

# VISUAL IMPACT ASSESSMENT

## SR 99/120 Interchange Connector Project

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April 2018

### California Department of Transportation

District 10, San Joaquin County, SR 99/120  
10-SJ-99/120 (PM3.1/6.2 PM R5.1/T7.2)  
EA 10-1E740

Prepared by: Edvard King for Ali Boule Date: 7/18/18

Ali Boule

Environmental Planner, LSA

Reviewed by: Marcia D. Vallier Date: 4/18/18

Marcia D. Vallier

Vallier Design Associates, Inc.

California PLA #3293

Project Landscape Architect for Caltrans Documents

Approved by: Brad Cole Date: 7/19/18

Brad Cole

California PLA #4518

Caltrans District Landscape Architect

Branch C

Central Region

*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.

# VISUAL IMPACT ASSESSMENT

## SR 99/120 Interchange Connector Project

### **PURPOSE OF STUDY AND ASSESSMENT METHOD**

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. This visual impact assessment follows the guidance outlined in the publication Visual Impact Assessment for Highway Projects published by the Federal Highway Administration (FHWA) in March 1981.

### **PROJECT DESCRIPTION**

The California Department of Transportation (Caltrans) District 10 with the cooperation of the City of Manteca and the San Joaquin Council of Governments (SJCOG) proposes to reconstruct the existing State Route (SR) 99/120 interchange. This project will add an additional lane to increase capacity on two connector ramps (eastbound SR 120 to southbound SR 99 and from northbound SR 99 to westbound SR 120), add auxiliary lanes on SR 99 and 120 to improve merging traffic movements, upgrade the existing interchange ramps at Austin Road, replace the Austin Road structure over SR 99 with a four-lane structure over both SR 99 and Union Pacific Railroad (UPRR), remove the existing at-grade crossing of the UPRR tracks at Austin Road and construct a new connector road from Austin Road to Woodward to Moffat Boulevard and widen the existing Woodward Avenue gated railroad crossing, relocate the SR 99 Frontage Road along the east side of SR 99 from Austin Road for approximately 0.8 miles and install new signing/signals/lighting improvements. As part of the project some existing utility poles, sewer and water lines will need to be relocated.

This project will provide traffic congestion relief and improved operations of the interchange. Foundations will be driven piles, either steel or concrete. Excavation for structure footings will be up to 5 feet deep. Excavation for new drainage culverts would be up to 6 feet deep. Other roadway excavation will be up to 2 feet deep. No dewatering is expected as part of the project. The project will be importing fill, no export.

The Project would be constructed in three phases (See Figures 1, 2, 3, and 4). The Phase 1A project would be as follows:

- Widen the eastbound SR 120 to southbound SR 99 connector ramp from one-lane to two-lanes;
- Remove the Austin Road overcrossing and replace with a longer structure spanning SR 99 and UPRR;
- Add a new connecting road from Austin Road to East Woodward Avenue and Moffat Boulevard and modify the existing UPRR gated crossing at East Woodward Avenue to conform to the new connector road;
- Modify the existing northbound Austin Road exit ramp to conform to the higher overcrossing profile grade; and

- Temporarily close the Austin Road northbound entrance and southbound exit ramps on SR 99.

The Phase 1B project would be constructed concurrently or subsequent to the Phase 1A project:

- Widen the northbound SR 99 to westbound SR 120 connector ramp from one-lane to two- lanes;
- Convert the existing 99/120 separation structure to two lanes and construct a new separation structure to serve the eastbound 120 to northbound 99 connector ramp; and
- Add an auxiliary lane in the existing median of westbound SR 120 from Main Street to SR 99. The Moffat Overhead and Spreckels undercrossing, which spans over Van Ryn Avenue, will be widened in the median.

Phase 1C would complete the project as planned by:

- Restore the southbound exit ramp from SR 99 to Austin Road by constructing a grade separated braided ramp to eliminate the weaving with SR 120 merging traffic;
- Construct the entrance ramp from Austin Road to northbound SR 99 and to westbound SR 120 as a loop ramp that will provide separate traffic movements to SR 99 and SR 120;
- Relocate the northbound SR 99 exit ramp to Austin Road to accommodate the loop on ramp
- Relocate the SR 99 frontage road for approximately 0.8 miles.
- Add an auxiliary lane in each direction on SR 99 from SR 120 to approximately 1.7 mile south of the Austin Road overhead by shifting the median away from the UPRR ROW and relocating the frontage road; and
- Add an auxiliary lane in the existing median of eastbound SR 120 from Main Street to SR 99 to provide a dedicated lane to connect to the new 99/120 separation structure. The Moffat Overhead and Spreckels undercrossing, which spans over Van Ryn Avenue, will be widened in the median.

## **PROJECT LOCATION AND SETTING**

The project location and setting provides for the context for determining the type of changes to the existing visual environment. The proposed project is located on SR 99 between postmiles 3.1 to 6.2 and on SR 120 between postmiles 5.1 to 7.2 in the County of San Joaquin, California near the City of Manteca, as shown in Figures 5 and 6. The focus of the Project is on the point at which these two SR facilities converge, referred to as the SR 99/120 Connector--the center point of the Connector is located approximately at the latitude 37° 47' 0.6" N and longitude 121° 11' 13.7" W. Regionally, the project is located in the heart of California's Central Valley, at the northern edge of the San Joaquin Valley.

With the exception of elevated highway overpasses that provide sweeping, yet brief, panoramic views of the surrounding landscape, the proximate City of Manteca and San Joaquin County land is flat. The aesthetic qualities of the distant Sierra Nevada Mountains, Coast Range, Mount Boardman and Eagle Mountain provide a sense of enclosure among the vastness of the immediate flatlands that surround the Project boundary. The landscape is characterized by agricultural production, primarily consisting of orchards and field crops, to the northeast, southeast and southwest. Urban land uses in the City of

Manteca characterize the Project vicinity to the northwest. SR 99/120 is the physical dividing line between the City of Manteca's urbanity and the City's southeastern suburban and agricultural frontiers.

The project corridor 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. General commercial and industrial land uses outline the urbanized portion of the project corridor west of SR 99, while agriculture land uses surround the eastern edge of the SR 99 project corridor and the southwest portion of the project corridor. Some residential units that border commercial and industrial land uses have distant views of the project site.

The Project is not located within the vicinity of a designated or eligible state scenic highway. The only state designated scenic highway in San Joaquin County is located approximately 20 miles southwest by roadway on Interstate 580. However, the San Joaquin County 2035 General Plan identifies Austin Road as a "scenic route" from the Stanislaus County line to SR 99. The San Joaquin County 2035 General Plan EIR states that the scenic resources within view of the road are limited to croplands. The 2023 Manteca General Plan does not identify any scenic resources.

## **VISUAL RESOURCES AND RESOURCE CHANGE**

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

Views have been defined as foreground views (0 to ½ mile), middle-ground views (½ mile to 3 miles), and background views (greater than 3 miles) for this document.

### **Visual Character**

The existing visual character of the project area is semirural, including urban development in the western portion of the project site and rural agriculture in the eastern portion of the project site. The visual character of the proposed project would be compatible with the existing visual character of the corridor. The project will improve the existing facilities, but will maintain the same public roadway land use. The proposed project would be constructed with materials similar to the existing structure, such as concrete and asphalt. These materials will be similar in color, form, and texture to the existing facilities. However, the scale will differ slightly from existing conditions, because the project will include an expanded number of lanes and/or widened lanes in various areas of the project. Specifically, these expansions include:

- Widening the eastbound SR 120 to southbound SR 99 connector ramp from one-lane to two- lanes;
- Widening the northbound SR 99 to westbound SR 120 connector ramp from one-lane to two- lanes;
- Constructing a new structure over SR 99 to serve eastbound SR 120 to northbound SR 99 traffic and modify the existing structure over SR 99 to serve westbound SR 120 traffic;
- Adding an auxiliary lane in the median in each direction of SR 120 from Main Street to SR 99( the Moffat Overhead and Spreckels undercrossing, which spans over Van Ryn Avenue, will be widened in the median);

- Adding an auxiliary lane in each direction on SR 99 from SR 120 to approximately one mile south. This includes widening the Moffat Overhead and Spreckels Underpass, which spans over Van Ryn Avenue, structures;
- Removing the Austin overcrossing and replace with a longer and wider structure spanning SR 99 and UPRR (removal consists of removing the structure and the fill located between SR 99 and Moffat Boulevard); and
- Add a new connector road from Austin Road to Woodward Avenue to Moffat Boulevard and widen the existing UPRR Woodward Avenue gated crossing.

There would be two sections of mechanically stabilized earth (MSE) type retaining wall, in the southwest quadrant of the project. These would stretch along the west side of the eastbound SR 120 to southbound SR 99 ramp and the west side of the eastbound SR 120 connector ramp to Austin Road. Both walls would be approximately 800 feet long. The wall nearest the right of way, on the west side of the eastbound SR 120 to southbound SR 99 connector ramp would be about twenty five feet tall, and the wall west of the eastbound SR 120 connector ramp to Austin road would be about 15 feet tall. The ramp from southbound SR 99 to Moffat Boulevard would be elevated to approximately thirty feet above ground to pass over the eastbound SR 120 to southbound SR 99 ramp before descending to an at grade intersection with Moffat Boulevard. Therefore, the project will be similar to existing visual character in terms of form, line, color, and texture, but will be slightly larger in scale. Overall, the project will be compatible with the existing visual character of the corridor, as land uses in the immediate project vicinity will remain the same.

## Visual Quality

The visual quality of the existing corridor will not be altered by the proposed project. Three key terms are used to evaluate the visual quality of a proposed project: vividness, intactness, and unity.

**Vividness** may be defined as the visual power or memorability of landscape components as they combine in distinctive visual patterns.

**Intactness** may be defined as the visual integrity of the natural and man-built landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.

**Unity** may be defined as the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape.

The proposed project will be as vivid as the project corridor's existing conditions. Because the SR 99/120 Connector is elevated above adjacent properties, the existing conditions are on the Connector contrast with the surrounding, low-lying urban and rural landscape. The current vividness rating for the project area at ground level is 1 (very low) to 2 (low), and 2 to 3 (moderately low) on the existing SR 99/SR 120 connector ramps, due to the longer distance middle- and background views available from the ramps.

The proposed project will have a high degree of intactness, similar to existing conditions. The proposed project would be replacing an existing interchange, and widening would occur within existing medians. The project would largely be confined within existing right of way and within the existing highway and interchange footprint, with the exception of the Austin Road interchange alterations, which would create

larger on/off ramps, as well as some new at-grade roads connecting those ramps with existing roadways. Access to the project area is limited to on/off ramps along the state highway system which replace or enlarge existing on/off ramps. As such, the proposed project will have a high degree of intactness, meaning that it will not significantly visually spill or blend into areas beyond the extent of the existing interchange. The exception to the overall maintenance of intactness of the project is the new Austin Road interchange, which would be larger than the existing on/off ramps at the site, and which would result in the creation of some new roads to connect the larger ramps to existing roadways. Though there could be potential perceptions of encroachment in this area, particularly for the larger northbound SR 99 off ramp at Austin Road and the extension of East Woodward Avenue, the changes to this part of the project area are located away from the majority of area residences and businesses, and this reduced degree of intactness is isolated in these portions of the proposed project. The new roadway and elevated off ramp would parallel existing roadways and the existing highway structures. The area near East Woodward Avenue and the Moffat Boulevard exit is flat with views limited to the foreground. The change to views from the ground as a result of the new elevated off ramp and roadway would be minimal. The new elevated off ramp would provide a new opportunity for middle- and background views of the surrounding landscape.

In terms of unity, the proposed project will maintain a division between otherwise incompatible land uses of agricultural production and urban land uses (residential and commercial). Although the proposed project would continue the Connector's role as a physical division between these land uses, it plays an important role in unifying the landscape as a whole. Without the SR 99/120 Connector to demarcate the change from urban to rural and agricultural land uses, the transition would be abrupt and appear disjointed. By locating the proposed project within the existing interchange and incorporating improvements as close as possible to the existing highway alignments, the proposed project will maintain the existing visual quality of the landscape, including the role of the existing interchange as buffer between urban and agricultural land uses. Additionally, the proposed project improvements will be visually and operationally compatible with both the existing highway corridor and future planned highway improvements in the county. Overall, the proposed project will result in negligible changes to visual quality.

As a result, resource change (changes to visual resources as measured by changes in visual character and visual quality) will be low, overall. Although the proposed project will be slightly larger in scale than the roadways' existing conditions, overall visual character and visual quality will remain the same or improve slightly above existing conditions. Most of the project would be constructed within existing highway structures, including roadway widening and the addition of auxiliary lanes for on/off ramps. It is expected that the modifications to the existing structures will largely go unnoticed by receptors in the area, including highway users and local residents. The one area which would result in noticeable visual resource changes would be the SR 99/Austin Road off ramp, which is larger than the existing ramp, and the Moffat Boulevard off-ramp from southbound SR 99 to meet the extension of East Woodward Avenue. As discussed above, the change to views as a result of the new elevated off ramp and roadway would be minimal and located away from the majority of area residences and businesses. There would not be a significant change to the vividness, intactness, and unity of the project area as a result of the SR 99/Austin Road off ramp, the extension of East Woodward Avenue, or the Moffat Boulevard elevated off ramp.

## VIEWERS AND VIEWER RESPONSE

*Neighbors* (people with views *to* the road) and *highway users* (people with views *from* the road) will temporarily be affected by the proposed project during construction. Two terms are used to describe how neighbors and highway users will be affected by the proposed project—viewer exposure and viewer sensitivity:

**Viewer Exposure** is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, the duration of their view, the speed at which the viewer moves, and the position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.

Neighbors of the proposed project will be exposed to three phases of construction that could last up to two seasons per phase. Approximately 3,813 neighbors live in proximity to the area of visual effect of the proposed project, at an elevation below the project. The number of neighbors of the proposed project was estimated by geospatially analyzing which 2010 Census blocks intersect with the Area of Visual Effect for the proposed project. The Decennial Census is the only survey that captures block-level data; the next Decennial Census will not occur until Year 2020. Many of the census block boundaries extend beyond the area of visual effect; therefore, it is likely that the number of neighbors of the proposed project is much less than 3,813 people. The overlap of the area of visual effect and census blocks is shown in **Figure 3**. The area of visual effect was developed through the means of a virtual field site visit (FHWA 2015). Neighbors will have a static viewshed of the proposed project, in which they will be looking out and up towards the SR 99/120 Connector. The static viewshed for the majority of neighbors will have the proposed project in the distant background, although the project will be slightly obscured by structures such as businesses, landscaping or sound mitigation walls in the fore and middleground views. Highway users, or travelers, will also be exposed to the proposed project. **Table 1** summarizes the number of travelers along various points of the project:

**Table 1: Traffic Counts in the Project Area**

Route (SR)	Post Mile	Location	Count Type	Traffic Count	Year of Survey
99	2.374	NB traffic	Average Peak Hour	4,718	2013
99	2.374	SB traffic	Average Peak Hour	5,064	2013
99	4.536	SB on ramp from Austin Rd	Ramp AADT <sup>2</sup>	2,800	2014
99	5.037	SB off ramp to Austin Rd	Ramp AADT	1,295	2015
99	4.795	NB off ramp to Austin Rd	Ramp AADT	4,003	2015
99	5.030	NB on ramp to Austin Rd	Ramp AADT	1,309	2015
99	5.368	NB off to WB Rte 120	Ramp AADT	28,058	2015
99	6.146	SB off to WB Rte 120	Ramp AADT	13,050	2015
99	5.590	SB on from EB Rte 120	Ramp AADT	17,682	2015
99	5.634	NB on from EB Rte 120	Ramp AADT	10,325	2015
99	6.498	NB off to Yosemite/120	Ramp AADT	12,807	2015
99	6.837	SB off ramp to Rte 120	Ramp AADT	5,433	2015
99	6.839	NB on from Yosemite/120	Ramp AADT	4,819	2015
120	5.054	EB off to Main St	Ramp AADT	5,500	2010
120	5.071	WB on from S Main St	Ramp AADT	6,400	2010
120	5.567	WB off to S Main St	Ramp AADT	5,400	2010

Sources:

<sup>1</sup>Caltrans District 10, 2016. "Caltrans traffic Volumes for Ramp AADT in District 10." Pages 15, 16 and 23. Accessed on September 15, 2017 at <http://www.dot.ca.gov/trafficops/census/docs/2015-ramp-vol-district10.pdf>.

<sup>2</sup>Caltrans, 2015. "Caltrans Traffic Volumes Peak Hour Volume Data." Page 26. Accessed on September 15, 2017 at <http://www.dot.ca.gov/trafficops/census/docs/2014kanddfactors.pdf>.

Abbreviations:

AADT=annual average daily traffic; SB=southbound; S=south; NB=northbound; EB=eastbound; WB=westbound; SR=State Route; Rte=route; St=street; and, Rd=road.

When averaging all the traffic counts listed in **Table 1**, the average number of travelers on SR 99/120 Connector facilities equates to 8,041 one-way travelers per day. The SR 99 northbound off ramp to westbound SR 120 lists the highest annual average daily traffic (28,058 travelers), when compared to the other counts listed in **Table 1**. The SR 99 southbound off ramp to Austin Road lists the lowest annual average daily traffic (1,295 travelers), compared to the other counts listed in **Table 1**.

A traveler heading northbound from Jack Tone Road towards the SR 99/120 Connector interchange will have restricted views of the surrounding landscape, as the roadway ascends to the crest of its elevation where SR 99 and 120 meet. After cresting the roadway on top of the interchange, the viewshed for this traveler will open up to the Manteca skyline on the western side of the roadway and to the agricultural production on the eastern side of the roadway, as well as roadway signage, other vehicles on the road, and distant mountain range outlines on the horizon. As the traveler continues northbound on SR 99, the traveler will descend in elevation, and the viewshed will become restricted to middle- and ultimately foreground views. A southbound traveler on SR 99 would experience the same viewshed pattern, but in reverse order to how the northbound traveler was exposed to views.

A traveler heading eastbound from Main Street towards the SR 99/120 Connector interchange would have partially obstructed views that will be restricted to the fore and middle ground of urban or suburban Manteca, until cresting the road atop the interchange. Depending upon whether the traveler heads northbound or southbound on SR 99, the views will consist of roadway signage, other vehicles on the road, an outline of the distant Sierra Nevada mountain range, the Austin Road overpass (if southeast bound) the Manteca skyline, and agricultural production.

**Viewer Sensitivity** is defined as both the viewers concern for scenic quality and the viewers response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a project site is uninspiring, a community may still object to projects that fall short of its visual goals. Analysts can learn about these special resources and community aspirations for visual quality through citizen participation procedures, as well as from local publications and planning documents.

Viewer sensitivity to the proposed project is low for both neighbors and travelers. The improvements to SR 99/120 Connector are considered to be a priority among the region's political and agency leaders (Escalon Times 2017). A grade separation at the intersection of Austin Road and UPRR tracks at Moffat Boulevard will provide aesthetic interest to the landscape otherwise dominated by highway structures, railroad tracks, local roads, and agricultural and commercial land uses. Though this grade-separation will extend the Austin Road Bridge and could create a sense of encroachment, it will also provide safer rail crossing for the area. The proposed project will look and operate similar to the existing structure; therefore, negligible public controversy is anticipated for the proposed project. While changes in elevation and extending the bridge might affect viewer exposure, the effects will be minimal. Overall, neighboring business and resident as well as traveler viewer groups will have a low viewer response to project implementation.

## **VISUAL IMPACT**

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. No designated state scenic highways are located within or adjacent to the Project site (Caltrans 2017). While no scenic vistas or scenic resources are designated within the project area, the project will impact views of neighbors and travelers minimally.

The biggest view change is in regards to the lengthening and increased elevation of Austin Road over the UPRR tracks. All roads with the exception of Austin Road will remain at essentially the same elevation as in existing conditions. However, Austin Road will be about 30-feet taller than the existing at-grade railroad crossing. The proposed Austin Road overpass will not return to the existing grade until 800-feet south of the UPRR tracks. Implementation would result in the acquisition of two homes and relocation of residents along Austin Road south of the UPRR tracks. On the north side of the freeway, Austin road is raised about 3-feet and returns to original grade at the intersection of the existing frontage road. This change would impact the views of neighbors living in the southwestern quadrant of the project's vicinity, as the increased height of the overcrossing could place the structure within the sightlines of some neighbors. Nonetheless, the structure would not shade any neighboring homes. This change would benefit neighbors by removing the existing at-grade crossing of UPRR tracks. While the proposed lengthening and increased elevation of Austin Road poses a visual change, this slight visual change is a trade-off to designing a safer above-grade crossing for the UPRR tracks at Moffatt Boulevard. In order to construct the new connector road between Austin Road and Woodrow Boulevard, a portion of an existing orchard will be removed. However, much of the orchard would not be affected by the project and is anticipated to remain as orchard. Further, since land uses in the immediate vicinity of Austin Road would remain largely the same, scenic resources in view of the road would not be significantly affected. Therefore, no significant effects to this County-designated scenic route would occur.

In addition to the orchard impacts described above, minor tree removal would be required to construct the rest of the project. The project site is largely void of trees, but would require the removal of some trees located within the footprint of the proposed interchange design. This minor tree removal would not change the visual character of the area, since the project site is already developed with the existing interchange.

In order to mitigate for potential noise impacts of the project, noise barriers may need to be installed along the south side of SR 120 in the vicinity of the apartment complex located just south of the highway. Existing views from these apartments toward the north, where noise barriers would be constructed, are limited to SR 120 in the foreground, agriculture and industrial in the middleground, and urban development in the background. Installation of a noise barrier would obstruct these views for first-story residences in the complex. However, noise barriers would be designed consistent with the City of Manteca and Federal Highway Administration design standards and would be only as tall as required to mitigate potential noise impacts. As the visual quality of existing views is low, installation of a noise barrier would not cause a significant impact.

The proposed project will resemble existing conditions in terms of color, form, and texture. With implementation of **Mitigation Measure 1**, the visual character of the project will adhere to local preferences, as outlined in the 2023 Manteca General Plan. Caltrans will use conventional highway lighting to direct light onto the roadway to eliminate spillover onto adjacent properties and to minimize night sky lighting. A description of conventional highway lighting specifications is provided in Section 9-12 of the Caltrans Traffic Manual (Caltrans 2014). While construction would last up to two seasons for each phase, construction would follow the City of Manteca Noise Ordinance standard and construction work would be limited to the hours of 7:00 a.m. to 7:00 p.m. This would ensure that construction lighting would not affect nighttime views in the area.

The San Joaquin Council of Governments (SJCOG) has several congestion relief projects planned for state routes in the Manteca area (SJCOG 2017). Under the no-build alternative, the SR 99/120 Connector segment would eventually become out of sync with the surrounding highway system, as upgrades take place around the no-build alternative.

In the context of low anticipated viewer response to the project, the low level of visual change resulting from the proposed project would represent a low level of overall visual impact.

## **AVOIDANCE AND MINIMIZATION MEASURES**

Avoidance or minimization measures have been identified and can lessen visual impacts caused by the project. Also, the inclusion of aesthetic features in the project design previously discussed can help generate public acceptance of a project. This section describes additional avoidance and/or minimization measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

The 2023 Manteca General Plan's Community Design Element states under Policy CD-P-10 that Gateway features should be established at the intersection of Austin Road/SR 99. The General Plan identified the following methods for implementation of aesthetic-related policies involving the State Highway System's right of way:

- CD-I-4. Work with Caltrans to include gateway features in the future design of the

designated arterial street and highway interchanges.

- CD-I-5. Work with Caltrans to include landscape improvements and maintenance utilizing recycled wastewater within the highway right of-way and highway interchanges.

Noting the City of Manteca's community design goals, the following measures to avoid or minimize visual impacts will be incorporated into the project:

**Mitigation Measure 1:** Caltrans shall work with the City of Manteca to provide replacement highway planting, landscape improvements, and maintenance utilizing recycled wastewater within the highway right of-way at the Austin Road/SR 99 interchange. These landscape improvements would form a gateway feature at the Austin Road/SR 99 interchange in accordance with the 2023 Manteca General Plan's Community Design Element. This would lessen aesthetic impacts of the proposed project by providing a distinct, attractive gateway for the Austin Road/SR 99 interchange, particularly in its position at the southeastern entrance to the city. Any highway planting should follow the Caltrans Highway Design Manual's Highway Planting Standards and Guidelines (Caltrans 2016).

## CONCLUSIONS

The post project visual character of the project area would remain semirural. No significant visual impacts associated with development of the proposed project would occur. Mitigation Measure 1 is proposed to ensure that Caltrans coordinates with the City of Manteca to implement the City's gateway feature design elements consistent with the 2023 Manteca General Plan.

## REFERENCES

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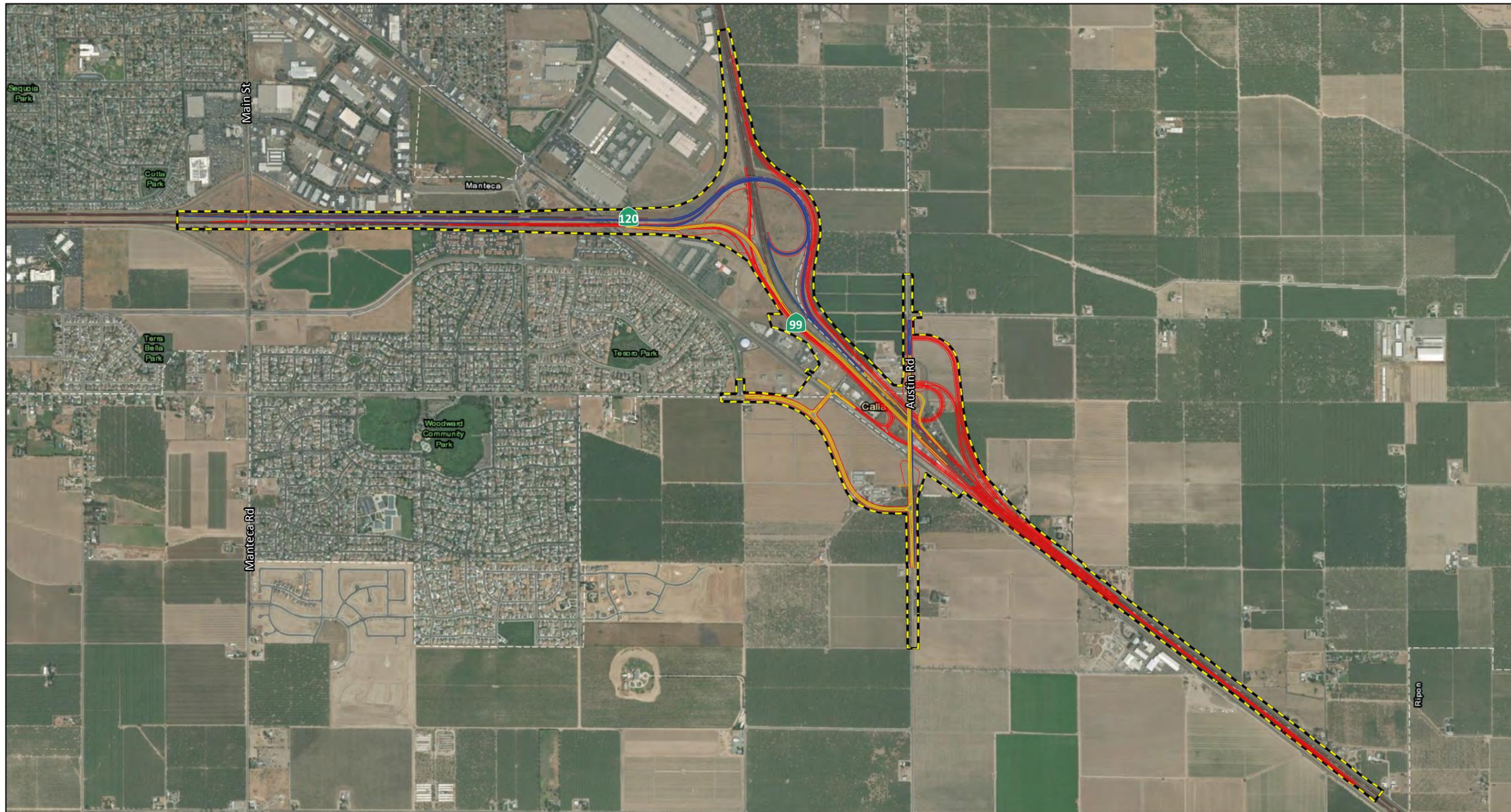
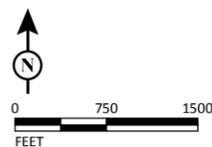


FIGURE 1



LEGEND

- Preliminary Study Area
- Phase 1b
- Phase 1c
- Phase 1a



SOURCE: NAIP Aerial Imagery (6/2016), Project Design- Mark Thomas (2/2018)

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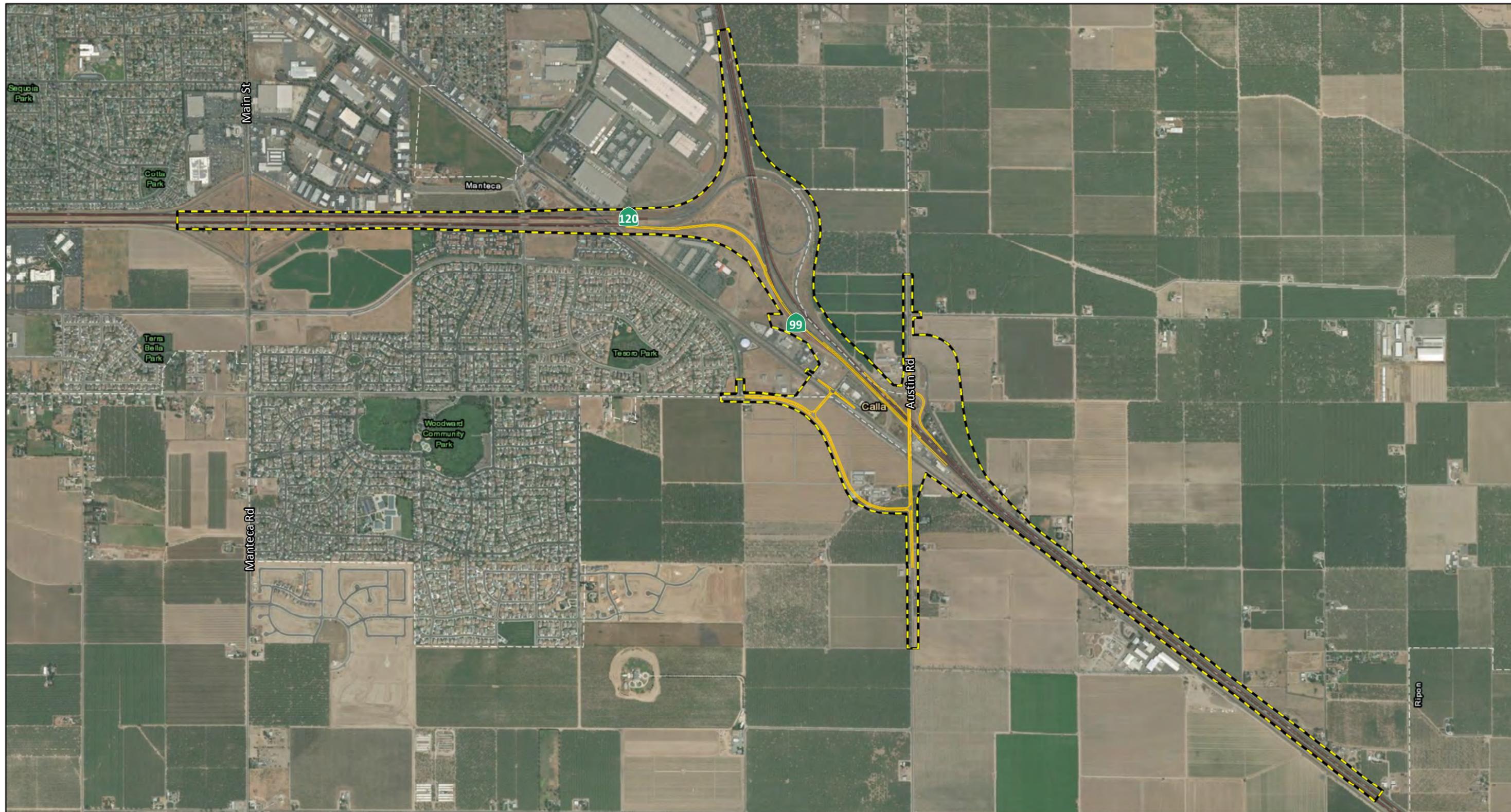


FIGURE 2



LEGEND

-  Preliminary Study Area
-  Phase 1a



0 750 1500  
FEET

SOURCE: NAIP Aerial Imagery (6/2016), Project Design- Mark Thomas (2/2018)

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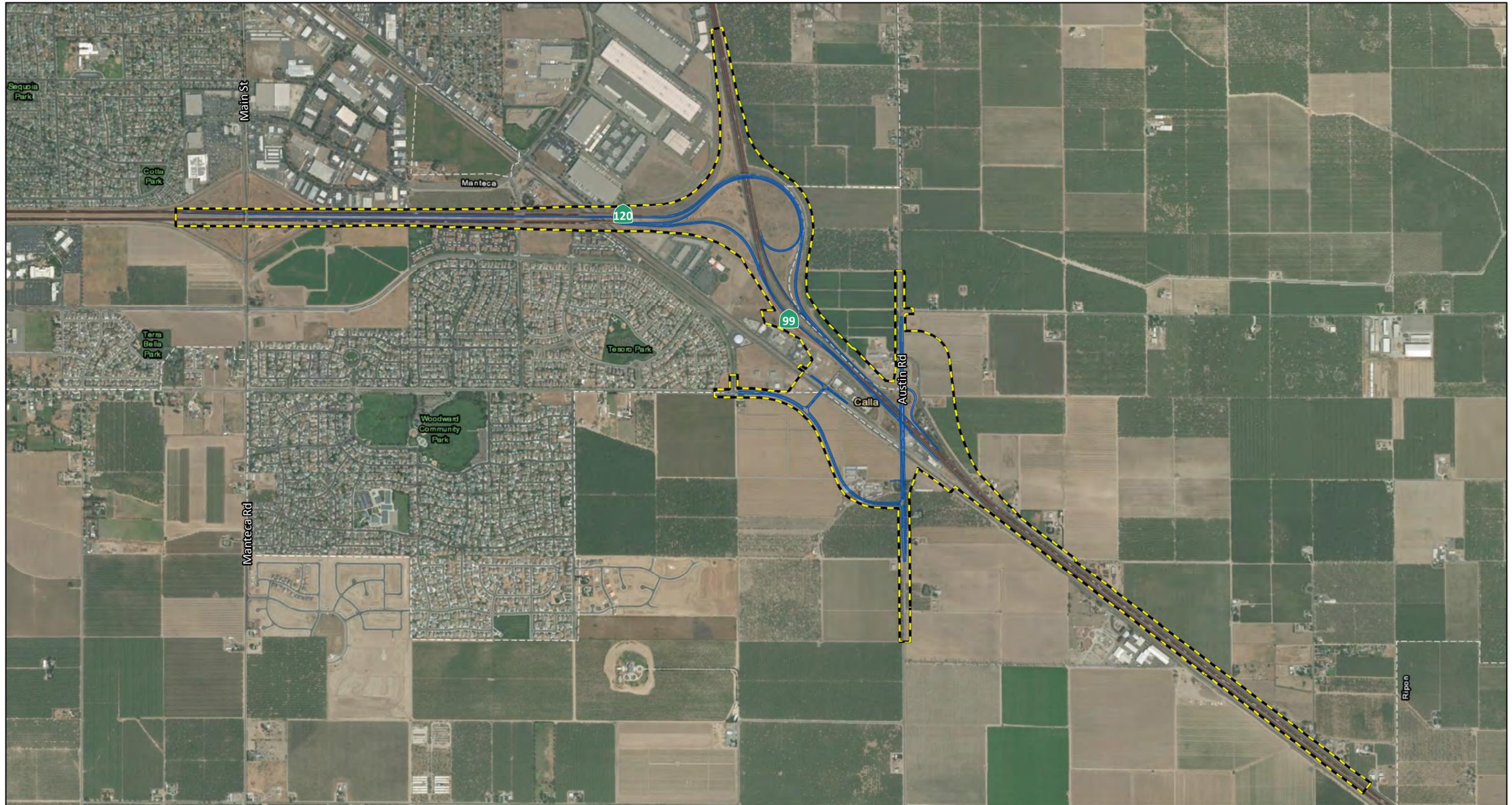


FIGURE 3



LEGEND

-  Preliminary Study Area
-  Phase 1b



SOURCE: NAIP Aerial Imagery (6/2016), Project Design- Mark Thomas (2/2018)

I:\MKT1507\GIS\Reports\CIA\CIA\_fig3\_3\_Prj\_design.mxd (2/6/2018)

State Route 99/120 Interchange Connector  
 in Manteca, San Joaquin County, California  
 Caltrans District 10, P.M. 3.1/6.2  
 EA 10-1E740  
 Project Design

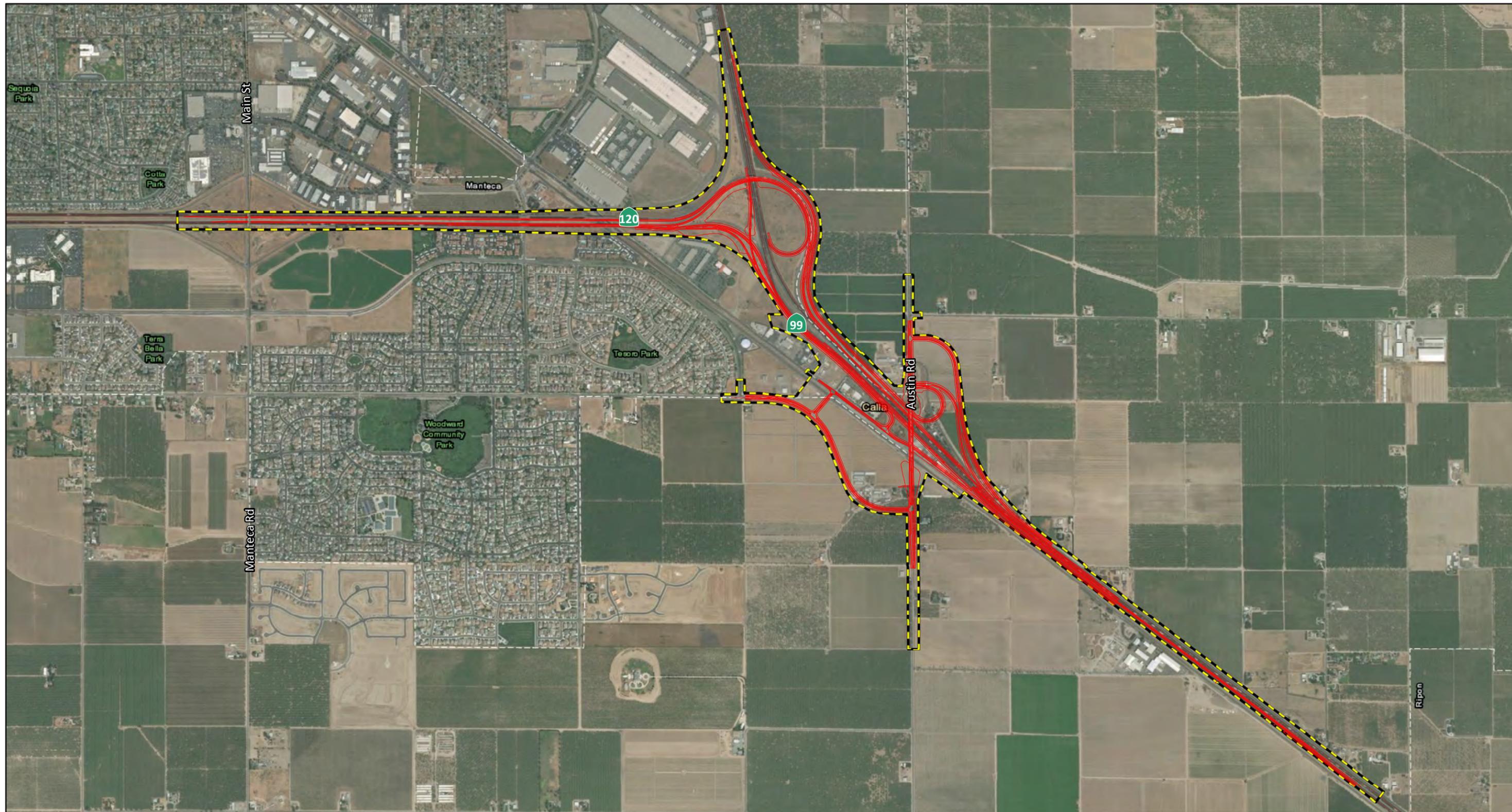


FIGURE 4



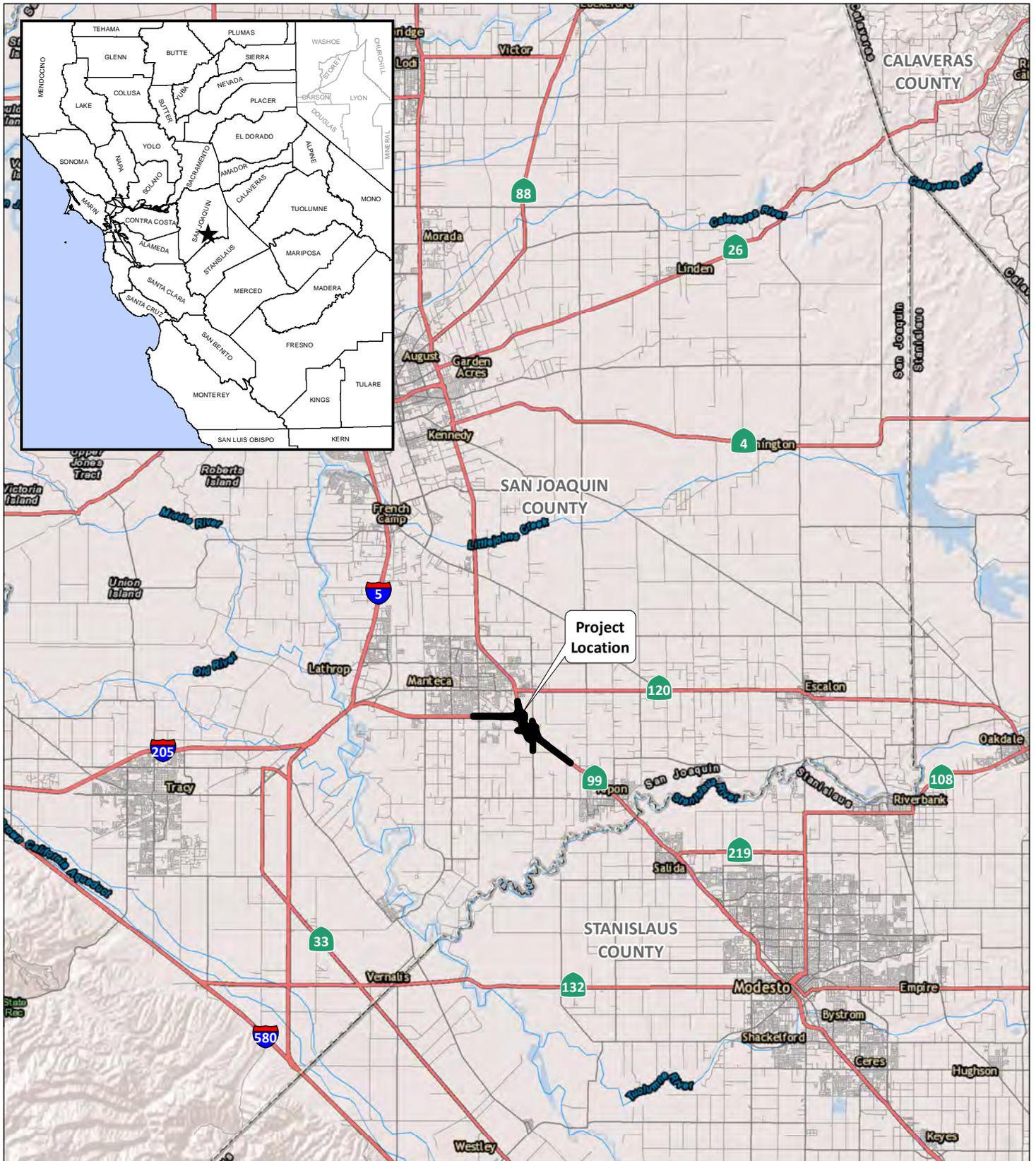
**LEGEND**

-  Preliminary Study Area
-  Phase 1c



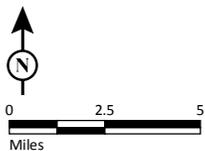

SOURCE: NAIP Aerial Imagery (6/2016), Project Design- Mark Thomas (2/2018)  
 I:\MKT1507\GIS\Reports\CIA\CIA\_fig3\_4\_Prj\_design.mxd (2/6/2018)

*State Route 99/120 Interchange Connector  
 in Manteca, San Joaquin County, California  
 Caltrans District 10, P.M. 3.1/6.2  
 EA 10-1E740  
 Project Design*



LEGEND

 Project Location



SOURCE: ESRI Imagery (2017)

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FIGURE 5

State Route 99/120 Interchange Connector  
in Manteca, San Joaquin County, California  
Caltrans District 10, P.M. 3.1/6.2  
EA 10-1E740  
Regional Location

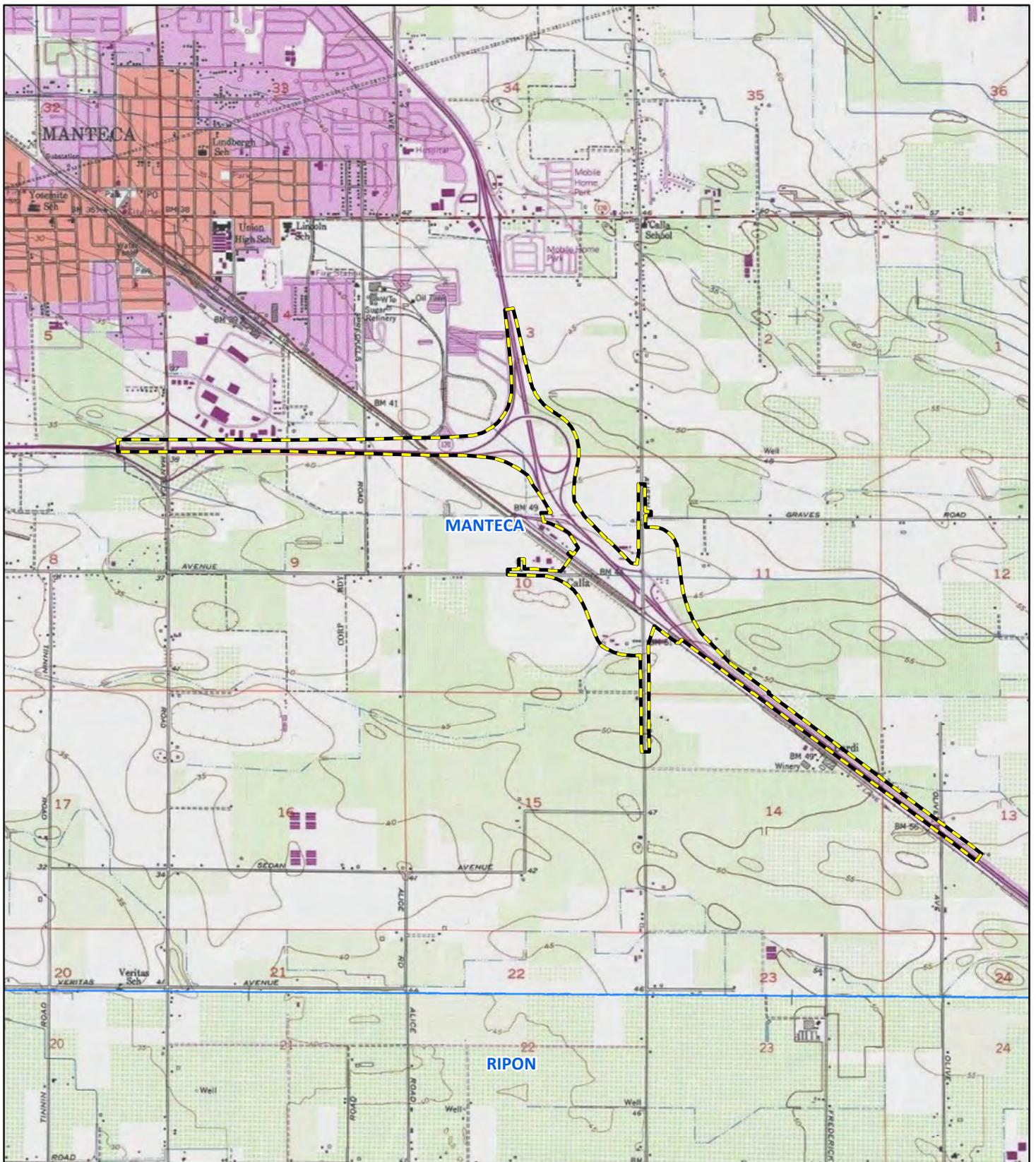
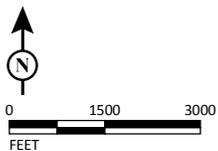


FIGURE 6



LEGEND

 Preliminary Study Area



SOURCE: USGS 7.5-minute topographic quadrangle Manteca, Calif (1952, ed. 1994)

I:\MKT1507\GIS\Reports\CIA\CIA\_fig2\_prj\_vic\_topo.mxd (12/6/2017)

State Route 99/120 Interchange Connector  
in Manteca, San Joaquin County, California  
Caltrans District 10, P.M. 3.1/6.2  
EA 10-1E740

Project Vicinity on Topographic Base