APPENDIX 3.13-B

# Land Use and Communities Technical Memorandum

**CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS**

# Technical Memorandum

## Merced to Fresno Section
## Land Use and Communities

*Prepared by:*

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**Figures**

# 1.0 Introduction

This technical memorandum (TM) focuses primarily on the incorporated and unincorporated communities within the footprint of the High-Speed Train (HST) alternatives to provide an understanding of how existing and future land uses would be affected by construction and operation of the California HST Project and demonstrate the implications on communities.

Land use designations are assigned by the local jurisdictions through the land use planning process, with the objective of organizing compatible uses and developing a community that balances work, living, and recreational uses. Increased accessibility can have both positive and negative effects on land use. Transportation projects have the direct impact of converting existing land uses to a transportation-related use. They can also have indirect impact by changing the economic value of land; for example, an interchange can increase the value of adjacent lands for large freeway-oriented commercial uses. Freeways provide visual accessibility for pass-by drivers, and an interchange provides convenient access. Collectively, a development may benefit from the visibility and accessibility to attract patrons from a larger region. In response, the local jurisdiction may chose to change the land use designation from agricultural to commercial to take advantage of this economic change in land value, thereby reducing agricultural lands. As a result, the interchanges induce changes and would constitute an indirect impact on land use. Conversely, a freeway or interchange can create unwanted effects (such as increased noise or access) on adjacent residential areas, which may change the value and character of the residential area. However, if it is an established neighborhood, the land use designation would not change. Therefore there would be an effect on the residential property value, but no indirect effect on the land use because the zoning would likely remain unchanged. This effect is better characterized as a direct effect on the community.

This TM reviews three key impact topics—direct impacts on land use, indirect impacts on land use, and direct impacts on community cohesion.

Various figures and photos are used to illustrate current land use and future plans (zoning) of the study area, as well as visual simulations locations within a number of the communities. This TM is divided into two sections:

1. Beginning north to south and by alternative, it describes existing land use and zoning for each community in the study area, focusing on the area within and adjacent to the project footprint and the community facilities near the proposed alternative.
2. A photo log along the proposed HST alternative routes, including brief descriptions of existing and future land uses and the HST alternative for that location. As applicable, any community impacts are described.

This TM provides information on the Ave 24 Wye and Ave 21 Wye, but a decision on the preferred wye alternative will made in the San Jose to Merced Section EIR/EIS, which will also include additional analysis.

## 1.1 Methodology and Definitions

This TM supports the conclusions discussed in the Merced to Fresno EIR/EIS and does not provide any new impacts analysis or identify any new mitigation measures. It addresses the three HST alternatives, including the wyes, that are considered in the Merced to Fresno Section. It does not discuss the heavy maintenance facilities. The footprint is defined as the right-of-way required for the operation of the HST Project and as about 50 feet for the elevated sections and about 100 feet for the at-grade sections. Complete analysis of the communities and land uses is in Section 3.12, Socioeconomics, Communities, and Environmental Justice, and Section 3.13, Land Use, Station Planning, and Development of the Merced to Fresno EIR/EIS. This TM relies, by reference, on the conclusions of other studies and technical memoranda that have assessed impacts on agricultural land uses due to the project. Other than converting agriculturally zoned land use to the transportation use for the HST Project, this TM does not

discuss any further land use impacts from the HST Project on zoned agricultural land; therefore only incorporated cities and unincorporated communities are addressed. Complete information on agriculture impacts for the Merced to Fresno section is located in Section 3.14, Agricultural Lands, of the Merced to Fresno EIR/EIS.

For the HST Project, direct land use impacts occur when the project permanently converts the existing land uses to a transportation-related use and precludes future planned uses (as identified in the local general plan, specific plan, or zoning classification). This impact reduces the area available within the jurisdictions for those uses. As described in EIR/EIS Section 3.13.5, Station Planning, Land Use, and Development, each of the HST alternatives result in direct impacts to the existing and future land uses. Overall, the HST Project requires less than 0.05% of the total land area in the three counties as a result of property acquisitions, but does not result in any significant impacts on a regional context for Merced, Madera, and Fresno counties. Refer to EIR/EIS Section 3.12.6, Socioeconomics, Communities, and Environmental Justice, and Appendix 3.12-A for information on the compensation for those affected by property acquisitions. The HST alternatives would add incrementally to the dedicated transportation land use corridors (State Route 99 [SR 99], UPRR and BNSF corridors) by adding about 50 feet for the elevated portions of the alignment and 100 feet for the at-grade portions. In the rural areas, the alignments may not be adjacent to the existing transportation corridors, and conversion to a transportation-related use would not add incrementally to an existing transportation corridor. In these areas, the existing and future land uses are primarily related to agriculture, and conversion of existing uses to transportation-related uses would not preclude the agricultural use of land adjacent to the right-of-way. The approximate right-of-way widths would be about 50 feet for elevated and 100 feet for at-grade, and this direct land use conversion in agriculture areas would not signify a significant impact within the regional context of Merced, Madera, and Fresno counties. Access across the HST right-of-way would be provided approximately every 2 miles and the California High-Speed Rail Authority (Authority) will work with the local jurisdictions to provide access as needed.

In addition to the permanent conversion of land use, indirect impacts on land use could occur, negatively affecting the nearby existing and future land uses as a result of increase in noise, loss of access, and/or visual impacts. Those impacts were analyzed and disclosed in the respective EIR/EIS sections, including Section 3.2, Transportation; Section 3.4, Noise and Vibration; and Section 3.14, Aesthetics and Visual Resources. Effects on the communities and neighborhoods is addressed in Section 3.12, Socioeconomics, Communities, and Environmental Justice, and effects on the agricultural lands are addressed in Section 3.14, Agricultural Lands, and growth inducing impacts were analyzed and disclosed in Section 3.18, Regional Growth.

The HST Project would not result in any changes in the pattern or intensity of land use, nor would it be incompatible with the adjacent land uses or preclude the ability to develop based on the future uses. For example, the mitigation measures related to noise only relate to the existing buildings and not to the planned future developments (refer to EIR/EIS Section 3.4.7, Noise and Vibration, under N&V-MM-3: Implement Proposed California High-Speed Train Project Noise and Vibration Mitigation Guidelines, for information on the policies regarding noise mitigation).

The HST Project would not mitigate for future developments. Development on one property naturally influences development choices on adjacent properties. In parallel, the HST Project may require some considerations about adjacent land use (for example, additional soundproofing), but this would result in affecting site development, not changing the existing land use designation or future uses or precluding any new development. An HST would create a new element of noise, change accessibility, block views, and shift utilities, but none of these elements preclude future land uses developments. Where the HST alternatives are located next to the existing transportation corridors, noise levels are already high from freight and freeway traffic sources. The HST Project would contribute to this noise with the passing of HSTs. Where noise affects residential or other sensitive receptors, mitigation has been identified, but this does not change the land use designation. Road closures would be required for building the at-grade alignments, but access would be maintained through overpasses at minimum intervals of every 2 miles, and new overpasses to provide additional access are not precluded. Views and visual accessibility can be valuable for properties, but they do not change a land use designation. Although utilities would need to

be located underground and outside of the HST right–of-way to avoid conflicts with HST, utility extensions for water or sewer would not be precluded from crossing under HST right-of-way. Therefore, the HST would not preclude future land use development, and the effects would not result in changes in land use designations. The effects may collectively affect the community cohesion. However, this TM will illustrate that the communities would not be bisected by the HST primarily because, when traveling near or through incorporated or unincorporated communities, the HST alignment is adjacent to existing major transportation corridors.

# 2.0 Existing and Future Land Uses

This section provides graphics using aerial photos to illustrate the existing and future land uses (zoning) based on adopted zoning maps and information in general plans for both the incorporated cities and unincorporated communities in the study area.

## 2.1 Communities and Land Use

The HST alternatives would be primarily located adjacent to existing transportation corridors (SR 99, BNSF, and UPRR) and the land use adjacent to these corridors is predominately related to commercial, industrial, or agricultural uses. Most of the alternatives would be located in the rural and unincorporated areas of Merced County and Madera County and the urban areas of Fresno. The urbanized areas of the cities of Merced, Chowchilla, Madera, and Fresno contain residences and businesses, while the unincorporated communities, including Le Grand, Fairmead, Madera Acres, Parksdale, and Parkwood, typically consist of residences with a few community facilities and agricultural-related businesses. These unincorporated communities include homes close to each other and areas where residents can gather and interact, so there is a sense of community cohesion. A few small, unincorporated communities contain a small number of residences, but otherwise are indistinguishable from the rural landscape. Many of these communities, including Lingard, Athlone, Minturn, Berenda, Sharon, and Kismet, are not acting as communities, serve merely as name places with a few homes spread at distances from each other. The names continue on USGS maps because there was once a post office, which closed more than 50 years ago. Because these smaller areas do not have a sense of community cohesion and no impacts to community cohesion would occur. Only any direct and indirect impacts on land use are described in this section. Section 3.0, Photo Essay, provides images of the existing land uses and information on the future uses for each of the communities identified and discussed in this section.

The construction of the Southern Pacific Railroad by the Central Pacific Railroad (now UPRR) through the San Joaquin Valley in the late 1800s brought considerable growth and farming opportunities to the Central Valley. The railroad connected the valley to Sacramento and San Francisco and provided an opportunity for ranchers and farmers to sell their goods to distant markets. The establishment of stations along the railway was a large reason for settlement and development of the cities in the study area. With the development of the stations, the cities of Merced, Madera, and Fresno became county seats and economic and cultural hubs. BNSF, the railroad to the east, came later and functioned less for passenger service and more as transportation for agricultural and industrial products. In the 1910s, the beginnings of SR 99 was constructed to connect the cities in the San Joaquin Valley and the rest of California. SR 99 has always generally paralleled the Central Pacific Railroad as it traveled between Modesto and Fresno. In the 1950s, SR 99 was completed as a four-lane expressway between Sacramento and Los Angeles. With this change, the railroads reduced passenger service and concentrated on industrial transportation. Land uses have developed consistent with these functions—generally, industrial and agricultural distribution around the railroads and commercial uses around the freeways. The SR 99 roadway was originally designed to be on the far side of the railroad from the nearby communities to avoid land use impacts. Since development centered on the railroad, this meant that SR 99 was designed to cross over the railroad to be away from the communities. For instance, the freeway is west of the UPRR railway in Merced, then east of it in Chowchilla, then west again in Madera, crossing two more times before traveling west of the UPRR railway in Fresno. In these crossings, a gap between the two transportation infrastructures has remained difficult to develop. The SR 99 corridor serves as the roadway backbone for automobiles and trucks within the study area and is a crucial link in transporting the valley's agricultural goods to market. Today, 131 of the 274 miles between Bakersfield and Stockton are defined by the Caltrans as "urban" and the remaining 143 miles as "rural."

### 2.1.1 Common to all HST Alternatives

All the HST alternatives include a station within the City of Merced and the City of Fresno. Information on the existing and future uses is provided in EIR/EIS Section 3.13.5, Station Planning, Land Use, and Development. The existing uses would be converted to a transportation-related use; however, the station

facilities are planned to accommodate commercial uses to serve the station patrons and other visitors. The City of Merced recently updated its General Plan (Merced 2012), and the City of Fresno is in the process of updating specific plans (Fresno 2010a, b); all plans include information related to the development of stations. Refer to EIR/EIS Section 3.13.5, Station Planning, Land Use, and Development, for complete information on the station planning that will be occurring in the station areas.

The existing transportation corridors created boundaries between established communities and neighborhoods in the study area. Communities provide opportunities for interaction in residential neighborhoods and with the business community; community facilities support community interactions. Transportation facilities support community interaction, but they can also be a barrier. The proposed north-south HST alignments would not create any new or additional barriers or disruptions that would negatively affect interactions or the quality of life in established communities and neighborhoods. Where the alternatives are at-grade in the urban areas, overpasses would be constructed to maintain access, and in areas where the overpass would also cross the existing railway, the overpass would also remove a barrier to access. Another benefit to nearby residences and community facilities where overpasses would span the existing railway would be from trains no longer having to sound their horns. Common to all HST alternatives, relocations would occur along edges of residential areas, but the alignments would not bisect communities or neighborhoods. Property acquisitions common to all HST alternatives, primarily in the cities of Merced and Fresno, represent a small portion of the land available in adjacent neighborhoods and would not result in changes in the existing neighborhoods' intactness or character.

#### 2.1.1.1 Merced Station and Fresno Station

**Merced Station**

Downtown Merced is primarily commercial, with areas of industrial and vacant properties located in the station area. Residential neighborhoods and other supporting land uses are located outside of the immediate station area. Photos of the land uses in the immediate station area are provided in Section 3.0. The nearby residential neighborhoods include schools, neighborhood parks, and religious facilities. A variety of community facilities are located in the downtown area, but none are within the station footprint. The area is predominantly commercial and light industrial, but a cluster of about 40 single-family homes, not associated with a neighborhood, is present that would be relocated prior to construction and the land use would be converted to transportation land use. The owners of residences on the properties would be compensated, and there are a number of suitable locations in the nearby area where residents would be able to relocate. In coordination with the City of Merced, the station is anticipated to provide a new civic focus for the commercial district of Merced. The City of Merced recently adopted the *City of Merced Vision 2030 General Plan,* which includes goals and policies related to a HST station in the downtown area to address the indirect effect associated with the station. The civic focal point and the enhanced accessibility between Downtown Merced and other urban centers may result in indirectly influencing the land use development pattern to become higher density development, but this would not change the land use designation of urban mixed-use commercial. The presence of the HST station adjacent to the UPRR is compatible without creating a new division through the center of downtown because there is a vast area of underdeveloped commercial property adjacent to the UPRR line that divides Downtown Merced east of the rail line from the industrial areas located west of the rail line. This area is also served by SR 99 accessibility.

**Fresno Station**

The downtown Fresno Station (both Kern Street and Mariposa Street alternatives) would be located in the Central Community Area, which is generally bounded by SR 180 to the north, SR 41 to the south and east, and SR 99 to the west. The Central Community Area is primarily associated with commercial and industrial land uses, including Downtown Fresno east of the UPRR corridor. Several properties are vacant in Downtown Fresno. Three neighborhoods in the Central Community Area—the Chinatown, Fulton, and Lowell neighborhoods—border or are within the station area. There are historic buildings and community facilities located in these neighborhoods, along with a mixture of commercial, residential, and industrial

land uses, but there are no community facilities within the station footprint. West of SR 99 is the Edison Community, which includes residential and commercial land uses.

The City of Fresno is anticipating an indirect effect on land use patterns from the presence of the HST station and has started the process of updating plans. The Fulton Corridor Specific Plan and Downtown Neighborhoods Community Plan address an HST station in the downtown area, the improvements associated with the station, and how the station could be used to leverage new development. The placement of the station is close to the historic SPRR line, and therefore it complements the historic community center and land use functions of the downtown Fresno area. Similar to Merced, the presence of the HST station adjacent to the UPRR is compatible without creating a new division through the center of downtown because there is a vast area of underdeveloped commercial property adjacent to the UPRR line, and this area is also served by SR 99 accessibility.

#### 2.1.1.2 Station Area Effects

The station areas in both Merced and Fresno would result in direct land use impacts for the alignment and the area adjacent to the alignment, but this entire area would not all be converted to a transportation-related use. Portions of the station area could be used for commercial purposes. Within the station areas for Merced and Fresno, land uses would be converted to transportation-related uses. Areas zoned commercial in Merced and areas zoned industrial and commercial in Fresno would be used for the station footprint, which would affect existing commercial, industrial, and residential properties in Merced and existing industrial and commercial properties in Fresno. For the areas of the Mariposa Street Station Alternative and the Kern Street Station Alternative in Downtown Fresno, the land uses are similar. There is only one block difference between the two station footprints; because the land uses are so similar, the effect differences related to conversion to a transportation-related use between the station alternatives would be negligible.

In general, the areas around the HST stations in Merced and Fresno (both the Mariposa Street and Kern Street alternatives) would benefit from increased regional transit access and from potential development within station areas in a manner consistent with the goals of the general plans. There would be improvements in community cohesion as neighborhoods (particularly those near HST station areas) may experience increased vitality in terms of improved access, residential infill, increased employment, and greater patronage of local businesses. Residents in the areas surrounding the stations would also realize benefits associated with increased property values. See Figure 3.13-B-1 and Figure 3.13-B-2 for existing and simulated views of the downtown area around the Merced and Fresno station areas.

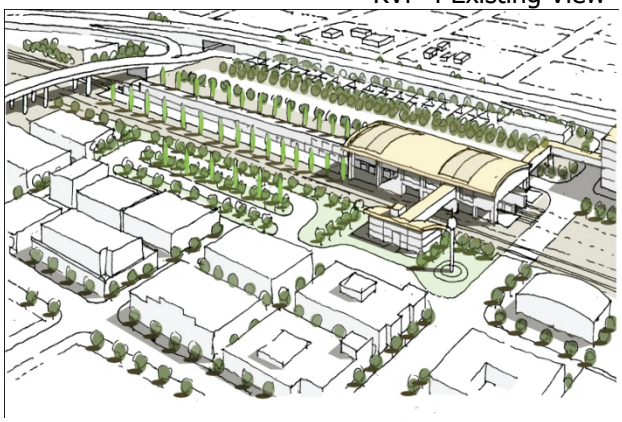
**What is Transit-Oriented Development?**

A transit-oriented development (TOD) is a pattern of dense, diverse, pedestrian-friendly land uses located near transit nodes that, under the right conditions, translates into higher transit patronage (Transit Cooperative Research Program 2004).

The HST stations would promote transit-oriented development (TOD) on vacant and underutilized properties in Downtown Merced and Downtown Fresno. The HST stations would act as a catalyst for planned growth in the downtown areas and revitalize surrounding neighborhoods. Indirect impacts of TOD, consisting of high-density residential and mixed-use development around the HST stations, would be beneficial, improving community cohesion and attracting new businesses and residential development. Redevelopment opportunities would occur where allowed by comprehensive and neighborhood plans and where stations can support TOD.


KVP 4 Existing View


KVP 4 Simulated View



KVP 4 Rendering

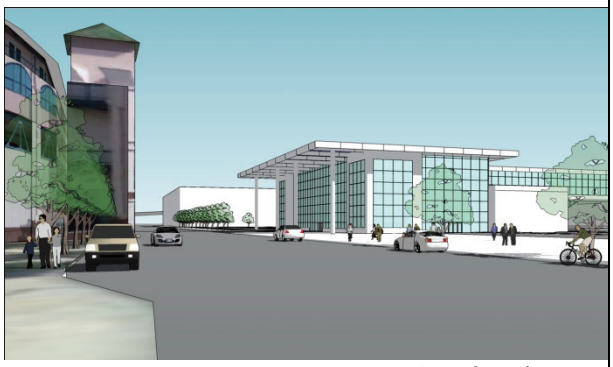
**Figure 3.13-B-1**
Merced Station Area
KVP 4 Existing and Simulated View and Rendering

*Upper Left, Existing View:* Martin Luther King, Jr. Avenue and W Main Street intersection, looking south toward SR 99. *Upper Right, Simulated View:* Simulation of Downtown Merced HST Station (Phase 1). *Lower Left, Rendering of:* The Downtown Merced Station Complex (Phase 1).


KVP 18 Existing View

KVP 18 Simulated View

KVP 19 Existing View



KVP 19 Simulated View

**Figure 3.13-B-2**
KVPs 18 and 19, Existing and Simulated Views
*Existing View, Upper Left:* KVP 18: View to the west from the main plaza at the western entrance to Chukchansi Park in Fresno, near the intersection of Tulare and H Streets. The historical Southern Pacific Depot is visible toward the area proposed for the Mariposa Street station alternative in Downtown Fresno.
*Simulated View, Top Right:* KVP 18: Simulated view of Mariposa Street station from approximately the same position as the existing view.
*Existing View, Lower Left:* KVP 19: View to the south from the ticket office at Chukchansi Park, near the intersection of Kern and H Streets, toward the area proposed for the Kern Street station alternative. The western edge of the ballpark is visible along the left side of the view, and parking and warehouse uses typical of the area are visible across H Street.
*Simulated View, Bottom Right*: KVP 19: Simulated view of Kern Street station from approximately the same position as the existing view.

### 2.1.1.3 HST Alternatives

Unlike a freeway project, the HST does not provide multiple points of access and therefore, outside of the station areas, the potential for indirectly influencing land use designations is not likely. The HST route would have effects on land development, but would not negatively affect community cohesion. The following section demonstrates that the alignments have been routed to avoid bisecting communities and would minimally affect existing and future land uses.

**UPRR/SR 99 Alternative**

Outside the City of Merced, the UPRR/SR 99 Alternative is adjacent to the UPRR and SR 99 corridors. Within unincorporated Merced County, the alignment travels through the unincorporated communities of Lingard and Athlone. There are no community facilities in these communities and only a few single-family

residences on larger parcels of land. Existing and future land uses are both agriculture. As explained in the methodology, the HST would not directly or indirectly change these land uses. The HST would be adjacent to the SR 99 and UPRR corridor and only minimally convert agricultural uses to transportation land use. This would not change the community character or functions of the community.

Before traveling through Madera County, the UPRR/SR 99 Alternative has two design options: the East Chowchilla design option, which stays along SR 99, and the West Chowchilla design option, which travels to the west and then south to avoid the Chowchilla city limits. With the East Chowchilla design option, the alternative travels through the unincorporated community of Minturn in Merced County, before reaching Chowchilla. Land uses in this small community include industrial and commercial uses near SR 99 and the surrounding area is agriculture. These uses are not community-focused, but rather freeway- and industrial-focused. The HST route would not change land uses other than the portion within the construction footprint. No community functions would be lost.

### *Chowchilla*

The recently adopted 2040 General Plan for Chowchilla foresees growth from the center of the city out to both sides of SR 99 in a balanced fashion. This includes new development about 500 feet east of the alternative and east of SR 99 that is not precluded by the East Chowchilla design option. The elevated alternative does not impact the existing access from SR 99, and much of the proposed development occurs more than 1,000 feet away from the alignment.

Information on the two design options associated with the UPRR/SR 99 Alternative through the Chowchilla area follows:

1. The East Chowchilla design option is west of and next to SR 99. The SR 99 divides an area of freeway-oriented commercial land use from a residential land uses to the east. The HST route is adjacent to the freeway, away from the commercial core of Downtown Chowchilla and buffered from the residential areas to the east by SR 99. Information on the existing and future uses is illustrated in Figures 3.13-B-3. The East Chowchilla design option would add incrementally to the SR 99 transportation corridor. The existing roadways crossing the HST alignment would be maintained. The UPRR corridor is approximately 1,500 feet to the west of the alignment, and Downtown Chowchilla is approximately 2,500 feet to the west of SR 99 and the HST route. The planned highway commercial uses would be centered on the SR 99/SR 233 highway interchange. With this design option there can be a connection from either the Ave 24 Wye or Ave 21 Wye. For the area along SR 99, no negative effects are anticipated because the alternative would be elevated, so the footprint would smaller and the land uses are zoned for highway commercial and industrial uses, which are not as sensitive as residential uses. Elevated guideways can result in substantial visual impacts; however, this would not change land use designations. The elevated guideway could provide some visual barriers to the adjacent land uses. This may affect the context for freeway-related land uses. Elevated HST guideway and retained fill areas could be as high as 50 feet above the existing surfaces. In general, the open nature of an elevated guideway does not block views, but in areas where adjacent existing and future uses are related to commercial uses, especially highway commercial use, the columns and elevated guideway could block views of some signs. However, this would affect the sign height and placement but would not preclude signs altogether. In addition, often freeway signs are posted well in advance of highway commercial uses, so the flexibility and visibility of sign placement are managed strategically to attract a driver to use a freeway exit. Additionally, as described above, the downtown core of Chowchilla is separated by freeway-oriented commercial land uses (such as gas stations and hotels), vacant land where the future uses will be commercial and industrial, and the UPRR railway, so there would be no negative effects related to community cohesion. See Figure 3.13-B-4 for existing and simulated views towards the elevated design option.

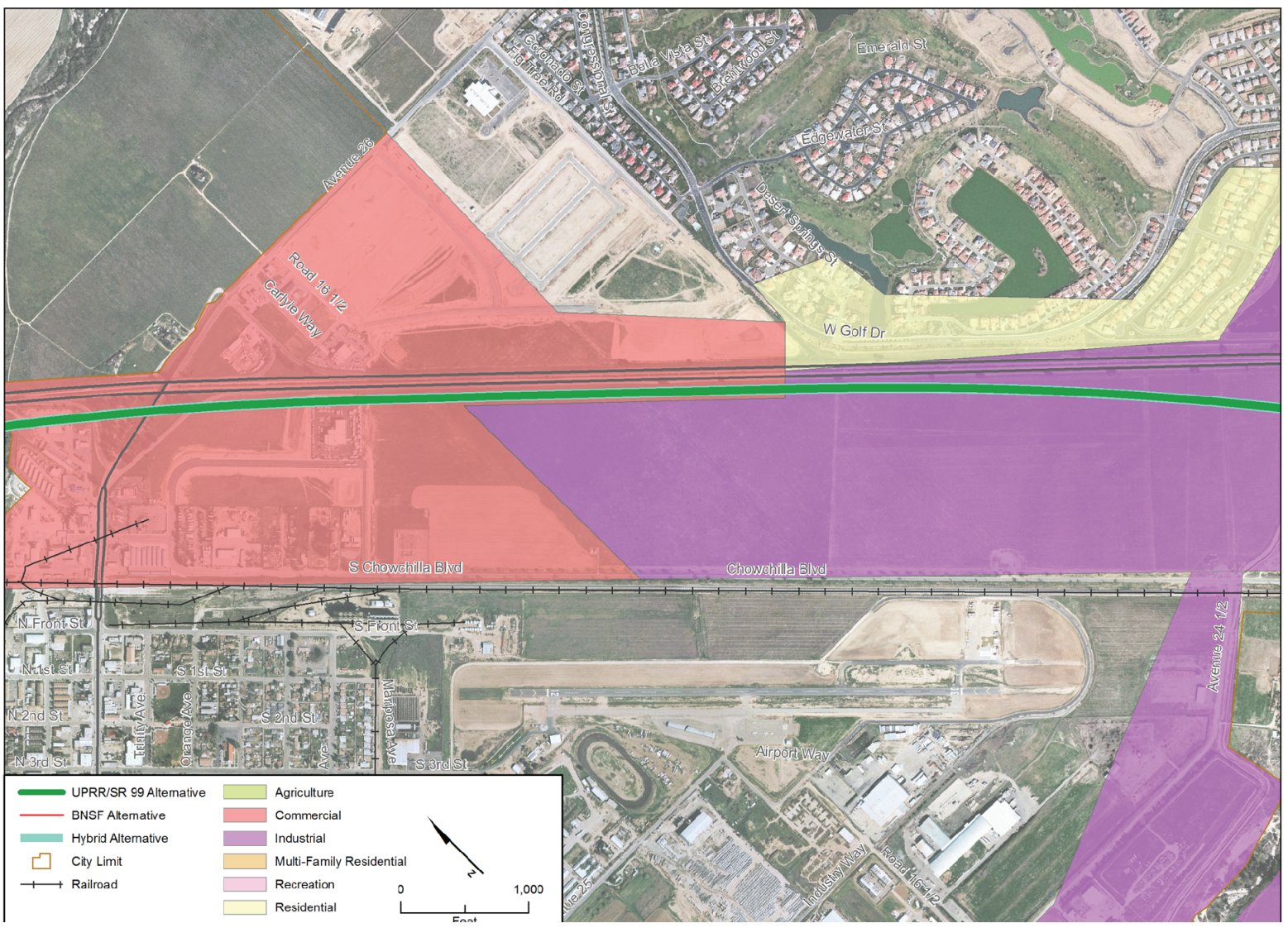
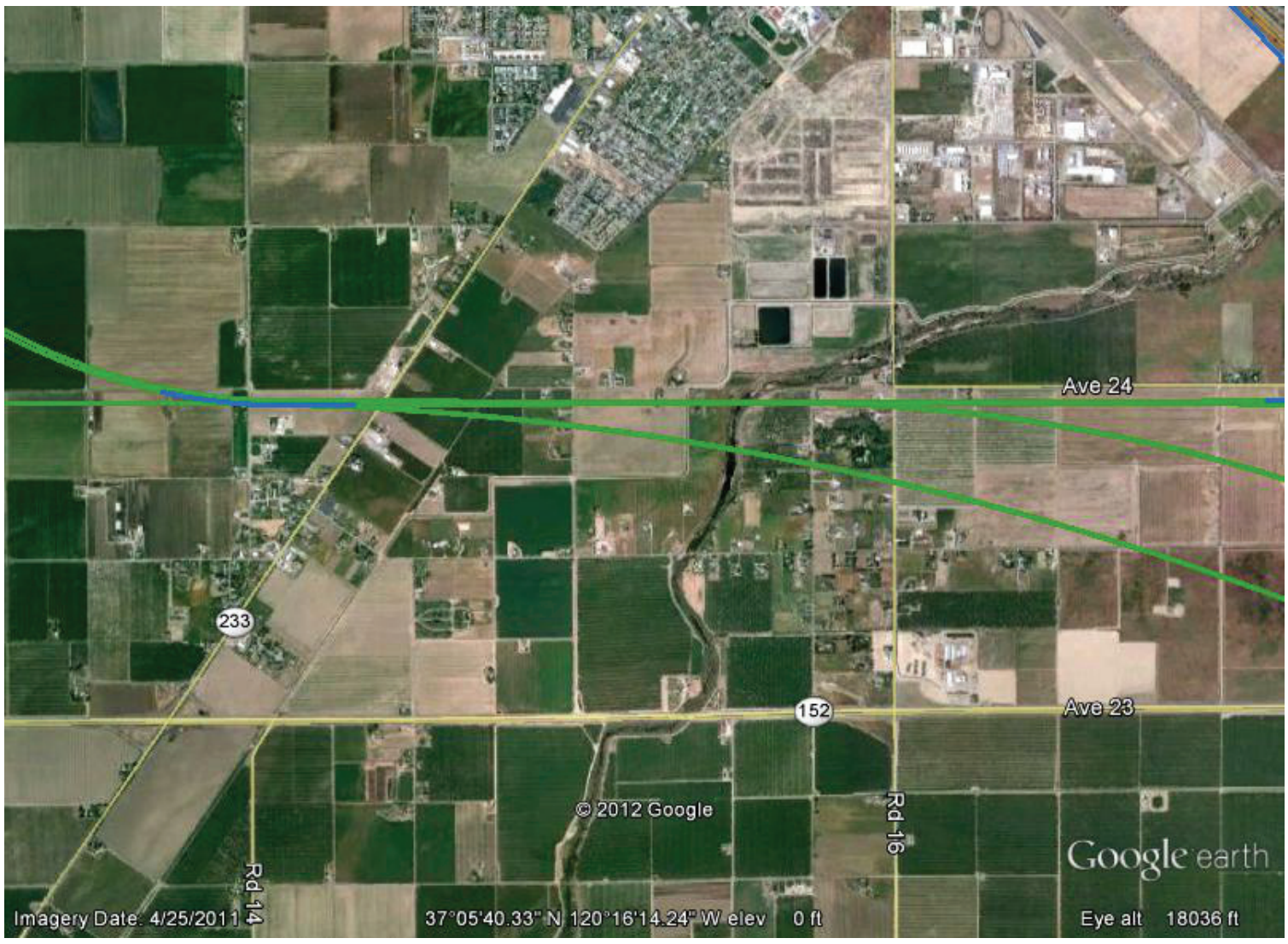




**Figure 3.13-B-3**
Adjacent Existing and Future Land Uses East Chowchilla Design Option

KVP 8 Existing View | KVP 8 Simulated View

**Figure 3.13-B-4**
KVP 8 Existing and Simulated Views
*Left, Existing View:* View to the northeast from the Downtown Chowchilla gateway. The SR 233–SR 99 interchange is visible in the center of the view. *Right, Simulated View:* The elevated HST guideway would appear across the center of the view, above the SR 99–SR 233 interchange.

2. The West Chowchilla design option turns west prior to reaching the Madera County line and travels west of Chowchilla through areas where the existing and future uses are both agriculture. The HST route would create direct impacts by converting agricultural land to a transportation-related use, but would not result in any indirect effects on the agricultural land uses. Because the area is outside of the city limits of Chowchilla, with no community facilities close by and residences spread out, the HST alignment would not result in any impacts to community cohesion. Information on the existing and future uses is illustrated in Figure 3.13-B-5. The design option would be located outside of the city limits and the planning area, but still within the sphere of influence. Within this area, the alignment is at grade, requiring about 100 feet for new right-of-way in the vicinity of Avenue 24. The design option requires modifications to the existing transportation system, but as shown by the blue outlines in the figure that designate proposed overcrossings, access would be maintained and would not preclude any future development. In addition, the at-grade alignment does not preclude the extension of any utility services that would need to be installed under the at-grade alignment. Utilities required to service the future land uses would not be precluded from crossing under or parallel and outside the HST right–of-way. Transportation access also would be maintained with crossings of the at-grade alignments, and the development of new overpasses to provide additional access is also not precluded.



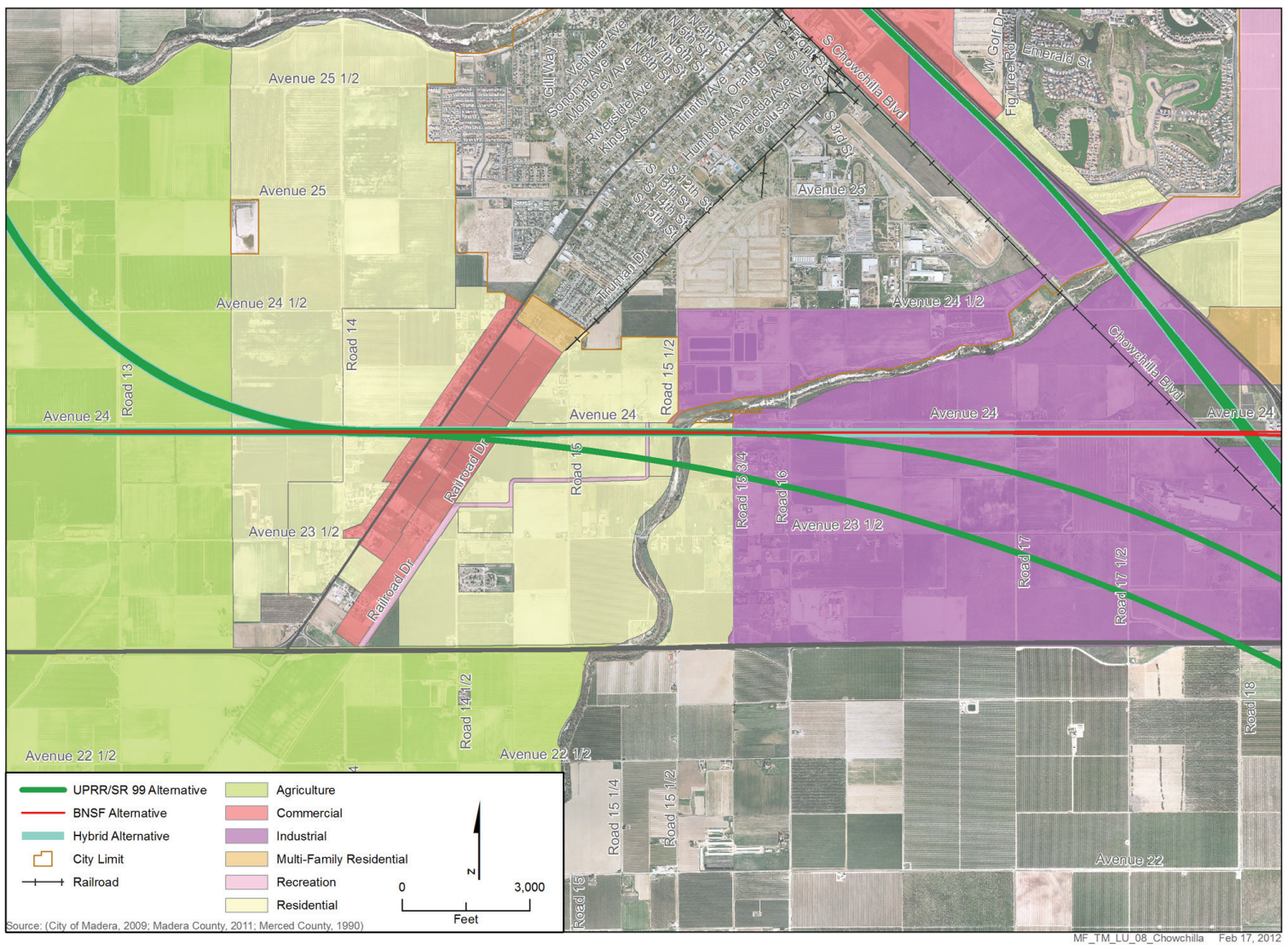




**Figure 3.13-B-5**
Adjacent Existing and Future Land Uses West Chowchilla Design Option

Chowchilla is unique compared to the other communities in the study area because of the connection point between the north-south alignment and the need to join with the east-west route traveling to the Bay Area. This combination could result in placing the western portion of Chowchilla within an "infrastructure triangle". Figure 3.13-B-6 illustrates the "infrastructure triangle" associated with the West Chowchilla design option. Chowchilla has always had SR 152 to the south and SR99 and the UPRR tracks to the east. With overpasses, Chowchilla is expanding over these infrastructure elements to the east. With the UPRR/SR 99 Alternative, the West Chowchilla design option and Ave 24 Wye would provide a new transportation leg west of Chowchilla. The alignment of the Ave 24 Wye includes access points over the HST alignment, maintaining a connection to the other side and not preventing future expansion of Chowchilla in any direction. In addition, utilities required to service the future land uses in this option would not be precluded from crossing under or parallel and outside the HST right–of- way. The East Chowchilla design option with the Ave 21 Wye or Ave 24 Wye would not create this triangle. These HST legs would not indirectly lead to changing the land use designations, nor would they divide the community, resulting in negative effects on community cohesion. Additionally, the legs would prevent development in these areas, but they may influence development patterns. Additional analysis on the wyes will be performed as part of preparing the San Jose to Merced Section EIR/EIS.

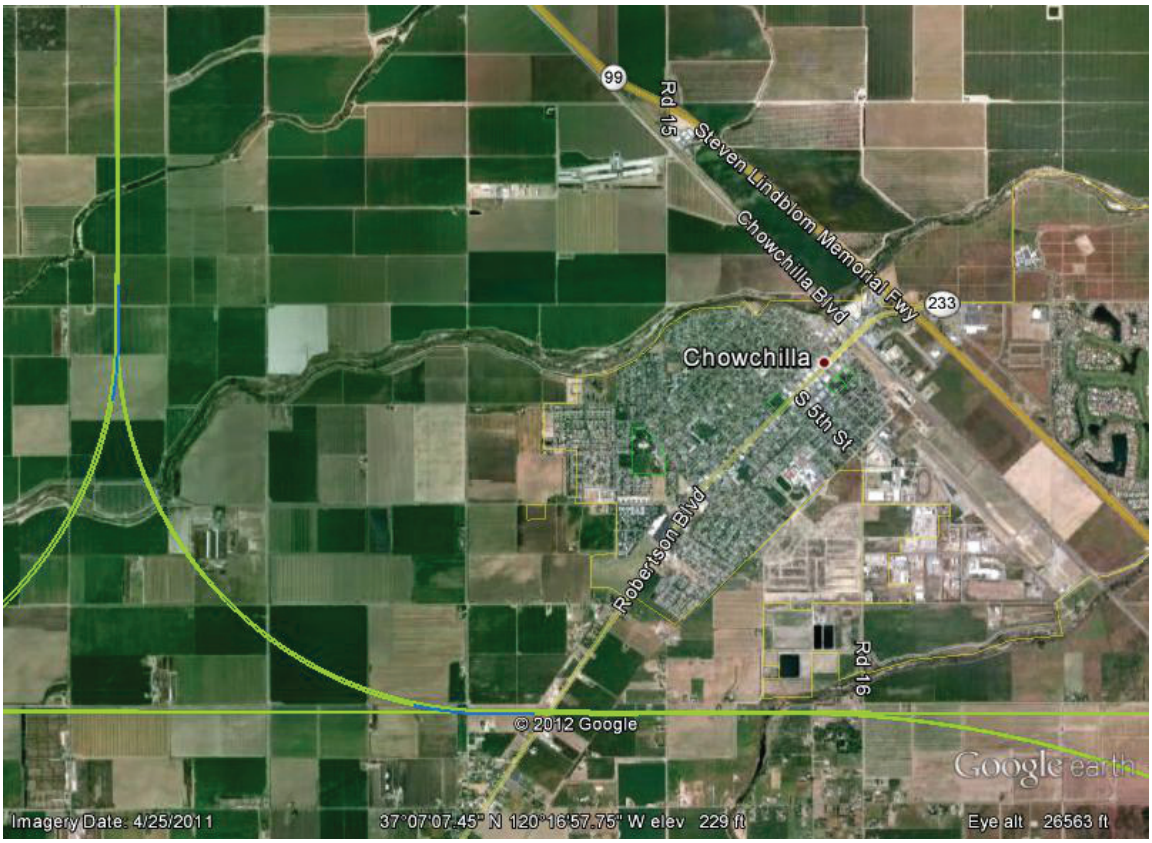



**Figure 3.13-B-6**
Potential Infrastructure Triangle (West Chowchilla design option with Ave 24 Wye)

All of the HST alternatives with the Ave 24 Wye would travel through Chowchilla's planning area and the sphere of influence based on the 2040 General Plan. A large area east of SR 233 and south of the existing city limits is designated for industrial uses. In the area centered on SR 233 (Robertson Boulevard), the planned uses are residential and commercial. Access to these areas would be maintained with overpasses of the HST alignment. Where the at-grade alignment crosses SR 233, there are options to cross the roadway at grade, resulting in a new overpass or an underpass.

The HST Project would not create any changes in the pattern or intensity of land use nor would it be incompatible with the adjacent land uses or preclude the ability to develop land based on future uses.

The HST Project mitigates for the existing conditions only, so any new development influences the range of development on adjacent property. As such, the HST may require additional building considerations for more-sensitive uses (i.e., addressing noise issues near residential development) to adjacent land uses especially around SR 233, but do not preclude the development from moving forward. Any utilities required to service the future land uses would not be precluded and the new utility extensions would need to be located under the at-grade alignments. The HST Project also would provide overcrossings at many of the existing roadways and would not preclude construction of other new overcrossings. Because services and access to the planning area identified by the City of Chowchilla would not be precluded, no significant impacts are expected within the planning area. There are no community facilities or neighborhoods that would be divided or removed that would result in changing the community cohesion for the planned uses.

### *Fairmead*

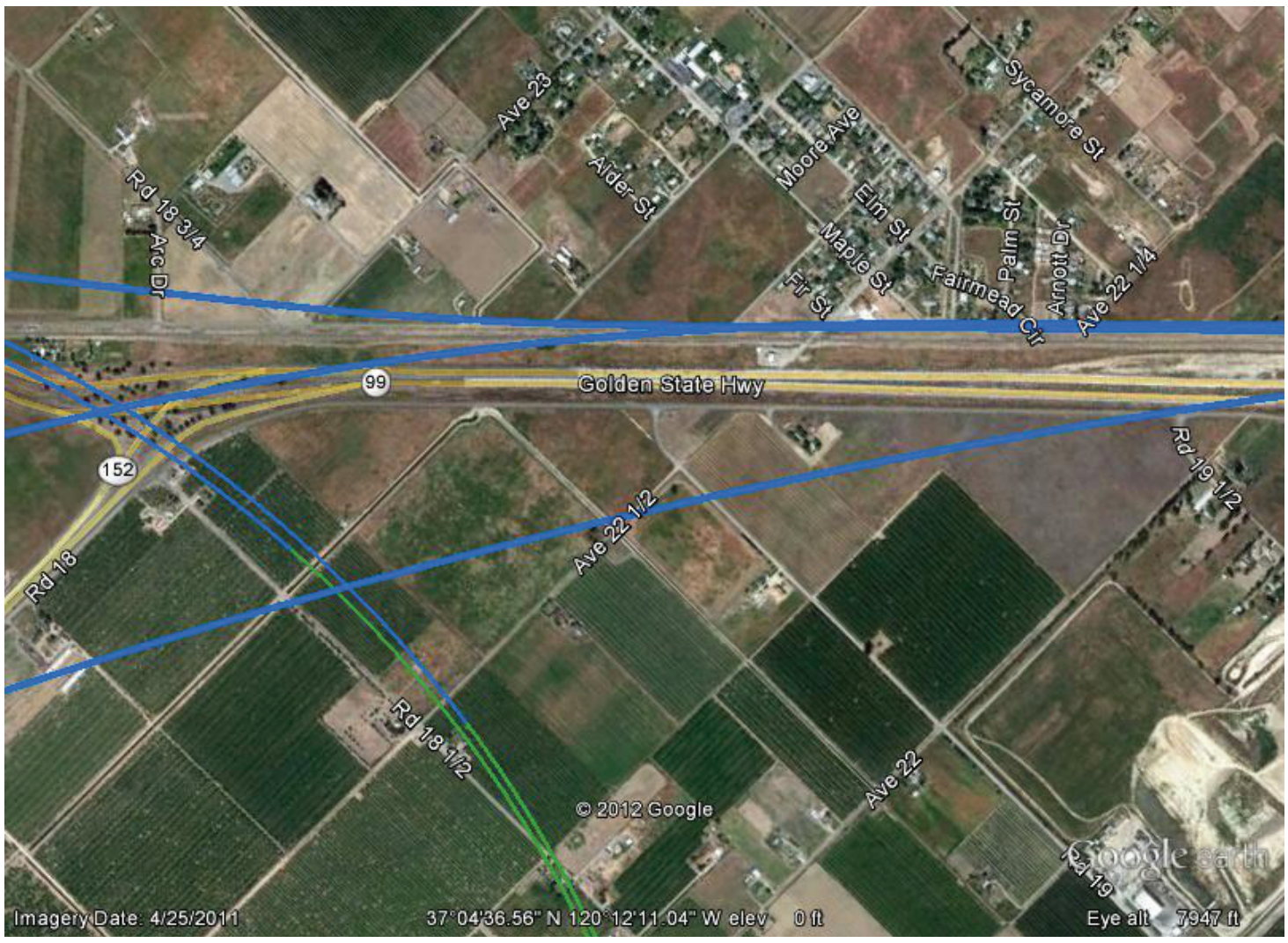
The unincorporated community of Fairmead in Madera County consists primarily of single-family residences and a few community facilities. The UPRR/SR 99 Alternative with both Ave 21 and Ave 24 wyes travel adjacent to the community. The HST alignment for both alternatives would be elevated along SR 99, but along the side primarily associated with the Fairmead community. Existing access points would be maintained. The UPRR/SR 99 Alternative would affect parking at one of the religious facilities that faces SR 99 but not the facility itself. See Figure 3.13-B-7 for existing and simulated views from Fairmead towards the elevated alignment. The alternative would affect areas where the existing land uses are low-density residential and agriculture north and south of the main area, and the future uses are related to residential, commercial, and agriculture. West, and across the SR 99 corridor, the area is primarily zoned for industrial and commercial uses. The construction of the UPRR/SR 99 Alternative would not affect the adjacent land uses because the alternative is elevated through the community, access would be maintained, and the existing residential properties would be mitigated from any noise impacts. Information on the existing and future uses is illustrated in Figure 3.13-B-8. Although the alternative would not disrupt or sever community interactions or divide the community, impacts on community character would occur as a result on the parking impacts at the religious facility. However, these impacts on community cohesion are not significant because the project would not divide the community or displace a large number of houses and people.

After leaving Fairmead, the UPRR/SR 99 Alternative travels though the unincorporated communities of Berenda and Notarb, adjacent to the UPRR/SR 99 corridor. There are no community facilities and few single-family residences on large parcels. The alternative's effects would not result in indirect impacts on land use.

KVP 9 Existing View

KVP 9 Simulated View

**Figure 3.13-B-7**
KVP 9 Existing and Simulated Views
*Left, Existing View:* View to the west toward the UPRR corridor and SR 99 from within Fairmead, a residential area between Chowchilla and Madera. *Right, Simulated View:* The elevated HST guideway, shown here with a tinted, transparent sound barrier, would appear in front of the existing UPRR corridor. If the at-grade Ave 24 Wye were selected as part of the project, it would appear between the elevated UPRR/SR 99 Alternative and the UPRR corridor.



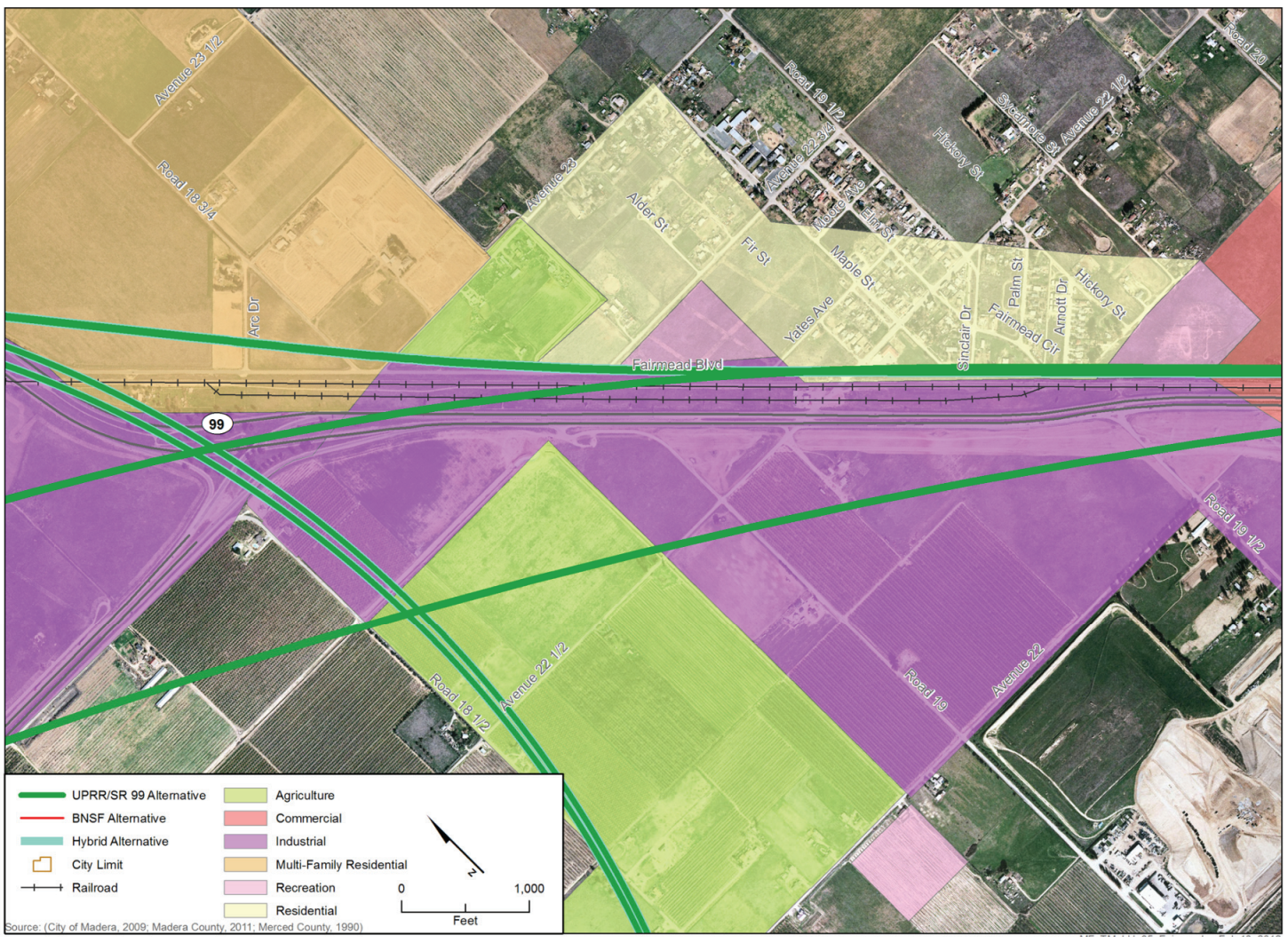




**Figure 3.13-B-8**
Adjacent Existing and Future Land Uses Fairmead

### *City of Madera*

The UPRR/SR 99 Alternative would travel through the City of Madera, but would not bisect the community. The elevated alignment would be adjacent to the SR 99 and UPRR corridors just north of the downtown area. Where the SR 99 corridor travels to the west, the elevated alignment would be adjacent to the UPRR corridor through the downtown area of Madera and then adjacent to the UPRR and SR 99 corridor again south of the downtown areas, where the SR 99 would travel to the east again to parallel the UPRR corridor. North of the downtown area, the adjacent existing uses to the alignment are vacant and future land uses are commercial. This transitions to an area where existing uses include residential and parks and future uses are primarily residential. Then, crossing the Fresno River, the alignment would enter the downtown core of the city and the adjacent uses are primarily and commercial and industrial, with residential farther east and west. As the alignment continues south, the adjacent existing and future uses are industrial and then transition to existing uses of vacant, residential, and parks, with future uses of commercial and residential. The elevated alignment would require about 50 feet of right-of-way, converting this area to a transportation-related use. Information on the existing and future uses is illustrated in Figures 3.13-B-9.

The HST Project would not change land use designations outside the HST footprint, and with noise mitigation and accessibility points preserved in Madera, no indirect effects on land use are anticipated. In the northern area of Madera where the existing land uses are currently vacant and future uses are related to commercial, the elevated guideway would be about 50 feet above the existing surfaces, so views towards this area from SR 99 would be maintained. The elevated guideway does not preclude any future uses, but in areas where the adjacent existing and future land uses are related to commercial uses, especially highway commercial, the columns and elevated guideway are adjacent to the transportation corridors could potential block views of signage from drivers along SR 99. Within the City of Madera, signs for larger commercial areas are allowed to display one sign, ranging from 20 to 40 feet tall depending on the size of the commercial property. The maximum height can be up to 60 feet as long as certain conditions are met. For the smaller commercial uses, 20 feet is the maximum height, and it is possible these signs could still be viewed; and if a 60-foot sign is allowed, it is likely it could be viewed from SR 99 as well. In the downtown area where the adjacent uses are residential to the north and south and commercial and industrial through downtown, mitigation is provided for noise impacts, but elevated guideway would have visual impacts on residential neighborhoods and the downtown area because the elevated guideway would be the largest structure in the area. See Figure 3.13-B-10 and Figure 3.13-B-11 for existing and simulated views of the elevated guideway through the downtown area of Madera. Although access would be maintained underneath the elevated guideway, the elevated alignment could create the perception of a barrier. Without mitigation, the area may become unattractive for redevelopment. This could influence the desirability of the area for future development and could negatively affect property values. This in turn could result in physical deterioration in downtown Madera. With mitigation measures, such as aesthetic designs that use the area underneath the elevated guideway for business parking or new businesses, downtown Madera could become an attractive setting for economic development or recreational uses. The Authority has developed *Technical Memorandum 200.06* (TM 2000.6), *Aesthetic Guidelines for Non-Station Structures* (Authority 2012). TM 200.06 provides information on what will be done under elevated guideways to minimize any impacts related to aesthetics.

Although Madera may have originally grown around the UPRR line, there are areas in Downtown Madera between the UPRR tracks and SR 99 that are underdeveloped and this area has been viewed as a barrier in the community, creating a division between the east and the west sides of the city. As described, the elevated alignment in this area would contribute a visual presence of large transportation infrastructure, but would not bisect the community because access would be maintained along the roadway network. The HST Project also would affect community facilities, including creating potential visual impacts on three parks (Sharon Avenue Linear Park, Riverside Park, and Road 27¾ Linear Park) because of the nearby elevated guideway. The project would also need to acquire portions of two of these parks (Riverside Park and Road 27¾ Linear Park), which would be mitigated by acquiring replacement land adjacent to the parks. The long-term use of the parks would not be affected, and the elevated guideway would provide shade in the parks, which would be beneficial to the many park users during hot summer

months. Because access would be maintained under the elevated guideway and mitigation would be provided to address visual and community facility impacts, there would be no impacts on community cohesion within the City of Madera.

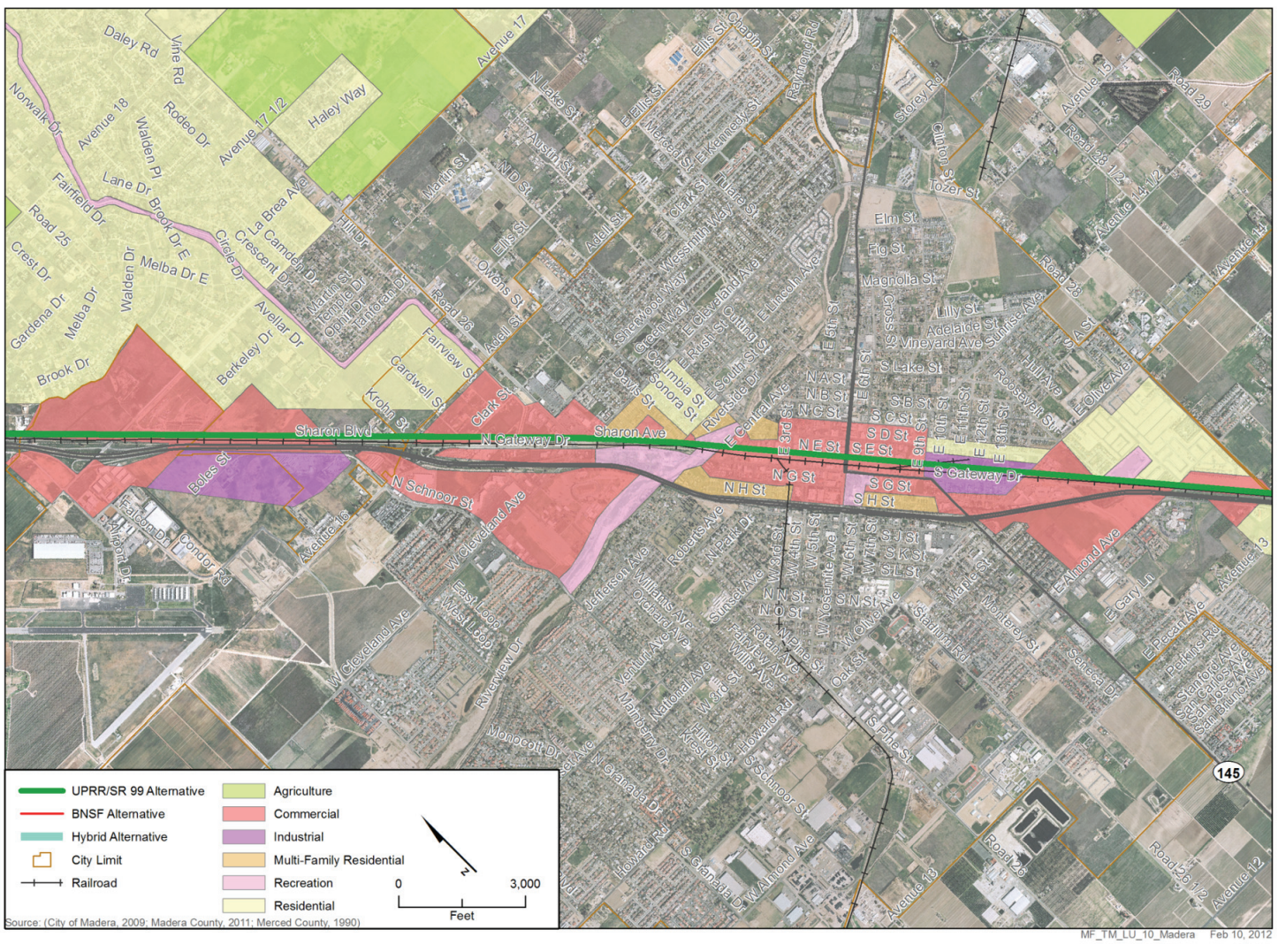




**Figure 3.13-B-9**
Adjacent Existing and Future Land Uses, City of Madera

KVP 10 Existing View | KVP 10 Simulated View

**Figure 3.13-B-10**
KVP 10 Existing View
*Left, Existing View:* View to the northeast from Rotary Park in the City of Madera. The existing UPRR tracks are visible in front of a residential neighborhood. *Right, Simulated View:* The elevated HST guideway (supported by piers that start below the roadway grade and thus appear shorter in this view than they would actually be) would be located next to the existing UPRR tracks and Sharon Boulevard. The simulation shows a tinted, transparent sound barrier.

KVP 11 Existing View | KVP 11 Simulated View

**Figure 3.13-B-11**
KVP 11 Existing and Simulated Views
*Left, Existing View:* View to the northeast from the intersection of S Gateway Drive and W Yosemite Avenue in Downtown Madera. *Right, Simulated View:* The elevated HST guideway, shown here with a tinted, transparent sound barrier would appear above and adjacent to the existing UPRR corridor.

### *City of Fresno*

As the elevated alignment enters Fresno County and the City of Fresno, existing land uses adjacent to the alignment are open space, vacant, and commercial, and future uses are primarily industrial with some residential. Camp Pashayan, part of the San Joaquin River Ecological Reserve, is an open space area under and east of the alignment and the HST Project. The alignment also would be west of the unincorporated community of Herndon, but would not result in any negative effects that result in negative effects on community cohesion. As the alignment continues south, it would transition to grade and would be adjacent to the UPRR corridor, where the adjacent land uses are primarily industrial and commercial. Residential land uses occur further away from the alignment, primarily to the east. Where residential development is closer to the UPRR corridor, there are existing sound barriers in many locations that mitigate noise impacts from freight trains. For much of the area, as the alignment would travel south to the Fresno Station and would be between SR 99 and the UPRR corridor, the adjacent existing and future land uses are large commercial areas to the west and industrial to the east, including the UPRR switching yard. Where the alignment would be once again adjacent to just the UPRR corridor, the existing and future adjacent uses are a mixture of commercial, open space, and industrial to the west and residential to the east to where the alignment would cross under SR 180. The open space adjacent to the alignment is Roeding Regional Park, a 158-acre park that includes the Fresno Chaffee Zoo. From SR 180 to the Fresno Station, existing land uses are a mix of vacant, industrial, and commercial, and the future uses are commercial to east of the station and a mix of industrial to the north and commercial to the south. Figure 3.13-B-12 illustrates the existing land uses along part of the alignment north of the station area.

The HST Project would not result in changes in the pattern or intensity of land use, nor would it be incompatible with the adjacent land uses or preclude the ability to develop based on future uses. The at-grade alignment would add incrementally to the transportation corridors within Fresno and because much of the adjacent future land uses are related to commercial and industrial uses, and site development would not be precluded because these areas are less sensitive to noise and visual impacts. Any utilities required to service the future land uses would not be precluded and the new utility extensions would need to be located under the at-grade alignments. The HST Project also would provide overcrossings at many of the existing roadways and would not preclude construction of any new overcrossings. Because services and access to the planning area would not be precluded, no significant impacts are expected within the planning area.

The UPRR and SR 99 corridors are physical barriers to access; however, several crossings, including grade-separated crossings with sidewalks, maintain connections between the western and eastern parts of the study area. The transportation corridors also tend to form boundaries for the community areas of Fresno. Because the corridors form boundaries, they minimize the effect on community cohesion. The HST Project would maintain access to the areas, and the new overpasses would span the HST and UPRR corridors, thereby improving access to some areas. Also, because the HST alignment is adjacent to the UPRR line near the Roeding Park zoo, the noise mitigation may reduce existing freight noise effects on the park and zoo areas. No community facilities would be acquired, so the HST Project is expected to result in benefits to the cohesion for some of the adjacent areas.

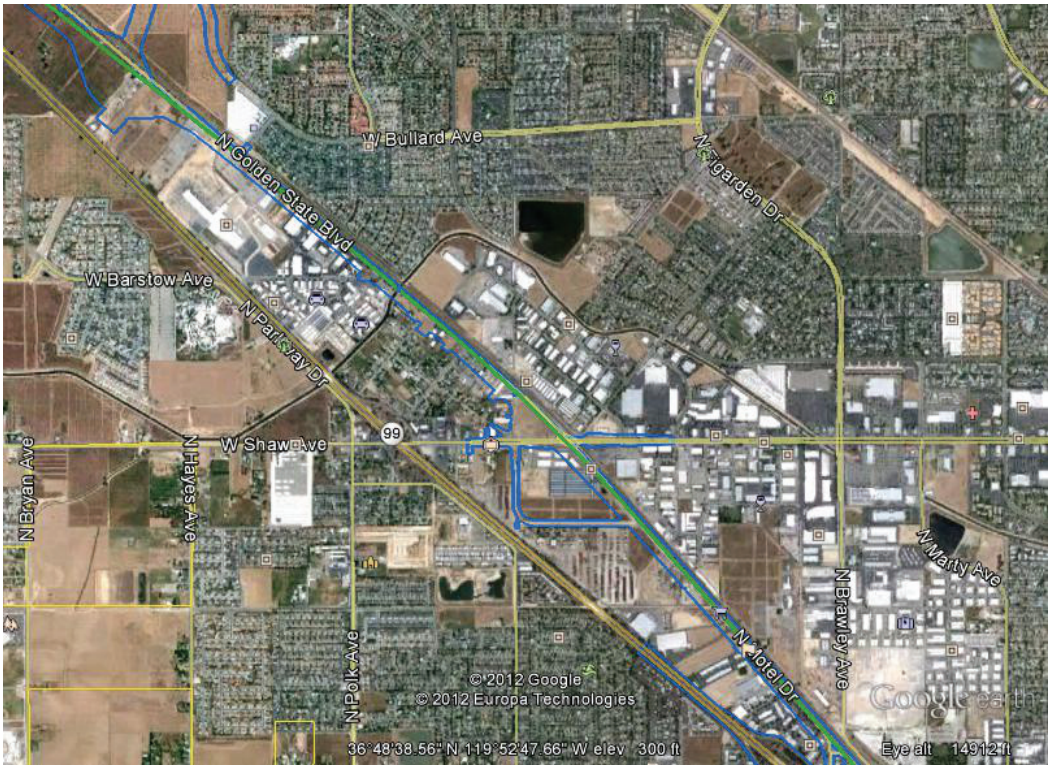



**Figure 3.13-B-12**
Existing Land Use - Fresno

## BNSF Alternative

### *Le Grand*

The BNSF Alternative with either the Mission Avenue or Mariposa Avenue design options would be elevated through the small unincorporated community of Le Grand in Merced County (east of Merced and south of Planada). The East of Le Grand design options would avoid the community by traveling farther east before rejoining the BNSF corridor to the south. Through Le Grand, the footprint would be within existing residential and vacant land uses and zoned for residential and industrial uses. Adjacent to the alignment and within Le Grand, the existing and future uses are residential, commercial, and industrial to the west and industrial to the east. Figure 3.13-B-13 illustrates the existing and future land uses.

The elevated structure through Le Grand would result in negative visual impacts for the small community, but would not preclude any development, nor would it remove community facilities or result in any negative effects on community cohesion. Although the boundary of the community extends east of the BNSF and the Santa Fe Boulevard corridors, these transportation corridors form a boundary between the residential and commercial areas and the industrial areas to the east. The HST Project would be consistent with these transportation uses on the edge of town. See Figure 3.13-B-14 for existing and simulated views of the elevated guideway through Le Grand.

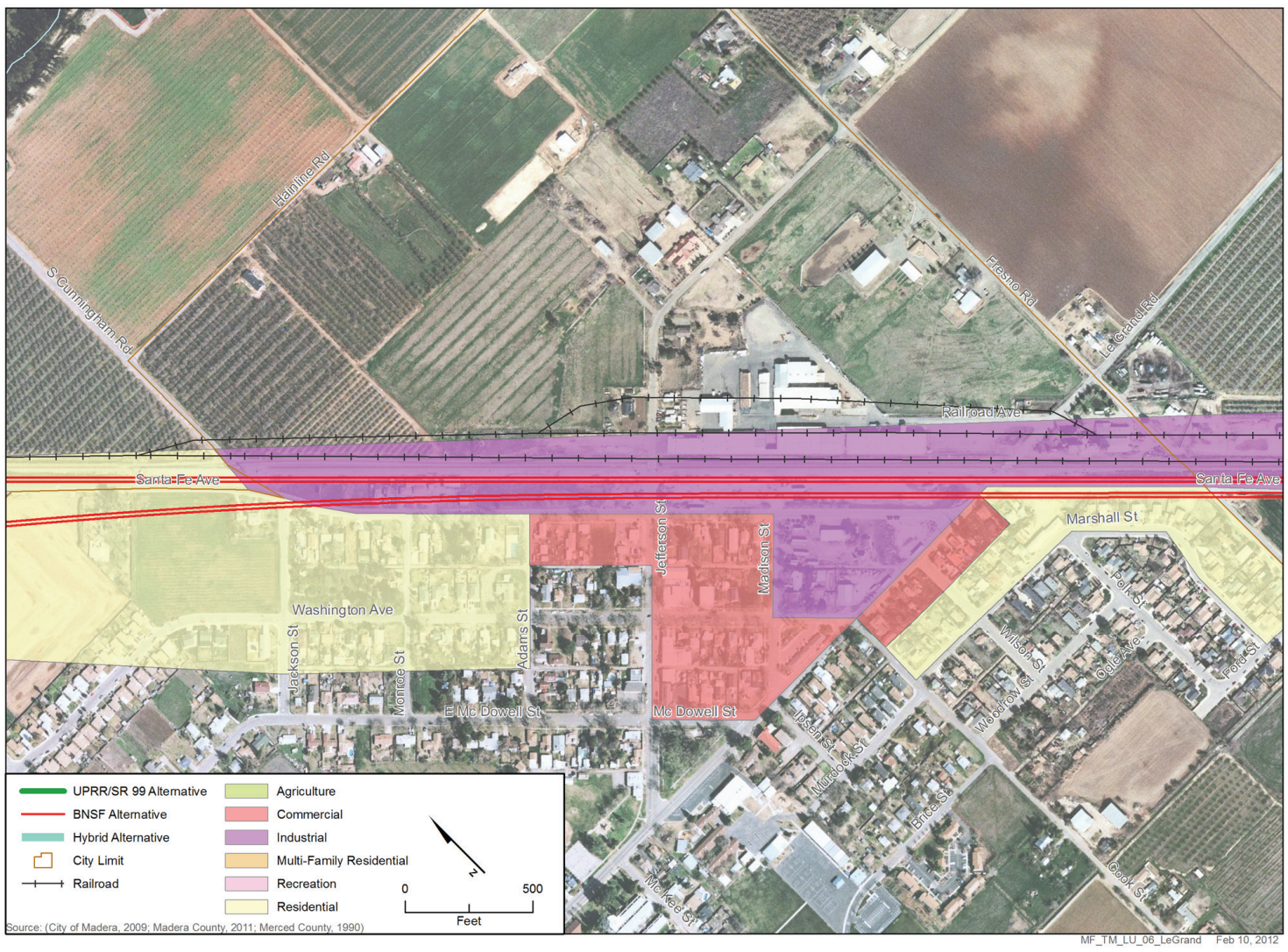




**Figure 3.13-B-13**
Adjacent Existing and Future Land Uses, Le Grand

KVP 25 Existing View | KVP 25 Simulated View

**Figure 3.13-B-14**
KVP 25 Existing and Simulated Views
*Left, Existing View:* View to the northeast from within a residential neighborhood in Le Grand. The Black Rock Milling Company industrial site is visible beyond the residences near the end of the street.
*Right, Existing View:* The Black Rock Milling Company would be mostly visible with the HST Project.

### *Madera County*

The BNSF rail line travels through the small unincorporated communities of Sharon and Kismet in Madera County. A few single-family residents are close to the alternatives, but none would be acquired and there are no community facilities or any sense of community cohesion. Both existing and future land uses are agricultural near the BNSF corridor.

### *Madera Acres*

The BNSF Alternative north-south alignment would travel at grade, and the wye alternatives would be elevated through the unincorporated community of Madera Acres, which is composed primarily of single-family residences. Figure 3.13-B-15 illustrates the existing and future land uses. The community is located north of the City of Madera and is within the city's sphere of influence. Figure 3.13-B-16 illustrates the existing and simulated views of the north-south alignment and the wyes. The area includes a golf course and an elementary school located more than 0.5 mile east of the alignment. The existing BNSF corridor has resulted in division of this community, with two at-grade railway crossings providing connection points. Existing and future land uses within Madera Acres are primarily lower density residential. The BNSF Alternative would be consistent with the existing BNSF railway. The HST Project would include noise mitigation that minimizes noise impacts associated with the HST for the existing residential properties. Also, grade separations spanning both the HST and the BNSF lines would be constructed in two locations, providing improved access for these land uses. The grade crossings would in BSNF trains no longer needing to sound their horns at the crossings, and the noise mitigation may provide additional benefits to residents by mitigating freight train traffic noise as well. None of the community facilities in the community would be negatively affected, and the overpasses would provide benefits for the elementary school students who need to travel over the corridor by improving safety. No negative effects on community cohesion are anticipated because the residential developments appear to function independently on either side of the BNSF corridor and the overpasses would result in improvements in community cohesion by providing a direct connection and removing the at-grade train crossings.

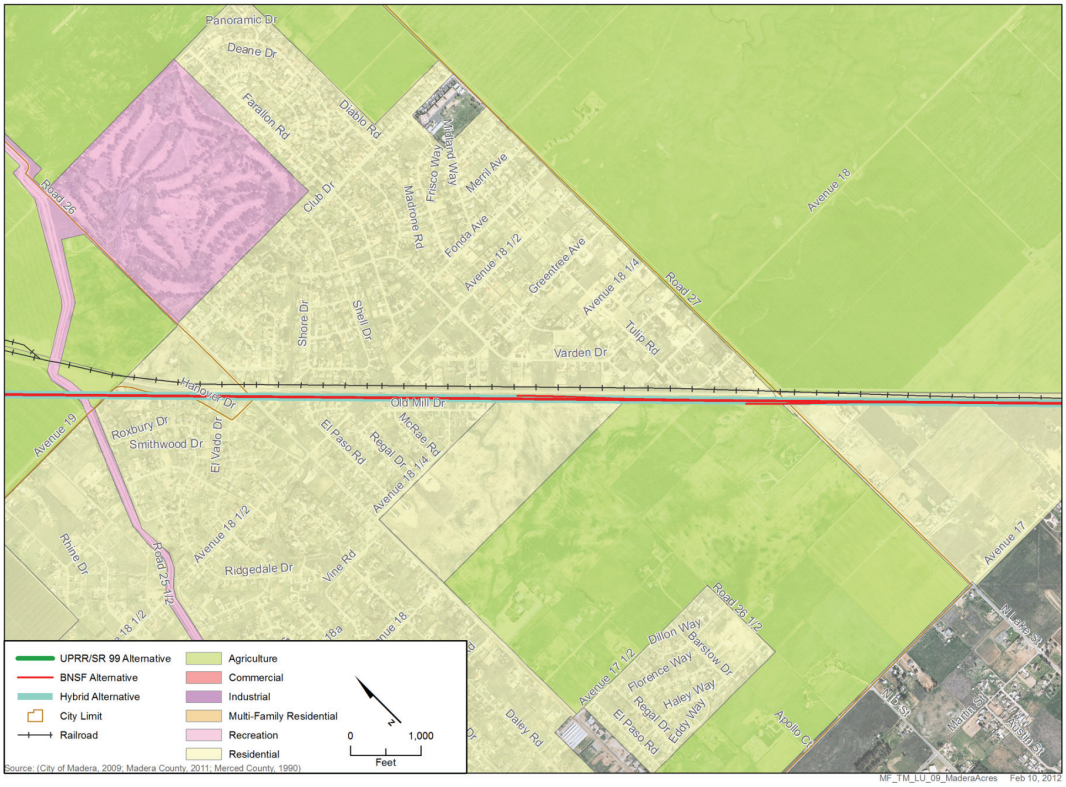




**Figure 3.13-B-15**
Adjacent Existing and Future Land Uses, Madera Acres

KVP 27 Existing View

KVP 27 Simulated View Hybrid and BNSF Alternatives

**Figure 3.13-B-16**
KVP 27 Existing and Simulated Views
*Left, Existing View:* View to the northeast from Avenue 18¼ (Old Mill Way), southwest of Old Mill Drive, within a residential neighborhood in Madera Acres. The existing BNSF tracks are visible beyond Old Mill Drive. *Right, Simulated View:* One of the three elevated Wye options and the at-grade BNSF or Hybrid Alternative guideway, shown here with sound barriers, would appear in front of the existing BNSF tracks.

In the unincorporated area north of the City of Madera and east of Madera Acres, there are residential and agriculture areas. East of SR 145 and adjacent to the BNSF railway, there is an area where the future uses are industrial. The HST Project would preclude new rail spurs to the west side of the BNSF line that may service these zones. Although the HST Project would preclude the addition of an at-grade rail spur on the HST side of the rail line, there are other transportation access points that would not be affected and the future uses in this area can still be serviced.

Beyond Madera Acres, the BNSF Alternative joins with the UPRR/SR 99 alternative for common effects in Fresno. These are not discussed in further for the BNSF Alternative.

## Hybrid Alternative

The Hybrid Alternative would not travel through any additional communities beyond those identified under the UPRR/SR 99 Alternative from the City of Merced to Fairmead and the City of Fresno and under the BNSF Alternative from the unincorporated community of Kismet to Madera Acres. The Hybrid Alternative would avoid the City of Madera and the unincorporated communities of Berenda, Notarb, Parksdale, and Parkwood associated with the UPRR/SR 99 Alternative and the unincorporated communities of Le Grand and Sharon associated with the BNSF Alternative.

Impacts to Chowchilla would be the same as those identified for the UPRR/SR 99 Alternative. The Hybrid Alternative with the Ave 24 Wye also would create an "infrastructure triangle" as shown in Figure 3.13-B-6, and like the West Chowchilla design option, it would not preclude future development. The Hybrid Alternative with the Ave 21 Wye would be the same as the East Chowchilla design option. Existing and simulated views are associated with the East Chowchilla design option in Figure 3.13-B-4 and would be the same with the Hybrid Alternative. The Hybrid Alternative with the Ave 24 Wye would not travel through Fairmead, but rather would avoid the community and travel east along the Ave 24 Wye through agricultural land and join the BNSF corridor. The Hybrid Alternative with the Ave 21 Wye would travel along a similar alignment as the UPRR/SR 99 Alternative through Fairmead and there would be no differences beyond those described above under the UPRR/SR 99 Alternative. Once the Hybrid Alternative joins the BNSF corridor the communities along the alignment are the same as those described above under the BNSF Alternative to the Fresno Station, starting with the unincorporated community of Kismet.

Through Madera Acres, both the north-south alignment and wye alternatives would be at grade, so no elevated structures would be introduced through the community.

# 3.0 Photo Essay

The following section provides a series of photos taken from Google Earth at a number of points along each of the HST alternative locations. The photos illustrate the existing land uses where the HST alternatives would be located and, as applicable, the existing land uses adjacent to the HST alternatives. Figures 3.13-B-17 to 3.13-B-1-20 provide information on the locations where the images were taken.

The photographs provide information on the existing and future land uses next to the HST alternatives and the surrounding land uses. Information after each photo provides information on the types of land uses, any community facilities nearby, the type of HST alignment (at-grade, retained cut or fill, or elevated).

The photos in this section are presented in the following order:

1. Merced Station area. Photos illustrate the existing land uses only within the construction footprint for the HST station.

2. Fresno Station area. Photos illustrate the existing land uses only within the construction footprint for the HST station.

3. UPRR/SR 99 Alternative. Photos are generally from within the communities along the alignment and includes the design options and wyes.

4. BNSF Alternative. Photos are generally from within the communities along the alignment and includes the design options and wyes.

5. Hybrid Alternative. For the most part, the locations associated with the UPRR/SR 99 and BNSF alternatives are the same for the Hybrid Alternative. Where the locations are the same, it is noted in the supporting text for each location.

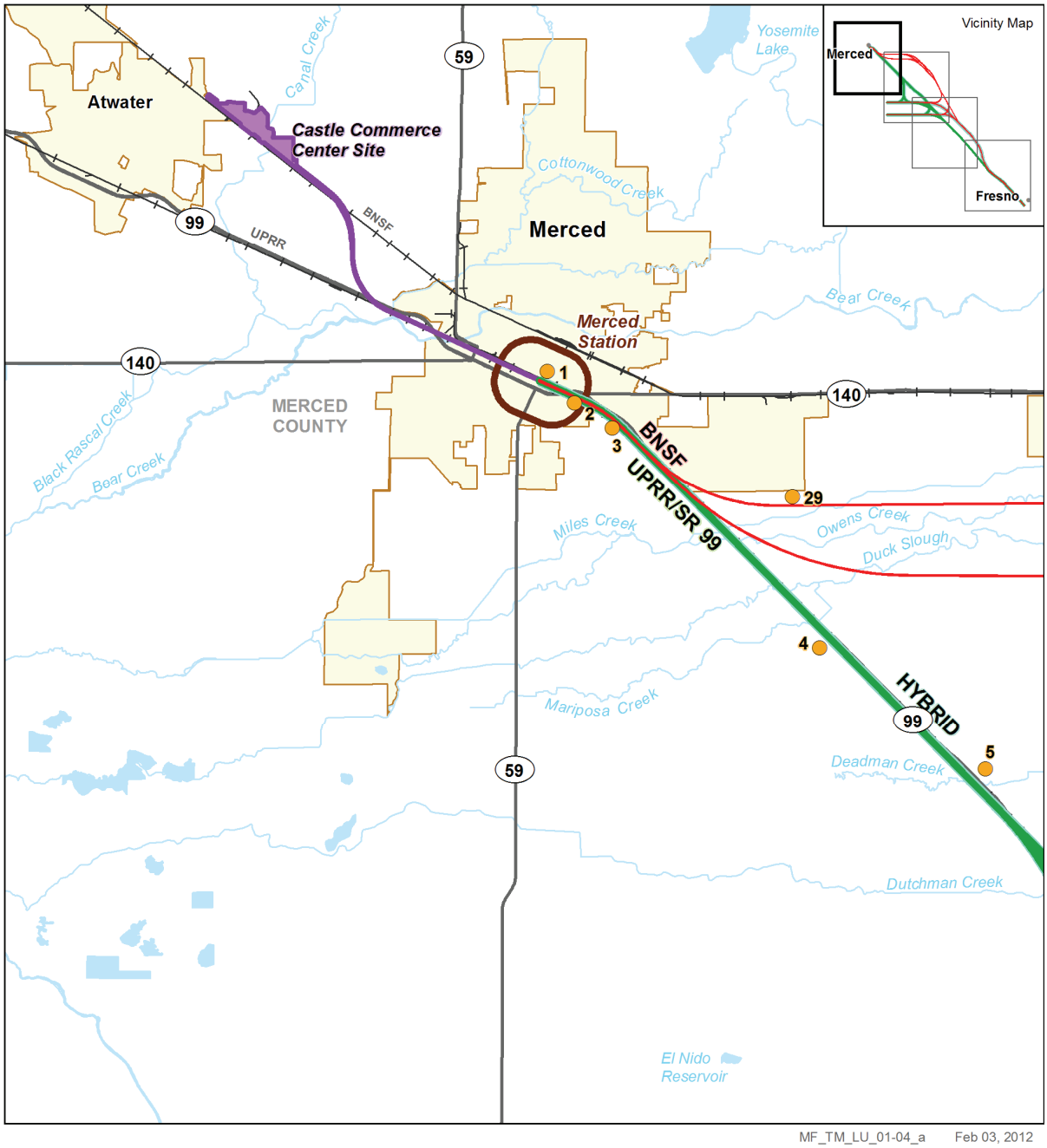



**Figure 3.13-B-17**
Photo Locations – Merced Vicinity

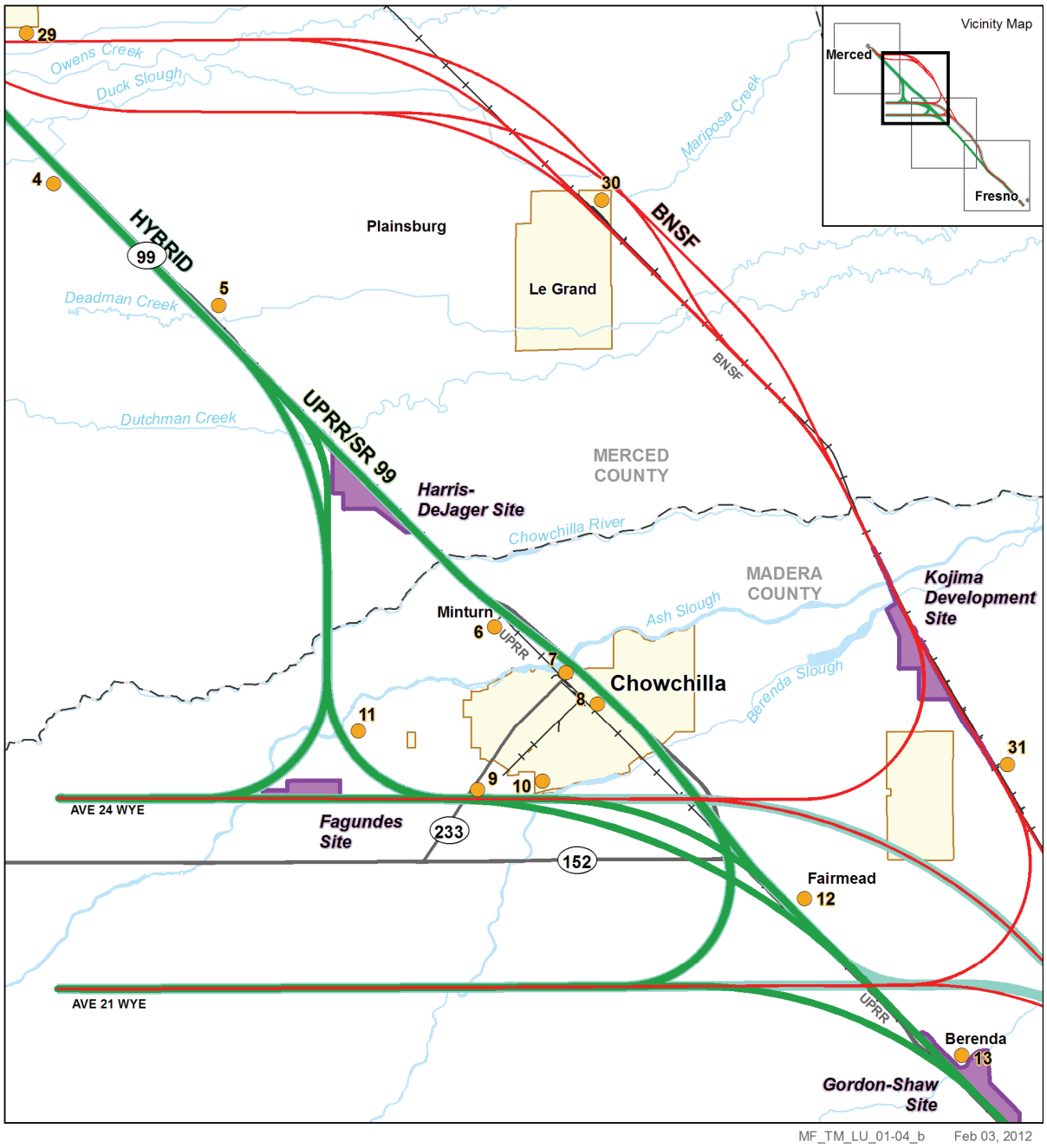



**Figure 3.13-B-18**
Photo Locations – Chowchilla Vicinity

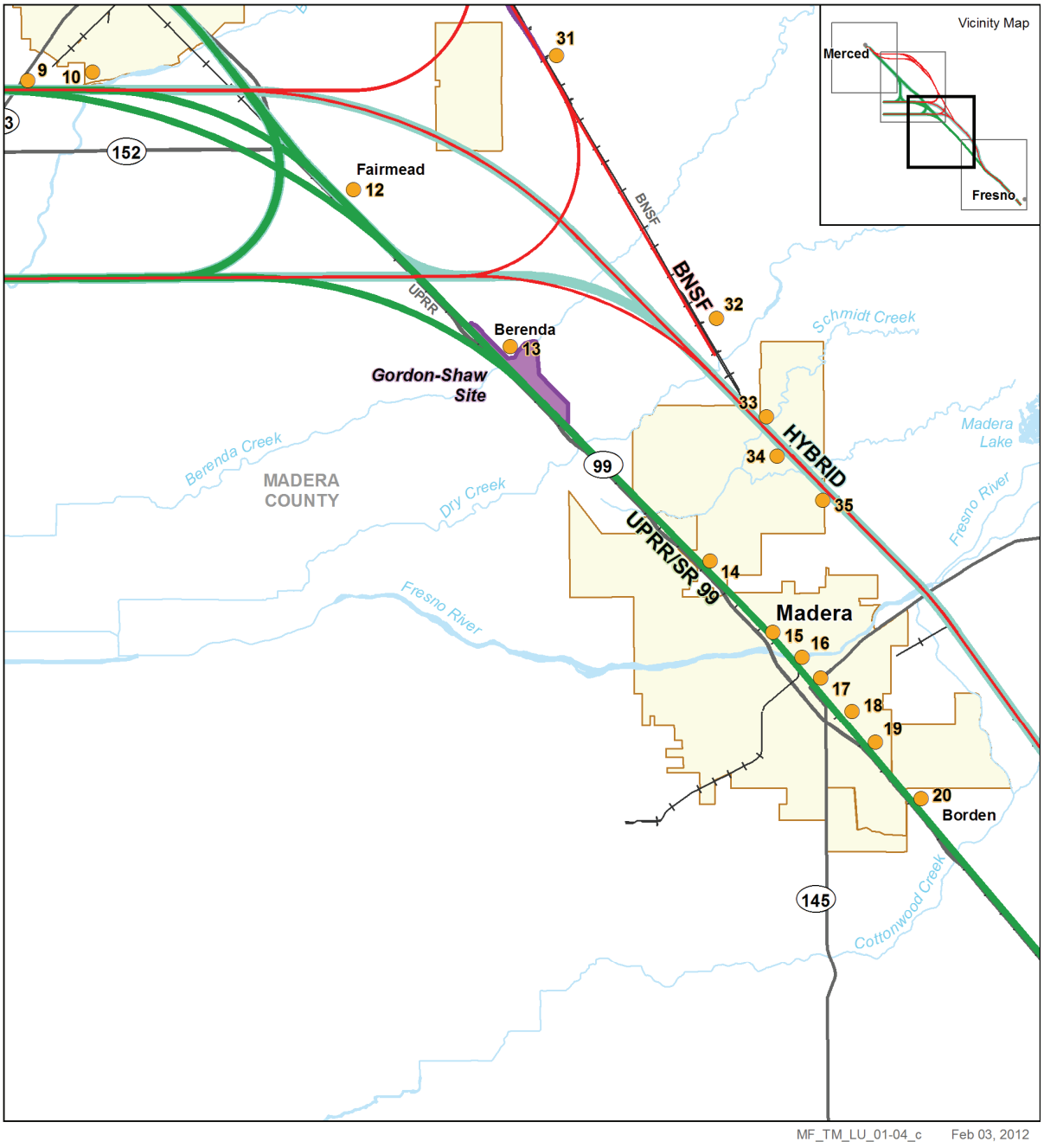



**Figure 3.13-B-19**
Photo Locations – Madera Vicinity

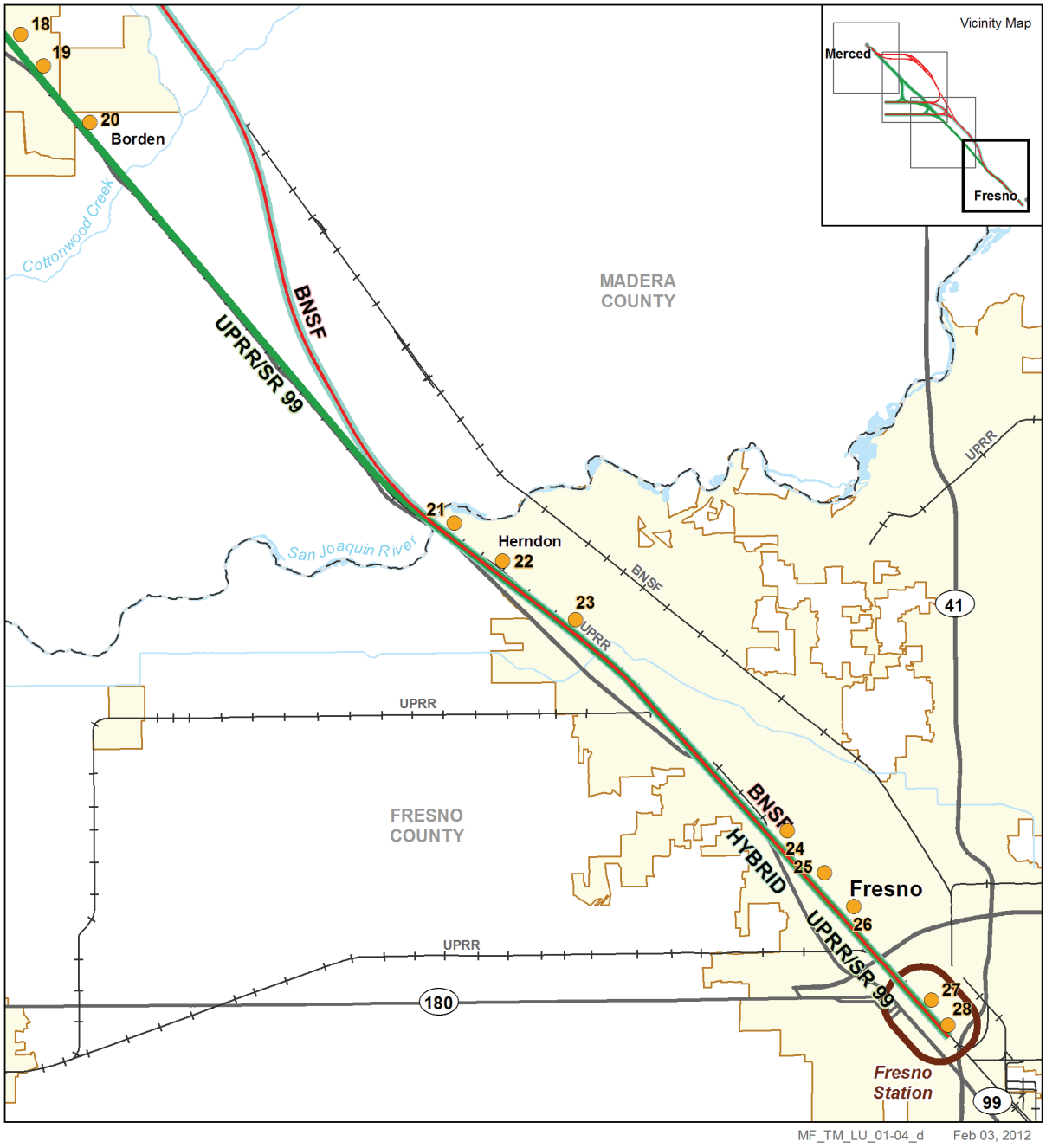



**Figure 3.13-B-20**
Photo Locations – Fresno

## Merced Station Area


Location 1. Looking south towards the Merced Station area from West 16th Street. Existing uses include vacant land, commercial, and industrial and future uses are commercial.


Location 1. Looking north towards the Merced Station location from 15th Street. UPRR corridor just north of the buildings. Existing land uses related to industrial and future land uses are commercial.


Location 1. Looking north towards Merced Station location from 15th Street at vacant land. UPRR corridor just east of project. Existing use is a vacant lot and future uses are commercial.


Location 1. Looking south from Merced Station area towards proposed surface parking. Existing use is a vacant lot and future uses are commercial. Behind the vacant lot are a number of single-family residential properties that would be acquired for the HST Project.

**City of Merced – Merced County**


Location 2. Looking north along D Street North towards the retained cut alignment, which would be the same for all HST alternatives. The roadway is closed in this area and there is community facility (homeless shelter to the west) that would be acquired and relocated under all HST alternatives. Existing and future uses are commercial.

**Merced County**


Location 3. Looking north from East Gerard Avenue along the at-grade alignment for all alternatives. The area is within Merced County and within the sphere of influence for the City of Merced. Existing land uses include residential and industrial and future uses are industrial and agriculture.

## UPRR/SR 99 Alternative

### Lingard – Merced County


Location 4. Looking north towards the at-grade UPRR/SR 99 and Hybrid alternatives from Lingard Road. The unincorporated community of Lingard is located within Merced County. There are no community facilities, and the at-grade alignment would require the closure of access to southbound SR 99 from Lingard Road. Existing and future land uses are agriculture.

### Athlone – Merced County


Location 5. Looking west towards the at-grade UPRR/SR 99 and Hybrid alternatives from South Athlone Road in the unincorporated community of Athlone east of SR 99. The alternatives would be located west of SR 99 and the existing and future land uses are agricultural.

**Minturn – Madera County**


Location 6. Looking north towards the elevated UPRR/SR 99 and Hybrid alternatives from Chowchilla Boulevard in the unincorporated community of Minturn west of SR 99. Existing land uses include commercial industrial and in the surrounding area the existing and future uses are highway commercial and agricultural.

**Chowchilla – Madera County**


Location 7. Looking north towards the elevated design options of the UPRR/SR 99 and Hybrid alternatives within Chowchilla from the Robertson Boulevard and SR 99 interchange area. The elevated alignment would maintain access at the interchange area. Existing and future land uses are commercial (highway commercial).

**Chowchilla – Madera County**


Location 8. Looking east towards the elevated options of the UPRR/SR 99 and Hybrid alternatives within Chowchilla from Prosperity Boulevard. Existing land use is vacant and the future land uses are commercial and industrial.


Location 9. Looking south towards the at-grade Ave 24 Wye from SR 233 (Robertson Boulevard) just outside City of Chowchilla limits. A new roadway overpass or underpass would be constructed about 0.25 mile to the south. Existing uses are related to residential and agriculture. The area is within the planning area for Chowchilla and the future uses are commercial and residential.

**Chowchilla – Madera County**


Location 10. Looking south towards the at-grade Ave 24 Wye from within the City of Chowchilla from Road 15 1/2. Existing and future land uses are industrial in this area. The area to the south is within the planning area for the City of Chowchilla.

**Madera County**


Location 11. Looking south towards the at-grade UPRR/SR 99 and Hybrid alternatives from Ave 24 1/2 and Road 13 intersection. The area is within the sphere of influence for the City of Chowchilla. In this area, new roadway overpasses would be constructed over the at-grade alignment. Existing land and future land uses are agricultural.

**Fairmead – Madera County**


Location 12. Looking north along the elevated UPRR/SR 99 and Hybrid alternatives from Fairmead Boulevard. Existing land uses include residential and agricultural and future land uses are residential, commercial, and agricultural.

**Berenda – Madera County**


Location 13. Looking southeast towards the elevated UPRR/SR 99 Alternative from Ave 20 1/2 near the unincorporated community of Berenda. Existing and future land uses are agricultural. The elevated alignment would maintain access for the roadways in the area.

**City of Madera – Madera County**


Location 14. Looking south along the elevated UPRR/SR 99 Alternative from Ave 17/SR 99 interchange in the City of Madera. Existing land use is vacant and future land uses are commercial.


Location 15. Looking south along the elevated UPRR/SR 99 Alternative alignment from Sharon Boulevard. Existing and future land uses are residential and commercial. Sharon Avenue Linear Park is on the right side of the roadway.

**City of Madera – Madera County**


Location 16. Looking south along the elevated UPRR/SR 99 Alternative from Riverside Drive where the alignment would cross the Fresno River. Existing and future land uses are residential and commercial. Riverside Park is shown in the photo.


Location 17. Looking southwest towards the elevated UPRR/SR 99 Alternative from SR 145 in downtown Madera. Existing and future land uses are commercial.

**City of Madera – Madera County**


Location 18. Looking south along the elevated UPRR/SR 99 Alternative from South E Street in downtown Madera. Existing and future land uses are industrial.


Location 19. Looking south towards the elevated UPRR/SR 99 Alternative from South Know Street in downtown Madera. Existing land uses are vacant and residential and future land uses are residential and commercial. County Road 27 3/4 Linear Park is on the right side of the roadway.

### Parksdale – Madera County


Location 20. Looking west towards the elevated UPRR/SR 99 Alternative from Road 28 in the unincorporated community of Parksdale. Existing land uses are vacant and agricultural in this area and future land uses are residential. Existing residential development is about 1,000 feet from the alignment. The unincorporated community of Parkwood is located west of SR 99 and the alignment would not travel through the community.

### Fresno County

All of the HST alternatives would be located along the same alignment in Fresno County and the City of Fresno.

### Camp Pashayan

Location 21. Looking south towards the elevated crossing of the San Joaquin River from just outside Camp Pashayan. Existing and future land uses are related to parks and open space.

**City of Fresno**


Location 22. Looking west towards the elevated alignment from Herndon Drive. Existing and future land uses are commercial.


Location 23. Looking south along the at-grade alignment from Golden State Boulevard. Existing and future land uses are commercial and industrial. There is residential development on the left about 200 feet from the alignment.

**City of Fresno**


Location 24. Looking south along the at-grade alignment from Golden State Boulevard (just south of Clinton Avenue). A mobile home park is located on the right in the photo. Existing and future land uses are commercial and industrial.


Location 25. Looking south along the at-grade alignment from Golden State Boulevard. A number of older motels are located in this area. Existing and future land uses are commercial. There are residential land uses to the left in the picture.

**City of Fresno**


Location 26. Looking south along the at-grade alignment from the intersection of Olive Avenue and Golden State Boulevard. A roadway overpass would be constructed in this location, crossing the UPRR corridor and the HST alignment. Existing and future land uses are commercial and open space to the west and residential to the east. Roeding Park is located on right in the photo.

**Downtown Fresno Station Area**


Location 27. Looking north in the station area from Tulare Street. Existing and future land uses are commercial. Chukchansi Park is up the roadway on the right side and Downtown Fresno is in the distance.

**Downtown Fresno Station Area**


Location 27. Looking northwest from the station area from Tulare Street and the UPRR corridor. The historic Southern Pacific Railroad depot is on the right. Existing and future land uses are commercial and there are industrial uses farther north. There are vacant parcels located in the area as well.


Location 27. Looking south from the station area from Tulare Street and the UPRR corridor. The Chinatown neighborhood is south of the station area. Existing and future land uses are commercial. There are vacant parcels located in the area as well.

### Downtown Fresno Station Area


Location 28. Looking north towards the station area from Mono Street and the UPRR corridor. Existing and future land uses are commercial. Downtown Fresno can be seen in the distance.

## BNSF Alternative

### Mission Ave Design Option – Merced County


Location 29. Looking south from Mission Avenue towards the BNSF Alternative, which would be elevated in this area. Land uses are primarily agricultural and there are areas of residential development. There is a small residential development to the left in the picture that would be affected by acquisitions and require relocation. Existing and future uses are agricultural.

**Le Grand – Merced County**


Location 30. Looking east from Santa Fe Avenue along the BNSF Alternative (Mission or Mariposa design option), which would be elevated in this area. Existing and future land uses are industrial. Residential uses (not visible in photo) are to the right.

**Sharon – Madera County**


Location 31. Looking north towards the BNSF Alternative from Sante Fe Drive and Ave 24 in the unincorporated community of Sharon in Madera County. Existing and future land uses are agricultural. A new roadway overpass would be constructed in this location. There are no community facilities in the area, but there are two women's prisons about 1 mile west.

**Kismet – Madera County**


Location 32. Looking west towards the at-grade BNSF and Hybrid alternatives from Ave 20 1/2 in the unincorporated community of Kismet in Madera County. Existing and future land uses in the area are agricultural.

**Madera Acres – Madera County**


Location 33. Looking west along the at-grade BNSF and Hybrid alternatives in the unincorporated community of Madera Acres in Madera County. Existing and future land uses are residential. A new roadway overcrossing would be constructed along this roadway over the HST and BNSF corridors. The overcrossing would improve safety and community cohesion.

**Madera Acres – Madera County**


Location 34. Looking north from Old Mill Drive towards the at-grade BNSF and Hybrid alternatives. Existing and future land uses in the area are residential. Residential properties would be acquired and converted.


Location 35. Looking north towards the at-grade BNSF Alternative and Hybrid Alternative from Lake Street. Existing and future land uses in the area are residential. A new roadway overpass would be constructed in this area over both the HST and BNSF corridors. The overcrossing would improve safety and community cohesion.

**Unincorporated Madera County**


Location 36. Looking north towards the at-grade BNSF Alternative and Hybrid Alternative from Ave 15 1/2. The area is within the sphere of influence for the City of Madera. Existing land uses are residential and industrial and future land uses in the area are industrial. Although a rail spur could not be constructed, existing transportation access would be maintained, including new overpasses at Ave 15½ and Ave 15.

# 4.0 References

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