicted in Section 3.16.5. These landscape units are:

- Santa Clara
- Diridon Station
- San Jose Station Approach
- Communications Hill
- Monterey Highway San Jose
- Coyote Valley
- US 101
- Morgan Hill–San Martin
- Downtown Gilroy
- Pajaro–San Felipe
- Pacheco Pass
- San Luis
- Romero
- Henry Miller



Note: Key Viewpoints are described in the San Jose to Merced Aesthetics and Visual Quality Technical Report, within Appendix A Key Viewpoint Selection and Analysis.

JANUARY 2019

Figure 3.16-1 Project Alternatives, KVPs, and Regional Scenic Resources

The Authority identified KVPs within the landscape units to provide representative examples of existing views of the landscape as seen by affected viewers. The Aesthetics and Visual Quality Technical Report Appendix A, Key Viewpoint Selection and Analysis, describes the approach that was used to select and analyze KVPs. The KVPs also are used to illustrate and assess whether an alternative would be compatible or incompatible with the existing visual character. A total of 35 KVPs have been identified within the project extent for the visual assessment. Figure 3.16-1 shows the project alternatives, the locations of KVPs and regionally important scenic resources, such as Mt. Hamilton and the Diablo Range, that are visible from the RSA.

3.16.4.2 Impact Avoidance and Minimization Features

IAMFs are project features that are considered to be part of the project and are included as applicable in each of the alternatives for purposes of the environmental impact analysis. The full text of the IAMFs that are applicable to the project is provided in Appendix 2-E. The following IAMFs are applicable to the aesthetics and visual quality analysis:

- AVQ-IAMF#1: Aesthetic Options
- AVQ-IAMF#2: Aesthetic Review Process
- SOCIO-IAMF#1: Construction Management Plan
- PK-IAMF#1: Parks, Recreation, and Open Space
- LU-IAMF#1: HSR Station Area Development: General Principles and Guidelines
- LU-IAMF#3: Restoration of Land Used Temporarily During Construction
- BIO-IAMF#5: Prepare and Implement a Biological Resources Management Plan

This environmental impact analysis considers these IAMFs as part of the project design. In Section 3.16.6, Environmental Consequences, each impact narrative describes how these project features are applicable and, where appropriate, effective at avoiding or minimizing potential impacts to less than significant under CEQA.

3.16.4.3 Methods for Impact Analysis

This section describes the sources and methods the Authority used to analyze potential project impacts on aesthetics and visual quality for each landscape unit and at each KVP. These methods apply to both NEPA and CEQA analyses unless otherwise indicated. Refer to Section 3.1.5.4, Methods for Evaluating Impacts, for a description of the general framework for evaluating impacts under NEPA and CEQA. Sections 3.16.4.4, Method for Evaluating Impacts under NEPA, and 3.16.4.5, Method for Determining Significance under CEQA, describe the NEPA and CEQA impact criterion used to evaluate project impacts on aesthetics and visual quality.

This impact assessment evaluates visual quality based on the existing physical characteristics of visual resources and on viewers' awareness of and exposure to those resources. The degree of visual impact generated by a project depends on the project's visual compatibility with its surrounding environment and on viewers' sensitivity to visual changes. The following describes the methods used to define the visual setting, illustrate the project appearance, and determine visual effects.

Existing Visual Character, Viewer Groups, and Visual Quality

Visual Character

Visual character is an impartial description of the visual attributes of a scene or object expressed as the natural, cultural, and project environments. Aesthetics and visual resources can include stands of trees, rock outcroppings, historic buildings, views of an urban skyline, scenic vistas, or a visually important area of land, water, or other environmental and physical elements that currently make up the RSA within a particular landscape unit. Most of the project footprint is within an existing transportation corridor. Accordingly, the Authority evaluated the existing project environment to establish existing, baseline conditions. Where the project would be located in undeveloped areas without an existing transportation corridor as an existing project environment, analysts described only the natural and cultural environments.

Scenic vista views are defined as higher-quality views that generally encompass a wide area with long-range views to surrounding elements in the landscape. Such views usually occur where there is a flat landscape with little vegetation or an elevated viewing point that allows for views out and over the surrounding landscape. Vistas also have a directional range—some viewpoints have scenic vistas with a 360-degree view, while others may have a vista view confined by a narrower line of sight. Narrower vista views are often confined by topography, development, and vegetation.

For purposes of this analysis, the term “scenic vistas” refers either to designated scenic viewpoints—ones identified in public documents or formally developed for sightseeing—or to views generally of exceptional scenic quality, particularly if widely recognized or identified in public documents. Examples of scenic vistas include the following:

Public views of definable, widely recognized natural or humanmade scenic features of public interest or concern. These may include:

- Mountain peaks
- Bays
- Rivers
- Other natural features of regional importance
- Vivid humanmade scenic features such as the Golden Gate Bridge, the Statue of Liberty, or highly vivid city skylines

Public views from designated view locations, such as:

- California Department of Transportation (Caltrans) public vista point along a highway
- View overlook in a national or state forest or park
- View locations designated in a land use planning document adopted by federal, state, or local government.

No formally designated scenic vistas or vista points were identified in the project study area. However, county and city documents call out many views to existing landforms and “gateway” locations along major roadways. These locations are noted in the descriptions of each landscape unit.

In California, state scenic highways are designated by Caltrans. To be designated scenic, a highway must traverse an area of outstanding scenic quality, one containing striking views, flora, geology, or other unique natural attributes. The project study area contains one state or local designated scenic highway within a landscape unit, Interstate (I-) 5 in the vicinity of Santa Nella.

Viewer Groups and Viewer Sensitivities

Viewers are the population affected by the proposed project’s aesthetics and are defined by their relationship to the project and their visual preferences. Viewer groups are classified by their activities, such as residential, recreational, retail, commercial, institutional, civic, industrial, agriculture viewers and travelers. Travelers are further classified by their purpose for traveling (e.g., commuters, tourists, haulers) or mode (e.g., pedestrians, cyclists, motorists, rail users). This analysis evaluates the sensitivity of each viewer group and describes it using five ratings: Low, Moderately Low, Moderate, Moderately High, and High. The sensitivity ratings for each viewer group associated with the project are shown in Table 3.16-1.

Table 3.16-1 Affected Viewer Groups and Associated Sensitivities

Viewer Group	Viewer Group Sensitivity	Reasoning
Residential Viewers	High	Surrounding neighborhood appearance and views from residence are contributing factors for choice of residence and sense of pride in living in specific neighborhood/residence, resulting in high awareness. Amount of time spent daily at residence experiencing views contributes to high exposure to views.
Recreational Viewers	Low to high	Active recreationists (involved in team sports where concentration on team interaction is key) are generally focused on the activity, not the surrounding setting, and therefore have lower awareness. Passive recreationists (e.g., walkers, hikers, canoeists) travel to specific locations to experience the surroundings as part of their activity, embracing exposure to views and surroundings and have high awareness.
Retail Viewers	Moderately low to moderate	Retail viewers are concerned with locating retail locations by means of distinct architecture or signage. Awareness of surrounding environment increases if retail experience includes continued exposure to environment. For example, an outdoors farmers' market increases exposure to surroundings. An indoor supermarket produce department limits exposure once inside the building.
Commercial Viewers	Moderately low to moderate	While commercial viewers may have increased awareness of views, their commercial activities command their visual attention, limiting exposure.
Institutional Viewers	Moderately low to moderate	Institutional viewers who work at an institution have similar sensitivity as commercial viewers, but visitors would likely have a uniform moderate sensitivity, reflecting pride by awareness in the good upkeep and appearance of the institution's environment.
Civic Viewers	Moderately low to moderate	Civic viewers who work at an institution have similar sensitivity as commercial viewers. Visitors would likely have a moderate sensitivity, with high awareness of the good upkeep and appearance of the institution but limited exposure due to infrequent visits to the civic facility.
Industrial Viewers	Low to moderately low	Industrial viewers have a moderate awareness of the environment surrounding their workplace, but low exposure to it, due to visual focus on safely executing their work and the limited windows of industrial buildings to observe the surrounding environment during work.
Agricultural Viewers	Moderately low	Agricultural workers have a moderate awareness of their surrounding environment, limited to focusing on tending to the flora or fauna at hand. Their exposure is low, as they vary their workplaces with the seasons and crop cycles.

Viewer Group	Viewer Group Sensitivity	Reasoning
Traveler Viewers	Low to high	Awareness of traveler viewers varies with the landscape, traffic levels (for those operating vehicles), and whether the individual is a driver or passenger. Heavier traffic requires more focus on the actions of surrounding vehicles and people, with a lower awareness of the surrounding environment beyond the path of travel. Lighter traffic provides more opportunity to be aware of the surrounding landscape. More scenic conditions raise awareness by offering visual distractions away from the path of travel, such as the sight of a landmark or sunset. Exposure varies with speed and activity while traveling. Slower travel increases exposure. If not operating a vehicle, one may concentrate on surrounding environment (higher exposure) or read or work (lower exposure).

Visual Quality

Visual quality is the result of how viewers perceive their environment and what those viewers like or dislike about the visual resources that compose the visual character of a particular scene. These perceptions are expressed in terms of natural harmony, cultural order, and project coherence.

- **Natural harmony**—The visual character of the natural environment in combination with viewer preference affects the perception of natural harmony; viewers either consciously or unconsciously evaluate the composition of the natural environment and determine if it is harmonious or inharmonious.
- **Cultural order**—The visual character of the cultural environment in combination with viewer preferences affects the perception of order; viewers either consciously or unconsciously evaluate the composition of the cultural environment to determine if it is orderly or disorderly.
- **Project coherence**—The visual character of the project environment in combination with viewer preferences affects the perception of order; viewers either consciously or unconsciously evaluate the composition of the project environment and determine if it is coherent or incoherent.

The value placed on visual resources correlates to whether those resources meet the viewer’s preferred concepts of natural harmony, cultural order, and project coherence. The greater the degree to which preferences are met, the higher the visual quality; the more they fail to match preferences, the lower the visual quality. Establishing the visual quality of the natural, cultural, and project environments aids in evaluating the overall visual quality of the landscape. This analysis evaluates and assesses the visual quality of each landscape unit using five descriptive ratings: Low, Moderately Low, Moderate, Moderately High, and High.

Project Visual Appearance

The Authority used computer modeling and rendering techniques to prepare photographic simulations illustrating the visual character elements of the proposed project, the change in existing visual character, and the future visual appearance of each KVP with the relevant alternative in place. Simulations included views within the Santa Clara, Diridon Station, and San Jose Station Approach landscape units; simulations also illustrate Caltrain electrification, which will be completed prior to initiating HSR construction. Existing topographic and site data provided the basis for developing an initial digital model. Project engineers provided plan and profile drawings of the proposed HSR facilities, from which the Authority created a three-dimensional rendering of the proposed HSR facilities that they then overlaid onto a digital image of the existing conditions. Comparing the KVP existing photographs to the simulations provided the basis for determining potential project effects on views and visual quality.

Project Visual Impacts

Activities such as grading and excavation, and project components such as at-grade or elevated trackway, vegetative cover, tracks, OCS and other project infrastructure, and other ancillary visual elements that interact to form a composition can alter the existing visual environment. Project impacts were determined by evaluating changes to the existing visual quality (visual character + viewer preferences) and predicting viewer sensitivity to those changes, as illustrated on Figure 3.16-2. This evaluation includes an analysis of direct impacts caused by construction or operation of the project, and the indirect impacts from induced growth associated with the HSR stations.



Source: Adapted from FHWA 2015

MAY 2017

Figure 3.16-2 Visual Effects

The degree of change or value of the effect is expressed by summarizing the compatibility of the proposed project with existing conditions; the viewer sensitivity to that impact is a combination of the viewer's exposure to and awareness of the change in visual quality. The degree to which a project meets viewer preferences determines the level of change in visual quality.

The Authority assessed light and glare effects by determining the change in light and glare levels; evaluating affected viewers, viewer sensitivity, and viewer preferences; and determining if any mitigation would be required to reduce these effects.

3.16.4.4 Method for Evaluating Impacts under NEPA

CEQ NEPA regulations (40 C.F.R. Parts 1500–1508) provide the basis for evaluating project effects (as described in Section 3.1.5.4). As described in Section 1508.27 of these regulations, the criteria of context and intensity are considered together when determining the severity of the change introduced by the project.

- **Context**—For this analysis, the *context* includes adopted local plans, policies, and regulations; existing visual character; presence of parks and recreational destinations; historic districts and properties; important visual resources; and viewer groups.
- **Intensity**—For this analysis, *intensity* is determined by assessing the degree to which the project would result in changes to the context, including the introduction or alteration of features that substantially contrast with the inherent or established visual character of a view or landscape (blocking, removing, or changing a regionally or locally important visual resource or view) where the viewer sensitivity would increase the perceived impact of a visual change.

3.16.4.5 Method for Determining Significance under CEQA

CEQA requires that an EIR identify the significant environmental impacts of a project (CEQA Guidelines § 15126). One of the primary differences between NEPA and CEQA is that CEQA requires a significance determination for each impact using a threshold-based analysis (see 3.1.5.4 Methods for Evaluating Impacts, for further information). Under CEQA, significant impacts are determined by evaluating whether project impacts would exceed the significance threshold established for the resource (as presented in Section 3.1.5.4). For this project, the following standard CEQA criteria are used in determining whether the project would result in a significant impact on aesthetics and visual quality in the following instances:

- The project would have a substantial adverse impact on a scenic vista.
- The project would substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historical buildings within a state-designated scenic highway.
- The project would, in non-urbanized areas, substantially degrade the existing visual character or quality of the public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points.) In urbanized areas, the project would conflict with applicable zoning and other regulations governing scenic quality.
- The project would create a new source of substantial light or glare, which would adversely affect day or nighttime area views.

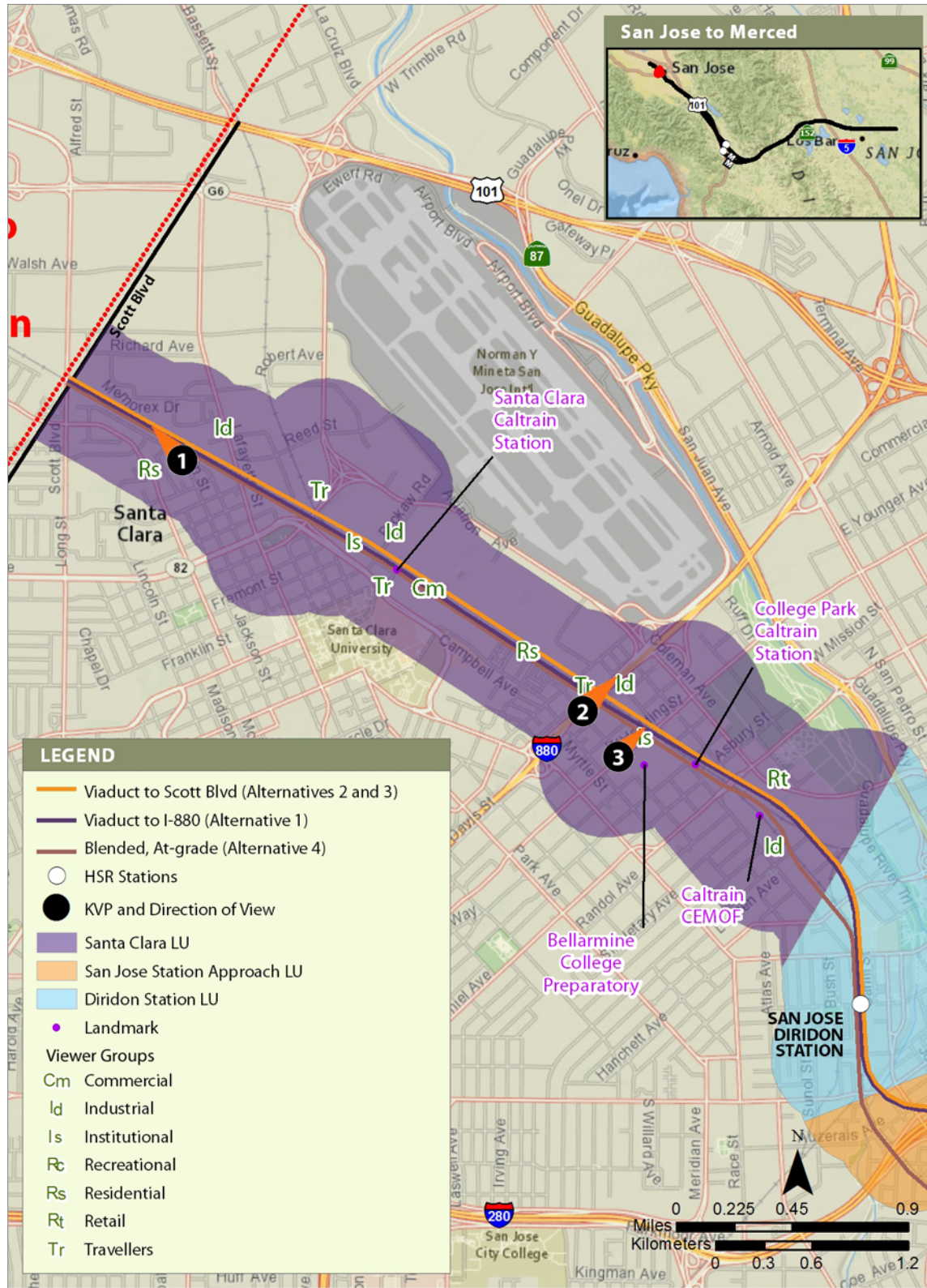
Other considerations include whether the project would (1) introduce elements that would conflict with the visual character of a state- or federally listed historic district or an eligible historic property or (2) substantially affect a park, recreational destination, or other feature or area identified as an important visual resource. In applying the criteria, the term *substantial* is defined as a decrease of two or more levels of visual quality in a landscape viewed by viewers with moderate to high viewer sensitivity or as a decrease of one level in a landscape viewed by viewers with high viewer sensitivity.

3.16.5 Affected Environment

This section describes the affected environment in the aesthetics and visual quality RSA. For each landscape unit, it provides an overview of the visual character, including the natural, cultural, and project environments; the affected viewer groups; the visual quality; and representative KVPs for each landscape unit. This information provides the context for the environmental analysis and the evaluation of impacts.

3.16.5.1 Santa Clara Landscape Unit

The Santa Clara Landscape Unit (Figure 3.16-3) extends from Scott Boulevard in Santa Clara in a southeast direction following the Caltrain railway to West Julian Street in San Jose. It extends west and east of the railway to encompass adjacent properties, including the transit facilities at the Santa Clara Caltrain Station and Bellarmine College Preparatory campus. The landscape unit extent, KVP locations, visual resources, and viewer group are illustrated on Figure 3.16-3. Table 3.16-2 provides a summary of the visual resources and character and the viewer groups in the Santa Clara Landscape Unit and the overall existing visual quality.



JANUARY 2019

Figure 3.16-3 KVPs, Visual Resources, and Viewers in the Santa Clara Landscape Unit

Table 3.16-2 Santa Clara Landscape Unit Visual Character, Viewer Group Sensitivity, and Visual Quality

Existing and Baseline Visual Resources and Character			Viewers Groups Sensitivity	Existing and Baseline Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Urban vegetation ▪ Background views of mountain ranges ▪ Moderate visibility ▪ No major water features 	<ul style="list-style-type: none"> ▪ Single-family, 1–2 stories ▪ Multi-unit residential, 2–4 stories ▪ Industrial, single-story ▪ Commercial, 2–3 stories ▪ Santa Clara Caltrain Station ▪ Reed Street Dog Park ▪ Larry J. Marsalli Park ▪ Newhall Park ▪ Bellarmine College Preparatory ▪ Passenger and freight railroad storage 	<ul style="list-style-type: none"> ▪ Two-track Caltrain railway ▪ Multitrack Caltrain/UPRR ▪ Santa Clara Railroad Historical Complex ▪ College Park Caltrain Station ▪ CEMOF ▪ Baseline conditions would add OCS for the electrification of the Caltrain corridor 	<ul style="list-style-type: none"> ▪ Residential viewers—low to high ▪ Recreational viewers—moderately low ▪ Retail and Commercial viewers—moderately low ▪ Industrial viewers—moderately low ▪ Institutional viewers—moderately low ▪ Travelers—moderately low 	<ul style="list-style-type: none"> ▪ Moderately high

CEMOF = Centralized Equipment Maintenance and Operations Facility
 OCS = overhead contact system
 UPRR = Union Pacific Railroad

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Santa Clara Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Santa Cruz Mountains**—The Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys and are visible in the background of views from the RSA. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Mount Hamilton, Lick Observatory, and the Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide views of wilderness in the background of views from the RSA. Atop Mount Hamilton is the Lick Observatory, operated by the University of California. This landmark is visible from throughout the region.
- **Santa Clara Railroad Historical Complex**—The Santa Clara Caltrain Station is the oldest operating railroad depot in California, constructed in 1863. It hosts a railroad library and museum while still serving its original function as a passenger depot. It was added to the National Register of Historic Places in 1985. It is located at 1001 Railroad Avenue, just southwest of the Caltrain railway.

Natural Environment

The natural environment comprises vegetation associated with residential landscaping. The extent of vegetation in residential areas ranges from mature trees that create shaded areas, to small trees along roadways. Most homes have some form of low-scale (low height) landscaping

along property perimeters. Minimal landscaping exists along roadways and in designated parking areas in industrial areas. Most street trees and landscaping are in good health.

When air quality is good, background views providing scenic vistas to the Diablo Range and Mount Hamilton are common to the south and east. Few views of the Santa Cruz Mountains are available because of the density of development.

Cultural Environment

Residential and industrial uses associated with the cultural environment predominate throughout the landscape unit. These residential and industrial uses border the project environment that consists of the existing rail corridor that roughly transects the middle of the landscape unit. To the east of the Caltrain railway, the cultural environment comprises industrial development, with the exception of a retail center at the south limits and the San Jose Earthquakes stadium just north of I-880. These areas are characterized by low-rise, boxy industrial structures and warehouses surrounded by surface parking clustered together on large lots. Development is typically oriented around roadways that dead end or cul-de-sac at the alignment. As such, industrial development rarely fronts the Caltrain right-of-way and is typically separated from the tracks by minimal setbacks or utility yards.

The residential areas to the west of the railway are visually distinct neighborhoods. On the west side residential use predominates, with single-family homes north of Lafayette Street and multi-unit development north of I-880. Lafayette Street neighborhoods typically consist of small-lot, one- and two-story single-family homes with small front yards set back from partially tree-lined streets. These homes commonly feature pitched roofs, attached garages fronting the street, and recessed doorways at building frontages. Most residential development backs up to the Caltrain tracks and is screened from view by low fencing and landscaping.

The multi-unit neighborhoods in San Jose south of the Santa Clara Caltrain Station consist primarily of contemporary row houses of up to four stories on narrow streets. Noise barriers line the corridor in this area, blocking street views to the railway. Newhall Park, just north of I-880, is lined on two sides by row houses, but does have a view of the railway corridor past the cul-de-sac end of Newhall Street. In San Jose's College Park neighborhood, south of I-880, Bellarmine College Preparatory campus abuts the Caltrain railway and straddles Hedding Street, with the classrooms shielded from the railway by parking, the football stadium, and baseball diamond.

The southern portion of the landscape unit contains the Caltrain Centralized Equipment Maintenance and Operations Facility (CEMOF) and a retail center consisting of one- and two-story big-box retail development scattered on large surface parking lots. Through this area the industrial uses and Caltrain tracks are visually compatible.

This area includes the Santa Clara Caltrain Station, Santa Clara's police station, and two- and three-story commercial developments accommodating retail, hotel, and office uses, oriented around internal, landscaped surface parking lots. The area around the station serves as the commercial center of the landscape unit. Small pockets of industrial uses exist south of Lafayette Street and south of Taylor Street.

Project Environment

The project environment consists of the Caltrain railway corridor, which has two tracks from the north boundary of the landscape unit to De La Cruz Boulevard, where the Union Pacific Railway (UPRR) Coast Line joins the Caltrain corridor. At this location, the railway expands from two to as many as eight tracks; some of the tracks are used for freight train storage. At the south boundary, Caltrain's CEMOF has multiple tracks for cleaning, repair, and storage of passenger cars and locomotives. Six roadways cross the railway, four above and two below the railway. Views of the project environment from adjacent streets are limited to the six streets that cross the railway corridor.

The electrification of the Caltrain railway, underway in 2018, will be completed prior to the start of HSR construction. The electrification project will change the visual environment along the Caltrain railway in this landscape unit, so a baseline condition is presented following the description of the

existing condition. The baseline condition, after Caltrain electrification, would add OCS poles and wires within the railway corridor.

Viewer Groups

Viewer groups in the Santa Clara Landscape Unit include residential viewers, recreational viewers, retail viewers, commercial viewers, industrial viewers, institutional viewers, and travelers, including travelers on Caltrain (Figure 3.16-3). Viewer sensitivities for each of these viewer groups as described in Table 3.16-2 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

North of the Santa Clara Caltrain Station, the project corridor passes immediately adjacent to many residences; fencing or landscaping restricts the view from some homes and yards. Views toward the project environment are also available from Main Street. South of the Santa Clara Caltrain Station, residences are visually shielded from the railway by noise barriers and landscaping. However, residential viewers from top story units would have views of the project. In most locations, residents' exposure to the project corridor is blocked or obscured by fencing, walls, or landscaping, greatly reducing or eliminating their exposure and thereby their sensitivity. In locations where residents have clear views to the project corridor from their homes or neighborhood, their sensitivity is high.

Recreational viewers are located at the few parks within the landscape unit, which have limited views of the project corridor. The Reed Street Dog Park is off Reed and Lafayette Streets, just north of the Caltrain railway. Landscaping buffers views to the railway corridor, including views from the Larry J. Marsalli Park. Recreational viewers in Newhall Park have a narrow view down Newhall Street toward the railway, limiting exposure to the railway to a small percentage of the total view from the park. Because of the limited views from each park to the project corridor and recreationists' focus on their activity, recreationists have a moderately low viewer sensitivity.

Retail viewers occur in two clusters: the first just south of the Santa Clara Caltrain Station, which has no view of the project corridor, and the second at the Caltrain CEMOF, which has a clear view to the rail corridor. Depending on the view to the project corridor, retail viewers would have a low to moderately low sensitivity because retail buildings in the landscape unit tend to be oriented away from the project corridor, limiting viewers' exposure. Commercial and industrial viewers are located adjacent to the project corridor. In one-story buildings, views of the project corridor are limited by fencing and landscaping that obscure views to the project corridor, limiting exposure and reducing sensitivity; however, newer multistory commercial buildings would have clear views of the project corridor. These viewers would have moderately low sensitivity because even with a clear view to the corridor, industrial and commercial workers would be focused on their work tasks, limiting views to the environment outside. Institutional viewers include students and staff at Bellarmine College Preparatory School. With few direct views to the project corridor, their sensitivity is moderately low. Travelers on roads have limited views of the project corridor as no roads run adjacent to the railway and few pass nearby or terminate at the railway. Caltrain and other rail travelers have views to the adjacent landscape from the railway corridor, but few within the corridor. Views within the railway corridor exist where the corridor widens for multiple adjacent tracks, station facilities, or at the CEMOF. For these reasons, traveler groups would have a moderately low sensitivity.

Visual Quality

As shown in Table 3.16-2, as perceived by viewer groups, the natural harmony of the Santa Clara Landscape Unit is moderate, and the cultural order and the project coherence are moderately high. Overall, the existing visual quality of the Santa Clara Landscape Unit is moderately high.

With the baseline conditions, the visual quality would remain moderately high. The OCS would be a minor visual addition to the existing railway corridor, and supporting electrical facilities would be located in an adjacent industrial neighborhood where their presence would not contrast with the existing landscape. The overall visual quality of the Santa Clara Landscape Unit would remain moderately high.

Key Viewpoints

Table 3.16-3 identifies the three KVPs in the Santa Clara Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are provided in Section 3.16.6.

Table 3.16-3 Key Viewpoints Representing the Santa Clara Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing and Baseline Visual Quality
1	Main Street between Washington and Jackson Streets	Residential	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Residential landscape with varying species of mature trees that provide decoration and privacy. ▪ Moderately high cultural order—Residences are same style and age and in good repair. Industrial buildings across railway are obscured by landscaping, minimizing their contrast with the neighborhood. ▪ Moderately high project coherence—Caltrain corridor is neatly maintained, lined with a wall of vegetation, and fenced with a decorative metal fence along Main Street. 	Moderately low	Moderately high
2	Northbound I-880 between Alameda and Coleman Avenue interchanges	Traveler	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—Includes mature trees planted to screen the freeway from surrounding neighborhoods. Views of the Diablo Range from the highway elevation over the Caltrain/UPRR railway. ▪ Moderate cultural order—Consists of the freeway, in good repair and with neat signage and a typical, utilitarian design. ▪ Project environment not visible. 	Moderate to moderately high	Moderately high
3	West Hedding Street, between the Bellarmine College Preparatory campus	Traveler	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—Mature trees dominate the view, obscure the campus parking and classroom buildings, and frame a distant view of the Diablo Range. ▪ Moderate cultural order—Includes West Hedding Street Bridge, with simple railings and a gentle curve across the railway. Powerlines and power poles intrude visually in a disorderly way. ▪ Project environment not visible. 	Moderate to high	Moderately high

KVP = key viewpoint
UPRR = Union Pacific Railroad

3.16.5.2 Diridon Station Landscape Unit

The Diridon Station Landscape Unit (illustrated on Figure 3.16-4) follows the Caltrain right-of-way from West Julian Street in San Jose to West San Carlos Street in the Hannah-Gregory neighborhood. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-4. Table 3.16-4 provides a summary of the visual resources and character and the viewer groups in the Diridon Station Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Diridon Station Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Diridon Station, San Jose**—The historic San Jose Diridon Station on the western edge of downtown San Jose is the physical hub of Silicon Valley’s transportation network and central landmark for the planned redevelopment area that would include significant mixed-use development. The station sits at the end of a green square that reinforces its formal symmetry.
- **Downtown Skyline, San Jose**—The scenic vista of the skyline of downtown San Jose visually identifies the center of the 178-square-mile city. The high-rise buildings that cluster in the downtown are visible from the nearby freeways, including State Route (SR) 87, I-880, and I-280. Views to the downtown provide wayfinding clues for travelers and offer a strong visual identity for the city.
- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Silver Creek Hills**—The Silver Creek Hills in southern San Jose separate the Santa Clara Valley from the Evergreen Valley. Scenic vistas to their largely undeveloped western slopes provide views of open space in contrast to the fully developed valley.

Natural Environment

The terrain is level and vegetation is related to existing development such as heavily landscaped surface parking lots, formal lawns fronting San Jose Diridon Station, and street trees that line the surrounding roadways. Views of San Jose’s downtown skyline are visible in the background to the east.

Cultural Environment

The Diridon Station Landscape Unit has a mix of development types, ranging from primarily residential areas to the west and public facilities, surface parking, and light industrial to the east. The name of the primary street in the landscape unit changes where it passes under the railway; to the west it is The Alameda, to the east it is West Santa Clara Street. North of West Santa Clara Street the large surface parking lot for the SAP/San Jose Arena and the arena structure dominate the landscape. West of the railway are a few industrial buildings that back up to the railway. To the east past the arena parking lot is a neighborhood of mixed industrial and residential uses. The arena structure is larger than the surrounding city blocks and clad in concrete and metal, contrasting with the scale and materials of the older, surrounding buildings.

Development west of the railway along The Alameda consists of new mixed-use development, ranging from two to six stories in height. Coordinated features such as lighting, signage, and building frontages contribute to the area’s high visual quality. Building heights are reflective of the neighborhood’s older building stock. A new colorful residential loft building, converted from the historic Del Monte Plant 51, is visible from the station, as is a two-story Whole Foods Market that includes a brewery and dining terrace overlooking The Alameda and San Jose Diridon Station.

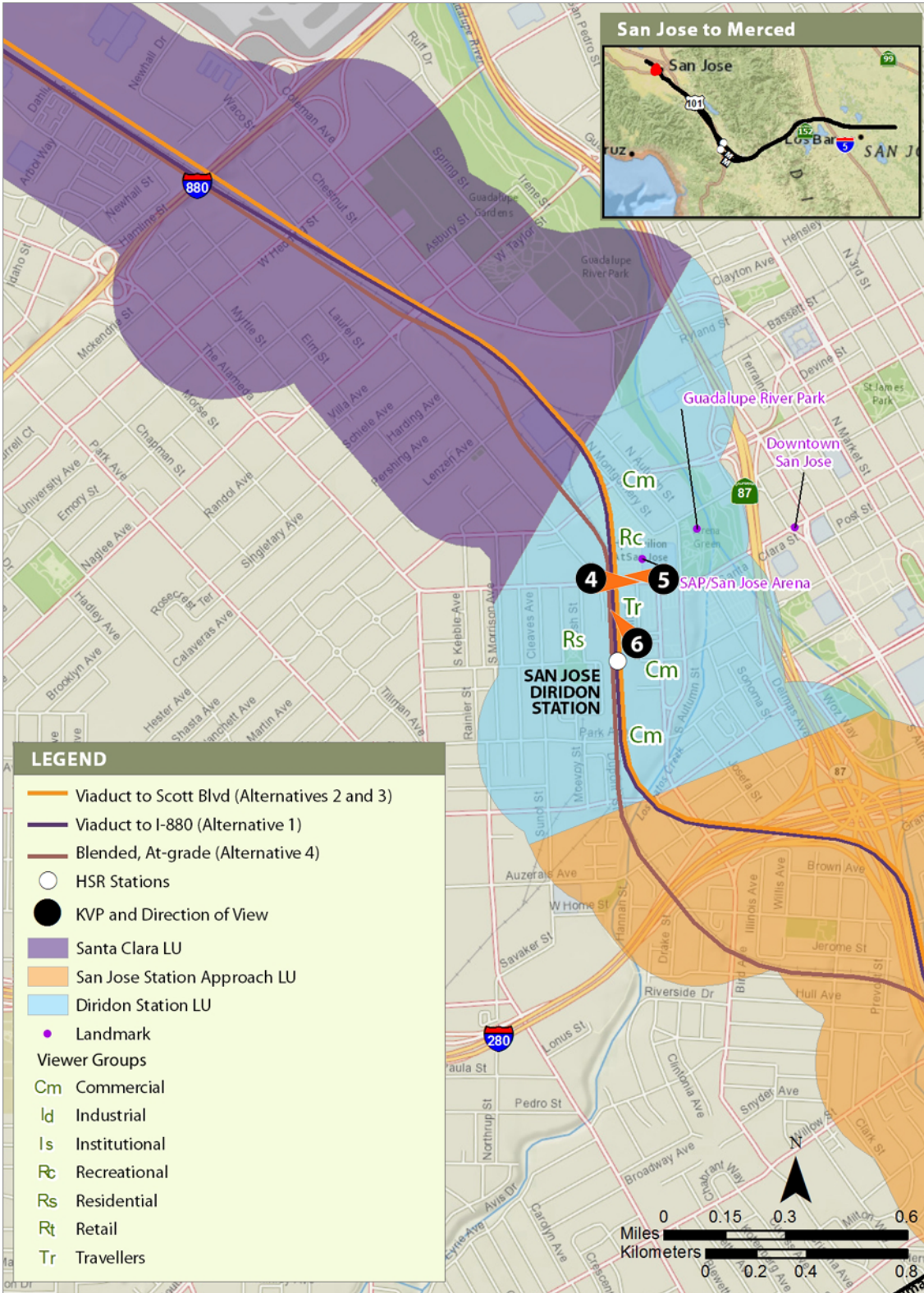


Figure 3.16-4 KVPs, Visual Resources, and Viewers in the Diridon Station Landscape Unit

Table 3.16-4 Diridon Station Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing and Baseline Visual Resources and Character			Viewer Groups and Sensitivity	Existing and Baseline Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Urban vegetation ▪ Moderate visibility ▪ Los Gatos Creek 	<ul style="list-style-type: none"> ▪ Historic San Jose Diridon Station ▪ SAP/San Jose Arena ▪ VTA transit center ▪ Surface parking ▪ Multi-unit residential ▪ Older industrial ▪ Cahill Park ▪ Class II bike lanes along East San Fernando Street. 	<ul style="list-style-type: none"> ▪ Multi-track Caltrain/UPRR railway ▪ VTA light rail ▪ San Jose Diridon Station ▪ Baseline conditions would add OCS for the electrification of the Caltrain corridor 	<ul style="list-style-type: none"> ▪ Residential viewers in single- and multifamily areas—high ▪ Recreational viewers at park—low ▪ Commercial viewers—low ▪ Travelers on roadways and on Caltrain—moderately low to moderate 	<ul style="list-style-type: none"> ▪ Moderate

OCS = overhead contact system
 UPRR = Union Pacific Railway
 VTA = Valley Transportation Authority

South of West Santa Clara Street is the historic San Jose Diridon Station and its parking lots, the (Santa Clara) Valley Transportation Authority’s (VTA) bus transit center, and an electric utility facility. San Jose Diridon Station dates back to 1935 with architectural features characteristic of that period. The station has been well maintained and features a brick exterior, several large arched windows, detailing along the roof, and an awning at the entrance. The VTA transit center located to the north of the station is a large surface facility with small bus shelters. Immediately to the east of the station are large surface parking lots shaded by mature sycamore trees. Farther east of the station Montgomery Street is lined with low profile industrial uses, many of which have fallen into disrepair. The setbacks of these structures vary, with some built up to the street and others set back by surface parking lots and fences.

Project Environment

The project environment includes the San Jose Diridon Station, and VTA light rail and Caltrain/UPRR tracks. Three tracks come into the landscape unit from the north, expanding to eight tracks in the station, and then combining to two tracks south of the station. In the station, pairs of tracks share passenger platforms, low concrete waiting areas shaded by steel canopies. These tracks and platforms are used by the passenger trains of Caltrain, Altamont Corridor Express (ACE), and Amtrak’s Capitol Corridor. Freight trains passing through the station and Amtrak’s Coast Starlight use the easternmost track with a single platform that is partially shaded by an awning extending from the station building.

The electrification of the Caltrain railway, underway in 2018, will be completed prior to the start of HSR construction. The electrification project will change the visual environment along the Caltrain railway in this landscape unit, so a baseline condition is presented following the description of the existing condition. The baseline condition, after Caltrain electrification, would add OCS poles and wires within the railway corridor.

Viewer Groups

The Diridon Station Landscape Unit viewer groups comprise residential viewers, recreational viewers, commercial viewers, and travelers (Figure 3.16-4). Viewer sensitivities for each of these viewer groups as described in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Residential viewers are concentrated immediately adjacent to San Jose Diridon Station on its west side. Residences consist of three- to four-story row houses and multi-unit buildings. All residential units on the east side of the development have an unobstructed view of the railway station, resulting in high exposure to the project corridor. Their views are also elevated, providing views across Diridon Station to the downtown San Jose skyline, so their viewer sensitivity is high. Recreational viewers are located at Cahill Park with a long, narrow view down San Fernando Street toward the project corridor, limiting exposure to the station and its surroundings, resulting in low viewer sensitivity. Commercial viewers are located in one-story buildings that front on streets adjacent to the project corridor but with limited views of the corridor; their viewer sensitivity is low. Travelers include those on three roads that cross the project corridor and have clear views of the project corridor. Approaching the project corridor perpendicularly in an urban setting, these travelers have moderately low sensitivity due to the short exposure and narrow views and their need to focus on busy urban driving conditions. Cyclists, including those using the Class II bike lanes along East San Fernando Street, also have moderately low sensitivity, due to their focus on avoiding hazards in busy urban traffic. Bus and rail commuters transiting through San Jose Diridon Station and surrounding transit facilities have moderate sensitivity because of their regular exposure to the project site, their slower pace as pedestrians, and periods of observation while waiting for transit to arrive.

Visual Quality

As shown in Table 3.16-4, as perceived by the viewer groups, the natural harmony is moderately low throughout the landscape unit, the cultural order is moderate, and the project coherence is high. Overall, the existing visual quality of the Diridon Station Landscape Unit is moderate.

With the baseline conditions the visual quality would remain moderate. The OCS would be a minor visual addition to existing railway corridor and not overwhelm the physical presence of the historic San Jose Diridon Station. The addition of the OCS would do little to increase the visual presence of the railway. The overall visual quality would remain moderate.

Key Viewpoints

Table 3.16-5 identifies the three KVPs in the Diridon Station Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-5 Key Viewpoints Representing the Diridon Station Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing and Baseline Visual Quality
4	Intersection of The Alameda and Stockton Street, immediately west of the Caltrain corridor	Residential	<ul style="list-style-type: none"> Low natural harmony—Mature trees lack a relationship to the natural setting and land used as a staging area is covered in ruderal vegetation. Moderately high cultural order—The Alameda’s passing beneath the railway bridge and aesthetic details are a gateway. Views of the downtown skyline are in the background. Moderate project coherence—Railway and staging area detract from the surroundings. 	Moderately high to high	Moderate
5	West Santa Clara Street, between South Autumn and South Montgomery Streets	Traveler	<ul style="list-style-type: none"> Moderate natural harmony—Robust and mature streets trees enclose/obscure the surface parking lots. The Santa Cruz Mountains are visible in the distance. Moderate cultural order—SAP/San Jose Arena dominates in scale and contrasting materials. Streetscape is clean and free of clutter. Moderate project coherence—Railway corridor has minimal presence; however, a train crossing the bridge provides a stronger visual indication. 	Moderately high to high	Moderate
6	View of San Jose Diridon Station from Cahill Street, between West San Fernando and Stover Streets	Traveler	<ul style="list-style-type: none"> Moderate natural harmony—Landscape is very formal, with a small lawn surrounding the station’s flagpole. Mature trees line the perimeter of the VTA’s bus facility just north of the station building. There are no views to distant landmarks. Moderate cultural order—Historic character of San Jose Diridon Station in an area otherwise dominated by warehouses and commercial buildings. Includes VTA bus facility. High project coherence—Stately station building is a prominent symbol of both the current passenger railway operations in the corridor and the aspirations of its corporate creator and the community that restored and maintains the station. 	Moderately high	Moderately high

KVP = key viewpoint
VTA = (Santa Clara) Valley Transportation Authority

3.16.5.3 San Jose Station Approach Landscape Unit

The San Jose Approach Landscape Unit extends southeast from West San Carlos Street in the Hannah-Gregory Neighborhood following the Caltrain/UPRR and I-280/SR 87 corridors to the Almaden Expressway in the Guadalupe-Almaden Neighborhood. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-5. Table 3.16-6 provides a summary of the visual resources and character and the viewer groups in the San Jose Station Approach Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the San Jose Station Approach Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Downtown Skyline, San Jose**—The scenic vista of the skyline of downtown San Jose visually identifies the center of the 178-square-mile city. The high-rise buildings that cluster in downtown are visible from the nearby freeways, including SR 87 and I-280. Views to downtown provide wayfinding clues for travelers and offer a strong visual identity for the city.
- **Guadalupe River Park**—Guadalupe River Park is a 3-mile ribbon of parkland that runs along the banks of the Guadalupe River in the heart of downtown San Jose from I-880 at the north, to I-280 at the south. It is a resource of regional importance to the people of Santa Clara County and the San Francisco Bay Area (Bay Area).
- **Mount Hamilton, Lick Observatory, and the Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide a scenic vista to views of wilderness from throughout the area. Atop Mount Hamilton is the Lick Observatory, operated by the University of California. This landmark is visible throughout the region.
- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys. Their forested flanks contrast with the grass and oak covered eastern hill, and provide orientation for the valley.
- **Silver Creek Hills**—The Silver Creek Hills in southern San Jose separate the Santa Clara Valley from the Evergreen Valley. Scenic vistas to their largely undeveloped western slopes provide views of open space in contrast to the fully developed valley.

Natural Environment

The terrain is level and vegetation is primarily related to existing development such as residential landscape and heavily landscaped surface parking lots. East of SR 87 is the floodplain of the Guadalupe River, which passes under both the railway and freeway. The floodplain of the Guadalupe River is also vegetated with a natural riparian corridor that separates development from the river. Los Gatos Creek is a naturally tree-lined riparian waterway. Background views of the hills and mountain ranges are available.

Cultural Environment

The San Jose Station Approach Landscape Unit is composed primarily of residential areas that are bisected by freeways and the Caltrain/UPRR railway, with small commercial and industrial uses scattered throughout. Most residences are single-family homes, with larger multi-unit developments in a few locations, including a residential high-rise immediately south of the Tamien Caltrain Station. West of the Caltrain/UPRR railway, multi-unit residential uses sit beyond Bird Avenue, which is the primary roadway in the area: six lanes wide with no median landscaping, connecting I-280 to San Jose Diridon Station and the arena. South of I-280, the landscape unit is generally residential, with recreational uses following the east side of the SR 87/VTA light rail corridor.

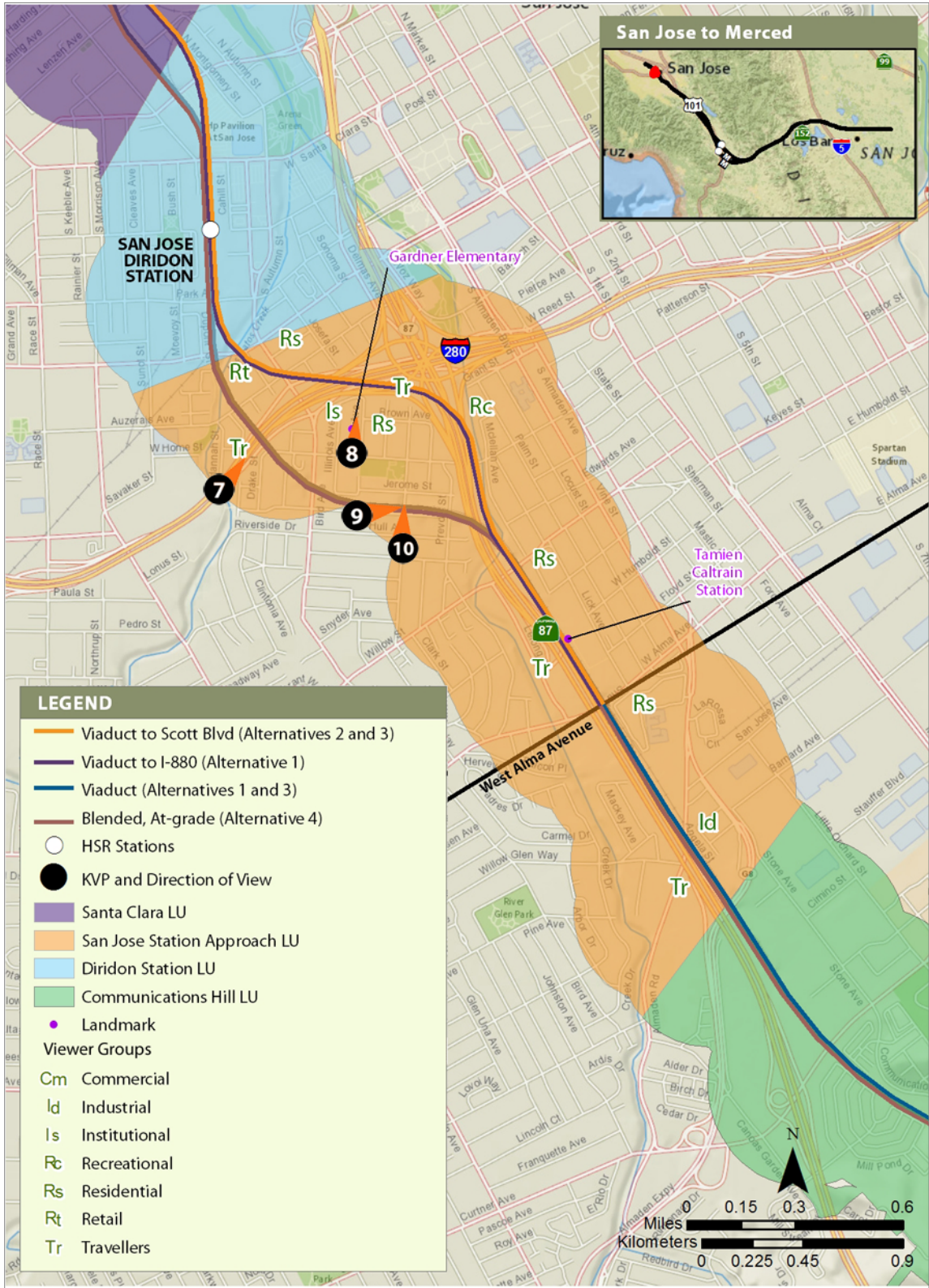


Figure 3.16-5 KVPs, Visual Resources, and Viewers in the San Jose Station Approach Landscape Unit

Table 3.16-6 San Jose Station Approach Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing and Baseline Visual Resources and Character			Viewer Groups and Sensitivity	Existing and Baseline Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Urban vegetation ▪ Background views of hills and mountain ranges ▪ Moderate visibility ▪ Guadalupe River 	<ul style="list-style-type: none"> ▪ SR 87 and I-280 ▪ Single-family residences ▪ Biebrach Park, Fuller Park, Guadalupe River Park ▪ Scattered commercial ▪ Railway storage yard 	<ul style="list-style-type: none"> ▪ Two-track Caltrain/UPRR railway ▪ SR 87 and I-280 ▪ Tamien Caltrain Station ▪ Baseline conditions would add OCS for the electrification of the Caltrain corridor 	<ul style="list-style-type: none"> ▪ Residential viewers—moderate to high ▪ Recreational viewers—moderately low to moderately high ▪ Commercial viewers—moderately low ▪ Institutional viewers—low ▪ Travelers—moderately low 	<ul style="list-style-type: none"> ▪ Moderately high

I = interstate
 SR = State Route
 UPRR = Union Pacific Railroad

Residential uses to the west side of SR 87 in the Gardener neighborhood are visually shielded from the freeway by existing noise barriers and fences. The Gardner neighborhood is composed of many older, well-maintained homes, bisected by the Caltrain/UPRR railway and Fuller Park.

A single-story, big box Orchard Supply Hardware retail facility is the predominant use between the Caltrain/UPRR railway and Bird Avenue. The newer building shares the site with the older, abandoned building and differs from the old building because it has contemporary façade detailing, a trussed peaked roof accenting its main entrance, and parking lot landscaping. Both buildings are separated from the street by large surface parking lots and visible through the gas stations and small retail fronting Bird Avenue. The east side of Bird Avenue is dominated by an eight-story residential building. There are many light sources in this landscape unit. Streets are brightly lit. Automobile traffic is present at all hours, especially along I-280 and SR 87 and major arterials.

The Gardner School, Gardner Community Center, Fuller Park, Guadalupe River Park, and an adjoining trail leading to downtown San Jose are the prominent public facilities in the area. A Class I bike trail also joins the corridor at Willow Street, running between the freeway and railway, generally at the level of the freeway. Cyclists and pedestrians using the trail are surrounded by freeway traffic to the west and railway infrastructure to the east.

The southernmost portion of the landscape unit, between West Alma Avenue and Almaden Expressway, is bounded on the west by the elevated freeway and on the east by a multi-unit residential complex and small, mixed industrial uses along the railway. Tall evergreens limit views to the railway corridor from the residential uses, and fences block views from the industrial uses. Residences to the east of SR 87, around Tamien Station, are generally located a block or more away from the freeway and railway. One exception is a residential high-rise immediately adjacent to the railway on the north side of West Alma Avenue.

Project Environment

The Caltrain/UPRR railway through this landscape unit has two tracks, with a third track at the Tamien Caltrain Station and a small storage yard of four tracks for midday storage of ACE passenger trains just south of the station. The railway joins the SR 87/VTA light rail corridor just north of Willow Street and the Tamien Station. This increases the predominance of transportation

infrastructure in the middle portion of the landscape unit. Caltrain’s Tamien Station, the terminal for about half of the daily Caltrain service, hosts idling trains laying over between runs.

The electrification of the Caltrain railway, underway in 2018, will be completed prior to the start of HSR construction. The electrification project will change the visual environment along the Caltrain railway in this landscape unit by adding OCS poles and wires within the existing railway corridor, so a baseline condition is presented following the description of the existing condition.

Viewer Groups

The San Jose Station Approach Landscape Unit viewer groups include residential viewers, recreational viewers, commercial viewers, institutional viewers, and travelers (Figure 3.16-4). Viewer sensitivities for each of these viewer groups as described in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Residential viewers are located in the Gardner Neighborhood and south of the Tamien Caltrain Station. In this location residences are shielded from views of the adjacent freeway by landscaping or noise barriers that obscure views to the project corridor; therefore, their viewer sensitivity would be low. Residents with views of the Caltrain/UPRR corridor vary in sensitivity. All are highly sensitive, but their varied exposure may temper their sensitivity. Residents facing Fuller Park also see the Caltrain/UPRR corridor, suggesting high exposure and high sensitivity. Some residents with homes adjacent to the rail corridor also have high exposure and sensitivity, while others have low exposure and moderate sensitivity because of landscaping or fencing limiting their views.

Recreational viewers use three parks and four Class I bike and pedestrian trails that run adjacent to the railway. Recreational viewers at Fuller Park have a high exposure to the project corridor. Combined with the passive nature of recreationists in park settings, their sensitivity is moderately high. Views from Biebrach Park are limited to long, narrow views down street corridors, limiting exposure and resulting in moderately low sensitivity. Recreational viewers in Guadalupe Park and along the Guadalupe River Trail West would be immediately adjacent to the project corridor. Where recreationists are directly exposed to the project corridor, their viewer sensitivity is moderately high.

Commercial viewers are scattered in the Tamien Station area and south, in one-story buildings with limited views of the project corridor. Focusing visually on their work, they have moderately low viewer sensitivity. Institutional viewers—Gardner Elementary School students and staff, whose views of the project corridor are shielded by classroom buildings and the surrounding neighborhood—have low viewer sensitivity. Travelers on I-280 and SR 87 have high exposure to the project corridor where it passes over the freeway. Two VTA light rail lines run in the median of SR 87. Caltrain and other rail travelers have views to the adjacent landscape from the railway corridor. While all these travelers have high exposure to the project corridor, overall, focused on either busy traffic conditions or occupied by other activities while on transit, these travelers have moderately low viewer sensitivity.

Visual Quality

As shown in Table 3.16-6, as perceived by viewer groups, the natural harmony and cultural order of the San Jose Station Approach Landscape Unit is moderately high, and the cultural order and the project coherence is high. Overall, the existing visual quality of the San Jose Station Approach Landscape Unit is moderately high.

The baseline conditions with Caltrain electrification would include OCS to power Electric Multiple Unit trains. The OCS would be carried on individual poles, increasing the presence of the railway corridor, but it would not obscure views across the corridor. The electrification would extend south to the Tamien Station. South of the station, the railway would remain unelectrified. The visual quality would remain moderately high.

Key Viewpoints

Table 3.16-7 identifies the four KVPs in the San Jose Station Approach Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-7 Key Viewpoints Representing the San Jose Station Approach Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing and Baseline Visual Quality
7	Southbound I-280, west of Bird Avenue, about 1,000 feet from the rail corridor	Traveler	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Characterized by the many, mature trees that line the freeway and views of the Diablo Range, visible in the distance. ▪ High cultural order—I-280 infrastructure is neat but utilitarian. View of San Jose's skyline displays the greatest concentration of high-rise buildings in the Silicon Valley, back-dropped by the Diablo Range. ▪ Moderately high project coherence—The railway bridge blends with the utilitarian views of the freeway and does not interfere with views of the skyline. 	Moderate to moderately high	Moderately high
8	West Virginia Street toward the Gardner School	Residential and Institutional	<ul style="list-style-type: none"> ▪ Moderately low natural harmony—Vegetation and the playing fields on the school campus appear artificial. ▪ Moderately high cultural order—Campus design appears thoughtful, and there are views of the twin downtown high-rises in the background. ▪ Project environment not visible. 	Moderately low	Moderate
9	Fuller Avenue east to Fuller Park and rail corridor	Residential and recreational	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Thriving, mature trees, but obviously urban environment. ▪ Moderate cultural order—Park defined by low fence; adjacent church lacks architectural treatment to identify it as a place of worship. ▪ Moderately low project coherence—No strong indication of the railway's presence. 	Moderately Low	Moderate

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing and Baseline Visual Quality
10	Delmas Avenue north to rail corridor	Residential	<ul style="list-style-type: none"> ▪ Moderately low natural harmony—Mature trees but all ground is covered in pavement ▪ Moderately low cultural order—Trailer parked on sidewalk, dominant utility poles, mix of architectural forms. ▪ Moderately low project coherence—No indication overpass carries a railroad or a highway. 	Moderate	Moderately Low

KVP = key viewpoint

3.16.5.4 Communications Hill Landscape Unit

The Communications Hill Landscape Unit (illustrated on Figure 3.16-6) extends along the Caltrain/UPRR railway from the Almaden Expressway to Pullman Way, near the Lick Quarry. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-6. Table 3.16-8 provides a summary of the visual resources and character and the viewer groups in the Communications Hill Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Communications Hill Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Mount Hamilton, Lick Observatory, and the Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide a scenic vista to views of wilderness from throughout the area. Atop Mount Hamilton is the Lick Observatory, operated by the University of California. This landmark is visible from throughout the region.
- **Communications Hill**—Communications Hill rises abruptly from the valley floor. It commands views across most of San Jose to the surrounding mountain ranges. At its summit are two communications towers.
- **Silver Creek Hills**—The Silver Creek Hills in southern San Jose separate the Santa Clara Valley from the Evergreen Valley. Scenic vistas to their largely undeveloped western slopes provide views of open space in contrast to the fully developed valley.

Cultural Environment

The Communications Hill Landscape Unit is a patchwork of different types of development, with its namesake large cluster of communications infrastructure on top of the hill. Between Almaden Expressway and Curtner Avenue, the land comprises one-story industrial buildings surrounded by parking and storage facilities. Buildings are oriented facing the streets that serve them, not the project corridor. At the north end of the cut into Communications Hill residential uses border both the east and west sides of the project corridor. Townhomes sit uphill from Communications Hill Park, east of the railway, and residents primarily look above the railway. From the park there is little landscaping to block views toward the project corridor. To the west of the railway, a mobile home community sits slightly downhill. From the mobile home community views of the project corridor are obscured by fencing and mature evergreens, although the trees do not form a solid visual barrier.

Project Environment

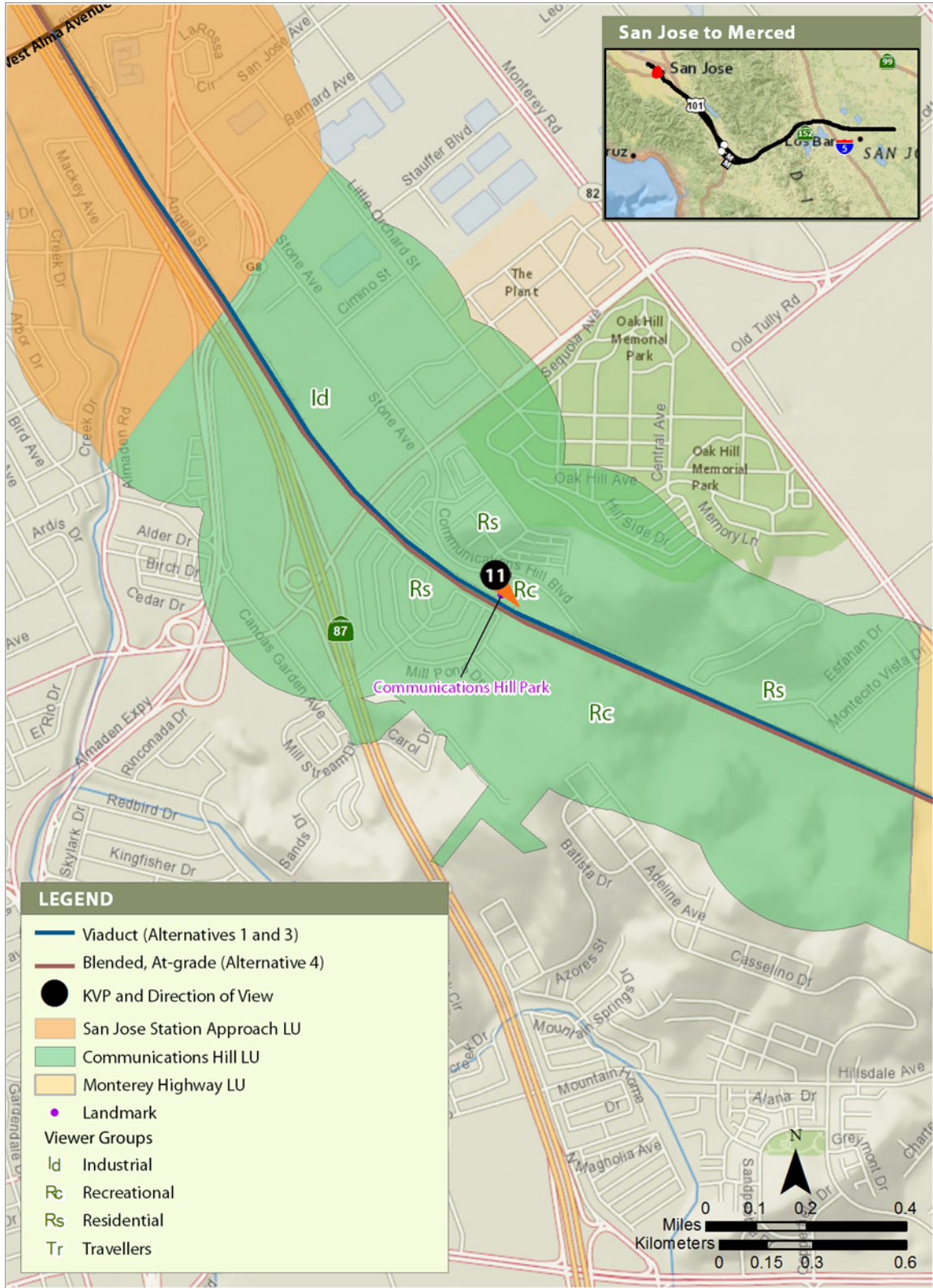
SR 87 continues south and the two-track Caltrain/UPRR railway curves and heads southeast, away from the freeway in this area, and cuts through Communications Hill.

Viewer Groups

The Communications Hill Landscape Unit viewer groups include residential viewers, recreational viewers, commercial viewers, and travelers (Figure 3.16-6). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Residential viewers include those in a dense neighborhood of multi-level row houses and single-family homes off Communications Hill Boulevard. Where views to the project corridor are clear, residents' visual sensitivity is high, as neighborhood appearance and surrounding views are factors in choice of home and neighborhood. In locations where views are screened or blocked by landscaping or structures, residents' sensitivities are governed by views of those features. Thick landscaping screens views of the project corridor for many residential viewers; however, residents located uphill and farther away have a clearer view of the project corridor. On the west side of the project corridor, in the Millpond neighborhood of manufactured homes, residential viewers are screened from the project corridor by landscaping and a noise barrier. Similarly, farther south and east, residential viewers in the Chateau la Salle manufactured home neighborhood are also visually screened from the project corridor. Where residents are adjacent to the project corridor but their view is mostly screened, their sensitivity to the conditions of the project corridor is moderately low, but where residential viewers who are farther from the project corridor have an unobscured view, their sensitivity is moderately high.

Recreational viewers in the neighborhood park, which has little vegetation, have high exposure to the project corridor. A neat oval of grass, the park is geared toward passive recreation (e.g., sitting, walking). There are no markings or equipment for sporting activities, suggesting recreations engaged with viewing the surrounding environment and leading to high viewer sensitivity. Commercial viewers along both sides of the project corridor north of Curtner Avenue are in one-story buildings oriented toward adjacent streets; consequently, they have little exposure to the project corridor and are visually engaged with their work, indicating low viewer sensitivity.



JANUARY 2019

Figure 3.16-6 KVPs, Visual Resources, and Viewers in the Communications Hill Landscape Unit

Table 3.16-8 Communications Hill Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Solitary hill in flat terrain ▪ Urban vegetation ▪ Background views of hills and mountain ranges ▪ Moderate visibility ▪ No major water features 	<ul style="list-style-type: none"> ▪ Suburban multi-unit residences ▪ Mobile homes ▪ Communications Hill Park 	<ul style="list-style-type: none"> ▪ Two-track Caltrain/UPRR railway 	<ul style="list-style-type: none"> ▪ Residential viewers—moderately low to moderately high ▪ Recreational viewers—high ▪ Commercial viewers—low ▪ Travelers, including those on SR 87 and passenger trains—low to moderately low 	<ul style="list-style-type: none"> ▪ Moderate

SR = State Route

Travelers include motorists on SR 87 and two VTA light rail lines that run in the median of SR 87. Low buildings along SR 87 limit views of the project corridor. While these travelers have some exposure to the project corridor, overall, they are focused on either busy traffic conditions or occupied by other activities while on transit, resulting in a visual sensitivity that is moderately low. Along the Class I SR 87 Bike and Pedestrian Trail low buildings block views to the railway. Cyclists on the Curtner Avenue bike lanes are focused on traffic. Traffic conditions and obscured views to the project corridor leave these travelers with a low viewer sensitivity. Within the Caltrain railway and project corridor four passenger trains pass each way each weekday and one passes each way on weekends. Three of the weekday trains in each direction are morning and evening local Caltrain commuter trains, with riders likely to be engaged in work or reading that limits their exposure to the passing views. Amtrak’s long-distance Coast Starlight passes once daily in each direction through the corridor with passengers more likely to be traveling for leisure, and consequently more engaged with viewing the passing scenery. Due to the low frequency of these travelers’ exposure to the project corridor, their viewer sensitivity is low.

Visual Quality

As shown in Table 3.16-8 as perceived by viewer groups, the natural harmony and the cultural order of the Communications Hill Landscape Unit is moderate. The project coherence is moderately high. Overall, the existing visual quality of the Communications Hill Landscape Unit is moderate.

Key Viewpoints

Table 3.16-9 identifies the KVP in the Communications Hill Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-9 Key Viewpoint Representing the Communications Hill Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
11	Communications Hill Boulevard at Monte Vista Drive, about 300 feet from the rail corridor	Residential and Recreational	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—The hillside rises toward the summit of Communications Hill; the form and vegetation are typical of undeveloped areas in the region. A concrete retaining wall holds the hill from the railway tracks, expressing tension between the natural topography and infrastructure. ▪ Moderately high cultural order—Transitioning from open space to a well-planned residential area. There are no buildings in this view. ▪ Moderately high project coherence—Railway tracks cut across the view in a straight line, through the low spot in the hills. 	Low	Moderately high

KVP = key viewpoint

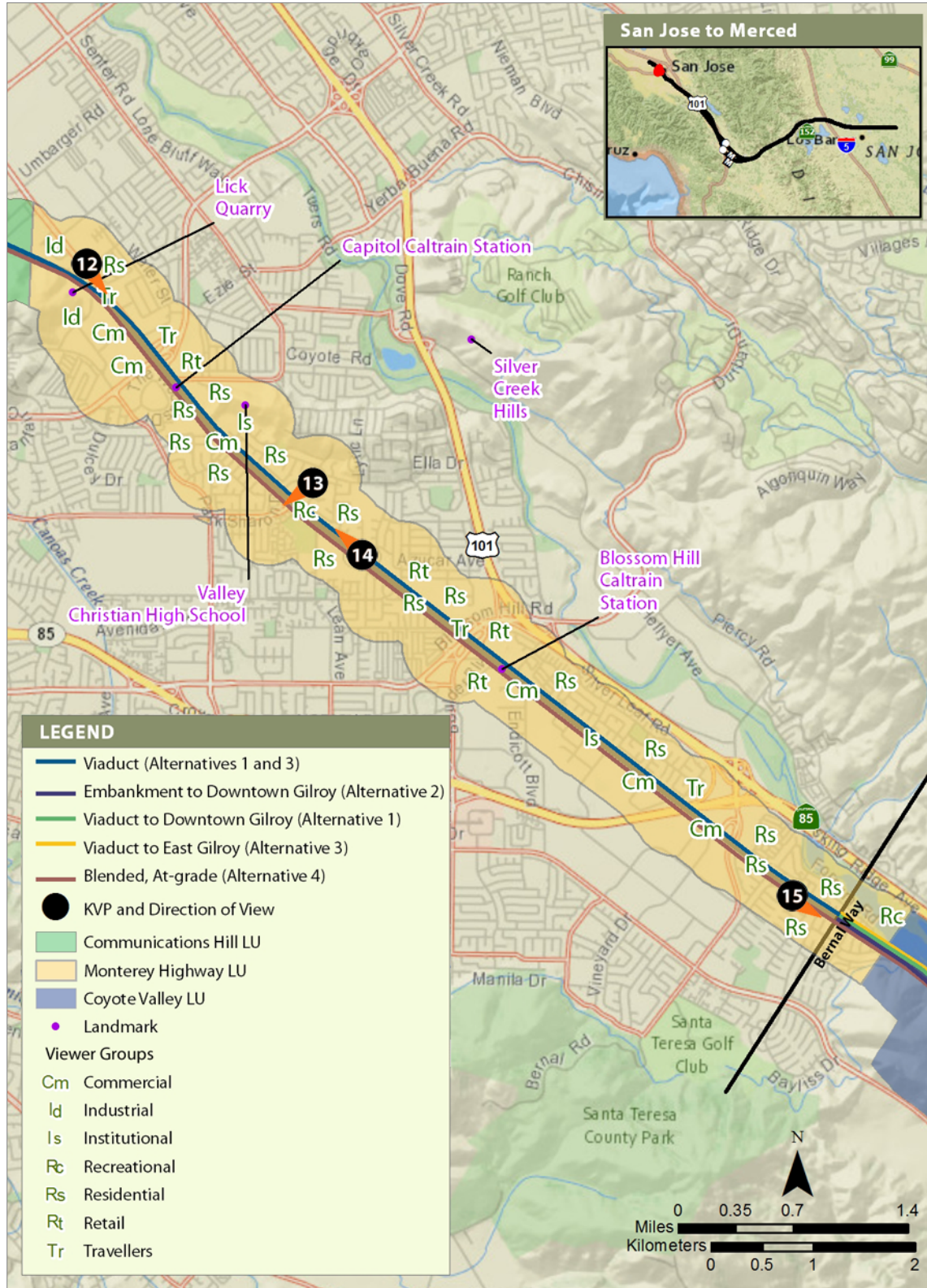
3.16.5.5 Monterey Highway San Jose Landscape Unit

The Monterey Highway San Jose Landscape Unit (illustrated on Figure 3.16-6) extends for 7 miles along Monterey Road from Pullman Way, near the Lick Quarry, to Metcalf Road. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-7. Location of KVPs representative of this landscape unit’s visual character are illustrated on Figure 3.16-7. Table 3.16-10 provides a summary of the visual resources and character and the viewer groups in the Monterey Highway San Jose Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Monterey Highway San Jose Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Silver Creek Hills**—The Silver Creek Hills in southern San Jose separate the Santa Clara Valley from the Evergreen Valley. Scenic vistas to their largely undeveloped western slopes provide views of open space in contrast to the fully developed valley.
- **Keesling’s Shade Trees**—Keesling’s Shade Trees line Monterey Road from Edenvale in San Jose to Gilroy. Planted between 1900 and 1907, they once lined both sides of Monterey Road. They now exist only along portions of the west side of the highway. They were designated as California Points of Historical Interest in 1985.
- **Mount Hamilton, Lick Observatory, and the Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide a scenic vista to views of wilderness from throughout the area. Atop Mount Hamilton is the Lick Observatory, operated by the University of California. This landmark is visible from throughout the region.



JANUARY 2019

Figure 3.16-7 KVPs, Visual Resources, and Viewers in the Monterey Highway San Jose Landscape Unit

Table 3.16-10 Monterey Highway San Jose Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Urban vegetation ▪ Background views of hills and mountain ranges ▪ Moderate visibility ▪ No major water features ▪ Keesling’s Shade Trees 	<ul style="list-style-type: none"> ▪ Walled suburban residential neighborhoods ▪ Roadway-oriented commercial 	<ul style="list-style-type: none"> ▪ Monterey Road 	<ul style="list-style-type: none"> ▪ Residential viewers—moderately low to high ▪ Recreational viewers—low ▪ Retail viewers—moderately low ▪ Commercial viewers—moderately low ▪ Civic viewers—moderately low ▪ Industrial viewers—moderately low ▪ Travelers—low to moderate 	<ul style="list-style-type: none"> ▪ Moderately high

- **Santa Teresa Ridge**—The undeveloped Santa Teresa Ridge runs into the Santa Clara Valley from the Santa Cruz Mountains. It divides the urbanized area of San Jose from Coyote Valley. It also provides the northernmost wildlife crossing between the Santa Cruz and Diablo ranges.

Natural Environment

The landform consists of level terrain. Some areas have mature landscaping as part of the urban development while others have minimal or no landscaping at all. Between the project corridor and Monterey Road, a row of black walnut trees, Keesling’s Shade Trees, provide a continuous visual landmark for the 30 miles between San Jose and Gilroy. The trees are in varying states of health, with some stands tall and healthy, and other locations with only a scattering of less-robust trees. Background views include the surrounding hills and mountain ranges.

Cultural Environment

The cultural environment is primarily characterized by the residential uses along the project corridor. These residential uses are screened from the project corridor by landscaping and fences or noise barriers. Within residential areas, commercial retail buildings are located at a few intersections. These retail uses are generally set back from the roadway by extensive parking.

The Lick Quarry is located to the west of the project corridor and includes a dedicated rail spur and associated industrial machines and activities. The quarry presents a large industrial use that is visible from the project corridor. South of the quarry there is a drive-in theater/flea market that is separated from the project corridor by a thick line of evergreens. Light industrial and commercial buildings are located on the east side of the project corridor, extending south to Skyway Drive, while residential homes are along the west side. South of Skyway Drive residential homes are on the east side of the project corridor. Between the railway and Monterey Road, there is a jumble of industrial activities and undistinguished building types.

Project Environment

The project environment is characterized by the two-track Caltrain/UPRR railway on a low (3- to 5-foot) berm, tall power poles, and Monterey Road, separated from the railway by the Keesling’s Shade Trees. Noise barriers of varied materials, commonly block or wood, shield adjacent

residential neighborhoods to the west and east from the railway and highway. Landscaping, primarily mature trees, softens the utilitarian forms of the roadway and railway, but their planting is not consistent, leaving other locations looking more like an urban freeway. This is because up until the 1980s, Monterey Road was US 101, the main route between San Francisco and Los Angeles along the coast. Regional traffic on the northern portion of Monterey Road was moved to a new freeway bypass outside the corridor in the late 1950s, but it wasn't until the 1980s that a bypass took US 101 off Monterey Road south of Blossom Hill Road. In this section, speeds are high, intersections are few, and traffic is lighter.

Viewer Groups

The Monterey Highway San Jose Landscape Unit viewer groups include residential viewers, recreational viewers, retail viewers, commercial viewers, civic viewers, industrial viewers, and travelers (Figure 3.16-7). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Residential viewers predominate. With very few exceptions, residential development along the project corridor (UPRR/Caltrain and Monterey Road) is shielded from both the railway and highway by noise barriers and landscaping. For the 7-mile length of the landscape unit, there are five locations where residential developments view directly onto Monterey Road, and no locations where residences view the railway. Where residential viewers do not have a view of the project corridor, their viewer sensitivity is moderately low. Where residential viewers have a direct view from their homes or neighborhoods, their sensitivity is high because neighborhood appearance and surrounding views are factors in choice of home and neighborhood. In locations where views are screened or blocked by landscaping or structures, residents' sensitivities are governed by views of those features. Recreational viewers are found at Edenvale Garden Park, west of the project corridor, south of Branham Lane. The park includes tennis and basketball courts and a picnic area, with views of the project corridor that are obscured by landscaping and noise barriers. Because the view of the project corridor is obscured, their viewer sensitivity to the project corridor is low.

Along the west side of the UPRR/Caltrain railway are some multi-story commercial buildings with tenants that include commercial and civic viewers. Engaged in work, their visual focus is on their work rather than outside views. The higher floors in these buildings have a view of the project corridor and the distant hills. Industrial viewers are at the northern edge of the landscape unit at the Lick Quarry. These viewers are focused on work, be it at computers or safely operating heavy machinery, not on viewing the surrounding area. These viewers have moderately low viewer sensitivity.

Travelers on local roads and cross streets have limited exposure to the project corridor, as they see it just as they approach throughout the landscape unit. Travelers along Monterey Road have a high exposure to the project corridor as they run parallel and adjacent to each other, resulting in a moderate viewer sensitivity. Cyclists riding along Monterey Road are focused on safety, because of the high automobile traffic speeds and varied shoulder lane conditions, making their viewer sensitivity to the adjacent landscape low. In the Caltrain railway and project corridor four passenger trains pass each way each weekday and one passes each way on weekends. Three of the weekday trains in each direction are morning and evening local Caltrain commuter trains, with riders likely to be engaged in work or reading that limits their exposure to the passing views. Amtrak's long distance Coast Starlight passes once daily in each direction with passengers more likely to be traveling for leisure and, consequently, more engaged with viewing the passing scenery. Due to the low frequency of these travelers' exposure to the project corridor, their viewer sensitivity is low.

Visual Quality

As shown in Table 3.16-10 as perceived by viewer groups, the natural harmony and the cultural order of the Monterey Highway San Jose Landscape Unit is moderately high. The project coherence is high. Overall, the existing visual quality of the Monterey Highway San Jose Landscape Unit is moderately high.

Key Viewpoints

Table 3.16-11 identifies the four KVPs in the Monterey Highway San Jose Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-11 Key Viewpoints Representing the Monterey Highway San Jose Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
12	Monterey Highway at Lick Quarry	Traveler	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Santa Cruz Mountains visible in the distance. Street trees in the roadway median and along the sidewalk, screen adjacent residential homes from views of the roadway. In the middle ground, taller trees densely line the far side of the railway corridor. ▪ Moderately low cultural order—Highway, billboard, used car sales lot, and quarry facilities located immediately next to one another contrast. ▪ Moderately high project coherence—Railway corridor is not visible, but Monterey Highway is prominent. Street landscaping and light poles are orderly; pavement is in good condition and marked clearly. 	Moderate	Moderate
13	Branham Lane, San Jose	Residential	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—Santa Cruz Mountains rise from the valley in the distance. Landscaping along the roadway is native trees and bushes and neat groundcover. In the middle ground taller trees line the far side of the railway corridor. ▪ Moderately high cultural order—Residential homes similar in scale and design, orderly streetscaping, library building presents a geometric modern design. ▪ Moderate project coherence—Evidenced by the crossing traffic signal. 	Moderately low	Moderately high

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
14	Monterey Road, just past Edenvue Drive	Traveler	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Tall, mature trees line the UPRR/Caltrain railway to the west, their height and full foliage block views from the corridor. No views distant views. ▪ Moderately high cultural order—Railway tracks flank the straight, six-lane Monterey Road to the west. Uniform noise barriers and landscaping line most of the eastern side of Monterey Road and limit views from residential areas to the highway and railway. ▪ Moderately high project coherence—Monterey Road is clearly delineated, exposed soil is free of weed, and view down the road is neat and free of clutter. 	Moderate	Moderately high
15	Avenida Rotella in the Los Paseos neighborhood	Residential	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—Trees, hedges, and lawns dominate this view, obscuring from view most of the homes lining the street. Robust landscaping is important to the residents. ▪ Moderate cultural order—Neighborhood is characterized by single-story homes, similar in their distance from the street, paint colors, and materials. ▪ Project environment not visible. 	Moderately low	Moderately high

KVP = key viewpoint
UPRR = Union Pacific Railway

3.16.5.6 Coyote Valley Landscape Unit

The Coyote Valley Landscape Unit (Figure 3.16-8) extends along Monterey Road and US 101 from Metcalf Road in San Jose to just north of Burnett Avenue in Morgan Hill. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-8. Table 3.16-12 provides a summary of the visual resources and character and the viewer groups in the Coyote Valley Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Coyote Valley Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Keesling's Shade Trees**—Keesling's Shade Trees line Monterey Road from Edenvale in San Jose to Gilroy. Planted between 1900 and 1907, they once lined both sides of Monterey Road. They now exist only along portions of the west side of the highway. They were designated as California Points of Historical Interest in 1985.

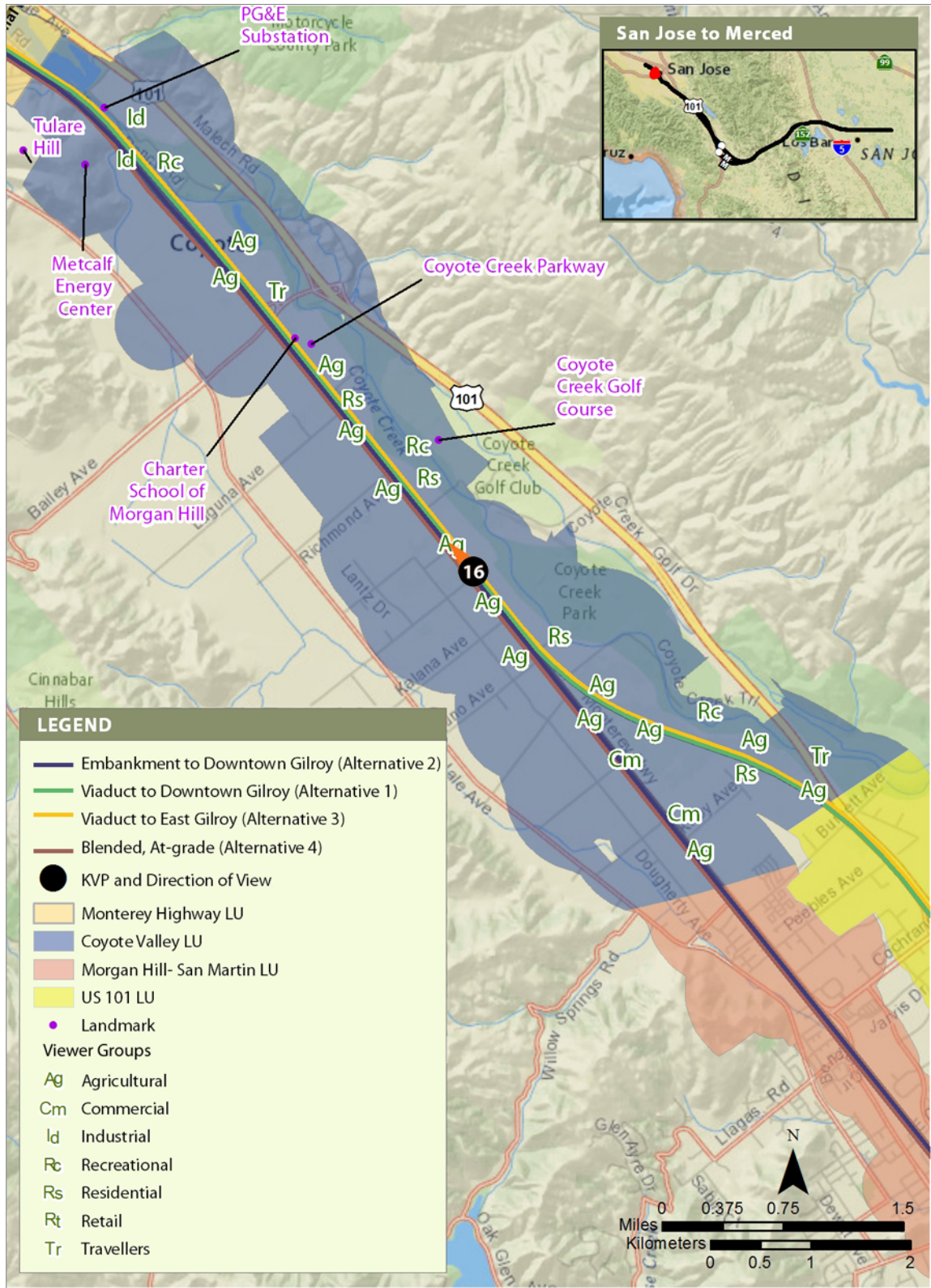


Figure 3.16-8 KVPs, Visual Resources, and Viewers in the Coyote Valley Landscape Unit

Table 3.16-12 Coyote Valley Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level valley rising to rolling hills ▪ Row crops, orchards ▪ Tree-lined riparian areas ▪ Good visibility ▪ Background views of hills and mountain ranges, including Tulare Hill ▪ Coyote Creek, including Coyote Creek Parkway ▪ Keesling’s Shade Trees ▪ Coyote Creek Golf Course 	<ul style="list-style-type: none"> ▪ US 101 freeway ▪ Coyote Creek Trail ▪ Metcalf Energy Center ▪ PG&E substation 	<ul style="list-style-type: none"> ▪ Monterey Road 	<ul style="list-style-type: none"> ▪ Recreational viewers—high to moderate ▪ Travelers—moderately high to moderately low ▪ Residential viewers—high ▪ Agricultural viewers—moderate to low ▪ Industrial viewers—low 	<ul style="list-style-type: none"> ▪ Moderately high

PG&E = Pacific Gas and Electric Company

- **Mount Hamilton, Lick Observatory, and the Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide scenic vistas to views of wilderness from throughout the area. Atop Mount Hamilton is the Lick Observatory, operated by the University of California. This landmark is visible from throughout the region.
- **Santa Teresa Ridge**—The undeveloped Santa Teresa Ridge runs into the Santa Clara Valley from the Santa Cruz Mountains. It divides the urbanized area of San Jose from Coyote Valley. It also provides the northernmost wildlife crossing between the Santa Cruz and Diablo ranges.
- **Coyote Creek and Coyote Valley**—The portion of the Santa Clara Valley between Santa Teresa Ridge and Morgan Hill is generally referred to as the Coyote Valley. It is divided by Monterey Road and the UPRR. To the east, it is mainly parklands, with some agriculture, lining Coyote Creek. To the west, it is open space and agriculture but entitled across its northern portion to become a large, urbanized development.
- **El Toro Peak**—El Toro Peak rises to the west of Morgan Hill. Its distinctive form has been incorporated into the city’s seal and official logo. It serves as a visual anchor and scenic vista at the western end of both East Main Street and East Dunne Avenue.

Natural Environment

The Coyote Valley Landscape Unit includes the largely agricultural area between the urbanized areas of San Jose and Morgan Hill. It is bisected by Coyote Creek and its riparian corridor and the Coyote Creek Parkway, which includes the Coyote Creek Trail that provides recreational access throughout the parkway. The agriculture fields of the valley and the brown grasses of the open space are neat and rectangular in character. In contrast, the Coyote Creek Golf Course has meandering irrigated green fairways. The natural environment also includes Keesling’s Shade Trees, in varied health, along

Monterey Road. Outside of the cities, views include agricultural fields and buildings in the near ground and the hills of the Santa Cruz and Diablo ranges at a distance.

Cultural Environment

Throughout the landscape unit, the open space and agricultural uses are broken up by scattered development, the most disparate being the Metcalf Energy Center and adjacent 40-acre Pacific Gas and Electric Company (PG&E) substation at the base of Tulare Hill. Other development includes small residential areas, mobile home communities, greenhouses, aging highway commercial buildings, a golf course, and commercial uses largely dedicated to supporting agriculture and roadside buildings along Monterey Road in varied stages of use and maintenance.

Project Environment

The Monterey Road/UPRR corridor is a uniform assemblage of the four-lane roadway, the single-track UPRR railway on a low (3- to 5-foot) berm, and accompanying power poles. Prior to the 1980s, Monterey Road was US 101, the main route between San Francisco and Los Angeles along the coast. The roadway retains most of its early appearance including a concrete median barrier, topped by a wire mesh glare screen that is slowly unraveling. Speeds are high and intersections are few, but traffic is light through the Coyote Valley. During the 1980s, US 101 was relocated to its current location as an eight-lane freeway that hugs the base of the foothills of the Diablo Range. The freeway often runs on a split-level alignment, with the northbound lanes usually higher than the southbound lanes, allowing a view over the opposing traffic. Views from the freeway span across the Coyote Valley to the Santa Cruz Mountains.

Viewer Groups

The Coyote Valley Landscape Unit viewer groups are primarily recreationists and travelers, with some residential, industrial, and agricultural viewers (Figure 3.16-8). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity

The Coyote Valley includes both active and passive recreational activities. Cyclists, runners, and walkers use the Coyote Creek Trail through the valley, which provides views of nature as part of the experience. These viewers have a moderately high to high viewer sensitivity, as they are drawn to the area by ability to enjoy the landscape. The valley is also home to the Coyote Creek Golf Course and the Santa Clara County Model Aircraft Skypark. Whether golfing or flying a model aircraft, these recreationists are more focused on their activity, while still aware of the surrounding environment. These viewers have a moderate viewer sensitivity. Institutional viewers include the Charter School of Morgan Hill and Ann Sobrato High School students and staff, whose views of the project corridor are shielded by classroom buildings and mature landscaping, for a low viewer sensitivity.

Residential viewers are in areas of single-family homes separated by open space or small clusters of fewer than 10 homes. In most cases landscaping blocks views of the project corridor; however, there are open views to surrounding rural and agricultural areas and distant views to the Diablo Range and Santa Cruz Mountains. While there are few residential viewers their viewer sensitivity is high, as their residence in the Coyote Valley offers a rural setting with rural views within a major metropolitan area, an uncommon living situation.

Industrial viewers are found at the large electrical substation and power plant at the north end of the landscape unit. Working around high voltages and complex machinery requires focus on work, reducing their viewer sensitivity to the surrounding landscape to low. Agricultural viewers may be found tending to field crops and orchards, or in the valley's greenhouses. Those working outside are aware of the health of the crops and the immediate surrounding environment, for a moderate visual awareness, but their work is often seasonal, and their exposure to any one location is limited. Greenhouse workers have few views to the surrounding environment from within the buildings. Their viewer sensitivity is low.

Travelers in the Coyote Valley landscape unit are concentrated on Monterey Road and US 101. For travelers on Monterey Road, viewing the scenery is part of their experience. These travelers have clear views to the parallel and adjacent railway corridor. Because they are often choosing to use Monterey Road to enjoy the scenery away from the traffic on the parallel US 101 freeway, and because they are driving parallel to the project corridor for many miles, their viewer sensitivity is moderately high. Travelers on US 101 have views of the project corridor from a distance varying from 0.3 to 1 mile and often obscured by vegetation, buildings, and traffic, making their viewer sensitivity moderately low. Along the Caltrain/UPRR railway four passenger trains pass each way each weekday, and one passes each way on weekends. Three of the weekday trains in each direction are morning and evening local Caltrain commuter trains, with riders likely to be engaged in work or reading that limits their exposure to the passing views. Amtrak's long-distance Coast Starlight passes once daily in each direction with passengers more likely to be traveling for leisure and, consequently, more engaged with viewing the passing scenery. Due to the low frequency of these travelers' exposure to the project corridor, their viewer sensitivity is low.

Visual Quality

As shown in Table 3.16-12, as perceived by viewer groups, the natural harmony of the Coyote Valley Landscape Unit is moderately high. The cultural order is moderately low and the project coherence is high. Overall, the existing visual quality of the Coyote Valley Landscape Unit is moderately high.

Key Viewpoint

Table 3.16-13 identifies the KVP in the Coyote Valley Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-13 Key Viewpoint Representing the Coyote Valley Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
16	East side of Monterey Road in the Coyote Valley	Traveler	<ul style="list-style-type: none"> ▪ Moderately high natural harmony— Includes active agricultural fields, an evenly spaced, procession of the historic Keesling's Shade Trees along the highway and background views, to the east, of the foothills of the Diablo Range rising from the valley. ▪ Moderately high cultural order—Neat transportation corridor with a neat composition of buildings in the distance. ▪ Moderately high project coherence— Includes the highway, lined with tall and uncluttered power poles, and a portion of the agricultural field to the east. 	Moderately low	Moderately high

KVP = key viewpoint

3.16.5.7 US 101 Landscape Unit

The US 101 Landscape Unit (illustrated on Figure 3.16-9) extends along US 101 from just north of Burnett Avenue in Morgan Hill to just north of Buena Vista Avenue in Gilroy. The landscape unit extent, KVP locations, visual resources and viewer groups are illustrated on Figure 3.16-9. Table 3.16-14 provides a summary of the visual resources and character and the viewer groups in the US 101 Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the US 101 Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Coyote Valley. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide scenic vistas of wilderness from throughout the area.
- **El Toro Peak**—El Toro Peak rises to the west of Morgan Hill. Its distinctive form has been incorporated into the city’s seal and official logo. It serves as a visual anchor and scenic vista at the western end of both East Main Street and East Dunne Avenue.
- **Morgan Hill “Gateways”**—Morgan Hill’s General Plan calls out the gateways to the city as places where the “visual integrity” should be enhanced. These locations include the Cochrane, Dunne, and Tennant freeway interchanges along US 101.
- **Gilroy “Gateways”**—Gilroy’s General Plan identifies entry points to the city. These include the US 101 interchanges at Masten, Buena Vista, Leavesley, and Tenth Street.

Natural Environment

The landform of the US 101 Landscape Unit is level terrain. The primary vegetation is orchards and row crops from agricultural uses. Background views include mountain ranges and El Toro Peak.

Cultural Environment

The cultural environment includes commercial, retail, residential, and agricultural development. In Morgan Hill around the Cochrane Road interchange, office and freeway retail buildings line the west of the freeway, with the office buildings having clear views to the freeway. On the east side, a big box retail center sits opposite a commercial nursery.

Continuing south, residential homes line the west side of US 101, screened from the freeway by landscaping, and agricultural fields and commercial buildings are located on the east side of the freeway. South of Tennant Avenue, the area is largely agricultural fields, interspersed with pockets of homes. Most of the homes are screened from the freeway by established landscaping. Views to the project corridor are primarily from overcrossings and interchanges.

Passing San Martin, the South County Airport is immediately adjacent to the freeway, with the runway paralleling and bordering the freeway’s western right-of-way. Hangers are located west of the runway, separated from the freeway by the paved runway, taxiways, and tarmac. Primarily, small, private planes are visible across the airfield. A California Highway Patrol truck inspection facility is to the east of the freeway, serving northbound traffic. The operations building, scale building, and lines of trucks awaiting weighing and inspection are enclosed at the rear by a tall noise barrier.

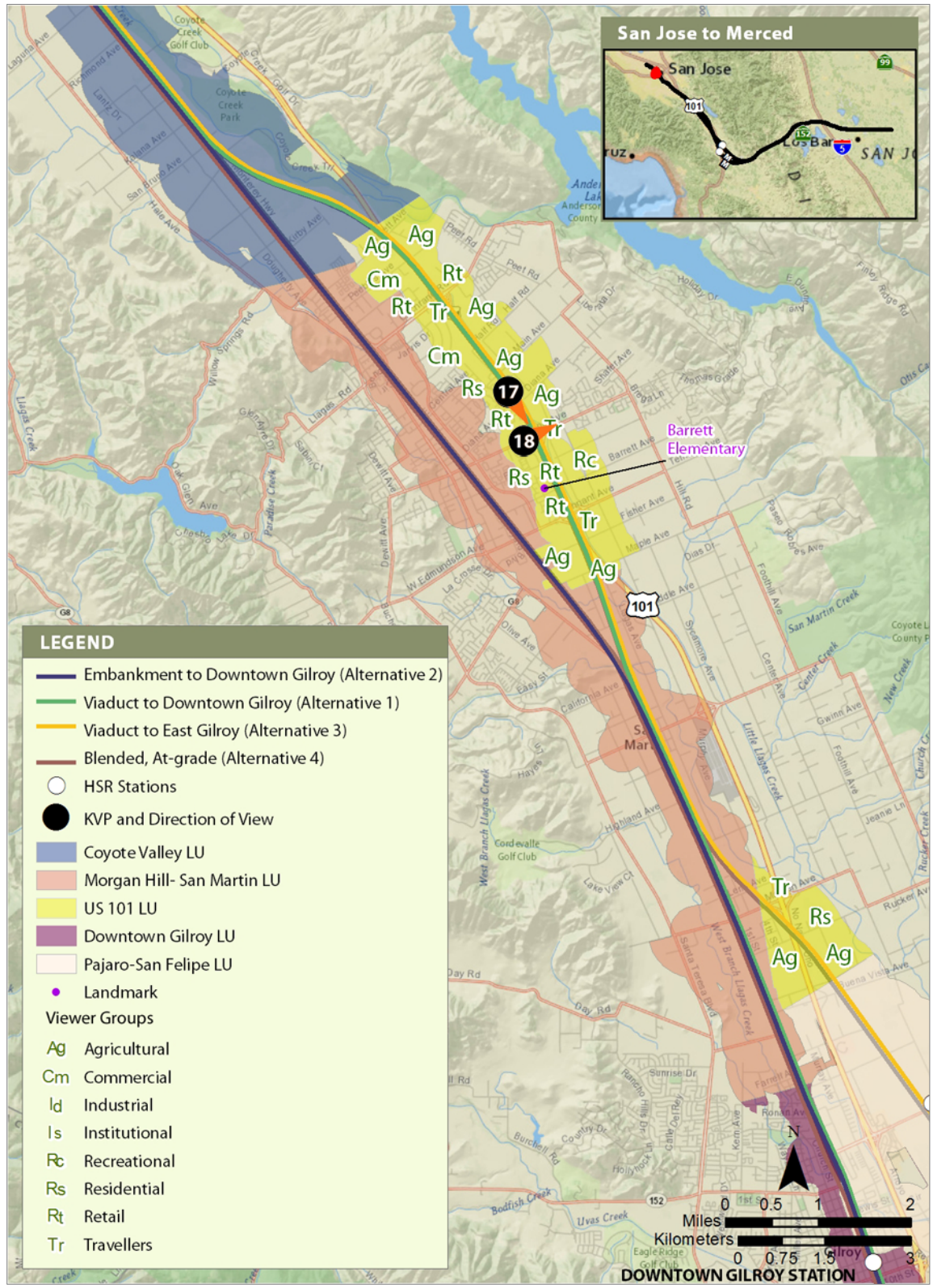


Figure 3.16-9 KVPs, Visual Resources, and Viewers in the US 101 Landscape Unit

Table 3.16-14 US 101 Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Orchards and row crops ▪ Background views of mountain ranges and El Toro Peak ▪ Good visibility 	<ul style="list-style-type: none"> ▪ US 101 freeway ▪ Suburban and scattered residential ▪ Freeway commercial development 	<ul style="list-style-type: none"> ▪ US 101 Freeway 	<ul style="list-style-type: none"> ▪ Residential viewers—high to moderately low ▪ Retail viewers—moderately low ▪ Commercial viewers—moderately low ▪ Institutional viewers—low ▪ Agricultural viewers—moderate to low ▪ Travelers—moderately low 	<ul style="list-style-type: none"> ▪ Moderate

Project Environment

The US 101 Landscape Unit lies east of the downtowns of Morgan Hill, San Martin, and Gilroy, along the six-lane US 101 freeway. The US 101 freeway is wide, with a wide median and shoulders, crossing the flat valley. Views to the hills from the freeway are obscured in locations by larger buildings and mature trees.

Viewer Groups

The US 101 Landscape Unit viewer groups include residential viewers, recreational viewers, retail viewers, commercial viewers, institutional viewers, agricultural viewers, and travelers (Figure 3.16-9). Viewer sensitivities for each of these viewer groups as shows in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Residential viewers are located mostly in a rural setting with some in suburban areas. Some residential homes are shielded from the project corridor by landscaping or noise barriers while others have direct views. Neighborhood appearance and surrounding views are factors in choice of home and neighborhood. In locations where views to the project corridor are screened or blocked by landscaping or structures, residents’ sensitivities are governed by views of those features, making their viewer sensitivity to the project corridor moderately low, but where their view to the corridor is clear, their viewer sensitivity is high.

There are two concentrations of retail activity along US 101 in the landscape unit. One is around the Cochrane Road interchange, the second at the East Dunne Avenue interchange. Retail viewers have clear views of shops and stores within the retail centers. Commercial viewers are near the Cochrane Road interchange, in buildings oriented away from the freeway. These viewers have moderately low viewer sensitivity, as the retail and commercial activities are visually contained away from the freeway. Institutional viewers are at the South County Airport and the California Highway Patrol truck inspection facility, with their primary focus on work rather than the surrounding landscape, resulting in a low viewer sensitivity.

Agricultural viewers may be found tending to field crops and orchards, or in the valley’s greenhouses. Those working outside are aware of the health of the crops and the immediate surrounding environment, for a moderate viewer sensitivity, but their work is often seasonal and

their exposure to any one location is limited. Greenhouse workers have few views to the surrounding environment from within the buildings, resulting in a low viewer sensitivity.

Travelers are concentrated on US 101. They have views to the adjacent land uses, described above, sometimes limited by vegetation and buildings. There are distant views to the surrounding hills and El Toro Peak. Traffic is heavy on the six-lane freeway, requiring concentration on surrounding traffic, resulting in a moderately low viewer sensitivity.

Visual Quality

As shown in Table 3.16-14, as perceived by viewer groups, the natural harmony and project coherence of the US 101 Landscape Unit is moderately high and the cultural order is moderately low. Overall, the existing visual quality of the US 101 Landscape Unit is moderate.

Key Viewpoints

Table 3.16-15 identifies the two KVPs in the US 101 Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-15 Key Viewpoints Representing the US 101 Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
17	Walnut Grove Drive from near the intersection with English Walnut Way	Residential	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Maturing trees and landscaping are in good health and well maintained, but the wide, linear street lined with parked cars creates a gap between planted areas. ▪ Moderate cultural order—Single-story homes with a similar distance from the street, style, and materials. The width of the street and proximity of the homes creates a channelized view down the roadway corridor that does not offer a view out of the neighborhood. Roadways are lined with parked vehicles. ▪ Project environment not visible. 	Moderately low	Moderate
18	East Dunne Avenue approaching the US 101 interchange	Traveler	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Clear view of the Diablo Range from the over-crossing of US 101 freeway. Landscaping is mature, especially within the interchange loops. ▪ Moderately high cultural order—No buildings are visible in the foreground. The roadway, signage, and traffic signals are well maintained and free of clutter, for a neat and orderly appearance. ▪ Moderately high project coherence—The project environment is the interchanges, with all the attributes described as a part of the cultural order. 	Moderate	Moderately high

KVP = key viewpoint

3.16.5.8 Morgan Hill–San Martin Landscape Unit

The Morgan Hill–San Martin Landscape Unit (illustrated on Figure 3.16-10) extends along the UPRR and Monterey Road from just north of Burnett Avenue in Morgan Hill to Las Animas Avenue in Gilroy. In developed areas, it encompasses properties adjacent to the railway. Where development is sparse, it expands to up to 0.25 mile to each side of the UPRR. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-10. Table 3.16-16 provides a summary of the visual resources and character and the viewer groups in the Morgan Hill–San Martin Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Morgan Hill–San Martin Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide scenic vistas of wilderness from throughout the area.
- **El Toro Peak**—El Toro Peak rises to the west of Morgan Hill. Its distinctive form has been incorporated into the city’s seal and official logo. It serves as a visual anchor and scenic vista at the western end of both East Main Street and East Dunne Avenue.
- **Downtown Morgan Hill and its approaches**—Morgan Hill’s General Plan calls out the gateways to the city as places where the “visual integrity” should be enhanced. These locations include the Madrone area north of Cochrane Road; the Cochrane Road/Monterey Road intersection; Monterey Road south of Watsonville Road; the Cochrane, Dunne, and Tennant freeway interchanges; and the Caltrain station.

Natural Environment

The landform is level terrain. The primary vegetation is from orchards or planted vegetation in urban areas. Background views include mountain ranges and El Toro Peak. Water features include Llagas Creek.

Cultural Environment

Within the City of Morgan Hill agricultural fields give way to commercial and industrial buildings. North of downtown Morgan Hill, the National Register of Historic Places (NRHP)-listed Villa Mira Monte is adjacent to the UPRR/Caltrain railway. In this area, Monterey Road moves away from the railway corridor, running generally 0.25 mile to the west and forming the main commercial street in the downtown. Lighting would be present throughout the night, but the fixtures are all pedestrian-scaled to light the street but not the sky. Commercial buildings would likely be lit at night as well, but the absence of large signage indicates a moderate level of nighttime lighting. As density declines and agricultural uses increase, light levels south of Morgan Hill become moderately low.

The community of San Martin is centered on San Martin Avenue where it intersects the UPRR and Monterey Road. The blocks surrounding this intersection include small homes and some commercial buildings that visually read as the center of San Martin. The San Martin Gwinn Elementary School is at the north edge of the town. Along San Martin Avenue, the condition of the buildings is sometimes poor, and the nearby larger commercial buildings clash with the smaller homes. On the south side of the town, the NRHP-listed San Martin Winery is adjacent to the east side of the UPRR/Caltrain railway.

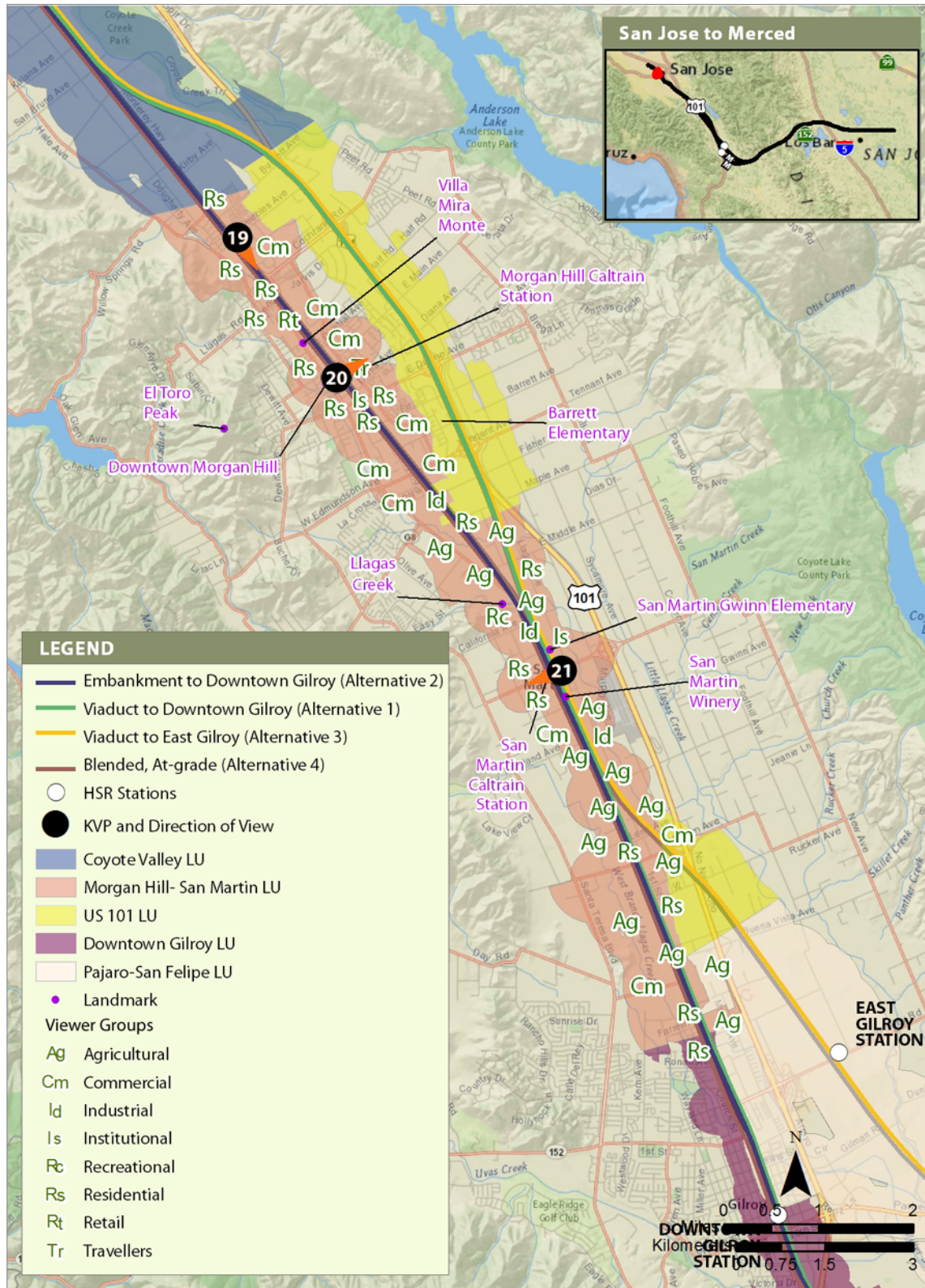


Figure 3.16-10 KVPs, Visual Resources, and Viewers in the Morgan Hill–San Martin Landscape Unit

Table 3.16-16 Morgan Hill–San Martin Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Urban vegetation ▪ Background views of mountain ranges and El Toro Peak ▪ Good visibility ▪ Llagas Creek 	<ul style="list-style-type: none"> ▪ Typical residential and industrial structures ▪ Villa Mira Monte ▪ Downtown Morgan Hill commercial district ▪ San Martin Winery 	<ul style="list-style-type: none"> ▪ Monterey Road ▪ UPRR railway ▪ Morgan Hill Caltrain Station ▪ San Martin Caltrain Station 	<ul style="list-style-type: none"> ▪ Residential viewers—high to moderately low ▪ Retail viewers—moderate ▪ Agricultural viewers—moderate to low ▪ Civic Viewers – moderately low ▪ Commercial viewers—moderately low ▪ Industrial viewers—low ▪ Travelers—moderate to moderately low 	<ul style="list-style-type: none"> ▪ Moderate

UPRR = Union Pacific Railroad

Project Environment

The single-track UPRR skirts the east side of downtown. Outside of the immediate downtown, the railway corridor passes the backs of most buildings. Between Morgan Hill and San Martin, the UPRR includes a short stretch of second track to allow trains to pass one another.

Viewer Groups

The Morgan Hill–San Martin Landscape Unit viewer groups include residential viewers, retail viewers, commercial viewers, industrial viewers, civic viewers, agricultural viewers, and travelers (Figure 3.16-10). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity

Residential viewers are found in newer neighborhoods around Morgan Hill and in older homes scattered in agricultural areas and San Martin. Most homes are visually shielded from the project corridor by landscaping, noise barriers, or orchards. The shielded residential viewers have a moderately low viewer sensitivity. Where residences are located with a clear view to the project corridor, or when residents have views from their neighborhood, their viewer sensitivity is moderately high to high, because neighborhood appearance and surrounding views are factors in choice of home and neighborhood.

Retail viewers are primarily found in downtown Morgan Hill, near the Caltrain Station. This is a traditional downtown setting where viewers often walk to their final destination, paying attention to the character of the downtown area. These viewers in downtown have a moderate viewer sensitivity. Commercial viewers, engaged in their work activities, may be found in newer buildings, north of downtown Morgan Hill, oriented away from the railway with limited views of the corridor, resulting in a moderately low viewer sensitivity. Industrial viewers are distributed along the railway corridor. Many are in large manufacturing or distributions buildings with few windows that limit views. Others use large outdoor areas that are often surrounded by tall security fencing

that limits exposure to nearby views. These viewers have a low viewer sensitivity. Civic viewers may be found east of the Morgan Hill Caltrain Station at the South County Morgan Hill Courthouse. These viewers have views of the project corridor from the parking lots between the courthouse and the railway, and longer views out of windows from the within the courthouse building. Engaged in work or court activities, their visual focus is on their work rather than outside views.

Agricultural viewers may be found tending to field crops and orchards, or in the valley's greenhouses. Those working outside are aware of the health of the crops and the immediate surrounding environment, for a moderate viewer sensitivity, but their work is often seasonal and their exposure to any one location is limited. Greenhouse workers have few views to the surrounding environment from within the buildings, resulting in a low viewer sensitivity.

Travelers in the Morgan Hill–San Martin Landscape Unit are concentrated on Monterey Road and the cross streets leading to US 101. These local travelers, making the same trips daily or more frequently, have a moderate viewer sensitivity. Cyclists using the Class II lanes on Monterey Road with fast moving traffic are more focused on road conditions, passing vehicles, and their safety than the passing landscape, resulting in a moderately low sensitivity. Along the Caltrain railway corridor four passenger trains pass in each direction each weekday and one passes each way on weekends. Three of the weekday trains in each direction are morning and evening local Caltrain commuter trains, with riders likely to be engaged in work or reading that limits their exposure to the passing views. Amtrak's long-distance Coast Starlight passes once daily through the corridor in each direction with passengers more likely to be traveling for leisure and, consequently, more engaged with viewing the passing scenery. Due to the low frequency of these travelers' exposure to the project corridor, their viewer sensitivity is low.

Visual Quality

As shown in Table 3.16-16, as perceived by viewer groups, the natural harmony and cultural order of the Morgan Hill–San Martin Landscape Unit is moderate and the project coherence is moderately high. Overall, the existing visual quality of the Morgan Hill–San Martin Landscape Unit is moderate.

Key Viewpoints

Table 3.16-17 identifies the three KVPs in the Morgan Hill–San Martin Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-17 Key Viewpoints Representing the Morgan Hill–San Martin Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
19	Monterey Road at Peebles Avenue	Traveler	<ul style="list-style-type: none"> ▪ Moderately low natural harmony—Most distant views are blocked by residences west of the railway tracks; only a sliver of the hills near El Toro Peak are visible. Trees rise from gaps in paved parking areas and on vacant parcels. An evenly spaced procession of the historic Keesling’s Shade Trees separates the UPRR from the highway. ▪ Moderate cultural order—Highway setting with commercial buildings to the west and a residential neighborhood to the east. ▪ Moderately low project coherence—Definition of the transition from road to parking is undefined. 	Moderately low	Moderately low
20	Morgan Hill Caltrain Station	Retail	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—Numerous trees of varied species, including a mature native oak on the far side of the railway corridor. The Diablo Range is visible in the background. ▪ Moderate cultural order—Street, sidewalk, and various styles of street lighting, with a single power pole being the one conspicuous vertical element. ▪ Moderately high project coherence—UPRR/Caltrain tracks are visible on a low berm at the far edge of the parking lot. They are neat and free of clutter. 	Moderate	Moderately high
21	Central San Martin, toward Monterey Road	Traveler	<ul style="list-style-type: none"> ▪ Moderately low natural harmony—Foothills are visible in the distance, but views are obscured by mature trees in the middle ground. The large redwood is non-native to the valley floor and out of place. Bushy trees overhanging the roadway are in poor condition. ▪ Low cultural order—Development is uncoordinated. There are no sidewalks lining the street, a building on the street is missing a long section of awning, overhead powerlines cross the area, and the masts of the streetlights are oriented in all directions. ▪ Moderate project coherence—Railway corridor is evident by the multiple crossing arms and warning gantries standing at the grade crossing. 	Moderate	Moderately low

KVP = key viewpoint

3.16.5.9 Downtown Gilroy Landscape Unit and Key Viewpoints

The Downtown Gilroy Landscape Unit extends along the UPRR from Las Animas Avenue to Southside Drive in Gilroy. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-11. Table 3.16-18 provides a summary of the visual resources and character and the viewer groups in the Downtown Gilroy Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Downtown Gilroy Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

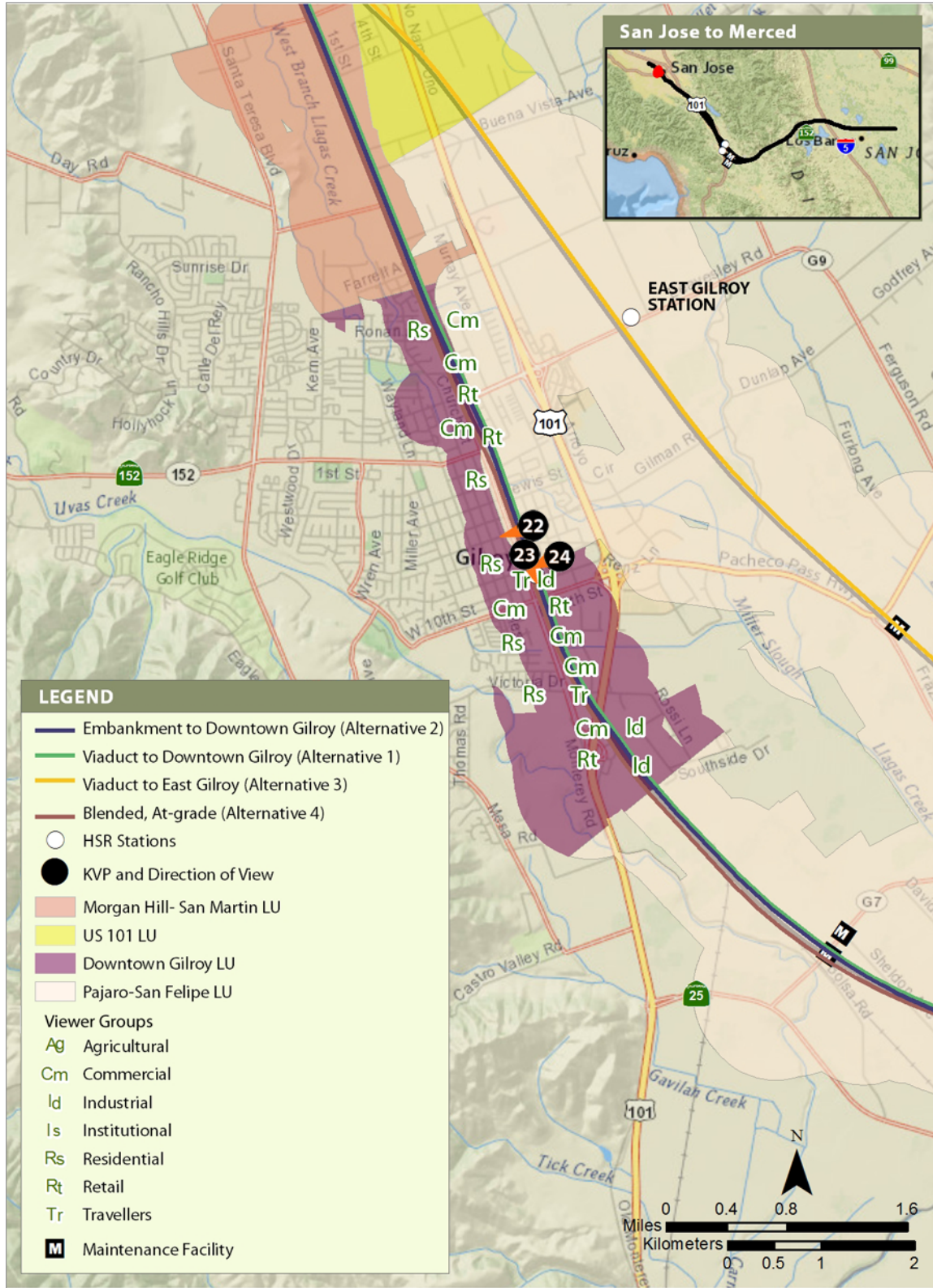
- **Downtown Gilroy and its approaches**—Gilroy’s General Plan identifies entry points to the city such as Monterey Street; SR 152/Pacheco Pass; and the US 101 interchanges at Masten, Buena Vista, Leavesley, and Tenth Street.
- **Caltrain Station, Gilroy**—Since 1992, the Gilroy Station has served as the southern terminus of a portion of Caltrain’s weekday rail service. The Gilroy Downtown Specific Plan identifies the station as one of the landmarks in the downtown area.
- **Gilroy City Hall, Gilroy**—Built in 1904, the Gilroy Downtown Specific Plan identifies the city hall as one of the landmarks in the downtown area.

Natural Environment

The landform is level terrain. The primary vegetation is from planted vegetation in urban areas. Background views include mountain ranges.

Cultural Environment

The northern end of the Downtown Gilroy Landscape Unit comprises newer commercial buildings and older industrial buildings along the UPRR corridor. Through the downtown of Gilroy, Monterey Road moves away from the UPRR railway and forms the main commercial street of the city. Along Monterey Road, downtown Gilroy is a traditional downtown with many older buildings of similar size and architecture. The Gilroy City Hall, a national landmark building built in 1904, is a substantial building of sandstone with an elaborate mission tile roof.



JANUARY 2019

Figure 3.16-11 KVPs, Visual Resources, and Viewers in the Downtown Gilroy Landscape Unit

Table 3.16-18 Downtown Gilroy Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Urban vegetation ▪ Background views of mountain ranges ▪ Good visibility ▪ No major water features 	<ul style="list-style-type: none"> ▪ Commercial and industrial uses along UPRR ▪ Gilroy Railroad depot and City Hall ▪ Downtown Gilroy commercial district ▪ Gilroy Prep School ▪ Live Oak Creamery 	<ul style="list-style-type: none"> ▪ UPRR railway ▪ Gilroy Caltrain Station 	<ul style="list-style-type: none"> ▪ Residential viewers—moderately high to moderately low ▪ Retail viewers—moderately low ▪ Industrial viewers—low ▪ Institutional viewers—moderately low ▪ Travelers—moderate to low 	<ul style="list-style-type: none"> ▪ Moderate

UPRR = Union Pacific Railroad

The UPRR corridor runs a block east of Monterey Road and is lined with parking, the backsides of downtown buildings, and smaller industrial and commercial buildings. The railway passes adjacent to the Gilroy Prep School campus and the NRHP-listed Live Oak Creamery. East of the railway is a residential neighborhood of older single-family homes and mature tree-lined streets, separated from the rail corridor by a line of small industrial buildings. The area surrounding the NRHP-listed Gilroy Caltrain Station is devoid of buildings. To the west, between Monterey Road and the station is a large surface parking lot and VTA transit center. The mature trees in the median of Monterey Road and in the parking lot obscure views of the historic station building from the roadway. The west side of Monterey Road is lined with one-story commercial buildings.

Project Environment

The single-track rail corridor through Gilroy is very narrow, approximately 50 feet wide, until the Gilroy Caltrain Station, where the UPRR mainline swings east around the passenger platform and three station storage tracks. East of the railway station is the UPRR mainline railway tracks and a large open area covering about four city blocks, with one industrial building in the northeast corner. South of the station, the two-track UPRR corridor curves to the east, past industrial and commercial buildings to pass under US 101 and out of the city.

Viewer Groups

The Downtown Gilroy Landscape Unit viewer groups include residential viewers, retail viewers, industrial viewers, institutional viewers, and travelers (Figure 3.16-11). Viewer sensitivities for each of these viewer groups as described in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Residential viewers are found primarily east of downtown Gilroy in a neighborhood of older single-family homes and tree-lined streets. Views to the project corridor are limited by the density of development and mature trees. This makes the viewer sensitivity of viewers in their homes moderately low, but it increases to moderately high when the project corridor is visible from the neighborhood, as the appearance of the surrounding neighborhood visible from one's residence is a contributing factor for choice of residence and provides a sense of pride to the resident.

Retail viewers include shoppers and diners in downtown Gilroy. With most retail establishments lining Monterey Street, the only views to the project corridor are from cross streets, limiting exposure and rendering retail viewer sensitivity moderately low. Industrial viewers are adjacent to

the project corridor in one-story buildings oriented toward local streets with limited views of the project corridor. With their focus on work and limited exposure to the project corridor, their viewer sensitivity is low. Institutional viewers include Gilroy Prep School's students and staff members. Classroom buildings are all oriented away from the railway. Views to the project corridor are available from the sports facilities, but viewers engaged in sporting activities, either as participants or spectators, are focused on the sports rather than surrounding views, so viewer sensitivity is moderately low. Travelers include motorists on local roads and on the limited service of passenger trains. Travelers in automobiles are found along Monterey Road, US 101, and major arterial roads connecting US 101 to downtown Gilroy, including Leavesley Road and East Tenth Street. Travelers on US 101 can see the south end of downtown Gilroy as the freeway passes over the UPRR railway. These travelers have a moderately low viewer sensitivity because they are traveling at freeway speeds, limiting their views to a few seconds at most. Travelers on city streets move more slowly and experience views of the downtown area, resulting in a moderate viewer sensitivity. Rail viewers see little from trains, as the rail right-of-way through Gilroy is narrow and lined with buildings, limiting views to primarily the "back" side of buildings. Due to the low frequency of these travelers' exposure to the project corridor, their viewer sensitivity is low.

Visual Quality

As shown in Table 3.16-18, as perceived by viewer groups, the natural harmony of the Downtown Gilroy Landscape Unit is low, the cultural order is high, and the project coherence is moderately high. Overall, the existing visual quality of the Downtown Gilroy Landscape Unit is moderate.

Key Viewpoints

Table 3.16-19 identifies the three KVPs in the Downtown Gilroy Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-19 Key Viewpoints Representing the Downtown Gilroy Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
22	East 6th Street at Alexander Street	Residential	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Trees of various species, both mature and newly planted, and in good condition. A glimpse of the Santa Cruz Mountains is visible in the distance. ▪ Moderately high cultural order—Buildings, modest in scale and design, are neat and orderly. The City's care for the neighborhood is reflected by the sidewalk bulbs at the intersection, planted with new street trees and the historic streetlights. ▪ Project environment is not visible. 	Moderate	Moderately high
23	Gilroy Caltrain Station	Traveler	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—Landscaping is well designed and maintained. ▪ High cultural order—Centered on the historic Gilroy Station building with a Spanish Revival style, symmetric facade and classical highlights that demonstrate it was intended to be a significant civic structure. ▪ High project coherence—Caltrain trains can be seen behind the station from the parking lot, a visual cue to viewers that this is an active railway station, and the parking lot layout highlights the station building. 	Moderate	High
24	East 8th Street toward the UPRR/Caltrain railway	Residential	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Distant hills provide an orientation and reminder that Gilroy is at the edge of the urbanized Bay Area. Mature trees of many species dot the residential area, bushy and healthy, but they largely untrimmed. ▪ Moderately low cultural order—Transitions from residential to commercial in this view, with a Caltrain passenger train seen at the end of 8th Street. ▪ Moderately low project coherence—The sight of the parked Caltrain train identifies the railway's presence. Without the train there would be no visible clues to the railway's locations. 	Moderately low	Moderately low

KVP = key viewpoint

3.16.5.10 Pajaro–San Felipe Landscape Unit

The Pajaro–San Felipe Landscape Unit extends in two legs, from Las Animas Avenue and Southside Drive in Gilroy, meeting west of SR 152/Pacheco Pass Highway near San Felipe Road. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-12. Table 3.16-20 provides a summary of the visual resources and character and the viewer groups in the Pajaro–San Felipe Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Pajaro–San Felipe Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Santa Cruz Mountains**—Scenic vistas of the Santa Cruz Mountains and their foothills enclose the western side of the Santa Clara and Coyote Valleys. Their forested flanks contrast with the grass and oak covered eastern hill and provide orientation for the valley.
- **Diablo Range**—To the east of the Santa Clara Valley, the high, undeveloped mountains covered in grasses, chaparral, and oak provide scenic vistas of wilderness from throughout the area.

Natural Environment

The Pajaro–San Felipe Landscape Unit is primarily a flat landscape of open space and agricultural uses. The agriculture is characterized by low-lying crops, permitting expansive views across the fields. The Pajaro River crosses the landscape unit in a natural channel, while its tributary, Llagas Creek, flows as a canal south from Gilroy into the river, passing Gilroy’s sewage disposal ponds. Farther to the east, the tree lined Tequisquita Slough and Pacheco Creek wind through the fields, enclosing and blocking long views. Near SR 152 and the edge of the foothills, vineyards are the predominant agricultural use.

Cultural Environment

The cultural environment includes small pockets of residences and agricultural buildings. Residences are scattered throughout the area, with denser clusters off Rucker and Buena Vista Avenues in the north and near the community of Old Gilroy. South of the Pajaro River, the Frazier Lake Airpark holds a number of hanger buildings and a seaplane landing facility. Southeast of the City of Gilroy, the single-track UPRR Hollister Branch runs south to the City of Hollister.

Project Environment

There is no existing project environment in this landscape unit because the alignment travels through open space and agricultural lands with small pockets of residences and agricultural buildings that comprise the natural and cultural environments, not conforming to any existing transportation facility.

Viewer Groups

The Pajaro–San Felipe Landscape Unit viewer groups include residential viewers, recreational viewers, agricultural viewers, and travelers (Figure 3.16-12). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity

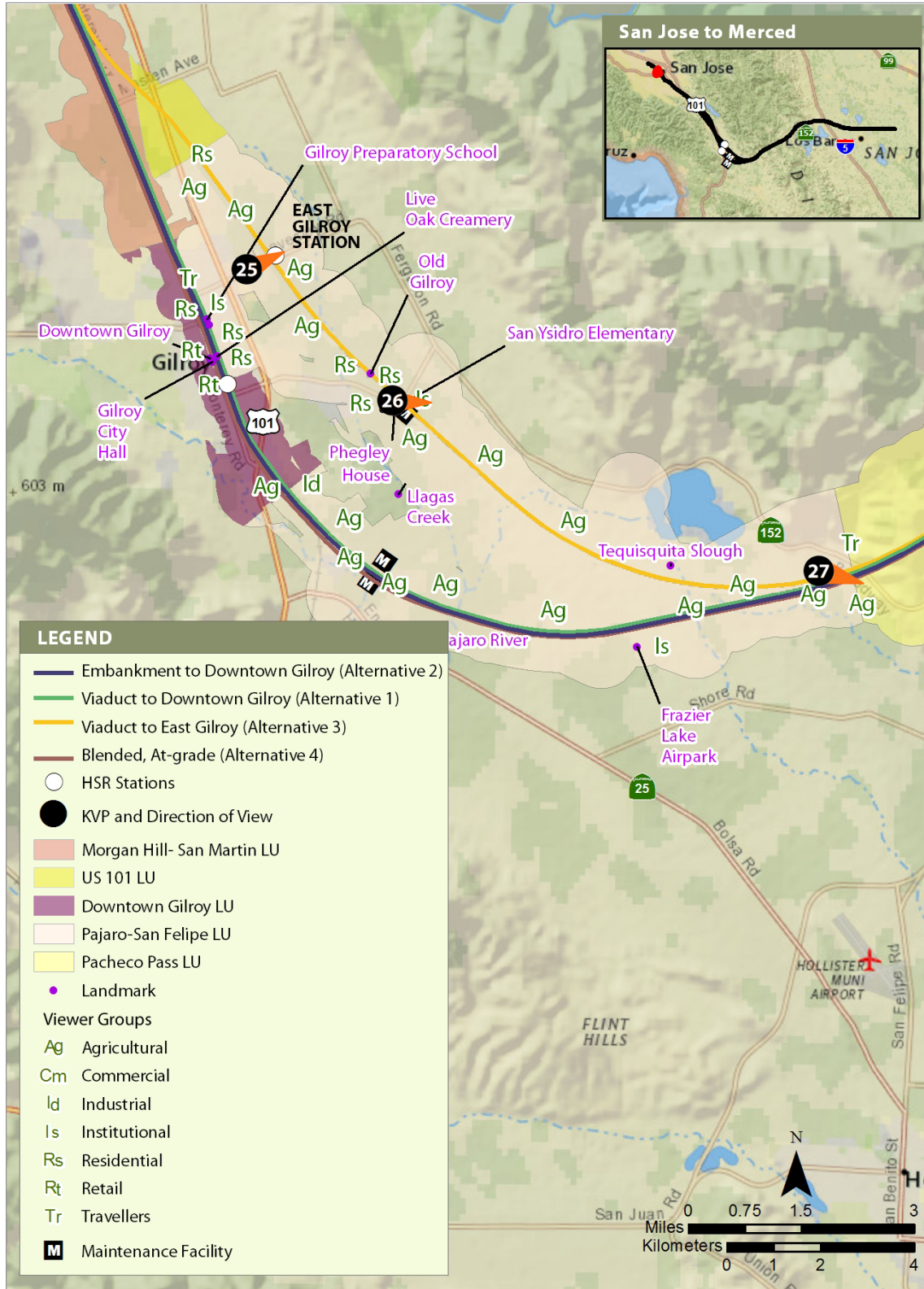


Figure 3.16-12 KVPs, Visual Resources, and Viewers in the Pajaro-San Felipe Landscape Unit

Table 3.16-20 Pajaro–San Felipe Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Row crops, orchards ▪ Tree-lined riparian areas ▪ Good visibility ▪ Background views of mountain ranges ▪ Pajaro River, Llagas Creek, Tequisquita Slough 	<ul style="list-style-type: none"> ▪ Clusters of residential and agricultural buildings ▪ Old Gilroy ▪ Frazier Lake Airpark 	<ul style="list-style-type: none"> ▪ Not Applicable 	<ul style="list-style-type: none"> ▪ Residential viewers—high to low ▪ Recreational viewers—moderately low ▪ Agricultural viewers—moderately low ▪ Travelers—moderately low 	<ul style="list-style-type: none"> ▪ Moderately high

Residential viewers are primarily in small aggregations of homes lining the few roads through the landscape unit. Residential viewer exposure to the project corridor varies primarily by distance, though visual filtering by vegetation and structures affects some views. Where crops are low to the ground distant views are available across the fields. Because of the low density of residences in this agricultural area, most residents have a moderately low sensitivity when viewing the project corridor, as their homes are far from the corridor. They only see it as part of a background view in the context of the flat fields and distant hills. For the few residents with a clear and close view of the project corridor, exposure and viewer sensitivity are high, because the corridor is a part of their immediate view, informing the visual environment surrounding their residences.

The few recreational viewers in the landscape unit are at Frazier Lake Airpark, a privately-owned airpark with both grass and water runways. Many users fly historic planes to and from the airpark, and the airpark hosts events displaying many historic aircraft. These recreationists are focused on their activity but, when flying, have a unique and high exposure to the landscape unit. Their viewer sensitivity is moderately low, as most of their activity is engaged in viewing, repairing, or safely operating small aircraft.

Agricultural workers are engaged in all aspects of agricultural production. Their activities take place in different locations at different times, giving them low exposure to any one location, and a moderately low viewer sensitivity. Travelers are located along SR 152, which is the primary roadway in the landscape unit. In this area the travelers are focused on the road conditions because of the high traffic volumes on this winding, two-lane rural highway with heavy truck traffic, resulting in a moderately low viewer sensitivity.

Visual Quality

As shown in Table 3.16-20, as perceived by viewer groups, the natural harmony of the Pajaro–San Felipe Landscape Unit is high and the cultural order moderate. Project coherence is not applicable because there is no project environment in this landscape unit. Overall, the existing visual quality of the Pajaro–San Felipe Landscape Unit is moderately high.

Key Viewpoints

Table 3.16-21 identifies the three KVPs in the Pajaro–San Felipe Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-21 Key Viewpoints Representing the Pajaro–San Felipe Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing and Baseline Visual Quality
25	Leavesley Road	Traveler	<ul style="list-style-type: none"> ▪ High natural harmony—Includes distant views to the Diablo Range across the flat valley and recently tilled fields. Stands of trees shade residences further down the road. ▪ Moderately high cultural order—The straight roadway, lined with power poles, fades into the distance. The visible buildings are just off the roadway. The settlement pattern is light, with views of well-tended fields stretching away from each side of the road, reinforcing agriculture as the primary activity in the area. ▪ Project environment is not applicable. 	Low	High
26	SR 152 near Frazier Lake Road in the community of Old Gilroy	Residential	<ul style="list-style-type: none"> ▪ Moderate natural harmony—The natural environment is secondary to the crossroads, with landscaping acting as buffers around homes. With clear atmospheric conditions, Antimony Peak is visible in the distance. Many fully mature non-native trees are evident, including palms and redwoods. ▪ Moderately high cultural order—The highway is in excellent condition, freshly paved, with a new guardrail and signage. The Phegley House is eligible for listing on the NRHP. ▪ Project environment is not applicable. 	Moderate	Moderately high

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing and Baseline Visual Quality
27	San Felipe Road toward SR 152	Traveler	<ul style="list-style-type: none"> ▪ High natural harmony—Long views to the west and south provide sweeping views across the valley to the Coast Range. The Diablo Range foothills are seen building up from the valley floor. In front of the hills, some large and majestic valley oaks may be seen at the far side of the neat rows of grapes in the vineyard that lines the roadway. ▪ High cultural order—The cultural environment is agricultural. A low wire fence encloses the vineyard. In the distance, the bright metal roof of a shed is seen behind an oak. ▪ Project environment not visible. 	Low	High

KVP = key viewpoint
 SR = State Route
 NRHP = National Register of Historic Places

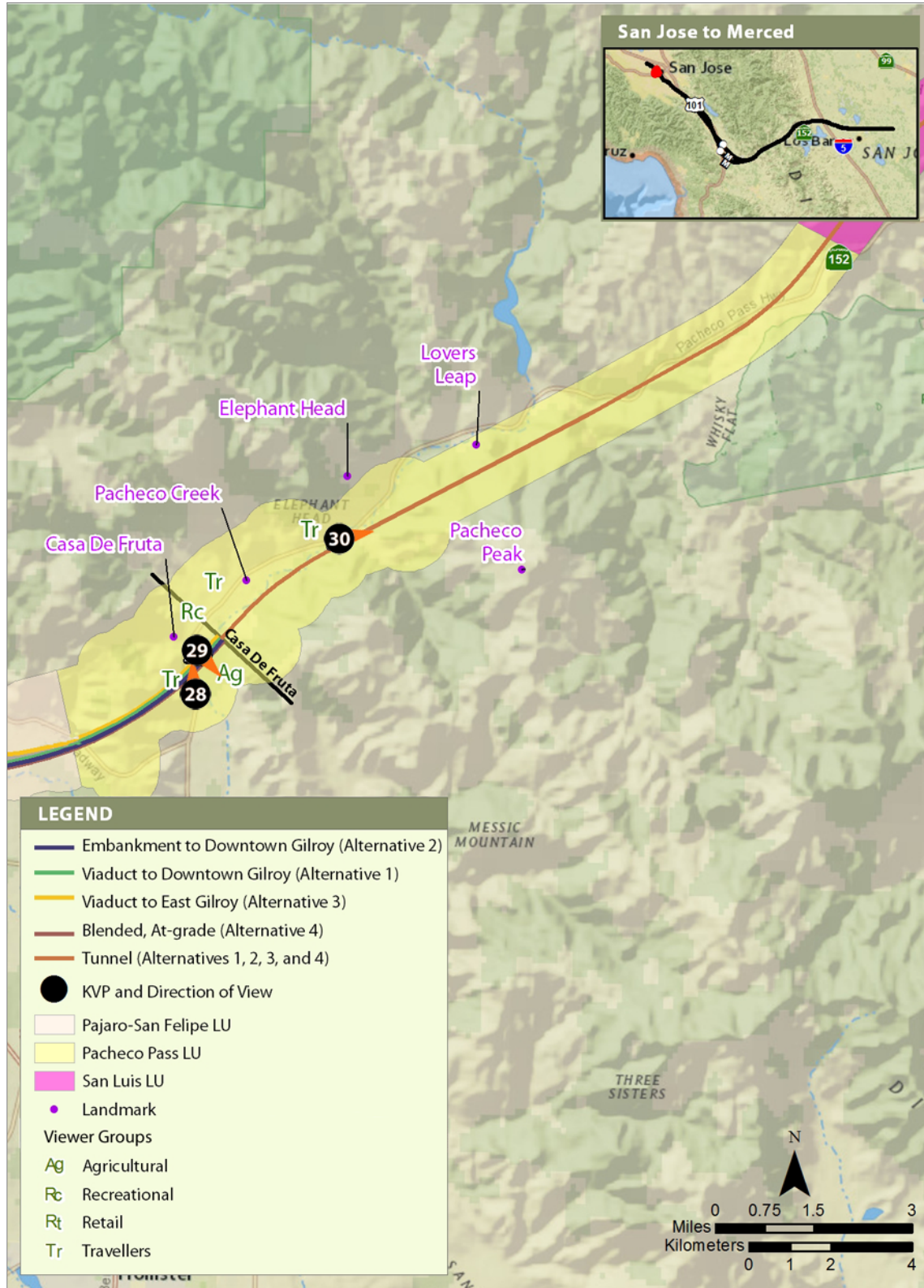
3.16.5.11 Pacheco Pass Landscape Unit

The Pacheco Pass Landscape Unit extends from SR 152/Pacheco Pass Highway near San Felipe Road northeasterly through the Pacheco Creek Valley and Pacheco Pass to just east of the Santa Clara–Merced County line. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-13. Table 3.16-22 provides a summary of the visual resources and character and the viewer groups in the Pacheco Pass Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Pacheco Pass Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **Pacheco Creek Valley**—SR 152 runs from US 101 at the south end of the Santa Clara Valley to I-5 in the Central Valley through the Pacheco Creek Valley. The landmarks and scenic vistas of the valley are viewed by travelers passing along this route, which serves as the primary access to the South Bay and Monterey Bay Area from the Central Valley.
- **Pacheco Peak**—Pacheco Peak is the highest peak rising from the southern limits of the Pacheco Creek Valley. Scenic vistas to the peak exist from the western mouth of the valley, north of Hollister, to Pacheco Pass, at the eastern side.
- **Elephant Head**—Elephant Head is the terminus of Elephant Head Ridge, a prominent point of the northern hills lining Pacheco Creek Valley.
- **Lovers Leap**—This stone outcropping on the southern slopes rising from Pacheco Creek Valley is the most identifiable natural landmark in the valley. It occurs where the valley contracts and the highway begins winding up to Pacheco Pass.



JANUARY 2019

Figure 3.16-13 KVPs, Visual Resources, and Viewers in the Pacheco Pass Landscape Unit

Table 3.16-22 Pacheco Pass Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Rolling hills ▪ Oak woodlands ▪ Riparian sycamores ▪ Grazing lands ▪ Good visibility ▪ Elephant Head & Lovers Leap ▪ Pacheco Creek 	<ul style="list-style-type: none"> ▪ SR 152 ▪ Casa de Fruta ▪ Scattered ranch buildings and homes 	<ul style="list-style-type: none"> ▪ Not applicable 	<ul style="list-style-type: none"> ▪ Travelers—moderately high ▪ Agricultural viewers—moderately low ▪ Retail viewers—low 	<ul style="list-style-type: none"> ▪ High

SR = State Route

Natural Environment

The Pacheco Pass Landscape Unit begins at the eastern edge of the Santa Clara Valley, south of the community of San Felipe. The land along SR 152 is hilly rangeland to the east and vineyards to the west. As the highway runs up from the valley into the hills, long views to the west and south provide sweeping westerly views across the southern Santa Clara Valley to the Coast Ranges. Travelling to the northeast, the landscape of the mouth of the Pacheco Creek Valley is one common throughout most parts of California: rolling hills dotted with oaks rise from a lush valley bisected by Pacheco Creek, which is shaded by sycamores.

Continuing to the east, the landmarks of Lovers Leap and Elephant Head are visible from SR 152, and each—especially Lovers Leap—acts as a landmark. Pacheco Creek generally follows the southern edge of the valley. The creek is identified at a distance by stands of sycamore trees growing along its course. The highway’s climb from the Pacheco Creek Valley to Pacheco Pass occurs in a narrowing valley. Tree cover increases as the road climbs east, eventually reaching the summit, where the landscape cover opens again to grasslands on rolling hills spotted with oak. The eastern side of the pass is drier than the west because fewer trees shade the grassy hillsides.

Cultural Environment

SR 152 is a four-lane expressway, curving though the landscape with a generous median.

There are few homes or buildings except for the commercial development at Casa de Fruta. Casa de Fruta is a complex, begun in 1943 as a roadside fruit stand on the Pacheco Pass Highway. It has expanded since then to include a restaurant, produce and gift shop, gas station, hotel, wine store, and children’s recreation area with a miniature train. The buildings line the old highway, with parking along the roadway and in lots interspersed throughout the development. Buildings are low, one-story structures, with low peaked roofs. All types of vehicles are parked, including autos, large tour buses, and tractor-trailer trucks.

In the hills south of the highway a cluster of buildings occupies the summit, and some residences with outbuildings are scattered across the landscape. Truck brake-check areas along the highway near the summit cause congregations of tractor-trailer trucks.

Project Environment

There is no existing project environment in this landscape unit because the alignment crosses the natural and cultural environments, not conforming to the geometry of any existing transportation facility.

Viewer Groups

The Pacheco Pass Landscape Unit viewer groups include travelers, agricultural viewers, and retail viewers (Figure 3.16-13). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Retail viewers are primarily located at the Casa de Fruta area, which has a mix of retail and dining. The facility originated as a fruit stand and now leads shoppers through an extensive marketplace. Visitors to Casa de Fruta are visually immersed in the retail experience, with little exposure to the surrounding landscape, giving them a low viewer sensitivity. Agricultural viewers in this landscape unit are engaged in ranching, either tending to herds or harvesting hay. Both of these activities occur on a very infrequent basis, so their exposure is low and viewer sensitivity is moderately low. Travelers are primarily along SR 152, a four-lane expressway, which links the Santa Clara Valley, Salinas Valley, and Monterey Peninsula to the Central Valley and I-5. The route through the rural valley and over the pass offers many scenic views for the travelers along this highway, although in the landscape unit, it is not a state-designated scenic highway. The scenic views of the rural valley and topographical landmarks give travelers a moderately high viewer sensitivity.

Visual Quality

As shown in Table 3.16-22, as perceived by viewer groups, the natural harmony and the cultural order of the Pacheco Pass Landscape Unit is high. Project coherence is not applicable because there is no project environment in this landscape unit. Overall, the existing visual quality of the Pacheco Pass Landscape Unit is high.

Key Viewpoints

Table 3.16-23 identifies the three KVPs in the Pacheco Pass Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-23 Key Viewpoints Representing the Pacheco Pass Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
28	SR 152, west of Casa de Fruta	Traveler	<ul style="list-style-type: none"> ▪ High natural harmony—Consists of the mouth of the valley, with hills beginning to rise to either side. Pacheco Creek generally follows the southern edge of the valley. The trees lining the creek block some views, but along the path of the highway, there are middle ground views of the rolling and rising hills, studded with oaks. ▪ High cultural order—Centered on the highway. The view is free of clutter. One blue sign announcing the services at Casa de Fruta is seen on the right shoulder as the highway disappears around the corner. ▪ Project environment is not applicable. 	Moderately low	High

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
29	Casa de Fruta Playground	Retail	<ul style="list-style-type: none"> ▪ Moderate natural harmony—Dense line of willows, oaks, and other flora enclose most of the view. A glimpse of the hills across the Pacheco Creek valley is evident just above the riparian tree line. The foreground of the play area is devoid of landscaping except for the overhanging canopy of one large tree. ▪ Moderately low cultural order—Traditional roadside attraction. The play structure is bounded by a low wood curb. The area between the play area and the miniature railway tracks is undefined, and nothing separates the railway from the play area. The collection of antique farm equipment is set with no apparent order at the riparian edge. ▪ Project environment is not applicable. 	Moderately low	Moderate
30	Pacheco Creek Valley	Traveler	<ul style="list-style-type: none"> ▪ High natural harmony—Rangeland on the valley floor is scattered with valley oaks. The hills to the right of the roadway rise in processions of smoothly curved grassy slopes with growing concentrations of oaks. ▪ High cultural order—Infrastructure of the highway is in good condition and neat, including the pavement, guardrail, and safety call box. The access road slopes gently into the adjacent field, secured by a gate. ▪ Project environment is not applicable. 	Moderately low	High

KVP = key viewpoint
 SR = State Route

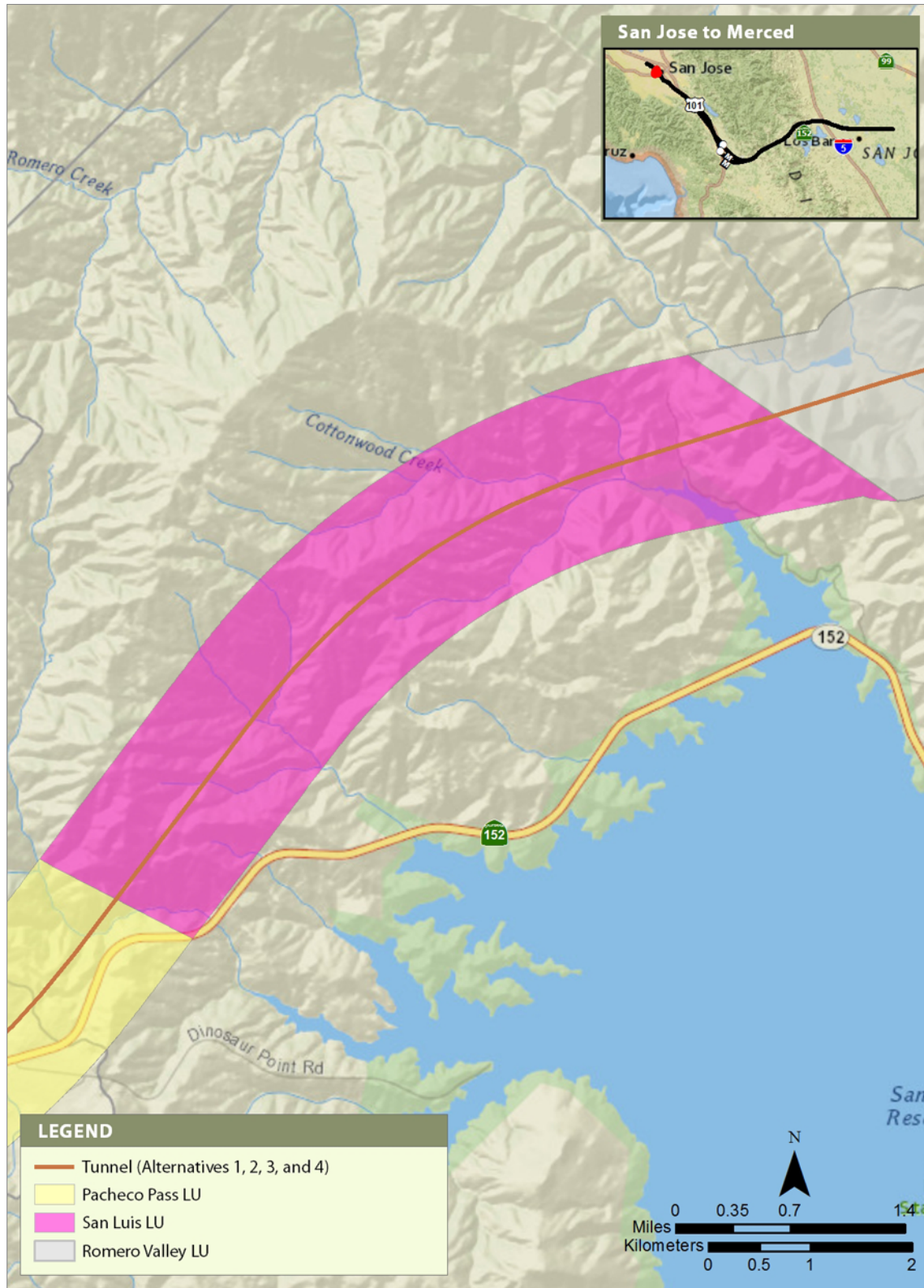
3.16.5.12 San Luis Landscape Unit

The San Luis Landscape Unit extends from along the northern shore of San Luis Reservoir from just east of the Santa Clara–Merced County line to just east of Cottonwood Bay. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-14. Table 3.16-24 provides a summary of the visual resources and character and the viewer groups in the San Luis Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the San Luis Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **San Luis Reservoir**—This large reservoir is crossed at its northern edge by SR 152. The large body of water is unique in the arid hills that bound the western edge of the San Joaquin Valley. The San Luis Reservoir State Recreation Area Resource Management Plan/Preliminary General Plan (USDI et al. 2005) calls for preservation of “scenic vistas that overlook open land and water.”



JANUARY 2019

Figure 3.16-14 Visual Resources, and Viewers in the San Luis Landscape Unit

Table 3.16-24 San Luis Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Rolling hills ▪ Oak woodlands ▪ Good visibility ▪ San Luis Reservoir 	<ul style="list-style-type: none"> ▪ SR 152 ▪ San Luis Reservoir 	<ul style="list-style-type: none"> ▪ Not applicable 	<ul style="list-style-type: none"> ▪ Recreational viewers—moderately high ▪ Travelers—moderately high 	<ul style="list-style-type: none"> ▪ High

SR = State Route

Natural Environment

San Luis Reservoir comes into view as SR 152 descends from the pass. The eastern portion of Pacheco Pass is dominated by the San Luis Reservoir, which is 9 miles long and 5 miles wide and situated in a bowl of oak-studded hills. The reservoir is used for offline water storage, meaning water is pumped in, with no significant amount collected from tributaries feeding the reservoir. Its level varies throughout the year, so sometimes it is full, and, at other times, a broad band of unvegetated, muddy shoreline extends from the grassy hillsides to the lowered lake level.

Cultural Environment

The four-lane SR 152 expressway crosses the north side of the reservoir, descending from Pacheco Pass in a series of large and steep cuts and fills. SR 152 is a state-designated scenic highway from the summit (Santa Clara–Merced County line) to I-5. The drive past the reservoir presents long views across the water to the south of the highway and views up valleys to the north of the highway. Near the east end of the landscape unit, Cottonwood Bay is the only location where the waters of San Luis Reservoir are on each side of the road. The highway is not lit, so nighttime lights are generated only by the vehicles on the highway. There are no other significant light sources in the area.

Project Environment

There is no existing project environment in this landscape unit because the HSR alignment would travel through the natural and cultural environments, not conforming to the geometry of any existing transportation facility.

Viewer Groups

The San Luis Landscape Unit viewer groups include recreational viewers and travelers. Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity. Recreational viewers primarily concentrate on views of the water, using the lake for fishing and other active recreation. Hikers and hunters make up the remaining viewers, covering the area in isolation or in small groups, scanning the terrain for views of wildlife and the open landscape. They have a moderately high viewer sensitivity. Travelers are along SR 152, which is the primary roadway in the landscape unit. Travelers have expansive views of the landscape as the highway cuts across ridges and valleys on its descent around the reservoir, giving them a moderately high viewer sensitivity. No viewer groups are illustrated on Figure 3.16-14 because the HSR would be in a tunnel within this landscape unit; therefore, the project would not be visible to any viewer groups.

Visual Quality

As shown in Table 3.16-24, as perceived by viewer groups, the San Luis Landscape Unit has a moderately high natural harmony and high cultural order. Project coherence is not applicable because there is no project environment in this landscape unit. Overall, the existing visual quality of the San Luis Landscape Unit is high.

Key Viewpoints

There are no KVPs in the San Luis Landscape Unit because the project corridor is not readily visible from viewer access points.

3.16.5.13 Romero Landscape Unit

The Romero Landscape Unit extends from the Romero Valley just east of Cottonwood Bay, eastwardly across the California Aqueduct, Delta-Mendota Canal, and I-5, to SR 33, north of the community of Santa Nella. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-15. Table 3.16-25 provides a summary of the visual resources and character and the viewer groups in the Romero Landscape Unit and the overall existing visual quality.

Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Romero Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **San Joaquin Valley National Cemetery**—This green landscape of national remembrance attracts people to the Romero Valley from many locations.
- **San Joaquin Valley Grasslands**—There are many miles of natural grasslands in the San Joaquin Valley. Views from public roads into the grasslands provide an easy way to observe the wildlife without disturbing it.
- **California Aqueduct and Delta-Mendota Canal**—The two aqueducts that serve the San Joaquin Valley provide views of moving water in a frequently dry landscape and a reminder of the agricultural economy that has been built in the valley.

Natural Environment

The Romero Landscape Unit begins at the ridgeline between Cottonwood Bay and Romero Creek Valley. The hills on the west side of the San Joaquin Valley are covered with grasses that are golden for most of the year, turning green only in the winter and early spring when rainfall occurs. Few trees dot the hills.

Cultural Environment

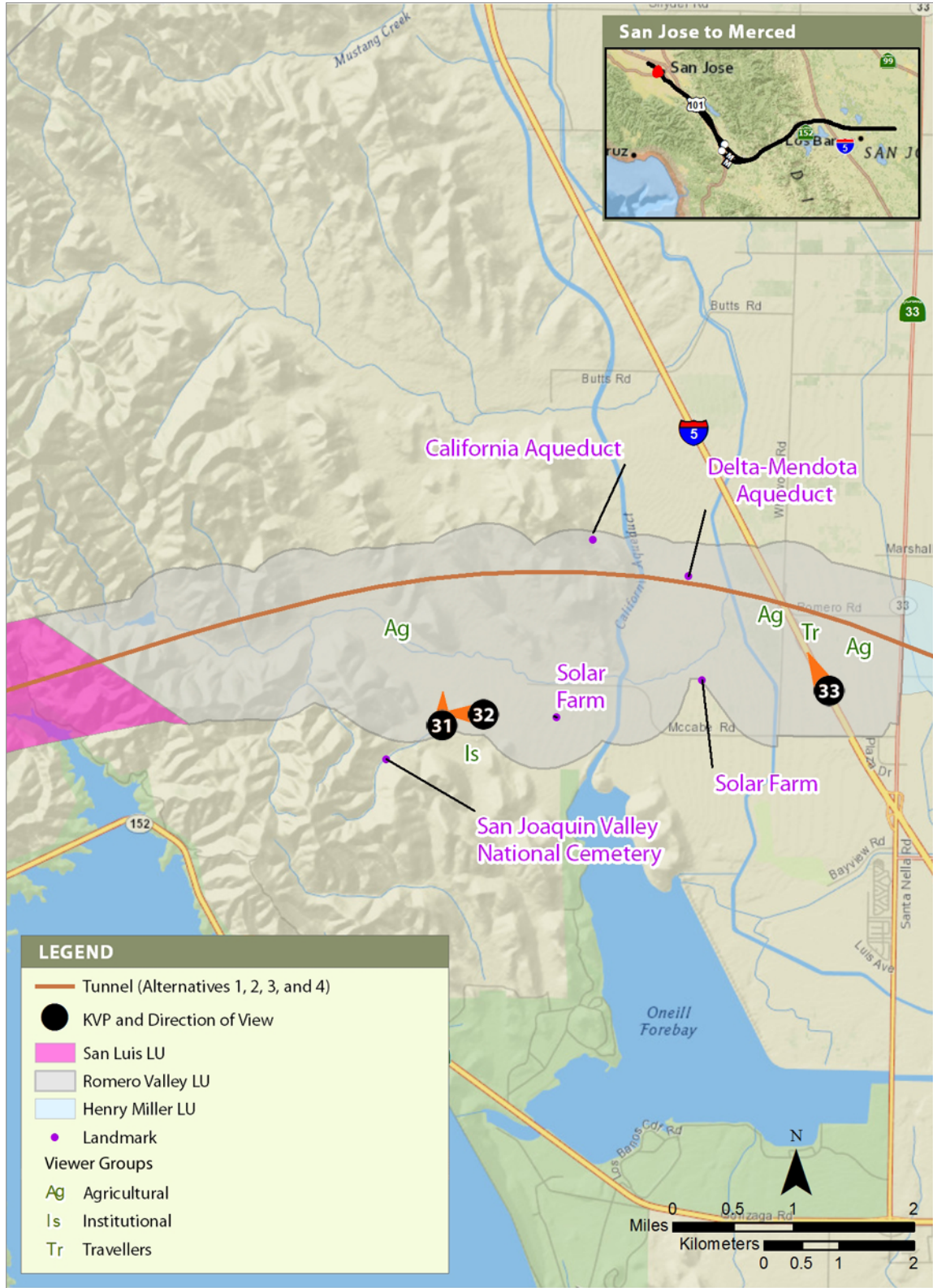
The Romero Creek Valley opens to the western edge of the San Joaquin Valley, near the San Joaquin Valley National Cemetery. The cemetery stands out as a field of green in the surrounding golden landscape.

East of the cemetery, the California Aqueduct and Delta-Mendota Canal cross from north to south. Between the cemetery and the two canals, two large photovoltaic solar farms, fields covered in trellises of black solar panels, contrast with the open space and natural colors seen elsewhere in the landscape unit. I-5, the primary north-south freeway in California, crosses the eastern portion of the landscape unit. A constant flow of long-distance travelers in cars, trucks, and buses pass on the freeway. The landscape unit ends at SR 33, north of the community of Santa Nella.

Within the Pacheco Pass Subsection, there are two officially designated state scenic highways. SR 152 is a designated state scenic highway from the Santa Clara–Merced County line, near Pacheco Pass, traveling eastward past the San Luis Reservoir to I-5 in the San Joaquin Valley. I-5 is a designated scenic highway from SR 152 north to the Stanislaus County line.

Project Environment

There is no existing project environment in this landscape unit because the HSR alignment would travel through the natural and cultural environments, not conforming to any existing transportation facility.



JANUARY 2019

Figure 3.16-15 KVPs, Visual Resources, and Viewers in the Romero Landscape Unit

Table 3.16-25 Romero Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Rolling hills ▪ Grasslands, few trees ▪ Moderate visibility ▪ No major natural water features 	<ul style="list-style-type: none"> ▪ Single group of ranch buildings ▪ San Joaquin National Cemetery ▪ Aqueducts ▪ Solar farm ▪ I-5 	<ul style="list-style-type: none"> ▪ Not applicable 	<ul style="list-style-type: none"> ▪ Institutional viewers—moderately low ▪ Agricultural viewers—moderately low ▪ Travelers—moderately low 	<ul style="list-style-type: none"> ▪ Moderately high

I = interstate

Viewer Groups

The Romero Landscape Unit viewer groups include institutional viewers, agricultural viewers, and travelers (Figure 3.16-15). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

The San Joaquin Valley National Cemetery sits at the mouth of the Romero Valley. As institutional viewers, cemetery visitors are present infrequently, making their exposure to views in and around the cemetery low, but their viewer awareness is high, as the ritual of remembering the deceased is a powerful human experience, usually associated with a calm atmosphere, free of distraction. The surrounding landscape is a background to the burial grounds, buildings, and memorials where visitors are focused on the icons of the cemetery, giving them a moderate sensitivity to the visual quality of the landscape unit.

Agricultural viewers in the Romero Valley are engaged in ranching, either tending to herds or harvesting hay. Both of these activities occur on a very infrequent basis, so their viewer sensitivity is moderately low. Travelers are concentrated on I-5. They have views to the adjacent land uses and surrounding hills. Because traffic (including many large trucks) is heavy on the freeway and requires drivers to concentrate on surrounding traffic, these travelers would have a moderately low viewer sensitivity.

Visual Quality

As shown in Table 3.16-25, as perceived by viewer groups, the natural harmony of the Romero Landscape Unit is moderately high and the cultural order moderate. Project coherence is not applicable because there is no existing project environment in this landscape unit. Overall, the existing visual quality of the Romero Landscape Unit is moderately high.

Key Viewpoints

Table 3.16-26 identifies the three KVPs in the Romero Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-26 Key Viewpoints Representing the Romero Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
31	West Loop Road, at the northern edge of the San Joaquin Valley National Cemetery	Institutional	<ul style="list-style-type: none"> ▪ High natural harmony—The natural environment radiating from the viewpoint is expansive and open. The green grass within the cemetery contrasts with the expanse of golden grasses stretching to the distant hills. Romero Valley is wide, flat, and treeless except for some trees planted around the ranch buildings in the middle of the valley. ▪ High cultural order—Dominated by the green grass and headstones of the cemetery, set in precise geometry. The bounds of the cemetery are clearly marked by the light-colored posts of a wire fence. Floral memorials provide evidence of recent human visitation. The setting is simple but serene and reverential. ▪ Project environment is not applicable. 	Low	High
32	Pomas Road	Institutional	<ul style="list-style-type: none"> ▪ High natural harmony—Valley, as seen from this higher viewpoint, appears as a bowl in the foothills. The ranch buildings and trees are the only forms, scattered dark spots on the valley floor. The depth of the valley draws the view deeper into the foothills, and the peak in the left of the background has some darker slopes, indicating stands of oaks. The clouds and other distant peaks blend together. ▪ Moderate cultural order—Pomas Road curves gently to the flagpole promontory, lined with neat concrete curbs. A post and wire fence marks the edge of the cemetery property, running in a straight line over the topography and disappearing as it passes down the hill. The narrow roadway curves with the topography. The barbed-wire fence is a common element of open spaces, and the farm buildings in the distance are an expected element of the grassland and ranch environment. ▪ Project environment is not applicable. 	Low	High

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
33	I-5, Santa Nella	Traveler	<ul style="list-style-type: none"> ▪ Moderately high natural harmony—The natural environment is the evident vast, flat landscape of the San Joaquin Valley. Grasslands in the foreground extend to the orchards in the distance. Good air quality allows long views. ▪ Moderate cultural order—Centers on the freeway, running straight to the horizon. It is neatly fenced from the adjacent fields. Signs line the road, and a monitoring equipment tower sits in the foreground. Off to the distance to the right is a collection of structures, but they are too distant to clearly discern their use. ▪ Project environment is not applicable. 	Moderately low	Moderately high

KVP = key viewpoint

3.16.5.14 Henry Miller Landscape Unit

The Henry Miller Landscape Unit extends through western Merced County in a west-east orientation across the San Joaquin Valley from just east of I-5. It passes north of the communities of Santa Nella and Volta and the city of Los Banos before bisecting the Grasslands Ecological Area (GEA). It ends where it meets the Central Valley Wye Section at the intersection of Henry Miller Road and Carlucci Road, approximately 6 miles west of the San Joaquin River. The landscape unit extent, KVP locations, visual resources, and viewer groups are illustrated on Figure 3.16-16. Table 3.16-27 provides a summary of the visual resources and character and the viewer groups in the Henry Miller Landscape Unit and the overall existing visual quality.

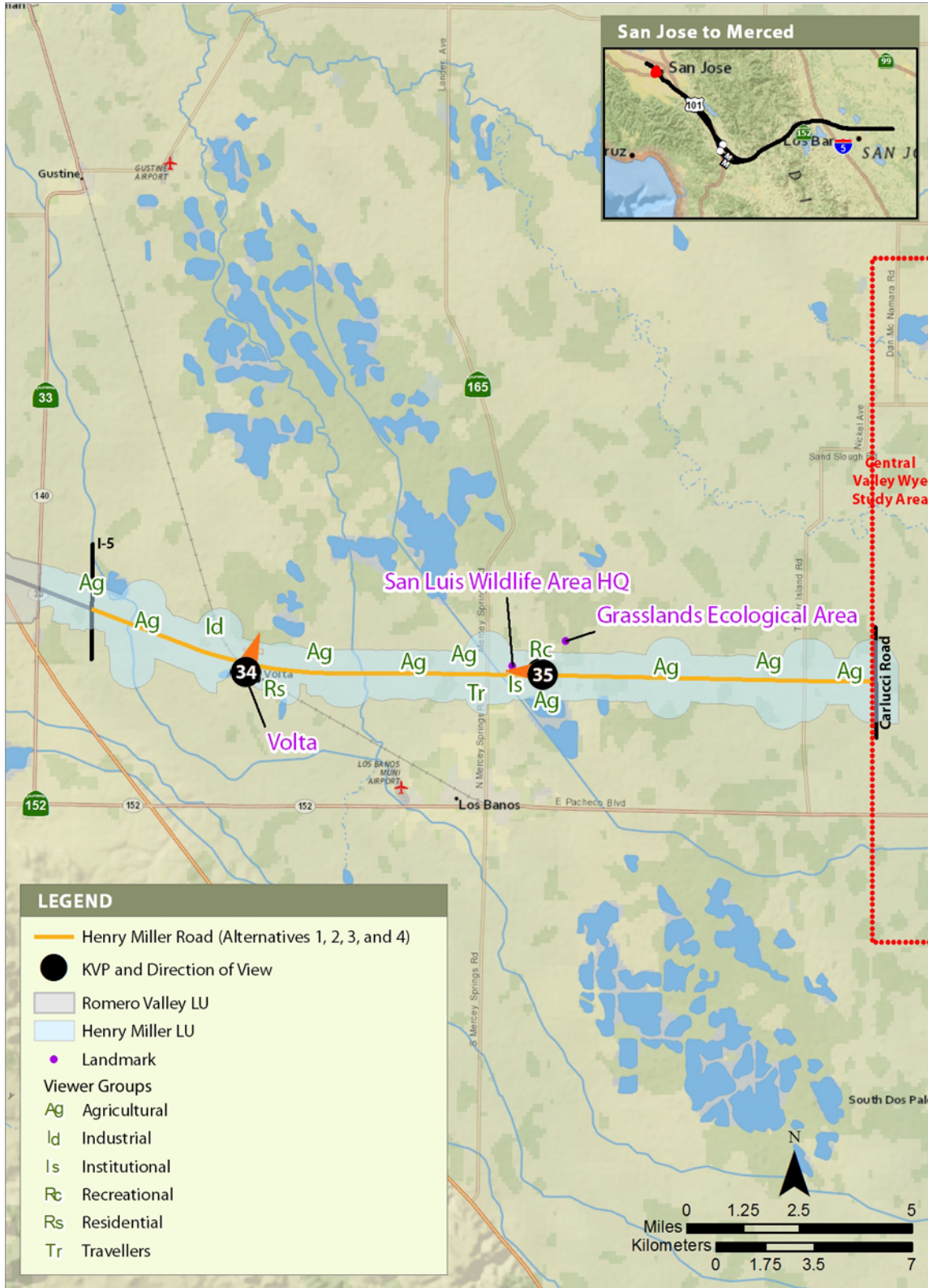
Visual Character

The notable visual resources and scenic vistas that are located within and may be seen from the Henry Miller Landscape Unit, based on analysis of aerial and satellite mapping, site surveys, and review of city and county general plans and other policy documents include:

- **San Joaquin Valley Grasslands and Wetlands**—Many miles of wetlands and grasslands in the San Joaquin Valley between Los Banos, Chowchilla, Gustine, and Merced are part of the GEA. This ecology provides birds on the Pacific Flyway with habitat, which in turn attracts bird-watchers, hunters, and other recreational users. Views from public roads into the wetlands and grasslands provide an easy way to observe the wildlife without disturbing it.

Natural Environment

The topography is flat, with about a 10-foot variation in elevation from Volta to the San Joaquin River. The Cartesian grid, based on section surveys, places roads generally at intervals of 1 mile and running either north-south or west-east. Trees and other natural vegetation of any significant size are rare, especially outside the low-lying wetlands; therefore, a tree or stand of trees provides a local landmark. Furthermore, while the Diablo Range can be visible to the west, haze or other degradations to visibility often obscure the distant range. These factors often reduce the predominant landscape to a two-dimensional grid stretching to the horizon.



JANUARY 2019

Figure 3.16-16 KVPs, Visual Resources, and Viewers in the Henry Miller Landscape Unit

Table 3.16-27 Henry Miller Landscape Unit Visual Character, Viewer Groups, and Visual Quality

Existing Visual Resources and Character			Viewer Groups and Sensitivity	Existing Visual Quality
Natural Environment	Cultural Environment	Project Environment		
<ul style="list-style-type: none"> ▪ Level terrain ▪ Farmland, few trees ▪ Wetlands ▪ Moderate visibility ▪ No major natural water features 	<ul style="list-style-type: none"> ▪ Scattered residences and agricultural structures ▪ San Luis Wildlife Area headquarters 	<ul style="list-style-type: none"> ▪ Not applicable 	<ul style="list-style-type: none"> ▪ Residential viewers—high ▪ Recreational viewers—moderately high ▪ Agricultural viewers—moderately low ▪ Travelers—moderate 	<ul style="list-style-type: none"> ▪ Moderate

Cultural Environment

Henry Miller Road extends to the east from Santa Nella for 21 miles across the western side of the San Joaquin Valley. It passes through the community of Volta and portions of the GEA. Lighting is diverse and scattered, with residences lit into the evening and some outdoor lighting on agricultural buildings and homes burning throughout the night. Light from traffic on the roadways is minimal, as traffic levels are low.

Project Environment

There is no existing project environment in this landscape unit.

Viewer Groups

The Henry Miller Landscape Unit viewer groups include residential viewers, recreational viewers, agricultural viewers, and travelers (Figure 3.16-16). Viewer sensitivities for each of these viewer groups as shown in Table 3.16-1 can range from low to high depending upon the number of viewers, their proximity to the project, and the focus of their activity.

Residential viewers are primarily associated with small aggregations of homes lining the north-south/east-west road grid. Residential viewer exposure varies primarily by distance, though visual filtering by vegetation and structures affects some views. There are very few residences, but most face directly onto Henry Miller Road, the primary roadway in this sparsely populated landscape unit. With few dense stands of trees, limited tall vegetation, and most homes separated from others, views available to residences are of the wide agricultural valley, limited mostly by atmospheric conditions. Because the appearance and views of the surrounding environment are contributing factors for one's residence and sense of pride, residents' visual awareness and exposure combine to make their viewer sensitivity high.

Recreational viewers are found hiking the trails in the Los Banos State Wildlife Area. Few in numbers, their exposure is low, but the act of observing wildlife focuses the viewer's attention on the surrounding landscape. This makes their viewer sensitivity moderately high. Agricultural viewers include people engaged in all aspects of agricultural production. As a group, they are found everywhere in the landscape unit, but because of the seasonal cycles of agriculture, their activities take place in different locations at different times, giving them low exposure to any one location and a moderately low viewer sensitivity. Travelers are on local roads in the landscape unit, moving between farms, homes, or avoiding traffic on SR 152. Traffic is light, so travelers can enjoy more of the landscape, making their viewer sensitivity moderate.

Visual Quality

As shown in Table 3.16-27, as perceived by viewer groups, the natural harmony and the cultural order of the Henry Miller Landscape Unit is moderate. Project coherence is not applicable. Overall, the existing visual quality of the Henry Miller Landscape Unit is moderate.

Key Viewpoints

Table 3.16-28 identifies the two KVPs in the Henry Miller Landscape Unit, indicates the viewer perspective represented, summarizes the existing visual character, provides nighttime light levels, and characterizes visual quality. Photographs of the existing conditions at KVPs are in Section 3.16.6.

Table 3.16-28 Key Viewpoints Representing the Henry Miller Landscape Unit

KVP	Location	Viewer Group Perspective	Natural, Cultural, and Project Environment	Nighttime Lighting Levels	Existing Visual Quality
34	Volta	Residential	<ul style="list-style-type: none"> ▪ Moderately low natural harmony—Flat agricultural land with views to the horizon. Grasses and scrub cover the fields in the foreground. ▪ Moderately low cultural order—An elementary school and some agricultural-industrial uses complete the community. Trees are scattered across the middle ground. Cracked pavement, leaning road signs, and graveled shoulders sinking into puddles exhibit minimal maintenance on the roadways in the area. Although this view is in front of a school, there are no marked crosswalks visible at the intersection. Landscaping at the homes past the railway grade is minimal. Utility poles dominate the built environment. ▪ Project environment is not applicable. 	Low	Moderately low
35	Henry Miller Road	Recreational	<ul style="list-style-type: none"> ▪ Moderately low natural harmony—Views to the western valley foothills are barely visible in the background. To the right of the roadway, trees shading the facilities around the wildlife complex stand out from the flat terrain. Dry bushes line the roadway, with a line of green flora at the edge of the shoulder. Exposed soil appears dry and rocky. ▪ Moderate cultural order—The wildlife headquarters is one of the larger groups of buildings along Henry Miller Road. It serves as a landmark on the road, signaling the edge of the Grasslands Ecological Area, with its associated wetlands. Across Henry Miller Road, the white buildings with rusted metal roofs are the facilities of the Los Banos wastewater treatment facility. Henry Miller Road and adjacent power lines run straight to the horizon, with other buildings and trees appearing in the distance. ▪ Project environment is not applicable. 	Low	Moderate

KVP = key viewpoint

3.16.6 Environmental Consequences

3.16.6.1 Overview

This section discusses the potential impacts on aesthetics and visual quality that could result from implementing the project alternatives. It is organized by the following topics: impacts on visual quality including scenic vistas, scenic highways, and light and glare. Each topic area addresses potential impacts from the No Project Alternative and the project alternatives. Impacts from the project alternatives are presented in terms of the temporary and permanent changes to the visual character, viewer sensitivity, and impact on visual quality.

Construction and operation of the project would introduce new visual elements into the areas adjacent to or within viewing range of the rail corridor and proposed trackway. The most substantial permanent new visual elements would be associated with station site placement and maintenance facilities, grade separations, communication towers, and other infrastructure necessary to accommodate the HSR system such as elevated structures where bulk and mass cannot be reduced.

Increased nighttime lighting generated at the HSR stations, maintenance facilities, and traction power substations would also be visible to nearby viewers. Trains operating at night would contribute a regular and repeating source of light, while nighttime maintenance activities along the alignment would introduce lighting in fixed locations or emanating from slow-moving maintenance vehicles.

During construction, the Authority and its contractors would screen construction equipment, restrict fugitive dust emissions, and implement site restoration and revegetation plans. Farmland used for temporary staging would be restored (see Volume 2, Appendix 2-E). The project would comply with the Authority's aesthetic guidelines and the design of project infrastructure such as elevated structures to balance the desire for a consistent, project-wide aesthetic with the relevant local context. Through the Authority's aesthetics review process, the Authority would consult with local jurisdictions to involve the community, solicit input on local aesthetic preferences, and incorporate this feedback into the final design.

The Aesthetics and Visual Quality Technical Report (Authority 2019) explains the overall change in the visual quality rating of each project alternative for each landscape unit. The intensity of the change to aesthetics and visual quality would vary with context, such as where the project would be visible to viewers, and the affected viewer sensitivity to the visual change. Table 3.16-29 shows the permanent change in the visual quality rating and the degree of impact compared to the existing condition by landscape unit for each project alternative.

Table 3.16-29 Summary of Visual Quality Change and Degree of Impact for Project Alternatives

Landscape Unit/KVP	Existing Visual Quality Rating	Viewer Sensitivity Existing/ Project	Project Visual Quality Rating
Santa Clara Landscape Unit	MH	Alternatives 1, 2, 3, 4: ML / ML	Alternatives 1, 4: MH Alternatives 2, 3: M
KVP-1 Main Street	MH	Alternatives 1, 2, 3, 4: H / H	Alternatives 1, 4: MH Alternatives 2, 3: M
KVP-2 I-880	MH	Alternatives 1, 2, 3, 4: L / L	Alternatives 1, 2, 3, 4: MH
KVP-3 West Hedding Street	MH	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: MH

Landscape Unit/KVP	Existing Visual Quality Rating	Viewer Sensitivity Existing/ Project	Project Visual Quality Rating
Diridon Station Landscape Unit	M	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3: ML Alternative 4: M
KVP-4 Caltrain from the Alameda	M	Alternatives 1, 2, 3, 4: H / H	Alternatives 1, 2, 3: ML Alternative 4: M
KVP-5 Caltrain from West Santa Clara Street	M	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3: MH Alternative 4: M
KVP-6 Diridon Station	MH	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: MH
San Jose Station Approach Landscape Unit	MH	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 2, 3: M Alternative 4: MH
KVP-7 San Jose Skyline	MH	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: MH
KVP-8 Gardner School	M	Alternatives 1, 2, 3: MH / MH Alternative 4: N/A	Alternatives 1, 2, 3: ML Alternative 4: N/A
KVP-9 Fuller Avenue	M	Alternatives 1, 2, 3: N/A Alternative 4: MH/MH	Alternatives 1, 2, 3: N/A Alternative 4: M
KVP-10 Delmas Avenue	ML	Alternatives 1, 2, 3: N/A Alternative 4: H/H	Alternatives 1, 2, 3: N/A Alternative 4: ML
Communications Hill Landscape Unit	M	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: M
KVP-11 Communications Hill Park	MH	Alternatives 1, 2, 3, 4: H / H	Alternatives 1, 2, 3: M Alternative 4: MH
Monterey Highway San Jose Landscape Unit	MH	Alternatives 1, 3: M / H Alternatives 2, 4: M / M	Alternatives 1, 3: M Alternative 2: H Alternative 4: MH
KVP-12 Lick Quarry	M	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: M
KVP-13 Branham Lane	MH	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 3: M Alternatives 2, 4: MH
KVP-14 Edenvale Drive	MH	Alternatives 1, 3: M / MH Alternatives 2, 4: M/M	Alternatives 1, 3: M Alternative 2: H Alternative 4: MH
KVP-15 Avenida Rotella	MH	Alternatives 1, 2, 3, 4: H / H	Alternatives 1, 3: M Alternatives 2, 4: MH
Coyote Valley Landscape Unit	MH	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 3: M Alternatives 2, 4: MH
KVP-16 Monterey Road Coyote Valley	MH	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 3: ML Alternatives 2, 4: MH

Landscape Unit/KVP	Existing Visual Quality Rating	Viewer Sensitivity Existing/ Project	Project Visual Quality Rating
US 101 Landscape Unit	M	Alternatives 1, 3: M / M Alternatives 2, 4: N/A	Alternatives 1, 3: ML Alternatives 2, 4: N/A
KVP-17 Walnut Grove	M	Alternatives 1, 3: H / H Alternatives 2, 4: N/A	Alternatives 1, 3: L Alternatives 2, 4: N/A
KVP-18 East Dunne Avenue	MH	Alternatives 1, 3: M / M Alternatives 2, 4: N/A	Alternatives 1, 3: M Alternatives 2, 4: N/A
Morgan Hill–San Martin Landscape Unit	M	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3: ML Alternative 4: MH
KVP-19 Peebles Avenue	ML	Alternatives 1, 3: N/A Alternatives 2, 4: M / M	Alternatives 1, 3: N/A Alternative 2: M Alternative 4: ML
KVP-20 Caltrain Morgan Hill Station	MH	Alternatives 1, 3: N/A Alternatives 2, 4: MH / MH	Alternatives 1, 3: N/A Alternative 2: M Alternative 4: MH
KVP-21 San Martin	ML	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: ML
Downtown Gilroy Landscape Unit	M	Alternatives 1, 2, 4: ML / ML Alternative 3: N/A	Alternatives 1, 2: ML Alternative 3: N/A Alternative 4: M
KVP-22 East Sixth Street	MH	Alternatives 1, 2, 4: MH / MH Alternative 3: N/A	Alternative 1: M Alternative 2: ML Alternative 3: N/A Alternative 4: MH
KVP-23 Caltrain Gilroy Station	H	Alternatives 1, 2, 4: M / M Alternative 3: N/A	Alternatives 1, 2: M Alternative 3: N/A Alternative 4: MH
KVP-24 East Eighth Street	ML	Alternatives 1, 2, 4: MH / MH Alternative 3: N/A	Alternatives 1, 2: L Alternative 3: N/A Alternative 4: M
Pajaro-San Felipe Landscape Unit	MH	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 4: M Alternative 3: ML
KVP-25 Leavesley Road	H	Alternatives 1, 2, 4: N/A Alternative 3: M / M	Alternatives 1, 2, 4: N/A Alternative 3: M
KVP-26 SR 152 at Frazier Lake Road	MH	Alternatives 1, 2, 4: N/A Alternative 3: MH / MH	Alternatives 1, 2, 4: N/A Alternative 3: ML
KVP-27 San Felipe	H	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: M

Landscape Unit/KVP	Existing Visual Quality Rating	Viewer Sensitivity Existing/ Project	Project Visual Quality Rating
Pacheco Pass Landscape Unit	H	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 2, 3, 4: MH
KVP-28 SR 152	H	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 2, 3, 4: H
KVP-29 Casa de Fruta	M	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 4: M Alternative 3: ML
KVP-30 Pacheco Creek Valley	H	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 2, 3, 4: MH
San Luis Landscape Unit	H	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 2, 3, 4: H
Romero Landscape Unit	MH	Alternatives 1, 2, 3, 4: ML	Alternatives 1, 2, 3, 4: MH
KVP-31 West Loop Road	H	Alternatives 1, 2, 3, 4: M	Alternatives 1, 2, 3, 4: H
KVP-32 Pomas Road	H	Alternatives 1, 2, 3, 4: M	Alternatives 1, 2, 3, 4: H
KVP-33 I-5	MH	Alternatives 1, 2, 3, 4: ML	Alternatives 1, 2, 3, 4: MH
Henry Miller Landscape Unit	M	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: M
KVP-34 Volta	ML	Alternatives 1, 2, 3, 4: M / M	Alternatives 1, 2, 3, 4: ML
KVP-35 GEA	M	Alternatives 1, 2, 3, 4: MH / MH	Alternatives 1, 2, 3, 4: ML

KVP = key viewpoint, L = low, ML = moderately low, M = moderate, MH = moderately high, H = high, N/A = not applicable

3.16.6.2 Impacts on Visual Quality, including Scenic Vistas

No Project Impacts

The population of the Bay Area and San Joaquin Valley is expected to grow through 2040 (Section 2.5.1.1, Projections Used in Planning), with the San Joaquin Valley population projected to grow at a higher rate than any other region in California. Development in the Bay Area and San Joaquin Valley would continue under the No Project Alternative and result in associated direct and indirect impacts on aesthetics and visual quality. The No Project Alternative considers the impacts of conditions forecasted by current land use and transportation plans near the project extent, including planned improvements to the highway, aviation, conventional passenger rail, freight rail, and port systems through the 2040 planning horizon. Without the HSR project, the forecasted population growth would increase pressure to expand highway and airport capacities. The Authority estimates that additional highway and airport projects (up to 4,300 highway lane miles, 115 airport gates, and four airport runways) would be needed to achieve equivalent capacity and relieve the increased pressure (Authority 2012). Planned and other reasonably foreseeable projects anticipated to be constructed by 2040 include residential, commercial, office, industrial, recreational, and transportation projects that would introduce new visual elements to the landscape and would result in changes to the natural, cultural, and project environments that are unrelated to the proposed project. A list of anticipated future development projects is provided in Appendix 3.19-A, Cumulative Plans and Non-transportation Projects List, and Appendix 3.19-B, Cumulative Transportation Projects List.

Impacts on visual quality from planned and other reasonably foreseeable projects would depend upon the setting and context of the project and the design aesthetic. Some development at the fringes of urbanized areas would result in the conversion of agricultural or open space, and older industrial and commercial areas would be redeveloped for new uses, including residential and retail. Existing local plans and policies provide policies and guidelines so that new development is of a high visual quality. Public projects, including transportation projects, also incorporate design guidelines to reduce impacts on aesthetics and visual quality. Planned development is expected to occur on land that is now in agricultural use in the RSA, including in southern Santa Clara County, San Benito County, and Merced County, and a continued loss of the rural visual

landscape in the region is expected. It is assumed that these developments would be suburban in character and, given existing design guidelines, would likely have at least moderate visual quality. Such developments tend to offer relatively high degrees of internal unity and intactness.

Planned development and transportation projects that would occur under the No Project Alternative would likely include various forms of mitigation to address impacts on aesthetics and visual quality. Development of private and public projects is expected to continue under the No Project Alternative because of population growth. While the No Project Alternative would substantially change visual resources due to new development, it is anticipated that development would be consistent with plans and standards such that visual quality would not be substantially adversely affected.

Project Impacts

Construction Impacts

Construction of the project alternatives would involve demolition of existing structures; clearing and grubbing; handling, storing, hauling, excavating, and placing fill; possible pile driving; and construction of aerial structures, bridges, road modifications, utility upgrades and relocations, HSR electrical systems, and railbeds. PG&E network upgrades would require extension of underground and/or overhead power transmission lines to three traction power substations (TPSSs) that would be constructed as part of the project for all alternatives and would include reconductoring of overhead electric utilities that may involve use of helicopters for equipment installation. The types of construction activities would be common to all alternatives. The intensity of the impacts on aesthetics and visual resources would vary with context, such as where the construction activity would be visible to viewers who would have a greater sensitivity to the visual change. Construction activities are described in Chapter 2, Alternatives.

Impact AVQ#1: Temporary Direct Impacts on Visual Quality and Scenic Vistas

Construction activities for any of the project alternatives would increase the disorder within views from ground disturbing activities and demolition and add construction equipment and materials into views. During the 7-year construction period, heavy equipment and associated vehicles such as cranes, dozers, graders, scrapers, and trucks, would be visible in the RSA. Construction activities would not be constant over the 7-year period, and intensity of construction activities would vary, depending on type of construction at a given site. For example, construction duration at tunnel portals would be of a greater intensity and duration than activities along existing at-grade rail corridors. Where construction activities take place, dust, material stockpiles, and other visual signs of construction would be present and visible to nearby viewers. Depending on location, viewers could see staging areas, worker parking, and equipment and materials storage areas, which would add industrial-looking elements into the landscape. Introducing construction activities and equipment into the viewshed would be short-term and temporary. All viewer groups are likely to be accustomed to seeing machinery, trucks, and vehicles within the area because roadway improvement projects, development projects, agriculture and ranching, and rail maintenance activities require the use of such equipment.

A summary of temporary construction activities with the potential to affect visual quality and scenic vistas, by landscape unit is provided in Table 3.16-30, with additional information available in the Aesthetics and Visual Quality Technical Report (Authority 2019).

Table 3.16-30 Landscape Unit-Specific Temporary Construction Activities

Landscape Unit	Description of Location-Specific Construction Activities
Santa Clara	<p>Primary construction staging for Alternatives 1, 2, and 3 would be located north of West Julian Street, between the Caltrain/UPRR tracks and Montgomery Street. For Alternative 4, the staging area would be north of Caltrain, between Lafayette, Reed, and Grant Streets. Land use around each site is primarily industrial.</p> <p>For Alternative 1, construction of an aerial HSR structure would take place adjacent to the existing Caltrain/UPRR, adjacent to retail and industrial uses, descending to grade at I-880. The aerial structure would be approximately 1 mile long. North of I-880, Alternative 1 would use existing Caltrain railway tracks, with no construction activities necessary.</p> <p>For Alternatives 2 and 3, the aerial structure would extend to Scott Boulevard. Construction of the aerial structure would be visible to travelers on I-880 and from residential areas adjacent to the Caltrain railway. The aerial structure would be approximately 3.5 miles long. Construction activities for Alternatives 2 and 3 would be visible to highly sensitive residential viewers.</p> <p>For Alternative 4, there would be horizontal shifts to the existing Caltrain and UPRR railway to permit blended HSR/Caltrain operations. At West Taylor Street, a single-track bridge for the UPRR would be added to the east of the existing railway grade separation. Adjacent viewers in this area are primarily industrial viewers, with low to moderately low sensitivity. All other construction activities for Alternative 4 in the landscape unit would be similar to existing railway maintenance activities.</p>
Diridon Station	<p>For Alternatives 1, 2, and 3, primary construction staging would be located south of Otterson Street, between the Caltrain/UPRR tracks and Montgomery Street. Construction of facilities over the existing platforms at the San Jose Diridon Caltrain Station would take place in two stages, with half the station platforms closed for each stage. Temporary scaffolding to construct the elevated facilities would be erected, obscuring views across the tracks. Construction activities for the HSR station building and access roads would require removal of many mature trees in the VTA transit center and parking lots. Construction barriers would line sidewalks and roadways, blocking views to transit facilities.</p> <p>For Alternative 4, there would be horizontal shifts to the existing Caltrain and UPRR railway to permit blended HSR/Caltrain operations. At Diridon Station, two existing station platforms would be raised approximately 4 feet and lengthened to approximately 1,400 feet to accommodate HSR trains. This construction would be visible to adjacent highly sensitive residential viewers but would be partially obscured by other station platform canopies and stationary trains. Construction activities for the HSR station building and access roads would require removal of many mature trees in the VTA transit center and parking lots. Construction barriers would line sidewalks and roadways, blocking views to transit facilities. Other construction activities for Alternative 4 in the landscape unit would be similar to existing railway maintenance activities.</p>
San Jose Station Approach	<p>For Alternatives 1, 2, and 3, primary construction staging would be located in the Diridon Station Landscape Unit. Temporary shoring for the aerial structure spanning I-280 and SR 87 would block some views at grade for travelers along the freeways and intersecting streets and for recreational viewers along the Guadalupe River Trail.</p> <p>For Alternative 4, construction activities would be in or adjacent to the existing Caltrain/UPRR railway. Construction activities at some locations would be in view of highly sensitive residential and recreational viewers, temporarily providing views that contrast with existing residential and park settings.</p>
Communications Hill	<p>For all alternatives, primary construction staging would be located outside the Communication Hill Landscape Unit, between Hillside Avenue, the Caltrain/UPRR tracks, Capitol Expressway, and Snell Avenue. Construction activity would consist of horizontal shifts to existing tracks and adding track(s) within the existing Caltrain/UPRR railway corridor.</p>

Landscape Unit	Description of Location-Specific Construction Activities
Monterey Road San Jose	<p>Primary construction staging would be located between Hillsdale Avenue, the Caltrain/UPRR tracks, Capitol Expressway, and Snell Avenue. For Alternatives 1 and 3, this location would also house a precast yard, approximately 67 acres, where the horizontal guideway beams of an aerial structure would be produced. The site would be adjacent to an active quarry, industrial uses, and a former drive-in theater, now used as a flea market. The flea market property is screened from adjacent uses by mature trees.</p> <p>Alternatives 2 and 4 would not require a precast yard, as the alternatives do not include an aerial structure throughout the landscape unit.</p>
Coyote Valley	<p>Primary construction staging would be located to the east of Monterey Road, south of Live Oak Avenue. For Alternatives 1 and 3, this location would also house an approximately 37-acre precast yard, where the horizontal guideway beams of an aerial structure would be produced. Additional construction staging would be south of Blanchard and east of Emado/HSR, and east of Monterey at Live Oak.</p> <p>Alternatives 2 and 4 would not require a precast yard, as the alternatives do not include an aerial structure throughout the landscape unit.</p>
US 101	<p>For Alternatives 1 and 3, a substantial staging area would be located northeast of Monterey Road and Burnett Avenue.</p> <p>The HSR alignments for Alternatives 2 and 4 would not pass through this landscape unit, but the power line reconductoring activity described below would take place.</p> <p>For all alternatives, the reconductoring of approximately 11.1 miles of the existing Spring to Llagas and Green Valley to Llagas power lines would start at Morgan Hill Substation located along West Main Avenue in Santa Clara County. In the US 101 Landscape Unit, the work would start at Day Road before heading south for approximately 2.5 miles and terminating at the Llagas Substation in the City of Gilroy. Along with reconductoring the lines, existing lattice steel towers/poles would be raised or replaced with new lattice steel towers/poles, resulting in an approximately 25-foot-taller structure.</p>
Morgan Hill– San Martin	<p>For Alternatives 1 and 3, the primary staging area would be west of the UPRR/Caltrain railway between Buena Vista Avenue and Day Road. A secondary site would be located east of the UPRR/Caltrain railway near Highland Avenue. Besides the activities of a staging yard, the primary staging area would also house a pre-cast yard, where the horizontal guideway beams of an aerial structure would be produced for Alternatives 1 and 3.</p> <p>For Alternatives 2 and 4, primary construction staging areas would be located east of Monterey Road, near Tilton Avenue, west of the UPRR near East Middle Avenue, west of Monterey Road near California Avenue, and east of the UPRR near Highland Avenue.</p> <p>As described above in the US 101 Landscape Unit, reconductoring of the existing Spring to Llagas and Green Valley to Llagas power lines would also occur within this landscape unit.</p>

Landscape Unit	Description of Location-Specific Construction Activities
Downtown Gilroy	<p>For Alternatives 1, 2, and 4, the primary staging areas would be east of the Gilroy Caltrain Station and east of the UPRR between Banes Lane and East Luchessa Avenue.</p> <p>Alternative 3 would not pass through this landscape unit.</p> <p>For Alternative 1, temporary scaffolding to construct the elevated station facilities would be erected, obscuring views across the tracks. Construction activities for the HSR station and access roads would require removal of many of the mature trees in the VTA transit center and parking lots. Construction barriers would line sidewalks and roadways, blocking views to transit facilities.</p> <p>For Alternative 2, the UPRR/Caltrain tracks and Caltrain station platform and train storage yard would be relocated during construction activities, requiring passengers to navigate temporary passageways across the construction site. Views would be blocked by the fill for the HSR and Caltrain station.</p> <p>For Alternative 4, construction of the blended HSR/Caltrain station would take place at grade adjacent to the existing station platform, with no temporary facility necessary.</p>
Pajaro–San Felipe	<p>For Alternatives 1, 2, and 4, primary staging would be northeast of SR 152 near San Felipe Road.</p> <p>For Alternative 3, primary staging would be in the same location, with a precast yard east of US 101, along the HSR alignment between Cohansey Road and Las Animas Avenue.</p> <p>Alternative 3 would also include construction of the East Gilroy Station. Because it is on an embankment and does not require complex elevated construction with extensive scaffolding, construction activities would be similar to those for at-grade HSR construction. The primary difference would be the clearing and construction activities spread across the parking facilities. This would extend far from the HSR alignment and stations site, but the presence of safety fencing, construction workers, and machinery and earthworks would be the same as described for other at-grade HSR construction.</p> <p>For all alternatives, the tunnel portal for Tunnel 1 would be located just south of the primary staging area. Construction activity at the portal would last 3 to 4 years. Activity at the tunnel portal would be screened, but due to the scale of the industrial activities and amount of excavation necessary to create the tunnel portal location in the hillside, visual quality would be affected for the duration of construction, restoration, and revegetation.</p>
Pacheco Pass	<p>For all alternatives, staging areas would be provided south of SR 152 across from Casa de Fruta for Tunnel 1 and south of SR 152 and Pacheco Creek for Tunnel 2. A new road would be provided on the west side of SR 152 from Walnut Avenue to the east portal of Tunnel 1. A new road and bridge across Pacheco Creek would be constructed to provide access to the west portal of Tunnel 2. Additional staging would be south of Casa de Fruta and Pacheco Creek.</p> <p>Construction activity at the portals would last 3 to 4 years. Activity at the tunnel portal would be screened, but due to the scale of the industrial activities and amount of excavation necessary to create the tunnel portal location in the hillside, visual quality would be affected for the duration of construction, restoration, and revegetation.</p>
San Luis	<p>All alternatives would pass through the entire San Luis Landscape Unit in twin tunnels. The portals would be outside the landscape unit, so no construction activities would be visible to any viewer other than an occasional construction-related vehicle traveling on SR 152. The visual quality within this landscape unit would not be affected by the construction activities.</p>

Landscape Unit	Description of Location-Specific Construction Activities
Romero	<p>For all alternatives, tunnel construction would require both powerlines and an access road to be built into Romero Canyon. Staging areas for the tunnel construction would surround the portal location. Construction activity at the portal would last 3 to 4 years. Because of the scale of the industrial activities and amount of excavation necessary to create the tunnel portal location in the hillside, visual quality would be affected for the duration of construction, restoration, and revegetation, but due to the remote location, very few viewers would see it.</p> <p>Staging for other construction activities, including bridges across the California Aqueduct, Delta-Mendota Aqueduct, and I-5 would be located just east of the California Aqueduct and east of I-5.</p>
Henry Miller	<p>For all alternatives, primary construction staging, approximately 43 acres, would be located south of Henry Miller Road, just west of Johnson Road. Viaducts would be constructed using forms, not precast beams, so there would be no need for a precast yard. Secondary staging areas for grade separations would be located east of SR 33, north of Fahey Road, and east of SR 165. The temporary construction impacts would be the same under all alternatives.</p>

HSR = high-speed rail

UPRR = Union Pacific Railroad

VTA = Santa Clara Valley Transportation Authority

SR = State Route

I = Interstate

For portions of the alignment on viaduct, the project would use precast span construction, for which elevated guideway sections would be manufactured at a central facility and conveyed to the construction site on transporters that would move along the completed portions of the viaduct. This method would reduce the limits of construction, area of disturbance, and amount of equipment needed to build the viaducts. The contractor would use conventional construction methods to construct the at-grade and embankment extents. Where construction activities, including precast yards, large earthworks, and large structures, are constructed, the cultural order would decline relative to the existing land use in the area because of the industrial character of precast yards, heavy equipment movement required to construct earthworks, or extensive view-blocking scaffolding required where bridge spans are too great or remote to justify precast construction. If the construction activities were in undeveloped or agricultural areas, the natural harmony would also decline, due to imposition of the industrial activities on the natural landscape and changes in views due to removal of grasses, trees, and other flora during the construction period. These declines would affect visual quality for the duration of the construction period. Depending on location and viewer groups present, the decline in visual quality could be two levels, triggering an impact on the visual environment and visual quality where sensitive viewers are present.

Visual impacts during construction would be greater in areas with highly sensitive viewer groups, where there are more viewers, and where larger portions of the project alternatives would be visible. Construction may be visible from some locations with views to surrounding mountains and peaks. Blocked views from roadways and bridges would be fleeting for travelers such as motorists, bicyclists, and pedestrians, representing a low viewer sensitivity and no impact on the visual environment and visual quality. The views for institutional and commercial viewers with a moderate viewer sensitivity from adjacent multilevel buildings would be blocked where viaducts and overcrossings are under construction. This could represent an impact depending upon the view.

During construction, the Authority and its contractors would screen and site activities away from sensitive viewers, restore temporary construction sites to their pre-construction condition, and develop and implement a fugitive dust control plan to minimize fugitive dust emissions and associated visual impacts (AQ-IAMF#1). In addition, the Authority and its contractors would develop a construction management plan that would include visual protection measures designed to minimize impacts on residents and businesses (SOCIO-IAMF#1).

CEQA Conclusion

All alternatives would have a significant impact on visual quality under CEQA because construction activities and equipment would substantially degrade the existing visual character or quality of multiple sites and their surroundings. Construction equipment, stockpiles, and activities would contrast with the established character of views in highly sensitive residential areas and would alter the existing visual quality of residential areas and historic properties, reducing their natural harmony and cultural order to affect visual quality. While the project would reduce dust, screen and site activities away from sensitive viewers, and restore temporary construction sites to their pre-construction condition, some large-scale activities, such as viaduct construction or tunnel portal installation, could not be screened, reducing visual quality by one to two levels, depending on the setting. Where construction impacts the views of highly sensitive residential and recreational viewers, visual quality would be impacted. The project features would reduce the potential impacts on aesthetics and visual quality, but not to a level below significance. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Impact AVQ#2: Permanent Direct Impacts on Visual Quality—Santa Clara Landscape Unit

The existing visual quality in the Santa Clara Landscape Unit is moderately high. No viewer group predominates in the landscape unit, so overall viewer sensitivity is considered moderate. Existing, baseline, and simulated views of Alternatives 1, 2, 3, and 4 at three locations illustrate views from residential viewers with moderately high sensitivity (one location) and travelers with moderate to low sensitivity (two locations).

Alternative 1

Under Alternative 1, the HSR system would use existing and new at-grade tracks to accommodate HSR service through Santa Clara and San Jose. The additional rail infrastructure would include new trackways, OCS, improved fencing, and other related infrastructure within and adjacent to existing railway facilities. Viewers in the landscape unit include residents, whose sensitivity ranges from moderate to high and other viewers with low to moderately low sensitivity.

Because the infrastructure would be located within and adjacent to existing railway facilities, the baseline visual character of the landscape unit would not change. The visual quality would remain moderately high. Viewers would perceive no change in visual quality under Alternative 1 in the Santa Clara Landscape Unit.

Alternative 1 would result in no visual quality change, either because the view would be the same as the baseline condition or because the Alternative 1 changes would not be visible (KVP 1, Figure 3.16-17; KVP 2, Figure 3.16-18; and KVP 3, Figure 3.16-19).



KVP 1—Existing Conditions



KVP1—Baseline 2029



KVP1—Alternatives 1 and 4 Simulation



KVP1—Alternatives 2 and 3 Simulation

JANUARY 2019

Figure 3.16-17 KVP 1 Santa Clara Landscape Unit—Main Street: Existing, Baseline 2029, and Simulated Views



KVP 2—Existing Conditions



KVP 2—Baseline 2029



KVP 2—Alternatives 1 and 4 Simulation



KVP 2—Alternatives 2 and 3 Simulation

FEBRUARY 2018

Figure 3.16-18 KVP 2 Santa Clara Landscape Unit—I-880: Existing, Baseline 2029, and Simulated Views



KVP 3—Existing Conditions



KVP 3—Baseline 2029



KVP 3—Alternatives 1 and 4 Simulation



KVP 3—Alternatives 2 and 3 Simulation

S

FEBRUARY 2018

Figure 3.16-19 KVP 3 Santa Clara Landscape Unit—West Hedding Street: Existing, Baseline 2029, and Simulated Views

Alternative 2

A new aerial structure would be introduced through the landscape unit, rising to heights of more than 60 feet above grade to pass over roads and highways. The structure would be taller than surrounding homes, offices, and other buildings adjacent to the railway corridor and would impart an industrial aesthetic to the landscape, in contrast to the scale, materials, and style of the adjacent buildings and Santa Clara Railroad Historical Complex.

The Authority has implemented aesthetic guidelines for the HSR infrastructure that include approaches to integrate structures within a community and to reduce the intrusiveness of large, elevated structures, reducing impacts on views (AVQ-IAMF#1). Refer to *Aesthetic Options for Non-Station Structures* (Authority 2014). Prior to construction, the contractor would document that the Authority's aesthetic review process has been followed (AVQ-IAMF#2). While these project features would reduce impacts, the height and depth of the aerial structure under Alternative 2 would partially block some distant views to scenic vistas from the landscape unit, including the Diablo Range and Mount Hamilton. Visual quality in the landscape unit would decline from moderately high to moderate. While residents in the landscape unit have a moderately high to high viewer sensitivity, the majority of viewers in the landscape unit have a moderately low viewer sensitivity. Viewers with a moderately low sensitivity would experience a decline in visual quality from moderately high to moderate under Alternative 2 in the Santa Clara Landscape Unit.

Two tracks for HSR would be added to the existing two Caltrain tracks, replacing the baseline OCS, which is similar in scale to the electrical poles in the neighborhood, with a steel OCS that would be taller and would use a beam to suspend the OCS across all four tracks (KVP 1, Figure 3.16-17). At KVP 1, the primary viewers are residents of the neighborhood. With their high visual sensitivity, they would experience a decline in visual quality from moderately high to moderate under Alternative 2 at KVP 1.

Alternative 2 would pass over the I-880 freeway, partially blocking views to the Diablo Range, but adding a distinct landmark (KVP 2, Figure 3.16-18). Visual quality would remain moderately high. Travelers in this location have a low viewer sensitivity due to usual heavy traffic that requires focus on the road. They would not perceive a change in visual quality at KVP 2 under Alternative 2.

Under Alternative 2, Hedding Street would pass under the Caltrain/UPRR tracks, with a new viaduct carrying the HSR over the roadway (KVP 3, Figure 3.16-19). While the view would change, there would be no change to visual quality, which would remain moderately high. Travelers with a moderate viewer sensitivity would not perceive a change in visual quality under Alternatives 2 at KVP 3.

Alternative 3

Alternative 3 would be the same as Alternative 2 in the Santa Clara Landscape Unit, with the same effects on visual quality.

Alternative 4

Alternative 4 would be similar to Alternative 1 in the Santa Clara Landscape Unit but would remain at grade through the entire landscape unit, with minor horizontal track shifts to accommodate HSR operations in blended operations with Caltrain. The addition of at-grade tracks and OCS in and along the baseline Caltrain/UPRR corridor, a TPSS facility adjacent to a Caltrain TPSS facility in an existing industrial area, and other rail infrastructure would not block any views. Visual quality would remain moderately high in the landscape unit. Visual quality would be unchanged from the baseline condition at KVPs 1, 2, and 3. Viewer groups in the Santa Clara Landscape Unit would not perceive a change in visual quality under Alternative 4.

CEQA Conclusion

In the Santa Clara Landscape Unit, Alternative 1 would have a less-than-significant impact under CEQA because constructing the HSR infrastructure at grade within and adjacent to existing railway facilities would conform to the baseline character of the area. Visual quality in the landscape unit would be unchanged and remain moderately high. The majority of viewers would be travelers and industrial viewers with moderately low viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternatives 2 and 3 would have a less-than-significant impact under CEQA because, while construction of a viaduct for HSR would alter the baseline visual quality of the Santa Clara Landscape Unit, it would only reduce visual quality from moderately high to moderate. Although visual quality in the landscape unit would decrease by one level, the majority of viewers would be travelers and industrial viewers with moderately low viewer sensitivity who would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 4 would have a less-than-significant impact under CEQA because modifying the baseline Caltrain and UPRR railway to permit blended HSR operations at grade within and adjacent to baseline railway facilities would conform to the existing character of the area. Visual quality in the landscape unit would be unchanged and remain moderately high. The majority of viewers would be travelers and industrial viewers with moderately low viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Impact AVQ#3: Permanent Direct Impacts on Visual Quality—Diridon Station Landscape Unit

The existing visual quality in the Diridon Station Landscape Unit is moderate. Travelers and commercial viewer groups make up the majority of the viewers in this landscape unit, with moderate sensitivity, but there are also a small number of highly sensitive residential viewers. Existing, baseline, and simulated views of Alternatives 1, 2, 3, and 4 at three locations illustrate views from highly sensitive residential viewers (one location) and travelers with moderate sensitivity (two locations).

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 would be the same in the Diridon Station Landscape Unit. A new elevated structure (viaduct) and station would be constructed to accommodate HSR service through the landscape unit. Design features drawn from the ongoing planning process led by the City of San Jose would provide a high-quality architectural treatment of the HSR station and facilities. The viaduct, at a height of more than 60 feet above grade to pass over roads and highways, would be taller than most surrounding homes, offices, and other buildings adjacent to the railway corridor. The height and depth of the viaduct structure would block distant views of the San Jose skyline, while the height and length of the elevated concourse and railway platforms would visually overpower the historic San Jose Diridon Station facilities. The HSR infrastructure would contrast in scale, materials, and style with the surrounding buildings. Visual quality would decrease from moderate to moderately low in an area with moderately high viewer sensitivity. Residential viewers on the west side of the railway have a high viewer sensitivity, but the majority of viewers are travelers and commercial viewers with a low to moderate visual sensitivity.

Views toward downtown San Jose from the Alameda neighborhood would be blocked by HSR infrastructure and new development east of the station, and the scale and shadows of the aerial HSR structure would change the visual character (KVP 4, Figure 3.16-20). While the glass concourse over the tracks (to the right of the view) would neatly enclose the platform area of the at-grade facilities, the bulk of the concrete comprising the HSR platform level would appear vastly out of scale with all the surrounding structures. The aerial structure would dominate the view. The at-grade platforms for Caltrain, ACE, Amtrak, and Capitol Corridor trains would be in shadow, reducing their visibility from outside the site. The at-grade platforms, historic railway bridge, and The Alameda/West Santa Clara Street would be shaded by the elevated station and viaduct, reducing their daytime light levels. Visual quality would decline from moderate to moderately low. Residents with a high viewer sensitivity who populate the neighborhood immediately west of the station would experience a decline in visual quality from moderate to moderately low under Alternatives 1, 2, and 3 at KVP 4. While the project would minimize the intrusiveness of large, elevated structures (AVQ-IAMF#1 and AVQ-IAMF#2), the loss of residential views would be unavoidable under each of the project alternatives.

The HSR would operate on a high aerial structure above the existing railway services at the San Jose Diridon Station (KVP 5, Figure 3.16-21). A distant glimpse of the Santa Cruz Mountains would remain visible down West Santa Clara Street beneath the HSR aerial, as would the trees in the parking lots on the south side of West Santa Clara Street. The arena would continue to dominate the view, and the new elevated HSR facilities would complement its scale. The scale and visibility of the HSR would contribute to the visual identity of the San Jose Diridon Station area as a significant civic hub in the region. Visual quality at KVP 5 increases from moderate to moderately high. The primary viewers on the east side of San Jose Diridon Station are travelers of all kinds, including daily commuters and people attending events at the arena, with viewer sensitivity being moderate. They would experience an increase in visual quality from moderate to moderately high at KVP 5 for Alternatives 1, 2, and 3.

At KVP 6, Figure 3.16-22, the area in front of the historic station on Cahill Street would be expanded into a plaza, and palm trees would line Cahill Street. The new HSR station would create a prominent visual symbol of the addition of HSR service to the current passenger railway operations in the corridor. Like KVP 5, the primary viewers are travelers, with a moderate viewer sensitivity, and visual quality would remain moderately high. Viewers would not perceive a change in visual quality under Alternatives 1, 2, and 3 at KVP 6.

Alternative 4

All changes for Alternative 4 would take place within the existing rail facilities. The shift to the tracks and OCS, HSR signage, and modified platforms would not create obvious alterations to the existing station and its surroundings. The new station building for HSR would be similar in size to the existing historic Diridon Station building, but constructed of materials that clearly differentiate it from the historic structure. Visual quality would be unchanged, remaining moderate. Viewers would not perceive a change to visual quality.

CEQA Conclusion

Alternatives 1, 2, and 3 would have a less-than-significant impact under CEQA because, while construction of a viaduct for HSR would alter the baseline visual quality of the Diridon Station Landscape Unit, it would only reduce visual quality from moderate to moderately low. Although visual quality in the landscape unit would decrease by one level, the majority of viewers would be travelers with moderate viewer sensitivity who would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 4 would have a less-than-significant impact under CEQA because modifying the baseline Caltrain and UPRR railway and Diridon Station platforms to permit blended HSR operations at grade within and adjacent to baseline railway facilities would conform to the baseline character of the area. Visual quality in the landscape unit would be unchanged and remain moderate. The majority of viewers would be travelers with moderate viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.



KVP 4—Existing Conditions



KVP 4—Baseline 2029 Simulation



KVP 4—Alternatives 1, 2, and 3 Simulation



KVP 4—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-20 KVP 4 Diridon Station Landscape Unit—Caltrain from The Alameda: Existing, Baseline 2029, and Simulated Views



KVP 5—Existing Conditions



KVP 5—Baseline 2029 Simulation



KVP 5—Alternatives 1, 2, and 3 Simulation



KVP 5—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-21 KVP 5 Diridon Station Landscape Unit—Caltrain from West Santa Clara Street: Existing, Baseline 2029, and Simulated Views



KVP 6—Existing Conditions



KVP 6—Baseline 2029 Simulation



KVP 6—Alternatives 1, 2, and 3 Simulation



KVP 6—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-22 KVP 6 Diridon Station Landscape Unit—San Jose Diridon Station: Existing, Baseline 2029, and Simulated Views

Impact AVQ#4: Permanent Direct Impacts on Visual Quality—San Jose Station Approach Landscape Unit

The existing visual quality in the San Jose Station Approach Landscape Unit is moderately high. Viewers include residents, travelers, recreationists, students, and teachers. Overall viewer sensitivity in the landscape unit is moderately high. Existing and simulated views of Alternatives 1, 2, and 3 at two locations and Alternative 4 at three locations illustrate views for travelers with moderate sensitivity and residential viewers with high sensitivity.

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 would be the same through the San Jose Station Approach Landscape Unit and would use a new viaduct to connect San Jose Diridon and Tamien Stations by following the I-280 and SR 87 corridors. South of Tamien Station the alignment would transition to at grade within the existing Caltrain/UPRR corridor. Viewers include residents, travelers, recreationists, students, and teachers. Overall viewer sensitivity in the landscape unit is moderately high.

The HSR would be on a high aerial structure above the I-280 and SR 87 interchange (KVP 7, Figure 3.16-23). The elevation of the structure would obscure some of the trees that frame the view of the downtown skyline but would not obscure the distant view to the Diablo Range. During the design of the HSR project, the Authority's aesthetic guidelines and aesthetic review process would reduce the aesthetic and visual impacts of the HSR by increasing the compatibility of the HSR infrastructure within an existing, specific local design context, such as providing special design treatments for the I-280/SR 87 interchange aerial structure (AVQ-IAMF#1 and AVQ-IAMF#2). The addition of the aerial structure provides another visual indication that multiple transportation services are converging to serve the City of San Jose. As with the distant views to the mountains, its elevation also nicely frames the view of the skyline. Overall visual quality remains moderately high when viewed by travelers with a moderate viewer sensitivity.

HSR infrastructure for Alternatives 1, 2, and 3 would introduce permanent changes to the visual character that would contrast with the residential setting of the Gardner neighborhood, as seen from West Virginia Street, bordering the playfields at the Gardner School (KVP 8, Figure 3.16-24). The scale and position of the elevated structure would introduce a view of transportation infrastructure above the existing neighborhood. It would block the scenic vista to downtown, creating a visual barrier between the Gardner neighborhood and the center of San Jose. Residential viewers with a moderately high viewer sensitivity would experience a decline in visual quality from moderate to moderately low. Alternative 4 does not pass through KVP 8.

Alternatives 1, 2, and 3 would not pass KVPs 9 or 10, resulting in no effect on visual quality.



KVP 7—Existing Condition



KVP 7—Baseline 2029 Simulation



KVP 7—Alternatives 1, 2, and 3 Simulation



KVP 7—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-23 KVP 7 San Jose Station Approach Landscape Unit—San Jose Skyline: Existing, Baseline 2029, and Simulated Views



KVP 8—Existing Conditions, Baseline 2029, and Alternative 4



KVP 8—Alternatives 1, 2, and 3 Simulation

FEBRUARY 2018

**Figure 3.16-24 KVP 8 San Jose Station Approach Landscape Unit—Gardner School:
Existing, Baseline 2029, and Simulated Views**

Alternative 4

Alternative 4 would utilize the existing Caltrain/UPRR corridor through the landscape unit. The existing two-track railway would be expanded to three tracks to enable blended HSR/Caltrain service. The third track would be added to the south/west side of the existing tracks. New, single-track bridges would be built next to existing bridges across I-280, Prevost Street, SR-87, Willow Street, Alma Street, and Almaden Road. The existing bridges across Bird Avenue and Delmas Street would be reconstructed to carry three tracks. The tracks would be raised slightly (approximately 5 feet) to permit construction of the new bridges. The Tamien Caltrain Station would remain in place, with the midday train storage tracks south of the station shifted from west of the mainline tracks to the east.

The addition of at-grade tracks with associated OCS and other rail infrastructure would not block distant views but would require the removal of some trees adjacent to the railway. With almost all construction within or immediately adjacent to the existing railway, there would be little change to the visual environment away from the railway. Views across the railway corridor would still be open. Where new bridges are added or rebuilt to carry the third track, the Authority's aesthetic guidelines and aesthetic review process would reduce the aesthetic and visual impacts of the HSR by increasing the compatibility of the HSR infrastructure within an existing, specific local design context, such as providing special design treatments to match or complement existing railway structures (AVQ-IAMF#1 and AVQ-IAMF#2).

Because the railway would be at grade, existing landscaping and walls that screen residents' views to the corridor would limit their exposure. Residents with a moderately high visual sensitivity would not perceive a change in visual quality under Alternative 4 in the San Jose Station Approach Landscape Unit.

At KVP 7, Figure 3.16-23, HSR would operate in blended service with Caltrain, requiring a new, single-track bridge to span I-280 on the west (foreground) side of the existing two-track Caltrain/UPRR bridge. The new bridge, constructed of concrete piers and steel plates, would be similar in appearance to the existing bridge. The new bridge across the freeway would not alter views of existing stands of trees or block distant views to the Diablo Range. Overall visual quality would remain moderately high. Travelers with a moderate viewer sensitivity would not perceive a change in visual quality under Alternative 4 at KVP 7.

Alternative 4 would not pass KVP 8, resulting in no effects on visual quality.

At KVP 9, Figure 3.16-25, Alternative 4 would add a third track to the existing railway, moving tracks slightly closer to the viewpoint and requiring construction of a retaining wall, visible in the simulation. No trees would be removed from Fuller Park or along Fuller Avenue. The church, lawn of Fuller Park, and streetscape would be unaltered. New fencing along the railway and a train control box would intrude into the corner of the park but would do little to affect the sense of community in the area, although the new fencing and retaining wall would increase the presence of the railway. Visual quality would remain moderate. Residents or recreationists with a moderately high visual sensitivity would not perceive a change in visual quality at KVP 9. Alternatives 1, 2, and 3 do not pass through KVP 9.

At KVP 10, Figure 3.16-26, the existing Caltrain/UPRR bridge over Delmas Avenue would be replaced with a new bridge to carry three tracks for the UPRR and blended HSR/Caltrain operations. All existing trees and buildings would also be unaltered, but the rail bridge would be rebuilt. The Authority's aesthetic guidelines and aesthetic review process would reduce the aesthetic and visual impacts of the bridge replacement by providing special design treatments to match or complement existing railway structures (AVQ-IAMF#1 and AVQ-IAMF#2). The appearance of the railway would change only slightly. The approximate height and span of the new bridge would not change substantially from the existing bridge. Visual quality would remain moderately low. Residents with a high visual sensitivity would not perceive a change in visual quality at KVP 10 under Alternative 4. Alternatives 1, 2, and 3 would not pass KVP 10.



KVP 9—Existing Conditions



KVP 9—Baseline 2029 and Alternatives 1, 2, and 3



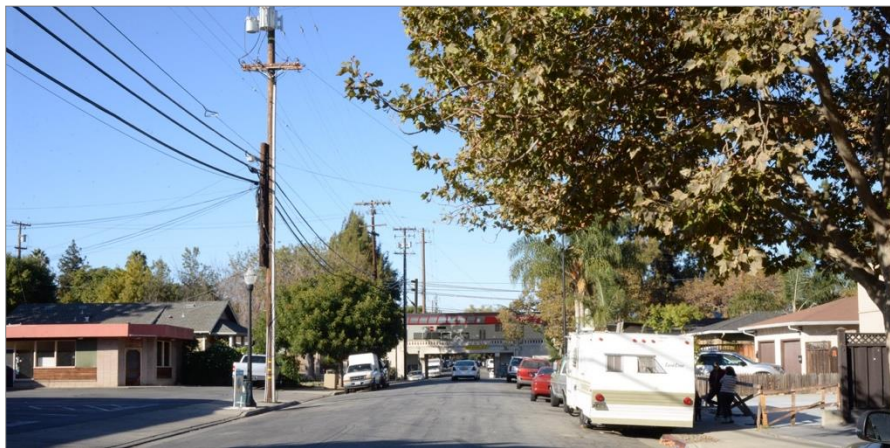
KVP 9—Alternative 4 Simulation

FEBRUARY 2018

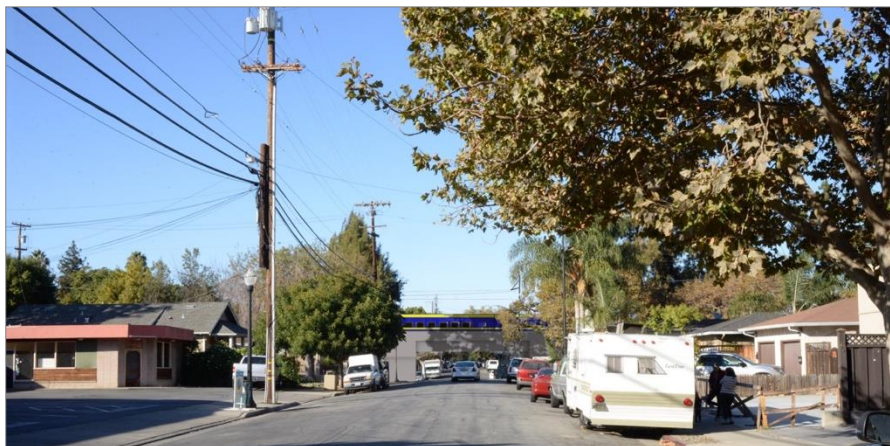
Figure 3.16-25 KVP 9 San Jose Station Approach Landscape Unit—Fuller Avenue: Existing, Baseline 2029, and Simulated Views



KVP 10—Existing Condition



KVP 10—Baseline 2029 Simulation, Alternatives 1, 2, and 3



KVP 10—Alternative 4 Simulation

FEBRUARY 2018

**Figure 3.16-26 KVP 10 San Jose Station Approach Landscape Unit—
Delmas Street: Existing, Baseline 2029, and Simulated Views**

CEQA Conclusion

Alternatives 1, 2, and 3 would have a less-than-significant impact under CEQA because, while construction of a viaduct for HSR would alter the existing visual quality of the San Jose Station Approach Landscape Unit, it would only reduce visual quality from moderately high to moderate. Although visual quality in the landscape unit would decrease by one level, the majority of viewers would be residents with moderately high viewer sensitivity who would have a less-than-significant response to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 4 would have a less-than-significant impact under CEQA because modifying the baseline Caltrain and UPRR railway and grade separations to permit blended HSR operations at grade within and adjacent to baseline railway facilities would conform to the baseline character of the area. Visual quality in the landscape unit would be unchanged and remain moderately high. The majority of viewers would be residents with moderately high viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Impact AVQ 5: Permanent Direct Impacts on Visual Quality—Communications Hill Landscape Unit

The existing visual quality in the Communications Hill Landscape Unit is moderately high. Highly sensitive residential and recreational viewers are dominant in this landscape unit. Existing and simulated views of Alternatives 1, 2, 3, and 4 at one location illustrate views for these highly sensitive viewers.

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 would follow the existing Caltrain right-of-way through the Communications Hill Landscape Unit. Two at-grade tracks for Caltrain/UPRR would be realigned to the east side of the right-of-way centerline. The realigned Caltrain/UPRR tracks would not have OCS, as Caltrain's electrification ends in the previous landscape unit at Tamien Station. Two new tracks for HSR, with OCS, would be added to the west side of the right-of-way centerline. A TPSS facility would be constructed east of the railway, near Pullman Way.

HSR infrastructure would introduce permanent changes to the visual character of existing residential and recreationist views in and around Communications Hill Park (KVP 11, Figure 3.16-27); with two additional tracks, the graded and ballasted portion of the rail right-of-way would eliminate some of the vegetation between the park and railway. It would also increase the width of the cut through the hill, with longer and higher retaining walls. The expanding rail infrastructure. Including a noise barrier along the edge of the park, would reduce the natural slopes of the hill and vegetation. The HSR infrastructure would be sufficiently separated from the park to maintain the park's recreational features (PK-IAMF#1), but the expanded area of rail infrastructure would reduce the area between the park and railway, bringing two incompatible uses closer together. While the project would implement aesthetic guidelines and an aesthetic review process to integrate the HSR infrastructure in the surrounding landscape and local context (AVQ-IAMF#1 and AVQ-IAMF#2), it would still change the existing visual character. Potential addition of a noise barrier between the park and railway would add a tall block wall along the entire western side of the park. While landscaping would soften the look of the wall, its height and length would be incompatible with the existing view across the tracks to the open hillsides from within the park. Highly sensitive residential and recreational viewers would experience a decline in visual quality from moderately high to moderate under Alternatives 1, 2, and 3 at KVP 11.



KVP 11—Existing Conditions



KVP 11—Alternatives 1, 2, and 3 Simulation



KVP 11—Alternative 4 Simulation

FEBRUARY 2018

**Figure 3.16-27 KVP 11 Communications Hill Landscape Unit—
Communications Hill Park: Existing and Simulated Views**

Alternative 4

Alternative 4 would be similar to Alternative 1 at KVP 11 but would require less alteration to the existing topography. One additional track would be added within the existing Caltrain right-of-way as it passes Communications Hill Park. The additional track would be added to the west of the existing tracks, minimizing encroachment on the vegetation between the park and railway. The track would fit within the existing cut through the hill, with no need to alter the existing retaining walls or pedestrian bridge. The HSR infrastructure would be added to the opposite side of the railway, away from the park, maintaining the visual separation of the park from the railway, but the poles supporting the OCS would add a repeating vertical element to the railway, increasing the visual presence of the railway in an otherwise natural setting. Visual quality would remain moderately high. Recreationists in the park or nearby residents with a high viewer sensitivity would not perceive a change in visual quality for Alternative 4 at KVP 11.

CEQA Conclusion

Alternatives 1, 2, and 3 would have a significant impact under CEQA because the expansion of railway infrastructure would substantially degrade the visual environment and visual quality of Communications Hill Park and its surroundings by reducing visual quality from moderately high to moderate in a location where viewers with a high viewer sensitivity (residents and recreationists) are present. The expanded railway facilities would visually encroach upon the Communications Hill Park and its surroundings and would alter the existing visual setting. Project features would provide minimum design standards appropriate for the environment but would not increase the distance between the park and HSR infrastructure nor reduce the effect of the widened cut through the hillside. Therefore, project features would reduce the potential impacts on the visual environment and visual quality, but not to a less-than-significant level. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Alternative 4 would have a less-than-significant impact where it passes Communications Hill Park and elsewhere in the landscape unit under CEQA because modifying the baseline Caltrain and UPRR railway to permit blended HSR operations at grade within and adjacent to baseline railway facilities would conform to the existing character of the area and would result in no change to the existing visual quality, with no impact on any viewer. Therefore, CEQA does not require mitigation.

Impact AVQ#6: Permanent Direct Impacts on Visual Quality—Monterey Highway San Jose Landscape Unit

The existing visual quality in the Monterey Highway San Jose Landscape Unit is moderately high. Residential viewers predominate in the landscape unit, with high sensitivity to changes in visual quality. Moderately sensitive travelers are also present. Existing and simulated views of Alternatives 1, 2, 3, and 4 at four locations illustrate views of moderately sensitive travelers (one location) and highly sensitive residential viewers (three locations).

Alternatives 1 and 3

Alternatives 1 and 3 would run on an elevated structure in the median of Monterey Road. The elevated structure would rise to heights of more than 60 feet above grade to pass over roads and highways. It would be taller than surrounding homes, offices, and other buildings. In its prominent position, it would be visible from locations far from the existing railway corridor, partially blocking views of the surrounding hills. The viaduct would obscure views from northbound Monterey Road across to the UPRR/Caltrain corridor and the mature Keesling's Shade Trees separating the highway from the railway. The elevated structure would be considerably taller than the Keesling's Shade Trees. The viaduct would be visible from within surrounding neighborhoods and Edenvale Gardens Regional Park, and Ramac Park.

From Monterey Road near the Lick Quarry, distant views of the Santa Cruz Mountains would be increased by the removal of the quarry processing machinery, and partially obscured by the HSR aerial structure (KVP 12, Figure 3.16-28). Monterey Road would be unaltered in the view. The

visual quality would remain moderate; the majority of viewers at this KVP are travelers on Monterey Road with a moderate viewer sensitivity.

Looking toward Monterey Road and the UPRR from Branham Lane in San Jose, the Santa Cruz Mountains would still be seen in the distance under Alternatives 1 and 3, but the aerial HSR guideway and OCS would block and obscure part of the view (KVP 13, Figure 3.16-29). Landscaping along Branham Lane would remain, as would the taller trees on the far side of the railway corridor. The prominence of the HSR aerial guideway would introduce a substantial element of civil infrastructure into the setting of homes and the library, increasing the visual presence of transportation infrastructure. Overall visual quality would drop from moderately high to moderate. The majority of viewers at KVP 13 are residents as they travel to and from their homes in the adjacent neighborhoods. These travelling residents with a moderately high viewer sensitivity would experience a decline in visual quality from moderately high to moderate under Alternatives 1 and 3 at KVP 13.

To place columns for the HSR viaduct along Monterey Road and the UPRR/Caltrain railway corridor with Alternatives 1 and 3, the mature trees in the median of Monterey Road would be removed (KVP 12, Figure 3.16-30). The Keesling's Shade Trees would remain, separating the UPRR/Caltrain railway from the roadway. The stout columns supporting the viaduct would block views to the opposite side of the highway. The viaduct would split the highway in two and would overhang traffic lanes, enclosing the view along the highway between the viaduct and noise barrier. The viaduct would be visible from homes currently shielded from the corridor by the noise barrier, intruding on the visual character of the adjacent neighborhood. Visual quality would decrease to moderate. The majority of viewers at KVP 14 are residents traveling to their homes and residents viewing the aerial structure above their homes in the adjacent neighborhoods. Residents with an overall moderately high viewer sensitivity would experience a decline in visual quality from moderately high to moderate under Alternatives 1 and 3 at KVP 14.

With Alternatives 1 and 3, the aerial HSR above the median of Monterey Road would be clearly visible from KVP 15, Figure 3.16-31. Mature trees lining the UPRR railway would screen some views of the HSR, but the visual intrusion of the HSR above the homes would bring industrial materials and forms into view, reducing the visual quality from moderately high to moderate. Residents with a high viewer sensitivity would experience a decline in visual quality from moderately high to moderate under Alternatives 1 and 3 at KVP 15.

Alternative 2

Alternative 2 enters the landscape unit on an aerial structure from the Caltrain/UPRR corridor and descends to pass under Capitol Expressway. Continuing south, it would run at grade immediately adjacent to the UPRR, within the Monterey Road right-of-way, requiring removal of all of the Keesling's Shade Trees. Because it is placed at grade, it would not be visible from adjacent residential neighborhoods, which are shielded from views of the existing transportation corridor by noise barriers and well-established landscaping. Therefore, travelers on Monterey Road, with a moderate viewer sensitivity, are the primary viewers.

As part of the reconstruction of Monterey Road, landscaping in the rail/highway corridor would increase. Reconstruction of Monterey Road would formalize its design and landscaping, which would be designed in accordance with the Authority's aesthetic guidelines to integrate the structures into the local context (AVQ-IAMF#1).

From Monterey Road near the Lick Quarry, the Alternative 2 aerial structure would slowly descend toward an at-grade alignment as it moves away (KVP 12, Figure 3.16-28). Distant views of the Santa Cruz Mountains would be increased by the removal of the quarry processing machinery and would be partially obscured by the HSR aerial structure. Monterey Road would be unaltered in the view. Travelers at this KVP, with a moderate viewer sensitivity, would not perceive a change in visual quality for Alternative 2 at KVP 12.



KVP 12—Existing Conditions



KVP 12—Alternatives 1 and 3 Simulation



KVP 12—Alternative 2 Simulation



KVP 12—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-28 KVP 12 Monterey Highway San Jose Landscape Unit—Lick Quarry: Existing and Simulated Views



KVP 13—Existing Conditions



KVP 13—Alternatives 1 and 3 Simulation



KVP 13—Alternative 2 Simulation



KVP 13—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-29 KVP 13 Monterey Highway San Jose Landscape Unit—Branham Lane: Existing and Simulated Views



KVP 14—Existing Condition



KVP 14—Alternatives 1 and 3 Simulation



KVP 14—Alternative 2 Simulation



KVP 14—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-30 KVP 14 Monterey Highway San Jose Landscape Unit—Edenvale Drive: Existing, Baseline 2029, and Simulated Views



KVP 15—Existing Condition



KVP 15—Alternatives 1 and 3 Simulation



KVP 15—Alternatives 2 and 4 Simulation

FEBRUARY 2018

**Figure 3.16-31 KVP 15 Monterey Highway San Jose Landscape Unit—
Avenida Rotella: Existing and Simulated Views**

Branham Lane would be reconstructed under Alternative 2 to pass under the UPRR/Caltrain and high-speed railways. Views to the Santa Cruz Mountains would be slightly obscured by the addition of a pedestrian bridge over Monterey Road and the railway corridor (KVP 13, Figure 3.16-29). The realignment of Branham Lane would change the landscaping in the area, which includes native grasses rising up the approach to the pedestrian bridge in a smooth and rounded incline. The trees in the median of the roadway would break up the expanse of pavement. The improved roadway and new pedestrian bridge are both well designed. The curve of the roadway would bring it closer to the homes on the right, making the view slightly more urban. The intersection with Monterey Road and the railway corridor would be more evident as the roadway descends to pass beneath and the pedestrian path to pass over. Overall visual quality would remain moderately high as the majority of viewers at KVP 13 are residents traveling to and from their homes in the adjacent neighborhoods. When viewed by residents with a moderately high viewer sensitivity, the change in visual character would result in no effect on visual quality for Alternative 2 at KVP 13.

Figure 3.16-30, KVP 14, illustrates simulations of the Monterey Road, HSR, and UPRR/Caltrain railway corridor for Alternative 2 between the HSR and Monterey Road. To place the HSR infrastructure adjacent to the UPRR right-of-way, Monterey Road would be reconfigured. The Keesling's Shade Trees would be removed, but new street trees would be planted in the median and on both sides of the east side sidewalk/multi-use path. Low-growing native grasses would also line the pathway. The new landscape would be coordinated and denser. If studies do not require the installation of a noise barrier, the reconfigured roadway would include a decorative fence separating the roadway from the HSR infrastructure and street lighting that includes decorative standards for roadway and pathway lighting. New street lighting would be provided for both the travel lanes and the pedestrian and bike path. It would be designed to minimize spillover into residential areas (AVQ-IAMF#1). Visual quality would increase to high for KVP 14 without a noise barrier under Alternative 2.

Should a noise barrier be constructed, the same landscape and streetscape improvements would be provided, but the noise barrier would screen the HSR and UPRR railways from view, and block views to the trees west of the UPRR railway. This would limit views to primarily the landscaping along the roadway. The noise barrier would contain views along Monterey Road. Visual quality would remain moderately high at KVP 14 with a noise barrier under Alternative 2.

Viewers at KVP 14 include travelers on Monterey Road, and travelers and recreationists would use the multi-use pathway. Because the pathway would be separated from highway traffic, its users would focus more attention on the surrounding environment's visual quality instead of fast moving vehicles. This means they would have a moderately high viewer sensitivity, and pathway users would experience the increase in visual quality as a beneficial effect on visual quality. The majority of viewers at this KVP are travelers with moderate exposure as they travel to and from their homes in the adjacent neighborhoods. Without a noise barrier, viewers would experience an increase in visual quality with Alternative 2. With a noise barrier, the visual character would not increase, so viewers would not perceive a change visual quality.

At KVP 15, Figure 3.16-31, the view would be unchanged, as the HSR would run at grade, with no portion of its infrastructure tall enough to be seen rising above the roofs of the homes or trees, resulting in no change to the existing view. Residents with a high viewer sensitivity would not perceive a change in visual quality under Alternative 2 at KVP 15.

Alternative 4

Alternative 4 would expand the existing two-track UPRR/Caltrain railway to three tracks to support blended HSR/Caltrain service. The tracks would run at approximately the same elevation as the existing tracks. Existing at-grade crossings would be renovated to include four-quadrant crossing gates. The Capitol and Blossom Hill Caltrain Stations would be reconstructed to include an island platform between the blended tracks, with grade-separated pedestrian access. The addition of at-grade tracks with associated OCS and other rail infrastructure would not block distant views. The track would require the removal of some trees adjacent to the railway. With almost all construction within or immediately adjacent to the existing railway, there would be little

change to the visual environment away from the railway. Existing streets and roadways would continue to cross the railway at grade. Views across the railway corridor would still be open. No new highway grade separations would be built, so the appearance of the railway and roadway corridor would change only slightly. The visual quality would remain moderately high. Because the railway would be at grade, existing landscaping and walls that screen residents' views to the corridor would limit their exposure. Residents or travelers with a moderate visual sensitivity would not perceive a change in visual quality for Alternative 4 in the Monterey Highway San Jose Landscape Unit.

At KVP 12, the easing of the curve where the railway corridor joins the Monterey Road corridor would open views into the Lick Quarry. Distant views to the Santa Cruz Mountains would gain some prominence as many existing mature trees lining the railway and Monterey Road would be removed. Trees in the median of the roadway and along the eastern (left) sidewalk would remain, but the tall trees that enclosed the view would be removed. With fewer trees, the dominance of the built environment would increase. The wide highway, billboard, used car lot, and quarry facilities would become more prominent. With the roadside businesses gone and more of the quarry's operations visible, the industrial presence would provide a singular backdrop. Travelers with a moderate visual sensitivity, would not perceive a change in visual quality at KVP 12.

At KVP 13, the railway would be expanded to three tracks to support UPRR and blended HSR/Caltrain operations. The tracks would remain at grade, with OCS added above two of the tracks. The grade crossing would have additional gates and signals added to make it a quad gate crossing. The Santa Cruz Mountains would remain visible in the distance. Existing landscaping and taller trees lining the far side of the railway corridor would remain. None of the existing buildings would change, and the changes to the roadways would be minor. The modifications to the crossing gates and signals in the middleground would blend with the existing infrastructure. The visual quality would remain moderately high. The majority of viewers are residents traveling to and from their homes in the adjacent neighborhoods with a moderately high viewer sensitivity. They would not perceive a changes in visual quality for Alternative 4 at KVP 13.

KVP 14, Figure 3.16-30, illustrates a typical situation along Monterey Road in South San Jose. The existing UPRR/Caltrain railway would be reconfigured to three tracks to support UPRR and blended HSR/Caltrain operations. Some trees would need to be removed from both sides of the railway, but, as seen in KVP 12 (Figure 3.16-28), many would remain. Monterey Road would remain the dominant feature, lined with noise barriers and landscaping that blocks views to and from adjacent homes and defines this as a primary transportation corridor. Security fencing would be added to separate the railway from the highway, partially obscuring views to the railway and OCS from travelers along the highway. Visual quality would remain moderately high at KVP 14. Travelers with a moderate viewer sensitivity would not perceive a change in visual quality.

At KVP 15, the view would be unchanged, as the HSR would run at grade, with no portion of its infrastructure tall enough to be seen rising above the roofs of the homes or trees, resulting in no change to the existing view. This results in no change to the visual quality. Residents with a high viewer sensitivity would not perceive a change in visual quality for Alternative 4 at KVP 15.

CEQA Conclusion

Alternatives 1 and 3 would have a significant impact under CEQA because construction of a viaduct would substantially degrade the established visual character or quality of nearby residential neighborhoods, Monterey Road, and the Keesling's Shade Trees and their surroundings. A viaduct would contrast with the established character of views in residential areas and would alter the existing visual character of residential areas where the elevated HSR infrastructure would be visible over existing noise barriers and landscaping that currently shield residential views of Monterey Road and the UPRR/Caltrain tracks. An enhanced design for the viaduct (AVQ-IAMF#1) would not obscure the dominance of the structure in the landscape. The project actions would reduce the potential impacts on the visual environment and visual quality but not to a less-than-significant level. The viaduct's height would make it visible to residents from their homes, currently shielded from the highway corridor by existing landscaping and noise barriers (KVP 15, Figure 3.16-31). Visual quality in the landscape unit would be reduced from

moderately high to moderate. The majority of viewers would be residents with high viewer sensitivity who would experience impacts from the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA requires mitigation. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Alternative 2 would have no impact under CEQA because the reconstruction of Monterey Road and associated landscaping would improve visual quality from moderately high to high in an area with moderate viewer sensitivity. Landscaping along Monterey Road would be formalized and increased. Grade separations of road, HSR, and UPRR/Caltrain would eliminate visual conflicts at grade crossings. A dedicated multiuse path would allow viewers to focus on the surrounding improved visual environment, rather than traffic conflicts between motorized and nonmotorized users. Because there would be no impacts under Alternative 2, CEQA does not require mitigation.

Alternative 4 would have a less-than-significant impact under CEQA because modifying the UPRR/Caltrain railway to permit blended HSR/Caltrain operations at grade within and adjacent to baseline railway facilities would conform to the existing character of the area and would result in no change to the existing visual quality. Visual quality in the landscape unit would be unchanged, remaining moderately high. The majority of viewers would be travelers with moderate viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation for Alternative 4.

Impact AVQ#7: Permanent Direct Impacts on Visual Quality—Coyote Valley Landscape Unit

The existing visual quality in the Coyote Valley Landscape Unit is moderately high. Residential, recreational, and traveler viewers predominate in the Coyote Valley Landscape Unit, with moderate to high sensitivity to changes in visual quality. Existing and simulated views of Alternatives 1, 2, 3, and 4 at one location illustrate views of travelers with moderately high viewer sensitivity.

Alternatives 1 and 3

Alternatives 1 and 3 would be the same across the Coyote Valley Landscape Unit. The HSR alignment would run on an elevated structure in the median of Monterey Road. The viaduct would rise to heights of more than 60 feet above grade to pass over roads and highways. It would be taller than surrounding buildings and landscape. The scale and position of the viaduct would disrupt the visual character of the agricultural and open space by adding a view of large-scale transportation infrastructure above the landscape unit. Because of its height and location through the middle of the valley, the viaduct would be visible from locations far from the existing highway corridor, affecting residential viewers with high sensitivity and recreational viewers with moderate to high sensitivity. Institutional viewers and industrial viewers with low visual sensitivity, agricultural workers with a moderately low visual sensitivity, and varied travelers with a low to moderately high sensitivity are also present. For travelers on Monterey Road with a moderately high viewer sensitivity, it would block views of the surrounding hills.

Aesthetic guidelines and an aesthetic review process incorporating local design context (AVQ-IAMF#1 and AVQ-IAMF#2) would provide an enhanced design for the elevated HSR structures, but the height of the viaduct would continue to be out of scale with the surrounding buildings and landscape and block views. Travelers with a moderately high viewer sensitivity would experience a decline in visual quality from moderately high to moderate under Alternatives 1 and 3.

Under Alternatives 1 and 3, Monterey Road would be widened to the east to create a median for the columns that support the HSR viaduct (KVP 16, Figure 3.16-32). The Keesling's Shade Trees would remain, separating the UPRR/Caltrain railway from the roadway. They would be visible between the columns that support the viaduct. The viaduct, supported by columns, would visually split the highway in two, and overhang traffic lanes. It would be taller than most adjacent trees and all buildings. The viaduct would dominate the view with its height and materials, contrasting with the rural agricultural setting. The TPSS would introduce an industrial facility to the agricultural setting. The TPSS's perimeter would be designed to obscure views of the equipment (AVQ-IAMF#1) but would still intrude on the agricultural setting.



KVP 16—Existing Conditions



KVP 16—Alternatives 1 and 3 Simulation



KVP 16—Alternative 2 Simulation



KVP 16—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-32 KVP 16 Coyote Valley Landscape Unit—Monterey Road Coyote Valley: Existing and Simulated Views

The height of the viaduct would vary, but it would generally rise approximately 50 feet above the highway and adjacent UPRR/Caltrain railway, introducing a large-scale, narrow, linear form above the wide and flat transportation corridors below. The visual quality would decrease from moderately high to moderately low. The majority of viewers at KVP 14 are travelers. Monterey Road, with lighter traffic, slower speeds, and a more rural setting than the parallel US 101 freeway, provides viewers with a moderately high visual exposure and awareness, resulting in a moderately high viewer sensitivity. When viewed by travelers with a moderately high viewer sensitivity, the decrease in visual quality would result in a degraded effect on visual quality for Alternatives 1 and 3 at KVP 16.

Alternative 2

Alternative 2 would pass through the Coyote Valley Landscape Unit on at-grade tracks adjacent to the UPRR right-of-way in the Monterey Road corridor, requiring the highway to be shifted to the east. The reconstruction would move the roadway closer to the Morgan Hill Charter School, increasing the visual prominence of the roadway. Grade separating all roadways that cross both the UPRR/Caltrain and HSR railways would reduce visual conflicts between railway traffic and roadway traffic, including bicyclists and pedestrians.

Under Alternative 2, Monterey Road would be relocated and reconstructed (KVP 16, Figure 3.16-32). The Keesling's Shade Trees would be removed to accommodate construction of the HSR adjacent to the UPRR right-of-way. Replacement trees would line both sides of the highway. Instead of a concrete median barrier, there would be a median planted with native grasses. Views would be available through the trees to the valley and the Diablo Range. The TPSS would introduce an industrial facility to the agricultural setting. The TPSS's perimeter would be designed to obscure views of the equipment (AVQ-IAMF#1). Reconstruction of Monterey Road would formalize its design and landscaping. The new row of trees to the east side of the highway would reduce views to adjacent land uses, focusing views down the highway corridor. Visual quality would remain moderately high. The majority of viewers at KVP 16 are travelers, many of whom have chosen to utilize Monterey Road to enjoy the lighter traffic, slower speeds, and more rural setting than the parallel US 101 freeway, giving them a moderately high visual exposure and awareness, resulting in a moderately high viewer sensitivity. Travelers with a moderate viewer sensitivity would not experience a change in visual quality under Alternative 2 at KVP 16.

The TPSS would introduce an industrial facility to the agricultural setting. The TPSS's perimeter would be designed to obscure views of the equipment (AVQ-IAMF#1) but would still intrude on the agricultural setting.

Alternative 4

Alternative 4 would expand the existing one- to two-track UPRR/Caltrain railway to three or four tracks to support blended HSR/Caltrain service. The tracks would run at approximately the same elevation as the existing tracks. Most existing at-grade crossings would be renovated to include four-quadrant crossing gates, and a few lightly used crossings would be closed. The addition of at-grade tracks with associated OCS and other rail infrastructure would not block distant views. The track would require the removal of some trees adjacent to the railway. Existing streets and roadways would continue to cross the railway at grade. Views across the railway corridor would still be open, although OCS would be introduced along the railway, mimicking the pattern of the old telegraph and power poles, some of which still follow the railway. No new grade separations would be built, so the appearance of the railway corridor would change only slightly. The visual quality would remain moderately high. Travelers with a moderately high visual sensitivity would not experience a change in visual quality under Alternative 4 in the Coyote Valley Landscape Unit (KVP 16, Figure 3.16-32).

CEQA Conclusion

Alternatives 1 and 3 would have a significant impact under CEQA because the scale, materials, and style of the viaduct would substantially degrade the visual character of Monterey Road, Keesling's Shade Trees, and surrounding agricultural land and open space. An enhanced design for the viaduct (AVQ-IAMF#1) would not obscure the dominance of the structure in the landscape. Project

features would reduce the potential impacts on the visual environment and visual quality, but not to a less-than-significant level. Visual quality in the landscape unit would decrease by two levels (from moderately high to moderately low), and the majority of viewers would be travelers with moderately high viewer sensitivity. No mitigation measures are available to address this impact.

Alternative 2 would have a less-than-significant impact under CEQA because the introduction of HSR infrastructure would not substantially degrade the existing visual environment and visual quality of the Coyote Valley Landscape Unit. Formalizing and enhancing the landscaping along Monterey Road would improve the visual environment around Monterey Road. Grade separations of the road, HSR, and UPRR/Caltrain would eliminate visual conflicts at grade crossings. A dedicated multiuse path would allow viewers to focus on the surrounding improved visual environment, rather than on traffic conflicts between motorized and nonmotorized users. Visual quality in the landscape unit would be unchanged and remain moderately high. The majority of viewers would be travelers with moderately high viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 4 would have a less-than-significant impact under CEQA because modifying the UPRR/Caltrain railway to permit blended HSR/Caltrain operations at grade within and adjacent to the railway facilities would conform to the existing character of the area and would result in no change to the existing visual quality. Visual quality in the landscape unit would be unchanged and remain moderately high. The majority of viewers would be travelers with moderately high viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Impact AVQ#8: Permanent Direct Impacts on Visual Quality—US 101 Landscape Unit

Alternatives 2 and 4 would not pass through this landscape unit and would therefore have no impacts on visual quality. The existing visual quality in the US 101 Landscape Unit is moderate. Existing and simulated views of Alternatives 1 and 3 at two locations illustrate views from moderately sensitive travelers and from highly sensitive residential viewers. Travelers along US 101 are the primary viewer group, with residential viewers present in less than 5 percent of the Landscape Unit.

Alternative 1

Alternative 1 would traverse the US 101 Landscape Unit for 4.7 miles on an aerial structure beginning just north of Morgan Hill. The alignment would be on aerial structure across level terrain along the west side of US 101 between Burnett Avenue to just south of Tennant Avenue. Development along the freeway is generally suburban, with highway commercial development at interchanges and some commercial office and residential development separated by remaining agricultural uses. Travelers on US 101 are the primary viewer group and would be exposed to views of the aerial structure throughout the landscape unit. Because the aerial structure would parallel the freeway for nearly 5 miles, and there are views to the surrounding hills, peaks, and passing commercial and agricultural areas, travelers on US 101 have a moderate viewer sensitivity.

The viaduct would be visible from distant recreation facilities—the Coyote Creek Trail, Anderson Lake County Park, Morgan Hill Outdoor Sports Center, and the Morgan Hill Aquatics Center—thereby affecting the viewshed of recreationists. While recreationists can be highly sensitive viewers, the distance from which they would be viewing the viaduct would reduce the prominence of the structure in the viewshed, limiting their exposure and any impacts on visual quality.

The aerial structure would rise to heights of more than 60 feet above grade to pass over roads and interchanges and would be taller than surrounding homes, offices, and other buildings in the area. South of Tennant Avenue, the alignment would leave the freeway corridor bisecting residential and agricultural land and crossing over the mature orchards, as the dominant form in the area. The project would implement approaches to integrate HSR within a community, including soliciting input from local jurisdictions and incorporating local aesthetic preferences into final design and construction (AVQ-IAMF#1 and AVQ-IAMF#2). These project features would minimize visual impacts of HSR infrastructure, including aerial structures. In areas where

Alternative 1 would require the relocation of residences or other structures, the land opened up by the HSR viaduct would be revegetated to reintroduce landscaping (LU-IAMF#3). While the project features would reduce impacts, they would not replace views lost to HSR construction or obscure large-scale HSR facilities in a flat environment.

Travelers with a moderate viewer sensitivity would experience a decline in visual quality from moderate to moderately low visual quality in the US 101 Landscape Unit.

Alternative 1 would traverse a residential neighborhood west of US 101 between the East Main Street overcrossing and East Dunne Avenue interchange, passing immediately adjacent to homes for about 0.5 mile. The height, length, and concrete construction of the aerial structure would contrast with the scale and materials of the existing residential structures as illustrated on Figure 3.16-33, KVP 17, at Walnut Grove Drive in Morgan Hill. The aerial structure would remove half a block of homes and landscaping from the streetscape, affecting highly sensitive residential viewers and diminishing the residential character of the view, reducing the visual quality at KVP 17 from moderate to low. During project design, the Authority's aesthetic guidelines and aesthetic review process would minimize the aesthetic and visual impacts of the TPSS and other HSR infrastructure by increasing the compatibility of the HSR infrastructure within an existing, specific local design context (AVQ-IAMF#1). However, the change in visual quality at this KVP is not typical of the changes to the visual quality for the US 101 Landscape Unit because residential views are present in less than 5 percent of the landscape unit, while views from travelers along US 101 are present throughout the Landscape Unit.

Figure 3.16-34 (KVP 18), is more typical of the character of the landscape unit. It illustrates a view toward the freeway from travelers on East Dunne Avenue. The aerial viaduct would partially block travelers' views toward the surrounding hills. The dominance of the aerial structure would also affect travelers' views of the highway commercial uses along US 101, obscuring buildings and signage. Travelers with a moderate viewer sensitivity would experience a decline in visual quality from moderately high to moderately low under Alternative 1 at KVP 18.

Alternative 3

Alternative 3 would be the same as Alternative 1 along US 101 to the east of Morgan Hill, with the same impacts on visual quality. South of San Martin, Alternative 3 would turn east and enter the US 101 Landscape Unit again for about one mile between Masten Avenue and Buena Vista Avenue. At this location, Alternative 1 would be part of the Morgan Hill-San Martin Landscape Unit. The vertical alignment for this portion of Alternative 3 in the US 101 Landscape Unit would include portions of retained fill and elevated structure. Where the HSR would be aerial, such as the crossing of US 101 south of Masten Avenue, the elevated structure would vary in height up to 40 feet above existing grade. This would block views from within the landscape unit to the surrounding hills and make the HSR infrastructure visible from throughout the landscape unit, resulting in similar impacts on visual quality as the northern portion of the landscape unit, reducing visual quality from moderate to moderately low. Travelers on US 101, with moderate viewer sensitivity, are the primary viewers in the landscape unit. Because Alternative 3 would traverse the US 101 Landscape Unit for the greatest length, about 5.7 miles, it has the greatest exposure of all alternatives, resulting in the greatest impact of the project alternatives.



KVP 17—Existing Conditions and Alternatives 2 and 4



KVP 17—Alternatives 1 and 3 Simulation

FEBRUARY 2018

Figure 3.16-33 KVP 17 US 101 Landscape Unit—Walnut Grove: Existing and Simulated Views



KVP 18—Existing Conditions and Alternatives 2 and 4



KVP 18—Alternatives 1 and 3 Simulation

FEBRUARY 2018

Figure 3.16-34 KVP 18 US 101 Landscape Unit—East Dunne Avenue: Existing and Simulated Views

CEQA Conclusion

For Alternatives 1 and 3, the impact under CEQA would be less than significant because the introduction of aerial infrastructure would not substantially degrade the existing visual quality in the US 101 Landscape Unit. Although visual quality would decrease by one level (from moderate to moderately low), the majority of viewers would be travelers with moderate viewer sensitivity who would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Impact AVQ#9: Permanent Direct Impacts on Visual Quality—Morgan Hill–San Martin Landscape Unit

The existing visual quality in the Morgan Hill–San Martin Landscape Unit is moderate. No one viewer group dominates this landscape unit; overall viewer sensitivity is moderate. Existing and simulated views of Alternatives 1 and 3 at one location, and Alternatives 2 and 4 at three locations, illustrate views for travelers, retail, and other viewers with overall moderate sensitivity.

Alternative 1

Alternative 1 would enter the Morgan Hill–San Martin Landscape Unit just north of San Martin, passing from the US 101 corridor to the Monterey Road/UPRR corridor between Tennant Avenue and California Avenue on a viaduct. The alignment would cross agricultural land dotted with residences on an aerial structure as it travels from US 101 to meet the UPRR/Caltrain railway at Llagas Creek. Running adjacent to the east side of the UPRR/Caltrain railway, the alignment would remain on an elevated structure through San Martin. South of San Martin, the alignment would continue on an aerial structure adjacent to the east side of the UPRR railway toward Gilroy. The scale and materials of the elevated structure would contrast with the visual character of the agricultural land, Llagas Creek, and the community of San Martin.

No viewer group predominates in the landscape unit. Most homes are visually shielded from the project corridor by landscaping, noise barriers, or orchards, with residential viewers having a moderately low sensitivity where shielded, and moderately high to high sensitivity where they have a clear view. Travelers have moderate sensitivity. Viewers with a moderate viewer sensitivity would experience a decline in visual quality from moderate to moderately low under Alternative 1 in the Morgan Hill–San Martin Landscape Unit.

Alternative 1 would not pass through KVPs 19 or 20. At KVP 21, Figure 3.16-37, HSR would run through San Martin on an aerial structure while the UPRR/Caltrain railway remains at grade. The aerial would be high enough to allow views to the western foothills. The aerial structure's materials and form would appear industrial and utilitarian but would not clash with the form or materials of the building on the north side of the street. The HSR crossing would frame the view down San Martin Avenue. The Authority would incorporate local design elements in landscaping and design embellishments to improve the aesthetic appeal of the HSR infrastructure (AVQ-IAMF#1), allowing the crossing to act as a gateway structure into San Martin's commercial district. The visual quality would remain moderately low. Viewers would not perceive a change in visual quality under Alternative 1 at KVP 21.

Alternative 2

Alternative 2 would utilize new at-grade HSR tracks that would be located between the UPRR/Caltrain railway and a relocated Monterey Road north of Cochrane Road. South of Cochrane Road to East San Martin Avenue, the HSR would be located on the east side of the UPRR right-of-way. Grade separations would carry intersecting roads over or under both railways. The fill for the approaches where grade separations would pass over the HSR and UPRR would block views from adjacent property. The grade separations would be visually similar to the grade separations along US 101 or where Butterfield Boulevard crosses the UPRR south of downtown Morgan Hill. The addition of at-grade tracks with associated OCS and other rail infrastructure would not block distant views, but the scale and size of roadway overcrossings would dominate and block some views. It would require the removal of the Keesling's Shade Trees north of Cochrane Road, but as part of the reconstruction of Monterey Road, landscaping in the rail/highway corridor would increase. South of Cochrane Road, Alternative 2 would be at grade adjacent to the east side of the UPRR/Caltrain railway through Morgan Hill and San Martin. The addition of HSR to the east of the UPRR right-of-way would expand the rail corridor into some natural areas, requiring the removal of some trees.

In addition to the viewer groups described for Alternatives 1 and 3, Alternative 2 also includes retail and other viewers in Morgan Hill and San Martin. Retail viewers are primarily found in downtown Morgan Hill, near the Caltrain Station. Overall visual sensitivity for the landscape unit is moderate. The addition of the HSR adjacent to the existing UPRR/Caltrain railway would reduce visual quality in the landscape unit from moderate to moderately low. Viewers with a moderate viewer sensitivity would experience a decline in visual quality from moderate to moderately low under Alternative 2 in the Morgan Hill-San Martin Landscape Unit.

Figure 3.16-35, KVP 19, illustrates a view of Alternative 2 along Monterey Road in northern Morgan Hill. All of the Keesling's Shade Trees have been removed for the HSR. The embankment for the HSR blocks views to the west, including views towards El Toro Peak. Replacement street trees along the east side of the highway provide a green band to balance the austerity of the HSR infrastructure immediately against the southbound highway and the removal of all of the Keesling's Shade Trees. The Authority would incorporate local design elements in landscaping and design embellishments to improve the aesthetic appeal of the HSR infrastructure (AVQ-IAMF#1). The removal of the buildings lining the roadway allow for the provision of a uniform edge along the roadway. The trees and sidewalk/path extend the character of Monterey Road in the rural Coyote Valley into this view. The rural environment is reinforced by the clear view to the water tower, an icon of agricultural towns, but the expansion of railway facilities in the view, with no landscaped separation from the highway, creates a contrasting industrial aesthetic, due to the concrete and steel of the HSR infrastructure. Visual quality increases to moderate. Travelers with a moderate viewer sensitivity would experience an increase in visual quality from moderately low to moderate under Alternative 2 at KVP 19.



KVP 19—Existing Conditions and Alternatives 1 and 3



KVP 19—Alternative 2 Simulation



KVP 19—Alternative 4 Simulation

FEBRUARY 2018

**Figure 3.16-35 KVP 19 Morgan Hill–San Martin Landscape Unit—
Pebbles Avenue: Existing and Simulated Views**

Figure 3.16-36, KVP 20, illustrates a simulation of Alternative 2 through Morgan Hill. In the image, both the UPRR/Caltrain and high-speed railways would be elevated on a low retained berm. The Authority would incorporate local design elements in landscaping and design embellishments to improve the aesthetic appeal of the HSR infrastructure (AVQ-IAMF#1). The view across the tracks would be blocked by the retaining wall, limiting views of the trees on the far side of the railway corridor, but still allowing distant views to the Diablo Range. Vines would climb the retaining wall, slightly softening its appearance. Retail viewers walking around the downtown with a moderately high viewer sensitivity would experience a decline in visual quality from moderately high to moderate under Alternative 2 at KVP 20.

At KVP 21, Figure 3.16-37, Alternative 2 would place the HSR at grade adjacent to the east side of the UPRR/Caltrain railway through San Martin. Aesthetic guidelines (AVQ-IAMF#1) would allow for the placement of a clear noise barrier in this location to allow views across the tracks, but the view would be blocked by passing trains, as seen in the simulation. As the trains would pass the location at high speeds, the blocking of the view would be for only a short period of time. Passing Caltrain or UPRR freights already pass the site, and they do so for longer periods of time. Caltrain passes very slowly, as the San Martin Station is just to the north of the crossing. Freight trains are longer than passenger trains, so traveling at a moderate speed, they block the view for a longer time. Design embellishments to the streetscape along the HSR in accordance with the Authority's aesthetic guidelines would improve the aesthetic appeal of the HSR infrastructure (AVQ-IAMF#1), providing additional landscaping for the area. The visual quality would remain moderately low. Viewers would not perceive a change in visual quality under Alternative 2 at KVP 21.

Alternative 3

Alternative 3 would be the same as Alternative 1 through San Martin, with the same impacts on visual quality. South of San Martin, it would turn east toward the US 101 freeway and the Masten Avenue interchange. It would cross agricultural land dotted with residences on an aerial structure. The aerial structure would contrast in scale and materials with the agricultural fields. The aerial structure would be taller than adjacent residences and businesses, including the NRHP-listed San Martin Winery, dominating their scale with its height. No viewer group predominates in the landscape unit, so viewer sensitivity is moderate. As with Alternative 1, viewers with a moderate viewer sensitivity would experience a decline in visual quality from moderate to moderately low under Alternative 3 in the Morgan Hill–San Martin Landscape Unit.

Alternative 4

Alternative 4 would expand the existing one- to two-track UPRR/Caltrain railway to three tracks to support blended HSR/Caltrain service. The tracks would run at approximately the same elevation as the existing tracks, with some slight variations to improve the vertical alignment. Existing at-grade crossings would be renovated to include four-quadrant crossing gates. The addition of at-grade tracks with associated OCS and other rail infrastructure would not block distant views. The track would require the removal of some trees adjacent to the railway. Existing streets and roadways would continue to cross the railway at grade. Views across the railway corridor would still be open, although OCS would be introduced along the railway, mimicking the pattern of the old telegraph and power poles, some of which still follow the railway. No new grade separations would be built, nor would the railway's elevation increase more than 5 feet near the Llagas Creek crossing, so the appearance of the railway corridor would change only slightly. The Morgan Hill and San Martin Caltrain stations would be rebuilt with new platforms and pedestrian grade separations. The visual quality would increase to moderately high. No viewer group predominates in the landscape unit, so viewer sensitivity is moderate. Viewers with a moderate visual sensitivity would experience an increase in visual quality from moderate to moderately high under Alternative 4 in the Morgan Hill–San Martin Landscape Unit.



KVP 20—Existing Conditions and Alternatives 1 and 3



KVP 20—Alternative 2 Simulation



KVP 20—Alternative 4 Simulation

FEBRUARY 2018

**Figure 3.16-36 KVP 20 Morgan Hill–San Martin Landscape Unit—
Caltrain Morgan Hill Station: Existing and Simulated Views**



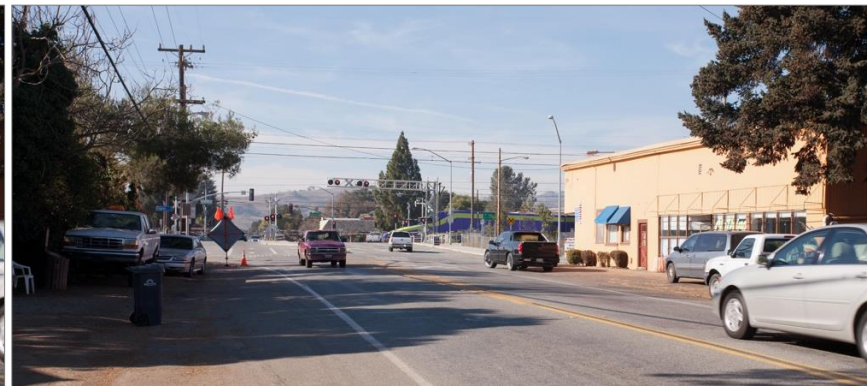
KVP 21—Existing Condition



KVP 21—Alternatives 1 and 3 Simulation



KVP 21—Alternative 2 Simulation



KVP 21—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-37 KVP 21 Morgan Hill San Martin Landscape Unit—San Martin: Existing and Simulated Views

KVP 19, Figure 3.16-35, illustrates a typical view of Alternative 4 along Monterey Road in northern Morgan Hill. Very little would change in this view, with the railway configured to support UPRR and blended HSR/Caltrain operations. The Keesling's Shade Trees would remain, separating the roadway from the rails. A tall fence would be visible but would not obscure views across the railway. The repeating elements of the fence posts would mask the poles of the OCS. All buildings would remain, and there would be no changes to Monterey Road. The expansion of the railway to three tracks would not be evident. Visual quality would remain moderately low. Travelers with a moderate viewer sensitivity would not perceive a change in visual quality under Alternative 4 at KVP 19.

KVP 20, Figure 3.16-36, illustrates the expansion of the Morgan Hill Caltrain Station to accommodate expansion of the existing railway to support UPRR and blended HSR/Caltrain service. A third track for UPRR would be added to the east side of the railway. In the view, the existing trees in both the station parking areas and the mature oaks would remain, along with distant views to the Diablo Range. The sight of a passing HSR train would reinforce the presence of the station facility, but the new platforms to serve Caltrain passengers and pedestrian undercrossing to provide access across the blended railway and UPRR would not stand out in this view, as the platforms would be at grade. The parking area for the station would remain, with a new fence to enclose the railway tracks. Overall visual quality would be unchanged, remaining moderately high. Retail viewers walking around the downtown with moderately high viewer sensitivity would not perceive a change in visual quality under Alternative 4 at KVP 20.

In San Martin at KVP 21, Figure 3.16-37, the installation of four-quadrant gates and an expanded median barrier would constitute the change at the San Martin Avenue grade crossing in San Martin. No changes would be evident to the trees, landscaping, or buildings. The upgraded crossing would be slightly more prominent in the view, with the additional gates reinforcing the intersecting railway. Visual quality would remain moderately low. Viewers would not perceive a change in visual quality under Alternative 4 at KVP 21.

CEQA Conclusion

Alternatives 1 and 3 would have a less-than-significant impact under CEQA because the decrease in visual quality from moderate to moderately low would be predominantly viewed by viewers with a moderate viewer sensitivity. Although Alternatives 1 and 3 would follow different alignments south of San Martin, the deviation would not produce any disparate impacts. The introduction of aerial infrastructure would not substantially degrade the existing visual environment and visual quality in the Morgan Hill–San Martin Landscape Unit. Although visual quality would decrease by one level (from moderate to moderately low), the majority of viewers would be travelers with moderate viewer sensitivity who would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 2 would have a less-than-significant impact under CEQA because the introduction of HSR infrastructure would not substantially degrade the existing the visual environment and visual quality in the Morgan Hill–San Martin Landscape Unit. Although visual quality would decrease by one level (from moderate to moderately low), the majority of viewers would be viewers with moderate viewer sensitivity who would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 4 would have a less-than-significant impact under CEQA because modifying the UPRR/Caltrain railway to support blended HSR/Caltrain operations at grade within and adjacent to baseline railway facilities would conform to the existing character of the area and would result in no change to the existing visual quality, with no effect on any viewer. Therefore, CEQA does not require mitigation.

Impact AVQ#10: Permanent Direct Impacts on Visual Quality—Downtown Gilroy Landscape Unit

The existing visual quality in the Downtown Gilroy Landscape Unit is moderate to moderately high. No one viewer group dominates this landscape unit; overall viewer sensitivity is moderately

low. Alternative 3 would not pass through this landscape unit and is therefore not discussed further. Existing and simulated views of Alternatives 1, 2, and 4 at three locations illustrate travelers' views with moderately high sensitivity (one location) and residential viewers with moderately high sensitivity (two locations).

Alternative 1

Alternative 1 would pass through the landscape unit from San Martin to Gilroy on an aerial structure, transitioning to grade to pass beneath US 101 at the UPRR overhead. South of the freeway, the alignment would transition into a trench to travel under an existing UPRR industrial spur track, returning to grade near Carnadero Avenue. The elevated structure would rise to heights of more than 50 feet above grade to pass over roads. It would be taller than surrounding homes, offices, and other buildings, partially blocking views of the surrounding hills. No one viewer group predominates in the landscape unit, with residential, retail, industrial, institutional, and travelers present. Along the rail corridor, industrial viewers predominate. Their viewer sensitivity is moderately low.

The aerial four-track approach to the Downtown Gilroy Station would partially block a distant view to the Santa Cruz Mountains, while permitting another glimpse because of the removal of buildings under the viaduct (KVP 22, Figure 3.16-38). Because of its height, the elevated structure would be visible from surrounding neighborhoods. HSR infrastructure would introduce permanent changes to the aesthetic and visual quality of existing commercial and residential views that would contrast with residential and commercial settings. Elevated HSR structures, lines of overhead catenary system, and viaducts would impart an industrial aesthetic to the landscape and would dominate the scale of adjacent residential, commercial, and historic structures, such as the NRHP-listed Gilroy City Hall. Aesthetic guidelines and an aesthetic review process incorporating local design context (AVQ-IAMF#1 and AVQ-IAMF#2) would provide an enhanced design for the viaduct and spaces beneath it, but the wide, aerial structure and associated OCS poles and wires would rise above the surrounding buildings, blocking views to the historic City Hall building, creating a visual barrier. The railway corridor, once hidden from view, would be clearly seen. Visual quality would drop from moderately high to moderate. Residents with a moderately high viewer sensitivity would experience a decline in visual quality from moderately high to moderate under Alternative 1 at KVP 22.

At KVP 23, Figure 3.16-39, the UPRR/Caltrain railway would be at-grade behind the historic depot, while a new elevated HSR station would be built just to the east of the UPRR/and Caltrain facilities. A new HSR station entry building would be built to the south of the existing train station. Existing landscaping would remain around the historic depot, but an enlarged plaza south of the building would remove other mature trees. The new HSR station building would be much taller than the historic depot and modern in style, with glass and steel as its primary materials. This would produce a visual contrast with the historic depot, clearly defining the two buildings, but the scale of the HSR building would reduce the prominence of the historic depot. The elevated HSR platforms and canopy would tower above the station and be the tallest structure in downtown Gilroy. The HSR facilities would overwhelm the existing station building in scale. Overall visual quality would decline from high to moderately high. Travelers with a moderate viewer sensitivity would experience a decline in visual quality from high to moderately high under Alternative 1 at KVP 23.

KVP 24, Figure 3.16-40, illustrates the view west along East Eighth Street towards the UPRR/Caltrain railway. The elevated HSR station for Alternative 1 would block most of the view to the Carlyle Hills, replacing a natural vista with a humanmade one. None of the existing trees or landscaping in foreground would be removed. The height of the HSR facilities and the concrete, steel, and glass construction would contrast with the small homes and wooden construction of the residential area, increasing the intrusion of non-residential structures into the view. The station facilities would clearly mark the railway corridor by their size and prominent location at the end of the street. Visual quality at KVP 24 would decline from moderately low to low. Residential viewers with a moderately high viewer sensitivity would experience a decline in visual quality from moderately high to moderate under Alternative 1.



KVP 22—Existing Conditions and Alternative 3



KVP 22—Alternative 1 Simulation



KVP 22—Alternative 2 Simulation



KVP 22—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-38 KVP 22 Downtown Gilroy Landscape Unit—East 6th Street: Existing and Simulated Views



KVP 23—Existing Conditions and Alternative 3



KVP 23—Alternative 1 Simulation



KVP 23—Alternative 2 Simulation



KVP 23—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-39 KVP 23 Downtown Gilroy Landscape Unit—Caltrain Gilroy Station: Existing and Simulated Views



KVP 24—Existing Conditions and Alternative 3



KVP 24—Alternative 1 Simulation



KVP 24—Alternative 2 Simulation



KVP 24—Alternative 4 Simulation

FEBRUARY 2018

Figure 3.16-40 KVP 24 Downtown Gilroy Landscape Unit—East 8th Street: Existing and Simulated Views

Alternative 2

Under Alternative 2, HSR and UPRR/Caltrain would rise on an embankment to pass through Gilroy, including the Gilroy Caltrain Station, following the same horizontal alignment as Alternative 1 and affecting the same viewer groups. It would follow the same horizontal alignment as Alternative 1. The retained embankment through downtown Gilroy would rise 20 feet above grade. It would be about the same height as surrounding homes, offices, and other buildings, partially blocking views of the surrounding hills. HSR infrastructure would introduce permanent changes to the aesthetic and visual quality of existing commercial and residential views by creating a solid wall where the railways pass through the city. Where cross streets pass under the HSR and UPRR/Caltrain railways, adjacent buildings would be removed, creating gaps in the downtown urban fabric and adjacent residential areas.

As the embankment would be approximately the same height as the surrounding buildings, its scale would not contrast with the existing environment. However, the HSR infrastructure, including the overhead catenary system, noise barriers, and overcrossings and viaducts would impart an industrial aesthetic to the landscape and would contrast with the design of adjacent residential, commercial, and historic structures. The height and length of the elevated HSR platforms would visually dominate the historic Gilroy Caltrain Station. The project (AVQ-IAMF#1 and AVQ-IAMF#2) would solicit input from local jurisdictions and incorporate local aesthetic preferences into final design and construction, but these measures would not replace views lost to HSR construction or reduce the visual contrast of HSR facilities relative to their surroundings. The visual quality would decline from moderate to moderately low.

The combined UPRR/Caltrain and HSR embankment approach to the Downtown Gilroy Station would cross Sixth Street. Most trees, landscaping, and buildings in the area would be removed to allow Sixth Street to drop down to pass under the railways (KVP 22, Figure 3.16-38). While this would open a distant view to the Santa Cruz Mountains and Carlyle Hills West, mature trees around the grade separation would be removed. The depression of the street would add retaining walls and a more industrial look to the view, contrasting with the residential setting and forming a strong visual separation from downtown. Aesthetic guidelines and an aesthetic review process incorporating local design context (AVQ-IAMF#1 and 2) would provide an enhanced design for the HSR crossing and walls, but the removal of nearby buildings and replacement with open space would create a hole in the neighborhood. Visual quality would decrease from moderate to moderately low. Residents with a moderately high viewer sensitivity would experience a decline in visual quality from moderate to moderately low under Alternative 2 at KVP 22.

Both the UPRR/Caltrain and HSR railways would be on a retained embankment behind the Gilroy Station building (KVP 23, Figure 3.16-39). A new HSR station entry building would be built to the south of the existing train station. Existing landscaping would remain around the historic depot, but an enlarged plaza south of the building would remove other mature trees. The new HSR station building would be much taller than the historic depot and modern in style, with glass and steel as its primary materials. This would produce a visual contrast with the historic depot, clearly defining the two buildings, but the scale of the HSR building and new backdrop of a retaining wall would reduce the prominence of the historic depot. The new building's form and function would eclipse the old one. Visual quality would decline from high to moderately high. Travelers with a moderate viewer sensitivity would experience a decline in visual quality from high to moderately high under Alternative 2 at KVP 23.

The HSR station for Alternative 2 on an elevated berm would yield the same degradation as Alternative 1 (KVP 24, Figure 3.16-40). The HSR station would block less of the view to the Carlyle Hills. Again, none of the existing trees or landscaping in the foreground would be removed. The height of the HSR facilities, although not as high as in Alternative 1, would still be out of scale with the neighborhood. The concrete, steel, and glass construction would contrast with the small homes and wooden construction of the residential area, increasing the intrusion of non-residential structures into the view. The station facilities would clearly mark the railway corridor by their size and prominent location at the end of the street. Visual quality at KVP 24 would decrease from

moderately low to low. Residential viewers with a moderately high viewer sensitivity would experience a decline in visual quality from moderately low to low under Alternative 2.

Alternative 4

Alternative 4 would expand the existing UPRR/Caltrain railway to provide three tracks southbound into the Downtown Gilroy Station, all at grade. South of the station, a pair of tracks would be provided for the UPRR and a pair for HSR. North of the station, the existing right-of-way would be expanded to the east, encroaching on some industrial areas and requiring removal of industrial buildings near the Leavesley Road grade crossing and between Lewis Street and East 6th Street. South of the station, the right-of-way would be expanded to the west, requiring the removal of an industrial building near the East Luchessa Avenue grade crossing.

Through downtown Gilroy, landscaping would be provided to screen the railway from adjacent viewers. The removal of two blocks of industrial buildings north of the station would disrupt the existing urban fabric, but the remaining property could support the City's plans to expand residential uses in the area, as outlined in the *Gilroy High-Speed Train Station Visioning Project Vision Report* (City of Gilroy 2012). Aesthetic guidelines and an aesthetic review process incorporating local design context (AVQ-IAMF#1 and AVQ-IAMF#2) would provide enhanced design for landscaping and other HSR infrastructure, but the widening of the at-grade railway corridor from one to three tracks would form a wide visual divide across the eastern edge of downtown. The visual quality would remain moderate. Viewers would not perceive a change in visual quality for Alternative 4 in the Downtown Gilroy Landscape Unit.

Figure 3.16-38 (KVP 22) illustrates the combined UPRR and blended Caltrain/HSR railway where it crosses East 6th Street in downtown Gilroy. There would be few changes to this view. The street trees obscure the expanded rail corridor, and the elimination of one building on the north side of the street just east of the tracks would barely be evident. With the railway remaining at grade, views of downtown and City Hall would remain. Other buildings that would remain visible, modest in scale and design, are neat and orderly. The widened rail corridor would be barely visible, except for the additional gantry for the quad-gate crossing and the faint trace of the OCS. The visual quality would remain moderately high. Residents with a moderately high viewer sensitivity would perceive no change in visual quality at KVP 22 under Alternative 4.

At KVP 23 (Figure 3.16-39), the rail facilities at the Downtown Gilroy Station would be at grade, with blended Caltrain/HSR tracks closest to the Gilroy Station building. A new HSR station entry building would be built south of the existing train station. Existing landscaping would remain around the historic depot, but rebuilt platforms for HSR trains would entail removal of mature trees closest to the railway tracks. The new HSR station building would be of modern design and much taller than the historic depot, with glass and steel as its primary materials, producing a visual contrast with the historic depot. The distance between the old and new buildings would allow the historic depot to maintain a prominence of its own. The scale of the HSR station would reduce the prominence of the historic depot. The rail facilities, while updated for HSR, would be visible passing behind the depot building in much the same location as existing tracks. Visual quality would decline from high to moderately high. Travelers with moderate sensitivity would experience a decline in visual quality from high to moderately high under Alternative 4 at KVP 23.

At KVP 24 (Figure 3.16-40), the long views to the Carlyle Hills would largely remain, although the new east entrance to the HSR station at the end of East 8th Street would be prominent in the view. All existing landscaping and trees in the foreground would remain untouched, obscuring many of the homes and buildings in the view. The new station facilities would fill the view at the end of the street, replacing views across the open field to the Caltrain storage tracks. The progression from residential to industrial to railway would remain, but the railway would be represented by a new glass and steel entry pavilion. The at-grade platforms would be about the same height as existing buildings in the area and would not block views across the tracks much more than trains that were previously stored on the tracks in the area. Visual quality at KVP 24 would increase to moderate. Residential viewers with moderately high sensitivity would experience an increase in visual quality from moderately low to moderate under Alternative 4.

CEQA Conclusion

Alternative 1 would have a less-than-significant impact under CEQA because the introduction of HSR infrastructure would not substantially degrade the existing visual environment and visual quality in the Downtown Gilroy Landscape Unit. Although visual quality would decrease by one level (from moderate to moderately low), most viewers would have moderately low sensitivity and would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 2 would have a less-than-significant impact under CEQA because the introduction of HSR infrastructure would not substantially degrade the existing the visual environment and visual quality in the Downtown Gilroy Landscape Unit. Although visual quality would decrease by one level (from moderate to moderately low), most viewers would have moderately low sensitivity and would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 4 would have a less-than-significant impact under CEQA because the introduction of HSR infrastructure would not substantially degrade the existing visual environment and visual quality in the Downtown Gilroy Landscape Unit. Visual quality would remain moderate. With no change to existing visual quality of the site or its surroundings, CEQA does not require mitigation.

Impact AVQ#11: Permanent Direct Impacts on Visual Quality—Pajaro—San Felipe Landscape Unit

The existing visual quality is moderately high and overall viewer sensitivity in the Pajaro—San Felipe Landscape Unit is moderate. Existing and simulated views of Alternatives 1, 2, and 4 at one location illustrate views from moderately sensitive travelers. Existing and simulated views of Alternative 3 at three locations illustrate views from moderately sensitive travelers and residential viewers with moderately high sensitivity.

Alternatives 1 and 2 would be the same in this landscape unit. They would run at grade from the Downtown Gilroy Landscape Unit, arcing east across the landscape unit to the Pacheco Pass Landscape Unit near Casa de Fruta. Alternative 3 would run at grade from the US 101 Landscape Unit, passing east of Gilroy and through Old Gilroy before arcing east to the Pacheco Pass Landscape Unit near Casa de Fruta. An HSR station would be included east of Gilroy near Leavesley Road. Alternative 4 would be similar to Alternatives 1 and 2, with slight differences in alignment north of the MOWF.

Alternative 1

The alignment would leave Gilroy at grade adjacent to the east side of the UPRR right-of-way, turning away from the UPRR Hollister Branch near Carnadero Road. The South Gilroy MOWF would be located on the east side of the HSR between Carnadero Avenue and Bloomfield Road. The site is mostly agricultural with low row crops, but also includes a large nursery complex with greenhouses and orchards, two large lot residences, and a grouping of agricultural buildings.

The South Gilroy MOWF would consist of long rail sidings to store maintenance trains. Support buildings would include spaces for offices and training, technical and mechanical uses, warehousing, and maintenance. Some maintenance materials, such as rails and ballast, would be stored outside. The site would extend for approximately 1 mile along the HSR alignment, with a maximum width of approximately 900 feet. The MOWF would introduce a large industrial use into an agricultural area. Bloomfield Avenue would cross over the MOWF on a long viaduct.

South of the MOWF, the alignment would transition to a long viaduct over the Pajaro River, the Soap Lake floodplain, and Frazier Lake Road before reaching an embankment to cross the Calaveras fault zone. The alignment would follow another series of viaducts and embankments across Pacheco Creek, Lovers Lane, San Felipe Road, and SR 152, before entering Tunnel 1 into the Pacheco Creek Valley. Both embankments and viaducts would limit some distant views for travelers on the intersecting roads as they approach the HSR. The viaducts would be visible from great distances across the flat farmland and floodplain, introducing views of large-scale transportation infrastructure into a rural and agricultural environment. The berm and viaduct would rise above the flat valley floor, creating a linear feature across the landscape, rising as it approaches the eastern side of the valley. This new feature would extend an artificial ridgeline across the valley, topped with a row of OCS poles. The sides of the embankment would be vegetated with grasses and other flora from the surrounding environment, blending with the texture and colors of the existing hillsides, although the form of the berm would be geometric and therefore artificial. The length of the embankment would visually intrude on the flat valley landscape.

The project includes aesthetic guidelines and establishing landscaping along HSR embankments and at the MOWF to soften and obscure HSR infrastructure (AVQ-IAMF#1). These features would minimize impacts on visual quality by integrating HSR infrastructure into the surrounding visual environment. Moderately sensitive travelers would experience a decline in visual quality from moderately high to moderate under Alternative 1 in the Pajaro-San Felipe Landscape Unit.

Alternative 1 would not pass KVPs 25 or 26, resulting in no effect on visual quality.

Figure 3.16-43 (KVP 27) illustrates a simulation of Alternative 1 where it would pass south of San Felipe, approximately 1,425 feet from the viewpoint. The berm would be covered with grasses the same color as the distant hills. Its height and shape would read as an extension of the descending hills, although the form of the berm would be geometric and therefore artificial. The HSR alignment would cut into the hillside, removing some of the oaks. The addition of the HSR alignment through the vineyard and hillside, with its line of OCS poles, would impose a new line of infrastructure across the rural agricultural landscape, contrasting with both the scale of development and land uses in the area. Visual quality would decrease to moderate. Travelers with moderate sensitivity would experience a decline in visual quality from high to moderate under Alternative 1 at KVP 27.

Alternative 2

Alternative 2 would be the same as Alternative 1 in the Pajaro-San Felipe Landscape Unit, with the same effects on visual quality.

Alternative 3

Alternative 3 would pass at grade to the east of Gilroy, where the East Gilroy Station would be built just north of Leavesley Road. It would then run through the community of Old Gilroy, where the East Gilroy MOWF would be built, before turning east toward San Felipe, meeting Alternatives 1, 2, and 4 just south of San Felipe Road and before entering Tunnel 1 into the Pacheco Creek Valley. A single-track, parallel railway spur from the UPRR mainline north of Gilroy would follow the west side of the HSR tracks as far as the East Gilroy MOWF.

The HSR and spur track would enter the landscape unit after passing over US 101 on a long, three-track viaduct, ending just south of Buena Vista Avenue. Transitioning to run at grade, the HSR and spur track would run east of Gilroy across flat farmland with scattered residences. Los Animas Avenue would be grade separated over the railway.

As illustrated on Figure 3.16-41 (KVP 25), the East Gilroy Station would be located at grade between Los Animas Avenue and Leavesley Road. The station would consist of two entry pavilions on the east and west sides of the tracks, opening onto large parking lots. Passengers would pass beneath the HSR and spur track from the pavilions before ascending to the HSR station platforms. The station and associated facilities would introduce an urbanized transportation center to an agricultural landscape.



KVP 25—Existing Conditions and Alternatives 1, 2, and 4



KVP 25—Alternative 3 Simulation

FEBRUARY 2018

Figure 3.16-41 KVP 25 Pajaro–San Felipe Landscape Unit—Leavesley Road: Existing and Simulated Views

South of the East Gilroy Station, the HSR and rail spur would cross above Gilman Road and Llagas Creek before reaching the East Gilroy MOWF. The MOWF would be west of the HSR tracks, consisting of rail sidings to store maintenance trains. The site is mostly agricultural, but a number of residences are present along Pacheco Court, and the San Ysidro Elementary School is immediately adjacent to the north. Support buildings would include spaces for offices and training, technical and mechanical uses, warehousing, and maintenance. Some maintenance materials, such as rails and ballast, would be stored outside. The site would extend for approximately 1 mile along the HSR alignment with a maximum width of approximately 950 feet. Large agricultural support buildings at two locations on the site would be removed, expanding nonagricultural uses across a large area.

South of the East Gilroy MOWF, the alignment would transition to a long viaduct over Bloomfield Avenue, the Pajaro River and Soap Lake floodplain, and Frazier Lake Road before reaching an embankment to cross the Calaveras fault zone. The alignment would follow another series of viaducts and embankments across Lovers Lane, Pacheco Creek, San Felipe Road, and SR 152. Both embankments and viaducts would limit some distant views for travelers on intersecting roads as they approach the HSR. The viaducts would be visible from great distances across the flat farmland and floodplain, introducing views of large-scale transportation infrastructure into a rural and agricultural environment.

The East Gilroy Station, MOWF, and HSR viaducts would contrast with the existing agricultural and natural landscape. The station's location would extend Gilroy's urban character into farmland. The alignment would pass through the community of Old Gilroy at grade at the intersection of SR 152 and Frazier Lake Road. These roadways would be relocated to bypass the community, intersecting on a tall berm near SR 152's overcrossing of the railway. This transportation development would encircle the center of the community with a high roadway, blocking views to the east and splitting the community and agricultural lands with the at-grade tracks, the MOWF, and elevated highway.

The project includes commitments (AVQ-IAMF#1 and AVQ-IAMF#2) to integrate HSR within a community to minimize visual impacts. Areas disturbed by construction would be revegetated to blend berms into the surrounding landscape (BIO-IAMF#5). While these features would minimize impacts on visual quality, they would not replace views lost to HSR construction nor obscure large scale HSR facilities in a flat agricultural environment. Moderately sensitive travelers would experience a decline in visual quality from moderately high to moderate under Alternative 3 in the Pajaro-San Felipe Landscape Unit.

With Alternative 3, the East Gilroy Station would be north of Leavesley Road on a green field site. At KVP 25 (Figure 3.16-41), Leavesley Road would ascend an overcrossing of the HSR tracks. The station can be identified in the simulation by the horizontal blue line of its canopy extending across the view north (left) of the overcrossing. Foreground views would be obscured by the expanded roadway, but the panorama of the Diablo Range would remain. A field of trees in front of the HSR station would obscure the vast surface parking lots. Views of agriculture would be eliminated, replaced with a very suburban character evident by the views of a wide roadway and expansive parking facilities. While its design would place it low to the ground and expressing a horizontal form consistent with the lines of the valley and distant ridge, nothing stands out to mark the station or its prominence as a transportation hub. The three project components (parking, station, overpass) are clear, and the intersection of the roadway and the railway is evident in the uprising of the road to pass over the railway. Visual quality would decrease from high to moderate. Travelers with a moderately low viewer sensitivity would experience a decline in visual quality from high to moderate under Alternative 3 at KVP 23.

Figure 3.16-42 (KVP 26) illustrates the view from eastbound SR 152 in Old Gilroy. The HSR alignment, bordered by a concrete retaining wall, and realigned SR 152 overcrossing are clear in this view. The HSR embankment, noise barrier, and overcrossing would block long views, including Anthony Peak. Landscaping would be established along the HSR alignment to soften and obscure the view of the railway and overcrossing (AVQ-IAMF#1), but nothing could be done to replace distant views at the KVP. Existing trees in the left half of the view would be gone, leaving the assortment of trees surrounding the historic property. The tall overcrossing would dominate the view. The HSR embankment and noise barrier and elimination of houses near the intersection would leave the historic Phegley House isolated between the HSR tracks and overcrossing. The industrial form and scale of the overcrossing would shift the visual emphasis from a rural crossroads to the edge of a major transportation facility. The HSR embankment and overcrossing would conflict with the rural character and roadway alignment. Most travelling viewers would bypass this KVP, because SR 152 would pass to the south, crossing over the HSR on the overcrossing seen in the simulation. Frazier Lake Road would intersect SR 152 near the west end of the overcrossing, so the remaining viewers at this location would be the residents of Old Gilroy. Although they are few, they would have moderately high sensitivity. They would experience a decline in visual quality from moderately high to moderately low under Alternative 3 at KVP 26.

Figure 3.16-43 (KVP 27) illustrates a simulation of Alternative 3 as it passes south of San Felipe, approximately 1,350 feet from the viewpoint. The berm would be covered with grasses the same color as the distant hills. Its height and shape would read as an extension of the descending hills, although the form of the berm is geometric and therefore not natural. The HSR alignment would cut into the hillside, removing some of the oaks. The addition of the HSR alignment through the vineyard and hillside, with its line of OCS poles, would impose a new line of infrastructure across the rural agricultural landscape that contrasts with both the scale of development in the area and land uses. Travelers with a moderate viewer sensitivity would experience a decline in visual quality from high to moderate under Alternative 3 at KVP 27.

Alternative 4

Alternative 4 would leave Gilroy at grade adjacent to the west side of the UPRR right-of-way, turning away from the UPRR and passing over it on a steel truss bridge just south of Carnadero Avenue. The embankments approaching the bridge would rise to about 50 feet above the flat agricultural landscape, creating a new feature visible from a great distance.

After passing over the UPRR, the South Gilroy MOWF would be on the west side of the HSR tracks, extending for about 1 mile along the railway south of Bloomfield Road. A rail spur track would connect from the UPRR Hollister Branch, allowing rail deliveries of materials to the MOWF.

The South Gilroy MOWF would consist of long rail sidings to store maintenance trains. Support buildings would include spaces for offices and training, technical and mechanical uses, warehousing, and maintenance. Some maintenance materials, such as rails and ballast, would be stored outside. The MOWF would have a maximum width of approximately 900 feet, introducing a large industrial use into an agricultural area. Most viewers in the area would be agricultural viewers, with a moderately low sensitivity, as they would be focused on tending the crops or working in greenhouses and orchards, with limited views of the surrounding environment. South of the MOWF, Alternative 4 would join the alignment of Alternatives 1 and 2 through the remainder of the landscape unit, crossing the Pajaro River and intersecting roads on viaducts and bridges before reaching Tunnel 1 to the Pacheco Creek Valley.



KVP 26—Existing Conditions and Alternatives 1, 2, and 4



KVP 26—Alternative 3 Simulation

FEBRUARY 2018

**Figure 3.16-42 KVP 26 Pajaro–San Felipe Landscape Unit—SR 152 at Frazier Lake Road:
Existing and Simulated Views**



KVP 27—Existing Conditions



KVP 27—Alternatives 1, 2, and 4 Simulation



KVP 27—Alternative 3 Simulation

FEBRUARY 2018

**Figure 3.16-43 KVP 27 Pajaro–San Felipe Landscape Unit—
San Felipe: Existing and Simulated Views**

Both embankments and viaducts would limit some distant views for travelers on the intersecting roads as they approach the HSR. The viaducts would be visible from great distances across the flat farmland and floodplain, introducing views of large-scale transportation infrastructure into a rural and agricultural environment. The berm and viaduct would rise above the flat valley floor, creating a linear feature across the landscape, rising as it approaches the eastern side of the valley. Figure 3.16-42 (KVP 27) illustrates how the embankments would visually intrude on the flat valley landscape. However, this change would not disrupt or enhance any existing development. Visual quality would decrease to moderate. Moderately sensitive travelers would experience a decline in visual quality from moderately high to moderate under Alternative 4 in the Pajaro-San Felipe Landscape Unit.

Alternative 4 would not pass KVPs 25 or 26, resulting in no effect on visual quality.

CEQA Conclusion

Alternatives 1, 2, and 4 would have a less-than-significant impact under CEQA because the HSR embankments and South Gilroy MOWF would not substantially degrade the existing visual quality of the agricultural landscape, nor would they block views. Application of aesthetic guidelines would eliminate the contrast of the South Gilroy MOWF with a rural agricultural setting. Project features would reduce the potential impacts on aesthetics and visual quality to a less-than-significant level. Although visual quality in the landscape unit would decrease by one level (from moderately high to moderate), the majority of viewers would be travelers with moderate sensitivity who would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Alternative 3 would have a significant impact under CEQA because the East Gilroy Station and East Gilroy MOWF would substantially degrade the existing visual character of the agricultural landscape, alter the existing visual character of agricultural landscape, and block views. Project features include aesthetic guidelines to integrate structures within a community and to reduce intrusiveness of large structures, and while these guidelines would reduce the conflicting aesthetic of HSR infrastructure, they would not avoid it entirely. Project features would reduce the potential impacts on visual quality, but not to a less-than-significant level. Visual quality would decrease by two levels (from moderately high to moderately low). Most viewers would be travelers with moderate sensitivity who would respond to the change in existing visual character or quality of the site and its surroundings. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Impact AVQ#12: Permanent Direct Impacts on Visual Quality—Pacheco Pass Landscape Unit

The existing visual quality in the Pacheco Pass Landscape Unit is high. Travelers and retail viewers are the primary viewer group in the landscape unit with moderate to moderately high sensitivity. Existing and simulated views of Alternatives 1, 2, 3, and 4 at three locations illustrate the views of travelers with moderately high sensitivity (two locations) and moderately sensitive retail viewers (one location).

Alternatives 1, 2, 3, and 4

Alternatives 1, 2, 3 and 4 would be visible for about 5 miles from SR 152, between the junction with SR 156 and midway between Casa de Fruta and Bell Station. The HSR would introduce permanent changes to the aesthetics and visual quality of existing travelers' views that would contrast with the agricultural and open space setting. Aerial HSR structures, rising up to 60 feet, lines of overhead catenary system, noise barriers, and overcrossings and viaducts for HSR and roadways would impart an industrial aesthetic to the landscape, obscuring views of the rolling hills and riparian landscape by introducing long and tall concrete structures.

Travelers are the primary viewer group in the landscape unit. The route through the rural valley and over the pass offers many scenic views for the travelers along this highway. The scenic views of the rural valley and topographical landmarks give travelers a moderately high sensitivity.

Retail viewers are primarily located at the Casa de Fruta area, characterized by a mix of retail and dining. These viewers have low sensitivity.

Alternatives 1, 2, 3, and 4 would cross SR 152, with minor differences between them in the horizontal alignment (KVP 28, Figure 3.16-44). In each case, the viaduct would be partially obscured by the trees growing along Pacheco Creek. Its tall columns and long spans would permit clear views to the far hills under the span. It would cross the valley at a height that does not block views to the distant mountains. The straight line of the viaduct would complement the gentle curve of the highway. The form of the viaduct would be familiar to highway travelers with few visual clues to differentiate its purpose as a railway structure from that of a highway structure. Visual quality would remain high. Travelers with a moderately high viewer sensitivity would not perceive a change in visual quality under any alternatives at KVP 26.

Figure 3.16-45, KVP 29, illustrates the view east from the playground at Casa de Fruta. All four alternatives would pass this location at almost the same distance. In each case, the HSR viaduct across the Pacheco Creek Valley would be visible above the riparian trees and block views to the distant hills, enclosing and limiting the view to the foreground. Because the distant view does not stand out within this view, its loss would have little effect. As Casa de Fruta is a roadside attraction, catering to travelers on SR 152, the view of the HSR infrastructure would be familiar as part of the Pacheco Pass transportation corridor. It would be an expected component of the experience of travel, and its scale would not dominate the view from the playground. The view of passing HSR trains would echo the passing of the Casa de Choo Choo miniature train. Visual quality would remain moderate. Retail viewers visiting Casa de Fruta with a moderate viewer sensitivity would not perceive a change in visual quality under any alternative at KVP 29.

The HSR viaduct across Pacheco Creek and twin west portals for Tunnel 2 would be visible to the south (right) side of SR 152 (KVP 30, Figure 3.16-46). The view of the valley would be blocked by the viaduct. The extensive grading for the tunnel portal would be evident by the reduction in tree coverage on the hillsides. Native trees would be established and the hillsides revegetated (BIO-IAMF#5 and LU-IAMF#3), but the thick oak woodlands would take years to fill in across the regraded hillsides. The hillsides would also be graded uniformly, removing the natural curves and slopes. The view of the viaduct from the highway would disrupt the natural setting with its industrial aesthetic of concrete and steel and stout columns. While the design would be treated with care (AVQ-IAMF#1), the view of a second transportation facility within the existing corridor with larger and taller structures and greater earthworks would contrast with existing views of open space. Visual quality would drop from high to moderately high. Travelers with a moderately high viewer sensitivity would experience a decline in visual quality from high to moderately high under any alternative at KVP 30.



KVP 28—Existing Conditions



KVP 28—Alternatives 1, 2, 3, and 4 Simulation

FEBRUARY 2018

Figure 3.16-44 KVP 28 Pacheco Pass Landscape Unit—SR 152: Existing and Simulated Views



KVP 29—Existing Conditions



KVP 29—Alternatives 1, 2, 3, and 4 Simulation

FEBRUARY 2018

Figure 3.16-45 KVP 29 Pacheco Pass Landscape Unit—Casa de Fruta: Existing and Simulated Views



KVP 30—Existing Conditions



KVP 30—Alternatives 1, 2, 3, and 4 Simulation

FEBRUARY 2018

Figure 3.16-46 KVP 30 Pacheco Pass Landscape Unit—Pacheco Creek Valley: Existing and Simulated Views

CEQA Conclusion

Alternatives 1, 2, 3, and 4 would have a less-than-significant impact under CEQA because while the regrading and terracing of the southern hillsides for cuts, tunnel portals, and viaducts would alter and block locally important views for traveling viewers with moderately high sensitivity, and the viaducts would degrade the scenic resources of the rolling hills and riparian landscape by introducing a long and tall concrete structure into the landscape, overall visual quality in the landscape unit would only decline one level (high to moderately high). Project features would reduce the potential impacts on aesthetics and visual quality. The majority of viewers would be travelers with moderately high sensitivity who would not respond to the change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.

Impact AVQ#13: Permanent Direct Impacts on Visual Quality—San Luis Landscape Unit

The existing visual quality in the San Luis Landscape Unit is high, and overall viewer sensitivity is high. Recreationists have high visual sensitivity.

Alternatives 1, 2, 3, and 4

Alternatives 1, 2, 3, and 4 would pass through the entire San Luis Landscape Unit in twin tunnels, not visible to any viewer. With no portions of the project visible above grade, the existing visual character and quality would remain high, resulting in no impact on the visual environment and visual quality for the three project alternatives.

There are no KVPs in the San Luis Landscape Unit.

CEQA Conclusion

Alternatives 1, 2, 3, and 4 would have no impact under CEQA because all four alternatives would be in a tunnel through the entire landscape unit and not visible to any viewers. With no change to the visual quality, which would remain high, there would be no impact on the visual environment and visual quality. Therefore, CEQA does not require mitigation.

Impact AVQ#14: Permanent Direct Impacts on Visual Quality—Romero Landscape Unit

The existing visual quality in the Romero Landscape Unit is moderately high, and recreationists have high visual sensitivity. Existing and simulated views of Alternatives 1, 2, 3, and 4 at two locations illustrate views from cemetery visitors with moderate sensitivity and at one location from travelers with moderately low sensitivity.

Alternatives 1, 2, 3, and 4

Alternatives 1, 2, 3, and 4 would be identical in the Romero Landscape Unit. The HSR would descend from the Pacheco Pass across the northern edge of the Romero Valley using a series of cuts and fills and short viaducts, which would span local roads, the two aqueducts, and I-5. A TPSS would be built where the existing parallel pairs of high-voltage transmission lines intersect the HSR. The earthworks and structures for HSR would alter the natural landscape, but the earthworks would blend into the surrounding landscape as grasses blanket the new cuts and fills. Because the HSR is distant from KVP 31 (Figure 3.16-47), its scale against the natural landscape would be minimized, maintaining the reverential backdrop of the gravesites. The viaducts spanning valleys would be more evident against the natural landscape, but their distance from almost all viewers would limit their exposure and the impact on the visual quality of the area.

The San Joaquin Valley National Cemetery sits at the mouth of the Romero Valley. As institutional viewers, cemetery visitors are present infrequently, making their exposure to views in and around the cemetery low, but their viewer awareness is high, as the ritual of remembering the deceased is a powerful human experience, usually associated with a calm atmosphere, free of distraction. The surrounding landscape is a background to the burial grounds, buildings, and memorials, where visitors are focused on the icons of the cemetery, giving them moderate sensitivity to the visual quality of the landscape unit.

Agricultural viewers in the Romero Valley are engaged in ranching, either tending to herds or harvesting hay. Both of these activities occur on a very infrequent basis, so their sensitivity is moderately low. Travelers are concentrated on I-5. They have views to the adjacent land uses and surrounding hills. Because traffic (including many large trucks) is heavy on the freeway and requires drivers to concentrate on surrounding traffic, these travelers would have a moderately low visual sensitivity.

During the design of the HSR project, the Authority’s aesthetic guidelines and aesthetic review process would reduce the aesthetic and visual impacts of the TPSS and other HSR infrastructure by increasing the compatibility of the HSR infrastructure within an existing, specific local design context (AVQ-IAMF#1). These features would minimize the overall impacts on visual quality in the Romero Landscape Unit. These features would not, however, avoid the change to visual quality from the introduction of an industrial feature into an agricultural and open space landscape. At the San Joaquin Valley National Cemetery, the contrast between the viaducts and the existing agricultural and open space setting would affect visual character. Institutional viewers with a moderate viewer sensitivity and travelers with a moderately low viewer sensitivity would experience a decline in visual quality from high to moderately high under any alternative in the Romero Landscape Unit.



KVP 31—Existing Conditions



KVP 31—Alternatives 1, 2, 3, and 4 Simulation

FEBRUARY 2018

Figure 3.16-47 KVP 31 Romero Landscape Unit—West Loop Road: Existing and Simulated Views

Figure 3.16-47 (KVP 31) illustrates a view north from the West Loop at the northern edge of the San Joaquin Valley National Cemetery to Romero Valley and the HSR. The HSR would be approximately 1.25 miles from the viewpoint. As seen in the simulation, at this distance, the HSR alignment would be visible but would not stand out. The straight line of the viaducts parallels the line of the fence, marking another boundary as the serene natural landscape recedes from the viewer in the cemetery. Because the HSR would be distant from these viewers, its scale against the natural landscape would be minimized, maintaining the reverential backdrop of the gravesites. Visual quality would remain high. Cemetery visitors with moderate sensitivity would not perceive a change in visual quality under any alternative at KVP 31.

Figure 3.16-48 (KVP 32) illustrates a view west to Romero Valley and HSR from Pomas Road in the San Joaquin Valley National Cemetery. The HSR would be approximately 1.5 miles from the viewpoint. As seen in the simulation, at this distance, the HSR alignment would be visible as a line across the valley, but its scale would be modest in comparison to the hillsides and mountains. Because of the distance, presence of the HSR would be minimal. Viewers from the cemetery would be expected to have moderate sensitivity to changes in visual character, but the distance to the HSR infrastructure would limit their exposure to these changes. They would not perceive a change in visual quality under any alternative at KVP 32.

At KVP 33 (Figure 3.16-49) the HSR would cross I-5 just north of the community of Santa Nella. The bermed approaches to the bridge over the freeway would block long-range views from the freeway. In addition, the berms would add raised, horizontal elements to the landscape that extend much farther on either side of the freeway than typical highway overcrossing approaches. Intersecting highways with bermed overcrossings are common along I-5 in the San Joaquin Valley. However, the view of the intersecting railway would stand out and become a landmark to travelers because of its scale in comparison to typical overcrossings. Visual quality would remain moderately high. Travelers with moderately low sensitivity would not perceive a change in visual quality under any alternative at KVP 32.

CEQA Conclusion

Alternatives 1, 2, 3, and 4 would have a less-than-significant impact under CEQA because the proximity of the HSR to moderately sensitive viewers at the San Joaquin Valley National Cemetery would be distant, limiting their exposure to the project. Visual quality in the landscape unit would remain high. The majority of viewers would be travelers with moderately low sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.



KVP 32—Existing Conditions



KVP 32—Alternatives 1, 2, 3, and 4 Simulation

FEBRUARY 2018

Figure 3.16-48 KVP 32 Romero Landscape Unit—Pomas Road: Existing and Simulated Views



KVP 33—Existing Conditions



KVP 33—Alternatives 1, 2, 3, and 4 Simulation

FEBRUARY 2018

Figure 3.16-49 KVP 33 Romero Landscape Unit—Interstate 5: Existing and Simulated Views

Impact AVQ#15: Permanent Direct Impacts on Visual Quality—Henry Miller Landscape Unit

The existing visual quality in the Henry Miller Landscape Unit is moderate, and the viewer sensitivity of residents, recreational viewers, travelers, and agricultural viewers ranges from high to moderately low. Existing and simulated views of Alternatives 1, 2, 3, and 4 at two locations illustrate the views of travelers and recreational viewers.

Alternatives 1, 2, 3, and 4

Alternatives 1, 2, 3, and 4 would be the same in the Henry Miller Landscape Unit. The HSR alignment would cross the landscape unit at grade, on embankment, and on viaduct. It would cross I-5 on viaduct north of the community of Santa Nella as it turns to the south, creating a linear feature across the landscape that would transition to grade just east of the community of Volta, aligned with Henry Miller Road. This alignment would create an artificial ridgeline across the valley, and visually intrude on the flat valley landscape.

Residential viewers, with high sensitivity, are primarily associated with small aggregations of homes lining the north-south/east-west road grid. Recreational viewers, with moderately high sensitivity, use hiking the trails in the Los Banos State Wildlife Area. Agricultural viewers, with moderately low sensitivity, comprise people engaged in all aspects of agricultural production. Travelers, with moderate sensitivity, use local roads in the landscape unit, moving between farms and homes or avoiding traffic on SR 152.

From Volta, the alignment runs east, following the south side of Henry Miller Road. The design of the HSR alignment and infrastructure would incorporate aesthetic guidelines that would minimize the contrast with the structures and natural setting of the existing landscape (AVQ-IAMF#1). The sides of the embankment would be revegetated with grasses and other flora from the surrounding environment, blending with the texture and colors of the existing landscape. A maintenance of way siding (MOWS) facility would be constructed just north of Los Banos on the south side of Henry Miller Road, adding a large industrial element into a rural setting. Henry Miller Road, SR 165, Delta Road, Turner Island Road, and Carlucci Road would cross over the railway, with the bermed earth and highway overcrossings rising above the flat valley. Travelers on the overcrossings would experience expansive views across the valley floor. The HSR alignment and infrastructure would bring views of modern infrastructure to a semi-remote and rural area, visible from both busy roadways and wetlands in the GEA. The visual quality would remain moderate in the landscape unit. Viewers would not perceive a change in visual quality under any alternative in the Henry Miller Landscape Unit.

At KVP 34 (Figure 3.16-50), the HSR would be seen on a berm passing the residences along Henry Miller Road. The berm would create a physical barrier that constrains distant views and reinforces the boundary of the community. Visual quality would remain moderately low. Viewers would not perceive a change in visual quality under any alternative at KVP 34.

At KVP 35 (Figure 3.16-51), the viaduct would follow the south side of Henry Miller Road. The HSR would travel through the GEA on an aerial structure to allow for free movement of wildlife across the HSR corridor. Paralleling the roadway and powerlines, the aerial structure would strengthen the view of the distant point of convergence and the grid that determines the land use of this part of the San Joaquin Valley, but the industrial aesthetic of concrete and steel would clash with the rural setting and simple agricultural structures. Visual quality would decline from moderate to moderately low. Recreationists with a moderately high viewer sensitivity would experience a decline in visual quality from moderate to moderately low under any alternative at KVP 35.

CEQA Conclusion

Alternatives 1, 2, 3, and 4 would have a less-than-significant impact under CEQA because overall visual quality in the landscape unit would remain moderate. Project features would reduce the potential impacts on aesthetics and visual quality. Visual quality in the landscape unit would remain moderate. The majority of viewers would be travelers with moderate viewer sensitivity who would not experience any change in existing visual character or quality of the site and its surroundings. Therefore, CEQA does not require mitigation.



KVP 34—Existing Conditions



KVP 34—Alternatives 1, 2, 3, and 4 Simulation

FEBRUARY 2018

Figure 3.16-50 KVP 34 Henry Miller Landscape Unit—Volta: Existing and Simulated Views



KVP 35—Existing Conditions



KVP 35—Alternatives 1, 2, 3, and 4 Simulation

JANUARY 2019

Figure 3.16-51 KVP 35 Henry Miller Landscape Unit—Henry Miller Road: Existing and Simulated Views

Impact AVQ#16: Indirect Impacts on Visual Quality from HSR Stations

As described in Section 3.13, Station Planning, Land Use, and Development, major changes in land development, including increases in intensity of uses near HSR stations, would be expected to occur concurrent with development and operations of the HSR station facilities. Operation of HSR service would increase the number of people at the stations, generating increased demand for development and commercial activity. Changes in land development because of operations of the project alternatives would result in changes in the built environment and indirect impacts on visual quality.

Project features (LU-IAMF#1 and AVQ-IAMF#2) would reduce potential land use impacts by implementing HSR station area development principles and guidelines. The application of station area development principles would help to maximize the performance of the transportation investment, enhance the livability of the communities it serves, create long-term value, and sensitively integrate the project into the communities along the HSR system corridor.

In accordance with *HSR Station Area Development General Principles and Guidelines* (Authority 2011), the Authority would encourage context-sensitive designs by working with local governments to enhance the public benefits of HSR station development so that they meet the needs of the local communities, including creating aesthetically pleasing buildings and streetscapes. These project features would provide development around HSR stations intended to be compatible with each communities' existing or planned visual character but cannot eliminate visual impacts from substantial changes in the built environment.

Alternatives 1, 2, and 4

The degree of visual impacts from land use changes generated by the project alternatives would depend on the HSR station setting. In the urbanized areas of San Jose and downtown Gilroy, development around the HSR stations under Alternatives 1, 2, and 4, as guided by the Station Zone of Responsibility, described in the *HSR Station Area Development General Principles and Guidelines* (Authority 2011), would be expected to produce a high-quality outcome from growth around stations, maintaining or enhancing the existing visual character of the communities, and would not result in a reduction in visual quality.

Alternative 3

Under Alternative 3, HSR stations would be located in San Jose and east Gilroy. The HSR station in San Jose would be the same as under Alternatives 1, 2, and 4 and would result in the same impacts. The HSR station in east Gilroy would be developed in a more rural setting than the station in downtown Gilroy and would alter the land use patterns in an existing agricultural area, thereby reducing visual quality.

CEQA Conclusion

Alternatives 1, 2, and 4 would have a less-than-significant indirect impact on the visual environment and visual quality under CEQA because *HSR Station Area Development General Principles and Guidelines* and each city's HSR station planning process would provide high design standards for development around the HSR stations in San Jose and downtown Gilroy, intended to maintain the existing or planned visual character of the local communities, conforming to applicable zoning and other regulations governing scenic quality, resulting in no decline in visual quality. Therefore, CEQA does not require mitigation.

Alternative 3 would have a significant impact on visual quality under CEQA because the project features would not reduce the visual impacts from the loss of agricultural views to expanded urban development. This loss of views and change of visual character would degrade the visual environment and visual quality around the East Gilroy Station. No mitigation measures are available to address this impact.

3.16.6.3 Impacts on Scenic Highways

No Project Impacts

No major development is planned for the Pacheco Pass and San Joaquin Valley Subsections, where SR 152 and I-5 are designated as State Scenic Highways. A median barrier is planned for SR 152 near Pacheco Pass. A median barrier is a common visual component of divided highways and would not alter the visual character or quality of the San Luis Landscape Unit.

Project Impacts

Construction Impacts

Impact AVQ#17: Impacts on State Scenic Highways

Alternatives 1, 2, 3, and 4 would pass near two designated State Scenic Highways in the Pacheco Pass and San Joaquin Valley Subsections: SR 152 and I-5. In the Pacheco Pass Landscape Unit, where SR 152 is a designated state scenic highway, the four alternatives would pass through twin tunnels, not visible to any viewer, and no visual impacts would occur.

In the San Joaquin Valley Subsection, where I-5 is designated a state scenic highway, the four alternatives would cross I-5 just north of the community of Santa Nella (Figure 3.16-52, KVP 33). The bermed approaches to the bridge over the freeway would block long views from the freeway and add a horizontal structure to the landscape extending much farther from the freeway than the typical highway overcrossing approach. This would alter the views from the freeway but would not be visually much different from roadway overcrossings. There are few landmarks along the highway in the San Joaquin Valley. Most are intersecting highways. The view of the intersecting railway would become a landmark to travelers. Because the HSR crossing would appear similar to other infrastructure along the freeway, the visual quality would be unaffected, remaining moderately high. Travelers with moderately low sensitivity would perceive no effect on visual quality.



FEBRUARY 2018

Figure 3.16-52 KVP 33—Alternatives 1, 2, 3, and 4 Simulation

CEQA Conclusion

Alternatives 1, 2, 3, and 4 would have a less-than-significant impact under CEQA because the construction of the project alternatives across the state scenic highway I-5 would not substantially damage scenic resources, such as trees, rock outcroppings and historic buildings, so that it affects the visual character of the highway. Across the portion of SR 152 that is a state scenic highway, the project alternatives would be in twin tunnels and not visible. The form of the HSR embankment and grade separation would be similar to existing highway infrastructure and would conform to the existing visual character of the highway. Therefore, CEQA does not require mitigation.

3.16.6.4 Impacts from Light and Glare

No Project Impacts

Planned residential, commercial, office, industrial, recreational, and transportation projects would introduce new visual elements to the landscape. While these planned developments would present new potential sources of light and glare, local and regional codes and policies include measures to limit the impacts of light and glare. Planned development would primarily occur in existing urbanized areas in San Jose, Morgan Hill, and Gilroy, and to a lesser extent in the San Joaquin Valley. Therefore, sources of new nighttime light, other than from project alternatives, would be most prevalent in urban areas. Where development occurs in more rural areas, new sources of lighting would increase nighttime light levels, potentially affecting highly sensitive residential viewers.

Project Impacts

Construction Impacts

Impact AVQ#18: Temporary Direct Impacts on Nighttime Light Levels

During the construction of the project, construction staging areas, precast yards, tunnel portals, maintenance facilities, station sites, and other HSR buildings would have temporary nighttime lighting for security and safety. Project features (SOCIO-IAMF#1) would include measures that minimize impacts on community residents and businesses, including temporary nighttime lighting. Contractors would prepare a construction management plan to reduce potential impacts on neighborhoods and communities. This project feature would minimize impacts from lighting at locations where construction activities do not occur at night. However, at tunnel portal construction sites in the Pajaro–San Felipe, Pacheco Creek Valley, and Romero Valley Landscape Units under all four alternatives, nighttime lighting would be required throughout the night for the duration of tunnel construction activities, which could be up to 5 years. Introducing lighting to these locations with no existing lighting would alter their visual character. While the project features would reduce impacts through visually sensitive lighting design, they could not eliminate the presence of nighttime light where none previously existed.

CEQA Conclusion

Alternatives 1, 2, 3, and 4 would have a significant impact on nighttime light levels under CEQA because lighting for tunnel portal construction sites in the Pajaro-San Felipe, Pacheco Creek Valley, and Romero Valley Landscape Units, where existing nighttime levels are low, would create a new source of substantial light that would adversely affect nighttime views in the area for the duration of tunnel construction, up to 5 years. While the project would reduce construction impacts through visually sensitive lighting design, they would not eliminate the presence of nighttime light where none currently exists. Therefore, the project features would reduce but not avoid the potential effects on the visual environment and visual quality. In other locations where construction activities would not occur at night, project features would minimize impacts from lighting on community residents and business. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Operations Impacts

Impact AVQ#19: Permanent Direct Impacts on Nighttime Light Levels at Fixed Locations

Various HSR buildings and facilities would be lit throughout the night, contributing to increases in nighttime light levels. There would be no overhead lights on the HSR guideway. The project features (AVQ-IAMF#1) would provide lighting and building design intended to conform to the local design context. Fixed lighting sources at proposed HSR facilities, including stations, tunnel portals, TPSS, and maintenance facilities, would be designed to direct lighting downward, minimizing light spillover, but the 24-hour operation of the facilities would require a minimum level of lighting for work safety and security.

These impacts would be most pronounced in rural areas without substantial sources of existing light, including in the rural agricultural area south and east of Gilroy and the Pajaro–San Felipe Landscape Unit, where existing light levels are low. There is an MOWF proposed under all alternatives, in addition to a new HSR station under Alternative 3. In the Henry Miller Landscape Unit, an MOWS is proposed for all alternatives. In these locations, project features would reduce impacts on nighttime light levels through visually sensitive lighting design, but they could not eliminate the presence of nighttime light where existing nighttime light levels are low.

CEQA Conclusion

Alternatives 1, 2, 3, and 4 would have a significant impact under CEQA because HSR facilities in rural areas would create new sources of substantial light that would adversely affect nighttime views and could be an annoyance to viewers. Project lighting would reduce visual quality by one or two levels, and viewer sensitivity would be moderate or, in some cases, high. While the project features would reduce impacts through visually sensitive lighting design, they would not eliminate the presence of nighttime light where none currently exists. The 24-hour operation of the facilities would require a minimum level of lighting for work safety and security. Therefore, project features would reduce but not avoid the potential impacts on the visual environment and visual quality. The impact would be significant and unavoidable. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Impact AVQ#20: Permanent Direct Impacts on Nighttime Light Levels from Trains

Where HSR trains run elevated on viaducts, adjacent to residential areas, the spillover of light from passing trains and maintenance equipment would increase nighttime light levels. Trains operating at night would contribute a regular and repeated source of light. Train lights would be directed toward the guideway. Nighttime maintenance activities along the alignment would introduce lighting from slow-moving maintenance vehicles. In residential areas, the HSR light sources would increase nighttime light levels.

While contributing little to overall light levels, the moving lights would be evident where existing light levels are moderate to low and highly sensitive residential viewers are present. Alternatives 1 and 3, running on viaduct from San Jose to Gilroy through the Monterey Highway, Coyote Valley, US 101, Morgan Hill–San Martin, and Downtown Gilroy Landscape Units, would have more light spillover into residential areas, resulting in more impacts from increased light levels than Alternatives 2 and 4, which would run at grade and have train light spillover contained by existing vegetation and noise barriers. Alternative 4 would operate in blended service with Caltrain in urbanized areas, with lights from HSR similar to lights from existing passenger and freight service, resulting in the least impact of the four alternatives. In other locations, the overall impact from light spillover would be the same under all four alternatives.

CEQA Conclusion

Alternatives 1 and 3 would have a significant impact under CEQA because the spillover from elevated viaducts would create a new source of substantial light, increasing nighttime light levels in residential areas, and could be an annoyance to viewers. Project lighting would reduce visual quality by one or two levels, and viewer sensitivity would be moderate or, in some cases, high. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Alternative 2 would have a significant impact under CEQA because the spillover from HSR trains would create a new source of substantial light, increasing nighttime light levels in residential areas, and could be an annoyance to viewers. Project lighting would reduce visual quality by one or two levels, and viewer sensitivity would be moderate or, in some cases, high. Mitigation measures to address this impact are identified in Section 3.16.9, CEQA Significance Conclusions. Section 3.16.7, Mitigation Measures, describes these measures in detail.

Alternative 4 would have a less-than-significant impact under CEQA because HSR would operate in blended service with Caltrain through residential areas. The lights from HSR trains would be similar to the existing light from UPRR and Caltrain operations. Existing landscaping and noise

barriers would contain light, resulting in no change to nighttime light levels and no effect on residential viewers. Therefore, CEQA does not require mitigation.

3.16.7 Mitigation Measures

The following mitigation measures would be implemented to address impacts on aesthetics and visual quality. In addition to these measures, NV-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines, would address impacts associated with light and glare, as discussed in Section 3.16.9, CEQA Significance Conclusions.

AVQ-MM#1: Minimize Visual Disruption from Construction Activities

Prior to construction, the contractor would prepare a technical memorandum identifying how the project would minimize construction-related visual/aesthetic disruption using the following strategies:

- Minimize pre-construction clearing to that necessary for construction.
- Limit the removal of buildings to those that would conflict with project components.
- Where possible, preserve existing vegetation, particularly vegetation along the edge of construction areas that may help screen views.
- After construction, regrade areas disturbed by construction, staging, and storage to original contours and revegetate with plant material similar in numbers and types to that removed, based on local jurisdictional requirements. If no local jurisdictional requirements exist, replace removed vegetation at a 1:1 replacement ratio for shrubs and small trees and a 2:1 replacement ratio for mature trees. For example, if the contractor removes 10 mature trees in an area, replant 20 younger trees that within 5 to 15 years (depending on the growth rates of the trees) would be of a height and spread to provide visual screening similar to the visual screening provided by the trees that were removed for construction. Replacement shrubs would be a minimum of 5-gallon planter size, and replacement trees would be a minimum 24-inch box and minimum 8 feet in height.
- To the extent feasible, locate construction staging sites outside of the immediate foreground distance (0 to 500 feet) of existing residential neighborhoods, recreational areas, or other land uses that include highly sensitivity viewers. Where such siting is unavoidable, screen staging sites from viewers using appropriate solid screening materials such as temporary fencing and walls. Paint over or remove any graffiti or visual defacement of temporary fencing and walls within 5 business days of it occurring.

The contractor would submit the technical memorandum to the Authority for review and approval.

This mitigation measure would be effective in minimizing the aesthetic and visual impacts of construction activities because it would reduce the resulting area, scale, and exposure to adverse visual impacts.

No additional impacts would result from the mitigation measures described above. These mitigation measures are typical of aesthetic treatments applied on linear transportation facilities; they have been defined to be specific in range and implementable according to context. The proposed mitigation measures (for both construction and operation) would enhance visual quality where possible, and alleviate impacts associated with visual changes introduced by the HSR project. Implementation of these measures (such as minimizing visual disruptions from construction activities, minimizing light disturbance during construction, replanting/providing vegetated screening, screening ancillary facilities, and incorporating the aesthetic design and review process) is not expected to result in additional visual impacts because the measures would serve to create a long-term, net aesthetic benefit.

AVQ-MM#2: Minimize Light Disturbance during Construction

Prior to construction activities requiring nighttime construction, the contractor would prepare a technical memorandum describing how the contractor would shield nighttime construction lighting and direct it downward in a manner to minimize the light that falls outside the construction site boundaries.

The contractor would submit the technical memorandum to the Authority for review and approval.

This mitigation measure would be effective in minimizing the aesthetic and visual impacts of nighttime construction light spillover because the light sources would no longer be visible off site to nearby viewer groups.

Implementation of this mitigation measure would not result in secondary impacts because it would not change the scope, scale, or location of construction activities beyond those that have been described as part of the project.

AVQ-MM#3: Incorporate Design Aesthetic Preferences into Final Design and Construction of Non-Station Structures

Prior to construction, the contractor would work with the Authority and local jurisdictions to incorporate the Authority-approved aesthetic preferences for non-station structures into final design and construction. Refer to *Aesthetic Options for Non-Stations Structures* (Authority 2014). The contractor would submit a technical memorandum to the Authority to document compliance.

This mitigation measure would be effective in minimizing the aesthetic and visual impacts of high-speed rail infrastructure because the implementation of a context-sensitive design process and resulting design elements would enhance the visual landscape, increasing the vividness and unity of the HSR infrastructure and reducing adverse visual impacts.

Implementation of this measure would not trigger secondary environmental impacts because it would not change the scope, scale, or location of construction activities beyond those that have been described as part of the project.

AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas

Prior to operations and maintenance of the HSR system, the contractor would plant trees or other vegetation along the edges of the HSR rights-of-way in locations adjacent to residential areas to screen the elevated guideway from the residential area. The species of trees to be installed would be selected based on their mature size and shape, growth rate, hardiness, and drought tolerance. No species listed by the Invasive Species Council of California would be planted. At maturity, the crowns of trees used would be tall enough to partially or fully screen views of the elevated guideway from adjacent at-grade areas. Upon maturity, trees would allow ground-level views under the crowns (with pruning if necessary) and would not interfere with the 15-foot clearance requirement for the guideway. The trees would be maintained. Irrigation systems would be installed in the tree planting areas.

The contractor would prepare a technical memorandum within 90 days of completing any construction section or subsection documenting the species of trees that were incorporated into the edges of the HSR right-of-way adjacent to residential uses. The contractor would submit the technical memorandum to the Authority to document compliance.

This mitigation measure would be effective in minimizing the aesthetic and visual impacts of high-speed rail infrastructure because it would reduce the adverse visual impact on sensitive viewers resulting from the contrast between existing views and views of HSR infrastructure. The planting of trees and other vegetation to provide visual relief to sensitive viewers from HSR facilities would introduce new visual features, such as hedgerows, that would block distant views. This mitigation measure is typical of visual treatments applied to similar infrastructure facilities and would be designed in coordination with local jurisdictions. In the context of the flat, open landscape of the RSA, the planting of flora to block views of the HSR facilities would reduce the intensity of the

visual contrast between the industrial aesthetic of the HSR and the surrounding rural/agricultural area, but the flora would also block views that were previously open.

Impacts from this mitigation would be blocked views where screening is placed in locations where views were previously available to residents and other sensitive viewers. The screening would provide viewers with views toward trees and other flora that would mask the HSR infrastructure, reducing the contrast and impact on sensitive viewers.

AVQ-MM#5: Replant Unused Portions of Lands Acquired for the HSR

Prior to operations and maintenance, the contractor would plant vegetation on land acquired for the project (e.g., shifting roadways) that was not used for the HSR, related supporting infrastructure, or other higher or better use. Planting design would allow adequate space between the vegetation and the HSR alignment and catenary lines. All street trees and other visually important vegetation removed in these areas during construction would be replaced with similar vegetation that, at maturity, would be similar in size and character to the removed vegetation. Replaced shrubs would be minimum 5-gallon planter size, and trees would be minimum 24-inch box and 8 feet in height. The Authority would provide for continuous maintenance with appropriate irrigation systems. The contractor would install the irrigation system within the planting areas. No species listed by the Invasive Species Council of California would be planted.

This mitigation measure would be effective in minimizing the aesthetic and visual impacts of land made fallow because it would replace vegetation removed during construction and enhance the visual appeal of areas in proximity to HSR infrastructure, thereby reducing the resulting area, scale, and exposure to adverse visual impacts.

Implementation of this measure is not anticipated to trigger secondary environmental impacts as new vegetation would primarily be replacing old vegetation and would not adversely affect visual quality or other resources.

AVQ-MM#6: Screen Traction Power Distribution Stations and Radio Communication Towers

Within 90 days of completing traction power substation or radio tower construction, the contractor would screen from public view the traction power substations (located at approximately 30-mile intervals along the HSR guideway), including radio towers where required, through the use of landscaping or solid walls/fences. Screening would consist of context-appropriate landscaping of a type and scale that does not draw attention to the station or feature. Plant species would be selected based on their mature size and shape, growth rate, hardiness, and drought tolerance. Planted shrubs would be a minimum 5-gallon planter size, and trees would be a minimum 24-inch box and 8 feet in height. No species listed by the Invasive Species Council of California would be planted. The landscaping would be continuously maintained, and appropriate irrigation systems would be installed in the landscaped areas. Walls would be constructed of cinderblock or similar material and would be painted a neutral color to blend in with the surrounding context. If a chain-link or cyclone fence is used, it would include slats in the fencing.

Any graffiti or visual defacement or damage of fencing and walls would be painted over or repaired within a reasonable period as agreed between the Authority and local jurisdiction. None of the mitigation measure options is expected to result in secondary impacts. The mitigation measures are typical of visual treatments applied on linear transportation facilities; they have been defined to be specific in range, implementable according to context, and designed in coordination with local jurisdictions.

The contractor would prepare a technical memorandum documenting how the requirements in this measure were implemented. The contractor would submit the technical memorandum to the Authority to document compliance.

This mitigation measure would be effective in minimizing the aesthetic and visual impacts of HSR infrastructure because it would reduce the adverse visual impacts on sensitive viewers resulting from the contrast between existing views and views of HSR infrastructure. The planting of trees and other vegetation to provide visual relief to sensitive viewers from HSR facilities would introduce new

visual features, such as hedges and clusters of flora that would block distant views. This mitigation measure is typical of visual treatments applied to similar infrastructure facilities and would be designed in coordination with local jurisdictions. The planting of flora to block views of the HSR facilities would reduce the intensity of the visual contrast between the industrial aesthetic of the HSR and the surrounding area, but the flora would also block views that were previously open, and no landscaping would conceal tall vertical elements, such as radio towers.

Impacts of this mitigation would be blocked views in those locations of traction power substations and radio towers where screening is placed in locations where views were previously available to residents and other sensitive viewers. The screening would provide viewers with views toward trees and other flora that would mask the HSR infrastructure, reducing the contrast and impact on sensitive viewers.

AVQ-MM#7: Provide Noise Barrier Treatment

Prior to construction (any ground-disturbing activity), the Contractor shall design a range of noise barrier treatments for visually sensitive areas, such as those areas where residential views of open landscaped areas would change or in urban areas where noise barriers would adversely affect the existing character and setting. The Contractor shall develop the treatments during the final design process and integrate them into the final project design. The treatments shall include, but are not limited to, the following:

- Noise barriers along elevated guideways that may incorporate transparent materials where sensitive views would be adversely affected by opaque noise barriers.
- Noise barriers made with nonreflective materials and of a neutral color.
- Surface design enhancements and vegetation appropriate to the visual context of the area shall be installed with the noise barriers. Vegetation shall be installed consistent with the provisions of AVQ-MM#5. Surface enhancements shall be consistent with the design features developed for AVQ-MM#3 and shall include architectural elements (e.g., stamped pattern, surface articulation, decorative texture treatment), as determined acceptable to the local jurisdiction. Surface coatings shall be used on wood and concrete noise barriers to facilitate cleaning and the removal of graffiti.

The Contractor shall prepare a technical memorandum documenting implementation and submit it to the Authority to demonstrate compliance.

3.16.8 Impact Summary for NEPA Comparison of Alternatives

As described in Section 3.1.5.4, when evaluating impacts on resources under NEPA, project alternatives are compared to the No Project condition. The determination of impact is based on the context and intensity of the change from project construction and operation. Table 3.16-31 compares the potential impacts of the project alternatives on aesthetics and visual quality, summarizing the detailed information provided in Section 3.16.6.

Construction of the project alternatives would cause temporary impacts on visual character and quality from introducing construction activities and equipment into the viewsheds of all viewer groups, including worker parking, and equipment and materials storage areas. Impacts would be greater where there are sensitive viewers or where larger portions of the project alternative would be visible. Construction may be visible from some locations with scenic vistas, such as from elevated roadways and bridges that cross or parallel the existing rail corridor or from adjacent multilevel buildings, degrading visual quality where sensitive viewers are present.

The construction impacts would be similar among all alternatives but would vary based on the location of the construction activity, the viewer groups present, and construction method. For example, certain portions of the alternative alignments would require the use of precast yards to develop horizontal guideway beams for aerial structures, which can degrade the visual unity and intactness of a viewshed. The visual impact would be greater under Alternatives 1 and 3, which would use more aerial structures, and therefore require precast yards, than under Alternatives 2 or 4. Areas disturbed by construction would be revegetated to blend berms into

the surrounding landscape, which would minimize impacts on visual quality, but would not replace views lost to HSR construction or obscure large scale HSR facilities that degrade the visual quality of nearby viewers.

The intensity of the impacts on aesthetics and visual resources would also vary by viewer sensitivity. Where the construction activity would be visible to viewers who are more sensitive to changes in aesthetic and visual quality, such as recreational, residential, and some traveling viewers, where HSR construction or operation would degrade visual quality, the impact would be greater. Project features include measures that would minimize impacts on community residents and businesses, including temporary nighttime lighting. Contractors would prepare a construction management plan to reduce potential impacts on neighborhoods and communities. Nonetheless, views of construction equipment and materials from nearby viewers would remain.

Construction of the alternatives would cause direct permanent impacts on visual character and quality resulting from physical changes of the landscape that alter the existing visual character or that block, screen, obstruct, or interfere with views of scenic resources and important visual landmarks, resulting in degraded visual quality. In general, permanent construction impacts would be greater where the HSR is on viaduct and the scale of the infrastructure dominates the existing landscape. Application of aesthetic guidelines and an aesthetic review process would provide an enhanced design for the elevated HSR structures, but the height and scale of these structures would continue to dominate the surrounding landscape. Permanent construction impacts are greater under Alternatives 1 and 3, which are on viaduct for 45.4 miles and 43.2 miles, respectively, than Alternatives 2 and 4, which are on viaduct for 20.9 and 15.2 miles, respectively. Because Alternative 4 would operate in blended service with Caltrain from San Jose to Gilroy with only one new grade separation and no viaducts, it would have the least construction impact of any of the alternatives. In areas where Alternatives 1 and 3 would require the relocation of residences or other structures, the land disturbed by construction of the viaduct would be revegetated.

Table 3.16-31 Comparison of Project Alternative Impacts for Aesthetics and Visual Quality

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Visual Quality				
Impact AVQ#1: Temporary Direct Impacts on Visual Quality and Scenic Vistas	Construction activities would temporarily degrade visual quality as construction proceeds along the length of the HSR alignment, including the use of precast yards for construction of 45.4 miles of viaduct, resulting in the greatest impact.	Construction activities would temporarily degrade visual quality as construction proceeds along the length of the HSR alignment, including the use of precast yards for construction of 20.9 miles of viaduct.	Construction activities would temporarily degrade visual quality as construction proceeds along the length of the HSR alignment, including the use of precast yards for construction of 43.2 miles of viaduct, resulting in a greater impact than Alternatives 2 and 4.	Construction activities would temporarily degrade visual quality as construction proceeds along the length of the HSR alignment, resulting in the least impact.
Impact AVQ#2: Permanent Direct Impacts on Visual Quality—Santa Clara Landscape Unit	The alignment would be at grade, and the additional rail infrastructure would be within and adjacent to existing railway facilities, such that the baseline visual quality (moderately high) of the area would not be affected, resulting in the least impact.	The construction of an elevated viaduct and other structures would change the baseline visual character and block or change locally important views for residents, such that the baseline visual quality of the landscape unit would be reduced from moderately high to moderate.	Same as Alternative 2.	Same as Alternative 1.
Impact AVQ#3: Permanent Direct Impacts on Visual Quality—Diridon Station Landscape Unit	HSR infrastructure, including aerial structures rising up to 60 feet, would introduce permanent changes to the visual character of the Diridon Landscape Unit, reducing visual quality from moderate to moderately low, predominantly affecting travelers and commercial viewer groups (moderate sensitivity).	Same as Alternative 1	Same as Alternative 1.	Track shifts and platform modifications to allow for HSR service to be blended with Caltrain service would not change the visual quality of the Diridon Landscape Unit, resulting in the least impact.

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact AVQ#4: Permanent Direct Impacts on Visual Quality—San Jose Station Approach Landscape Unit	HSR infrastructure, including a viaduct rising up to 60 feet, would introduce permanent changes to the existing visual character of the San Jose Station Approach Landscape Unit (moderately high visual quality) which includes the Gardner neighborhood (moderately high sensitivity), by adding a view of transportation infrastructure, such that the existing visual quality of the landscape unit would be degraded.	Same as Alternative 1.	Same as Alternative 1.	Track shifts and reconstruction or modification of existing grade separations to allow addition of a third track to permit HSR service to be blended with Caltrain service would not change the visual quality of the San Jose Station Approach Landscape Unit, resulting in the least impact.
Impact AVQ#5: Permanent Direct Impacts on Visual Quality—Communications Hill Landscape Unit	The expansion of railway infrastructure and elimination of vegetation between Communications Hill Park and the rail right-of-way in the Communications Hill Landscape Unit (moderately high visual quality) would introduce permanent changes for the residential and recreational viewers (high sensitivity) by visually encroaching upon the park, degrading visual quality at KVP 9. For the entire landscape unit, the effect would be neutral because of few sensitive viewers.	Same as Alternative 1.	Same as Alternative 1.	Track shifts to allow addition of a third track to permit HSR service to be blended with Caltrain service would not change the visual quality of the Communications Hill Landscape Unit, resulting in the least impact.

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact AVQ#6: Permanent Direct Impacts on Visual Quality—Monterey Highway San Jose Landscape Unit	Construction of the HSR viaduct would be visible over existing noise barriers and landscaping that currently shield residential views to Monterey Road and the UPRR/Caltrain tracks and would introduce permanent changes for the residential and recreational (high sensitivity) viewers, resulting in the greatest impact.	Reconstruction of Monterey Road and associated landscaping would improve visual quality from moderate to high in an area with travelers with moderate sensitivity.	Same as Alternative 1.	Track shifts and modifications to the Capitol and Blossom Hill Caltrain Stations to allow for HSR service to be blended with Caltrain service would not change the visual quality of the Monterey Highway San Jose Landscape Unit, resulting in the least impact.
Impact AVQ#7: Permanent Direct Impacts on Visual Quality—Coyote Valley Landscape Unit	Alternative 1 would run on an elevated structure in the median of Monterey Road. Construction of the viaduct would alter the existing visual character of agricultural landscape, degrading the visual quality of the landscape unit from moderately high to moderate for moderately high viewers, resulting in the greatest impact.	Alternative 2 would run at grade in the right-of-way of Monterey Road and require the removal of Keesling's Shade Trees. Design improvements and landscaping would reduce visual conflicts and maintain the existing visual quality of the landscape, resulting in no impact on visual quality.	Same as Alternative 1.	Track shifts and modifications to allow for HSR service to be blended with Caltrain service would not change the visual quality of the Coyote Valley Landscape Unit, resulting in a lesser impact than Alternatives 1 and 3.
Impact AVQ#8: Permanent Direct Impacts on Visual Quality—US 101 Landscape Unit	Alternative 1 would extend 4.7 miles through the US 101 Landscape Unit (moderate visual quality) predominantly affecting views from travelers along US 101 (moderate viewer sensitivity). Alternative 1 would affect fewer viewers than Alternative 3 because of its shorter length.	Does not pass through the landscape unit; therefore, there would be no impact.	Alternative 3 would extend 5.7 miles through the US 101 Landscape Unit (moderate visual quality), predominantly affecting views from travelers along US 101 (moderate viewer sensitivity). Alternative 3 would affect more viewers because of its longer length, resulting in the greatest impact.	Same as Alternative 2.

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact AVQ#9: Permanent Direct Impacts on Visual Quality—Morgan Hill—San Martin Landscape Unit	Construction of a viaduct from US 101 to the UPRR/Caltrain corridor south of San Martin would contrast in scale and material with the existing moderate visual character of residential neighborhoods and agricultural land, degrading the visual quality of the landscape unit to moderately low as viewed by moderately sensitive viewers, resulting in a greater impact than Alternatives 3 or 4.	The addition of at-grade tracks along the UPRR/Caltrain corridor would not block distant views, but views would still be restricted across the railway corridor because of grade-separated road over- and undercrossings. In contrast to Alternatives 1 and 3, the at-grade tracks and associated infrastructure would not dominate the local visual environment, degrading the visual quality of the landscape unit from moderate to moderately low as viewed by moderately sensitive viewers. However, impacts would occur along the entire length of the railway corridor, resulting in the greatest impact.	Same as Alternative 1, except Alternative 3 would leave the UPRR/Caltrain corridor for the US 101 corridor south of San Martin on an aerial structure. The deviation in alignment from that described for Alternative 1 would not produce any unique impacts.	Track shifts and modifications to the Morgan Hill and San Martin Caltrain Stations to allow for HSR service to be blended with Caltrain service would increase the visual quality of the Morgan Hill—San Martin Landscape Unit, resulting in the least impact.

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact AVQ#10: Permanent Direct Impacts on Visual Quality—Downtown Gilroy Landscape Unit	Primarily on viaduct up to 50 feet above grade along the UPRR corridor, Alternative 1 would substantially contrast with the established character of residential areas and block views of surrounding hills. Construction of an elevated station at Gilroy would conflict with the historic Gilroy Caltrain Station and Gilroy City Hall, degrading the visual quality of the landscape unit from moderate to moderately low as viewed by viewers with moderately low sensitivity. Because it would use the highest viaduct, it would result in the greatest impacts.	Following the same alignment as Alternative 1, Alternative 2 would run primarily on embankment up to 20 feet above grade, partially blocking views and introducing changes to commercial and residential views. Matching the height of surrounding buildings, the scale of the embankment would not contrast with the existing landscape. However, the elevated HSR station platforms would visually dominate the historic Gilroy Caltrain Station and Gilroy City Hall, degrading the visual quality of the landscape unit from moderate to moderately low as viewed by viewers with moderately low sensitivity, resulting in greater impacts than Alternatives 3 or 4.	Alternative 3 would not pass through the Downtown Gilroy Landscape Unit, resulting in no impact.	Track shifts and modifications to the Gilroy Caltrain Station to allow for HSR service to be blended with Caltrain service would not change the visual quality of the Downtown Gilroy Landscape Unit.
Impact AVQ 11: Permanent Direct Impacts on Visual Quality—Pajaro—San Felipe Landscape Unit	Viaducts to carry the HSR across the Pajaro River, Soap Lake floodplain, and intersecting roadways and embankments connecting the viaducts would introduce views of large-scale infrastructure to the agricultural setting and limit distant views. The South Gilroy MOWF would introduce an industrial use into an agricultural area. These actions would degrade the visual quality of the landscape unit, resulting in the least impact.	Same as Alternative 1.	On viaduct and embankment, Alternative 3 would contrast with the visual setting of existing agricultural areas. The East Gilroy Station and MOWF would contrast with the established character of residential areas, schools, and historic buildings in Old Gilroy and disrupt the existing agricultural setting, degrading visual quality in the landscape unit, resulting in the greatest impact.	Similar to Alternative 1 with the same impact on visual quality.

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact AVQ#12: Permanent Direct Impacts on Visual Quality—Pacheco Pass Landscape Unit	Viaducts rising up to 60 feet, along with other HSR infrastructure such as tunnel portals and terracing of hillsides, would contrast with the agricultural and open space setting and have an impact on the visual quality of travelers' views, degrading the visual quality of the landscape unit from high to moderately high as viewed by travelers with moderately high sensitivity.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact AVQ#13: Permanent Direct Impacts on Visual Quality—San Luis Landscape Unit	Construction of HSR tunnels would not be visible to viewers, resulting in no change to visual quality in the landscape unit.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact AVQ#14: Permanent Direct Impacts on Visual Quality—Romero Landscape Unit	Construction of the HSR viaduct would introduce modern infrastructure into a natural setting but would not degrade visual quality in the landscape unit.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact AVQ#15: Permanent Direct Impacts on Visual Quality—Henry Miller Landscape Unit	Construction of the HSR viaduct would introduce modern infrastructure into a natural setting, but it would not lower the visual quality in the landscape unit.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact AVQ#16: Indirect Impacts on Visual Quality from HSR Stations	Land use development around HSR stations in San Jose and downtown Gilroy would be expected to maintain the existing visual character of the community through implementation of sound design principles in the Authority's "zone of responsibility" around each station, resulting in the least impact.	Same as Alternative 1.	Same as Alternative 1 for the San Jose Diridon Station. Even with application of sound design principles in the "zone of responsibility," land use development around the East Gilroy Station would alter the land use patterns in an agricultural area, thereby degrading the existing visual quality of the area, resulting in no impact on visual quality in the Diridon Station Landscape Unit but in the greatest impact in the Pajaro-San Felipe Landscape Unit.	Same as Alternative 1.
State Scenic Highways				
Impact AVQ#17: Impacts on State Scenic Highways	Where all project alternatives cross I-5, the HSR embankment and grade-separation would be similar to existing highway infrastructure and would not affect the visual quality of the highway. The project would not be visible from SR 152 and would not degrade visual quality in the landscape unit.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.

Impacts	Project Alternative			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Light and Glare				
Impact AVQ#18: Temporary Direct Impacts on Nighttime Light Levels	Lighting for tunnel portal construction sites in the Pajaro-San Felipe, Pacheco Creek Valley, and Romero Valley Landscape Units would create a new source of substantial light for up to 5 years, reducing visual quality for the duration of construction.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact AVQ#19: Permanent Direct Impacts on Nighttime Light Levels at Fixed Locations	Alternative 1 would cause permanent visual impacts from the increase in lighting levels at HSR facilities in rural agricultural settings where existing nighttime light levels are low, including an MOWF south of Gilroy and an MOWS in the San Joaquin Valley, resulting in the least impact.	Same as Alternative 1.	Same as Alternative 1, except an HSR station and an MOWF would be built east of Gilroy and would increase the fixed sources of light in an existing agricultural area with low nighttime light levels, resulting in the greatest impact	Same as Alternative 1.
Impact AVQ#20: Permanent Direct Impacts on Nighttime Light Levels from Trains	Spillover light levels in residential areas would affect highly sensitive residential viewers, especially from trains passing on 45.4 miles of viaducts, degrading visual quality where sensitive viewers are present, resulting in the greatest impact.	Light spillover from viaducts would occur along 20.9 miles of elevated track, degrading visual quality where sensitive viewers are present, resulting in lesser impacts than Alternatives 1 and 3	Light spillover from viaducts would occur along 43.2 miles of elevated track, degrading visual quality where sensitive viewers are present, resulting in a greater impact than Alternatives 2 and 4.	Light from HSR trains in urbanized areas would be similar to existing light from passenger and freights trains, degrading visual quality where sensitive viewers are present, resulting in the least impact.

HSR = high-speed rail
 I- = Interstate
 MOWS = maintenance of way siding
 MOWF = maintenance of way facility
 SR = State Route
 UPRR = Union Pacific Railway

Construction of the alternatives would cause indirect permanent construction impacts on visual quality and character resulting from new development occurring near HSR stations. This impact would be greater under Alternative 3, which would construct the East Gilroy Station in a rural agricultural area, where increased development and intensification in land uses contrast with the existing setting. Project features would provide development around HSR stations intended to be compatible with each communities' existing or planned visual character but would not eliminate visual impacts from substantial changes in land use, such as the conversion of agricultural land to commercial uses at the East Gilroy Station, which would cause a degradation of visual quality. Lighting and building design would conform to the local design context.

The application of station area development principles would help to maximize the performance of the transportation investment, enhance the livability of the communities it serves, create long-term value, and sensitively integrate the project into the communities along the HSR system corridor. In accordance with *HSR Station Area Development General Principles and Guidelines*, the Authority would encourage context-sensitive designs by working with local governments to enhance the public benefits of HSR station development so that they meet the needs of the local communities.

3.16.9 CEQA Significance Conclusions

As described in Section 3.16.4.4, the impacts of project actions under CEQA are evaluated against thresholds to determine whether a project action would result in no impact, a less-than-significant impact, or a significant impact. Table 3.16-32 shows the CEQA significance determinations for each impact discussed in Section 3.16.6. A summary of the significant impacts, mitigation measures, and factors supporting the significance conclusion after mitigation follows the table.

Table 3.16-32 CEQA Significance Conclusions and Mitigation Measures for Aesthetics and Visual Quality

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
Visual Quality, Including Scenic Vistas			
Impact AVQ#1: Temporary Direct Impacts on Visual Quality and Scenic Vistas	Significant for all alternatives: Construction activities and equipment would substantially degrade the existing visual character or quality of multiple sites and their surroundings where there are highly sensitive viewers.	AVQ-MM#1: Minimize Visual Disruption from Construction Activities AVQ-MM#2: Minimize Light Disturbance during Construction	Less than Significant
Impact AVQ#2: Permanent Direct Impacts on Visual Quality—Santa Clara Landscape Unit	Alternatives 1 and 4: Less than significant because the HSR infrastructure would be located within and adjacent to baseline railway facilities, resulting in no change to the baseline visual quality of the landscape unit and no impact on any viewer group.	No mitigation measures are required	N/A

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
	Alternatives 2 and 3: Less than significant because the decrease in visual quality from moderately high to moderate would not affect the majority of viewers with moderately low sensitivity.	No mitigation measures are required	N/A
Impact AVQ#3: Permanent Direct Impacts on Visual Quality—Diridon Landscape Unit	Alternatives 1, 2, and 3: Less than significant because construction of a viaduct for HSR would decrease the baseline visual quality of the Diridon Station Landscape Unit from moderate to moderately low. Viewers with an overall moderate sensitivity would not experience an impact on visual quality.	No mitigation measures are required	N/A
	Alternative 4: Less than significant because minor track shifts and modifications to station platforms would not change the visual quality of the landscape unit.	No mitigation measures are required	N/A
Impact AVQ#4: Permanent Direct Impacts on Visual Quality—San Jose Station Approach Landscape Unit	Alternatives 1, 2, and 3: Less than significant because the decrease in visual quality from moderately high to moderate would be viewed mainly by travelers with moderate sensitivity and because construction of a viaduct for HSR would not substantially degrade existing visual quality.	No mitigation measures are required	N/A
	Alternative 4: Less than significant because there would be no change in visual quality.	No mitigation measures are required	N/A
Impact AVQ#5: Permanent Direct Impacts on Visual Quality—Communications Hill Landscape Unit	Alternatives 1, 2, and 3: Significant because construction of the project would degrade visual quality in the landscape unit for highly sensitive recreational and residential viewers with moderately high to moderate sensitivity by visually encroaching upon Communication Hills Park and its surroundings.	AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas AVQ-MM#5: Replant Unused Portions of Lands Acquired for the HSR	Less than Significant

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
	Alternative 4: Less than significant because minor track shifts would not change the visual quality of the landscape unit.	No mitigation measures are required	N/A
Impact AVQ#6: Permanent Direct Impacts on Visual Quality—Monterey Highway San Jose Landscape Unit	Alternatives 1 and 3: Significant because the decrease in visual quality from moderately high to moderate would be viewed primarily by residential viewers with high sensitivity, and because the HSR viaduct would be visible over existing noise barriers and landscaping that currently shield residential views to Monterey Road and the UPRR/Caltrain tracks.	AVQ-MM#3: Incorporate Design Aesthetic Preferences into Final Design and Construction of Non-Station Structures AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas	Significant and Unavoidable
	Alternative 2: Less than significant because the reconstruction of Monterey Road and associated landscaping would improve visual quality.	No mitigation measures are required	N/A
	Alternative 4: Less than significant because minor track shifts and modifications to station platforms would not change the visual quality of the landscape unit.	No mitigation measures are required	N/A
Impact AVQ#7: Permanent Direct Impacts on Visual Quality—Coyote Valley Landscape Unit	Alternatives 1 and 3: Significant, because the viaduct would alter the established character of the agricultural environment and block scenic vistas of the surrounding hills. Visual quality would decline from moderately high to moderately low in an area with viewers with moderately high sensitivity.	No feasible mitigation is available	Significant and Unavoidable
	Alternative 2: Less than significant because the at-grade infrastructure would not substantially degrade the existing visual quality of the landscape unit and would improve the visual environment around Monterey Road.	No mitigation measures are required	N/A

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
	Alternative 4: Less than significant because the at-grade infrastructure would not substantially degrade the existing visual quality of the landscape unit.	No mitigation measures are required	N/A
Impact AVQ#8: Permanent Direct Impacts on Visual Quality—US 101 Landscape Unit	Alternatives 1 and 3: Less than significant because the decrease in visual quality from moderate to moderately low would be viewed primarily by travelers with moderate sensitivity, and because the HSR infrastructure would not substantially degrade existing visual quality.	No mitigation measures are required	N/A
	Alternatives 2 and 4: No impact. The alignment would not pass through the US 101 Landscape Unit.	No mitigation measures are required	N/A
Impact AVQ#9: Permanent Direct Impacts on Visual Quality—Morgan Hill—San Martin Landscape Unit	Alternatives 1, 2, and 3: Less than significant because the decrease in visual quality from moderate to moderately low would be predominantly viewed by viewers with moderate sensitivity.	No mitigation measures are required	N/A
	Alternative 4: Less than significant because the at-grade infrastructure would not substantially degrade the existing visual quality of the landscape unit.	No mitigation measures are required	N/A
Impact AVQ#10: Permanent Direct Impacts on Visual Quality—Downtown Gilroy Landscape Unit	Alternative 1: Less than significant because the decrease in visual quality in the landscape unit from moderate to moderately low would be predominantly viewed by viewers with moderately low sensitivity.	No mitigation measures are required	N/A
	Alternative 2: Less than significant because the decrease in visual quality from moderate to moderately low would be predominantly viewed by viewers with moderately low sensitivity.	No mitigation measures are required	N/A

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
	Alternative 3: No impact. The alignment would not pass through the Downtown Gilroy Landscape Unit.	No mitigation measures are required	N/A
	Alternative 4: Less than significant because the at-grade infrastructure would not substantially degrade the existing visual quality of the landscape unit.	No mitigation measures are required	N/A
Impact AVQ#11: Permanent Direct Impacts on Visual Quality—Pajaro—San Felipe Landscape Unit	Alternatives 1, 2, and 4: Less than significant because the HSR infrastructure would only reduce visual quality one level (moderately high to moderate) in an area of viewers with moderate sensitivity.	No mitigation measures are required	N/A
	Alternative 3: Significant, because East Gilroy Station and HSR infrastructure would substantially degrade the existing visual character of the agricultural landscape. Visual quality would decline from moderately high to moderately low in an area of viewers with moderate sensitivity.	AVQ-MM#3: Incorporate Design Aesthetic Preferences into Final Design and Construction of Non-Station Structures AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas AVQ-MM#5: Replant Unused Portions of Lands Acquired for the HSR	Significant and Unavoidable
Impact AVQ#12: Permanent Direct Impacts on Visual Quality—Pacheco Pass Landscape Unit	All alternatives: Less than significant because while HSR infrastructure would degrade the scenic resources of the rolling hills and riparian landscape, overall visual quality in the landscape unit would only decline from high to moderately high as viewed by travelers with moderately high sensitivity.	No mitigation measures are required	N/A
Impact AVQ#13: Permanent Direct Impacts on Visual Quality—San Luis Landscape Unit	All alternatives: Less than significant because visual quality in the landscape unit would not change.	No mitigation measures are required	N/A

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
Impact AVQ#14: Permanent Direct Impacts on Visual Quality—Romero Landscape Unit	All alternatives: Less than significant because overall visual quality in the landscape unit would remain moderately high.	No mitigation measures are required	N/A
Impact AVQ#15: Permanent Direct Impacts on Visual Quality—Henry Miller Landscape Unit	All alternatives: Less than significant because overall visual quality in the landscape unit would remain moderate.	No mitigation measures are required	N/A
Impact AVQ#16: Indirect Impacts on Visual Quality from HSR Stations	Alternatives 1, 2, and 4: Less than significant because the project features provide high design standards for development around the HSR stations in San Jose and downtown Gilroy that would conform to applicable zoning and other regulations governing scenic quality, maintaining the existing or planned visual character of the local communities.	No mitigation measures are required	N/A
	Alternative 3: Significant because development around the East Gilroy Station would substantially degrade the existing visual character of the agricultural landscape. Visual quality would decline from moderately high to moderately low in an area of viewers with moderately high sensitivity.	No feasible mitigation measure is available	Significant and Unavoidable
State Scenic Highways			
Impact AVQ#17: Impacts on State Scenic Highways	All alternatives: Less than significant because construction across I-5 would be similar to the existing highway infrastructure and conform to the existing visual character, with no change to visual quality. In the Pacheco Pass Landscape Unit, where SR 152 is a designated state scenic highway, the alternatives would pass through twin tunnels, not visible to any viewer.	No mitigation measures are required	N/A

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
Light and Glare			
Impact AVQ#18: Temporary Direct Impacts on Nighttime Light Levels	All alternatives: Significant for tunnel portal construction sites in the Pajaro–San Felipe, Pacheco Creek Valley, and Romero Landscape Units. Lighting for 24/7 tunnel construction would create a new source of substantial light that would adversely affect nighttime views in the area.	AVR-MM#1: Minimize Visual Disruption from Construction Activities AVR-MM#2: Minimize Light Disturbance during Construction	Less than Significant
Impact AVQ#19: Permanent Direct Impacts on Nighttime Light Levels at Fixed Locations	Alternatives 1, 2, and 4: HSR facilities would create new sources of substantial light. The MOWS in the Pajaro–San Felipe and Henry Miller Landscape Units would be lit throughout the night in locations where the existing light level is low. Project features would reduce impacts through visually sensitive lighting design but would not eliminate the presence of nighttime light that could affect sensitive viewers.	AVQ-MM#6: Screen Traction Power Distribution Stations and Radio Communication Towers AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas	Significant and Unavoidable
Impact AVQ#20: Permanent Direct Impacts on Nighttime Light Levels from Trains	Alternative 1: Significant because spillover light from passing trains would create a new source of substantial light, increasing nighttime light levels in residential areas where existing nighttime light levels are low to moderate. Lights from HSR trains, running at grade or on viaduct from San Jose to Gilroy through the San Jose Station Approach, Communications Hill, Monterey Highway San Jose, Morgan Hill–San Martin, and Downtown Gilroy Landscape Units, would shine directly into homes or above existing landscaping and noise barriers into residential areas with sensitive viewers.	AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas NV-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines	Significant and Unavoidable

CEQA Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure	CEQA Level of Significance after Mitigation
	<p>Alternative 2: Significant because spillover light from passing trains would create a new source of substantial light, increasing nighttime light in residential areas where existing nighttime light levels are low to moderate. Lights from HSR trains running at grade or on viaduct in the Santa Clara, San Jose Station Approach, Communications Hill, Morgan Hill–San Martin, and Downtown Gilroy Landscape Units would shine directly into homes or above existing landscaping into residential areas with sensitive viewers.</p>	<p>AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas NV-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines</p>	<p>Significant and Unavoidable</p>
	<p>Alternative 3: Significant because spillover light from passing trains would create a new source of substantial light, increasing nighttime light levels in residential areas where existing nighttime light levels are low to moderate. Lights from HSR trains, running at grade or on viaduct from San Jose to Gilroy through the Santa Clara, San Jose Station Approach, Communications Hill, Monterey Highway San Jose, and Morgan Hill–San Martin Landscape Units, would shine directly into homes or above existing landscaping and noise barriers into residential areas with sensitive viewers.</p>	<p>AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas NV-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines</p>	<p>Significant and Unavoidable</p>
	<p>Alternative 4: Less than significant because spillover light from passing trains would be similar to existing light from passenger and freight trains.</p>	<p>No mitigation measures are required</p>	<p>N/A</p>

HSR = high-speed rail
 I = Interstate
 SR = State Route
 UPRR = Union Pacific Railway
 MOWF = maintenance of way facility
 MOWS = maintenance of way siding

For all project alternatives, the majority of aesthetics and visual quality impacts would be significant before mitigation during construction and operations activities. Temporary construction impacts would result from construction activities and equipment that are introduced into the viewshed of all user groups and would be significant under all three alternatives. Most significant impacts from permanent construction would relate to the presence of aerial viaducts, which would be out of scale with the existing visual environment, especially near single-family residential areas. This would result in greater impacts under Alternatives 1 and 3, which would be on viaduct for 45.4 miles and 43.2 miles, respectively, than Alternative 2, which would be on viaduct for 20.9 miles. Because Alternative 4 would operate in blended service with Caltrain from San Jose to Gilroy without only one new grade separation and no new viaducts, it would have the least construction impact of any of the alternatives.

Impact AVQ#1: Temporary Direct Impacts on Visual Quality and Scenic Vistas

During the period of construction all project alternatives would have a temporary significant impact because construction activities and equipment would substantially degrade the existing quality of multiple sites and their surroundings. Construction equipment, stockpiles, and activities would contrast with the established character of views in highly sensitive residential areas and would alter the existing visual quality of residential areas and historic properties, reducing their cultural order to affect visual quality. While the project would reduce dust, screen and site activities away from sensitive viewers, and restore temporary construction sites to their pre-construction condition, some large-scale activities, such as viaduct construction or tunnel portal sites could not be screened, substantially degrading visual resources. Where construction degrades the views of highly sensitive residential and recreational viewers, visual resources would be substantially degraded by causing a decline in both the cultural order and natural harmony, affecting a decrease in visual quality. The project features would reduce the potential impacts on the visual environment and visual quality, but not to a level below significance.

The Authority would implement mitigation measures to minimize the area, scale, and exposure of visual impacts on residential views. Mitigation measures AVQ-MM#1 and AVQ-MM#2 would require construction contractors to preserve existing vegetation to screen views, locate construction staging sites 500 feet from residential areas, and shield nighttime construction lighting, thereby minimizing changes to the existing visual quality. Therefore, with implementation of mitigation measures the impact would be less than significant.

Impact AVQ#5: Permanent Direct Impacts on Visual Quality—Communications Hill Landscape Unit

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 would have a significant impact because the HSR infrastructure would substantially affect residents with a high viewer response adjacent to Communications Hill Park and recreationists within the park with a moderately high viewer response. The project includes aesthetic guidelines to integrate structures within a community and to reduce intrusiveness of HSR infrastructure, which would reduce but not eliminate impacts of the visual encroachment of HSR.

The Authority would implement mitigation measures to minimize the impacts on residential and recreationist viewers. As part of AVQ-MM#4, the Authority or its contractors, prior to the commencement of HSR operations, would provide landscape screening to obscure HSR infrastructure from residential and recreational viewers. As part of AVQ-MM#5, lands acquired for the project that are not used for the HSR would be replanted or replaced with similar vegetation that, upon maturity, would be similar in size and character to the removed vegetation. This would minimize the aesthetic and visual impacts of land made fallow because it would replace vegetation removed during construction and enhance the visual appeal of areas in proximity to HSR infrastructure, thereby reducing the resulting area, scale, and exposure to adverse visual impacts.

These mitigation measures would soften and obscure the conflicting aesthetic of the HSR infrastructure from viewers in and around the park. Therefore, the impact would be less than significant.

Impact AVQ#6: Permanent Direct Impacts on Visual Quality—Monterey Highway San Jose Landscape Unit

Alternatives 1 and 3

Alternatives 1 and 3 would have a significant impact because the HSR infrastructure would substantially degrade the existing visual character or quality of nearby residential neighborhoods for residents with a high viewer response, Monterey Road, and the Keesling's Shade Trees and their surroundings. The project features would provide minimum design standards appropriate for the environment, but good design cannot obscure views of HSR infrastructure.

The Authority would implement mitigation measures to minimize the impacts on residential views. AVQ-MM#3 would require the contractor to work with the Authority and local jurisdictions to incorporate Authority-approved aesthetic preferences into final design and construction. As part of AVQ-MM#4, the Authority or its contractors, prior to the commencement of HSR operations, would provide landscape screening to obscure HSR infrastructure from residential viewers. This would reduce exposure to adverse visual impacts.

These mitigation measures would soften and obscure the conflicting aesthetic of the HSR infrastructure, but they would not be able to obscure tall HSR infrastructure from adjacent residential areas. Therefore, the impact would be significant and unavoidable.

Impact AVQ#7: Permanent Direct Impacts on Visual Quality—Coyote Valley Landscape Unit

Alternatives 1 and 3

Alternatives 1 and 3 would have a significant impact because the HSR infrastructure would substantially degrade the existing visual character of the site and its surroundings. The viaduct would contrast in scale, materials, and style with the rural character of Monterey Road and the Keesling's Shade Trees and surrounding agricultural and open space. Project features would provide minimum design standards appropriate for the environment, but good design cannot obscure views of HSR infrastructure.

The Authority would implement mitigation measures to minimize the impacts on residential views. AVQ-MM#3 would require the contractor to work with the Authority and local jurisdictions to incorporate Authority-approved aesthetic preferences into final design and construction. As part of AVQ-MM#4, the Authority or its contractors, prior to the commencement of HSR operations, would provide landscape screening to obscure HSR infrastructure from residential viewers. This would reduce exposure to adverse visual impacts. As part of AVQ-MM#5, lands acquired for the project that are not used for the HSR would be replanted or replaced with similar vegetation that, upon maturity, would be similar in size and character to the removed vegetation. This would minimize the aesthetic and visual impacts of land made fallow because it would replace vegetation removed during construction and enhance the visual appeal of areas in proximity to HSR infrastructure.

These mitigation measures would soften and obscure the conflicting aesthetic of the HSR infrastructure, but they would not be able to obscure tall HSR infrastructure. Because of the height of the HSR infrastructure and its prominence, it would substantially contrast with the flat terrain of the open space of the Coyote Valley. Therefore, the impact would be significant and unavoidable.

Impact AVQ#11: Permanent Direct Impacts on Visual Quality—Pajaro–San Felipe Landscape Unit

Alternative 3

Alternative 3 would have a significant impact because the East Gilroy Station would substantially degrade the existing visual character or quality of the site and its surroundings, introducing views of HSR infrastructure that substantially contrasts with the established character of rural agricultural areas, affecting travelers with moderately high viewer response. The project includes aesthetic guidelines to integrate structures within a community and to reduce intrusiveness of

large structures, which would reduce but not avoid loss of views and the conflicting aesthetic of the HSR infrastructure.

The Authority would implement mitigation measures to minimize the impacts on sensitive views. AVQ-MM#3 would require the contractor to work with the Authority and local jurisdictions to incorporate Authority-approved aesthetic preferences into final design and construction. As part of AVQ-MM#4, the Authority or its contractors, prior to the commencement of HSR operations, would provide landscape screening to obscure HSR infrastructure from viewers. As part of AVQ-MM#5, lands acquired for the project that are not used for the HSR would be replanted or replaced with similar vegetation that, upon maturity, would be similar in size and character to the removed vegetation. This would minimize the aesthetic and visual impacts of land made fallow because it would replace vegetation removed during construction and enhance the visual appeal of areas in proximity to HSR infrastructure, thereby reducing the resulting area, scale, and exposure to adverse visual impacts.

These mitigation measures would soften and obscure the conflicting aesthetic of the HSR infrastructure, but they would not be able to obscure HSR infrastructure, such as for the East Gilroy Station viewers. Because of the height of the HSR infrastructure and its prominence, it would substantially contrast with the flat terrain and agricultural character of the landscape unit. Therefore, the impact would be significant and unavoidable.

Impact AVQ#16: Indirect Impacts on Visual Quality from HSR Stations

Alternative 3

Alternative 3 would have a significant impact because the East Gilroy Station would be located in an agricultural area and any surrounding development would substantially degrade the existing visual character of the site and its surroundings. When HSR begins service, major changes in land development, including increases in intensity of uses near HSR stations, are expected to occur, resulting in indirect impacts on the visual environment and visual quality. The project includes design standards to reduce potential land use impacts by implementing HSR station area development principles and guidelines.

The application of station area development principles would help to maximize the performance of the transportation investment, enhance the livability of the communities it serves, create long-term value, and sensitively integrate the project into the communities along the HSR system corridor. In accordance with *HSR Station Area Development General Principles and Guidelines*, the Authority would encourage context sensitive designs by working with local governments to enhance the public benefits of HSR station development so that they meet the needs of the local communities.

These project features would provide development around HSR stations intended to be compatible with each communities' existing or planned visual character. Where the land use change results in the urbanization of agricultural land, however, it would be infeasible to maintain visual compatibility. Therefore, the impact would be significant.

Impact AVQ#18: Temporary Impacts on Nighttime Light Levels

All project alternatives would have a significant impact because during the construction of the project, construction staging areas, precast yards, tunnel portals, maintenance facilities, station sites, and other HSR buildings would have temporary nighttime lighting for security and safety that would create a new source of light that would adversely affect nighttime views. Contractors would prepare a Construction Management Plan to reduce potential impacts on neighborhoods and communities. It would include measures that minimize impacts on community residents and businesses, including temporary nighttime lighting.

This project feature would minimize impacts from lighting at locations where construction activities do not occur at night. However, where temporary construction lighting is required at night and occurs near sensitive viewers, such as travelers with a moderately high viewer sensitivity along SR 152 in the Pacheco Creek Valley, adverse impacts could occur. The tunnel portal construction sites in Pacheco Creek Valley and Romero Valley would be lit throughout the

night for the duration of tunnel construction activities. Introducing lighting to these locations with no existing lighting would alter their visual quality, reducing it by two levels. Although construction would not occur at night at all times or in other locations, lighting associated with construction may be an annoyance to viewers, especially in rural areas. Lighting would reduce visual quality by one level, where viewer sensitivity would often be moderate or, in some cases, high. While the project features would reduce impacts through visually sensitive lighting design, the 24-hour operation of the facilities requires a minimum level of lighting for work safety and security. Project features cannot eliminate the presence of nighttime light where none existed.

The Authority would implement mitigation measures to minimize the impacts on travelers' views. Mitigation measures AVQ-MM#1 and AVQ-MM#2 would require construction contractors to employ measures, such as preserving existing vegetation to screen views, to minimize visual disturbance and shield nighttime construction lighting, thereby maintaining existing visual quality as much as possible.

Mitigation measures would reduce the area, scale, and exposure to adverse visual impacts. This would reduce light spillover from HSR buildings and facilities. Therefore, the impact would be less than significant.

Impact AVQ#19: Permanent Impacts on Nighttime Light Levels at Fixed Locations

All project alternatives would have a significant impact because various HSR buildings and facilities would be lit throughout the night, which would create a new source of light that would adversely affect nighttime views. Fixed lighting sources at proposed HSR facilities, including stations, TPSS, and maintenance facilities, would be designed to direct lighting downward.

Significant impacts from permanent construction also would result from the introduction of the East Gilroy Station and maintenance of infrastructure facility in a rural agricultural area under Alternative 3, and new sources of permanent lighting under all alternatives. The Authority would implement mitigation measures to reduce adverse impacts; however, where the scale of HSR infrastructure would not be screened or views would not be restored through mitigation, significant impacts would remain. Less-than-significant impacts were found when impacts would be temporary and sufficiently mitigated, where alternatives would be at grade and within or adjacent to an existing rail corridor, or where the introduction of HSR infrastructure would benefit, not substantially degrade, the existing visual environment and visual quality.

The project features would provide minimum design standards, including design intended to limit light spillover, but the 24-hour operation of the facilities require a minimum level of lighting for work safety and security. Therefore, the project features would reduce but not avoid the potential impacts on aesthetics and visual quality. As part of AVQ-MM#4, the Authority or its contractors, prior to the commencement of HSR operations, would provide landscape screening to obscure HSR infrastructure from residential and other sensitive viewers. As part of AVQ-MM#6, the Authority or its contractors, prior to the commencement of HSR operations, would screen TPSS and radio communication towers, concealing fixed lighting from buildings and activities at grade. This would reduce light spillover from HSR buildings and facilities. Therefore, the impact would be less than significant.

Impact AVQ#20: Permanent Impacts on Nighttime Light Levels from Trains

Alternatives 1, 2, and 3 would have a significant impact because where HSR trains run elevated on viaducts, adjacent to residential areas, the spillover of light from passing trains and maintenance equipment would increase nighttime light levels, thus creating a new source of light that would adversely affect nighttime views. Train lights would be directed toward the guideway. Nighttime maintenance activities along the alignment would introduce lighting in fixed locations or emanating from slow-moving maintenance vehicles. Work safety and security requires a minimum level of lighting spread over the work area. In residential areas, the HSR light sources would increase nighttime light levels.

Project features would reduce but not avoid the potential impacts on aesthetics and visual quality. As part of AVQ-MM#4, the Authority or its contractors, prior to the commencement of HSR operations, would provide landscape screening to obscure HSR infrastructure from residential and other sensitive viewers. In locations where NV-MM#3 would place opaque noise barriers, light would be blocked by the barriers. In locations where the HSR viaducts are too tall to be obscured by landscaping or where noise barriers are translucent or transparent, the light spillover would persist. Therefore, the impact would be significant and unavoidable.