

VISUAL IMPACT ASSESSMENT

State Route 86/Avenue 50 New Interchange Project

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Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

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VISUAL IMPACT ASSESSMENT

State Route 86/Avenue 50 New Interchange Project

I. PURPOSE OF STUDY

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed project and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes.

II. PROJECT DESCRIPTION

The proposed project would convert a portion of State Route 86 (SR-86) from existing expressway to freeway with two new overcrossing structures across the Coachella Valley Stormwater Channel (CVSC) and SR-86, and new access ramps which would accommodate traffic for the existing and planned development in the area. The project would also include the realignment and widening of Avenue 50 from the existing two-lane roadway to a six-lane major arterial, and realignment of Tyler Street on both the east and west side of SR-86. The existing Avenue 50 roadway to the west of SR-86 would be repurposed as a CVSC maintenance road. The project would improve safety and traffic operations by enhancing the level of service (LOS) on the adjacent SR-86/Dillon Road interchange and SR-86/Avenue 52 intersection. Further, the project would improve public safety and mobility by constructing a second overcrossing structure spanning the CVSC/Whitewater River, replacing the existing low water crossing, and eliminating flood-related hazards during inclement weather events.

The proposed project includes two alternatives, Alternative 7 and Alternative 8, which are essentially the same except for the configuration of the southbound SR-86 on- and off-ramp. Alternative 8 includes a southbound loop on-ramp whereas Alternative 7 does not. Alternative 7 would result in an impervious area of approximately 42 acres and Alternative 8 will result in approximately 40 acres of impervious area. Both alternatives would include signalized intersections at SR-86/Avenue 50 on- and off-ramps, and Avenue 50/Tyler Street.

Alternative 7

Build Alternative 7 proposes Modified Type L-9 Partial Cloverleaf that includes a loop on-ramp in the southeast quadrant of the interchange to accommodate the anticipated heavy eastbound-to-northbound movement of morning commute traffic. In addition, this alternative proposes the realignment of Avenue 50 and Tyler Street, construction of a two-span structure over the existing SR-86, construction of a five-span structure over the CVSC, and the addition of signing and traffic signal controls.

Alternative 8

Build Alternative 8 is similar to Build Alternative 7 with a SB loop on-ramp in the northwest quadrant of the proposed interchange. In addition, this alternative proposes the realignment of Avenue 50 and Tyler Street, construction of a two-span structure over the existing SR-86, construction of a five-span structure over the CVSC, and the addition of signing and traffic signal controls.

Exhibit 1, Regional Vicinity Map, shows the vicinity of the proposed project, and Exhibit 2, Site Vicinity Map, shows the location of the proposed project. Exhibit 3a, Site Plan – Alternative 7, and Exhibit 3b, Site Plan – Alternative 8, show the site plans for Alternatives 7 and 8, respectively.

III. PROJECT LOCATION AND SETTING

The project location and setting provides the context for determining the type and severity of changes to the existing visual environment. The terms *visual character* and *visual quality* are defined below and are used to further describe the visual environment. The project setting is also referred to as the corridor or project corridor which is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way, and is determined by topography, vegetation, and viewing distance.

The proposed project is located on SR-86 between Avenue 52 and Dillon Road in the City of Coachella, Riverside County, California. The project is located in the eastern portion of the Coachella Valley, an extensive (approximately 10-mile wide) and moderately flat expanse oriented in a generally northwest to southeast direction, with a gentle gradient from San Gorgonio Pass (approximately 2,600 feet above mean sea level) to the Salton Sea (surface 227 feet below mean sea level) to the southeast. The Coachella Valley and the Salton Sea are part of the greater Salton Trough that includes a portion of the Colorado Desert Geomorphic Province. The Coachella Valley is surrounded by the Santa Rosa Mountains (Toro Peak, 8,715) approximately seven miles to the southwest, and the San Jacinto Mountains (San Jacinto Peak, 10,834 feet) to the northwest. The northeastern part of the valley is defined by the Little San Bernardino Mountains (up to 5,267 feet) located approximately two miles to the northeast.¹ The landscape is characterized by agricultural land, lower density development, and mountainous ridgelines to the south, west, and southwest. The land use within the corridor is primarily rural desert agricultural and vacant land, but also includes areas of suburban developed uses; refer to Exhibit 4, Existing Conditions Photographs.

According to Caltrans, a state route must be included on the list of highways eligible for scenic highway designation in Streets and Highways Code Section 263. It can then be nominated for official designation by the local governing body. The project site does not include any officially designated or eligible State scenic highways.²

IV. ASSESSMENT METHOD

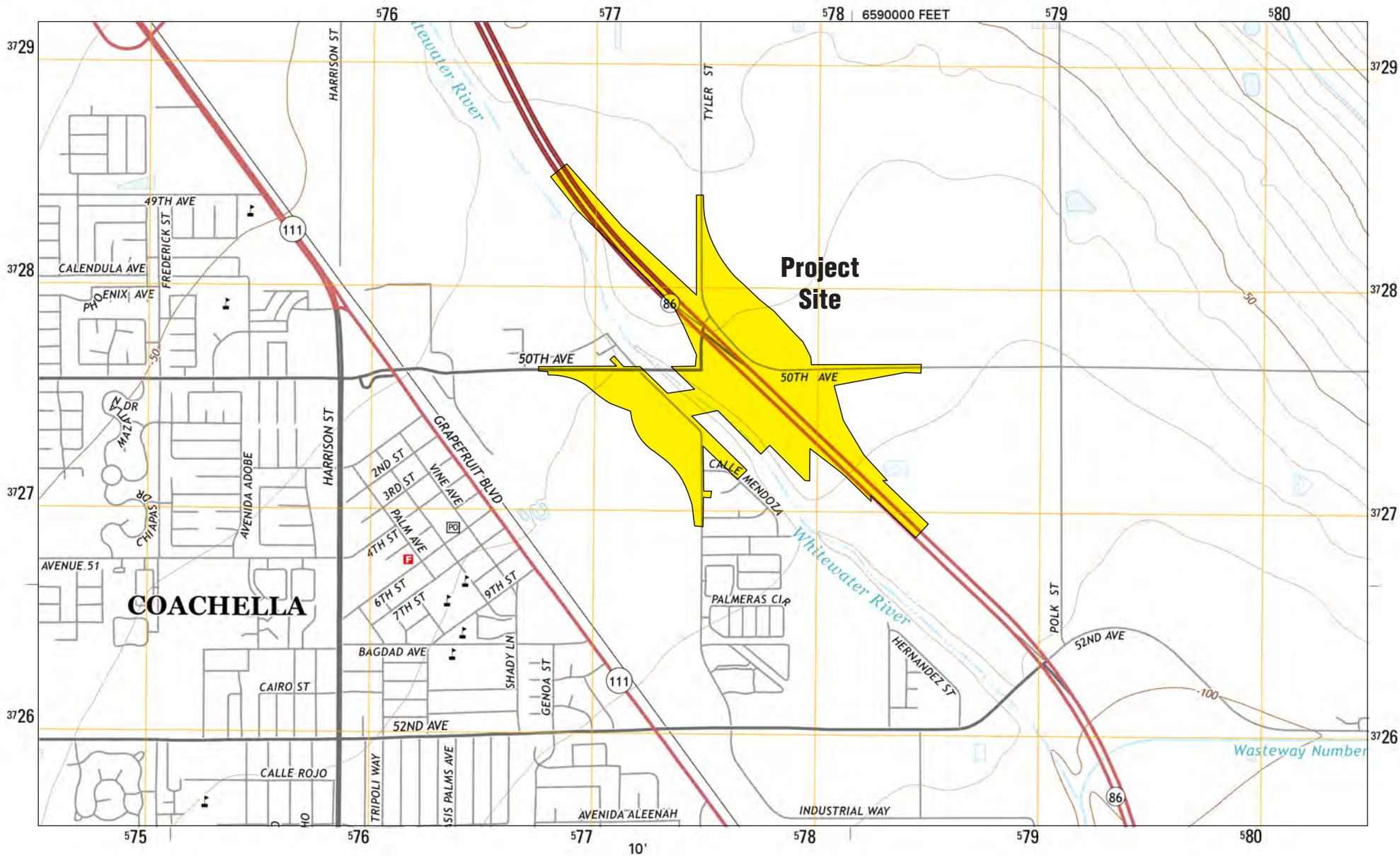
This visual impact assessment generally follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in January 1988.

The following steps were followed to assess the potential visual impacts of the proposed project:

- A. Define the project location and setting.
- B. Identify visual assessment units and key views.
- C. Analyze existing visual resources, resource change and viewer response.
- D. Depict (*or describe*) the visual appearance of project alternatives.
- E. Assess the visual impacts of project alternatives.
- F. Propose measures to offset visual impacts.

¹ City of Indio, *College of the Desert Indio Educational Center Draft Environmental Impact Report*, October 7, 2011.

² California Department of Transportation, *California Scenic Highway Mapping System*, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed on July 26, 2017.



Source: USGS Indio, CA Quadrangle, 2016.

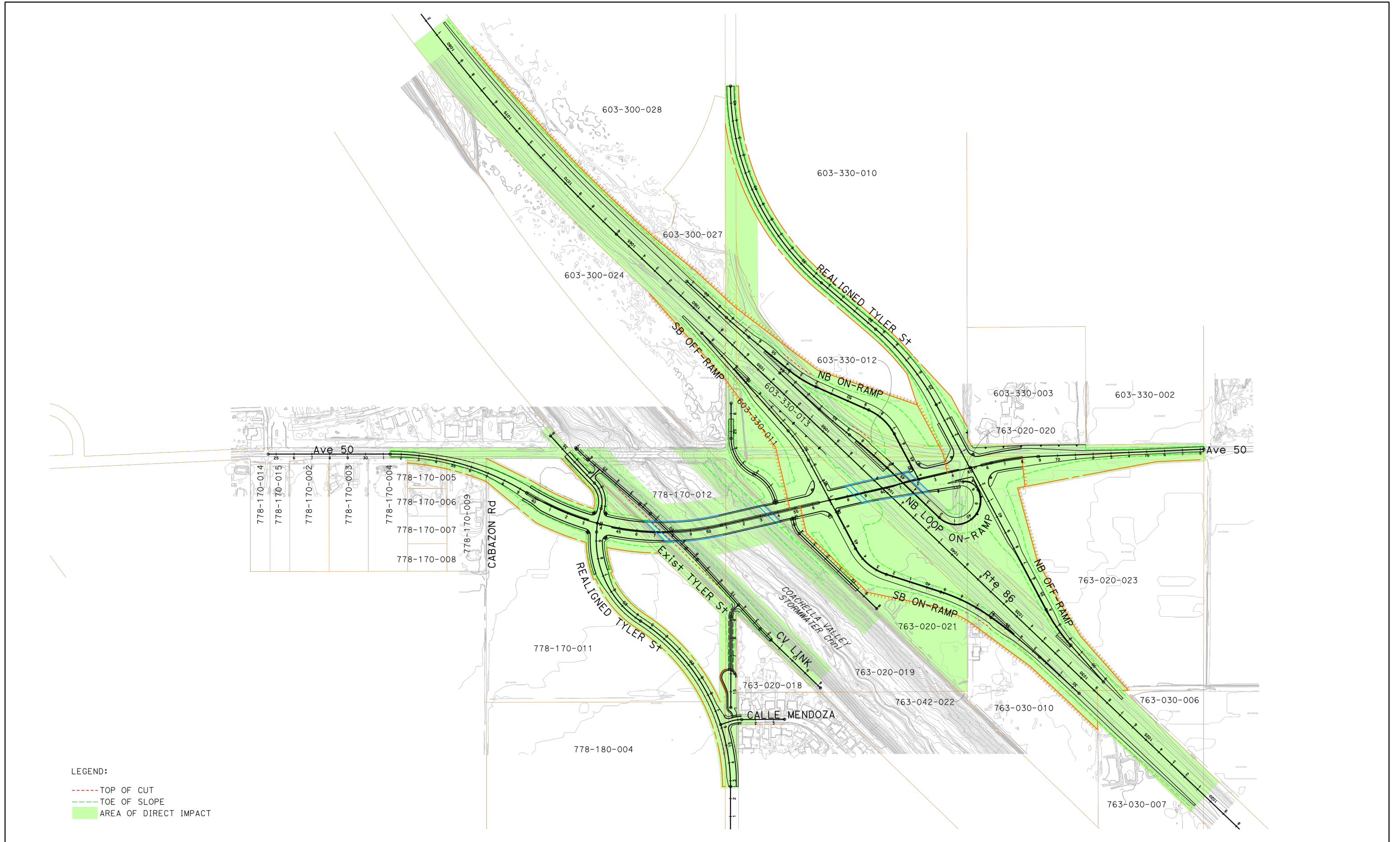
 Project Site



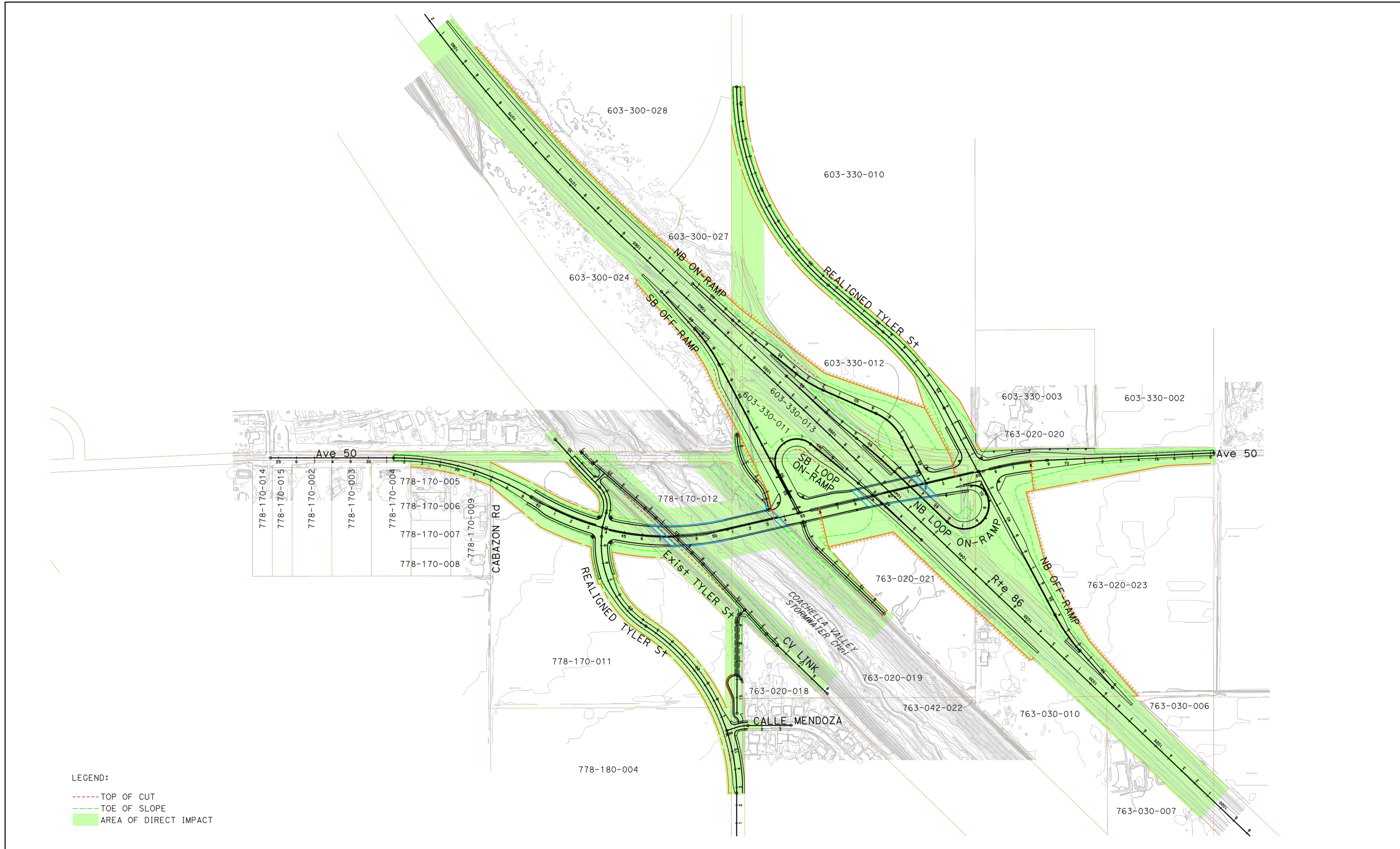
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STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Site Vicinity Map

Exhibit 2



LEGEND:
 - - - - - TOP OF CUT
 - - - - - TOE OF SLOPE
 [Green Shaded Area] AREA OF DIRECT IMPACT



LEGEND:
 - - - - - TOP OF CUT
 - - - - - TOE OF SLOPE
 [Green Shaded Area] AREA OF DIRECT IMPACT



View of agricultural land and the Santa Rosa Mountains to the south of the project site.



View of existing single-family residential use located along Avenue 50 near Tyler Street.



View of the project site looking east along Avenue 50.



View of an existing radio tower station located along 50th Avenue to the east of SR-86.

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Existing Conditions Photographs

For the purposes of this analysis, several Key Views were selected to represent public views from both public right-of-way and publicly accessible areas located within and adjacent to the project site. Key Views were selected after completion of site reconnaissance on June 28, 2017. Michael Baker International (Michael Baker) staff visited the site to take photographs and make observations from Key Views that were selected in consultation with City and Caltrans staff. The camera locations were recorded utilizing Global Positioning System (GPS) equipment. Primary photographs were taken using a fixed 50 millimeter lens, which captures a representation of human visual perception.

Michael Baker created a three-dimensional wire frame model using Project Engineer-provided Computer Aided Design and Drafting (CADD) files. Imaging software was used to align the computer model to the site photographs. The computer model was then superimposed over photographs from each of the Key Views, and minor camera alignment changes were made to all known reference points within view. Foreground masking of objects was performed with Adobe Photoshop to enhance realism.

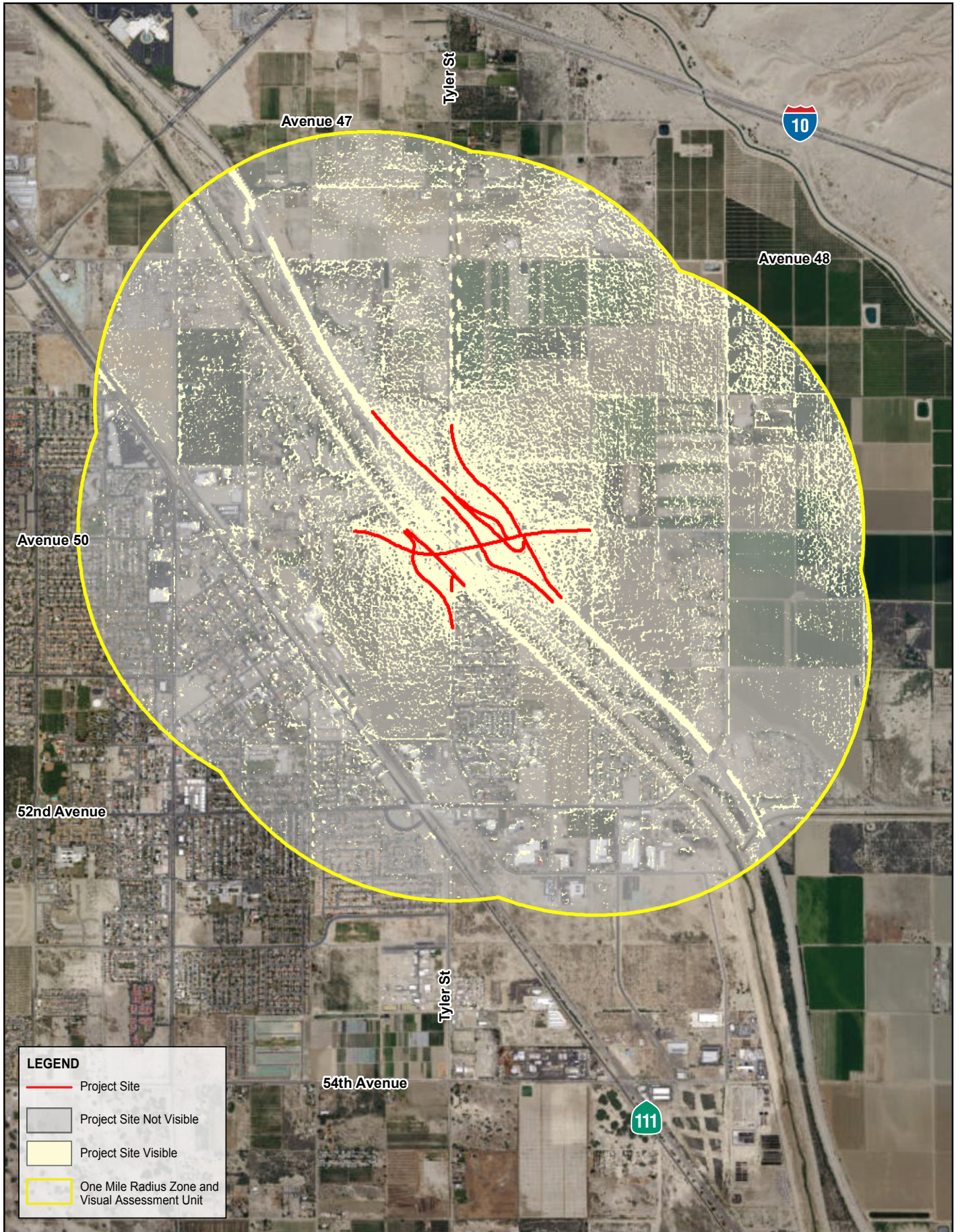
V. VISUAL ASSESSMENT UNITS AND KEY VIEWS

The project corridor is considered an “outdoor room” or *visual assessment unit* (VAU) for the proposed project. A VAU is typically defined by the limits of a particular viewshed and will often correspond to a place or district that is commonly known among local viewers. Exhibit 5a, Viewshed Map – Alternative 7, and Exhibit 5b, Viewshed Map – Alternative 8, delineate the VAU associated with the proposed project and depicts the viewshed for Alternatives 7 and 8 at a one-mile radius of the project corridor. The viewshed maps in Exhibits 5a and 5b portray the visible and non-visible areas of the project corridor within the VAU. VAUs are differentiated from other units both by its dimensions and visual resources. For this project, one VAU was determined to be sufficient for the visual analysis of the proposed project due to the homogenous character of the project area. Although there are multiple land uses within the VAU, all are within similar proximity to the project site and have similar views to the project site. Thus, one VAU was selected for the analysis of the proposed project in order to avoid repetitive analyses.

- Visual Assessment Unit 1

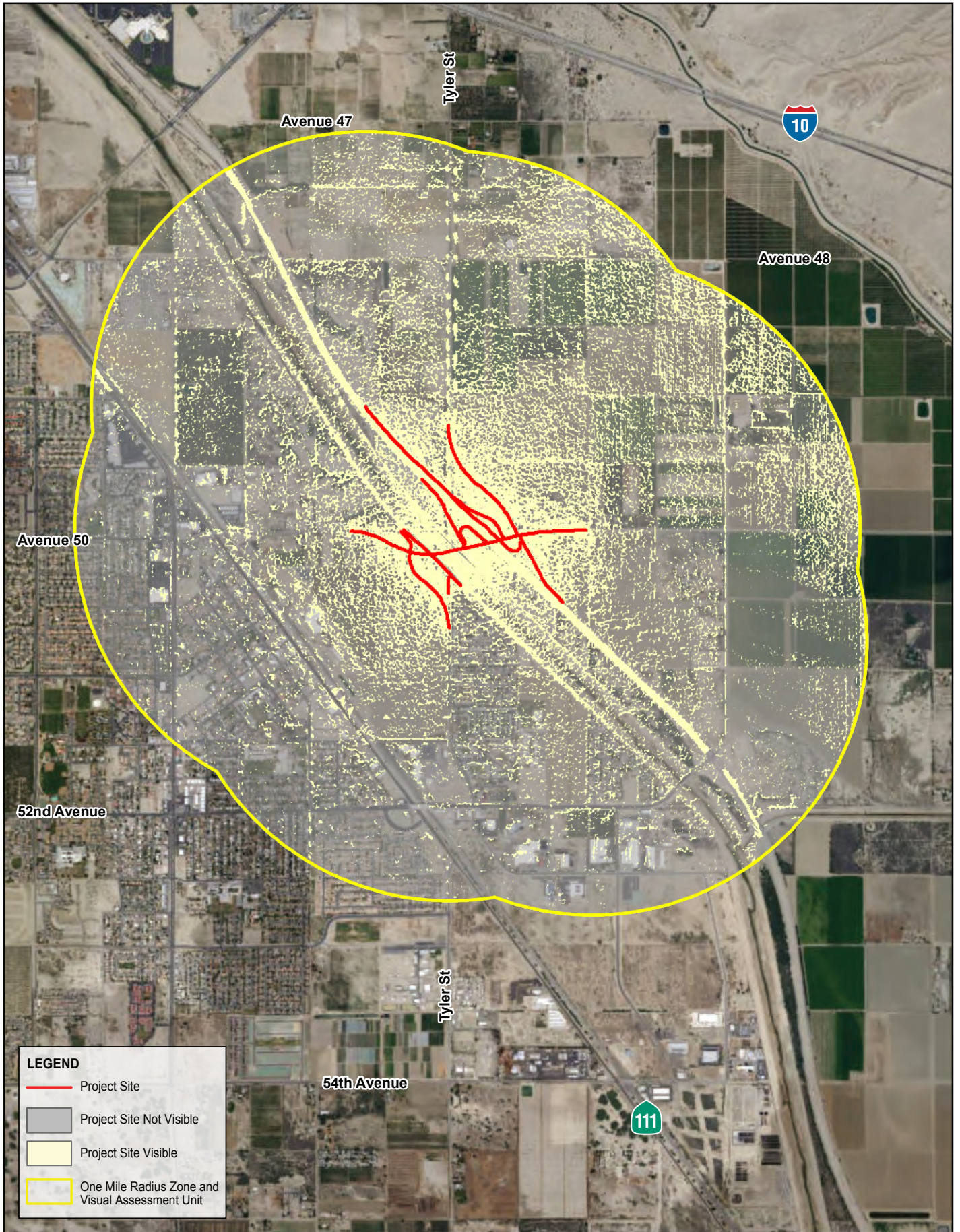
Visual Assessment Unit 1 (VAU1) is located in the central portion of the City, generally situated within the southeastern portion of the Coachella Valley, Riverside County. Exhibits 5a and 5b delineate the VAU associated with the proposed project. Geographic features that form this VAU include ridgelines associated with the Joshua Tree National Park to the north/east, eastern foothills of the San Bernardino National Forest to the northwest, Santa Rosa Mountains to the south, and San Jacinto Mountains to the west. These ridgelines and sloping hills visually contrast with the relatively flat form of the Coachella Valley, allowing for more distant views.

The project site is located between the foothills of Joshua Tree National Park to the north/east, and the Santa Rosa Mountains to the south. The developed area of the City of Coachella is located to the west/southwest, residential uses are positioned to the south and west, and agricultural land is situated to the north, east, and southwest of the project site. The CVSC traverses through the project site in a north-south direction. The project site is approximately 60 to 80 feet below mean sea level (msl). VAU1 is defined mainly by undeveloped land and agricultural uses in the Coachella Valley with surrounding views of the hillsides and ridgelines of Joshua Tree National Park to the north/east, eastern foothills of the San Bernardino National Forest to the northwest, Santa Rosa Mountains to the south, and San Jacinto Mountains to the west. Vegetation within



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STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Viewshed Map – Alternative 7



LEGEND

- Project Site
- Project Site Not Visible
- Project Site Visible
- One Mile Radius Zone and Visual Assessment Unit



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STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Viewshed Map – Alternative 8

the area generally consists of Arrowweed Scrub, Saltbush Scrub, ornamental vegetation, and agricultural land. These various vegetation types generally vary in color (brown/yellow and green) and height (from grasses to shrubs). Some flowering species exist within the area.

Five Key View locations within VAU1 were selected in consultation with Caltrans District 8 to depict visual changes to the project corridor from the proposed project. Each Key View location is described in detail below, and shown in [Exhibit 6, Key View Locations Map](#):

Key View 1 is located in the western portion of VAU1, along Avenue 50 near residential uses to the west of the project site. Key View 1 represents a typical view from eastbound Avenue 50 motorists and bicyclists, as well as views from residential uses along Avenue 50. Key View 1 depicts the realignment and widening of Avenue 50, and the proposed SR-86/Avenue 50 interchange.

Key View 2 is located in the south-central portion of VAU1 along Tyler Street. Key View 2 represents a typical view from northbound Tyler Street motorists, bicyclists, and pedestrians, as well as from Sierra Vista Park visitors. Key View 2 depicts the realignment and widening of Tyler Street associated with the project, and implementation of the future Coachella Valley Link (CV Link) up-ramp within the project limits.

Key View 3 is located in the southern portion of VAU1 along Tyler Street, near the southernmost limits of the project site. Key View 3 represents a typical view from northbound Tyler Street motorists, bicyclists, and pedestrians, as well as a general view from residences located along Tyler Street. Key View 3 depicts the realignment and widening of Tyler Street associated with the project, and implementation of the future the CV Link up-ramp within the project limits.

Key View 4 is located in the southeastern portion of VAU1 along SR-86, to the southeast of the proposed SR-86/Avenue 50 interchange. Key View 4 represents a typical view from northbound SR-86 motorists. Key View 4 depicts the proposed SR-86/Avenue 50 interchange overcrossing structure and new SR-86/Avenue 50 interchange.

Key View 5 is located in the eastern portion of VAU1 along Avenue 50, to the east of the project site. Key View 5 represents a typical view from westbound Avenue 50 motorists. Key View 5 depicts the new SR-86/Avenue 50 interchange overcrossing structure, and the widening/realigned Avenue 50.

VI. VISUAL RESOURCES AND RESOURCE CHANGE

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determine visual impacts (the other is *viewer response*, discussed below in *Section VII Viewers and Viewer Response*).

The FHWA method of visual resource analysis (guidance derived from the FHWA publication entitled *Visual Impact Assessment for Highway Projects*, dated January 1988) has been used to evaluate visible change as a result of project implementation. Visual resource change will be measured by low, moderate-low, moderate, moderate-high, and high ratings.



SOURCE: Google Earth Pro Aerial, April 2016.



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STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View Locations Map

Exhibit 6

First, visual character must be identified. Visual character is descriptive and non-evaluative, which means it is based on defined attributes that are neither good nor bad. A change in visual character cannot be described as having good or bad attributes until it is compared with the viewer response to that change. If there is public preference for the established visual character of a regional landscape and resistance to a project that will contrast that character, then changes in the visual character can be evaluated.

Next, visual quality must be assessed. Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed. FHWA states that this method should correlate with public judgments of visual quality well enough to predict those judgments. This approach is particularly useful in highway planning because it does not presume that a highway project is necessarily an eyesore. This approach to evaluating visual quality can also help identify specific methods for mitigating each adverse impact that may occur as a result of a project.

Visual Resources

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project corridor.

VISUAL CHARACTER

Visual character includes attributes such as form, line, color, texture, and is used to describe, not evaluate; that is these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator. For this project the following attributes were considered:

- **Form** - visual mass or shape
- **Line** - edges or linear definition
- **Color** - reflective brightness (light, dark) and hue (red, green)
- **Texture** - surface coarseness
- **Dominance** - position, size, or contrast
- **Scale** - apparent size as it relates to the surroundings
- **Diversity** - a variety of visual patterns
- **Continuity** - uninterrupted flow of form, line, color, or textural pattern.

The visual character of the proposed project will be fully compatible with the existing visual character of the corridor. The following includes a discussion on the existing visual character of VAU1 and the proposed project, and the change of existing visual character in VAU1 as a result of the project.

The surrounding uses include residential, agricultural, recreational, and vacant land uses. On-site uses consist of highway (SR-86), local roadway (Avenue 50 and Tyler Street), agricultural uses, and vacant land. Existing visual resources visible within the project viewshed include the Joshua Tree National Park to the north/east, eastern foothills of the San Bernardino National Forest to the northwest, Santa Rosa Mountains to the south, and San Jacinto Mountains to the west of the project site. The peaks, ridgelines, and hillsides associated with the aforementioned topographic features are the most prominent visual resources in the project area. These ridgelines are generally uniform in color and texture. Overall, the distant views toward these hills and ridgelines provide visual diversity in form, line, and color compared to the flat topography of the Coachella Valley. Vegetation within the area generally consists of Arrowweed Scrub, Saltbush Scrub, ornamental vegetation, agricultural land, and disturbed land associated with

highway and roadway right-of-way. These various vegetation types generally vary in color (brown/yellow and green) and height (from grasses to shrubs). Some flowering species exist within the area. However, due to a limited amount of visible vegetation in the area, textural diversity is lacking throughout VAU1.

Water flow within VAU1 generally flows toward the CVSC, which then flows in a southeastern direction. Man-made features within the project area consist of residential development, agriculture, transportation uses, and the CVSC. Avenue 50 within the project limits contains one signalized intersection at SR-86/Avenue 50, and a low water crossing at the CVSC. There are currently no highway bridge/overcrossing structures in the immediate vicinity of the project site.

Proposed Build Alternative 7

Build Alternative 7 is characterized by man-made features, including two overcrossing structures spanning over the CVSC and SR-86, retaining walls, fencing, paved ramps, graded slopes, etc. The new overcrossing structures are generally similar in line, color, and texture, and provides relatively consistent visible form. The proposed Avenue 50 interchange overcrossing structure is similar height, mass, and scale compared to the existing freeway overcrossing structures in the surrounding area (e.g., the Golf Center Parkway/Interstate 10 [I-10] overcrossing structure located approximately 2.95 miles to the northwest of the project site).

Build Alternative 7 would include minor view obstruction of the surrounding natural elements in VAU1, as the visible form would be altered due to the new SR-86/Avenue 50 interchange, SR-86/Avenue 50 interchange overcrossing structure, graded slopes, and associated paved ramps, fencing, etc. Distant views of the San Bernardino National Forest to northwest, and Joshua Tree National Park to the north/east would largely remain. Compared to the existing visual character in VAU1, implementation of the proposed project would nominally decrease the form, line, and diversity of the surrounding topographic features. Views to the surrounding mountains, hillsides, and ridgelines would largely remain with project implementation. Although hardscape at the project site would increase, the new SR-86/Avenue 50 interchange would be similar in character to the freeway interchanges in the surrounding area. As such, the visual character of the proposed project would be mostly compatible with the existing corridor.

Proposed Build Alternative 8

Similar to Build Alternative 7, Alternative 8 is characterized by man-made features, including two overcrossing structures spanning over the CVSC and SR-86, retaining walls, fencing, paved ramps, etc. Build Alternative 8 varies from Alternative 7 in that Alternative 8 includes a southbound SR-86 loop on-ramp rather than a direct southbound SR-86 on-ramp (as is the case for Alternative 7). Therefore, Alternative 8 would generally be similar in line, color, texture, height, mass, scale, and visible form as compared to Alternative 7. Alternative 8 would also be similar to the existing freeway overcrossing structures in the surrounding area (e.g., the Golf Center Parkway/I-10 overcrossing structure located approximately 2.95 miles to the northwest of the project site).

Similar to Build Alternative 7, Alternative 8 would include nominal view obstruction of the surrounding natural elements in VAU1, as the form would be altered due to the new overcrossing structures, and associated paved ramps, graded slopes, fencing, etc. Distant views of the San Bernardino National Forest to northwest, and Joshua Tree National Park to the north/east would largely remain. Compared to the existing visual character in VAU1, implementation of the proposed project would nominally decrease the form, line, and diversity of the surrounding topographic features. Although hardscape at the project site would increase, the new SR-86/Avenue 50 interchange would be similar in character to the freeway

interchanges in the surrounding area. As such, the visual character of the proposed project would be mostly compatible with the existing corridor.

VISUAL QUALITY

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. Public attitudes validate the assessed level of quality and predict how changes to the project corridor can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project. The three criteria for evaluating visual quality are defined below:

Vividness is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.

Intactness is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.

Unity is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

The visual quality of the existing corridor will be altered by the proposed project. The following includes a discussion on the existing visual quality of VAU1 and the proposed project, and the change of existing visual quality in VAU1 as a result of the project.

VAU1 consists of a variety of land uses, vegetation types, and views to hillsides and ridgelines that create a relatively vivid visual landscape for certain views. The project area is fairly unified, as a combination of the vast desert landscape, low-lying agricultural uses and development, and background views of hillsides and ridgelines in the project area create a coherent visual form for viewers. Due to the low intensity development in the surrounding area, the intactness of views to the hillsides and ridgelines associated with the Joshua Tree National Park, San Bernardino National Forest, Santa Rosa Mountains, and San Jacinto Mountains is high. However, some encroaching features such as the at-grade crossing, overhead powerlines, and existing signalized intersections decrease the intactness of the project area.

Proposed Build Alternative 7

The vividness of VAU1 would be slightly reduced due to hardscape features (associated with the new Avenue 50 overcrossing structures, the CV Link up-ramp and future CV Link pathway within the project limits, and the realignment of Avenue 50 and Tyler Street), generally unvaried color palette (greys, tans/browns, etc.), and lack of diverse project features (e.g., minimal landscaping, etc.). Partially obstructed views of surrounding topographic features, and hardscape features (including the proposed Avenue 50 overcrossing structures, realigned roadways, etc.) decrease the intactness in the area. The unified integrity of the visual landscape would largely remain, as the proposed SR-86/Avenue 50 interchange would be consistent with the height, mass, and scale of the existing overcrossing structures and interchanges in the area. Last, views of the surrounding hillsides and ridgelines would be nominally obstructed.

Proposed Build Alternative 8

As noted above, Alternative 8 would be similar to Alternative 7, although Alternative 8 would include an SR-86 southbound loop on-ramp rather than a direct southbound on-ramp. The main visual differences associated with Alternative 8 would be the orientation of the southbound SR-

86 loop on-ramp, and an additional retaining wall along SR-86 southbound under the SR-86/Avenue 50 interchange overcrossing structure. As such, the visual quality associated with Alternative 8 would be similar as described above for Alternative 7.

Resource Change

The following summarizes the changes in the visual resources for the proposed project, noting in particular the changes to visual character and quality.

Proposed Build Alternatives (Alternatives 7 and 8)

With regards to visual character, the proposed project (Alternatives 7 and 8) would include minimal view obstruction of the surrounding hillsides and ridgelines from some areas, and would introduce new hardscape elements such as paved ramps, fencing, retaining walls, columns, etc. However, distant views of the surrounding topographical features would largely remain, and the project would induce new wide-ranging views of these visual resources at certain areas in and around the project site (e.g., at the peak of the new SR-86/Avenue 50 interchange overcrossing structure, and the realignment of Avenue 50 and Tyler Street). The visual quality of the area would be altered by the proposed project, as the vividness and intactness would be reduced due to the physical features of the new SR-86/Avenue 50 interchange, and Avenue 50 overcrossing structures. The unity of the visual landscape would be nominally altered with implementation of the project. The overall visual resource change in VAU1 as a result of the project is expected to be moderate, as the visual character and quality would be altered compared to existing conditions.

VII. VIEWERS AND VIEWER RESPONSE

The population affected by the project is composed of *viewers*. Viewers are people whose views of the landscape may be altered by the proposed project—either because the landscape itself has changed or their perception of the landscape has changed.

Viewers, or more specifically the response viewers have to changes in their visual environment, are one of two variables that determine the extent of visual impacts that will be caused by the construction and operation of the proposed project. The other variable is the change to visual resources discussed earlier in *Section VII Visual Resources and Resource Change*.

Types of Viewers

There are two major types of viewer groups for highway projects: highway neighbors and highway users. Each viewer group has their own particular level of *viewer exposure* and *viewer sensitivity*, resulting in distinct and predictable visual concerns for each group which help to predict their responses to visual changes.

HIGHWAY NEIGHBORS (*Views to the Road*)

Highway neighbors are people who have views *to* the road. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, educational, recreational, and agricultural land uses may generate highway neighbors or viewer groups with distinct reasons for being in the corridor and therefore having distinct responses to changes in visual resources. For this project the following highway neighbors were considered:

- Residential Uses. Residential uses located to the south of Avenue 50 (in the western portion of the project site), and to the east of Tyler Street (in the southern portion of the project site) have views of the project site and the surrounding landscape.
- Sierra Vista Park. Recreational users at Sierra Vista Park located to the east of Tyler Street have views of the project site and surrounding landscape.
- Agricultural Uses. Agricultural uses located to the south of Avenue 50 and west of Tyler Street (in the western portion of the project site), as well as north and south of Avenue 50 (in the eastern portion of the project site) are afforded views of the project site and the surrounding landscape.

HIGHWAY USERS (Views from the Road)

Highway users are people who have views *from* the road. They can be subdivided into different viewer groups in two different ways—by mode of travel or by reason for travel. For example, subdividing highway users by mode of travel may yield pedestrians, bicyclists, transit riders, car drivers and passengers, and truck drivers. Dividing highway users or viewer groups by reason for travel creates categories like tourists, commuters, and haulers. It is also possible to use both mode and reason for travel simultaneously, creating a category like *bicycling tourists*, for example. For this project the following highway users were considered:

- SR-86 Highway Motorists. These viewers are composed of commuters, haulers, and local residents, as this highway runs from State Route 111 (SR-111) in Calexico to I-10 in Indio, and several communities throughout the Coachella Valley.
- Local Roadway Motorists. These viewers are comprised of local street users along Avenue 50 and Tyler Street, as these roadways provide connections to residential, agricultural, and recreational uses in the project vicinity.
- Bicycle/Pedestrian Travelers. These viewers consist of bicyclists and pedestrians traveling along the future CV Link connection to the south of the CVSC (as part of a separate project), and along the local roadways in the project vicinity (i.e., Avenue 50 and Tyler Street). The CV Link is a multi-modal path that will create a pathway for alternative transportation through the entire Coachella Valley.

Viewer Response

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions as previously mentioned, viewer exposure and viewer sensitivity.

VIEWER EXPOSURE

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. *Location* relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure. *Quantity* refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. *Duration* refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the

more exposure. High viewer exposure helps predict that viewers will have a response to a visual change.

- SR-86 Highway Motorists. As noted above, SR-86 provides commuters, haulers, and local residents connections from Calexico to Indio, and throughout several communities in the Coachella Valley. SR-86 motorists would have direct views of the new SR-86/Avenue 50 interchange and overcrossing structure, as this freeway traverses the project site in a north-south direction. This viewer group is comprised of a moderate number of viewers, as existing average daily traffic (ADT) volumes along SR-86 in the project vicinity range from 25,082 to 31,477.³ Daily commuters may have an increased awareness of views from the road due to the amount of time spent on the freeway (near the project area) each day. Drivers traveling in congested traffic conditions would likely perceive detailed views of the project features for longer durations of time. Drivers traveling at normal freeway speeds usually focus attention on long-range non-peripheral views and would have short duration of views to project features.
- Local Roadway Motorists. Local roadways in the project vicinity include Avenue 50 and Tyler Street. These roadways provide direct views of the project site from Avenue 50 and Tyler Street travelers. Avenue 50 motorists would have direct views of the realignment of Avenue 50, new SR- 86/Avenue 50 interchange, and the Avenue 50 overcrossing structures that would traverse over the CVSC and SR-86. Views of the Santa Rosa Mountains, San Jacinto Mountains, and Joshua Tree National Park would be afforded from Avenue 50 motorists. Tyler Street runs in a north-south direction, and provides background views of the Joshua Tree National Park hills to the north/east, and Santa Rosa Mountains to the south

This viewer group is comprised of a low quantity of viewers, as ADT volumes range from approximately 1,000 ADT⁴ to 16,203 ADT⁵ along Avenue 50. Drivers traveling along these roadways would likely have detailed views of the project features for short durations of time. As such, motorists traveling along Avenue 50, and Tyler Street would have an increased awareness of views to the proposed SR-86/Avenue 50 interchange.

- Bicycle/Pedestrian Travelers. The proposed CV Link pathway would be located along the south side of the CVSC and run parallel to the CVSC in a north-south direction. In addition, bicyclists and pedestrians would utilize the existing local roadways as travel pathways. Although the quantity of bicyclists/pedestrians is generally low compared to a highway or roadway, viewers along these trails would have an increased awareness of views to the project due to the amount of time spent on the trail, and their speed of travel.

CV Link users would have direct views of the proposed project, as a CV Link up-ramp would begin along Tyler Street near Sierra Vista Park, and trend north toward the CVSC. The CV Link up-ramp would connect with the planned CV Link path along the south side of the CVSC. The CV Link extension would travel north under the new Avenue 50 overcrossing structure (crossing the CVSC) and join the CV Link path to the north of the SR-86/Avenue 50 interchange. Bicyclists and pedestrians on the CV Link would have views of the new SR-

³ Fehr and Peers, *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report, August 2017.*

⁴ City of Coachella, *General Plan Update Final EIR, February 2015.*

⁵ Fehr and Peers, *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report, August 2017.*

86/Avenue 50 interchange, Avenue 50 overcrossing structures, and realigned local roadways (i.e., Avenue 50 and Tyler Street to the west of the CV Link). The duration of views along the CV Link would be moderate, as these viewers generally travel at slower speeds and have longer duration of views compared to highways and roadway users.

- Residential Uses. Residential uses adjoin the western and southern portions of the project site. The residents to the north of Avenue 50 do not have direct views of the project site due to existing perimeter walls surrounding the residential community. However, residents to the south of Avenue 50 would have direct views of the proposed project, and some residents along Tyler Street would have partial views of the project. These residents would have long-duration views to project changes and would likely have a high concern for the project and its effect on views from their homes and neighborhood.
- Sierra Vista Park Visitors. Sierra Vista Park adjoins the project site to the south, located to the east of Tyler Street. This park serves the local neighborhood along Tyler Street, and contains areas for barbecuing, picnic tables, a children’s playground, bathrooms, and a basketball court. Visitors at the Sierra Vista Park and its facilities would have direct views to project changes. The duration of views from Sierra Park visitors would be moderate.
- Agricultural Uses. Agricultural land uses generally surround the project site. Employees at the surrounding agricultural uses would have long duration of views to the proposed project, as views of the new SR-86/Avenue 50 interchange, Avenue 50 overcrossing structures, and realigned local roadways (Avenue 50 and Tyler Street) would be afforded.

VIEWER SENSITIVITY

Viewer sensitivity is a measure of the viewer’s recognition of a particular object. It has three attributes: activity, awareness, and local values. *Activity* relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers will have of changes to visual resources. *Awareness* relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. *Local values* and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes. High viewer sensitivity helps predict that viewers will have a high concern for any visual change.

Viewer Sensitivity Analysis

- SR-86 Highway Motorists. Highway motorists are generally considered to be engaged in their surrounding visual environment, depending on speed of travel and traffic conditions. The awareness of SR-86 motorists in the project vicinity includes a narrow focus and broad view of their surroundings. Although SR-86 is not designated as a State or local scenic highway in the General Plan, the City considers views of the mountains, hillsides, and ridgelines of the surrounding landscape to be visual resources. According to General Plan Policy 6.1, the City encourages the preservation of transit corridors with views of these visual resources.
- Local Roadway Motorists. Motorists along local roadways (Avenue 50 and Tyler Street) are anticipated to usually engaged in their visual surroundings due to the views of the hillsides

and ridgelines associated with the Joshua Tree National Park to the north/east, eastern foothills of the San Bernardino National Forest to the northwest, Santa Rosa Mountains to the south, and San Jacinto Mountains to the west of the project site. In general, these viewers have a narrow focus with a wide view of their natural surroundings. As noted above, the City considers the surrounding mountains, hillsides, and ridgelines to be visual resources. The City encourages development to preserve views of these visual resources along view corridors throughout City, including roadways in the project vicinity (refer to General Plan Goal 6, and Policies 2.4 and 6.1).

- Bicycle/Pedestrian Travelers. Bicyclists and pedestrians are visually engaged in their surrounding visual environment. The awareness of bicycle and pedestrian travelers on the CV Link and local roadways is generally characterized by a wide-ranging view and focus. Views of the surrounding mountainous ridgelines and hillsides (City-designated visual resources) are afforded by these viewers.
- Residential Uses. Residential viewers are usually attentive of their surrounding visual environment. Residential viewers to the south of Avenue 50, and some viewers in the neighborhood to the east of Tyler Street would be highly aware of change due to their awareness and local values. The awareness of residential viewers to the south of Avenue 50 is characterized by a wide focus consisting of mountainous ridgelines and hillsides, agricultural fields, and rural open space. The awareness of residential viewers along Tyler Street is characterized by a narrower focus toward Tyler Street and the Santa Rosa Mountains to the south of the project site. Based on the General Plan, community residents are concerned with the quality of views from their neighborhoods.
- Sierra Vista Park Visitors. Sierra Vista park visitors may be engaged in active (playing sports, etc.) or passive (picnicking, barbecuing, etc.) recreational activities. As such, the focus and viewshed of these viewers can be narrow or wide-ranging depending on the activity. Therefore, visitors at Sierra Vista Park are considered to be moderately concerned by visual change associated with the project.
- Agricultural Uses. Employees at agricultural uses are usually engrossed with their work and are not engaged in the surrounding outdoor visual environment. These viewers have a narrow focus and a wide viewshed. As such, agricultural viewers are considered to be moderately concerned by visual change.

Community Values

The General Plan provides goals and policies to protect views of the surrounding hills and ridgelines throughout the City from visual degradation, as shown below.

Overall Goal *Preserve the natural beauty and scenic quality of the City.* The City is located in an area of striking natural beauty. While the landscape will be altered with future development, the views of the mountains and the rural, agricultural character should be respected. In general, the natural topography of the hills should be maintained, some of the existing agricultural uses should be preserved or integrated into the landscape and views of the surrounding mountains should be maintained.

Policy 2.4 *Natural context.* Retain the City's natural infrastructure and visual character derived from topography, farmlands and waterway corridors.

Goal 6 *Visual Resources.* A city with stunning views of the hillsides and mountains surrounding the Coachella Valley.

Policy 6.1 *View corridor preservation.* Protect and preserve existing, signature views of the hills and mountains from the City.

As previously noted, the General Plan contains goals and policies pertaining to the preservation of the visual environment afforded throughout the City. The overall goal within the General Plan regarding visual resources is to preserve the natural beauty and scenic quality of the City. In addition, General Plan Goal 6, and Policies 2.4 and 6.1 are included in the General Plan to preserve and maintain the City's visual resources.

GROUP VIEWER RESPONSE

The narrative descriptions of viewer exposure and viewer sensitivity for each viewer group were merged to establish the overall viewer response of each group.

- SR-86 Highway Motorists. SR-86 highway motorists would have direct and frequent views of the proposed SR-86/Avenue 50 interchange project. Views would be short in duration due to travel speed; however, motorists are afforded a wide-range of views to surrounding ridgelines and hillsides. Therefore, the overall viewer response for this viewer group is moderate.
- Local Roadway Motorists. Motorists traveling along Avenue 50 and Tyler Street are usually engaged in their visual surroundings. These viewers would have short, direct, and frequent views of the improvements associated with the proposed SR-86/Avenue 50 interchange project. As noted above, it is the intent of the City to preserve view corridors that provide views of the surrounding mountainous ridgelines and hillsides. As such, the overall viewer response for this viewer group is moderate.
- Bicycle/Pedestrian Travelers. Bicyclists and pedestrians traveling along the CV Link and local roadways are typically encompassed in their visual surroundings. These viewers would have moderate, direct, and frequent views of the proposed SR-86/Avenue 50 interchange project. As noted above, these are afforded longer views (due to slower travel speeds) of the surrounding ridgelines and hillsides, and would be fully aware of changes to the visual landscape. However, bicycle trails typically have lower ridership numbers than local roadways. Therefore, the overall viewer response for this viewer group is moderate.
- Residential Uses. As previously noted, residential uses have long-term, direct views of the project site, and would likely have a high concern for visual impacts from the proposed project. In general, these viewers are engaged in their visual environment, and have narrow to wide-ranging views of the project site and surroundings. As such, the overall viewer response for this viewer group is high.

- Sierra Vista Park Visitors. Sierra Vista Park visitors to the east of Tyler Street would have direct views of the proposed project. These viewers can be visually engaged in their surrounding environment during passive recreational activities, but can also have a narrow focus and viewshed during active recreational activities. Therefore, the overall viewer response for this viewer group is moderate.
- Agricultural Uses. Employees at the surrounding agricultural uses would have long duration of views of the proposed project. However, these viewers are usually immersed in their work/activities and are not usually engaged in their visual surroundings. As such, the overall viewer response for this viewer group is moderate-low.

VIII. VISUAL IMPACT

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be beneficial or detrimental. Cumulative impacts and temporary impacts due to the contractor’s operations are also considered. A generalized visual impact assessment process is illustrated in the following diagram:

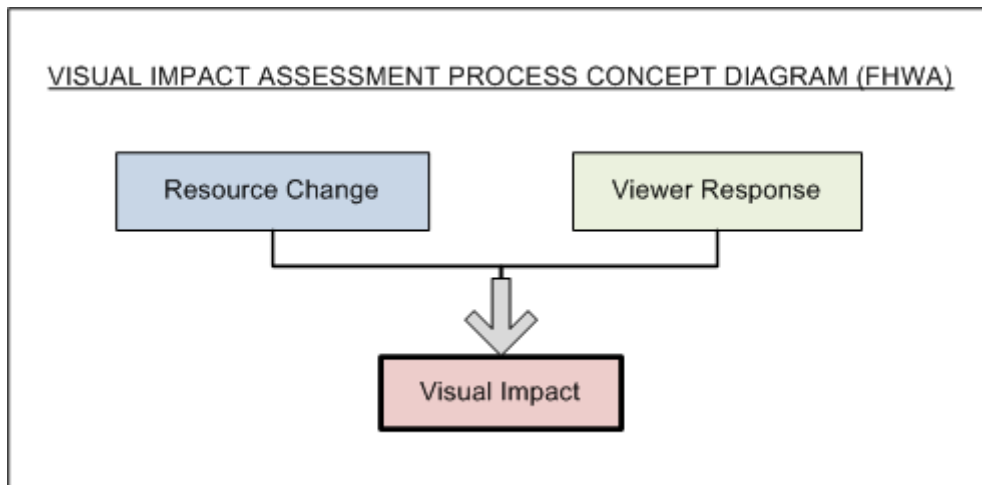


Table 1, Visual Impact Ratings Using Viewer Response and Resource Change, below provides a reference for determining levels of visual impact by combining resource change and viewer response.

Visual Impacts by Visual Assessment Unit and Alternative

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key views associated with visual assessment units that would most clearly demonstrate the change in the project’s visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. In addition, these key views will be analyzed for each proposed alternative.

This VIA also considers the potential impacts of a No-Build Alternative. The No Build Alternative will result in no change to the project corridor. Therefore, the visual character and quality of the project site and vicinity will remain similar to that described in Section VI, Visual Resources and Resource Change. The No Build Alternative will result in no changes to SR-86, Avenue 50, or Tyler Street.

**Table 1
Visual Impact Ratings Using Viewer Response and Resource Change**

		Viewer Response (VR)				
Resource Change (RC)		Low (L)	Moderate-Low (ML)	Moderate (M)	Moderate-High (MH)	High (H)
	Low (L)	L	ML	ML	M	M
	Moderate-Low (ML)	ML	ML	M	M	MH
	Moderate (M)	ML	M	M	MH	MH
	Moderate-High (MH)	M	M	MH	MH	H
	High (H)	M	MH	MH	H	H

The following section describes and illustrates visual impacts within VAU1, compares existing conditions to the proposed Build Alternatives (Alternatives 7 and 8) (the project), and includes the predicted viewer response.




VISUAL ASSESSMENT UNIT 1

KEY VIEW 1 – Key View 1 was taken from the eastbound travel lane of Avenue 50, to the west of the proposed SR-86/Avenue 50 interchange. This view looks east toward the realigned and widened Avenue 50, SR-86/Avenue 50 interchange, and Avenue 50 overcrossing structures (refer to Exhibit 7a, Key View 1 - Existing Condition).

Existing Condition

Existing views at this Key View mainly consist of Avenue 50 and associated right-of-way, residential uses to the south of Avenue 50, background hillside and ridgeline views of Joshua Tree National Park, and some mature vegetation. The visual form in Key View 1 appears to be somewhat consistent throughout the view. Avenue 50 appears to be linear and continuous with edges defined by the unpaved, dirt shoulders. Uniform colors are visible throughout Key View 1, including grey colors associated with the Avenue 50, brown colors associated with the dirt roadside areas and background hillside, and green colors associated with mature vegetation. Textures throughout this Key View consist of the smooth pavement along Avenue 50, grainy material of dirt shoulders and hillsides, and granular foliage of the mature trees and vegetation. The contrast between the roadway hardscape, and vegetation and roadside dirt areas provide some diversity in Key View 1. Visible vertical elements (i.e., power poles, signage, and palm trees), and mature vegetation are visually contrasting features that detract from unity and decrease intactness in this Key View. Notwithstanding, background views to the Joshua Tree National Park hillsides and ridgelines provide a fairly vivid visual landscape for viewers along eastbound Avenue 50.



-  Direction of Photo
-  Key View Location
-  Key View Number

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 1 – Existing Condition

Viewer Response

Key View 1 represents a typical view from eastbound Avenue 50 motorists to the west of the proposed SR-86/Avenue 50 interchange project site, as well as residential uses in the vicinity. Although Avenue 50 experiences a fairly low amount of daily traffic (16,203 ADT), residents along Avenue 50 would have permanent long-term views of the visual changes associated with the project. As such, overall viewer response in Key View 1 would be high.

KEY VIEW 1 – Build Alternative 7

Implementation of Build Alternative 7 would result in visible changes to the existing condition as seen from this Key View. Visible project features from this Key View under Alternative 7 include the realignment of Avenue 50 to the south, the Avenue 50 overcrossing structures (spanning over the CVSC and SR-86), and new SR-86/Avenue 50 interchange (refer to Exhibit 7b, Key View 1 - Proposed Condition – Alternatives 7 and 8).

Resource Change

Under Alternative 7, the visible form of Key View 1 would be altered due to the realignment of Avenue 50 to the south, partial removal of residential features (fencing and vegetation), the height and scale of the SR-86/Avenue 50 interchange, and the Avenue 50 overcrossing structures. The proposed condition would appear similar to the existing condition with regards to colors and texture, although a slight decrease in green colors (from vegetation removal along Avenue 50), and an increase in grey colors (from the widened Avenue 50) would occur. It is noted that the existing roadway alignment along Avenue 50 would be converted to an aggregate-based maintenance road for the CVSC, which would result in some textural variety in this Key View. The continuity in Key View 1 would be increased, as the curvature of Avenue 50 would create a seemingly uninterrupted flow of form. The intactness, unity, and diversity in this Key View has increased as a result of the expanded views of Joshua Tree National Park and curved alignment of Avenue 50. The resource change from Alternative 7 is considered to be moderate-low, as a decrease in mature vegetation along Avenue 50 would occur, but the realignment of Avenue 50 would provide more expansive views to the hillsides and ridgelines of Joshua Tree National Park to the east. Due to the high viewer response of residential viewers, and the permanent visual changes as seen from these viewers, the overall visual impact in this Key view is considered moderate-high. In order to ensure the visual character is not substantially degraded throughout Key View 1, implementation of Minimization Measure 1 would require landscaping improvements consistent with the existing character of the area, and compliance with Caltrans Standard Design Practices in consultation with the City of Coachella.

KEY VIEW 1 – Build Alternative 8

The difference between Alternatives 7 and 8 is that Alternative 8 includes an SR-86 southbound loop on-ramp at the proposed SR-86/Avenue 50 interchange (Alternative 7 includes a direct SR-86 southbound on-ramp). As shown in Exhibit 7b, this change is not perceptible from Key View 1. Therefore, the resource change associated with Alternative 8 would be similar to Alternative 7.

KEY VIEW 2 – Key View 2 was taken along Tyler Street, adjoining Sierra Vista Park and to the south of the proposed SR-86/Avenue 50 interchange. This view looks north along Tyler Street (refer to Exhibit 8a, Key View 2 - Existing Condition).



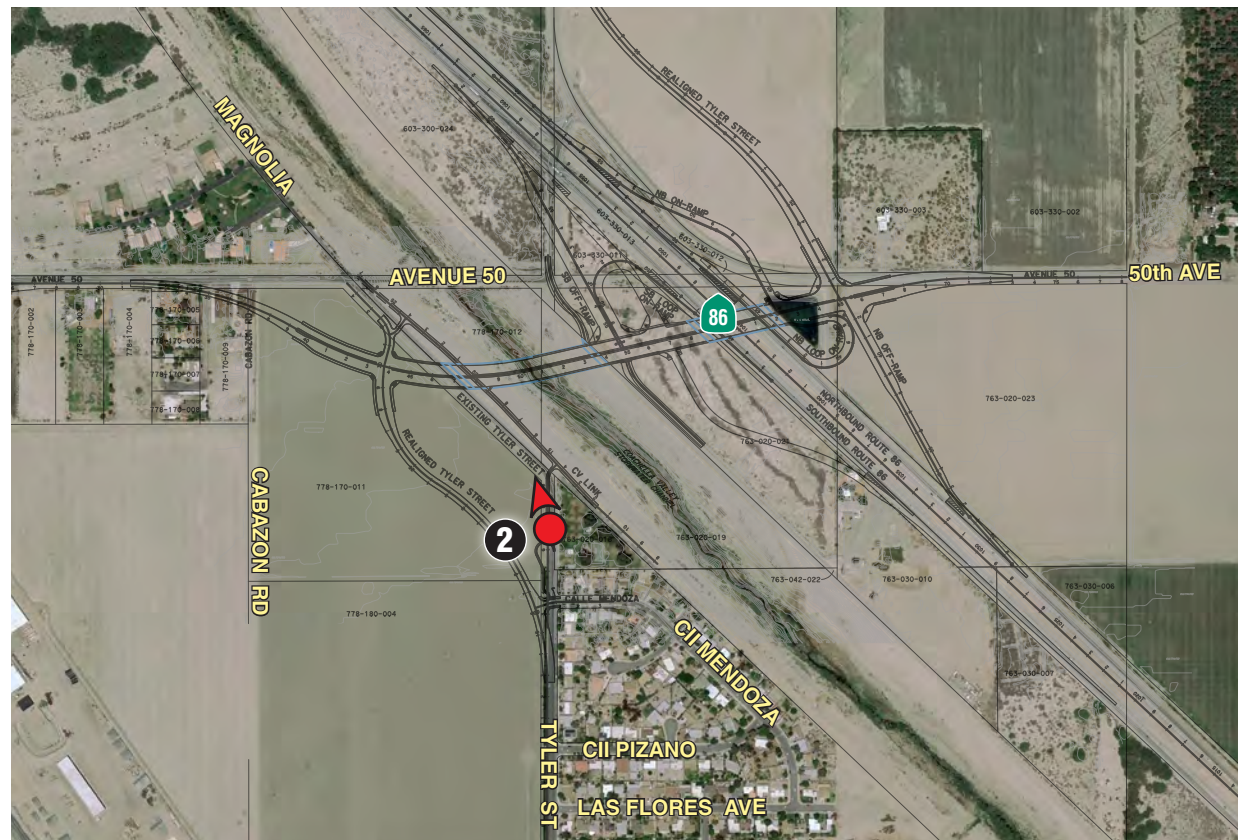
Alternative 7






Alternative 8

*For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 1
Proposed Condition – Alternatives 7 and 8



-  Direction of Photo
-  Key View Location
-  Key View Number

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 2 – Existing Condition

Existing Condition

Existing views at this Key View mainly consist of the Tyler Street right-of-way and sidewalk, agricultural and residential development, and background views of the Joshua Tree National Park hillsides and ridgelines. The visual form in Key View 2 appears to be consistent throughout the view. The Tyler Street right-of-way and sidewalk and Sierra Vista Park fence line appear to be linear and continuous. The ridgeline of the Joshua Tree National Park in background views define the boundary of the visual landscape in this Key View. The color scheme throughout Key View 2 is dominated by light grey and brown colors associated with the paved roadway, dirt, and hillside surfaces, and the light blue sky in background views. Green colors from mature vegetation and the grass area at Sierra Vista Park provide some variety in this Key View. Textures in this Key View consist of the smooth pavement along the Tyler Street right-of-way and sidewalk, grainy material associated with dirt shoulders, hillsides, and agricultural land, granular foliage of the mature trees at Sierra Vista Park, and the soft texture of the grass area at Sierra Vista Park. The diversity in Key View 2 is defined by the cohesive line angles, colors, and background views of ridgelines and hillsides in Key View 2. Linear elements (i.e., Tyler Street, sidewalk, fence line, and background ridgelines) in this Key View create visual unity for viewers. The intactness in this Key View is minimally influenced by vertical elements such as power poles, overhead power lines, signage, etc. Background views of the ridgelines and hillsides of Joshua Tree National Park create a vivid visual landscape in Key View 2.

Viewer Response

Key View 2 represents a typical view from northbound Tyler Street motorists, bicyclists, pedestrians, and Sierra Vista Park visitors to the south of the proposed SR-86/Avenue 50 interchange. The northbound traveler in Key View 2 would be directly exposed to the changes along Tyler Street in VAU1. Tyler Street experiences a low amount of daily traffic (4,600 ADT)⁶, but frequent visitors to Sierra Vista Park would have long-term views of the proposed project. As such, overall viewer response in Key View 2 would be moderate.

KEY VIEW 2 – Build Alternative 7

Implementation of Build Alternative 7 would result in visible changes to the existing condition as seen from this Key View. Visible project features from this Key View under Alternative 7 include the realignment of Tyler Street to the west, the CV Link up-ramp, and the Avenue 50 overcrossing structures (spanning over the CVSC and SR-86), and new traffic signals located at the Avenue 50/Tyler Street intersection (refer to Exhibit 8b, Key View 2 - Proposed Condition – Alternatives 7 and 8).

Resource Change

Under Alternative 7, the visible form of Key View 2 would be altered due to the realignment of Tyler Street to the west, the Avenue 50 overcrossing structures, and the CV Link up-ramp. The proposed condition would appear similar to the existing condition with regards to colors and texture, although an increase in brown colors associated with the CV Link up-ramp is noted. The linear continuity in this Key View would be altered with the construction of the CV Link up-ramp, as the angle of the CV Link up-ramp would contrast with the existing linear angles along the Tyler Street sidewalk and Sierra Vista Park fence line. Minimal encroachment of background views to the ridgelines and hillsides of Joshua Tree National Park would result. The vividness and unity in this Key View is similar to existing conditions, although the intactness has decreased as a result of the CV Link up-ramp. The new traffic signals at the Avenue 50/Tyler Street intersection are seen in middleground views at this Key View, although these features do not encroach, block, or

⁶ City of Coachella, *General Plan Update Final EIR*, February 2015.



Alternative 7



Alternative 8

*For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 2
Proposed Condition – Alternatives 7 and 8

degrade any visual resources in the project area. The resource change in Key View 2 as a result of Alternative 7 is considered to be moderate-low due to a slight decrease in intactness from Tyler Street and Sierra Vista Park viewers. As such, the overall visual impact at Key View 2 would be moderate. All proposed architectural treatments and landscaping would be required to be consistent with the existing character of the area, and the Caltrans Standard Design Practices (refer to Minimization Measures 1 through 3). In addition, all abandoned roadways not planned for repurposing would be required to be removed, and hydroseeded or revegetated using non-invasive plants in compliance with Caltrans Standard Design Practices in consultation with the City of Coachella (refer to Minimization Measure 4).

KEY VIEW 2 – Build Alternative 8

The difference between Alternatives 7 and 8 is that Alternative 8 includes an SR-86 southbound loop on-ramp at the proposed SR-86/Avenue 50 interchange (Alternative 7 includes a direct SR-86 southbound on-ramp). As shown in [Exhibit 8b](#), this change is not visible from Key View 2. Therefore, the resource change associated with Alternative 8 would be similar to Alternative 7.

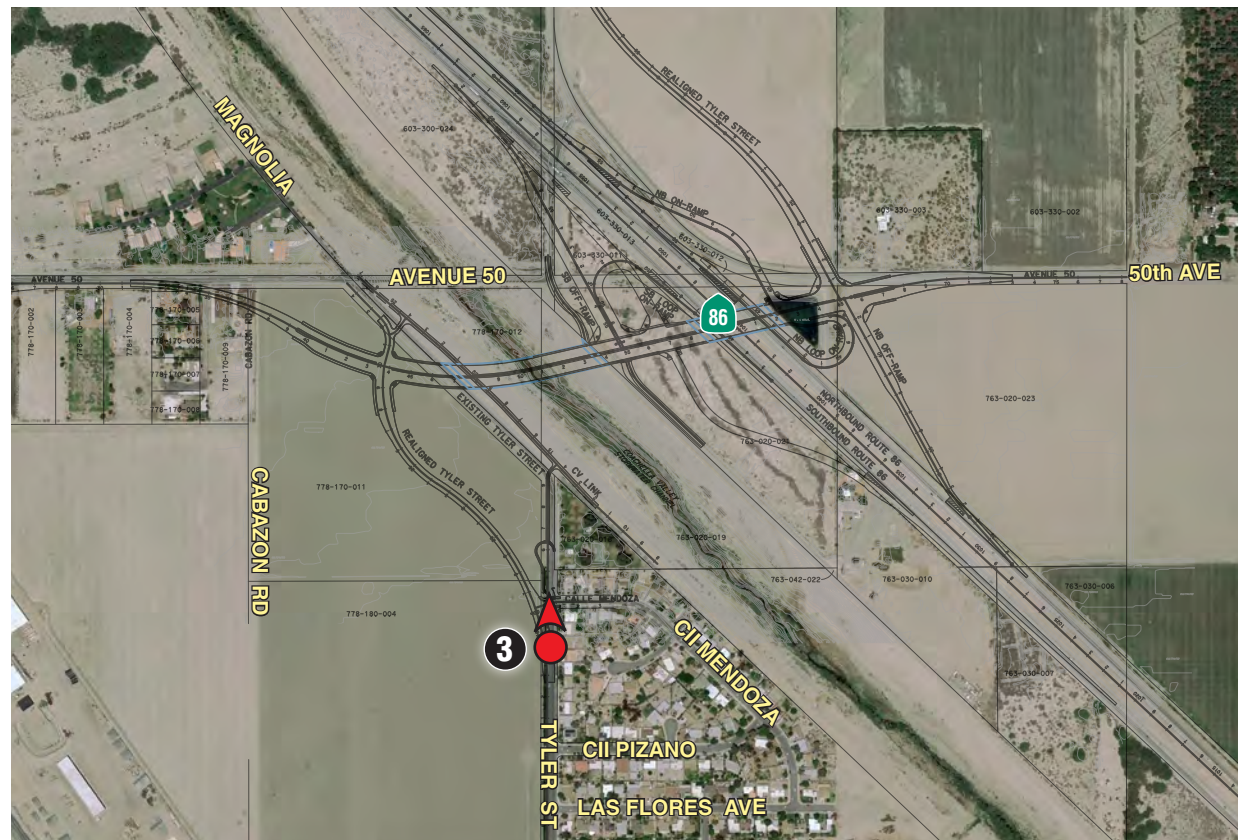
KEY VIEW 3 – Key View 3 was taken along Tyler Street near the southernmost limits of the project site, adjoining the residential neighborhood to the east. This view looks north along Tyler Street (refer to [Exhibit 9a](#), *Key View 3 - Existing Condition*).




Existing Condition

Existing views at this Key View mainly consist of the Tyler Street right-of-way and sidewalk, residential uses to the east of Tyler Street, the CVSC, and background views of the Joshua Tree National Park hillsides and ridgelines. The visual form in Key View 3 appears to be relatively consistent throughout this view. The Tyler Street right-of-way and sidewalk, and ornamental hedge to the west of Tyler Street appear to be linear and continuous toward the CVSC and Joshua Tree National Park, with edges defined by curbs, textures, and transitional color schemes (i.e., the edges of the Tyler Street hedge are defined by a change in color and texture in background and foreground visual elements, such as the blue sky, brown/grainy hillsides, and brown/yellow disturbed vegetation on the west side of Tyler Street). The hillsides and ridgelines of the Joshua Tree National Park in background views defines the boundary of the visual landscape in this Key View. The color scheme throughout Key View 3 is dominated by light grey, brown, and green colors associated with the paved roadway, dirt and hillside surfaces, and mature vegetation along Tyler Street. Light blue colors from the sky are also provided in background views. Textures in this Key View consist of the smooth pavement along the Tyler Street; grainy material at the CVSC slopes and background hillsides; and granular foliage of the mature vegetation along Tyler Street. The diversity in this Key View is characterized by a mix of vertical and horizontal elements (i.e., power poles, signage, Tyler Street right-of-way, the CVSC, etc.), as well as the variation in colors and textures as discussed above. This Key View is affected by a number of vertical elements such as power poles, trees, the ornamental hedge along Tyler Street, and signs that inhibit more expansive views of the background hillsides and ridgelines, effectively decreasing intactness. The vividness in Key View 3 is increased by the background ridgelines and hillsides of Joshua Tree National Park to the north/east.

Viewer Response

Key View 3 represents a typical view from northbound Tyler Street motorists, bicyclists, pedestrians, and a general view from residential uses to the east of Tyler Street. The northbound traveler and residential viewers in Key View 3 would be directly exposed to the changes along Tyler Street in VAU1. Tyler Street experiences a low amount of daily traffic (4,600 ADT), but



-  Direction of Photo
-  Key View Location
-  Key View Number

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 3 – Existing Condition

residents to the east of Tyler Street would have long-term (permanent) views of the proposed project. As such, overall viewer response in Key View 3 would be high.

KEY VIEW 3 – Build Alternative 7

Implementation of Build Alternative 7 would result in visible changes to the existing condition as seen from this Key View. Visible project features from this Key View under Alternative 7 include the realignment and widening of Tyler Street to the west, the CV Link up-ramp, and the Avenue 50 overcrossing structures spanning over the CVSC and SR-86 (refer to [Exhibit 9b](#), *Key View 3 - Proposed Condition – Alternatives 7 and 8*).

Resource Change

Under Alternative 7, the visible form of Key View 3 would be altered due to the realignment and widening of Tyler Street to the west, the new Avenue 50 overcrossing structures, and the CV Link up-ramp. As shown in [Exhibit 9b](#), the project would result in an increase in hardscape features along Tyler Street and the new CV Link up-ramp, and a decrease in vegetation along the west side of Tyler Street. The linear continuity in this Key View would be altered with the realignment of Tyler Street, as Tyler Street would sharply curve to the northwest toward Avenue 50 and away from the CVSC and Joshua Tree National Park. Minimal encroachment of background views to the ridgelines and hillsides of Joshua Tree National Park would result. Increased views of these visual resources would result with implementation of Alternative 7, which has improved the intactness, unity, and diversity in this Key View. As a result, the resource change to motorists', bicyclists', and pedestrians' views in Key View 3 from Alternative 7 is considered to be moderate-low. However, due to the high sensitivity and viewer exposure of residential viewers to the east of Tyler Street, as well as permanent visual changes to Tyler Street as seen from these viewers, the overall visual impact in this Key view is considered moderate-high. In order to ensure the visual character is not substantially degraded throughout Key View 3, implementation of Minimization Measures 1 through 3 would require landscaping improvements and architectural treatments to be consistent with the existing character of the area, and comply with Caltrans Standard Design Practices in consultation with the City of Coachella. Structures would be required to receive architectural aesthetics to minimize viewshed effects of the project and textures and anti-graffiti treatment to deter vandalism. In addition, Minimization Measure 4 requires all abandoned roadways not planned for repurposing to be removed, and hydroseeded or revegetated using non-invasive plants in compliance with Caltrans Standard Design Practices in consultation with the City of Coachella.

KEY VIEW 3 – Build Alternative 8

The difference between Alternatives 7 and 8 is that Alternative 8 includes an SR-86 southbound loop on-ramp at the proposed SR-86/Avenue 50 interchange (Alternative 7 includes a direct SR-86 southbound on-ramp). As shown in [Exhibit 9b](#), this change is not visible from Key View 3. Therefore, the resource change associated with Alternative 8 would be similar to Alternative 7.

KEY VIEW 4 – Key View 4 was taken from the northbound travel lane of SR-86, to the south of the proposed SR-86/Avenue 50 interchange. This view looks north toward the new SR-86/Avenue 50 interchange overcrossing structure and SR-86/Avenue 50 interchange (refer to [Exhibit 10a](#), *Key View 4 - Existing Condition*).



Alternative 7






Alternative 8

*For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 3
Proposed Condition – Alternatives 7 and 8



-  Direction of Photo
-  Key View Location
-  Key View Number

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 4 – Existing Condition

Existing Condition

Existing views at this Key View mainly consist of the paved travel lanes of SR-86, disturbed roadside vegetation, freeway signage, mature roadside vegetation, and distant background views of mountainous hillsides and ridgelines. The visual form in Key View 4 appears to consistent throughout the view. The SR-86 freeway, shoulders, and roadside vegetation create a linear focus northward toward Avenue 50 and the distant mountainous terrain. Edges are defined by transitional texture and color schemes along the paved area of SR-86 and roadside vegetation areas (i.e., these areas are defined by a change in color and/or texture in background and foreground visual elements, such as the blue sky, brown/grainy hillsides, and brown/yellow disturbed vegetation on the SR-86 shoulder). The visual landscape in this Key View appears vast and boundless due to the lack of a dominant physical feature that provides a sense of depth. The color scheme throughout Key View 4 is dominated by light grey, brown, and green colors associated with the paved SR-86 travel lanes, disturbed roadside vegetation, and mature vegetation areas along SR-86. Nearly transparent light brown colors from the surrounding hillsides are noted in the background, light blue colors from the sky are also provided in this Key View. Textures in this Key View are dominated by the smooth pavement along SR-86 and the granular foliage of roadside vegetation (mature and disturbed) along the SR-86 shoulders. Due to a lack of various visual patterns (other than linear patterns) in this Key View, there is a lack of diversity. However, linear elements such as the SR-86 travel lanes and mature roadside vegetation create some visual unity in this Key View. Vertical elements such as power poles, overhead power lines, and signage along SR-86 decrease the intactness in this Key View. The surrounding hillsides and ridgelines create a vivid landscape for viewers traveling along SR-86 in this Key View.

Viewer Response

Key View 4 represents a typical view from northbound SR-86 motorists. The northbound traveler would be directly exposed to the new SR-86/Avenue 50 interchange in VAU1. As noted above, approximately 25,082 to 31,477 vehicles travel this portion of SR-86 each day. The viewer quantity is moderate and the duration of views from SR-86 commuters and other motorists would be short. These viewers would be aware of the resulting visual changes from implementation of the project. Further, SR-86 motorists are currently afforded uninhibited views of the surrounding hillsides and ridgelines, which are designated as visual resources by the City. Therefore, overall viewer response in Key View 4 would be moderate.

KEY VIEW 4 – Proposed Build Alternative 7

Completion of Alternative 7 would result in visible changes to the existing condition in VAU1 as a result of the new SR-86/Avenue 50 interchange, as seen from this Key View. Visible project features from this Key View include the new SR-86/Avenue 50 interchange overcrossing structure and associated fencing, graded slopes, and the SR-86 southbound direct on-ramp (refer to [Exhibit 10b, Key View 4 - Proposed Condition – Alternatives 7 and 8](#)).

Resource Change

The project changes are generally consistent with the existing condition of the area with regards to colors, texture, scale, diversity, and continuity. The new SR-86/Avenue 50 interchange overcrossing structure would increase the visible form of man-made elements in the area. The vividness and unity in this Key View would be similar to existing conditions, but the size, scale and vertical alignment of the SR-86/Avenue 50 interchange overcrossing structure, as well as the graded slopes and SR-86 southbound direct on-ramp would slightly decrease the intactness in this Key View. However, due to the vast expanse of the visual landscape, as well as the depth and



Alternative 7



Alternative 8

*For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 4
Proposed Condition – Alternatives 7 and 8

distance to the surrounding hillsides and ridgelines (City-designated visual resources), minimal view blockage of visual resources would occur with implementation of Alternative 7. Therefore, the resource change in Key View 4 for the project is considered to be moderate, as the increased hardscape contributes to a developed appearance of the area. The overall visual impact in this Key View would be moderate. In order to ensure the visual character is not substantially degraded at Key View 4, implementation of Minimization Measures 1 through 3 would require landscaping improvements and architectural treatments consistent with the existing character of the area, and compliance with Caltrans Standard Design Practices in consultation with the City of Coachella. The retaining wall(s) under the SR-86/Avenue 50 interchange overcrossing structure would also be subject to consideration for architectural treatments. Structures would be required to receive architectural aesthetics to minimize viewshed effects of the project and textures and anti-graffiti treatment to deter vandalism (Minimization Measure 3). All proposed architectural treatments and landscaping would be required to be consistent with the existing character of the area, and compliance with Caltrans Standard Design Practices.

KEY VIEW 4 – Build Alternative 8




The difference between Alternatives 7 and 8 is that Alternative 8 includes an SR-86 southbound loop on-ramp at the proposed SR-86/Avenue 50 interchange (Alternative 7 includes a direct SR-86 southbound on-ramp). This change is perceptible from Key View 4. As shown in [Exhibit 10b](#), the area located along the western side of southbound SR-86 would not be paved or graded under Alternative 8. Although Alternative 8 would result in less grading and paved surfaces, and would retain the existing vegetation along southbound SR-86, the overall visual quality and character of the project area would be similar to Alternative 7. Therefore, the resource change from Alternative 8 would be moderate-low.

KEY VIEW 5 – Key View 5 was taken from the westbound travel lane of Avenue 50, to the east of the proposed SR-86/Avenue 50 interchange. This view looks southwest toward the realigned and widened SR-86/Avenue 50 interchange (refer to [Exhibit 11a](#), *Key View 5 - Existing Condition*).

Existing Condition

Existing views at this Key View mainly consist of Avenue 50, agricultural uses to the north and south of Avenue 50, and the Santa Rosa Mountains hillsides and ridgelines to the southwest. The visual form in Key View 5 appears to be consistent throughout the view. Avenue 50 appears to be linear and continuous with edges defined by the unpaved, dirt shoulders. Background views of the Santa Rosa Mountains establish the visual boundaries of this Key View. Uniform colors are visible throughout Key View 5, including brown colors associated with the dirt roadside areas and background hillsides, grey colors associated with Avenue 50, and some scattered green colors associated with mature vegetation at off-site uses. Textures throughout this Key View mainly consist of the grainy material of dirt shoulders and hillsides, smooth pavement along Avenue 50, and granular foliage of the mature trees and vegetation. Two visual patterns contribute to the visual diversity and unity in Key View 5: the linear pattern formed by Avenue 50 toward the Santa Rosa Mountains, and the mountainous terrain and ridgelines of the Santa Rosa Mountains that create its unique shape. Views to the Santa Rosa Mountains are largely unimpeded in Key View 5, as there are few visual barriers that decrease the intactness of these visual resources. Overall, background views of the Santa Rosa Mountains provide a vivid visual landscape for viewers along westbound Avenue 50.



-  Direction of Photo
-  Key View Location
-  Key View Number

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 5 – Existing Condition

Viewer Response

Key View 5 represents a typical view from westbound Avenue 50 motorists, and agricultural users to the east of the proposed SR-86/Avenue 50 interchange project site. Westbound travelers and agricultural employees in Key View 5 would be directly exposed to the changes along Avenue 50 in VAU1. Although this portion of Avenue 50 experiences a low amount of daily traffic (1,000 ADT), travelers along westbound Avenue 50 and agricultural users would be directly exposed to the visual changes of the proposed SR-86/Avenue 50 interchange and their impact on visual resources in the City. As such, overall viewer response in Key View 5 would be moderate-low.

KEY VIEW 5 – Build Alternative 7

Implementation of Build Alternative 7 would result in visible changes to the existing condition as seen from this Key View. Visible project features from this Key View under Alternative 7 include the realignment of Avenue 50 to the south, the SR-86/Avenue 50 interchange overcrossing structure, and new SR-86/Avenue 50 interchange (refer to Exhibit 11b, Key View 5 - Proposed Condition – Alternatives 7 and 8).

Resource Change

Under Alternative 7, the visible form of Key View 5 would be somewhat altered due to the realignment of Avenue 50 to the south, the new SR-86/Avenue 50 interchange, and the SR-86/Avenue 50 interchange overcrossing structure. The proposed condition would appear similar to the existing condition with regard to colors and texture, although a slight increase in grey colors would result due to increased paving along Avenue 50, and a decrease in brown colors and coarse texture from agricultural areas would result. The linear patterns, texture, and continuity of views from Key View 5 would be similar to existing conditions under Alternative 7. As shown in Exhibit 11b, nominal view blockage of background views to the ridgelines and hillsides of the Santa Rosa Mountains would result from this alternative. As a result, the vividness, intactness, and visual unity would be slightly reduced. The resource change to motorists' views in Key View 5 as a result of Alternative 7 is considered to be moderate-low due to a nominal difference in increased hardscape and view blockage of the Santa Rosa Mountains. Therefore, the overall visual impact as a result of Alternative 7 in Key View 5 would be moderate-low.

It is noted that the realignment of Avenue 50 in Key view 5 would be required to comply with Minimization Measure 4, which requires all abandoned roadways not planned for repurposing to be removed, and hydroseeded or revegetated using non-invasive plants in compliance with Caltrans Standard Design Practices in consultation with the City of Coachella.

KEY VIEW 5 – Build Alternative 8

The difference between Alternatives 7 and 8 is that Alternative 8 includes an SR-86 southbound loop on-ramp at the proposed SR-86/Avenue 50 interchange (Alternative 7 includes a direct SR-86 southbound on-ramp). As shown in Exhibit 11b, this change is not visible from Key View 5. Therefore, the resource change associated with Alternative 8 would be similar to Alternative 7.

SUMMARY OF VISUAL IMPACTS BY VISUAL ASSESSMENT UNIT

A summary of visual impacts has been prepared for the project's VAU:

Visual Assessment Unit 1

Overall, the visual character and quality in VAU1 would be slightly reduced as compared to existing conditions. Although implementation of the proposed project would result in additional hardscape



Alternative 7



Alternative 8

*For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT VIA
Key View 5
Proposed Condition – Alternatives 7 and 8

surfaces within VAU1, and would convert some agricultural uses to transportation uses, nominal view blockage of the surrounding hillsides and ridgelines would occur. Moreover, more expansive views of these visual resources would be provided along Avenue 50 and Tyler Street to the west of the proposed SR-86/Avenue 50 interchange. Viewers within VAU1 include northbound SR-86 highway motorists, local roadway motorists (along Avenue 50 and Tyler Street), bicyclists and pedestrians, residential uses, recreational uses, and agricultural uses. As previously discussed, the group viewer response is moderate for SR-86 motorists, moderate for local roadway motorists, moderate for bicycle/pedestrian travelers, high for residential uses, moderate for Sierra Vista Park (recreational) users, and moderate-low for agricultural uses. Key View 1 depicts a typical view from eastbound Avenue 50 travelers and residential uses along Avenue 50, Key View 2 shows typical views from northbound Tyler Street travelers, Key View 3 represents views from northbound Tyler Street travelers and residential uses along Tyler Street, Key View 4 shows a typical view from northbound SR-86 motorists, and Key View 5 represents views from westbound Avenue 50 travelers and agricultural uses to the east of the new SR-86/Avenue 50 interchange.

Change is noticeable in VAU1, particularly from views along Avenue 50 and Tyler Street (Key Views 1 through 3). The overall visual impacts to motorists, bicyclists, pedestrians, residential uses, and recreational users along these local roadways would be moderate-high (Key View 1), moderate (Key View 2), and moderate-high (Key View 3). Although nominal view blockage of the City's visual resources would occur with implementation of Alternatives 7 and 8, residential uses in the project vicinity would have permanent views of the visual changes associated with the SR-86/Avenue 50 New Interchange project. The overall visual impacts at Key Views 4 and 5 would be moderate, and moderate-low, respectively. Due to expansive background views of hillsides and ridgelines in Key View 5, the new SR-86/Avenue 50 interchange would not impede viewsheds to these visual resources. Although minor view blockage of the Santa Rosa mountains would occur along Avenue 50 (east of the Sr-86/Avenue 50 interchange) in Key View 5, there is a low quantity of viewers at this Key View and visual impacts would be moderate-low. Overall, the proposed SR-86/Avenue 50 interchange would result in visual changes to the existing roadway network, increase hardscape features in the area, and convert some agricultural uses to transportation uses. However, views to City-designated visual resources would largely remain, and would be enhanced at some Key Views with project implementation. Thus, when considering the overall resource change in VAU1 and the group viewer responses, the overall visual impact within VAU1 under the proposed project is considered to be moderate.

KEY VIEW SUMMARY

Table 2, *Summary of Key View Narrative Ratings*, below summarizes and compares the narrative ratings for visual resource change and viewer response for each key view.

SUMMARY OF VISUAL IMPACTS BY ALTERNATIVE

A summary of visual impacts has been prepared for the following alternatives:

Alternative 7

This alternative would result in two overcrossing structures, new SR-86 on- and off-ramps, widened and realigned roadways, signalized intersections, vegetation removal, and would convert agricultural uses to transportation uses. However, City-designated views of the hillsides and ridgelines of the

**Table 2
Summary of Key View Narrative Ratings**

VISUAL ASSESSMENT UNIT	KEY VIEW	ALTERNATIVES 7 AND 8		
		Resource Change	Viewer Response	Visual Impact
1	1	ML	H	MH
	2	ML	M	M
	3	ML	H	MH
	4	M	M	M
	5	ML	ML	ML

Joshua Tree National Park to the north/east, eastern foothills of the San Bernardino National Forest to the northwest, Santa Rosa Mountains to the south, and San Jacinto Mountains to the west would largely remain. Therefore, overall visual impacts from Alternative 7 would be moderate, similar to the discussion above in the “SUMMARY OF VISUAL IMPACTS BY VISUAL ASSESSMENT UNIT” section.

Alternative 8

Similar to Alternative 7, this alternative would result in widened and realigned roadways, two overcrossing structures, new SR-86 on- and off-ramps, signalized intersections, vegetation removal, and would convert agricultural uses to transportation uses. The difference related to Alternative 8 would be the construction of a southbound SR-86 loop on-ramp (rather than a direct southbound SR-86 on-ramp). As such, visual impacts from Alternative 8 would be moderate (similar to Alternative 7).

IX. PROJECT VISUAL IMPACT SUMMARY

Overall Visual Impact of the Project

Visual elements of the proposed SR-86/Avenue 50 New Interchange project would include two overcrossing structures, new SR-86 on- and off-ramps, widened and realigned roadways, signalized intersections, vegetation removal, and would convert agricultural uses to transportation uses. The project would result in an increase in hardscape in the area, visible to Avenue 50, Tyler Street, SR-86 highway motorists, local roadway motorists, bicyclists and pedestrians, residential uses, recreational uses, and agricultural uses. Visual impacts associated with a project are determined by a measurement of the resource change and viewer response. The overall visual impact of the project is considered to be moderate. Recommended Minimization Measures 1 through 6 would ensure the character and quality of the project area is maintained and is not degraded. These Minimization Measures require a review of landscaping architectural treatments by Caltrans and the City of Coachella, and construction and operational lighting design to reduce light and glare on surrounding uses.

California Environmental Quality Act Appendix G Checklist

SCENIC VISTAS

The General Plan contains goals and policies to preserve views of the mountainous hillsides and ridgelines that create a scenic backdrop throughout the City. General Plan 6.1 requires the preservation of hillside and mountain views from view corridors throughout the City that afford these views. Key Views 1 through 5 depict typical views from eastbound Avenue 50, northbound Tyler Street, northbound SR-86, and westbound Avenue 50 travelers with background views of the surrounding hillsides and ridgelines the City aims to preserve. As shown in Exhibits 7b, 8b, 9b, 10b, and 11b, the proposed SR-86/Avenue 50 interchange project structure would not result in substantial view blockage of the hillsides and ridgelines in the surrounding area. As such, the overall visual impact in Key Views 1 through 5 would be moderate. Further, Minimization Measures 1 through 4 would ensure the character and quality of the project area is maintained and is not substantially degraded.

VISUAL CHARACTER

Changes in visual character can be identified by how visually compatible a proposed project will be with the existing condition by using visual character attributes as an indicator. As previously discussed under Section VI, Visual Resources and Resource Change, the project corridor is characterized by views to the surrounding hillsides and ridgelines of the Joshua Tree National Park to the north/east, eastern foothills of the San Bernardino National Forest to the northwest, Santa Rosa Mountains to the south, and San Jacinto Mountains to the west. Although a new interchange and overcrossing structures would be introduced to the area, these transportation uses would be similar to the height, scale, mass, and character of the existing interchanges/overcrossing structures in the project vicinity (e.g., the Golf Center Parkway/I-10 overcrossing structure to the northwest of the project site). After project implementation, the visual character of the area would be moderately affected by the proposed project. However, implementation of recommended Minimization Measures 1 through 4 would ensure the character and quality of the project area is maintained and is not substantially degraded.

SCENIC RESOURCES ALONG SCENIC HIGHWAYS

According to Caltrans, a state route must be included on the list of highways eligible for scenic highway designation in Streets and Highways Code Section 263. It can then be nominated for official designation by the local governing body. The project site does not include any officially designated or eligible State scenic highways.⁷

LIGHT AND GLARE

Implementation of the proposed project would introduce additional sources of light and glare to the project area from traffic signals along Avenue 50 (i.e., at the northbound and southbound SR-86 on/off-ramps, and the Avenue 50/Tyler Street intersection). Motorists traveling along SR-86, Avenue 50, and Tyler Street would be nominally impacted by the traffic signals their short duration of exposure. The residential uses in the project vicinity could be sensitive to increased lighting from the proposed project. However, the project area currently contains lighting features, particularly along Avenue 50 and Tyler Street. Minimization Measures 5 and 6 (use of lighting design techniques) would reduce short- and long-term lighting impacts by requiring new lighting to be designed and installed to avoid light spillage at adjacent properties.

⁷ California Department of Transportation, *California Scenic Highway Mapping System*, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed on July 26, 2017.

Temporary Construction Visual Impacts

Implementation of the proposed project would expose sensitive uses to views of the project site. The proposed project would require staging areas to allow for construction activities and the storage of equipment. Construction vehicle access and staging of construction materials would be visible from motorists traveling along the project site as well as residents located in the project vicinity. These impacts are short-term and would cease upon project completion. The project would be required to comply with the Caltrans Standard Specifications for Construction, which would minimize visual impacts through the use of opaque temporary construction fencing that would be situated around construction staging areas.

Nighttime construction would be required for SR-86/Avenue 50 interchange improvements and overcrossing structure within Caltrans right-of-way. Nighttime construction would be limited to the hours of 10:00 p.m. to 6:00 a.m., in accordance with Caltrans regulations. Necessary lighting for safety and construction purposes would be directed away from land uses outside the project area, and contained and directed toward the specific area of construction. With implementation of Minimization Measure 5, construction lighting types, plans, and placement would be designed to minimize light and glare impacts on surrounding sensitive areas during construction. Implementation of Minimization Measure 6 would ensure that appropriate lighting controls are applied to reduce light and glare impacts during operation.

Construction of the proposed project would result in the disturbance of roadside landscaping near the SR-86/Avenue 50 interchange, and the abandonment of portions of the existing Avenue 50 and Tyler Street roadways. As such, the project would be required to comply with Minimization Measures 1 and 4. Minimization Measure 1 requires any disturbed landscaped area in Caltrans right-of-way to be revegetated with replacement plantings as approved by the Caltrans District Landscape Architect. Minimization Measure 4 requires all abandoned roadways not planned for repurposing to be removed, and hydroseeded or revegetated using non-invasive plants in compliance with Caltrans Standard Design Practices in consultation with the City of Coachella.

X. CUMULATIVE VISUAL IMPACT

Cumulative impacts are those resulting from past, present and reasonably foreseeable future actions, combined with the potential visual impacts of this project. For this project, it has been determined that the following cumulative visual impacts may occur.

Currently, there are three cumulative development/transportation projects proposed in the vicinity of the project site: the Avenue 50 Improvements from Calhoun Street to Harrison Street Project, the Public Library Facility Project, and the CV Link project. The Avenue 50 Improvements from Calhoun Street to Harrison Street Project includes the construction of curb and gutter where none now exist, and placing asphalt pavement to join the existing edge of street on Avenue 50 between Calhoun Street and Harrison Street. The finished project will complete the planned widening of Avenue to three traffic lanes in each direction, and include pedestrian, bicycle, and neighborhood electric vehicle facilities. The easternmost limits of this cumulative project is located approximately 0.63-mile the west of the closest SR-86/Avenue 50 interchange project boundary. Due to the distance, existing topography, and an intervening overcrossing structure, this cumulative project is not visible from the project site and would not be cumulatively considerable.

The Public Library Facility Project is located at 1538 Seventh Street in Coachella, approximately 0.64-mile to the southwest of the SR-86/Avenue 50 interchange project site. Due to the distance, existing

topography, and intervening trees and buildings, this cumulative project is not visible from the project site and would not be cumulatively considerable.

The CV Link project is an alternative transportation path that would extend across the Coachella Valley. The paved mixed-use path would stretch from State Route 111 (SR-111) in Palm Springs to Airport Boulevard in Coachella and Thermal in unincorporated Riverside County, and would accommodate pedestrians, bicycles, low-speed electric vehicles and neighborhood electric vehicles. As discussed above, the proposed project would include an extension of the CV Link pathway along the south side of the CVSC within the project limits. Visible features from the CV Link project would consist of a paved pathway, guardrails, signage, crossings, etc., that is typical of other bicycle/multi-use pathway projects. Although the CV Link project and SR-86/Avenue 50 New Interchange Project would result in increased hardscape along the CVSC and in the project area, these projects will provide connections for future residents to various areas within the Coachella Valley. In addition, due to the nature of these projects (transportation projects) and their lack of visual impediments, no visual degradation of visual resources in the area would occur. As such, no cumulative visual impacts would occur in this regard.

XI. AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to address visual quality loss in the project area. This approach fulfills the letter and the spirit of FHWA requirements because it addresses the actual cumulative loss of visual quality due to a project. This approach also results in avoidance, minimization, and/or mitigation measures that can lessen or compensate for a loss in visual quality. The inclusion of aesthetic features in the project design, discussed in *Section II*, can help generate public acceptance of a project. This section describes additional avoidance, minimization, and/or mitigation measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

The following measures to avoid or minimize visual impacts will be incorporated into the project:

- MM-1 **Landscaping.** Freeway landscaping shall retain the character of the existing desert scrub. Landscape palettes of context sensitive, water-conservation plants, and concept plans will be implemented in consultation with the City of Coachella and the Caltrans District Landscape Architect. All landscaping within the Caltrans right-of-way shall be reviewed and approved by Caltrans prior to final design and implementation.
- MM-2 **Existing Vegetation.** To minimize erosion on the project site, established, non-invasive vegetation shall be preserved to the maximum extent possible. Areas that are disturbed due to construction activities shall be stabilized with erosion control and plant replacement at a ratio acceptable to the Caltrans District Landscape Architect. All plant materials used will be non-invasive, and native vegetation will be used as much as possible.
- MM-3 **Architectural Treatments and Review.** Structures will receive architectural aesthetics to minimize viewshed effects of the project and will received textures and anti-graffiti treatment to deter vandalism. All proposed architectural treatments shall be developed during the Plans, Specifications, and Estimates phase in consultation with the City of Coachella and the Caltrans District Landscape Architect. All proposed

architectural treatments shall be reviewed and approved by Caltrans prior to final design and implementation.

- MM-4 **Roadway Abandonment and Hydroseeding/Revegetation.** Abandoned roadways not scheduled for repurposing shall be removed and hydroseeded or landscaped in consultation with the City of Coachella and the Caltrans District Landscape Architect using non-invasive plants. All proposed hydroseeding/landscaping within Caltrans right-of-way shall be reviewed and approved by Caltrans prior to final design and implementation.
- MM-5 **Construction Lighting.** Construction lighting types, plans, and placement shall be designed to minimize light and glare impacts on surrounding sensitive uses.
- MM-6 **Operational Lighting.** The project will be designed to reduce permanent new sources of light and glare.

Implementation of the proposed project will not require mitigation measures, as the previously identified minimization measures will sufficiently reduce potential visual impacts.

Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative

Table 3, *Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative*, below summarizes the numbered minimization measures from above for each alternative.

Table 3
Summary of Avoidance, Minimization, and/or Measures by Alternative

Alternatives 7 and 8	Avoidance/ Minimization Measure	Mitigation Measures
Build	1 through 6	None
No Build	None	None

XI. CONCLUSIONS

As concluded above, the proposed project would result in moderate visual impacts. The SR-86/Avenue 50 New Interchange project would include a new interchange, two new Avenue 50 overcrossing structures across the CVSC and SR-86, realigned roadways, CV Link up-ramp and extension, increased hardscape, graded slopes, vegetation removal, etc. However, recommended avoidance/minimization measures MM-1 through MM-6 would allow the project to blend into the existing landscape and reduce any potential visual impacts to viewer groups in the project vicinity.

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