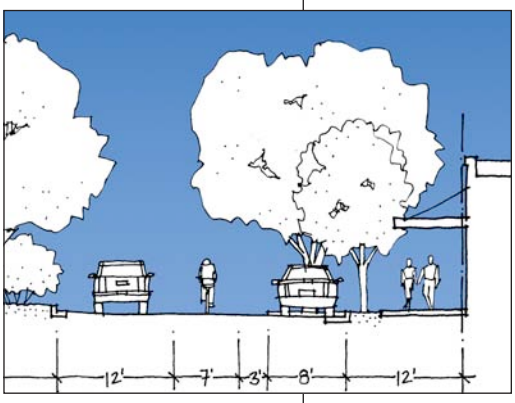
CITY OF KERMAN

Madera Avenue Streetscape Master Plan

Final Draft: January 2012
Updated March 2012



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Madera Avenue Streetscape Master Plan

A Report to the City of Kerman, CA
Final Draft: January 2012
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Executive Summary

This document is the outcome of a community-based planning process for the Madera Avenue Corridor in Kerman, a city of approximately 13,500 residents in west-central Fresno County, California. The project area includes an approximately 1 mile stretch of South Madera Avenue – State Route 145 – between Whitesbridge Avenue (State Route 180) to the north and California Street to the south .

The City of Kerman has a unique situation by having two state routes bisecting the community. From east to west is State Route 180 (Whitesbridge Road) and from north to south is State Route 145 (Madera Avenue). These two roadways serve as key transportation corridors for the residents, visitors, and surrounding businesses and farming operations.

Madera Avenue (State Route 145) is of particular importance since this roadway traverses the historic downtown of Kerman and, as such, serves as the community's main street. This key roadway provides many opportunities for the community but also creates some challenges for pedestrians and visitors to the downtown core.

In an effort to conduct a comprehensive analysis of the challenges and opportunities posed by Madera Avenue, the City of Kerman decided to seek grant funds to pay for the cost of the study. In late 2009 the City of Kerman was awarded a grant through

chapter 1

Introduction

the California Department of Transportation to prepare the Madera Avenue Master Streetscape Plan. This plan is the culmination of community input and technical analysis on the existing conditions of the Madera Avenue corridor and contains specific recommendations to improve the safety, mobility and access of the roadway as well as enhance its aesthetic qualities through streetscape improvements.

The primary purpose of the Madera Avenue Master Streetscape Plan is fourfold:

- First, the plan evaluates the existing conditions of the Madera Avenue corridor between Whitesbridge Road (SR 180) to the north and California Avenue to the south in order to assess safety, mobility, and access.
- Secondly, the plan proposes specific short, mid, and long-term recommendations to address pedestrian safety and improve mobility through a series of traffic calming measures and enhanced roadway design improvements.
- Thirdly, the plan seeks to tie Madera Avenue corridor together through a unified landscape theme, wayfinding signage, street furniture, lighting, and hardscape features.
- Lastly, the plan provides project cost estimates for the various recommendations and identifies possible funding sources to finance specific design improvements.

Acknowledgements

This document was prepared through close coordination with City Staff, an 18-member Community Advisory Committee, and a multi-disciplinary professional consultant team. Opticos Design, Inc., a Berkeley-based urban design and architecture firm, provided community planning and urban design expertise and prepared the plan document. The San Francisco office of Nelson\Nygaard focused on circulation and traffic. The Local Government Commission (LGC), a Sacramento-based nonprofit organization that works with local governments and communities to build healthy, livable places, assisted with community outreach and facilitation. Yamabe & Horn Engineering, Inc. assisted with conceptual civil engineering and project management.

Plan Organization

This plan is composed of 6 chapters. Chapter 1 introduces the project and outlines the process. Chapter 2 presents the existing conditions, and includes a discussion of key issues and opportunities. Chapter 3 describes a series of Frameworks that describe overarching Goals for the corridor. While Chapter 4 describes comprehensive design alternatives for the corridor, Chapter 5 describes additional detailed design elements. Chapter 6 outlines next steps and provides recommendations for funding and implementation. Finally, the Appendix provides resources and records from the community process, including participant lists, workshop flyers, and meeting notes.

Top Left: Focus group sessions engaged members of the business community, public agencies, and community service organizations. ***Above:*** *In addition to focus groups, the design team visited local businesses to discuss issues for the corridor.*

Community Outreach Summary

Design charrettes are an increasingly popular tool for neighborhood and street design programs. Charrettes are community-based design exercises that come out of a sincere intent to have the public involved in a meaningful way to craft their own future. This format allows residents, users of a street, or whatever population is targeted to be the primary force behind the designs. They are typically brought together for several sessions over a short period of time, before the charrette project team finalizes the designs and prepares a report like this one.

In April of 2011 the project team held an advisory committee meeting with members of the City Council, Planning Commission, City staff, business leaders, Kerman Unified School District and Caltrans. Participants at the meeting discussed the issues for the study area and the goals of the project and the charrette process to be utilized. Members of the project team also conducted a site audit at this time, noting the conditions in the study area. The advisory committee divided the charrette process into two visits from June to July of 2011. The input gathered from these visits forms the basis for the recommendations in this report.

Outreach Methods

Several outlets were utilized to help publicize the events for the charrette activities. English and Spanish-language flyers were distributed through various outlets such as at City Hall, through the different programs at the Parks and Recreation Department, and with the help of the Chamber of Commerce. Articles describing the project, as well as a paid advertisement, were published in the local newspaper, *The Kerman News*, prior to the charrette activities. Media releases were also submitted to the local radio station for announcement during programming. Project team members also

visited local businesses along the corridor to help spread the word about the public activities. Examples of the materials used for outreach can be found in Appendix 1.1.

Focus Group Meetings and Interviews

The project team held focus group meetings with various community stakeholders on June 10, 2011. These groups are typically smaller to allow for more conversations about particular streets or intersections, safety issues in general, or land uses and economic development. Meetings were held with the following groups:

- Local business owners and the Chamber of Commerce
- City agency staff, emergency responders and Caltrans
- Planning Commissioners and community service organizations

On July 14, project team members also conducted individual site interviews with minority-owned businesses along the Madera Avenue corridor. Notes from the focus group sessions and the site interviews can be found in Appendix 1.3 of this report.

Public Charrette Events

Public events were held at the Kerman City Hall Council Chambers and were open to anyone in the community. These events occurred over the course of two visits by the project team from June 10-11, and July 12-14, 2011.

The opening session of the charrette process was held on Thursday, June 10. Luis Patlan, Director of Planning and Development, welcomed participants to the workshop and provided background on the design project and the City's goals for developing a

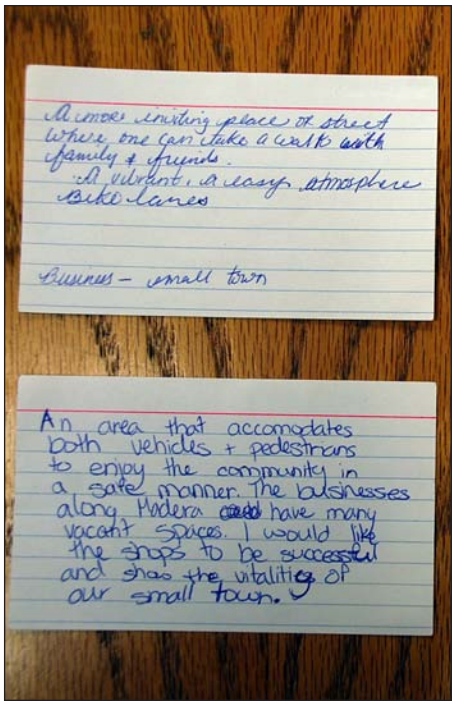
Community Priorities Identified:

- Add crosswalk at San Joaquin Avenue
- High visibility markings at crosswalks
- More street furniture (benches, trash cans, recycling bins)
- Shade
- Brick pavers in crosswalks
- Bicycle lanes
- Improve safety and access at Memorial Park
- Fix crosswalk at C Street

Above: *Residents identify and vote for their priority goals regarding the future of the Madera Avenue corridor.*

master streetscape plan for Madera Avenue. Paul Zykofsky, Associate Director of the Local Government Commission, followed Mr. Patlan with a presentation on creating healthy and safe streets, and an overview of the charrette process.

After this presentation, participants were provided index cards and asked to write down their future vision for Madera Avenue. They were then asked to take part in another exercise to help identify priorities for Madera Avenue. Participants were given adhesive dots to use as votes for the issues they felt were the most important to address for the corridor. The results of this exercise are shown on this page, and this information was carried over to help guide the project team in developing the recommendations over the course of the charrette process.



Above (Clockwise from Top Right): *The opening workshop; The design team discusses possible improvements for the corridor; Residents' future visions were recorded on index cards; Walk audit participants observe truck traffic patterns around Plaza Veterans Park.*

Walk Audit

On Saturday, June 11, the project team led a walking tour along Madera Avenue, from A Street up to Kearney Boulevard. The tour group observed existing land uses and street conditions, including design, walkability, traffic patterns, intersections, crossings, sidewalk conditions, and other features. The group shared ideas for some of the problems identified along the corridor.

Upon return from the walk audit, the group got light refreshments and gathered around a printed map to begin outlining potential improvements along Madera Avenue. The project team took the input from these activities back home and began working on the initial recommendations for the corridor.

Open House Sessions

The project team returned to Kerman the following month (July 12-14) and held

Left: *Closing presentation of the design charrette, introducing initial recommendations to residents.*

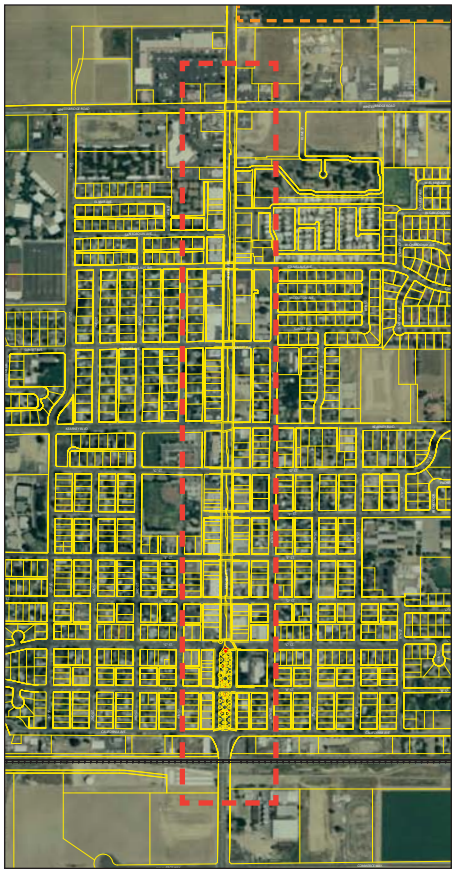
"open house" sessions at the Kerman City Hall Council Chambers. These sessions provided an opportunity for anyone from the public to stop by the Council Chambers and visit with the project team as they were developing designs for the corridor, and to provide their input.

Presentation of Initial Recommendations

During this second visit, the project team held a public workshop at Kerman City Hall on July 14 to present the first draft of recommendations to residents. Those who had participated in previous charrette activities were directly invited to attend this session. Paul Zykofsky reviewed key findings from the previous workshops and meetings; Stefan Pellegrini from Opticos Design shared the team's initial recommendations, including visuals of potential changes. Michael Moule of Nelson\Nygaard offered more detail on some of the engineering concepts shown in the recommendations. At the conclusion, they opened the floor to comments and questions from those in attendance. A listing of the comments is included in the Appendix 1.2.

Report Draft Process

After the first two charrette visits, additional opportunities to gather more input were provided. The presentation was made available through the City, for people to provide comments through a less public manner. Members of the Advisory Committee and the City helped the team refine the recommendations in this report through a "review and comment" process. This final report will be presented to the City Council and the public at an open hearing.



Project Area and the Community

The City of Kerman is located at the intersection of State Route 180 and State Route 145 in west central Fresno County, approximately 20 miles west of Fresno and 17 miles south of Madera. The project study area specifically focuses on the South Madera Avenue (Highway 145) corridor within the city's central commercial district, from Whitesbridge Avenue (State Route 180) at the northern limit to California Avenue at the southern extent.

State Route 145 is part of the California Freeway and Expressway System, connecting to State Routes 99 and 41 in Madera to the north and to Interstate 5 (near Coalinga) to the southwest. Largely a two-lane, rural road, SR 145 becomes a 4-lane divided roadway as it passes through Kerman as Madera Avenue, and serves as an important north-south connector for the community. Whitesbridge Avenue (State Route 180) connects Kerman to State Route 33 to the east and Fresno and Kings Canyon National Park to the east; Palm-lined Kearney Boulevard also connects Kerman to Fresno and the historic Kearney Mansion, 16 and 8 miles to the east, respectively.

chapter 2 Existing Conditions

Along its most heavily used segment, Madera Avenue carries approximately 16,500 cars per day on average with peak volumes reaching 1,350 per hour. Along with serving the local passenger vehicle traffic, Madera Avenue serves as an important truck route that provides truck passage between farms, processing facilities and markets particularly during the peak harvest months beginning in September.

During the five years between 2003 and 2008, there were 15 reported crashes involving vehicles in Kerman. Nearly all of these crashes occurred along Madera Avenue with a heavy concentration (nearly 2/3) in the area immediately surrounding the Kearney Boulevard intersection. Among the crashes during that time period, there were 4 that involved pedestrians, two of which occurred along Madera Avenue (one at Sunset Avenue and one at D Street), and 2 involving bicycles along Madera at F Street and California Ave near the packing plant.

A network of assorted facilities and important community spaces engages the project area, helping to stimulate activity along the corridor. Three schools are found within four blocks of Madera Avenue, including Kerman Floyd Elementary school, Kerman Middle school, and Kerman High School. At the southern end of the project area, Veterans Park is an important civic community destination, while Kerckhoff Park, which serves as a large multi-purpose park for sports competitions and community events such as the annual Harvest Festival, is centrally located only one block from the corridor.

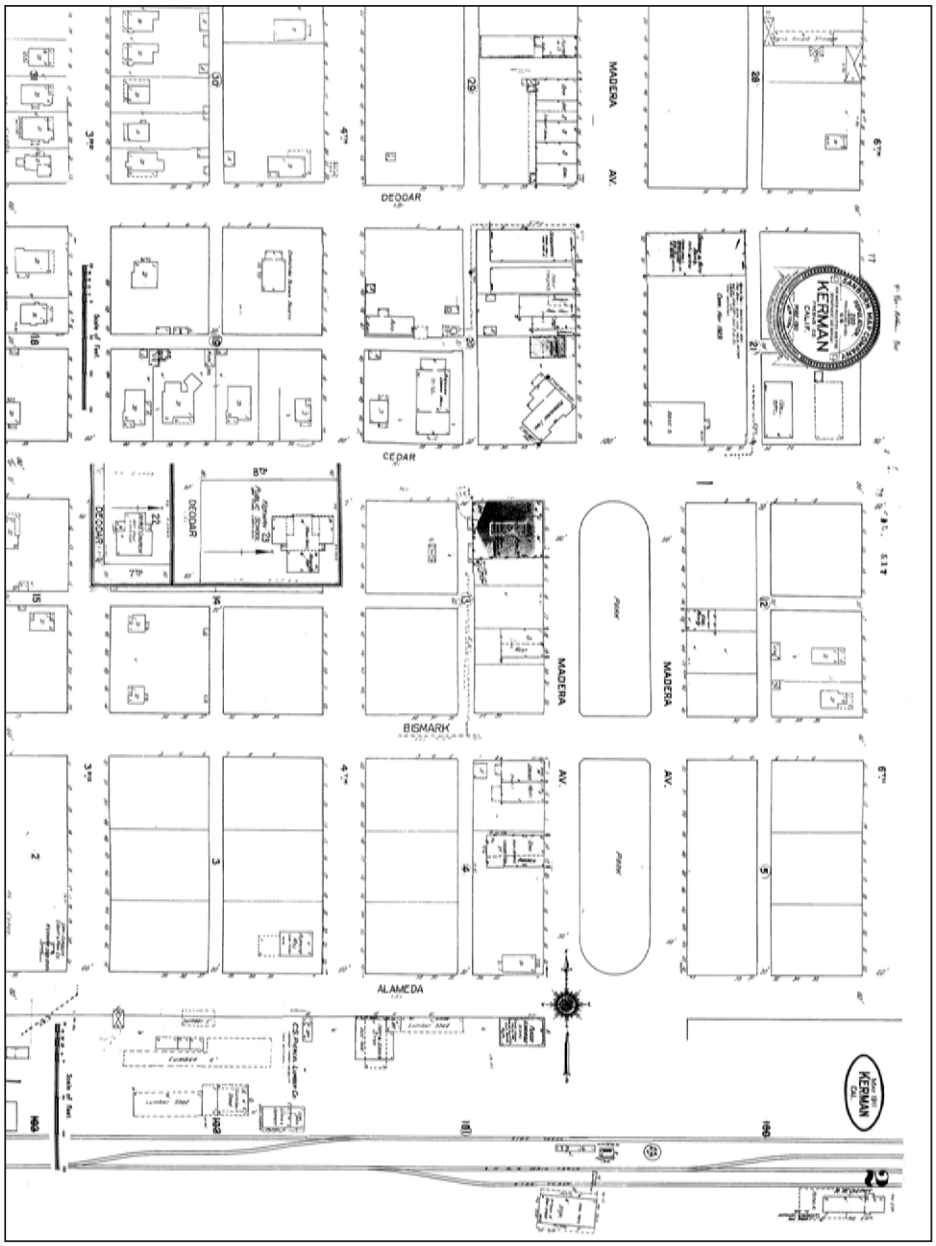
The street includes a wide variety of commercial and service establishments, including restaurants, markets, drug stores, medical and personal offices, and specialty retail stores. At the time of writing, major activity centers included local telecom business Sebastian, at the corner of South Madera Avenue and C Street, and the Kerman United Health Center, along Madera at Kearney Boulevard.

Demographic Background

The population of Kerman is approximately 13,500 people, according to the 2010 Census. Based on 2000 Census data, though the population maintains a relatively even age distribution, the city skews slightly toward younger residents; Kerman's median age was 27 years, with 35% under age 18. The median household income was reported as $31,188, with 20% below the poverty line. Approximately 65% of the community identifies itself as Latino.

Historical Background

Kerman began modestly around 1891 as a simple watering stop on the Southern Pacific Railroad Company's line between Tracy and Fresno. The land was ultimately acquired by Los Angeles-based investors William Kerckoff and Jacob Mansar, who joined names to dub the community "Kerman" in 1906; the small farming town was incorporated in 1946. The City was initially laid out as a series of square blocks south of Kearney Boulevard, with numbered streets (1st through 8th) running north-south and lettered streets (A through G) running east-west; the historic commercial core developed along Madera roughly between C and G Streets, with many buildings dating from the 1940s and 1950s. Historic photos of the street show two travel lanes with head-in diagonal parking during this period, and a vibrant and active commercial district.



Development subsequently spread to the north toward State Route 180 as the City grew, and Madera Avenue was expanded to five lanes. In 1995 the roadway was renovated to include a landscaped central median, new street trees, and traffic management and control elements at multiple intersections.

Top Left: *A Sanborn Map showing downtown Kerman's blocks and building footprints from 1929.* **Above:** *Historic images from downtown Kerman.*

Existing Roadway Characteristics

Today, the South Madera Avenue corridor exhibits a variety of characteristics along its route. The project area's southernmost blocks recall its role as the city's historic downtown center: the street maintains many small-footprint traditional commercial blocks, and also holds important civic spaces including the Plaza Veterans Park and City Hall. Journeying farther north, Madera Avenue's newer urban fabric gradually becomes more auto-oriented, with setback commercial buildings and surface parking lots.

The corridor is thus not a homogenous environment; its character varies widely along its length, based on variations in elements such as building form, treatment of frontage, and vehicular access. It can be divided into a series of four significant context zones. The map on the right indicates the approximate extents of the zones and the pictures on the opposite page are taken from the four different zones.

Within the project area, the typical cross-section of South Madera Avenue measures 100' in width, with sidewalks, a parking lane, two travel lanes in either direction, and a central landscaped median/turn lane.

Auto-Oriented Commercial

The commercial blocks north of San Joaquin Avenue, and in the vicinity of Whitesbridge Avenue, are almost exclusively auto-oriented. Surface parking lots are vast; sidewalk quality is inconsistent, with few shading elements and interruptions by street sign and utility poles, and multiple curb cuts for driveways. This zone should give priority to upgrading basic sidewalk facilities and improving connectivity in a challenging pedestrian environment.

Transitional, Mixed Commercial Area

North of F Street the character transitions from predominantly commercial to a mix of commercial, service, residential, and office uses, and the building pattern becomes gradually more fragmented, with a mix of street-oriented buildings, parking lots, vacant and underutilized properties. The transitional zone continues to approximately San Joaquin Avenue.

Historic Commercial Core

Kerman's historic commercial corridor developed roughly between C Street and G Street. Between C Street and F Street, buildings are predominantly oriented to the street, with pedestrian-scaled commercial shopfronts and entrances.

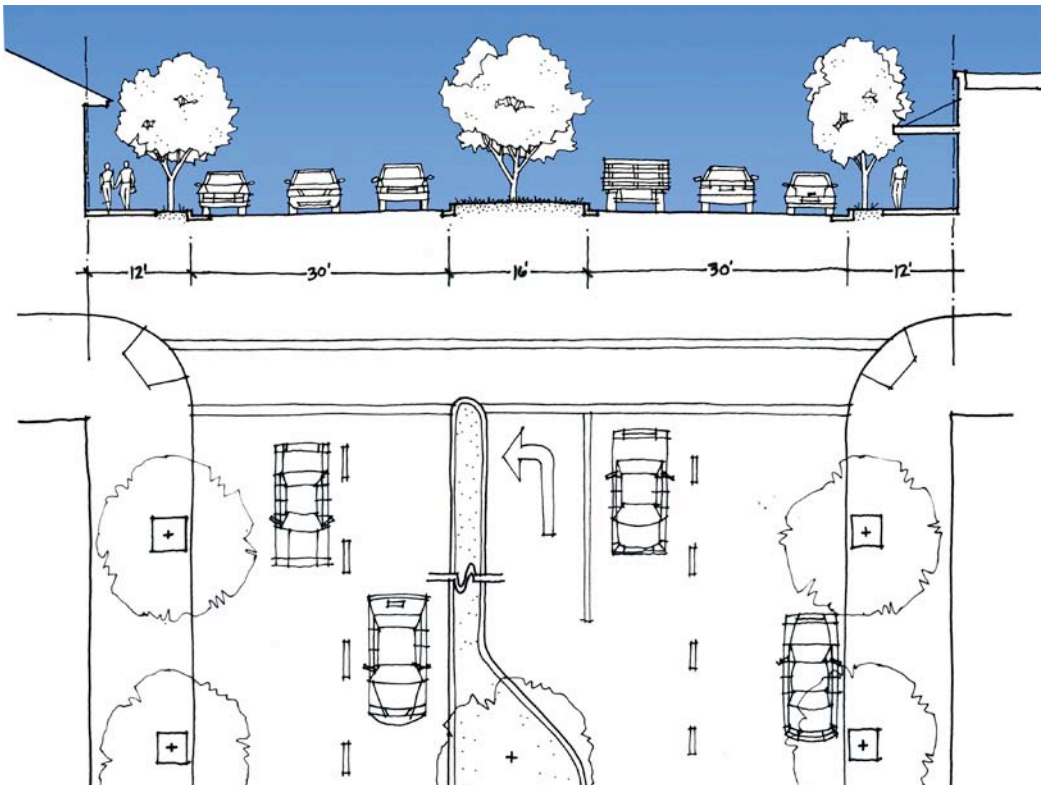
As traffic and use patterns have changed along Madera Avenue over time, many of the existing structures have begun to change their relationship to the street. Some buildings utilize large-scale signage directed toward vehicular patrons, and orient their entrances toward surface parking lots rather than the pedestrian sidewalk. Elsewhere older buildings have been replaced with newer structures set back on their lots behind parking lots. This transitional commercial zone requires a balance between pedestrian safety and amenities, and auto-oriented mobility.

Plaza Veterans Park

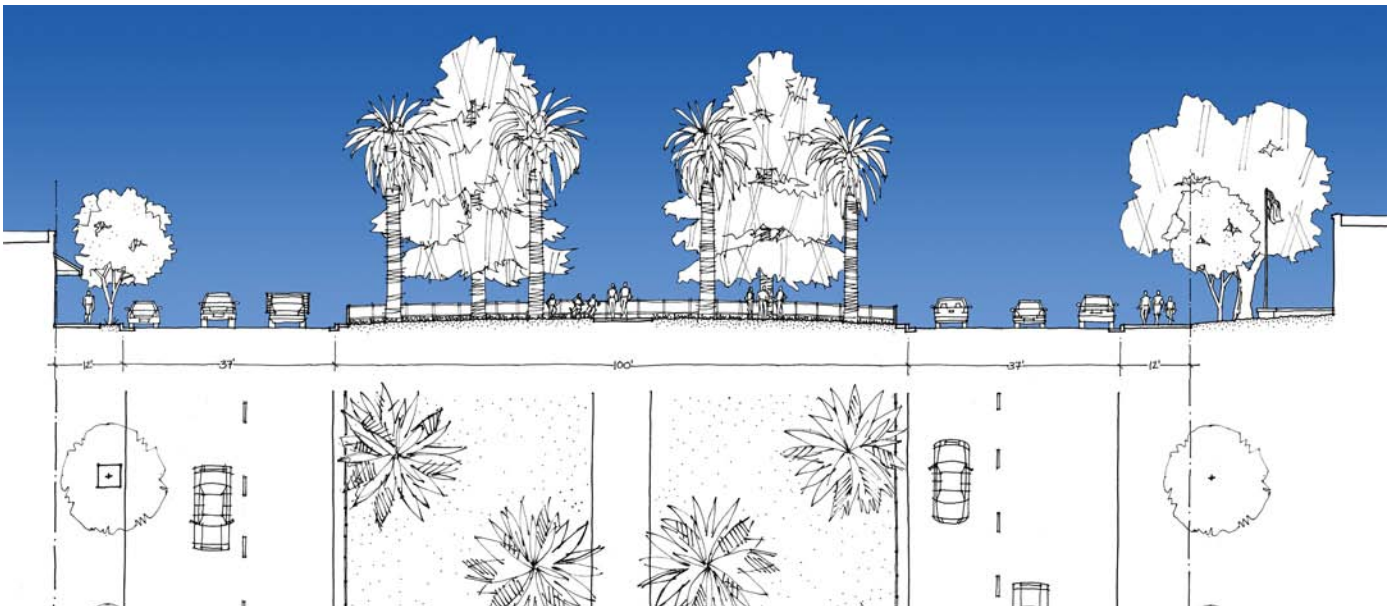
At the southern end of the project area between California/A Street and C Street, the roadway right-of-way measures 200 feet in width, with sidewalks, on-street parking, and two pairs of travel lanes that divide around the 100 foot wide Veterans Park. The size, quality, and centrality of this green space make the park an exceptional community asset and marks an important southern gateway into the community. The area includes important civic institutions and major employment centers. However, the park is not easily accessible for pedestrians, and traffic behavior and speed does not encourage pedestrian activity. The park remains underutilized as a gathering place for the community.

The design proposals described in Chapters 3 and 4 seek to calibrate future streetscape design to the distinct characters and needs of these contextual zones.

Above: *Images of the four different roadway characteristics. Auto-oriented commercial area, Transitional, Mixed Commercial Area, Pedestrian-Oriented Historic Commercial Core, and Plaza Veterans Park (north to south and top to bottom)*



Above: *A typical section through South Madera Avenue shows undefined outside travel lanes which encourage higher speeds and truck usage while inhibiting comfortable use of on-street parking, and small street trees which offer little shading for pedestrians.*



Above: *A section through Plaza Veterans Park illustrates an expansive and exceptional community green space, and its unfortunate inaccessibility as it is surrounded by multiple traffic lanes and consistent fencing.*

Key Issues

Madera Avenue as Main Street

Madera Avenue serves a dual role as a main street through Kerman's historic downtown core and a state highway serving outside commuters, farming and businesses operations. Its physical design currently accommodates a high volume of commuter and truck traffic and relatively high travel speeds.

This design can be incongruent with the community's desire for Madera Avenue to serve as a true main street. Changes to the design of Madera Avenue will be a challenge since this roadway is a designated State Route 145 with oversight by the California Department of Transportation (Caltrans). The city must work closely with Caltrans on design changes that will allow the roadway to serve as a main street consistent with Caltrans "Main Streets: Flexibility in Design & Operations" manual.

The manual provides design exceptions to the highway design standards that may be appropriate when designing state highways that also must function as community's main street. These exceptions include:

> "installing traffic calming devices, lowering speeds, wider sidewalks, roundabouts, and providing other street amenities that provide a feeling that a town's main street is where you want to be".

The "Main Streets: Flexibility in Design & Operations" manual should be a reference source for working with Caltrans on design modifications to Madera Avenue.

Challenging Pedestrian Environment

Today, Madera Avenue is designed as a typical state route based on Caltrans standards consisting of wide pavement expanses with four travel lanes, on-street parking, oversized median, limited pedestrian crossings, signalized intersections, and multiple left turn pockets. The design makes is challenging for pedestrians to comfortably navigate.

The roadway is better designed to accommodate vehicular traffic rather than accommodating movement of pedestrians. Contemporary development, particularly along the northern portion of the corridor has introduced large areas of surface parking and multiple curb cuts along the street's frontage, creating gaps that discourage walkability. The volume and speed of traffic coupled with the limited pedestrian crossings creates potential safety issues for pedestrians along Madera Avenue. For example, pedestrian tend to cross Madera Avenue where no mid-block crossing exists. This is particularly the case at the intersection of San Joaquin and Madera Avenue where school kids cross to patronize the U-Save Mini Mart even though there is no mid-block crossing.

Lack of Pedestrian Amenities

Pedestrian amenities are critical components of a roadway in term of encouraging walkability. Although Madera Avenue does have sidewalks on both sides of the roadway the sidewalk quality is narrow and inconsistent, often disrupted by street signs, posts or curb cuts. Pedestrian-scale lighting is insufficient, particularly on the block surrounding Plaza Veterans Park. There is also a lack of accessible, quality public space along the street such

Above: *An oversized left-turn pocket minimizes median plantings; An empty tree well and light poles interrupt usability of the narrow sidewalk; A long surface parking lot edges a sidewalk; Beautiful Plaza Veterans Park is made inaccessible by fencing and wide surrounding streets.*

as street furniture or strategic areas where the public can sit and socialize or seek haven from the hot summer sun. One area that can serve as a pedestrian destination and vibrant community space is Plaza Veteran's Park; however, the use of this space is limited due to high volume and speed of traffic as well limited crosswalk access points.

Basic Landscaping

Landscaping is a key component of urban form. It adds color, texture and vibrancy to public spaces such as in medians, along sidewalks, planters, and other areas. Madera Avenue has a raised landscaped median that includes mostly turf, redwoods, and crape myrtles with few to no shrubs or ground cover. The landscaping in the median is high maintenance and high water usage due to the large turf areas. During the summer months, the landscaping requires weekly maintenance and extensive use of man power to prepare for maintenance due to the need for lane closure.

In addition, the species and location of street trees along the sidewalks are placed in areas that conflict with awnings/canopies and storefronts. It appears that many of the street trees have been removed due to uprooting of the sidewalk. The tree wells appear to be too small, poorly irrigated and are devoid of decorative tree grates. Trees could also use regular pruning to ensure property growth and aesthetic appeal.

Lack of Cohesive Identity

Although Madera Avenue offers many amenities, the street's current organization does not actively encourage residents and visitors to patronize the City's businesses. On many levels, the street lacks a cohesive identity which could help to make it more attractive and appealing:

- The checkmarked pattern of commercial buildings and vacant spaces creates a fragmented pedestrian environment where residents and visitors might otherwise be encouraged to stroll between destinations.
- The use and application of pedestrian-scaled elements, such as storefront windows, building canopies, and pedestrian-scaled signage is irregular.
- Buildings along the street do not present a cohesive architectural style or theme. While many buildings share a "midcentury modern" design, some have been covered with uninteresting cladding materials, while others are in need of renovation. There are examples of new buildings that have been constructed with good design elements that can serve as a basis for representing a strong sense of identity in the future.
- Parking faces similar issues of organization. Although the parking analysis determined that sufficient on-street parking exists along the corridor, the use is limited because the available parking is not clearly delineated (especially behind buildings), it lacks clear signage, and poor lighting discourages nighttime use. The challenge of parking along Madera Avenue is exacerbated by regular truck traffic, which makes it difficult for residents and visitors to exit and enter vehicles parked along the corridor.
- Street signs and banner formats vary throughout the project area; more coordinated signage could improve the corridor's cohesiveness, and additional signage could help visitors locate important local destinations, such city hall, post office, library, community center, etc. New gateway treatments at both ends of the roadway would also encourage a more cohesive identity for residents and visitors.

Key Opportunities

As Kerman grows and changes, its downtown area should be positioned to serve as a vibrant destination point and the Madera Avenue corridor as a safe and welcoming main street for all users.

Strengthen Madera Avenue as the Community's Main Street

Madera Avenue once provided retail and businesses services to residents and regional visitors in a traditional main street environment, particularly south of G Street. As the City has grown and the vehicle became the dominant mode of transportation, the pattern of development and purchasing habits shifted away form downtown while streets were designed to reflect this new reality by focusing more on the vehicle and less on the pedestrian.

Today, much of the retail and major shopping opportunities have moved northward along the street and extended along Whitesbridge Road. In the future, it will be important to work to maintain the focus on the downtown as an important destination, particularly as commercial opportunities increase in the city and the region.

The development of strategies and policies to encourage businesses downtown will be important to the long-term health of the corridor. The introduction of strategic roadway design elements will also be critical to creating a pedestrian-friendly, cohesive, safe, and welcoming corridor.

Downtown Beautification Strategies

Improving the downtown corridor could includes basic and simple strategies, such as regularly power washing sidewalks, picking up litter, to more extensive and coordinated strategies, such as building façade improvements, holiday related decorations, parades, flowers on the street, murals and other public art.

These and similar type efforts can be coordinated between the City, the Chamber of Commerce and community-based service groups to focus on programs including, but not limited to, Downtown Clean-Up Day to remove graffiti, litter and other debris from sidewalk and alleyways, Adopt a Planter Program to encourage the panting and maintenance of flowers beds or pots that add color along the corridor, Downtown Mural Program to fundraise and fund artist's commissioned murals focusing on the history of downtown and the community, and Thursday Night Farmer's Market at Plaza Veterans' Park in order to showcase local agriculture, draw people to the downtown, and encourage greater community interaction. These and other efforts could help create an inviting and vibrant downtown corridor.

Enhance Streetscape along the Corridor

Generally speaking, the streetscape consists of all elements between the face of the curb and other improvements that exist along the roadway corridor. Frequently, the design of the roadway cross section will have a critical influence on the comfort, safety, and appearance of the street. If streetscapes are comfortable and safe for people, the pedestrian activity along those streets will increase.

The use of proper street trees, lighting, furnishings, paving, and signage are fundamental elements to a functional, inviting, and safe streetscape. Street trees are the main element that provides a variety of character to the streetscape which creates an inviting place to shop in addition to providing shade from the sun, cleaning of the air, and moderating temperature. Lighting not only provides comfort and safety during nighttime hours but it helps create a unity of appearance. Street furnishings add character to the pedestrian experience. Many of these items, such as benches and tables, also provide great opportunities to gather and interact. Other items, such as planters, trash receptacles, ganged newspaper racks, and bicycle racks promote cleanliness and unify the street scene. Brick pavers or stone accented concrete within the walkway and crossings liven up the pedestrian realm and create an inviting atmosphere. Lastly, the proper design and location of wayfinding signage enables people to successfully navigate through the City to public areas, such as City Hall, Library, Community Center, Post Office, by showing their location in relation to their surrounding environment.

Focus on Pedestrian-Friendly Design Elements

An attractive well-designed urban street is the result of a comprehensive design approach that balances the needs of pedestrians, bicyclists and automobiles for safety, security and aesthetics. Re-creating the street and sidewalk as the center of the community life is a critical component of an effective streetscape design. Streetscapes were once the primary places were people of all ages walked, biked, shopped, and ate. The Madera Avenue corridor must be recaptured as the hub or focus of the community where people can walk, shop, and interact. By creating a more active pedestrian

Responding to Context

Madera Avenue is not a homogenous environment but rather a complex place that plays an important role as both a regional route and a local community main street. While older portions hold great potential for a pedestrian-oriented shopping environment, other, newer sections will likely be primarily auto-oriented for quite some time. While the street can certainly benefit from a more unified character and identity, future visioning may desire several solutions for the streetscape in order to sensitively respond to these variations in character and need.

Other Future Design Considerations

A truck bypass that would re-route trucks off of South Madera Avenue was discussed. Further analysis would be required in order to fully explore the feasibility of this idea. This concept would need to be included in the circulation element of the General Plan and would require acceptance by Caltrans and by the community at large.

Overview

This chapter presents and discusses a series of design frameworks for Madera Avenue. These frameworks organize the concepts and initiatives that emerged from analysis and discussions with community stakeholders, and set the overall vision for the corridor. Detailed designs are discussed in Chapters 4 and 5.

The frameworks focus on pedestrian realm improvements; improvements to the bicycle network; traffic calming strategies; gateway and wayfinding strategies; and parking.

These frameworks are interrelated and should not be considered independently when thinking about changes to the corridor.

chapter 3 Corridor Design Frameworks

Pedestrian Realm Improvements

Existing Pedestrian Realm

Madera Avenue is a designated state route by the Caltrans. Its design is based on carrying a high volume of traffic through the region. As a four-lane divided roadway, Madera Avenue has fairly consistent pedestrian amenities, with a uniform 12' wide sidewalk for the length of the project area. However, pedestrians must navigate excessive driveway curb cuts, narrow and occasionally blocked sidewalks, little or no shade in many locations, inadequate lighting, and difficult crossings. There are several recommendations that should be considered in order to create an improved environment for pedestrians. These include:

Curb Extensions

Curb extensions, also known as bulb-outs or neck-downs, extend the sidewalk and curb line into the parking lane, reducing effective street widths and improving safety conditions for pedestrians. Curb extensions can significantly improve pedestrian crossings by:

- reducing the distance of pedestrian crossings and thus pedestrian's exposure to traffic while they cross the street;
- improving sight lines between drivers and pedestrians waiting to cross the street;
- reducing vehicle turning speeds; and
- calming traffic by visually and physically narrowing the roadway.

Curb extensions prevent motorists from parking too close to a crosswalk, which can visually screen pedestrians from traffic, or from parking in a manner that can block a curb ramp or crosswalk. They also improve the public realm by providing adequate space for accessible ramps and crossing infrastructure, as well as additional space for landscaping and streetscape features. Bollards can be incorporated at the end of curb extensions to provide added comfort and safety.

Curb extensions should not extend into travel lanes or bicycle lanes. Typically, curb extensions extend 6-7 feet from the curb (the approximate width of a parked car). The turning needs of larger vehicles and street sweepers, as well as the need to preserve u-turning movements, should be considered in their design, although the presence of on-street bicycle lanes does widen the effective turning radius for vehicles.

Curb extensions can also be used at mid-block locations to benefit pedestrians and to add opportunities for additional landscaping.

Along Madera Avenue, curb extensions should be installed at every major intersection, and at any location where a mid-block crossing is utilized. In locations where u-turn movements should be preserved, the southwest and northeast curb extensions facing Madera Avenue at any intersection may be eliminated in a manner that still maintains a shortened crossing distance in the north-south direction. As the existing Madera Avenue storm drainage system involves primarily only gutter flow with very few inlets, most of the curb extensions on Madera Avenue should be built as concrete "planters" that do not attach to the existing curb, leaving the existing gutter open for drainage.

Above: *Landscaped curb extensions; Curb extensions at a mid-block crossing; a pedestrian refuge within a street median; A bulb-out formed by curbed planters; Colorized crosswalks improve visibility and beautify the street.*

Universally Accessible Curb Ramps

To improve mobility for all and to comply with Americans with Disabilities Act ADA regulations, curb ramps should be installed at every intersection. Where feasible, two per corner at right angles to the curb should be encouraged, rather than having one "diagonal" curb ramp per corner (acceptable but not recommended). Slopes must comply with ADA standards with a maximum slope of 1:12. Curb ramp slopes must be perpendicular to any grade break, and wherever possible should align with the crosswalks for the benefit of the visually impaired. Ramps must also have level landings at any locations where pedestrians must turn in order to use the ramp -- landings must be at least 48 by 48 inches. Ramps must have detectable warning strips (truncated domes) placed in a two-foot wide band behind the normal curb location.

Mid-Block Crossings

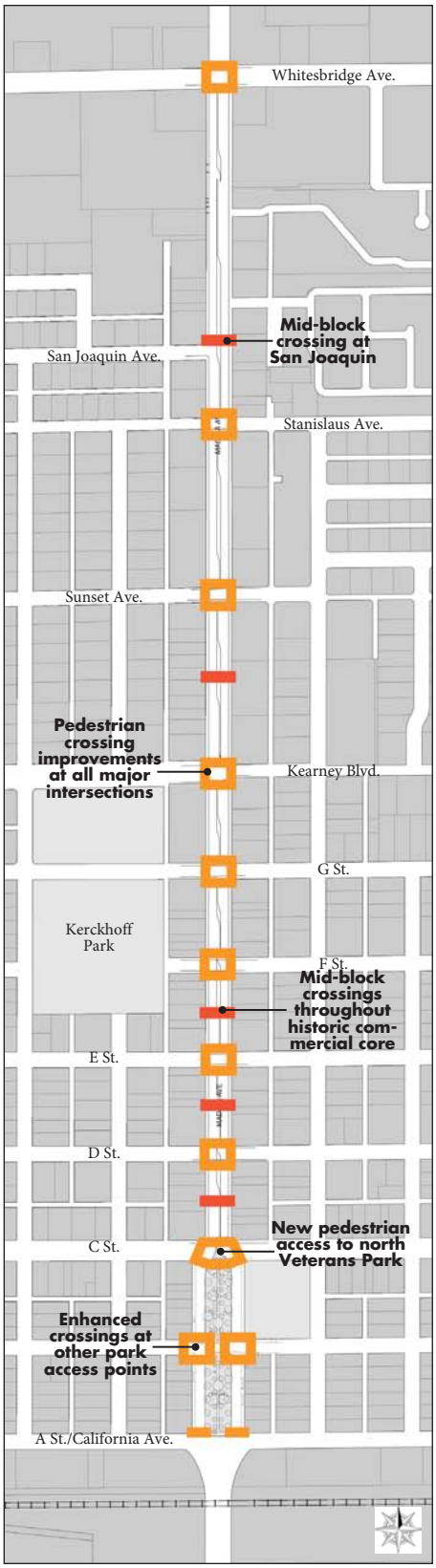
Developing formalized locations for mid-block crossings at unsignalized locations greatly improves pedestrian mobility and safety, and can help to encourage additional window-shopping and economic activity. Conventionally, pedestrians desiring to cross a street mid-block are often forced to choose between walking toward the next major intersection, or hazarding a crossing where drivers do not expect to encounter pedestrians. This is the case along Madera Avenue at San Joaquin Avenue, where students cross between Kerman High School and the U-Save Mini Mart. To accommodate and enhance unsignalized crossings along a wide, medianized street such as Madera Avenue, several treatments may be employed to enable a shorter, protected, and comfortable crossing. As described below, these treatments include pedestrian refuges in the median and high-visibility crosswalk markings.

Raised Medians as Pedestrian Refuges

The safety benefits of curbed medians and roadway channelization for vehicles have been documented in a number of research studies that have demonstrated reduced collision rates on facilities where they are present. Federal research has also shown that raised medians play a role in reducing pedestrian crash rates by about 40% at multi-lane unsignalized crossings (Safety Effects of Marked vs. Unmarked Crosswalks, FHWA, 2005). Crosswalks that cut through the median's raised curb promote pedestrian safety and comfort by giving pedestrians the opportunity to cross one direction of vehicular traffic at a time.

Madera Avenue's current median already promotes the potential for safer, convenient mid-block crossings, and is wide enough to provide a safe refuge for a bicycle or a person pushing a stroller. Within the historic downtown core, mid-block or unsignalized crossings should be implemented as often as each block in order to promote pedestrian crossings between businesses. North of Kearney Boulevard, additional unsignalized crossings should be considered to minimize distances between intersections, including a crossing at San Joaquin Avenue.

A walkway cut through the median should be a minimum of 6' wide to accommodate persons in wheelchairs and allow pedestrians to pass each other or walk comfortably side by side. Detectable warning surfaces (truncated domes) should be provided on both approaches. The ends of the walkway should be aligned with marked crosswalks and provide an accessible route of travel (per current accessibility guidelines).



High-Visibility Crosswalk Markings

High-visibility markings signal to motorists that they should be aware of the potential presence of individuals in the roadway. Every crosswalk across Madera Avenue should have longitudinal markings, which have greater visibility than the simple parallel lines. The markings should be 2 feet wide, a minimum of 10 feet long, and spaced to avoid the wheel paths of vehicles to provide a longer maintenance cycle.

Alternative Paving Treatments for Pedestrian Crossings

Special crosswalks with enhanced markings can be used to increase the visibility of the crosswalk on uncontrolled approaches to unsignalized intersections, at mid-block crossings and in pedestrian-intensive areas. This may consist of pavers or other textured crosswalk treatments, raised crosswalks, passively activated in-pavement lighting, or uniquely designed markings. These treatments may be used to define the historic Madera commercial corridor between California Street and Kearney Boulevard. Care should be given to make sure that pavers or other crosswalk treatments are smooth and level to allow for passage by someone in a wheelchair

Advance Yield Lines

On multi-lane roadways, many crashes involving pedestrians at marked crosswalks are the "multiple threat" crash type. These crashes occur when a driver in the first lane stops for the pedestrian but stops in close proximity to the crosswalk, reducing the sight lines between the pedestrian and drivers in the next lane. By placing a yield line and accompanying sign in advance of the crosswalk, the sight lines are opened up for pedestrians, and the chance of a crash is reduced. Advance yield lines should always be used at any unsignalized mid-block crosswalk with more than one lane in each direction. In addition, advance yield lines are recommended at marked crosswalks at unsignalized intersections if the lines can be placed at the intersection in a manner that does not create potential for driver confusion.

Pedestrian-Scale Lighting

Good outdoor lighting can create and encourage a pedestrian friendly environment, which is especially beneficial to business districts. Pedestrian-scale lights improve walkway illumination for pedestrian traffic and enhance community safety and business exposure. Typically, this lighting is positioned over the sidewalk, rather than the street, at about 12 to 15 feet above the sidewalk. Frequent lampposts at lower height with good illumination work best where there is high pedestrian activity.

Existing lighting along Madera Avenue serves to illuminate the roadway rather than the pedestrian realm. This discourages people from using the sidewalks during the evening hours. Poor pedestrian lighting is even more pronounced along both sides of Plaza Veteran's Park south of E Street.

Pedestrian-scale lighting and motor vehicle-scale lighting each should be provided as a complement to the other to ensure that both sidewalks and travel lanes are effectively illuminated.

Above: *Illustration of landscaped curb extensions at a potential mid-block crossing to facilitate regular student crossings at San Joaquin and Madera Avenues.* ***Left (Top to Bottom):*** *A pedestrian refuge within a street median with the crosswalk angled through the median to force the pedestrian to look in the direction of oncoming traffic; Inviting landscaping in a median's mid-block pedestrian refuge; High-visibility striping and bulb-outs at a mid-block crossing support circulation in a main-street commercial environment; pedestrian-scaled lighting.*

Other Improvements

Pedestrian-Friendly Signal Timing: At a minimum, signal timing should allow an average person to cross intersections at a reasonable walking speed of at least 3.5 feet per second. In addition, youth, elderly, and people with disabilities take longer than others to cross the street. Where appropriate, pedestrian crossing time should take the needs of these persons into consideration. Beyond these basic considerations, signals can be programmed with leading pedestrian intervals or pedestrian head starts, which provide pedestrians a "walk" two to three seconds in advance of the green vehicular movement, allowing pedestrians to establish a presence in the crosswalk before vehicles are allowed to turn.

Countdown Pedestrian Signals: Safety may be improved at signalized intersections by enhancing traffic signal equipment and/or providing more information to travelers. Countdown pedestrian signals – which are now required for all pedestrian signals – can be effective in communicating how much time is left to cross the street. By keeping the pedestrian informed, these devices result in fewer pedestrians remaining in the intersection at the end of the pedestrian clearance interval, and improve safety for all users of the roadway.

Traffic Calming

Many of the following initiatives focus on creating a safer pedestrian and bicycle network along the corridor. Calming traffic along Madera Avenue, including reducing travel speeds and modifying driver behavior in the vicinity of intersections, can help to make the area more appealing for pedestrians. Techniques to discuss include reducing lane widths, innovative intersection controls such as roundabouts, and road diets.

Lane Width Reduction

Reduction of lane width is a commonly used tool for reducing traffic speeds and preserving public right-of-way for other uses. Information published by the Federal Highway Administration in *Mitigation Strategies for Design Exceptions*, July 2007, shows that a reduction in lane width from 12 feet to 11 feet on a two-lane highway results in an average decrease in free-flow speed ranging between 0.4 to 4.7 miles per hour, depending on the width of the shoulder. In addition, this publication cites research that has found little difference in average collision rates for streets that have 11-foot travel lanes as compared to streets with 12-foot travel lanes. In *Traffic Calming – State of the Practice*, published by the Institute of Transportation Engineers in association with the FHWA, narrowed road widths are identified as a traffic calming method to reduce the free-flow speed of traffic.

The American Association of State Highway and Transportation Officials (AASHTO), in the publication *A Policy on Geometric Design of Highways and Streets*, 2004, states that lane widths generally range from nine to twelve feet with twelve feet being the prevailing standard width nationwide. AASHTO further states that lane widths of eleven feet are acceptable in urban areas where pedestrian, right-of-way or existing development constrains twelve-foot lanes. While the Caltrans Highway Design Manual (HDM) indicates that travel lane widths shall be 12 feet wide, the Caltrans publication *Main Streets: Flexibility in Design and Operations*, 2005, indicates that there are some instances when Caltrans will approve design exceptions for lane widths narrower than the standard 12 feet. Additionally, the draft Caltrans Highway Design Manual revisions released earlier this year allow for 11 foot lanes on streets posted at less than 40 mph with daily truck volumes less than 250 per lane.

Currently, lanes along Madera Avenue are striped at approximately 11.5 feet wide, although the outer travel lane appears to be far wider as it flows freely into the unmarked parking lane that is rarely used on many blocks.

Reduced lane widths combined with other traffic calming features may encourage slower speeds, which is desirable for a main street. Where existing right of way is limited, reducing lane widths can help to provide adequate shoulder width for bike lanes and sidewalks.

A key consideration for narrowed lane widths on corridors that experience frequent truck or recreational vehicle traffic is the provision of adjacent roadway spaces. On these corridors, it is desirable for some type of "buffer" to exist between the 11-foot wide lanes and opposing traffic and on-street parking. This can be accomplished by striping a one-foot offset from adjacent vertical curbs, providing a center two-way left-turn lane, or

providing an on-street bicycle lane. While large vehicles by law are limited to 8.5 feet in width and would not be expected to actively travel in these buffer areas, the separation helps to accommodate large vehicle turning movements and oversize loads.

The use of 11-foot wide travel lanes on Madera Avenue in Kerman would be expected to have little impact on large vehicles, other than a potential decrease in speeds as drivers adjust to the roadway conditions. The 11-foot wide lanes would still accommodate truck maneuverability, even for oversize loads, as they would be flanked by a center turn lane and an on-street bicycle lane or buffer.

Road Diets

During the design workshop the consultant team discussed the potential for reducing the number of general use traffic lanes along portions of the Madera Avenue corridor, in order to increase vehicular safety; provide more space, safety, and comfort for pedestrians and bicyclists; and to create a more economically friendly environment. Practitioners generally refer to such a reduction as a "Road Diet."

These conversions have been used by communities throughout the U.S. to address traffic safety, accessibility and bicycle facilities. Typically, road diets are associated with the conversion of streets from four lanes (two through lanes in each direction) to three lanes, (one through lane in each direction, and a center two-way left-turn lane, or median with turning pockets); though they can take other forms depending on the existing roadway configuration. Road diets in downtown corridors often result in an environment that is safer and friendlier to drivers, bicyclists, and pedestrians. The slowing of vehicular traffic generally results in a reduction in collisions and an increased comfort level for pedestrians and bicyclists. The reduction in lanes also provides enough room to add bicycle lanes.

Despite the decrease in travel lanes, road diets can often result in improved vehicle operations by allowing the provision of roundabouts, dedicated turn lanes, or customized signal timing to make intersections operate more efficiently. At the same time, road diets may increase the availability of on-street parking, and make off-street parking easier to access.

The combination of increased safety, efficiency and user comfort has also been seen to have a positive impact on businesses located along road diet corridors. Case studies have shown that downtown corridors that undergo a road diet generally experience an increase in sales and property values while experiencing a decrease in vacancy rates. This is often attributed to the fact that after the implementation of a road diet, it is easier for drivers and bicyclists to access businesses; since pedestrians feel more comfortable, they are more likely to visit multiple businesses during one trip.

Reducing the number of lanes along Madera Avenue would likely have similar positive impacts, and may allow additional room for other potential amenities discussed during the workshop, such as Class II bicycle facilities, more generous planting zones for canopy street trees, and additional public space for pedestrians.

Above: *La Jolla Boulevard in the Bird Rock neighborhood of San Diego was improved through a road diet with several roundabouts. Since then the area has seen private investment and increased pedestrian activity.*

Roundabouts

Changes to the physical character of the roadway will invariably have an impact on traffic flow along the corridor, in particular if a road diet is implemented. The design team discussed roundabouts as an innovative solution to improve key intersections and improve overall traffic flow along the corridor, particularly if a road diet is pursued.

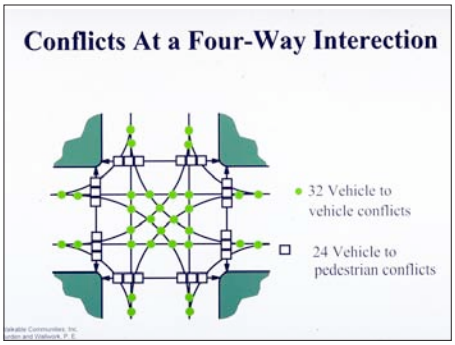
Roundabouts are still new in the U.S. and many communities express concern when they are first proposed. However, once built, residents often embrace them and recognize that they are safer, quieter, more attractive and more efficient than signalized intersections. While traffic engineers often recommend roundabouts because they are more efficient than a typical stop-controlled or signalized intersection, the lower speeds and more predictable vehicular movement also make them safer for pedestrians and bicyclists.

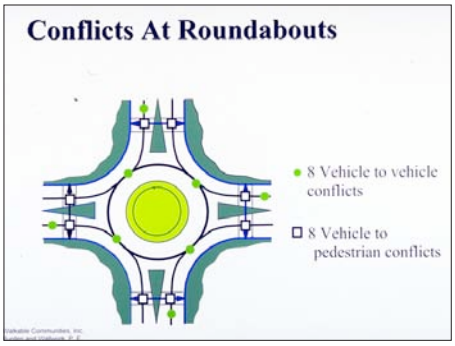
At the time of writing, Caltrans was considering installation of a roundabout at the Madera Avenue/SR 145 and Jensen Avenue intersection, approximately 1 mile south of the project area. If implemented, this roundabout will invariably influence local knowledge of and comfort with roundabouts, and may even impact the behavior of drivers entering Kerman from the south.

Additional benefits of roundabouts that should be considered include:

- A typical 4-way intersection, may have as many as 32 vehicle-to-vehicle conflicts. A typical roundabout would reduce these conflicts to 8. Properly designed roundabouts are designed to bring vehicle speeds down to 15-20 mph, speeds at which motorists are much more likely to yield to pedestrians. The splitter island in a roundabout provides a refuge for pedestrians as they cross the street and simplifies the crossing by letting them focus on vehicles traveling in only one direction.
- Because roundabouts are more efficient at moving traffic it is often possible to use a one-lane roundabout as a viable alternative to a conventional intersection with four or more lanes. While the existing Madera Avenue cross section requires pedestrians to cross as much as 76 feet, a one-lane roundabout could break the pedestrian crossing into as little as two, 12-14 foot legs.
- Roundabouts also work well for bicyclists. Most bicyclists at roundabouts simply take the travel lane since vehicles are circulating at a comfortable bicycle speed. . On high-volume roundabouts, particularly those with multiple lanes, less confident bicyclists can be provided a ramp on the approach to the roundabout so they can exit and walk their bicycle across at the crosswalk.
- Roundabouts can be designed for long or wide vehicles (such as emergency vehicles, buses, and wide-load or extended bed trucks) with a mountable truck apron to allow space for wheels or equipment to pass over for turning movements.

Along Madera Avenue, a roundabout should be considered at the Kearney Boulevard intersection to replace the existing traffic signal. This roundabout can be built large enough to accommodate full-size tractor-trailer vehicles, including turning movements. Preliminary traffic modeling and analysis suggests that this intersection can function at an improved level of service with a roundabout, even with a reduction in the total number of travel lanes (a road diet). A roundabout may also be considered at the E Street intersection. Right-of-way is somewhat constrained at E Street, so this round-





Above: *Urban single-lane roundabout; Diagrams (courtesy Dan Burden) illustrate typical conflicts at conventional four-way intersections and single-lane roundabouts; A wide, dangerously undefined intersection at California Ave.*

about would need to have a smaller diameter, which would allow through movements by tractor-trailer vehicles, but left turns would be restricted to single unit trucks.

Other Intersection Improvements

The City should consider additional improvements at key intersections to improve traffic flow and improve access and safety for pedestrians, including the following:

South of Veteran's Park (Madera Avenue at A Street/California Street): This intersection can benefit from the installation of a median south of the park, and channelization and realignment of the lanes to help motorists stay within the appropriate travel lane. This can be accomplished by using curvature that is appropriate for the posted travel speed of the street. Changing the geometry of the corners at the end of the park will reduce pedestrian crossing distance and further reduce the sea of asphalt that exists today.

If a road diet is pursued on Madera Avenue, further narrowing of the roadway is possible, including the provision of a buffered sidewalk along both sides of the park, which would allow the fence around the park to be removed, providing better access to this underutilized park.

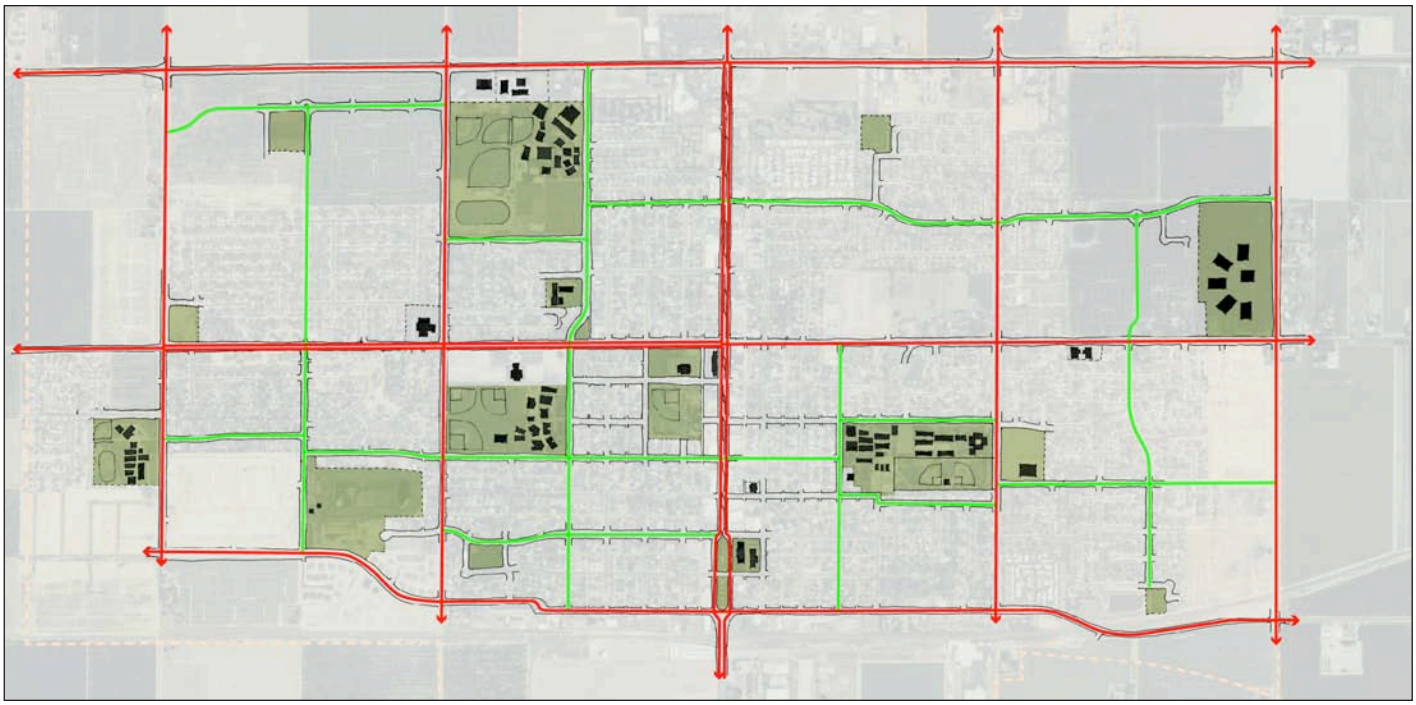
North of Veteran's Park (Madera Avenue at C Street): The design includes curb extensions and revisions to the median at the north end of the park. The narrowed roadway allows for crosswalks to the north end of the park, and a true pedestrian refuge at for the crosswalk on the north side of C Street.

If a road diet is pursued on Madera, the median refuge at C Street can be even wider, allowing for easier crossings to the park. The narrower roadway would allows a simple 1-lane crossing from City Hall to the park, and would provide space for a buffered sidewalk as described earlier.

Turn Pocket Reductions

The left turn pockets in the median on Madera Avenue are designed in an attempt to meet Caltrans HDM standards for deceleration and storage. In an urban setting where prevailing speeds are lower, drivers expect other vehicles to regularly slow down for many reasons, including left and right turn movements, yielding to pedestrians, making parking maneuvers, etc. Full length deceleration lanes are not as important in these situations. Based on appropriate urban speeds and driver expectation, a total length for turn pockets on Madera Avenue is recommended to be approximately 180 feet, from the beginning of the taper to the limit line. At major intersections, turn pockets may need to be slightly longer. The following turn pockets are recommended to be shortened, in order to provide additional space for landscaping:

- Southbound at C Street
- Southbound at Stanislaus Avenue
- Northbound for turning into the shopping center at Whitesbridge Avenue



Bicycle Network

An expansive bicycle network, in addition to supporting an effective open space network, is beneficial in providing safe, healthy, and sustainable options for travel throughout the entire community. The east-west streets that pass through the project area connect the Madera Avenue corridor to important sites throughout the city. Connections should be developed and improved between important community destinations such as schools, parks, civic and institutional facilities, residential neighborhoods, and commercial services. Kerman's Bicycle Master Plan proposes Class II routes (on-street bicycle lanes) along the city's half-mile street grid. The workshop design team also explored opportunities to expand this network by introducing further Class III bicycle facilities (shared bicycle routes) that extend into neighborhoods and offer direct connections to major community spaces. Several streetscape designs also demonstrate the opportunity for bicycle facilities to be incorporated along Madera Avenue itself.

Above: *Proposed Class II bicycle routes (red), and proposed Class III bicycle and pedestrian connections (green); A lack of on-street bicycle facilities often leads to conflicts between bicyclists and pedestrians on sidewalks.*

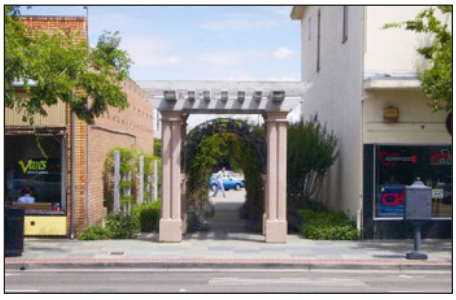
Landscaping and Frontage

With regards to landscaping and greening, public space amenities along Madera Avenue can be improved in three major ways. First, the landscaping in the median can be improved to remove large turf areas, add more shade trees, shrubs, and ground cover. Second, street tree planting should be improved along sidewalks. Thirdly, the City should work with private landowners to improve vacant and/or underutilized land fronting the roadway.

Landscaped Median

Madera Avenue features an existing raised median with sufficient width to provide ample landscaping. The current landscaping consists mostly of turf area with a variety of trees interspersed and little to no shrubs or groundcover. The turf area is high maintenance resulting in high water demand. Because Madera Avenue is a state route, the City must pull an encroachment permit from Caltrans and use most of its available crews to shut the inside lane for maintenance every week during the summer months.

The landscaping in the median should be redone with the goal of reducing maintenance time and introducing drought tolerant trees and plants to create an attractive and unified landscape theme along the corridor. The use of palms can be incorporated at the nose of the medians to be consistent with palm tree theme used in the City's logo. A variety of shrubs and ground cover can be used to add texture and color to the median. A 24" inch maintenance adobe red stamped concrete curbing can be included along the border of the median similar to the recently installed median in Kearney Boulevard.



Top Left: *A "landscape zone" beautifully conceals a surface parking lot.* ***Above:*** *Pedestrian signage and street furniture invites passers-by; Small empty lots along Madera Avenue could be converted into gardens or other small public spaces.*

Street Trees

Landscaping is an important component of a pedestrian-oriented streetscape. When properly designed, plantings along a street corridor add warmth to an otherwise totally hardscaped space; and street trees both provide shade and add a sense of enclosure to the sidewalk. Along Madera Avenue, the design team observed several potential issues with street trees, including the following:

- Small trees have been planted in many locations that are not able to provide shade due to their size and species;
- Trees in many locations come into conflict with building canopies that extend over the right-of-way due to their planting location and the width of the sidewalk;
- Trees result in uneven or cracked sidewalks, due to inadequately sized tree wells and perhaps ineffective root barriers;
- Tree wells have not been properly covered with tree well covers.

Street trees should be selected and placed to maximize a continuous, verdant shade canopy for pedestrians. In order for trees to grow to a substantial size they will typically require a tree well at least 6' wide and 5' deep and will require space and periodic pruning to ensure minimal conflict with building facades as they grow taller. Where curb extensions are implemented, larger street trees can be planted with a broader tree well, further away from building facades. Care should be taken to choose deep-rooted tree species that are tolerant of root pruning, such as sycamore (*platanus occidentalis*), and in any case, should be installed with a minimum 18" deep "surround" style root barrier to minimize sidewalk heaving and cracking.

Top Left: *Great canopy trees at Kerman City Hall.* ***Above:*** *Example of a thoughtful balance of hardscaping and landscaping, adding interest to a sidewalk; Shady street trees and regular landscaping create a welcoming pedestrian realm; a planted median.*

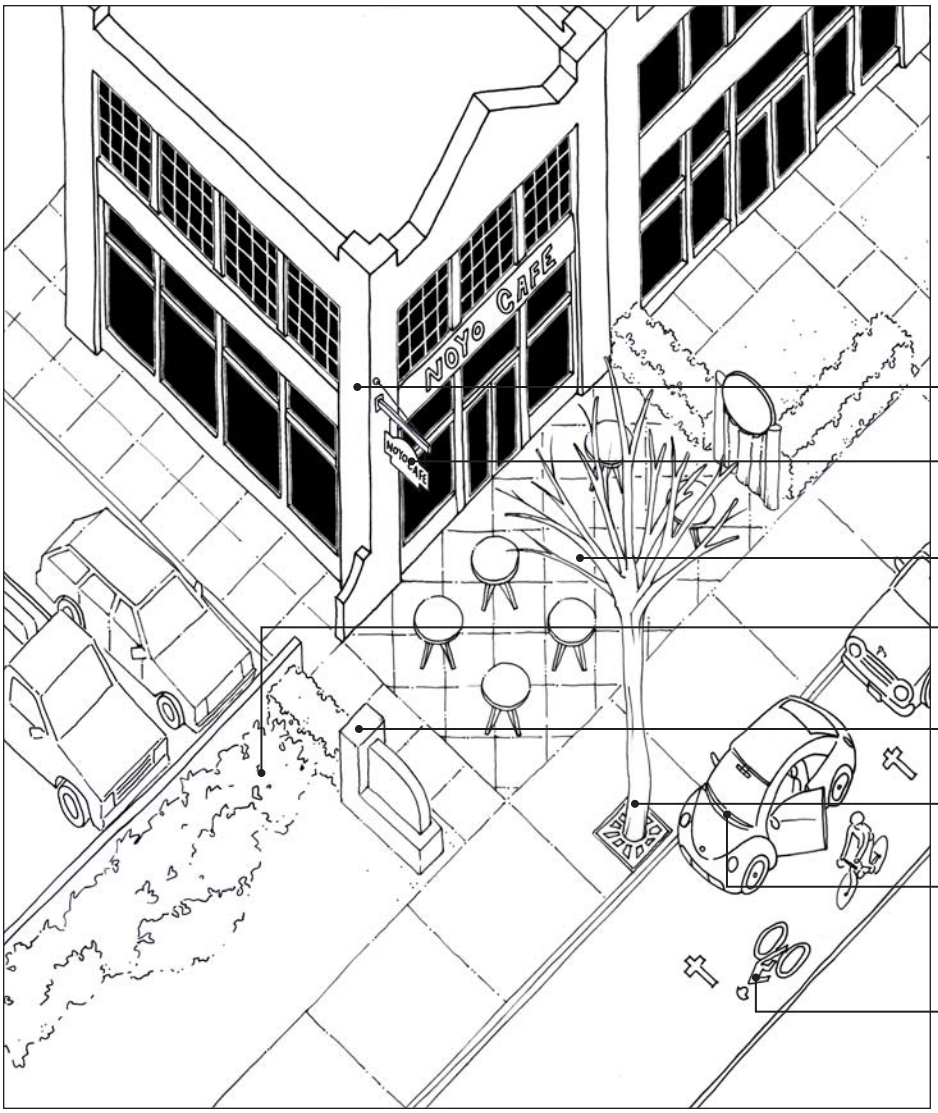
Private Frontage Improvements

Creating a good, walkable community goes beyond establishing continuous pedestrian amenities such as sidewalks and safe crossings; the nature and character of buildings, and the way they orient to the street, is also important. Buildings oriented to the street create the sense of a more "enclosed" and comfortable space for walking, and offer visual interest that may encourage pedestrians to further explore the street.

Currently, many buildings along Madera Avenue do not contribute to a comfortable walking environment, with large expanses of surface parking facing the street. In the short term, basic public realm improvements should be supplemented by initiatives for regular landscaping, pedestrian-scaled signage and lighting, and improvements to building facades.

Implementation of a "landscape and frontage zone" along the corridor should be considered. Private property owners could be encouraged to establish this zone within the front 5'-10' of their properties where a concerted effort could be made to remove or soften impermeable surfaces, introduce aesthetically pleasing screening (such as low walls or fences), landscaping (such as hedges and climbing vines), pedestrian-scaled signage, and pedestrian amenities (such as additional lighting and seating). Businesses such as restaurants could utilize this space for outdoor seating. Improvements could also encourage the closing of extraneous driveways and curb cuts.

In the short term, this work could be incentivized in the same way as a façade improvement program. In the long term, new buildings should be built with placement, form, and orientation requirements that help to encourage a better pedestrian environment.



Left: *Concepts for ideal walkable frontage.*

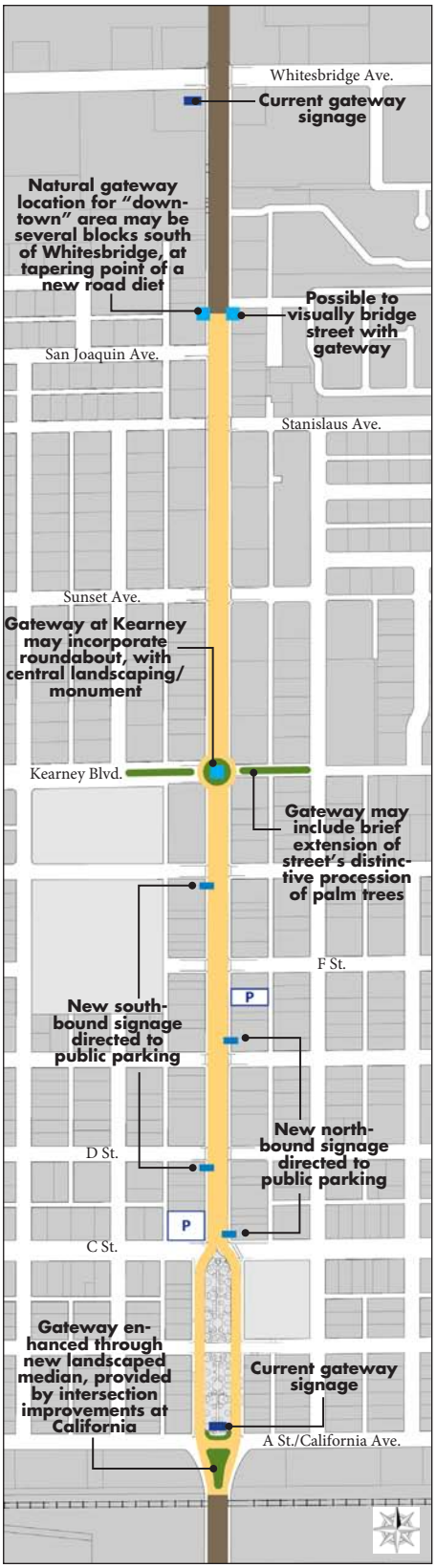
Gateways and Wayfinding

Madera Avenue provides an important entry route into the City and hence a "first impression" of the community for many visitors. Improvements to public and private-realm elements within the project area should be coordinated to present a high-quality, well-designed environment. The study area also provides many opportunities to provide visual gateways at transition points along the corridor.

Entering the City from the south, the vibrant green of Plaza Veterans Park provides a natural opportunity to welcome highway-bound visitors and suggest that the corridor is transitioning to a different character. A proposed road diet surrounding the Park may similarly encourage slower speeds, allow the historic Kerman sign to become far more visible to drivers, and welcome travelers into the central portion of the community. It would also provide additional space for landscaping to frame the gateway.

The transition from rural highway to community downtown is more ambiguous as one approaches Kerman from the north. A gateway sign currently welcomes visitors at the intersection of Madera and Whitesbridge Avenues, yet its location on the corner of a Carl's Jr. parking lot detracts from its visibility and effectiveness. Any gateway elements in this area may face the risk of being visually lost amidst the auto-oriented commercial parking lots and major directory signage. A compelling alternative for welcoming southbound traffic may be to implement a well-designed gateway element, a few blocks beyond Whitesbridge as one enters the transitional commercial zone. This option may be more visually effective, and perhaps be a truer "gateway" location for entrance into Kerman's primary community corridor.

One further primary gateway opportunity to consider is Madera Avenue's intersection at Kearney Blvd. Kearney is a significant and historic east-west connection that provides an elegant palm-lined route directly to Fresno. This intersection may be an ideal location for a roundabout, allowing traffic to flow smoothly and slowly through the intersection while also offering space for highly visible coordinated gateway landscaping and signage at the roundabout's center, and completing the Kearney Boulevard concept between Fresno and Kerman.



Signage and Wayfinding

Signage was also discussed as a design element in need of improvement. Improvements to public signage may increase orientation and wayfinding in the area, and assist in connecting visitors traveling along Madera Avenue to important community destinations, such as local parks and downtown amenities, as well as public parking lots. If possible, signs should be clustered together on the same monument to avoid visual clutter of multiple poles and signs along the street, and should be located in visible locations where pedestrian activity occurs. Greater consistency in the city's street banners may also present a more cohesive community identity to visitors. New signs should include directional signing to carefully-placed, off-street parking lots available to downtown patrons.

Workshop discussions also considered changes to the existing standards regulating private signs, including the promotion of more pedestrian scale and quality signage. Appropriate regulations can ensure that standards of signage and landscaping are consistent across Kerman and done so within the community's traditional character.

Above: *Kerman's current signage at north- and southbound gateways; Example of a street-scaled gateway feature; Example of appealing wayfinding signage.*

Parking

More than a thoroughfare for traffic passing through Kerman, Madera Avenue is a place of commercial exchange and social interaction. By providing access to people, places and services, parking is a key element of the streetscape and the economic and social functionality of Madera Avenue. Available parking in off-street lots located behind, to the side of, and sometimes in front of local businesses, and on-street parking along Madera Avenue and its cross streets, provide a means of automobile access to businesses, services, parks, and other public spaces up and down Madera Avenue. Other principal modes of access to destinations along Madera include bicycling, walking, ridesharing, and public transportation.

When planning changes to the streetscape and parking supply, it is important to note that many employees and patrons of establishments on Madera Avenue use more than one mode of transportation to access their destination. Every person arriving in the district, whether by car, bicycle, or bus, must walk at least part of the way to their final destination, whether that means walking from home, from where they park their vehicle or bicycle, or the location where they get off the bus. Moreover, as in many healthy main street districts, pedestrians who shop at one store often walk to or stop and shop at other retail establishments and/or utilize other public services in the vicinity on the way.

The key to managing parking in a way that supports the businesses and activities along Madera Avenue is to ensure that as the corridor and the City continue to grow, it is always easy to find a parking space on each block, within easy walking distance of every establishment.

Existing Conditions: Inventory and Availability

A field study of the corridor confirmed that parking is widely available on-street and off-street within one block of Madera Avenue during periods of time that typically reflect periods of peak demand. The full parking survey can be found in the in the appendix. Observations noted that:

- Consistent with the findings of the parking surveys, parking is widely available on-street, directly in front of most business establishments – even during midday on weekdays – which are typically periods of peak demand.
- For all but a few establishments, off-street parking was also widely available when observed in person.
- Parking is widely available on cross-streets of Madera Avenue.
- Many customers were observed walking from one shop to another, after parking once on-street or in a nearby off-street lot.

The most significant concern related to parking expressed by stakeholders was the safety of parallel parking along stretches of Madera Avenue where trucks and high speed traffic commonly use the adjacent lane. This concern is addressed by all of the streetscape alternatives presented in this plan, which provide sufficient right of way for curbside parking and through movements, and which include traffic calming measures which can be expected to prevent speeding in the corridor.

Above: *Fast traffic in undefined outer lanes inhibits on-street parking; Without off-street parking requirements, underutilized spaces could become lively outdoor dining areas; Improved signage could aid use of existing public parking.*

Above: *Without requirements for off-street parking, businesses' underutilized surface parking spaces could be converted into lively spaces for outdoor seating. The sketch above illustrates La Ramada's front parking stalls converted into a small garden for outdoor dining; the adjacent lot is softened by a landscaping zone and opened for public parking usage.*

Future Needs and Recommendations

Even with selective development on vacant lots and significant changes to the streetscape, such as installing curb extensions at intersections and new mid-block pedestrian crossings, the design team found that the supply of on-street and off-street parking in the corridor would be sufficient to accommodate new commercial development in the corridor without construction of new off-street parking facilities.

Based on the analysis of existing conditions and future needs in the corridor, the following overarching recommendations were established:

- Consider back-in angled parking on Madera Ave and on cross streets within one block of Madera Ave. Back-in angled parking spaces are arranged in an angled pattern, similar to head-in angled parking, but drivers back in to the space instead of head-in. This improves safety for all travelers by allowing drivers to see oncoming traffic when they pull out. Back-in angled parking also increases front door parking for businesses by between 20% and 70% compared to parallel parking.
- Accommodate new development with no requirement for new off-street parking.
- Incentivize conversion of underutilized off-street parking to unpaved green space, particularly along highly-visible sidewalk frontage.
- Negotiate to establish a public lot south of La Ramada.
- Require any new off-street parking to be located behind buildings (alley access).
- Manage on-street parking, implementing time limits and appropriate enforcement where necessary to ensure availability as Madera Avenue grows.

Above: *Cones block central lanes during routine maintenance of the median, demonstrating Madera Avenue's comfortable functionality as a two-lane thoroughfare.*

Overview

During the workshop, the design team explored two principal alternatives for future improvements to Madera Avenue's streetscape:

1. Maintaining the four-travel-lane section, and simply supplementing the current street structure with improvements for pedestrian safety, connectivity, and comfort, such as curb extensions and an expanded and improved crosswalk network.
2. Reducing the cross-section from four lanes (plus turn lanes/median) to two lanes (plus turn lanes/median), in addition to the baseline improvements to the pedestrian realm along the corridor. This "road diet" approach could be achieved through two primary means:
   - Utilizing low-cost solutions primarily involving re-striping travel lanes; or
   - Seeking more substantial streetscape solutions in long-term community visioning, including reconstruction and expansion of either the median or sidewalk.

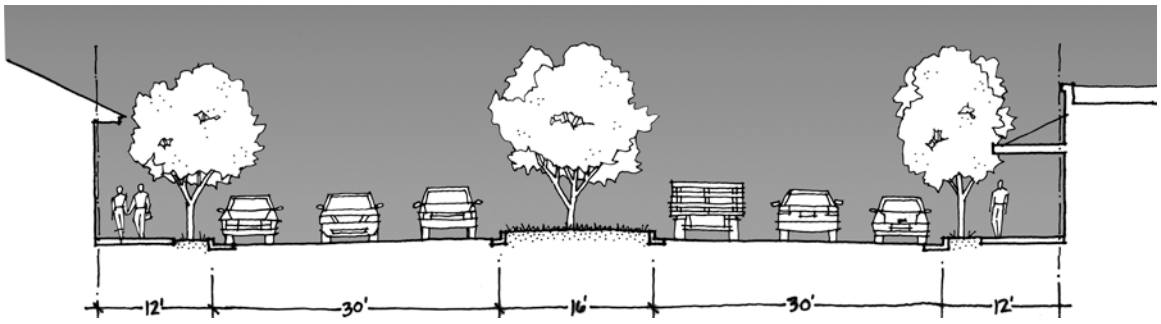
"Preferred" Strategy: Maintain Four-Lane Cross Section

The "preferred" alternative keeps the same fundamental five-lane structure of Madera Avenue, while integrating a palette of improvements that may enable a more welcoming pedestrian environment. These elements, which can be combined and added over time, can also provide the corridor with an aesthetically pleasing, unified set of public realm elements. These recommended improvements include:

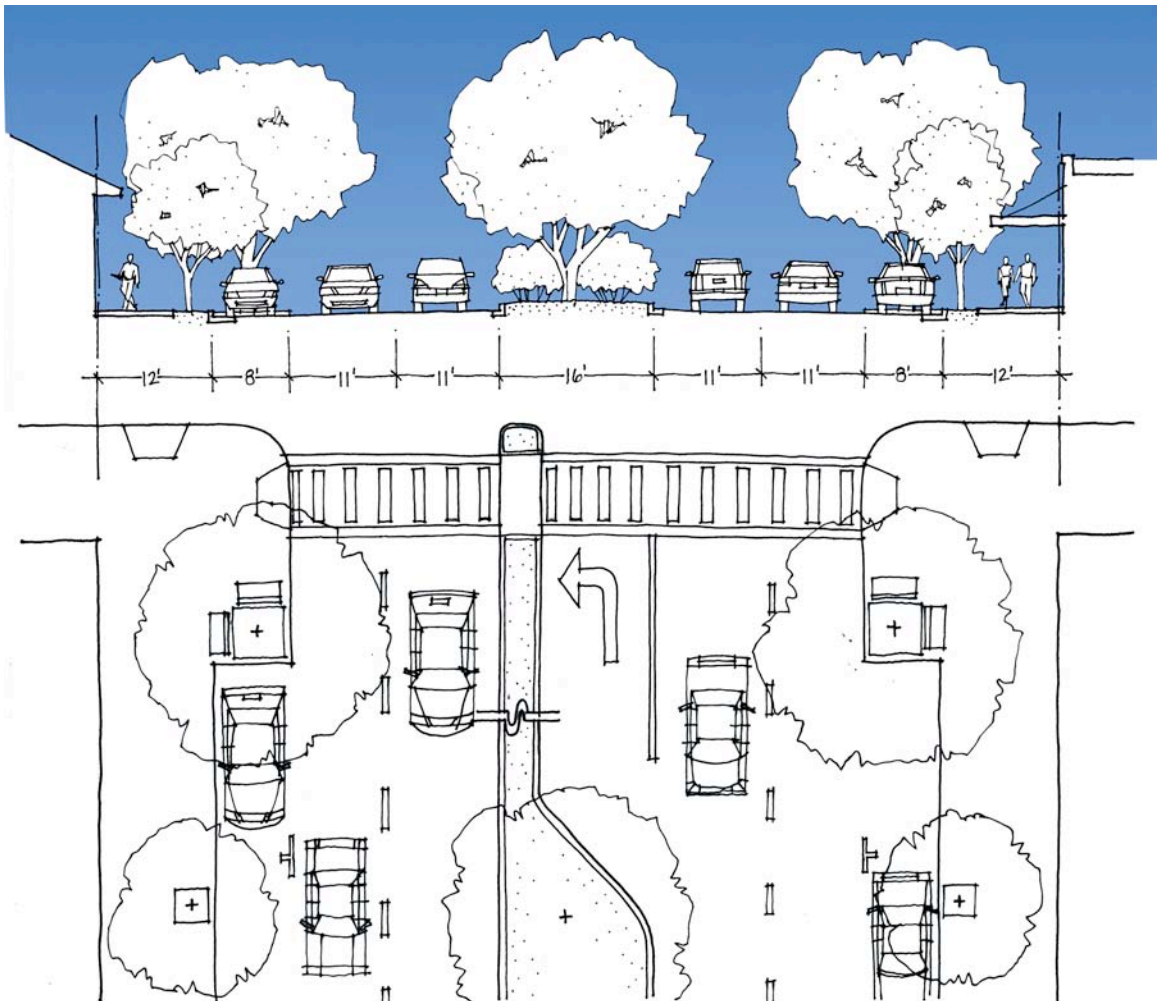
- Curb extensions at all intersections with high-visibility crosswalks that facilitate easier pedestrian crossings. In locations where u-turn movements should be preserved, the southwest and northeast curb extensions facing Madera Avenue at any intersection may be eliminated.
- Enhanced unsignalized pedestrian crossings at C Street, D Street, F Street, between Kearney Blvd. and Sunset Avenue, between Sunset Avenue and Stanislaus Avenue, and at San Joaquin Avenue, with high-visibility crosswalks, advance yield lines, and pedestrian refuges in the median.
- Shortened turn pockets in the median to create larger expanses for street trees and landscaping at the following locations: southbound at C Street; Southbound at Stanislaus Avenue; and northbound for turning into the shopping center at Whitesbridge Avenue
- Intersection improvements at California/A Street.
- Intersection improvements at C Street.
- Intersection improvements at Kearney Boulevard, including a designated left turn signal on Kearney.
- Street tree planting with larger "canopy" species in coordination with curb extensions, and along the sidewalk where possible.
- Replace turf medians with drought-tolerant native landscaping to minimize irrigation and maintenance.
- Clearly marked on-street parking spaces that provide a buffer between the sidewalk and the vehicular travel lanes.
- Continuous sidewalks with a minimum 5 foot clear pedestrian zone along the corridor, ensuring that all street furniture (including trash receptacles, street lights, street furniture, and utility poles) is placed outside the pedestrian zone.
- Coordinated pedestrian-scaled lighting, banner signage, traffic poles and mast arms, and street furniture.
- Gateway signage north of San Joaquin Avenue that welcomes southbound vehicular travelers.

Making these physical improvements to the corridor will create an environment in which pedestrians can safely and comfortably travel along and across Madera Avenue. For further illustrations of these improvements, please see Chapter 5 (Design Details).

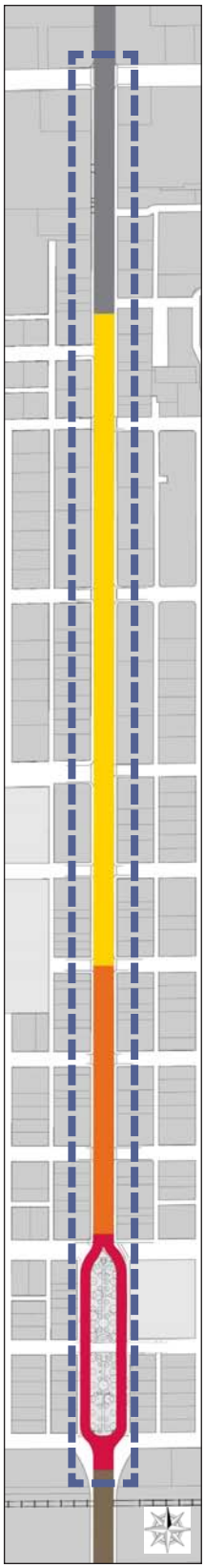
Preferred Strategy: Maintain Four Lanes

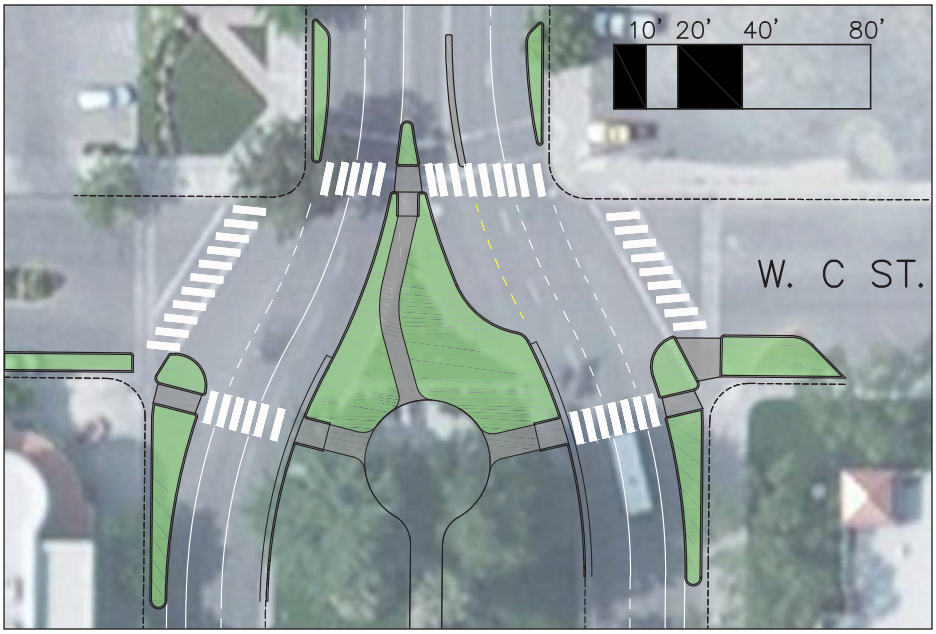


Above: *Existing Madera Avenue cross section.*

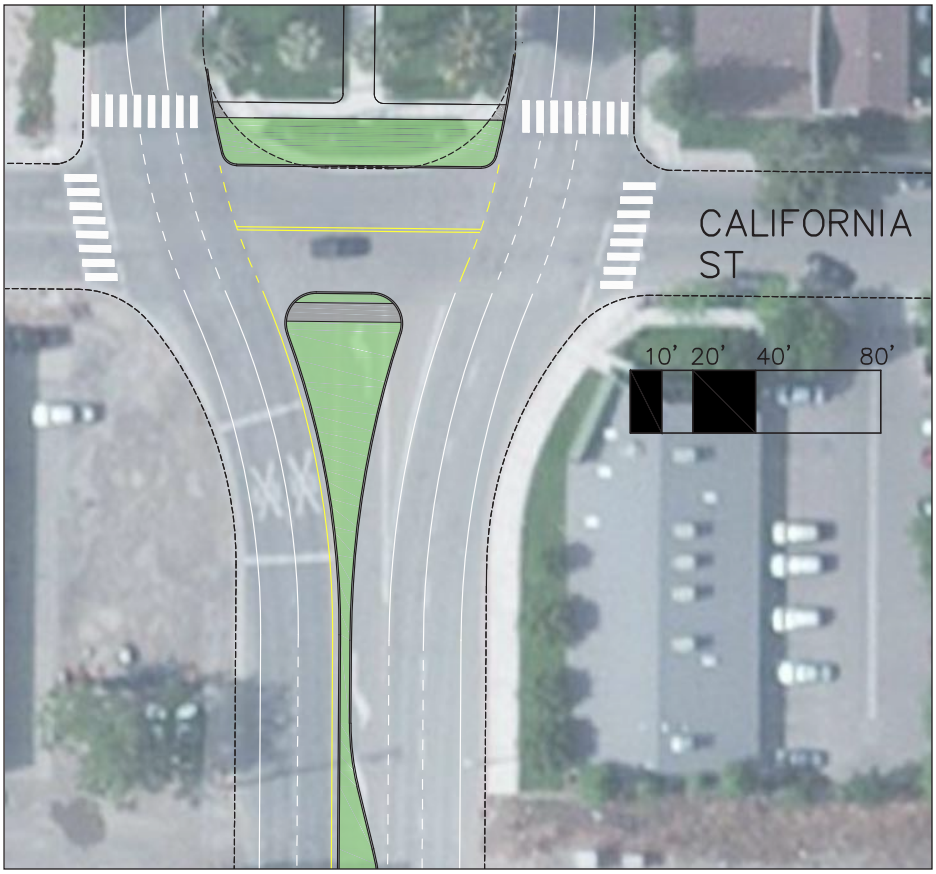


Above: *Proposed section for Madera Avenue which maintains five lanes, with curb extensions and high-visibility crosswalks. Shortened left-turn pockets and mid-block curb extensions allow larger street tree plantings.*

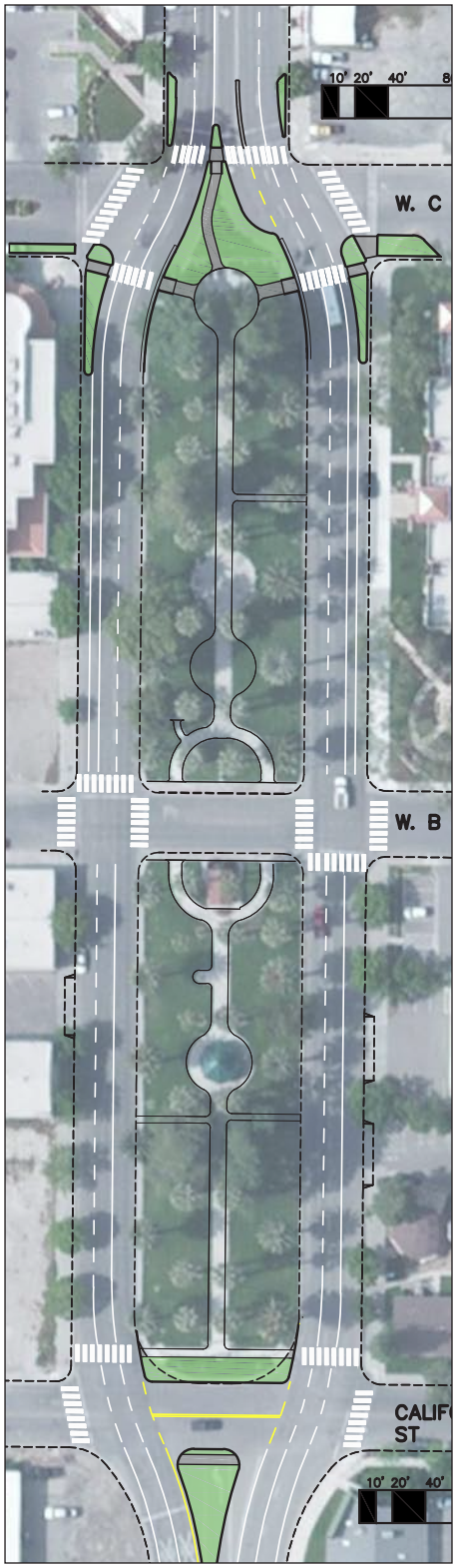




C Street/Madera Avenue intersection improvements with four-lane cross section



California Avenue/Madera Avenue intersection improvements with four-lane section



Improvements at Veterans Park

"Alternative" Strategies: Road Diet

A large portion of the Madera Avenue corridor could potentially benefit from various road diet strategies. These plans would implement the previously mentioned "baseline" improvements, but would also reduce the street from four travel lanes to two where appropriate, as described below.

Preliminary traffic analysis suggests that the reduction in travel lanes will not impose a significant reduction in Level of Service, even when taking into account the traffic growth projections outlined in the traffic study for the proposed Wal-Mart in Kerman. This traffic analysis can be found in the appendix.

The most suitable section for road diet improvements would likely be the stretch between California and San Joaquin Avenues; high numbers of driveways on Madera Avenue in the northern, auto-oriented commercial zone inhibit significant road diet improvements, as vehicular access to businesses becomes an issue; additional capacity in the vicinity of the Whitesbridge Avenue intersection may also be needed.

Employing a place-based response to changing conditions along Madera Avenue, road diet recommendations vary along the corridor's length in consistency with the needs of each context zone:

- At California Avenue (A Street), the leftmost northbound lane can be dropped to become a left turn lane onto A Street, with through traffic instructed by signs to merge to the right. In the southbound direction, the second travel lane can be introduced immediately after the crossing of A Street. This design allows for two lanes in each direction at the railroad crossing, which helps clear traffic after a train has blocked the tracks for an extended period. A narrower road here allows for roadway curvature appropriate for the posted speed of 30 mph, which will help keep drivers within the single travel lane. The narrower roadway makes it much easier for pedestrians to access the park, since they will only have to cross one travel lane in each direction.
- Between California Avenue (A Street) and C Street, the roadway can be reduced to 1 travel lane in each direction, along with a Class II bicycle lane and designated, on-street parallel parking. The narrower roadway allows for a sidewalk and planter strip to be added to the park edge on both sides of the park, providing a buffer between the park and the roadway. This makes the fence unnecessary, which further enhances access to the park.
- At C Street the road diet provides significant opportunities. Similar to the south end of the park the lanes can be realigned to allow for roadway curvature appropriate for the 30 mph posted speed. It also allows for a wide pedestrian refuge for the existing crosswalk on the north side of this intersection as well as three access pedestrian access points with crosswalks at the north end of the park. Southbound left turn movements can be maintained for passenger vehicles as shown in the drawing for this area, or for all vehicles by using a design similar to the one shown for the design of this intersection without the road diet. The curb extensions shown on the conceptual design drawing are intended to be built as concrete "planters" that do not attach to the existing curb, in order to maintain drainage in the existing gutters.
- Between C Street and F Street, the two-lane section (one-lane in each direction plus a median) should be continued, and back-in-angled parking should be implemented,

along with a narrow, but acceptable bike lane. When most vehicles are parked in the angled parking spaces, there will be more than enough room for bicyclists. On the rare occasion when very large vehicles are parked (e.g. long-bed crew cab pickup trucks, or the largest of sport utility vehicles), the bike lane will be about 4 feet wide, a minimum width, but still sufficient for use by bicyclists. If back-in angled parking is not viable, a striped bicycle lane, painted buffer, and on-street parallel parking can be implemented as described below for the section between F Street and San Joaquin Avenue. The use of head-in angled parking is not appropriate for this section due to potential conflicts between backing out vehicles, bicycles, and trucks.

- At Kearney Boulevard, a single-lane roundabout that accommodates full-truck turning movements should be implemented. Initial traffic analysis found the implementation of a roundabout at Kearney Boulevard along with a road diet would actually improve the level of service along the corridor. Without the implementation of a roundabout, the existing level of service can be maintained with a road diet and the addition of a left-turn lane.
- A smaller, optional roundabout may also be implemented at E Street. The small roundabout would accommodate full turning movements by cars; however, it would only accommodate through traffic by trucks and larger vehicles and would not be able to accommodate left or u-turn movements by these vehicles.
- Between F Street and San Joaquin Avenue, the two-lane section should be continued with a Class II bicycle lane and on-street, parallel parking. In the short term, the road diet can be achieved without relocating any curbs by implementing a striped buffer between the bike lane and the parking lane. Longer-term initiatives below describe alternatives that include curb and reconstruction
- North of San Joaquin Avenue, the two-lane section should transition back to the four-lane section. Here, there is no room for the class II bicycle lane, so shared lane markings should be provided for bicyclists in the outer lane.

Longer-term Initiatives

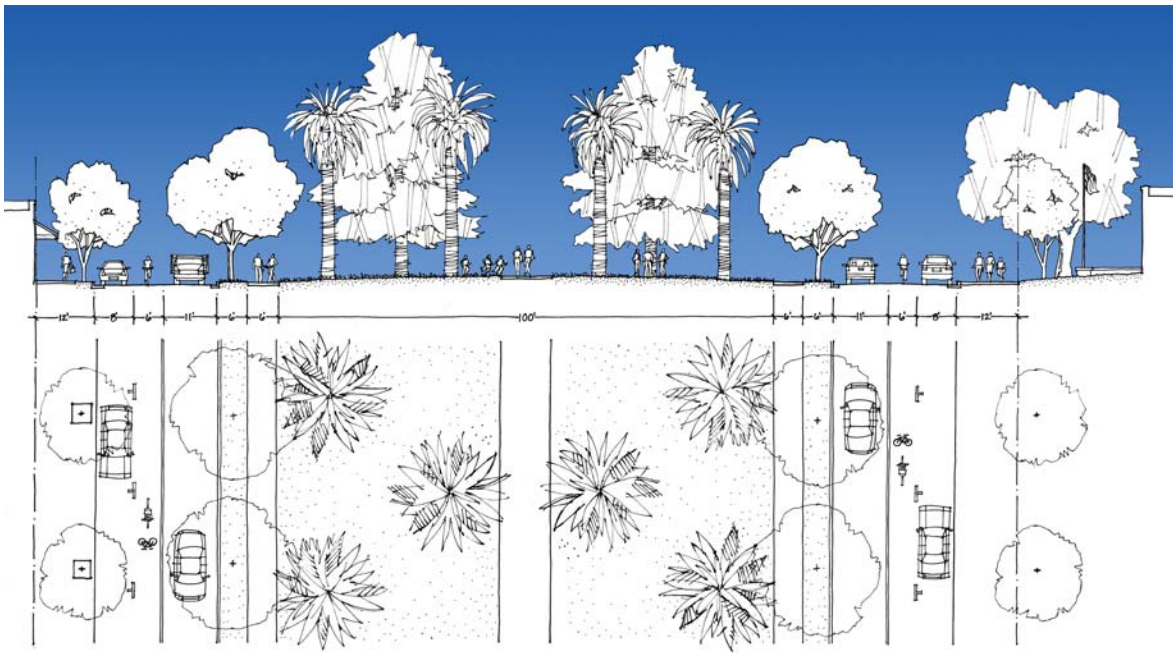
The above improvements, with the exception to the road diet and expansion of plaza veterans park, can be achieved by simple re-striping of the roadway without any change to the locations of the existing curbs along the sidewalk or median. If the road diet is found to be successful and funds were able to be secured for a more permanent implementation, a road diet would be able to accommodate either wider sidewalks or a wider median by eliminating the painted buffer between the bike lane and car lane and moving the curb along the sidewalk or median respectively. Due to the high roadway crown on Madera Avenue, the moving of the curbs would likely require a major reconstruction of the entire roadway.

Although significantly more expensive, they may be worthwhile to consider, particularly as the downtown business environment improves and evolves into more of a central destination. Expansion of the sidewalk would provide additional space for pedestrians, larger and more evenly-spaced street trees, and street furniture.

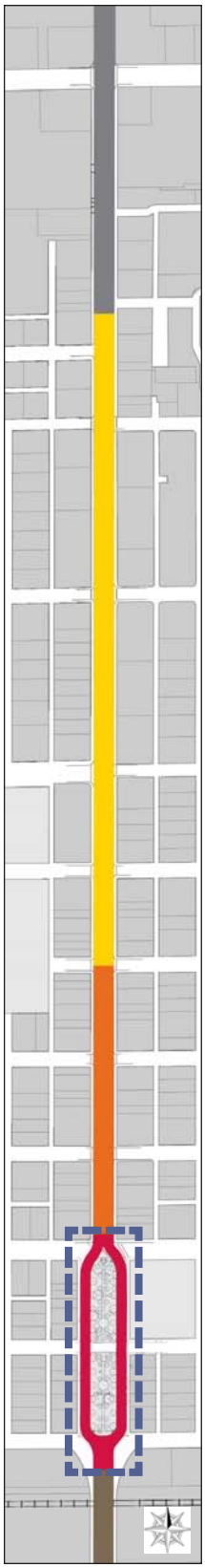
Additionally, a truck bypass that would re-route trucks off of South Madera Avenue was discussed. Further analysis would be required in order to fully explore the feasibility of this idea. This concept would need to be included in the circulation element of the General Plan and would require acceptance by Caltrans and by the community at large.

Alternative Road Diet Strategy: Plaza Veterans Park

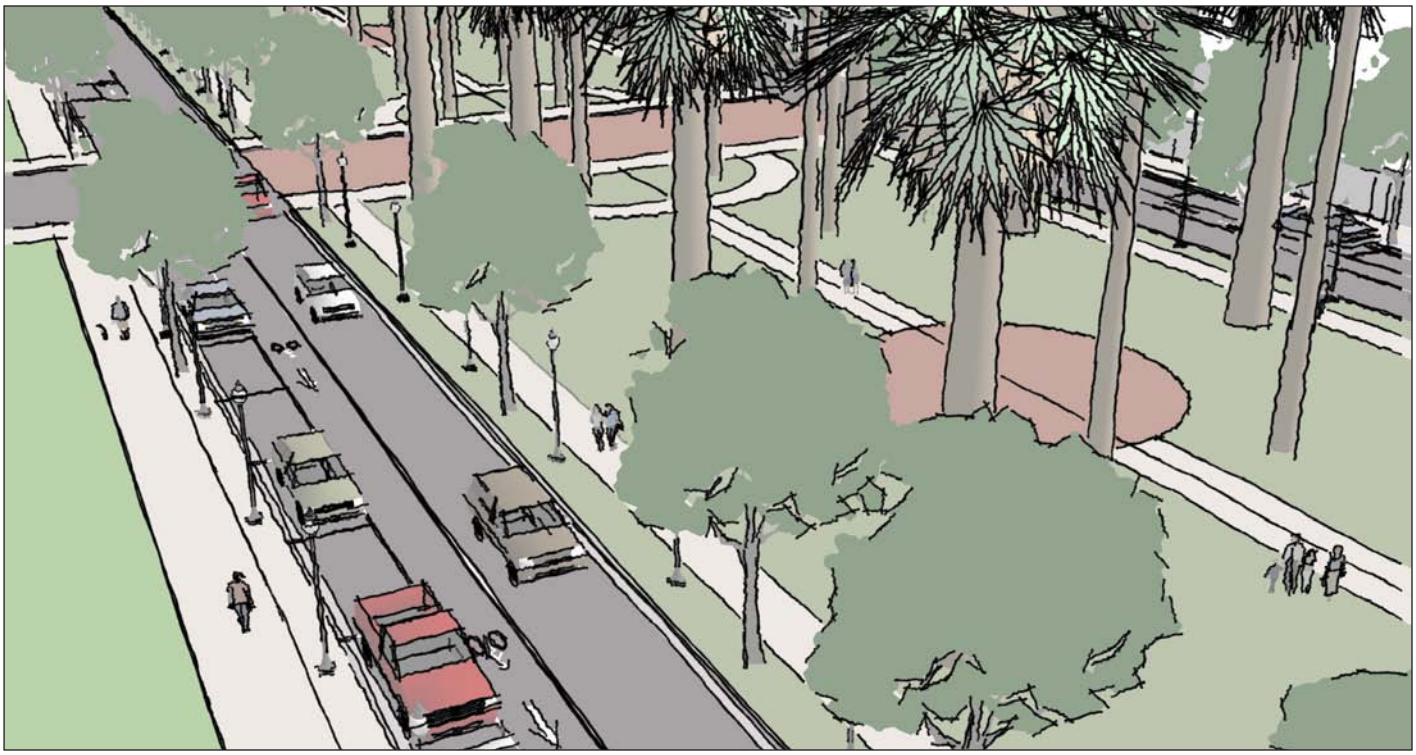
Above: *Existing Plaza Veterans Park cross section.*



Above: *Proposed street section at Veterans Park, showing an opened edge buffered from traffic by a new 6-foot planting strip and 6-foot sidewalk; alongside single 11-foot driving lanes, new 6-foot bicycle lanes, and 8-foot parking lanes on either side of the park.*

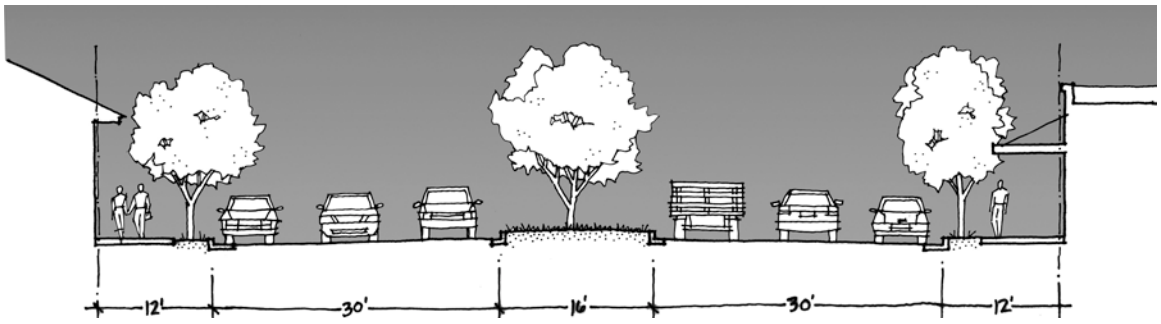


Above: *Street view of a road diet around Veterans' Park, adding a buffer planting zone to the park edge in place of current fencing.*

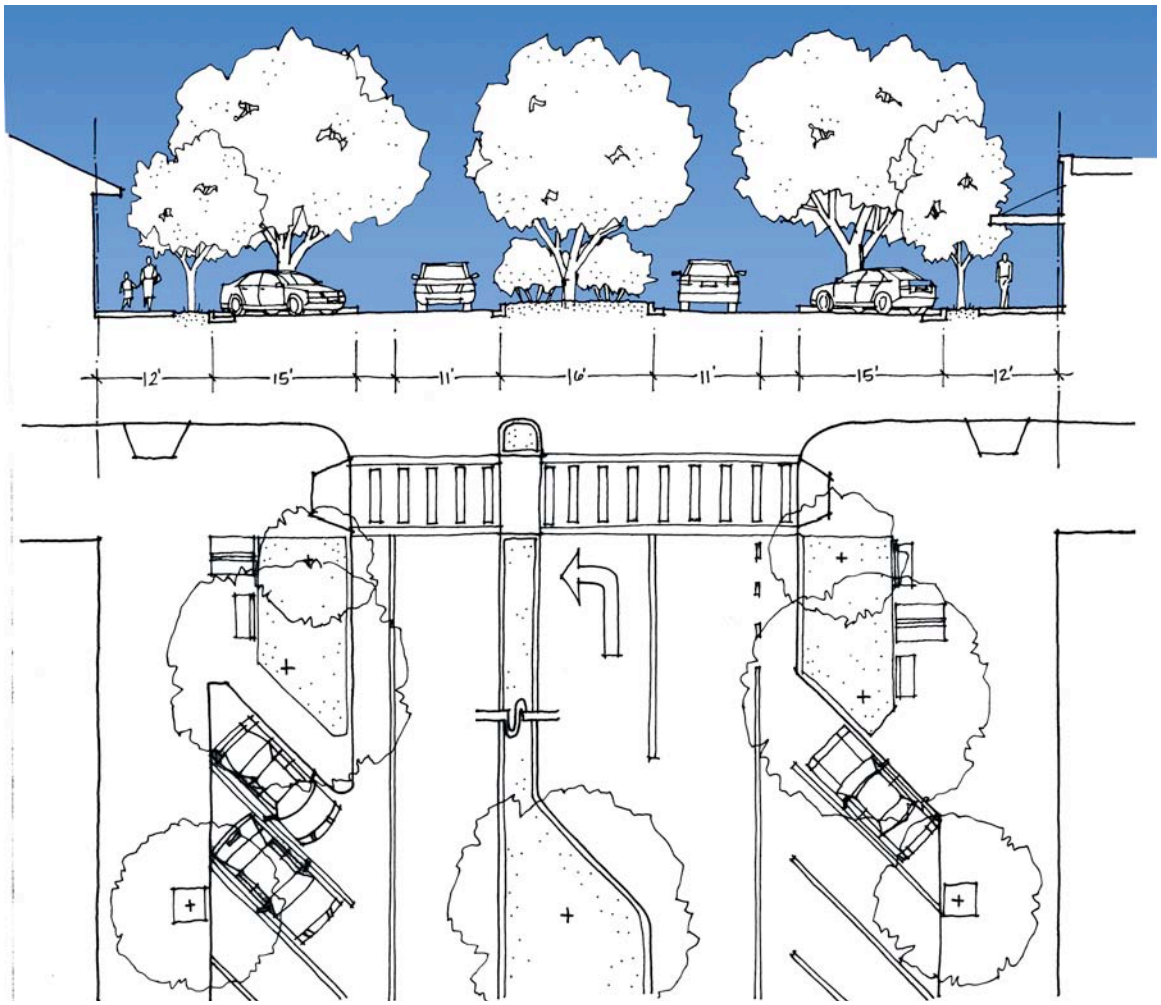


Above: *Aerial view of a road diet at Veterans' Park; the B Street intersection may be paved for use as plaza space for special events.*

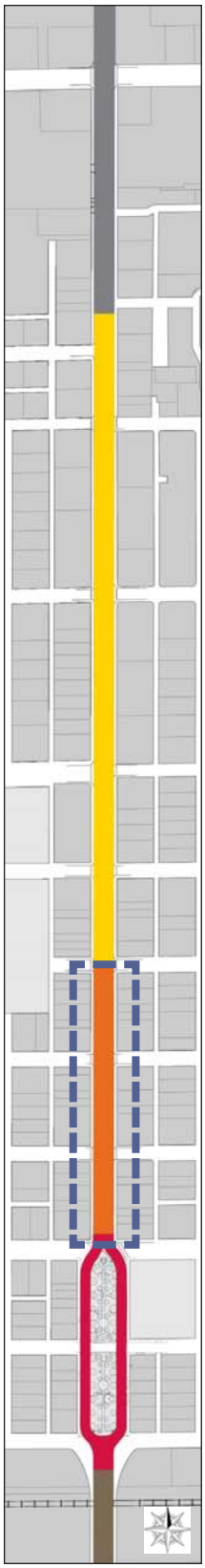
Alternative Road Diet Strategy: Re-Striping in Commercial Core



Above: *Existing Madera Avenue cross section.*



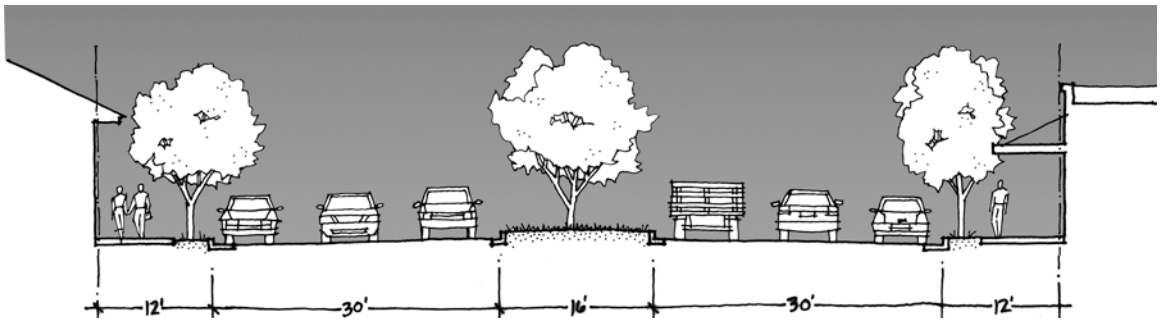
Above: *Proposed section for Madera Avenue's historic commercial core, with two travel lanes, a buffer zone, and reverse-angled parking. Curb extensions provide extra landscaping and furniture space.*



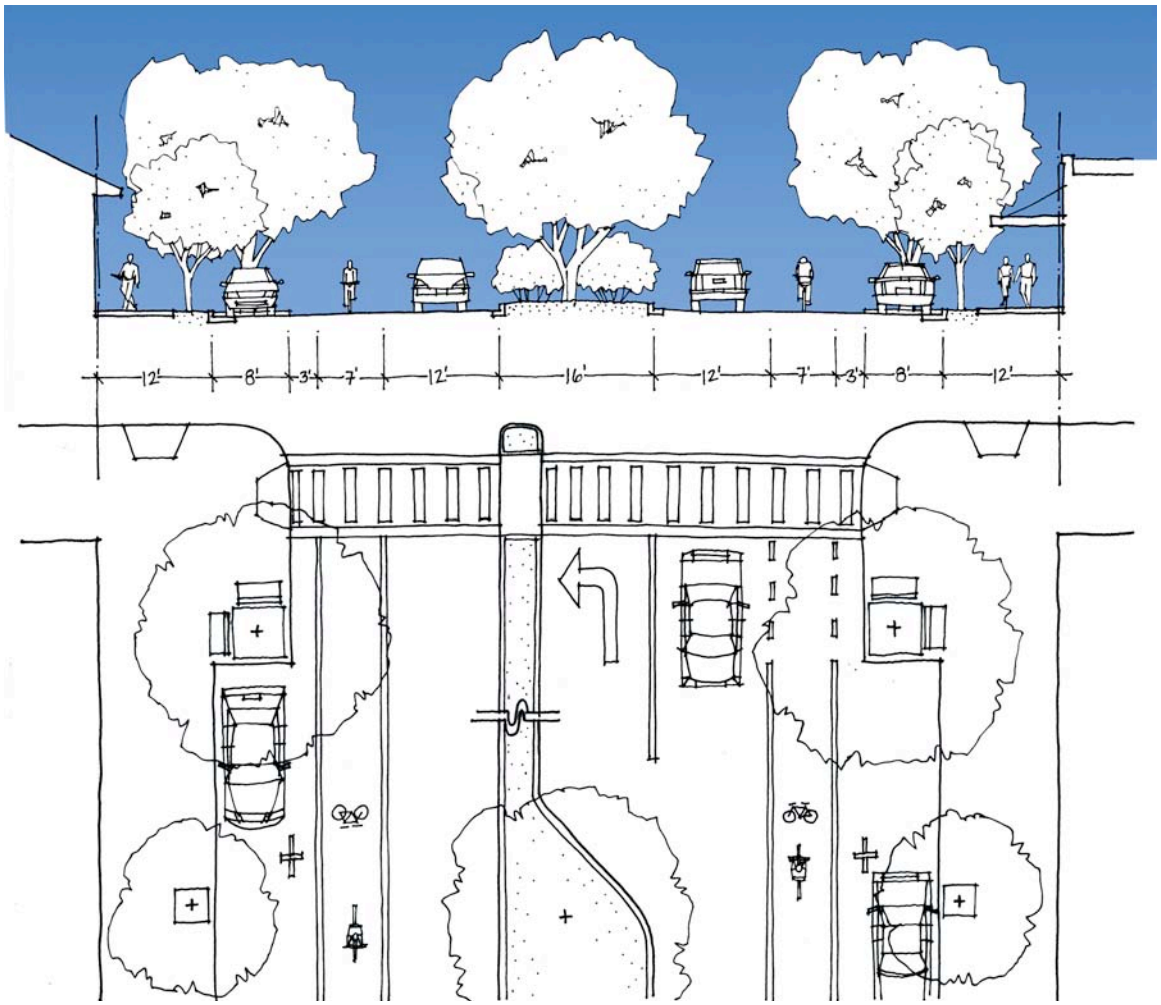
Above: *Street view of a road diet with reverse-angled parking implemented in the downtown historic commercial core.*

Above: *Aerial view of a road diet with reverse-angled parking implemented in the downtown historic commercial core.*

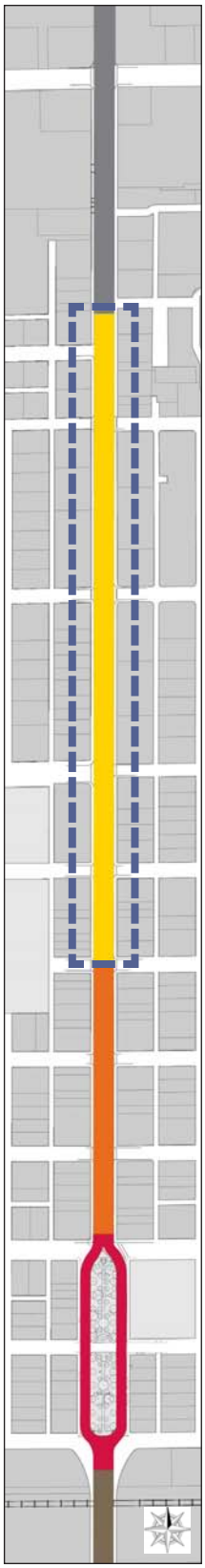
Alternative Road Diet Strategy: Re-Striping in Transitional Commercial Zone



Above: *Existing Madera Avenue cross section.*

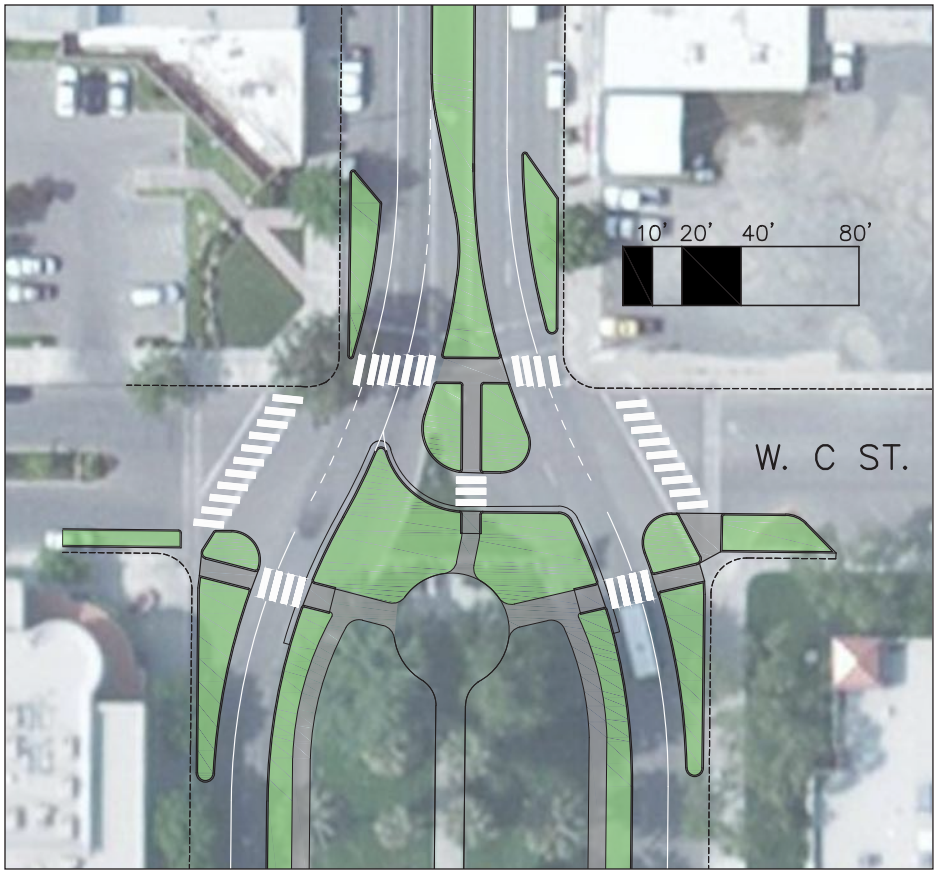


Above: *Proposed section for Madera Avenue's transitional commercial area, with two travel lanes, bicycle lanes, a buffer zone, and parallel parking. Curb extensions provide extra landscaping and furniture space.*

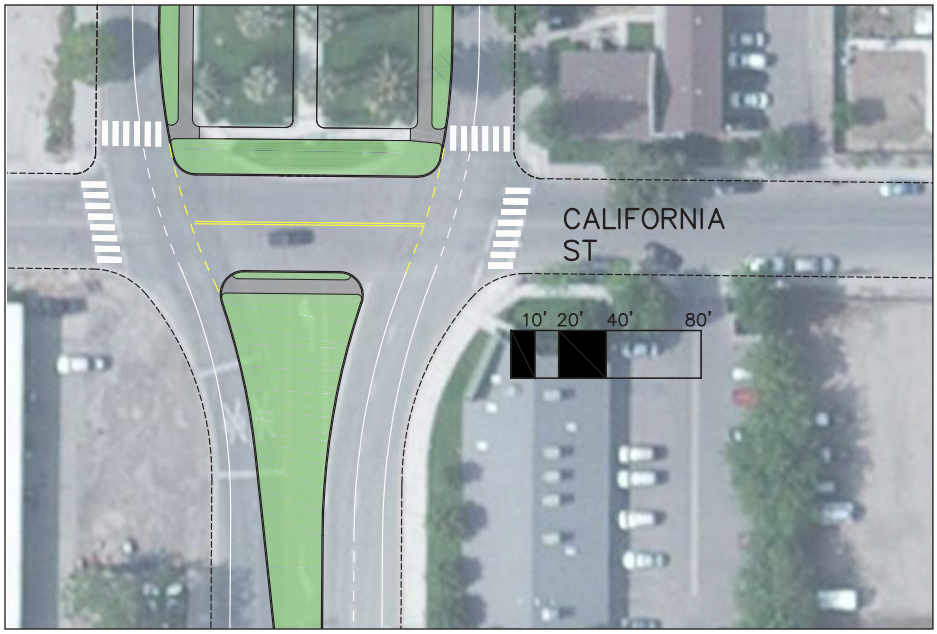


Above: *Street view of a road diet with bicycle lanes, buffer, and parallel parking implemented north of the historic commercial core.*

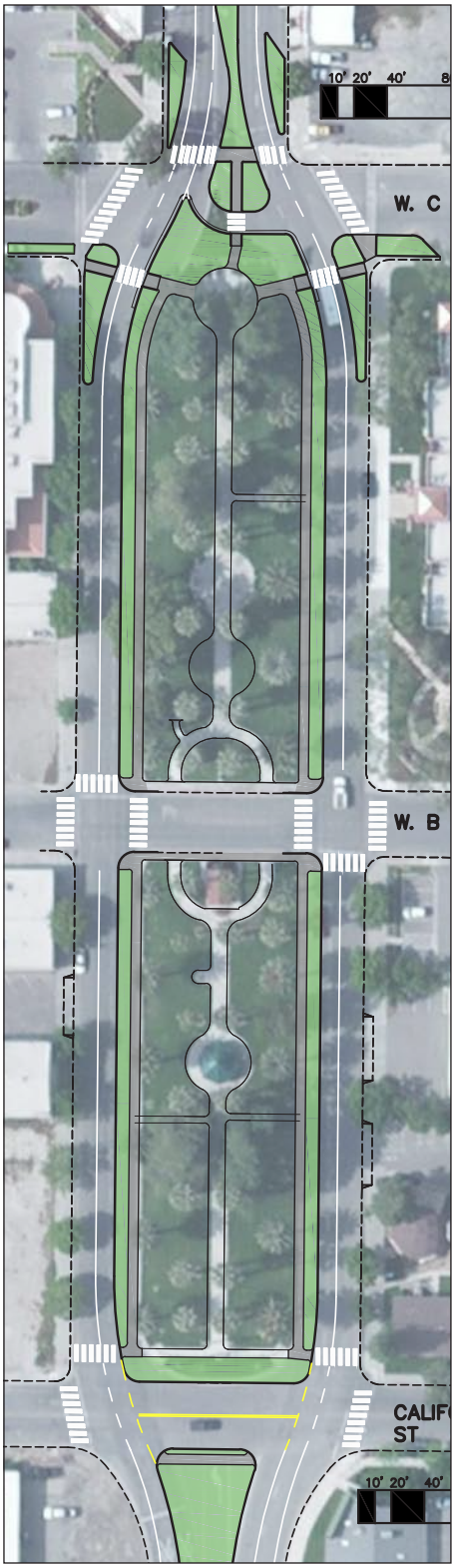
Above: *Aerial view of a road diet with bicycle lanes, buffer, and parallel parking implemented north of the historic commercial core.*



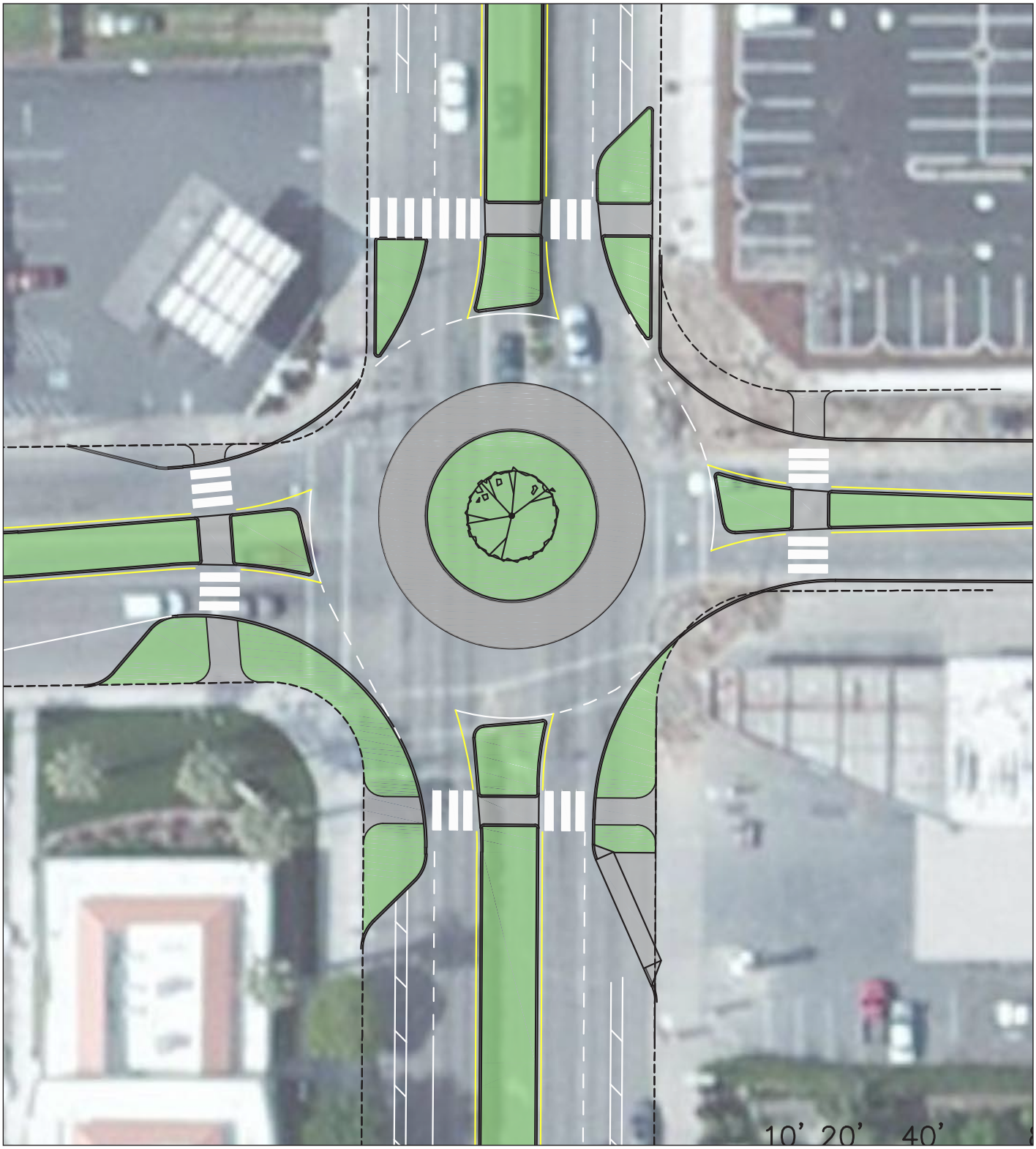
C Street/Madera Avenue intersection improvements with road diet



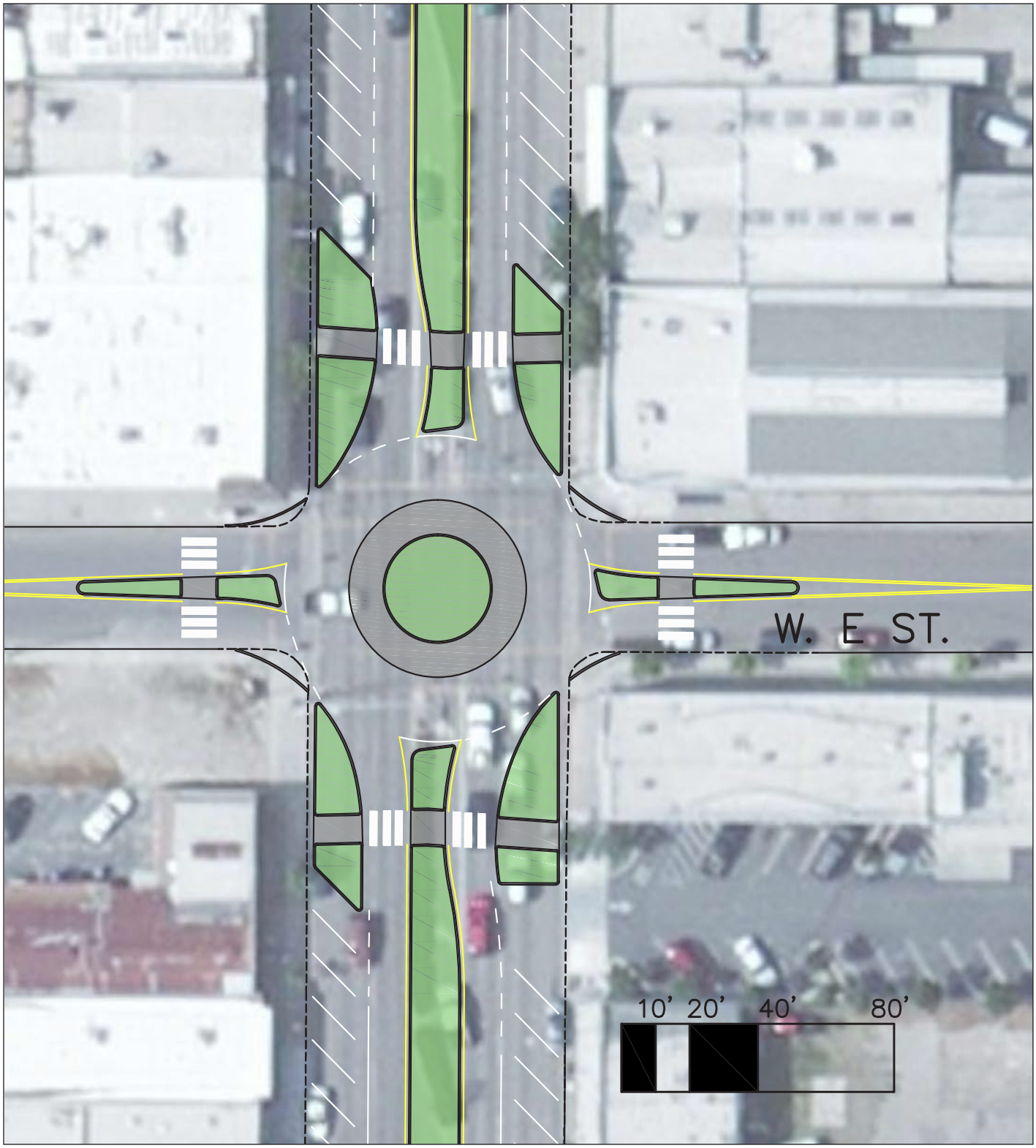
California Avenue/Madera Avenue intersection improvements with road diet



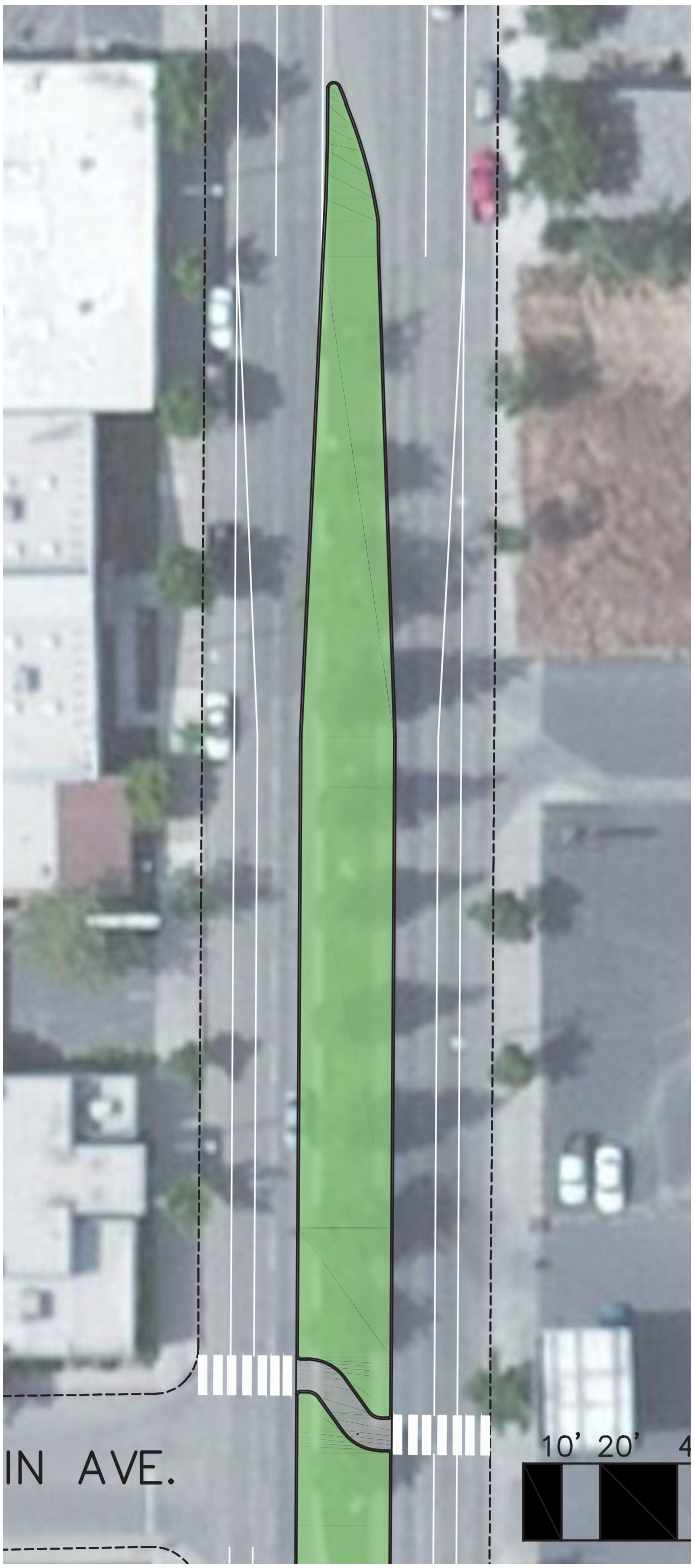
Road Diet at Veterans Park



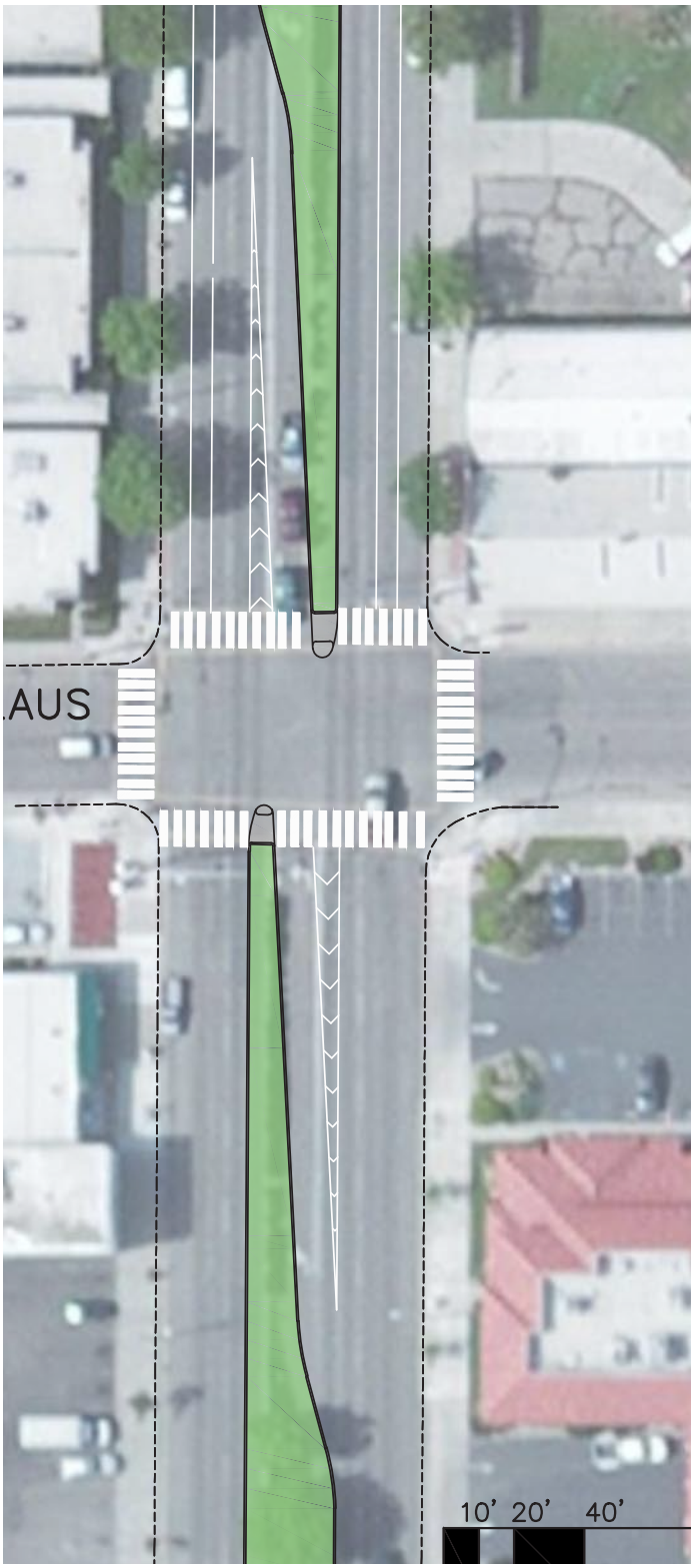
Roundabout design at Kearney Boulevard/Madera Avenue intersection



Small optional roundabout design at E Street/Madera Avenue intersection

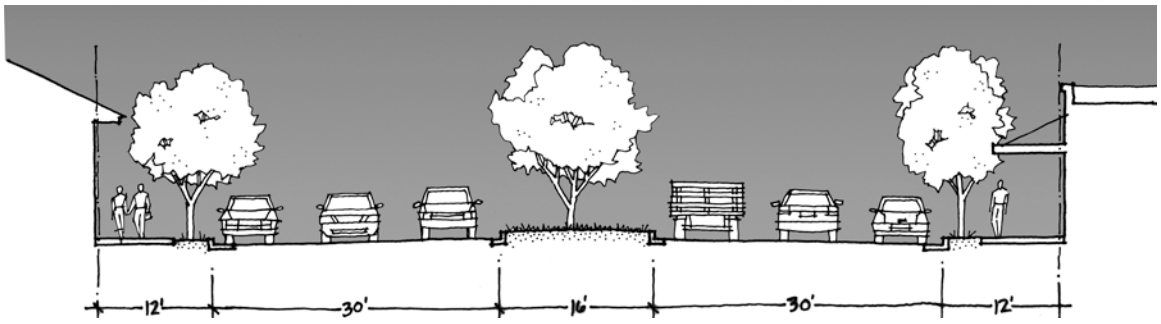


Unsignalized crossing at San Joaquin Avenue

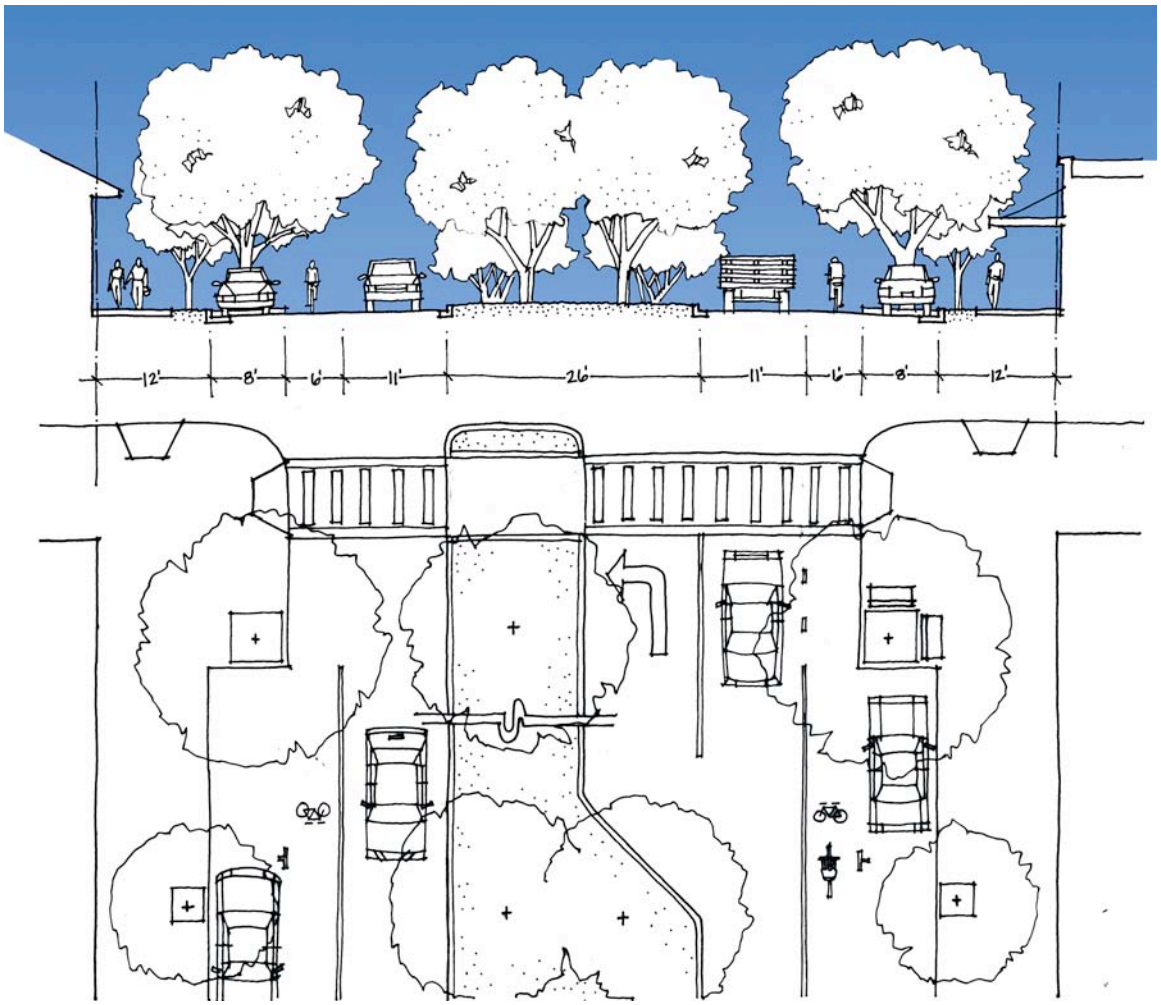


Example of shortened turn pockets (at Stanislaus Avenue)

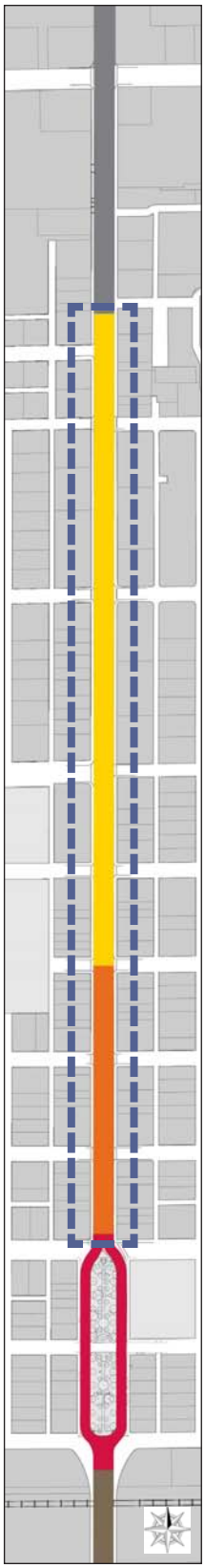
Alternative Long-Term Road Diet Strategy: Median Reconstruction



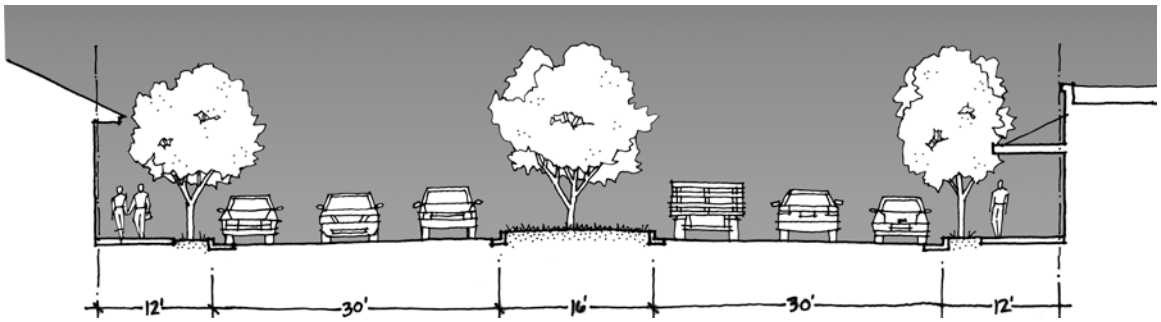
Above: *Existing Madera Avenue cross section.*



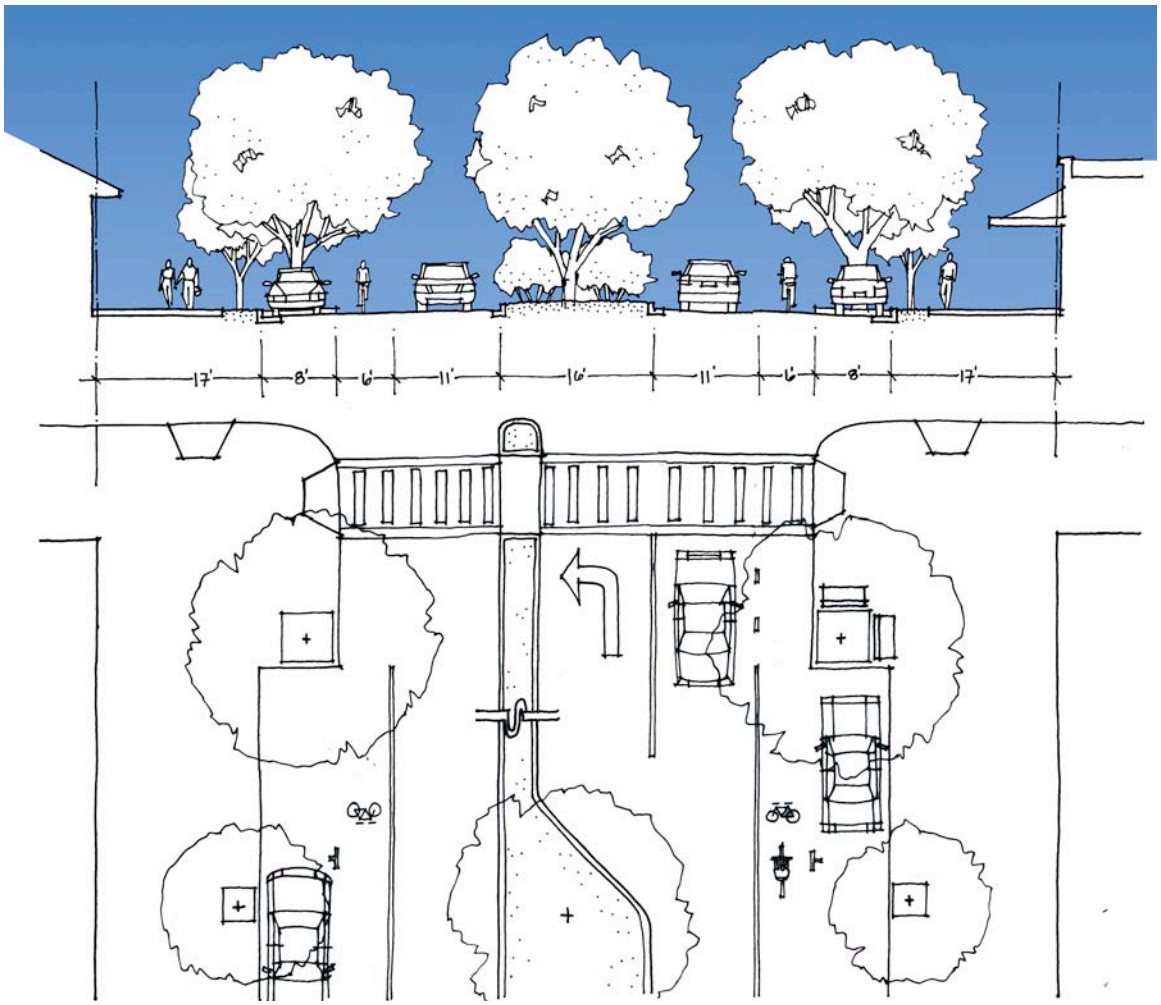
Above: *Potential long-term section improvement to Madera Avenue, widening the central planting median by reducing pavement to two vehicular travel lanes, bicycle lanes, and parking lanes, where possible.*



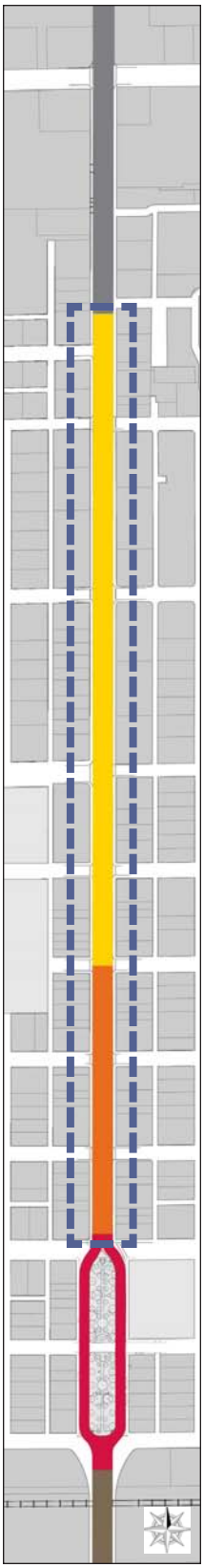
Long-Term Road Diet Strategy: Sidewalk Reconstruction

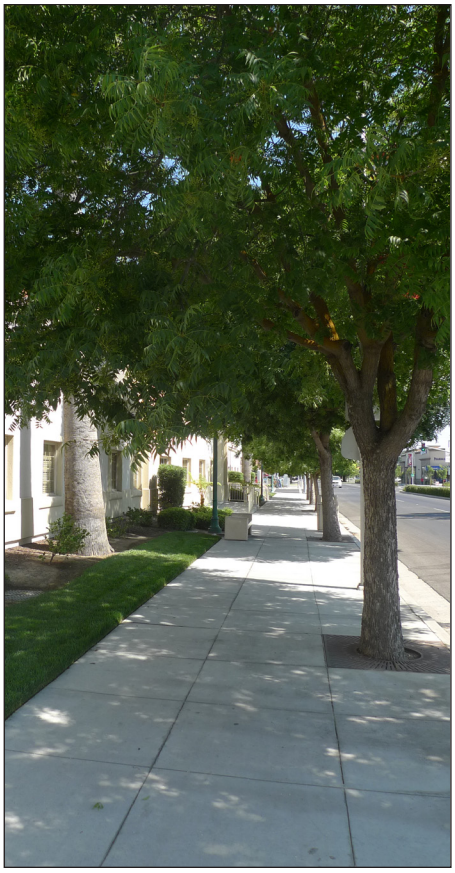


Above: *Existing Madera Avenue cross section.*



Above: *Potential long-term section improvement for Madera Avenue, expanding the sidewalk and its capacity for street furniture and landscaping by reducing the street to two travel lanes, bicycle lanes, and parking lanes.*





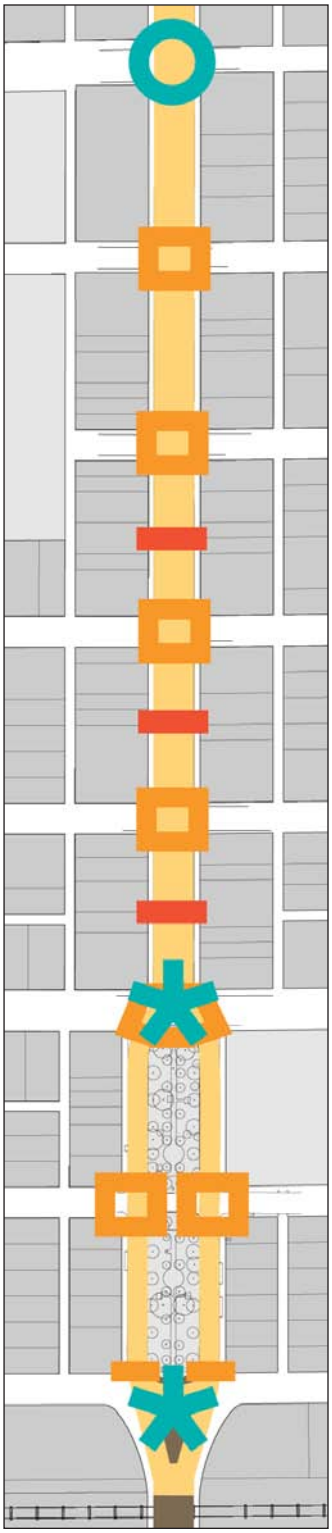
Above: *Examples of a landscaped sidewalk with street furniture in Kerman; and one of the City's remaining iconic pedestrian-scaled street lamps.*

Introduction

The following chapter presents specific details in implementing the proposed improvements to the Madera Avenue streetscape. Methods and details are provided on:

- Modifications to curbs/sidewalks, including implementation of curb extensions;
- Coordinated street furniture programs, particularly noting pedestrian-scaled lighting, benches, trash receptacles, and bike racks; and
- Development of successful community "gateway" features.

chapter 5 Design Details



Crossings and General Improvements: South Corridor

Parking lots along sidewalk buffered by new "landscaping and frontage zone"

Formalized tree-lined entry route to Kerckhoff Park, with parking plaza

Proposed public parking lot

New mid-block crossings with curb extensions allow larger street tree plantings and street furniture zones

Curb extensions with tree plantings and high-visibility crosswalks at intersections

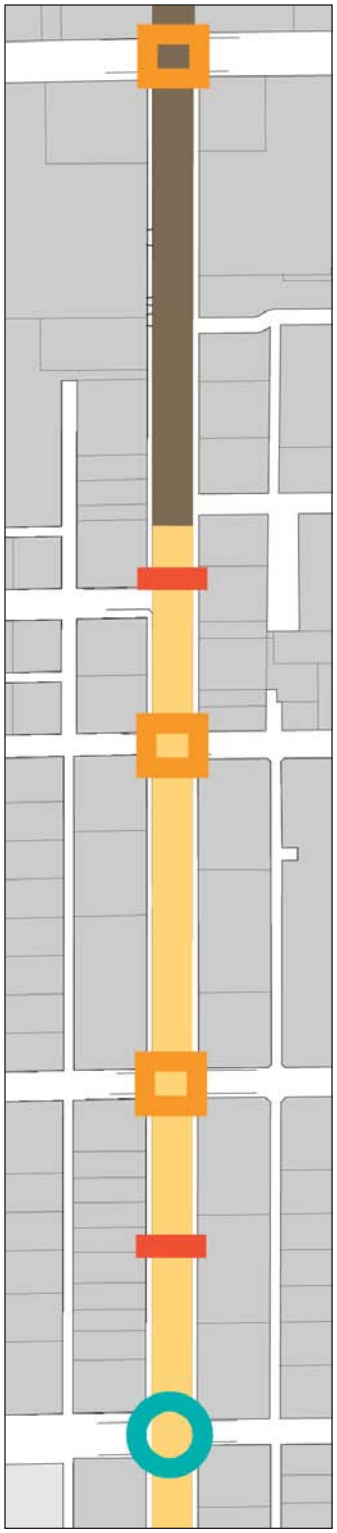
Public parking lot

New pedestrian crossings at north end of park

"Plaza" treatment of B Street at Veterans Park

New median organizes traffic at large California/ Madera intersection; Gateway welcome with low planting

Above Left: *Plan showing proposed pedestrian crossing improvements and mid-block crossings in downtown core.* **Above Right:** *Illustration of overall street improvements.*



Crossings and General Improvements: North Corridor

Shortened turn lanes allow more planting space for large median trees

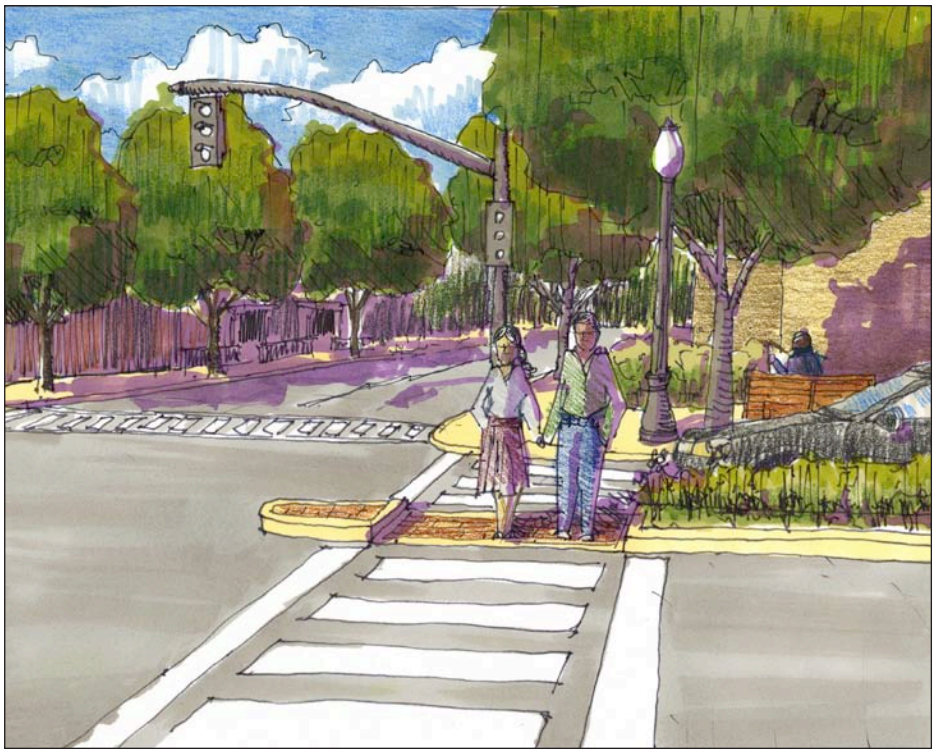
Mid-block crossing at San Joaquin Ave.

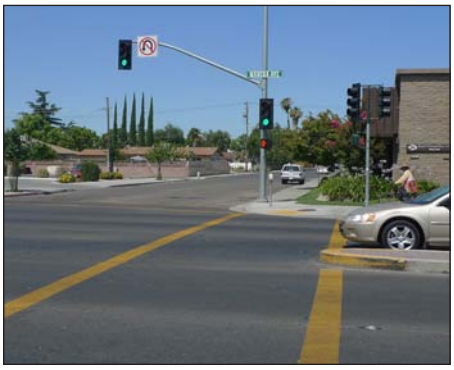
Curb extensions with tree plantings and high-visibility crosswalks at intersections

New mid-block crossings with curb extensions allow larger street tree plantings and street furniture zones

Potential roundabout and gateway at Kearney Blvd.

Above Left: *Plan showing proposed pedestrian crossing improvements and mid-block crossings on north corridor.* **Above Right:** *Illustration of overall street improvements.*





Left: *Illustration of new typical intersection improvements, including curb extensions, high-visibility crosswalks, and a mid-crossing pedestrian refuge. Compare to current typical intersection conditions (**above**, seen at Stanislaus and Madera Avenues), with long clear crossing lengths, and lower visibility striping.*

Curbs and Sidewalks

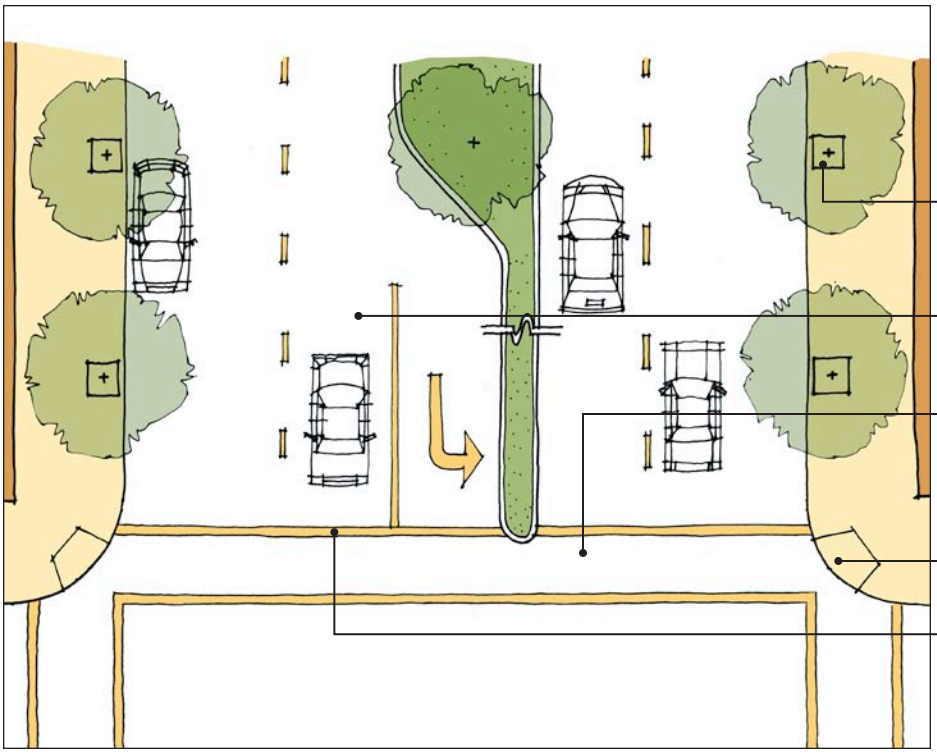
Sidewalks

Simple design updates to the organization and consistency of sidewalks may already encourage significant improvements to the ease of pedestrian travel along Madera Avenue. Though the right-of-way offers a standard 12 feet along the roadway for sidewalks, this zone is often interrupted - primarily in the northern auto-oriented commercial area - by signage posts, uncovered tree wells, and other obstructions. Pedestrian travel may be made more accessible by simply ensuring that all sidewalks allow a consistent, minimum five-foot through zone, and constraining all lighting and streetscape elements to a distinct curb-edge zone.

Curb Extensions

Curb extensions were also earlier identified as an efficient baseline tool to improve crossings at all major intersections and several key mid-block locations in the street's pedestrian network. Implementation of curb extensions can be achieved through two methods: by literal extension of the sidewalk, or by adding several curb-separated planters into the roadway. Both achieve the desired fundamental goals of increased pedestrian safety, yet have differing advantages. While extending the sidewalk increases potential space for street furniture, curbed planters may be a more economical alternative. The following illustrations depict curb extensions as integrated with other typical intersection improvements; and the two methods of implementation.

Existing Typical Intersection Design



Sidewalk width limits size of street trees that may be planted without conflicting with building canopies

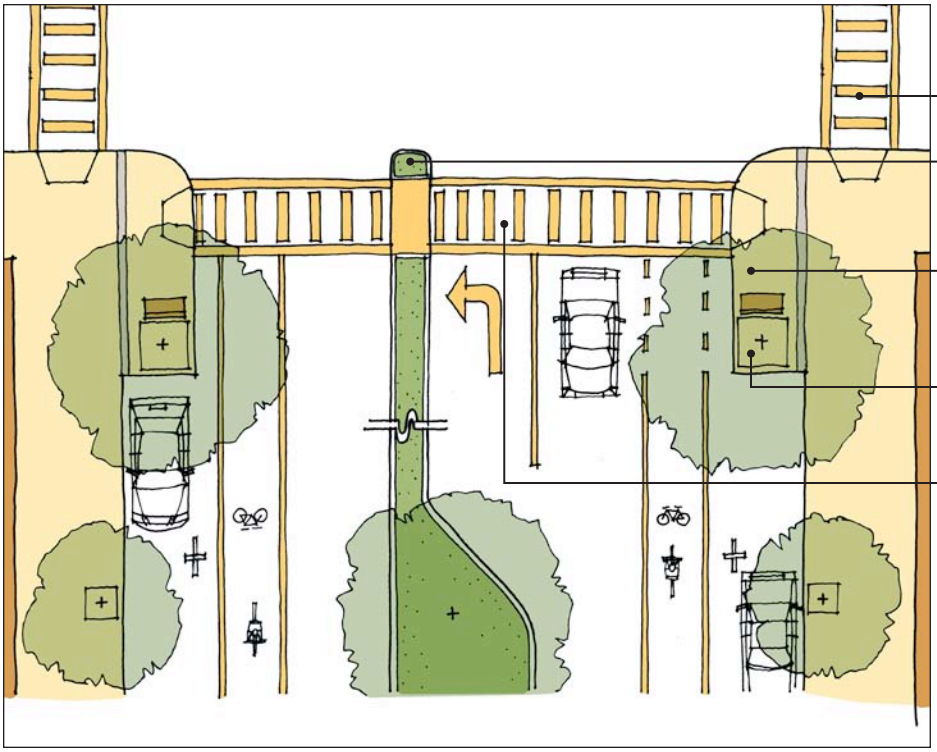
Madera Avenue typically measures 76 feet from outer curb to curb

Long crosswalks over entire length of wide street without refuge for pedestrians who may not complete crossing within signal time

Ramps on corner of sidewalk, encouraging pedestrians to stand at dangerous location where inattentive drivers may cut curb corner

Crosswalks marked by two bars only, a style that may be less visible for vehicles

Proposed Typical Intersection Design



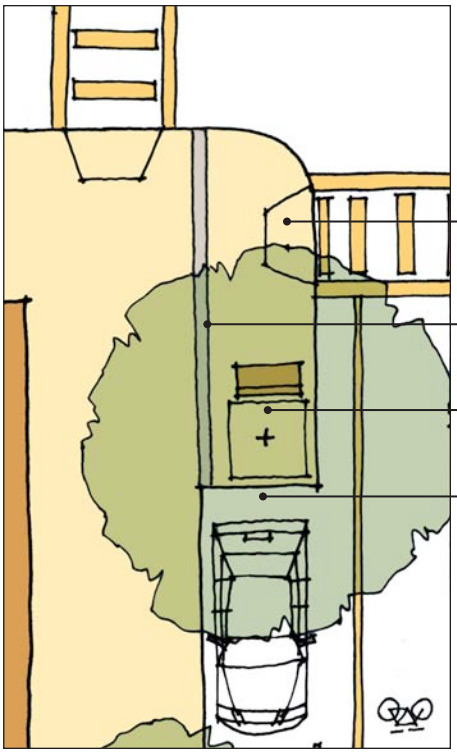
Adding vertical striping to crosswalks improves visibility for passing motorists

New median noses provide pedestrians protection for left turning vehicles and provide a safe place to pause.

New curb extensions along each east-west crossing of Madera Avenue, further improve pedestrian-vehicle visibility

Curb extensions provide opportunity for larger street tree plantings and street furniture zones

Curb extensions also increase safety by limiting clear crossing distances from 76 feet, to about 22 feet until pedestrian reaches mid-crossing refuge



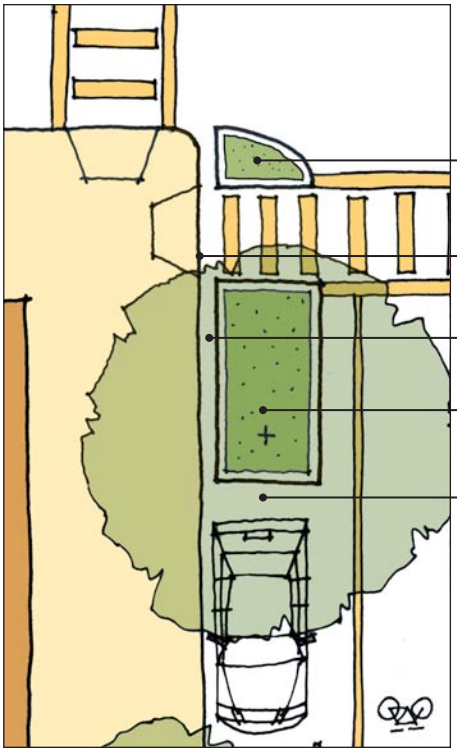
Curb Extension Option 1: New Sidewalk Addition and Grate

Ramps lead pedestrians in their direction of travel, rather than at a curb corner which could be cut short by an inattentive vehicle

Curb extension achieved by adding new sidewalk; Grate covers distance between old and new sidewalk, allowing uninterrupted drainage

Space created for new benches/street furniture and larger street trees

Curb extension is built roughly at the same depth as the parking lane



Curb Extension Option 2: Keep Sidewalk, Add Curbed Planters

Effect of "curb extension" is achieved by curbed planters, reducing vehicle speeds and giving pedestrians refuge to step into intersection for visibility and shortened crossings

Existing curb is maintained (with ramp improvements), lowering potential costs of construction

Space kept between current curb edge and curbed planters, for uninterrupted drainage

Space for larger street trees and landscaping

Curb extension is built roughly at the same depth as the parking lane

Street Furniture

In highly walkable communities, streets are not solely a route for multi-modal transportation: they also have potential to act as comfortable destinations of their own. The sidewalk realm should ideally, therefore, be designed with both purposes of transportation and destination in mind.

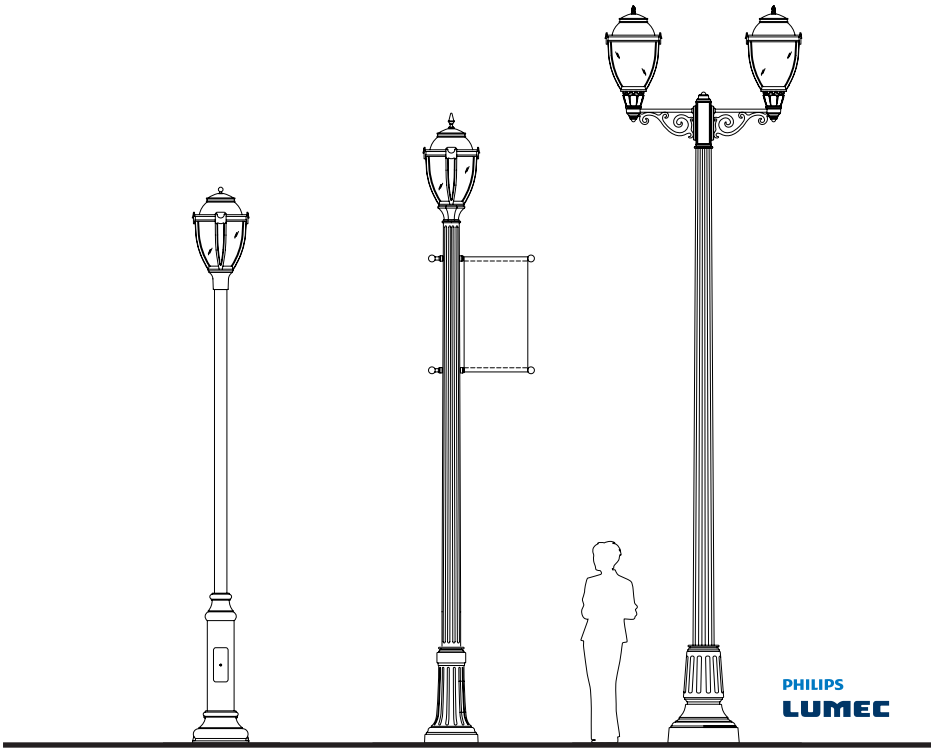
A complete urban sidewalk may be considered as maintaining three distinct zones. The earlier mentioned "through zone" accommodates uninterrupted pedestrian travel; the second, curb-side "furniture zone" ideally consolidates all stationary amenities of the sidewalk and enables the street to also function as a place of meeting and gathering. The "furniture zone" provides space for regular pedestrian-scaled lighting, benches, trash receptacles, and bicycle racks along the street. This zone also offers space for landscaping of the street, particularly street tree wells. Finally, a "frontage zone" provides space for outdoor seating. All of these zones may be implemented along a typical 12' sidewalk as illustrated.

Left: *An urban sidewalk provides space both for pedestrian travel, and for amenities such as bike racks and planting pots; the ample width also allows a "frontage zone" with outdoor seating for the storefronts.* ***Above:*** *Another clear example showing delineation between the through travel route, and a curb-side zone providing for stationary functions of the street.*

Pedestrian-Scaled Lighting

As common with many highway routes, Madera Avenue is currently lined by "cobra head" lights, with tall poles and necks which extend out over the street. However, within walkable community limits, it is also important to provide pedestrian-scaled street lamps which serve to illuminate sidewalks. These should be implemented in two scales: 10' high, single-head poles spaced every 60-75', and 14' high, double-head poles placed at street corners.

Kerman still maintains examples of wonderful historic street lights; contemporary lighting products should be chosen to coordinate with these traditional forms. Street lamp poles should also be utilized to implement a consistent banner program, contributing to a cohesive community identity.



Sample pedestrian-scale lighting products reflecting Kerman's traditional street lamps

A traditional street light in Kerman

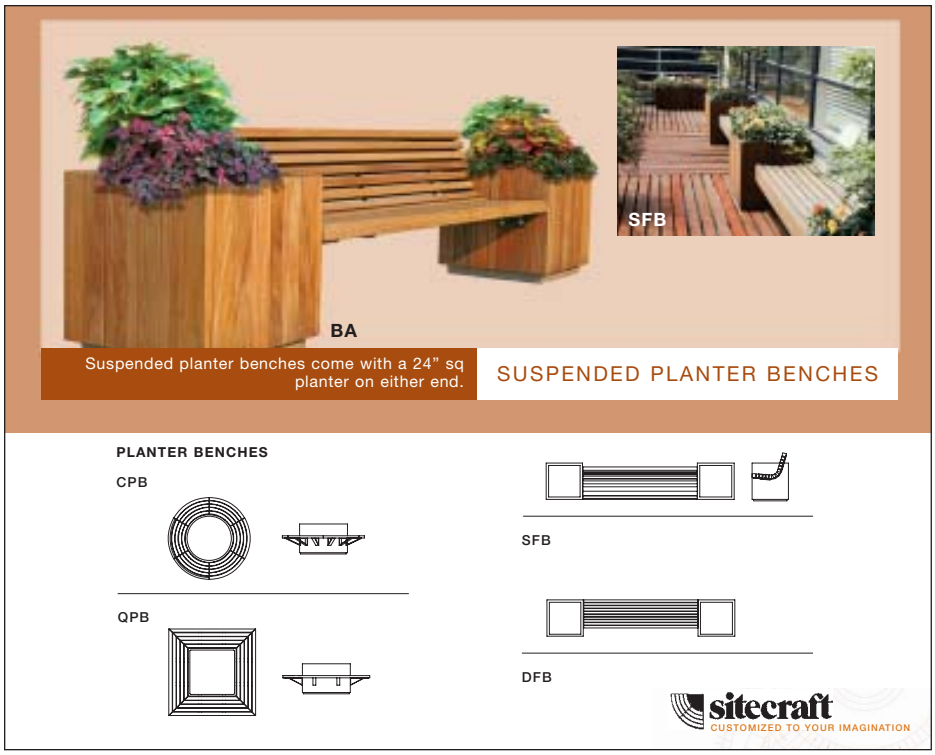
Lights coordinated with banner program

Larger poles integrated with traffic signals

Benches

Consistently-placed benches are key elements in developing more walkable neighborhood and commercial corridors. Offering opportunities for both meetings and rest, visitors are encouraged to extend their time enjoyed out on the street, rather than quickly moving to their intended destination and continuing away.

Benches should be integrated into the larger street landscaping plan where curb extensions are implemented. They may incorporate planters, or match materials used elsewhere in the streetscape. A vast variety of benches and urban seating options are possible, from contemporary to traditional to sculptural; more important than style of seating itself, is its thoughtful coordination with the overall vision of the streetscape, including other chosen street furniture elements.



Sample product with planters offers literal option to integrate benches and landscaping

Brick-base matches landscaping pavers

Benches coordinated with planter boxes

A sculptural bench, within planting strip

Bench with contemporary design

Trash Receptacles

Much like benches, regularly-provided trash receptacles are important amenities in a walkable environment. They allow extended street usage by pedestrians, support potential disposal needs of those visiting local businesses, and contribute to the order and cleanliness of the street.

Trash receptacles also come in diverse forms, and may vary stylistically based on the streetscape; coordination with other street furniture elements is ideal. They should be placed in proximity to benches at curb extension locations.

If the collection programs are possible, also providing distinct well-marked receptacle types for recycling and/or compost would be a positive addition to the streetscape.

Sample trash receptacle products

Receptacle personalized with signage

Receptacles coordinated with fencing

Colorful, playful bin encourages recycling

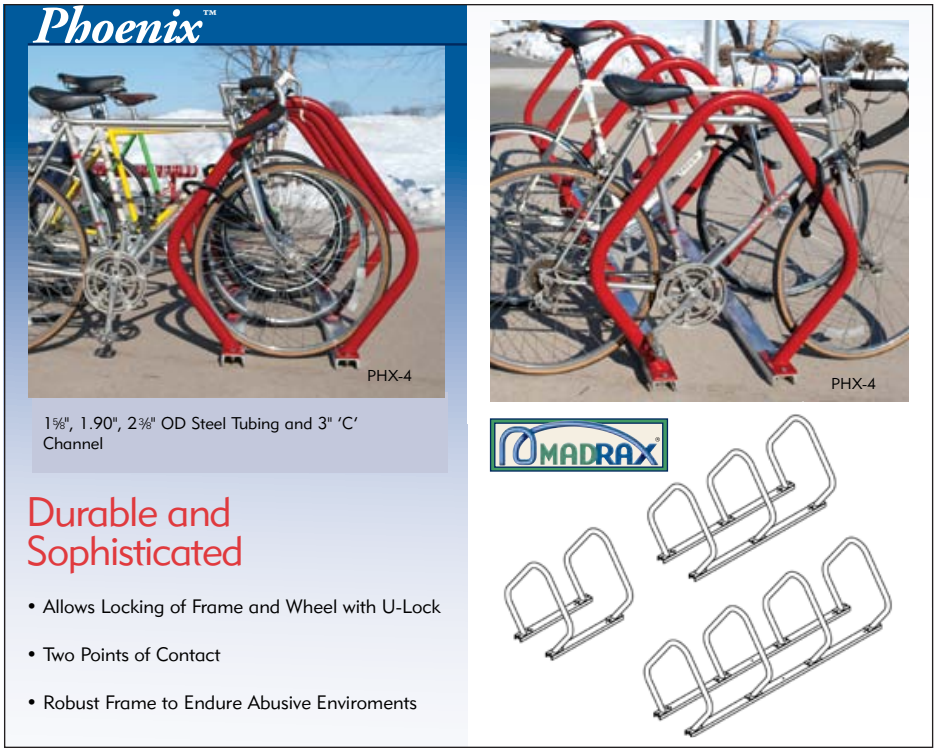
Metal-detailed bins match signage poles

Bicycle Racks

Frequent bicycle racks along the street corridor are another necessity for promoting healthy community living and easily enabling alternative modes of transportation.

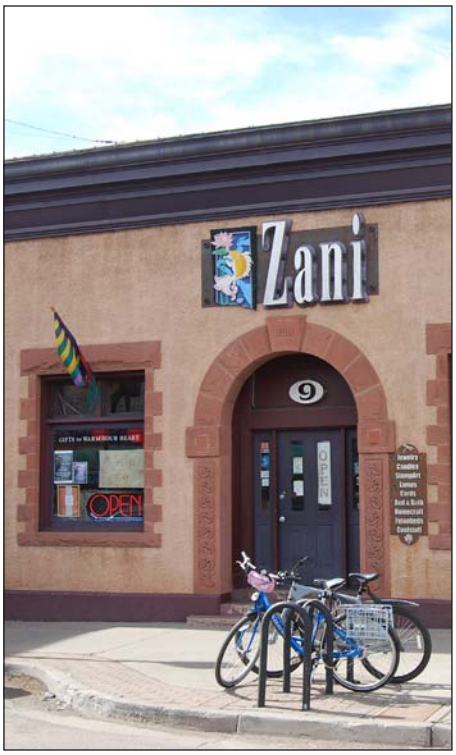
Consistent provision of bicycle racks can be a great support for local business activity. Bicycle racks should be placed in at least three to four locations along the corridor.

Stylistically, bicycle racks should be coordinated with the streetscape's overall aesthetic theme. Functionally, the most important characteristic of any rack is its ability to provide two points of contact for a bicycle, offering better support for the bicycle frame as well as providing a location for a lock



Sample bike rack products with optimal two points of contact for cycle frames

Bicycle racks in curb extension zone



Racks in front of commercial space

Sculptural yet functional bike racks

Bike racks in colorful, inviting streetscape

Unique racks add to a street's character

Coordination

Many aesthetic themes are possible for a streetscape. A style may be chosen based on prominent traditional features found along the street, directed by contemporary design trends, or guided by any uniquely inspired idea for the street.

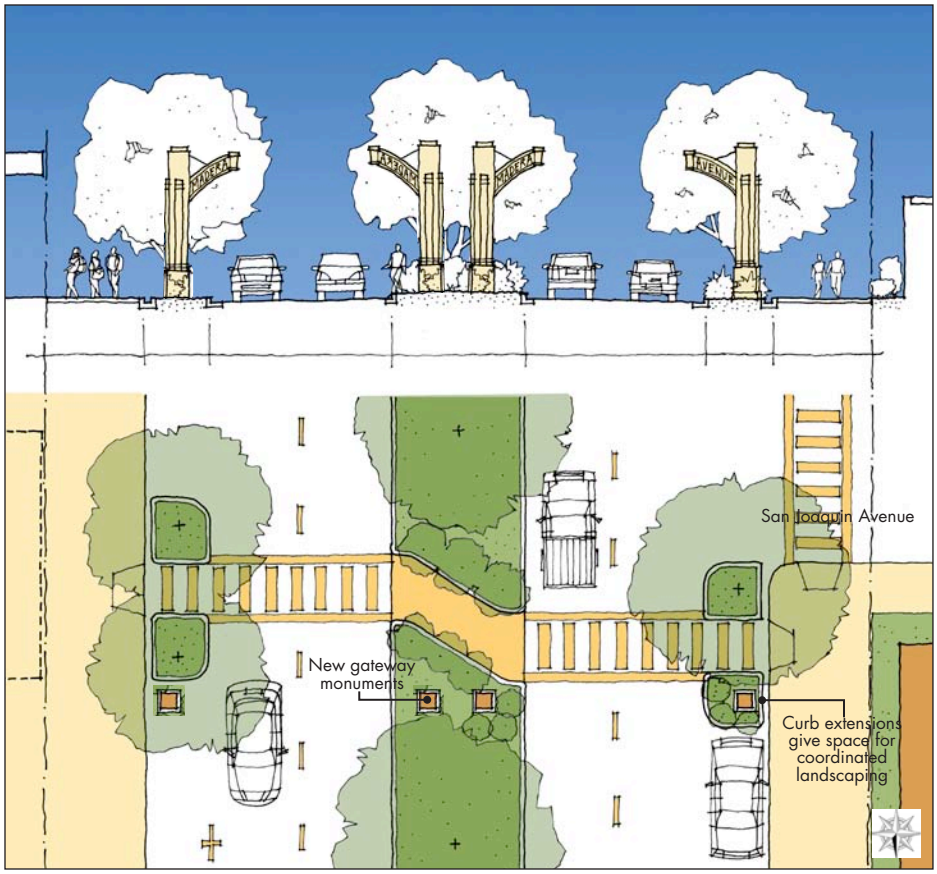
The key is simply to choose one vision, and select street furniture that is consistent with and contributes to that vision. Organizing all elements of the streetscape in one theme presents coherence in the street as a continuous, unified space. This coordination in a main street environment such as Madera Avenue also supports a strong identity and character of the greater community.

Matching benches, trash receptacles, and lighting blend fluidly into the streetscape

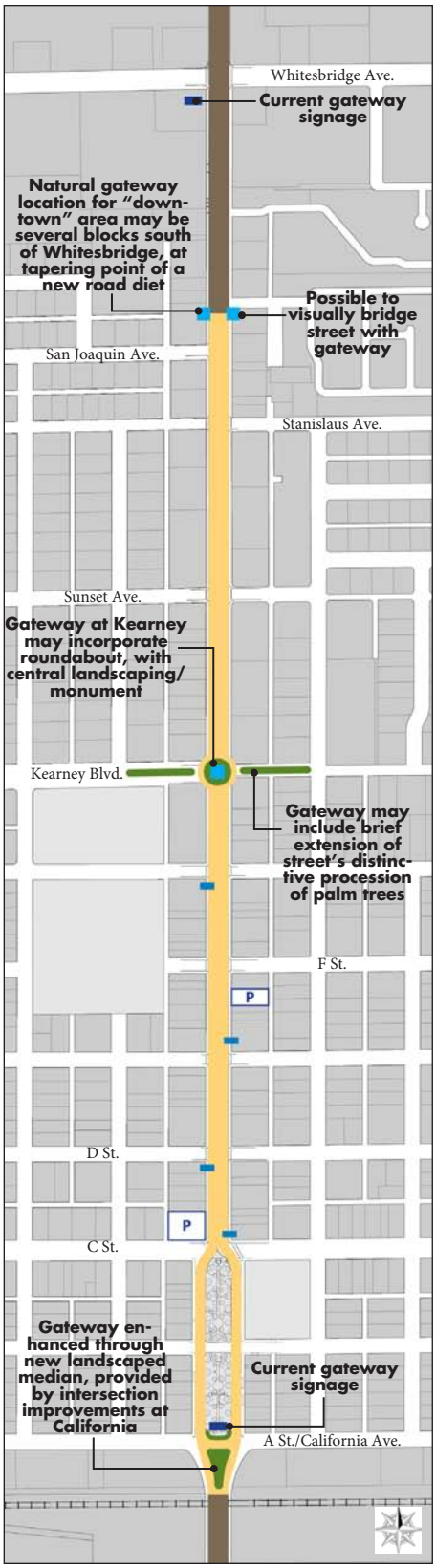
Simple street furniture coordination

Modern bike rack & granite block benches

Colorful cast concrete street features



Above: *A northern gateway scheme as it might integrate with a new crossing and curb extensions at the intersection of Madera and San Joaquin Avenues.*



Gateways

Two new City gateways are proposed south of Whitesbridge Avenue and at Kearney Boulevard; and basic landscaping enhancements are also possible at the southern gateway in coordination with California Avenue's intersection improvements.

An illustration above of a potential northern gateway shows how two pillar monuments could frame the roadway near crossing improvements at San Joaquin Avenue. The monuments shown here draw from unique art deco gateway features found on Kearney Boulevard in Fresno. This intersection may be an ideal gateway location, as a new crossing with curb extensions will already slow traffic and offer space for more significant landscaping.

The new east-west gateway at Kearney Boulevard can be implemented with similar modest signage monuments and landscaping. A new roundabout would provide easy opportunity for central gateway features in the intersection. Regardless of this potential intersection improvement, continuation of Kearney's iconic street palms in the blocks leading to Madera Avenue would also be an effective method to announce the boulevard's arrival into Kerman.

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Land Use and Regulatory Environment

For the most part, Madera Avenue is currently designated General Commercial in Kerman's 2007 General Plan Land Use Element. The General Plan sets many useful policies relevant to the revitalization of Madera Avenue, including policies to encourage the infill of vacant commercial properties and the renovation of existing commercial structures. The General Plan also sets forth three distinct design districts along Madera Avenue as follows:

1. The "Historic Townsite" spanning from California/A Street to Kearney Boulevard;

2. North of Kearney Boulevard to Whitesbridge Avenue;

3. Whitesbridge Avenue

These districts include design guidelines, many of which are implemented as standards in the City's Zoning Ordinance, and seek a somewhat distinct approach with regards to building scale, parking, signs, landscaping, setbacks, and outdoor lighting in each of the districts. Many of these guidelines are beneficial to creating a walkable environment, including guidelines for building placement and orientation to the front property line. Nonetheless, the design proposals discussed in this report suggest that a more coordinated and holistic approach to frontage and building design along Madera might help in presenting a cohesive and unified image to residents and visitors, particularly for design districts 1 and 2.

This could be accomplished through identifying a central "theme" for the corridor that could permeate both public realm elements as well as renovated building façades, and could provide additional direction for the creation of a broader set of design guidelines for the corridor that address acceptable materials, wall treatments, and colors. Madera Avenue currently has a large number of buildings in the "midcentury modern" style, incorporating streamlined design motifs, transparent storefronts, and vertically-projecting tower and signage elements that is not widespread throughout this portion of the valley. Embracing this style and establishing a more complete set of guidelines for it in renovation and new construction could help differentiate Kerman from other communities in a positive way.

The City could consider a "pattern book" or more detailed, architectural approach to the Design Guidelines for the corridor. Pattern Books typically regulate building massing, façade composition, external details, and colors and materials. Applicants might be encouraged to choose and follow an established architectural style, or an established appropriate architectural precedent, when making a new proposal. This choice can help to establish design review criteria when making a new proposal.

Frontage and Façade Improvement Programs

In the short term, improvements along Madera Avenue could focus on improved frontage.

Private property owners could be encouraged to establish a "landscape and frontage zone" within the front 5'-10' of their properties where a concerted effort could be made to organize new landscape and signage, and consider additional permeable surfaces or the closing of extraneous driveways. This could be accomplished through a "frontage improvement program" wherein the City provides some financial incentive (such as discounted/complimentary design, grants, and/or a match) for private property owners to complete the work. In the longer term, such a program could be extended to include more substantial improvements, such as façade and exterior building renovations and signage.

Signage Recommendations

Signage along Madera forms a large part of the visual landscape that visitors and residents experience. It includes both public realm signage, such as street signs and wayfinding, and private realm signage visible from the public right-of-way. While the

design team looked at ways that new public realm signage might be more integrated into a unified design for the corridor, private realm signage plays an important role as well. Many of signs do not appear to be in compliance with the City's existing sign ordinance.

Non-Conforming Signage

The City could consider a "Sunset Ordinance" for non-conforming signage. Such an ordinance would develop a strategy of amortizing non-conforming signs over a period of time. The amortization period would be based on the value of a given sign, with more substantial and expensive signs granted a longer amortization. Similar strategies have been effective in other California Cities.

In the event that such an ordinance were adopted, the California Business and Professional Code Section 5491.1 states that the City would need to conduct an inventory of illegal or abandoned signs within 120 days of adoption of any such amendment to the Sign ordinance.

New Signage

New signage could benefit from tighter standards for sign types that are appropriate to pedestrian-oriented environments, including window signs, wall signs, wall mural signs, blade signs, and awning signs. North of Kearney Boulevard standards could better address monument signage to ensure compatibility with the overall theme of the corridor.

Estimated Implementation Costs

The Appendix provides a detailed preliminary estimate that includes a tiered breakdown of costs by location.

Preliminary cost analysis for design and construction of the "Baseline" Design Alternative is $3,596,200.

Implementation Schedule	Short-term (1-5 years)	Mid-term (5–10 years)	Long-term (10+ years)	Possible Funding Sources
Baseline Alternative				
Determine Preferred Alternative for corridor	x			
Establish Working Group with City Staff and Caltrans	x			
Curb extensions		x		RSTP, RTIP, ISHF, C
Enhanced unsignalized pedestrian crossings				
at C Street	x			RSTP, RTIP, TEA
at D Street	x			RSTP, RTIP, TEA
at F Street	x			RSTP, RTIP, TEA
between Kearney Blvd. and Sunset Avenue		x		RSTP, RTIP, TEA, BTA
between Sunset Avenue and Stanislaus Avenue		x		RSTP, RTIP, TEA, BTA
at San Joaquin Avenue	x			RSTP, RTIP, TEA
Shortened turn pockets in the median		x		RTIP, ISHF
Intersection improvements at California/A Street		x		RSTP, RTIP, TEA, ISHF, C
Intersection improvements at C Street		x		RSTP, RTIP, TEA, ISHF, C
Intersection improvements at Kearney Boulevard, including a designated left turn signal on Kearney		x		RSTP, RTIP, TEA, ISHF, C
Street tree planting with larger "canopy" species in coordination with curb extensions, and along the sidewalk where possible	x	x		TEA, C
Replace turf medians with drought-tolerant native landscaping to minimize irrigation and maintenance	x			
Clearly marked on-street parking spaces that provide a buffer between the sidewalk and the vehicular travel lanes	x			RTIP
Continuous sidewalks with a minimum 5 feet clear pedestrian zone along the corridor	x			CMAQ, RSTP, TEA
Coordinated pedestrian-scaled lighting, banner signage, traffic poles and mast arms, and street furniture		x		RSTP, TEA
Public parking lots		x		
Plaza treatment at B Street			x	RSTP, RTIP, TEA
Install decorative stamped/textured concrete in sidewalks and at key crossings		x		RTIP
Road Diet Strategies (OPTIONAL)				
Restripe travel, turn and parking lanes		x		RTIP, ISHF
Add Class II bicycle lanes		x		CMAQ, RSTP, BTA, C
Curb extensions (concrete "planters")		x		RSTP, RTIP, ISHF, C
Plaza Veteran's Park widening		x		RTIP, TEA, C
Roundabout at Kearney Boulevard		x		RTIP, C
Widen median or sidewalk between F Street and San Joaquin Avenue			x	RTIP, ISHF, C
Design Improvements				
Identify Central Theme for Corridor	x			
Frontage Improvements	x			V
Façade and exterior building improvements		x	x	CDBG, D, BID
Signage improvements		x		D, BID
Install benches, trash and recycling receptacles, planters, etc.	x			D, BID, V
Install decorative pedestrian lighting along corridor	x			TEA, D, BID
Gateway monument signage at San Joaquin Avenue		x		D
Gateway monument signage at Kearney Boulevard		x		D

Key to Possible Funding Sources:

CMAQ	Congestion Mitigation and Air Quality Improvement Program
RSTP	Regional Surface Transportation Program
RTIP	Regional Transportation Improvement Programs
TEA	Transportation Enhancement Activities
BTA	Bicycle Transportation Account
CDBG	Community Development Block Grants
ISHF	Infrastructure State Revolving Fund
TRIP	Total Roads Improvement Program
C	Measure C Local Transportation-Purpose Funds Program
D	Development fees
BID	Business Improvement District
V	Volunteer initiatives

Next Steps

This section lists specific improvements and an approximate implementation timeline for the City of Kerman (see Implementation Schedule on next page). Factors that will influence the timeline include the need for collaboration with Caltrans, funding sources, and priorities.

Some short-term projects could begin soon, focusing on projects that will benefit pedestrian safety and comfort while providing visible changes. For example, striping high-visibility crosswalks at intersections is a noticeable improvement, and would signal that the City is serious about making the corridor more walkable. Also, some mid-term projects are less complex, and may merit a higher priority than those with more construction impacts.

Since most of the recommended projects are on State right-of-way, Caltrans' input in selecting priorities is essential. In coordination with Caltrans, the City of Kerman must assess each project to make sure it improves the current level of connectivity for non-motorized users, as well as preserving existing connectivity for vehicles.

The following are the next steps the City can take to begin implementing the recommendations in this report:

1. Establish a Working Group involving City Staff and Caltrans to determine the following:
   - An acceptable strategy for detailed design elements.
   - Opportunities for piggybacking onto projects already scheduled.
   - Locations that may require higher priority based on factors such as improving safety.
   - Solutions for private-realm improvements, including frontage, signage, and building façades within the project area.

2. Determine a Preferred Alternative for the Corridor
   - If necessary, conduct supplemental traffic analysis that analyzes in further detail the potential impact of reducing travel lanes and/or modifying intersections to the corridor's level of service.
   - If necessary, formulate an acceptable strategy for the rerouting and/or management of truck traffic.

3. Pursue available funding based on final strategy for implementing detailed design elements.

Funding Resources

A number of funding opportunities exist for leveraging City funds to construct the projects recommended in this report. These programs offer alternatives for street design, community facilities, and other infrastructure.

Key federal funding sources for walking and bicycling are available. The Federal Highway Administration provides a matrix of funding opportunities at http://www.fhwa.dot.gov/environment/bikeped/bp-guid.htm#bp4. Support for accessing these funds can be found through your regional transportation agency.

Each of these funding sources is subject to changes in state and federal law, the economy and revenue levels, and project priorities. The following is a summary of programs as they existed at the time of this report.

Federal, State, and Regional Funding Programs

Congestion Mitigation and Air Quality Improvement Program

Funds are directed to areas that are in non-attainment of air quality maintenance areas for ozone, carbon monoxide or particulate matter. Projects that contribute to attainment are eligible including traffic flow improvement programs and bicycle and pedestrian facilities.

For more information, visit:
http://www.fhwa.dot.gov/environment/air_quality/cmaq/

Regional Surface Transportation Program

Apportioned through MPOs and RTPAs, the program provides funding for bicycle and pedestrian facilities, safety improvements and hazard elimination, traffic management systems, intersections with high accident rates or congestion.

For more information, visit:
http://www.dot.ca.gov/hq/transprog/federal/rstp/Official_RSTP_Web_Page.htm

Safe Routes to School Programs

Caltrans administers state and federally funded Safe Routes to School (SRTS) programs to improve walking and bicycling conditions in and around schools. State grants are primarily focused on infrastructure (capital) projects. Projects for federal funding can include both infrastructure or non-infrastructure (education, encouragement, enforcement and evaluation) categories.

The program seeks to fund projects that incorporate engineering, education, enforcement, encouragement and evaluation components. Engineering is listed first, because that effort creates the durable features that support other local efforts. However, successful programs often require that all 5 “E”s are addressed. Encouragement and Education programs can often be started at low cost and have proven to be very successful

in getting more children to walk or bicycle safely to school. Applicants are encouraged to develop their proposals as partnerships of the school, city and community.

For more information, visit:
http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm

State Transportation Improvement Program (STIP)/
Federal Transportation Improvement Program (FTIP)

This program represents the lion's share of California's state and federal transportation dollars. Three-quarters of the program's funds are earmarked for improvements determined by locally adopted priorities contained in Regional Transportation Improvement Programs (RTIP), submitted by the Fresno Council of Governments (Fresno COG) and other regional transportation planning agencies from around the state.

STIP/FTIP funds can be used for a wide variety of projects, including road rehabilitation, intersections, bicycle and pedestrian facilities, public transit, and other projects that enhance the region's transportation infrastructure. Fresno COG has already awarded projects to the City of Kerman in the most recent round for bike lane striping and other projects. Funding for this program usually occurs every two years.

For more information, visit:
http://www.dot.ca.gov/hq/LocalPrograms/STIP.htm
http://fresnocog.org/document.php?pid=272

Transportation Enhancement Activities

Federal Transportation Enhancement funds are for construction projects that are "over and above" normal types of transportation projects. These projects may include street trees and landscaping along roadways, pedestrian and bicycle access improvements and other scenic beautification. These are apportioned throughout the county.

For more information, visit:
http://www.dot.ca.gov/hq/TransEnhAct/TransEnact.htm

Bicycle Transportation Account (BTA)

This state fund, administered by the Caltrans Bicycle Facilities Unit, can be used to support bicyclists, including through bike lanes, median crossings, and bicycle/pedestrian signals. Some of Kerman's desired bicycle facilities could be funded through this program. Annual BTA funding is projected to be in the range of $7 million a year, statewide.

To be eligible for BTA funds, a city or county must prepare and adopt a Bicycle Transportation Plan. Adoption of a plan establishes eligibility for five consecutive funding cycles.

For more information, visit:
http://www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm

Transportation Development Act (TDA)

TDA provides for two sources of funding to counties: Local Transportation Funds (LTF) and State Transit Assistance (STA). Where TDA funds are not allocated solely to public transportation, TDA may fund other transportation programs, including planning and program activities, and pedestrian and bicycle facilities. Providing certain conditions are met, counties with a population under 500,000 (according to the 1970 federal census) may also use the LTF for local streets and roads, construction and maintenance. The STA fund can only be used for transportation planning and mass transportation purposes.

For more information, visit:
http://www.dot.ca.gov/hq/MassTrans/State-TDA.html

Community Development Block Grants (CDBG)

Under the State Small Cities Community Development Block Grant (CDGB) Program, cities and counties may seek funding for a broad range of activities ranging from establishment and operation of revolving loan funds and construction of infrastructure improvements to construction of new housing and community facilities.

Applicants may also seek funding for planning studies and writing grant applications related to these activities. Funding programs under the CDBG Economic Development Allocation include the Planning and Technical Assistance Grants, Over-the-Counter Grants for public infrastructure associated with private-sector job creation, and Economic Enterprise Fund for small business loans. Applications under the Economic Development Allocation require a job creation/retention component.

Potential projects include street and traffic improvements, water system expansion and improvements, and sewer system expansion and improvements.

For more information, visit:
http://www.hud.gov

California Business, Transportation, and Housing Agency (BTH) Infrastructure State Revolving Fund (ISRF) Program

The Business Transportation and Housing Agency (which includes Caltrans) administers a revolving loan fund for local governments to finance infrastructure improvements, including city streets. Cities may apply for and receive loan funding from $250,000 up to $10 million, with terms of up to 30 years for a broad range of projects. Eligible applicants include cities, counties, special districts, assessment districts, joint powers authorities and redevelopment agencies. Eligible projects include city streets, county highways, state highways, drainage, water supply and flood control, educational facilities, environmental mitigation measures, parks and recreational features, port facilities, public transit, sewage collection and treatment, solid waste collection and disposal, water treatment distribution, defense conversion, public safety facilities, and power and communication facilities.

For more information, visit:
http://www.ibank.ca.gov/infrastructure_loans.htm

Urban Greening for Sustainable Communities Grant Program

The Proposition 84 Bond Act of 2006 provided funds for urban greening. The Strategic Growth Council is administering these funds, and anticipates three funding cycles. Cities, counties and nonprofits are eligible to apply for these grants for projects to preserve, enhance, increase or establish community green areas such as urban forests, open spaces, wetlands and community spaces (e.g., community gardens). Funds for street trees and median landscaping might be eligible under this program. Up to 25 percent of the funds may be available for the preparation of comprehensive Urban Greening Plans. Proposal submissions for the second funding cycle concluded in Summer of 2011.

For more information, visit:
http://www.sgc.ca.gov.

Total Roads Improvement Programs (TRIP)

This program offers a huge opportunity for substantial savings by funding street maintenance and improvement projects early. California Communities® offers a pooled securitization program to assist local agencies in bonding against future payments to obtain funding for more projects today. As a pooled public offering, program participants will benefit from reduced issuance costs and better interest rates as compared to stand-alone issues. The program does not require a pledge of the local agency's General Fund.

The Gas Tax Accelerated Street Improvement Program will allow local governments to leverage their State Motor Vehicle Fuel Tax (the "Gas Excise Tax") to finance road improvement projects. The use of proceeds from the Gas Excise Tax, an 18-cent State excise tax collected on fuel sales, is restricted to the maintenance and construction of public streets and highways. The obligations will be secured solely by a pledge of Gas Excise Tax revenues of the participating agencies.

For more information, visit:
http://www.cacommunities.org/

Transportation, Community, and System Preservation (TCSP) Program

The Transportation, Community, and System Preservation (TCSP) Program provides funding for a comprehensive initiative including planning grants, implementation grants, and research to investigate and address the relationships between transportation, community, and system preservation and to identify private sector-based initiatives.

States, metropolitan planning organizations, local governments and tribal governments are eligible for TCSP Program discretionary grants to plan and implement strategies which improve the efficiency of the transportation system, reduce environmental impacts of transportation, reduce the need for costly future public infrastructure investments, ensure efficient access to jobs, services and centers of trade, and examine development patterns and identify strategies to encourage private sector development patterns which achieve these goals. Funding is subject to reauthorization beyond Fiscal Year 2011.

For more information, visit:
http://www.fhwa.dot.gov/tcsp/pi_tcsp.htm

Environmental Enhancement and Mitigation Program (EEMP)

The program offers a total of $10 million each year for grants to local, state, and federal governmental agencies and to nonprofit organizations for projects to mitigate the environmental impacts caused by new or modified public transportation facilities. Eligible projects must be directly or indirectly related to the environmental impact of the modification of an existing transportation facility or construction of a new transportation facility. Grants are awarded in three categories: 1) Highway Landscaping and Urban Forestry Projects that offset vehicular emissions of carbon dioxide; 2) Resource Lands Projects to acquire or enhance resource lands to mitigate the loss or degradation of resource lands lying within or near the right-of-way acquired for transportation improvements; 3) Roadside Recreation Projects to acquire or develop roadside recreational opportunities.

The Guidelines and Application are published by the Natural Resources Agency each year. The Natural Resources Agency evaluates project proposals and provides a list of recommended projects to the California Transportation Commission (CTC) for consideration. The Department of Transportation administers the approved grants.

For more information, visit:
http://www.resources.ca.gov/eem/

Office of Traffic Safety Grants

The Office of Traffic Safety (OTS) administers traffic safety grant funds to reduce traffic deaths, injuries and economic losses. OTS distributes funds statewide in the form of traffic safety grants that are awarded to political subdivisions of the state based upon certain criteria. OTS develops a yearly Highway Safety Plan (HSP) that identifies the primary highway safety problems in the State and provides potential solutions. Identified in conjunction with the National Highway Traffic Safety Administration, OTS has several priority areas for grant funding, including Police Traffic Services, Emergency Medical Services, Roadway Safety, and Pedestrian and Bicycle Safety. Political subdivisions of the state are eligible to apply for and receive OTS grant funding. In addition to state governmental agencies, state colleges, and state universities, subdivisions of the state include local city and county government agencies, school districts, fire departments, and public emergency services providers. Non-profit, community-based organizations (CBOs) are eligible to apply for funding through a political subdivision of the state. For example, a county department may submit a proposal that includes funding for CBO participation. The CBO funding would be included under contractual services in the proposal budget.

For more information, visit:
http://www.ots.ca.gov/

REMOVE II Program

The REMOVE II Program provides incentives for specific projects that will reduce motor vehicle emissions within the District. Funding could go towards the construction of on- and off-street bicycle paths.

For more information, visit:
http://www.valleyair.org/grant_programs/grantprograms.htm

Measure C Local Transportation-Purpose Funds Program

Twenty-five (25%) percent of the proceeds of the retail transactions and use-tax is allocated to each city and to Fresno County for local priority improvement projects. The distribution of the funds is based on a formula incorporating street miles (25%) and proportionate population (75%), and most importantly, the funds are distributed immediately back to the communities. Funds can apply to construction and maintenance of streets and roads as well as bicycle and pedestrian facilities.

For more information, visit:
http://www.measurec.com/

Local Funding Opportunities

Development Fees

Some cities require developers to install or help pay for infrastructure improvements (streets, sidewalks, transit shelters, bike racks, landscaping, etc.) through individual development agreements. To avoid legal challenge of the City's right to levy these fees, care must be taken to apply this strategy only where there is a clear link establishing that travel generated by the private project will use the facility to be funded with the fees.

Public art funds derived from building projects can also be used for public art projects to enhance target areas.

Special Districts

A special district such as a Business Improvement District (BID) can provide up-front and on-going funding for projects benefiting specific commercial areas. Business-Based Improvement Districts are best suited for marketing, special events, and smaller expenditures like signage. Property-Based BIDs typically generate more revenues and are better suited for more expensive projects like landscaping. Landscaping and lighting districts are also sometimes established for streetscape improvements and maintenance.

Other types of facilities and infrastructure districts are sometimes created for parks, drainage and sewage. Special districts generally assess a charge levied upon parcels of real property within the district's boundaries to pay for "local improvements." Unlike redevelopment, it is necessary to charge an assessment or fee to property owners and/or merchants to fund such a district.

Volunteer Initiatives and Private Donations

In addition to funding sources, programs can be created for volunteer initiatives such as "Adopt-a" programs where individuals or groups engage in beautification projects such as tree plantings, or monitoring and keeping up local transit shelters. Local artists, art centers, or school art programs can be partners in community-based projects to create distinctive public artwork, transit shelters, sculptures, water features, or other amenities. Private donors or businesses can be solicited to sponsor downtown enhancement activities. These programs can be led by the City or by other community organizations.

chapter 4

MADERA AVENUE STREETSCAPE MASTER PLAN

Appendix

Media Releases and Flyers

SUBJECT: **Madera Avenue Streetscape Master Plan Community Workshops**

FROM: **Tony Leonard, Local Government Commission**

DATE: **Tuesday, May 31, 2011**
CONTACTS:

Luis Patlan
City of Kerman
Planning & Development Services Department
(559) 846-9389
lpatlan@cityofkerman.org

Anthony Leonard
Local Government Commission
(916) 448-1198 ext. 315
aleonard@lgc.org

On June 10 and 11, the City of Kerman will be hosting interactive public workshops to develop a streetscape master plan for Madera Avenue (State Route 145) from Church Avenue to State Route 180. These events will be an opportunity for the community to provide input into the development of this plan.

The input gathered from these events will help guide physical changes to the public right-of-ways to ensure safe access to and from schools, public parks and businesses, create a more pedestrian-friendly streetscape, improve biking routes along this corridor as well as help develop a more cohesive downtown area. During this process the design team will identify opportunities for traffic calming measures, landscape improvements emphasizing water conservation, improvements to lighting, signs, and street furniture, as well as ways to enhance pedestrian crossings and traffic signal design.

A design team consisting of Opticos Design, Yamabe & Horn Engineering, Nelson\Nygaard, and the Local Government Commission will lead the activities and development of the streetscape master plan.

At the Friday night opening workshop the design team will provide participants with an overview of the process, followed by a moderated group brainstorming and prioritizing session to determine the issues important to Kerman residents.

The Saturday workshop will start with a walking tour of Madera Avenue to assess walking, bicycling and driving conditions from all user points of view, followed by a design training session. The workshop will end with community design tables, where participants will break up into smaller groups and draw their solutions on maps of Madera Avenue.

Community participation is vital so all community members, leaders and business operators are invited to attend. The design team will return July 12-14 to present the initial recommendations resulting from these workshops.

WHEN:

Friday, June 10
Opening Community Workshop: Community Values and Priorities
6:00 – 7:30 pm

Saturday, June 11
Community Walkability Audit and Design Workshop
9:00 am – 1:00 pm

WHERE:

All workshops will be held at **Kerman City Hall, 850 S. Madera Avenue**

Refreshments and snacks will be provided at all events.
Spanish translation provided.

This project is made possible through an *Environmental Justice: Context Sensitive Transportation Planning Grant* from the California Department of Transportation.

FOR IMMEDIATE RELEASE

City of Kerman to Hold Community Workshop and BBQ to Show Madera Avenue Improvements

June 29, 2011, Kerman, CA — On Thursday, July 14, the City of Kerman will be hosting a public workshop and BBQ to present preliminary recommendations for their Streetscape Master Plan for Madera Avenue (State Route 145). A design team of transportation and land use consultants will present the plan concepts to the public on July 14 from 6 to 7:30 pm at Kerman City Hall. The public is encouraged to join the design team at 6 pm for a more detailed master plan review and an opportunity for the public to comment. Prior to the workshop, there will be a community BBQ and opportunity to preview the recommendations from 5-6pm at Plaza Veterans Park.

The design team of Opticos Design, Yamabe & Horn Engineering, Nelson/Nygaard and the Local Government Commission, will be returning to Kerman from July 12 to 14 to facilitate the public workshop and to highlight proposed traffic calming measures on Madera Avenue, landscape improvements, improvements to the lighting, signs and street furniture, and ways to enhance pedestrian crossings and traffic signal design. They are utilizing the input gathered from workshops and meetings held in June with residents, businesses and city staff to develop options for physical changes to Madera Avenue.

The elements of the proposed master plan are aimed at creating a more pedestrian-friendly streetscape, improving biking routes along this corridor and developing a more cohesive downtown area. The public is welcome to stop by City Hall on July 12 and 13 between the hours of 3 and 5 pm to meet with the design team and get a sneak peak of the developing plan recommendations prior to Thursday's events.

All community members, leaders and business operators are invited to attend these events. The Thursday night BBQ is free and open to the public.

When and Where:

BBQ and Plan Review
5:00-6:00pm
Plaza Veterans Park

Presentation of Plan Concepts
6:00-7:30pm
Kerman City Hall
850 S. Madera Avenue

For More Information Contact:

Luis Patlan
City of Kerman
Planning & Developemnt Services Dept
559-846-9389
lpatlan@cityofkerman.org

Anthony Leonard
Local Government Commission
916-448-1198 x 315
aleonard@lgc.org

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Join Us in Improving Madera Avenue!
Community Workshops: Madera Avenue Streetscape Master Plan
Help the City develop a streetscape plan that will include traffic calming measures, and improvements to landscaping, lighting, signs, and street furniture for Madera Avenue.
Opening Workshop
Friday, June 10
6 – 7:30 pm
Walking Tour and Design Workshop
Saturday, June 11
9 am – 1 pm
Workshops will be held at
Kerman City Hall, 850 S. Madera Avenue.
For more information, contact:
Luis Patlan, (559) 846-9389 or patlan@cityofkerman.org


Join Us!
Community Workshops:
Madera Avenue
Streetscape Master Plan
Opening Workshop
Friday, June 10
6 – 7:30 pm
Walking Tour/ Design Workshop
Saturday, June 11
9 am – 1 pm
Kerman City Hall
850 S. Madera Avenue.
For more information, contact:
Luis Patlan, (559) 846-9389 or
patlan@cityofkerman.org

Madera Avenue Streetscape Master Plan

COMMUNITY PLANNING EVENTS

The City is developing a context-sensitive streetscape plan for Madera Avenue that will include traffic calming measures, landscape improvements, lighting, signs, and street furniture. In order to respond to the community's needs and concerns, a series of workshops are being held to solicit input from the community.

With your help, the resulting plan will:

- Guide physical changes to the streetscape from Church Avenue to State Route 180,
- Improve bicycle mobility,
- Create a more pedestrian-friendly streetscape,
- Help develop a cohesive downtown area.

Friday, June 10, 2011

Opening Community Workshop:
Values and Priorities

■ 6 pm - 7:30 pm

Light refreshments provided

Saturday, June 11, 2011

Walking Tour & Design Workshop

■ 9 am - 1 pm

Lunch provided

Events held at:

Kerman City Hall

850 S. Madera Avenue, Kerman

For more information contact:

Luis Patlan
Phone: (559) 846-9389
E-mail: patlan@cityofkerman.org

This community planning process is made possible by an Environmental Justice Context-Sensitive Design Planning Grant from the California Department of Transportation (Caltrans) and by the City of Kerman. Outreach and Plan Preparation by the Local Government Commission, Opticos Design, Yamabe & Horn Engineering, and Nelson\Nygaard.

Plan principal para las calles de Avenida Madera

PLANIFICACIÓN DE EVENTOS COMMUNITARIOS

La Ciudad esta desarrollando un plan sensible de contexto de un paisaje urbano para la Avenida Madera que incluyera medidas para calmar el tráfico, mejoramientos de paisajes, iluminación, semáforos, y mobiliario urbano. Con el fin de responder a las preocupaciones y necesidades de la comunidad, una serie de talleres se llevaran a cabo para obtener aporte de la comunidad.

Con su ayuda, el plan resultante:

- Guiará cambios físicos de paisajes de la Avenida Church a la Ruta Estatal 180
- Mejorará la movilidad de bicicleta
- Creará un paisaje mas amigable para peatones
- Ayudará a desarrollar un centro unido

Para mas información:

Luis Patlan
(559) 846-9389
patlan@cityofkerman.org

veirnes, 10 de junio de 2011

Taller de apertura para la comunidad:
Valores y prioridades

■ 6 pm - 7:30 pm

Comida y refrescos

sábado, 11 de junio de 2011

Caminata de investigación y taller de diseño

■ 9 am - 1 pm

Almuerzo y refrescos

Eventos realzados en

Kerman City Hall

850 S. Madera Avenue, Kerman

Este proyecto es posible gracias a una subvención para Justicia Ambiental del Departmento de Transporte de California a la ciudad de Kerman. Aleance y preparación del plan por Local Government Commission, Opticos Design, Yamabe & Horn Engineering, y Nelson\Nygaard.

Madera Avenue Streetscape Master Plan

Presentation of Preliminary Plan Concepts

The City is developing a context-sensitive streetscape plan for Madera Avenue that will include traffic calming measures, landscape improvements, lighting, signs, and street furniture. Come see what changes are being recommended based on input from the public workshops and meetings held June 10-11.

With your help, the final plan will:

- Guide physical changes to Madera Avenue,
- Improve bicycle mobility,
- Create a more pedestrian-friendly streetscape,
- Help develop a cohesive downtown area.

Want a Sneak Peak?

Feel free to stop by City Hall and visit with the Design Team on July 12 or 13 between 3-5pm.

Please Join Us!

Thursday, July 14, 2011

Presentation of Plan Concepts

4 - 5:30 pm

Kerman City Hall
850 S. Madera Avenue, Kerman

Please RSVP to:
Olivia Pimentel
Phone: (559) 846-9386
E-mail: opimentel@cityofkerman.org

Light refreshments will be provided.

This community planning process is made possible by an Environmental Justice Context-Sensitive Design Planning Grant from the California Department of Transportation (Caltrans) and by the City of Kerman. Outreach and Plan Preparation by the Local Government Commission, Opticos Design, Yamabe & Horn Engineering, and Nelson\Nygaard.

Madera Avenue Streetscape Master Plan

Presentación de Ideas Preliminares

La ciudad está preparando un plan para la Avenida Madera que ayudará a reducer la velocidad de los carros y que incluirá mejoras al alumbramiento, los letreros, los arboles y plantas, y otros aspectos de esta calle principal de Kerman. Le invitamos a que participe para ver los cambios que se recomiendan en base a reuniones y talleres celebrados el 10 y 11 de junio.

Con su ayuda el plan final podrá:

- Guiar los cambios a la Avenida Madera,
- Mejorar la circulación en bicicleta,
- Crear una calle mas cómoda para peatones,
- Ayudar a crear un centro de la ciudad más activo.

¿Quiere dar un vistazo?

Pase por el municipio para hablar con el equipo de diseño el 12 o 13 de Julio entre 3 y 5 de la tarde.

¡Por favor participe!

Jueves 14 de julio de 2011

Presentación del Plan

4 a 5:30 de la tarde

Kerman City Hall
850 S. Madera Avenue, Kerman

Si piensa atender, por favor avise a:

Olivia Pimentel
Phone: (559) 846-9386
E-mail: opimentel@cityofkerman.org

Habrán botanas y refrescos.

Este proyecto es posible gracias a una subvención para Justicia Ambiental del Departmento de Transporte de California a la ciudad de Kerman. Publicidad y preparación del plan por la Local Government Commission, Opticos Design, Yamabe & Horn Engineering, y Nelson\Nygaard.)

Workshop Notes

Charrette Trip #1: Opening Workshop

- Add crosswalk at San Joaquin Avenue
- High visibility markings at crosswalks
- More street furniture (benches, trash cans, recycling bins)
- Shade
- Brick pavers in crosswalks
- Bike lanes
- Improve safety and access at Memorial Park
- Fix crosswalk at C Street
- Advanced pavement markings at crosswalks
- Curb extensions at intersections
- Install countdown pedestrian signals
- Install flashing beacons at unsignalized intersections
- Reduced truck traffic (create the truck bypass)
- Add more wayfinding and signage
- Install a speed feedback sign

Charrette Trip #2: Presentation of Plan Concepts Workshop

- Have concerns over cars entering from South around Memorial Park.
- Look at the possibility of putting parking next to Memorial Park.
- Be careful to not design for trucks.
- Need to be truck-friendly.
- No one uses the park.
- There was too much information presented to understand it all. *[The initial recommendations will be made available to participants after the workshop.]*

Stakeholder Notes

Business Focus Group

June 10, 2011, 7:45-9:30am

Attendees

- Tim Przybyla, Finance Director, City of Kerman
- Linda Geringer, Chamber of Commerce
- Luis Patlan, Planning Director, City of Kerman
- Jenny Mendez, United Health Center
- Sayla Griffin, Valley Health Team
- Paul Toste, Veterinarian
- Lizbeth Boyd, West America Bank
- Joseph Boyd, Tax Wizard
- Ray Man, KAR
- Francisco Ortiz y Davis, Sebastian Corp.
- John Lystad, Citibank
- Stefan Pellegrini, Opticos
- Chris Janson, Opticos
- Cailin Shannon, Opticos
- Michael Moule, Nelson Nygaard
- Kevin Shively, Nelson Nygaard
- Paul Zykofsky, LGC
- Tony Leonard, LGC

Introductions

Luis Patlan gave background on the project. This project is to improve safety along Madera Avenue. Traffic can be high and there are a lot of students from high school and junior high school. Many opportunities exist to slow the traffic and improve conditions on Madera Avenue. City applied for a Caltrans grant to do the Madera Avenue Streetscape plan, and assembled team with a lot of experience working on these types of projects. Result is to put together a plan that community can get behind and have City Council to start implementing the project.

Notes

- Like new repaving of the street that Caltrans did. Used to be a crosswalk near one of the quick gas station and kids continue to cross at a mid-block. In front of Kerman You Save. Want students to cross at signal.
- Happy with changes at Madera and Kearney. When business designed having entrance on Madera Avenue was a big deal. But parking is tricky. So don't allow people to enter from Madera. Exit only on Madera, entrance from parking. 50 staff, 250 patients a day. Shared parking with Civic Center. Has been an issue when special events are held.
- You're supposed to stop to let pedestrians cross but if I stop other cars continue and speed by.
- Part of problem is Madera Avenue is Highway 145. Lot of traffic is people passing through and they come zooming through and not aware of children crossing

as much. Motorists not always knowledgeable that schools are on both sides of avenue.

- Railroad line also sometimes blocks. Not very active. But sometimes block.
- People who visit will comment on how nice the median looks. Fowler has nice planter boxes and brick in downtown. Crosswalks: motorists don't stop for adults either. Would like to see the one in front of City Hall because you're not visible. Are standing in a left hand turn lane. When pull out on B street need to slow traffic down entering town. Fence blocks visibility.
- How effective would signs be? Put school signs and school zone signs. If put in signs would like to see the in-pavement flashers that they have in San Luis Obispo. Everyone sees that someone is going to cross. Works well.
- Michael: Signs alone aren't that effective. In-pavement flashers work well but there are new tools with flashers and less expensive than in-pavement flashers. Raised medians help.
- Fence around Veterans Park is a problem. Cars crash into it a lot. Has happened multiple times. Used to have events there, farmers market, but had people helping cross the street.
- Parades down Madera Avenue. Landscape could be a problem. Get permit to close whole street. Will close one side and people sit on median. Xmas use southbound lane but march north. Do it differently for other parades.
- Repaving has helped. Used to avoid Madera. Work at Sebastian and serve 3,000 customers/month. Many people use intersection at C and Madera so when you cross that's a problem. Playing "frogger." Several people hit going east on C and motorists going north don't yield.
- C and Madera is problem. People will be in right lane and suddenly wind up in left lane. Cars cut the corner.
- Would like to see more bicycle lanes. Really don't have any except on Kearny Blvd. Would like to see more places although no room on Madera Avenue. Bicycle trails/ paths like the one in Clovis is a beautiful bicycle lane. Madera looks nice, median looks good. Would like some trees added where they took trees out. Put something there. Hanging flowering baskets. Something like that. Bike path, walking paths throughout the town. Entrance from south coming into town is very ugly. From Industrial park need to do something to make City look nice.
- People do ride on Madera, but they ride on sidewalk. Pedestrians at risk of being hit. But if there were traffic calming measures it would be more conducive for them to use the road.
- Stefan: Focus is on Madera but will look at opportunities to improve connectivity.
- Isn't there a proposal to do bike lane from Goldenrod to west side of town. Are working on bike plan for city but as City grows look to incorporate bike lanes before. Are planning large parks on east and west side. 25 acres on east, 30 on west. With both of those would like to have bike paths through those parks that would connect to City. Want to encourage that. Existing path from Kearney.
- Like trees in the middle and on sides. Don't like it when the City takes a tree out. Seems shortsighted to take trees that have been there a long time. Go to beautiful

cities where sidewalks move. With high temperatures need as much shade as possible. Error for City/Parks to take them out. City plants crepe myrtles and gingkos. They are small trees that don't give shade and you get aphids. Gingko is great tree but grows too slow. Important to think long term. Stop taking out the trees.

- Most people don't think safety is problem on Madera Avenue. Most are pedestrian errors where they cross at a place where they shouldn't. Like the flashing lights. Also enforcement problem. South end of plaza park intersection is one we haven't talked about. Is problematic. Lots of space. That's the most treacherous intersection. Car coming from the south is going fast, cars also turning, not clear who has right of way. Need something. Motorists crossing have stop signs but cars coming fast south or northbound. Speed is problem.
- I go an extra block than turn there. Maybe best to get rid of left hand turn. Need that left hand turn. Have people that turn there. Safety signs might help.
- Traffic coming from south, going too fast. The change from 35 to 30mph is not clearly marked. Slow traffic down before gets into town. Several close calls and then cars hitting the fence. Sign indicating that they are entering a downtown business would help.
- Part of problem is that trucks and cut that corner. What if did drop it down to one lane around the park. Would slow traffic would help. With founders day next week need people to get across to park. But those two blocks may not need two lanes.
- Landscaping
- Could do boxes at some of the tree wells.
- Nice to have some parking off of Madera with a sign to let people know where they can park. There's plenty of parking behind buildings and on side streets it's just that people don't know where it is.
- If went down to two lanes would be able to put in diagonal parking and curb extensions at corners. When did construction and narrowed down to one lane we had real traffic backups especially when school is in session. Also have farmworkers returning and coming through town. Coinciding with afternoon school peak. Worker travel is during harvest through October.
- Have realigned existing school sites with 4 schools. Used to have citywide schools.
- Are also getting a new Wal-Mart on Goldenrod, one mile east of Madera Avenue. School also on Goldenrod.
- Slow people coming into town is a must. Have trucks going in and out of our facility. Start slowing them down before in town. From north the signal slows them down but not from the south. Especially with all the truck traffic coming through. One of major north-south highways in the Valley.
- What about buildings on Madera Avenue?
- City had a program where they matched up to $2,000 if did improvements of your store. I like the old buildings. Some people don't like that. Tired of having all the signs all over the store. Want buildings to be well-maintained. Years ago proposed that but got backlash from property owners. Are partial steps where could establish a design review committee that can make some suggestions.

- Lot of great things that can be done to enhance Madera, street, landscape, signage, etc. Façades is something that we've looked at but $2,500 is not enough. Encourage you to go to Fowler. They've given grants of up to $50,000. As project develops in next few years hopefully businesses will start to see that there's investment in this right of way.
- Park at south end of town is gorgeous. Need something like it at north end of town.

Agencies Focus Group

June 10, 2011, 10:00-11:00am

Attendees

- Luis Patlan, Planning Director, City of Kerman
- Philip Gallegos, Parks Dept. Director
- Ken Moore, Public Works Director
- Michael Mills, Caltrans
- Michael Navarro, Caltrans
- Jennifer Bryan-Sanchez, Caltrans
- Mark Ruiz, Kerman Unified School District
- Gary Horn, Yamabe & Horn
- Yohanes Makmur, Yamage & Horn
- Lee Ness, Kerman Police Dept.
- Jeff Belding, Kerman Police Dept.
- Officer Belden, Kerman Police Department
- Stefan Pellegrini, Opticos
- Michael Moule, Nelson Nygaard
- Kevin Shively, Nelson Nygaard
- Paul Zykofsky, LGC
- Tony Leonard, LGC

Introductions

Luis Patlan gave background on the project. This project is to improve safety along Madera Avenue. Traffic can be high and there are a lot of students from high school and junior high school. Many opportunities exist to slow the traffic and improve conditions on Madera Avenue. City applied for a Caltrans grant to do the Madera Avenue Streetscape plan, and assembled team with a lot of experience working on these types of projects. Result is to put together a plan that community can get behind and have City Council to start implementing the project.

Notes

- Beautifying Madera Ave and making more pedestrian friendly. We have several major events and would be good to support parades we have downtown. Landscaping, curb extensions that would support seating for the parades. Parades are primary activity. Do one celebration in Veterans Park. Sebastian Company has founding day. Median island has helped beautify downtown and slow down traffic.

- From PW standpoint biggest problem is dealing with trees. Keeping sidewalks clear. Need to pick better trees. Were told years ago that the Raywood Ash would be a good tree but haven't worked. Chinese Pistachio also damages concrete. Single most important issue that PW has to deal with. Landscaping: lot of grass that has to mow and have to coordinate with Caltrans and close one of lanes. Some way to install lower maintenance landscaping; lawn is challenging.
- SR 145 doesn't function as 4-lane highway for Kerman. Try to be flexible so city can meet its needs. Understand that there are a lot of pedestrians and bicyclists. Caltrans has in place policies for working with locals when a state route is also a main street. Can be flexible, using CSS, Complete Streets which allow for multimodal access on state routes. As far as trees can look at different species of trees as well as watering of trees to make sure that roots go down, deep-watering techniques. Along with root barriers. Fast growing trees typically have aggressive roots. Going to be important to know which trees are on Caltrans list. Caltrans doesn't allow some types of trees but not ones City would be interested in.
- Roundabout at Gateway and Park. 3-legged intersection but haven't finished it so splitter islands aren't in yet. Residential area.
- The one in Riverpark is poorly designed. Designed as 2-leg but never marked that way.
- Looking at putting roundabouts at Kearney and Vineland and Goldenrod.
- Challenge for school district is have children crossing to Kerman Floyed Elementary School and also High School and Middle School crossing to west. Lighted stop sign helps. Put in red curve on F Street. Take outside of parking lot to do a drop off and pick up lane.
- Median islands are helping on Madera with turning movements at intersections. Signals that we do have on Madera are supposed to be synchronized. If you go the speed limit. Tree wells and irrigation (deep watering) is there. Some of earlier phases are where we're having more problems. The ones on the sidewalk were all put in at same time. Would like to improve lighting, use a uniform standard; pedestrian crossing; discuss if median island needs to be extended south into industrial area. If not leave TWLTL but possibility of extending median and creating southern gateway. Would need buy in from businesses and large trucks.
- Medians built in mid-1990s. 1995-6.
- Needs to be a project that revitalizes downtown. Fewer people walking and more people driving is something we can improve. Speed on Madera even though it's posted 35mph you still see higher speeds. If we can improve safety that will draw people to downtown. Median island is a big asset. Wide sidewalk and tree wells are a buffer. Shops are small and are located at back of sidewalk. Without dealing with speed.
- Have discussed reducing lanes before. Could have challenge getting community to buy in. Have seen examples of La Jolla Blvd. in San Diego. Is doable but need buy in from Council and public.
- Focus on public safety. Where lot of Highschoolers cross now would like to see that put in between Stanislaus and Whitesbridge. Kids crossing at San Joaquin. Put-

ting more warning lights through Madera. At Kearney and Madera have turn lanes but would be good to have a left turn signal off of Kearney. Challenging because of offset intersection. Problem also with the fog. If they had a light to stop. Have pedheads but a lot of kids will see but still cross when red hand flashing. Countdowns would help.

- Veterans Park is a problem with cars going south at C. Some type of arrows or flashing light that would let people know that lane shifts. Use a solar beacon.
- In-pavement flashers or pedestrian beacons. Sunset and Madera have a problem with no marked crosswalks. Refuge island is too small.
- Improve street and building lighting to improve security/safety. Had one business smash in front door.
- Benches for pedestrians. Use of brick with concrete to create. Beautify the area. Sound system for parades. Historic decorative lighting is at south and north end of town would be good to fill in middle section of Madera Avenue.
- Consider road diet south of C Street. Get Caltrans the data and they'll consider.
- Caltrans traffic counts from 2009 are on Caltrans web site.
- One of Planning Commissioners suggested rerouting 145 trucks to another corridor. Possible alternate routes? Would need to talk to truck coordinator at Caltrans. Was brought up in relation to the roundabout.

Community Service Groups

June 10, 2011, 1:30-3:00pm

Attendees

- Beatriz Alejandre, United Way of Fresno
- Elaine Madrigal, Create for the Westside
- Meg Winchester, Food Bank
- Edie Forstrum, Salvation Army
- Veronica Acevedo, YLI/FNL
- Verenice Vidales, YLI/FNL
- Juan Rangel, Kerman Youth Commission
- Robert Bandy, Planning Commission
- Bob Epperson, Planning Commission
- Mike Arabian, Planning & Engineering at Sebastian, Planning Commission
- Luis Patlan, Planning Director, City of Kerman
- Olivia Pimentel, City of Kerman
- Michael Moule, Nelson Nygaard
- Paul Zykofsky, LGC

Introductions

Luis Patlan gave background on the project. This project is to improve safety along Madera Avenue. Traffic can be high and there are a lot of students from high school and junior high school. Many opportunities exist to slow the traffic and improve conditions on Madera Avenue. City applied for a Caltrans grant to do the Madera Avenue Streetscape plan, and assembled team with a lot of experience working on these types of projects. Result is to put together a plan that community can get behind and have City Council to start implementing the project.

Notes

- Like improvements like the traffic signal. Safety is a concern. Need to continue to improve on that. Maybe some other traffic lights at busiest intersections. New buildings, improvements are good.
- Don't think there's too much positive from commercial traffic standpoint. Anything we do might make that suffer. If you look at traffic patterns, end of July to October harvest season you see a lot more agriculture traffic. Parallel parking is a problem. If a truck parks the outside lane doesn't work. Need to consider with any changes. Hard to reroute traffic. Parking is concern. Try to make parking easier.
- Like trees in middle of street. Would be nice to have a bicycle lane. Pedestrian crosswalks not at intersection are problematic. Motorists don't yield.
- Landscaping improves look but when first put in people were upset because people had to make U turns. Bike lane would be nice because if you put it in would lose.
- Like trees in downtown area. Adds a lot. Do more of that. Would like to see buildings in downtown area have a more uniform look, color. Don't want it to look like little Mexico, but maybe a Santa Barbara look. In Clovis intersections have brick pattern in middle of intersection. Kerman has always prided itself in being a clean city.
- Large number of high school students crossing Madera Avenue. Need crosswalks to help youth cross.
- Landscaping and median have improved appearance. Have also helped with some of ped issues. Improvement: parking. Already affecting flow of traffic. As get more trucks on road are seeing more traffic in center lanes because motorists concerned with opening of car doors. Find more ways to put parking off-street. Access to businesses. Medians did create more of a problem because have to make more U-turns. Better access to businesses. Esthetics of local storefronts. Planning Commission has been looking at and would like to establish some guidelines and standards.
- Truck traffic during harvest is challenge. Think about bypass route especially since development is going east west. Truck parking may not be an issue on Madera Avenue. Goldenrod near cemetery. City has adopted truck routes and no parking areas. Everything south of RR tracks is allowed for parking. Trucks parked on Madera Avenue. On weekend have counted 100 trucks parked around town. Whitesbridge on west side gets a lot of trucks parked. Industrial area would be a good place to put it.
- Decorative crosswalks. At San Joaquin a beacon or sign would help.

- For median, still hear grumblings but esthetics have improved. Safety benefit by giving peds a safe place to cross. Truck traffic is a problem. Difficult to find bypass or alternate truck route. Modoc or Sycamore/Howard. Most truck traffic going straight north to Madera, others to Firebaugh and Modoc. Kearney to west works well but not to the east. Caution is folks still want the traffic but not the truck traffic. Bypass of 49 in Sutter Creek took all traffic out of town. Traffic speeds can be pretty high at times. Have seen some studies and information on roundabouts and traffic calming measures like bulb-outs that can help.
- Aesthetics of commercial buildings have a lot of mix. Would be nice to have a City style or look. Unified architectural theme would be nice. Take existing and see how existing businesses can blend in nicely with that. There are a number of well-designed buildings but there are smaller and older buildings that aren't maintained.
- Mix of things might work well.
- Challenge if you don't think about that you end up with main street like Los Banos where they lost their character.
- Use Caltrans formula to evaluate what impacts of changes on avenue would be. 5 factors quick and dirty to develop a cost-benefit. Walmart EIR done in November and might not have captured harvest season traffic.
- Would love it if trucks would not come so close to sidewalks/parking lane. At some point they hit one of the ped signals. Would like to have more time for ped signal. Countdown signals will help.
- Between railroad and E Street, road condition is poor. Probably due to truck traffic.
- Looking at south end of park, might be time to do something like what median has done to north end of park. Very unclear how road works there. Very confusing.
- If going northbound and come into town there's a sign that says trucks left lane.
- San Joaquin Valley Railroad trains sometimes block road for long periods of time. City needs to be in touch with them and see if they can time that. Fire department and ambulance service might have some leverage. Fire District. Fire station is off Kearney west part of town.
- Planning underway for a Highway 180 extension, Whitesbridge from Fresno west to connect to I-5 for goods movement. Route adoption study looking at various alternatives. Are looking at bypass to north on Belmont.
- Wayfinding program is also important because folks visiting don't know where to go. Recommend in report. Ironwork theme. Fix the clock in the park.
- If possible putting in a traffic signal at Sunset.
- Signal at Stanislaus because can't turn left to 180 get a lot of U-turns…

Kerman Local Minority-Owned Business Interviews

July 12, 2011

Maria's Family Cafe
861 S. Madera Ave

- Been in that location for 16 years
- Hours of operation: 6 am - 2:30 pm, 5 – 8:30 pm
- Wants to fix building, but it's hard to get loans.
- There is no lighting for her building
- From the Chinese restaurant towards the South
- Tree is lifting the sidewalk
- Would like to repair that and put in lighting
- It's too dark at night. Talked to the City about this a year ago.
- Also lives on Madera Ave
- Parking is on the side lot
- 12' is part of the property
- Rest is owned by Cable Company
- With the median there is no left turn. Cars can't make the U-turn.

U-Save Mini-Mart
200 S. Madera Ave

- With the median, has experienced loss of southbound business in mornings. No left turn.
- There are a lot of kids that stop in during school time.
- A crossing would be good.

Cecilia's Restaurant
15085 W Whitesbridge Ave

- There are parking issues.
- Market parking fills up the lot, so there is no room for restaurant parking.
- Been there for 6 years.
- Hours of operation: 8am – 5 pm.

CITY OF KERMAN	MEETING SIGN IN SHEET		
Project:	MADERA AVENUE MASTER STREETSCAPE PLAN	Meeting Date:	June 10th, 2011 Friday !
7:30 -9:30 AM	BUSINESS FOCUS GROUP	Place/ Room:	850 S. MADERA AVENUE KERMAN CA 93630

Name	Title	Company	Phone	Fax	E-Mail
Tony Leonard	Proj. Mngr	Local Government Comm.			
Paul Zykofsky	Assoc. Dir	" " "			
Florida Lemaire	Exec. Dir	Kerman Chamber			
Luis Pitta	Planning Dir.	City of Kerman			
FRANCISCO ORTIZ Y ORTIS	CHAMB. PRES SEBASTIAN	SEBASTIAN			
Jenny Mendez	Clinic Manager	UHC			
Jayla Griffin	CEO	Valley Health			
Lizbeth Boyd	PBSO	Westamerica			
JOSEPH D BOYD	CPA	JD Boyd Financial Svcs			
TIM PIZZYBYKA	FIN. DIR	CITY OF KERMAN			
Paul Toste	Vet/Farmer	Vet Med Ctr			
Stefan Pellegrini	Principal	Opticos Design LLC.			
RAY MAH	OWNER	KAR			
MICHAEL MOULE	PRINCIPAL	NELSON/NYGAARD			
Kevin Shively	Associate Plan.	Nelsn/Nygaard			
Olivia Pimentel	City Staff	City of Kerman			

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CITY OF KERMAN — MEETING SIGN IN SHEET

Project:	MADERA AVENUE MASTER STREETSCAPE PLAN	Meeting Date:	June 10th, 2011	Friday 2
10:00-11:30 AM	AGENCY FOCUS GROUP	Place/ Room:	850 S. MADERA AVENUE KERMAN CA 93630	

Name	Title	Company	Phone	Fax	E-Mail
Michael Mills	Landscape Architect	Caltrans			
MARK Reic	~~ASSISTANT~~	KUSD			
Gary Horn	City Engr	Yamabe + Horn			
Luis Patlan	Plan, Div.	City of Kerman			
Lee Ness	Planning Tech	City of Kerman			
JEFF BELDING	Recreation	City of Kerman			
Paul Zylowski	Assoc. Dir.	Local Govt. Comm			
Steve Williams	Principal	Opticos Design Inc.			
Philip Gallegos	Rec Director	city			
Ken Moore	PWD	City of Kerman			
Michael Navarro	Trans. Planner	Caltrans			
Yohanes Makmur	Engineer	Y&H			
Jennifer Bryan-Sanchez	Pro Mngr	Caltrans			
Tony Leonard		Local Govt Comm			
Olivia Poriatti	City Staff	City of Kerman			

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CITY OF KERMAN	MEETING SIGN IN SHEET		
Project:	MADERA AVENUE MASTER STREETSCAPE PLAN	Meeting Date:	June 10th, 2011 Friday 3
1:30PM-3:00 PM	COMMUNITY FOCUS GROUP	Place/ Room:	850 S. MADERA AVENUE KERMAN CA 93630

Name	Title	Company	Phone	Fax	E-Mail
Beatriz Alejandre	2-1-1 Call Center Manager	United Way of Fresno			
Edie Jamtgaard	S.A. Coach	The Salvation Army			
Elaine Madrigal	Director of Programs	CREATE for the Westside			
Robert Bandy	Planning Com	Mapa Kerman			
BOB EPPERSON	PLNG COMM				
Juan Rangel	Youth Commission	City of Kerman			
MIKE ARABIAN	PLANNING COMMISSION	CITY OF KERMAN			
Veronica Acevedo	YLI/FNL				
Verenice Vidales	YLI/FNL				
Meg Winchester	FOOD BANK				
Olivia Pimentel	City Staff	City of Kerman			
Luis Patlan	Planner	City of Kerman			
Paul Zykofsky	Assoc. Director	LGC			

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CITY OF KERMAN	MEETING SIGN IN SHEET		
Project:	MADERA AVENUE MASTER STREETSCAPE PLAN	Meeting Date:	June 10th, 2011 Friday 4
6:00 PM-8:00 PM		Place/ Room:	850 S. MADERA AVENUE KERMAN CA 93630

Name	Title	Company	Phone	Fax	E-Mail
Melissa Petrucelli	owner	HairWorks by Melissa			
Sue Logozzo	Public				
[illegible]	Public	Turning Point Prog-CC			
MARK Reyes	KUSD	KUSD			
[illegible]		Chamber			
Elaine Madrigal	Director of Programs	Create for the Westside			
Tony Leonard	Proj Manager	Local Govt Commissa			
Olivia Pimentel	City Stgg	City of Kerman			
Monica Fonseca	"	"			
Luis Patlan	" Planner	"			
Gary Horn	City Engr.	Yamabe & Horn			
CHRISTOPHER JANSEN	PROD MAN. ~~OFFICER~~	OPTICOS			
CAILIN SHANNON	DESIGNER	"			
STEFAN PELLEGRINI	PRINCIPAL	"			
Paul Zykofsky	Assoc. Director	LAC			

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CITY OF KERMAN	MEETING SIGN IN SHEET		
Project:	MADERA AVENUE MASTER STREETSCAPE PLAN	Meeting Date:	June 11th, 2011 Saturday
9:00 AM-1:00 PM		Place/ Room:	850 S. MADERA AVENUE KERMAN CA 93630

Name	Title	Company	Phone	Fax	E-Mail
Olivia Pimentel	City Stgg	City of Kerman			
Monica Fonseca	"	"			
Luis Patlan	" Planner	"			
Tony Leonard	Proj. Mgr	Local Gov't Com.			
Gary Horn	City Eng	Yamabe + Horn			
Stefan Pellegrini	Principal	Opticos Design Inc			
Chris Johnson	Prog Mngr	OPTICOS			
Paul Zykofsky	Assoc Director	LGC			
Mark Ruiz	~~Assistant City Mgr~~ Superintendent	KUSD			

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Intersection Traffic Analysis
(includes projected Wal-Mart Traffic)

Kearney/Madera - PM
Existing

Kearney / Madera
Signals - Actuated Cycle Time = 73 seconds

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South	South Madera										
3	L	60	3.0	0.262	35.1	LOS D	2.0	49.9	0.84	0.73	18.1
8	T	716	3.0	0.545	20.4	LOS C	11.8	301.7	0.81	0.71	21.5
18	R	66	3.0	0.545	27.5	LOS C	11.6	296.5	0.81	0.90	21.0
Approach		842	3.0	0.545	22.0	LOS C	11.8	301.7	0.81	0.73	21.2
East	West Kearney										
1	L	55	3.0	0.259	38.8	LOS D	1.9	48.8	0.88	0.74	17.2
6	T	139	3.0	0.344	28.2	LOS C	4.6	117.8	0.86	0.69	19.1
16	R	136	3.0	0.403	13.0	LOS B	2.1	54.2	0.44	0.73	26.0
Approach		329	3.0	0.403	23.7	LOS C	4.6	117.8	0.69	0.72	21.0
North	South Madera										
7	L	132	3.0	0.363	36.6	LOS D	4.5	114.5	0.88	0.78	17.7
4	T	467	3.0	0.373	17.4	LOS B	7.3	187.2	0.74	0.63	22.7
14	R	67	3.0	0.373	23.5	LOS C	6.7	171.8	0.74	0.88	22.2
Approach		666	3.0	0.373	21.8	LOS C	7.3	187.2	0.77	0.69	21.4
West	West Kearney										
5	L	67	3.0	0.295	39.5	LOS D	2.4	61.4	0.89	0.76	17.0
2	T	128	3.0	0.318	27.9	LOS C	4.2	107.9	0.86	0.69	19.1
12	R	39	3.0	0.048	9.5	LOS A	0.3	8.4	0.28	0.68	27.9
Approach		235	3.0	0.318	28.2	LOS C	4.2	107.9	0.77	0.71	19.5
All Vehicles		2073	3.0	0.545	22.9	LOS C	11.8	301.7	0.77	0.71	21.0

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual vehicle movements: Delay (HCM) & Degree of Saturation.
Approach LOS values are based on average delay for all vehicle movements and the worst degree of saturation (v/c ratio) for any vehicle movement.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per ped
2P	Across S approach	11	33.5	LOS D	0.0	0.0	0.89	0.89
8P	Across E approach	11	28.1	LOS C	0.0	0.0	0.88	0.88
6P	Across N approach	11	34.5	LOS D	0.0	0.0	0.90	0.90
4P	Across W approach	11	28.1	LOS C	0.0	0.0	0.88	0.88
All Pedestrians		44	31.0				0.89	0.89

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual pedestrian movements: Delay (HCM).

Kearney / Madera
Signals - Actuated Cycle Time = 91 seconds

Kearney/Madera- PM
Road diet with signalize intersection

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South	South Madera										
3	L	60	3.0	0.323	43.6	LOS D	2.5	63.6	0.86	0.74	16.2
8	T	716	3.0	0.934	45.2	LOS D	41.1	1053.2	1.00	1.06	15.1
18	R	66	3.0	0.934	52.8	LOS D	41.1	1053.2	1.00	1.06	15.1
Approach		842	3.0	0.934	45.7	LOS D	41.1	1053.2	0.99	1.03	15.2
East	West Kearney										
1	L	55	3.0	0.312	46.6	LOS D	2.4	60.6	0.88	0.75	15.6
6	T	139	3.0	0.343	34.6	LOS C	5.6	144.5	0.86	0.70	17.4
16	R	136	3.0	0.615	26.9	LOS C	4.2	107.8	0.63	0.76	20.3
Approach		329	3.0	0.615	33.4	LOS C	5.6	144.5	0.77	0.73	18.1
North	South Madera										
7	L	132	3.0	0.400	45.4	LOS D	5.7	145.0	0.90	0.79	15.8
4	T	467	3.0	0.641	23.6	LOS C	19.9	509.0	0.82	0.74	20.3
14	R	67	3.0	0.641	31.3	LOS C	19.9	509.0	0.82	0.92	19.8
Approach		666	3.0	0.641	28.7	LOS C	19.9	509.0	0.83	0.77	19.2
West	West Kearney										
5	L	67	3.0	0.392	47.9	LOS D	3.0	76.8	0.90	0.76	15.3
2	T	128	3.0	0.317	34.3	LOS C	5.2	132.4	0.86	0.69	17.5
12	R	39	3.0	0.051	11.3	LOS B	0.5	13.2	0.33	0.69	26.9
Approach		235	3.0	0.392	34.4	LOS C	5.2	132.4	0.78	0.71	17.8
All Vehicles		2073	3.0	0.934	37.0	LOS D	41.1	1053.2	0.88	0.86	17.0

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual vehicle movements: Delay (HCM) & Degree of Saturation.
Approach LOS values are based on average delay for all vehicle movements and the worst degree of saturation (v/c ratio) for any vehicle movement.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per ped
2P	Across S approach	11	38.4	LOS D	0.0	0.0	0.90	0.90
8P	Across E approach	11	36.9	LOS D	0.0	0.0	0.90	0.90
6P	Across N approach	11	36.9	LOS D	0.0	0.0	0.90	0.90
4P	Across W approach	11	36.9	LOS D	0.0	0.0	0.90	0.90
All Pedestrians		44	37.3				0.90	0.90

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual pedestrian movements: Delay (HCM).

Kearney / Madera
Signals - Actuated Cycle Time = 88 seconds

Kearney/Madera - PM
Road diet with signalized intersection and north-bound and south-bound right turn lanes

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South	South Madera										
3	L	60	3.0	0.316	42.9	LOS D	2.4	62.0	0.86	0.74	16.3
8	T	716	3.0	0.864	35.0	LOS C	33.1	847.8	0.96	0.91	17.3
18	R	66	3.0	0.062	9.3	LOS A	0.6	15.5	0.23	0.68	28.0
Approach		842	3.0	0.864	33.5	LOS C	33.1	847.8	0.89	0.88	17.7
East	West Kearney										
1	L	55	3.0	0.301	44.5	LOS D	2.3	58.1	0.88	0.74	16.0
6	T	139	3.0	0.331	32.8	LOS C	5.4	138.3	0.86	0.69	17.9
16	R	136	3.0	0.584	23.7	LOS C	3.9	98.9	0.61	0.75	21.4
Approach		329	3.0	0.584	31.0	LOS C	5.4	138.3	0.76	0.73	18.8
North	South Madera										
7	L	132	3.0	0.411	44.8	LOS D	5.5	141.8	0.90	0.79	15.9
4	T	467	3.0	0.564	22.0	LOS C	16.3	418.5	0.79	0.69	21.1
14	R	67	3.0	0.060	8.8	LOS A	0.5	12.9	0.20	0.68	28.3
Approach		666	3.0	0.564	25.1	LOS C	16.3	418.5	0.75	0.71	20.3
West	West Kearney										
5	L	67	3.0	0.377	45.7	LOS D	2.9	73.6	0.89	0.76	15.8
2	T	128	3.0	0.306	32.5	LOS C	5.0	126.8	0.85	0.68	17.9
12	R	39	3.0	0.050	11.4	LOS B	0.5	13.2	0.34	0.69	26.8
Approach		235	3.0	0.377	32.8	LOS C	5.0	126.8	0.78	0.71	18.2
All Vehicles		2073	3.0	0.864	30.3	LOS C	33.1	847.8	0.81	0.78	18.7

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual vehicle movements: Delay (HCM) & Degree of Saturation.
Approach LOS values are based on average delay for all vehicle movements and the worst degree of saturation (v/c ratio) for any vehicle movement.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per ped
2P	Across S approach	11	36.9	LOS D	0.0	0.0	0.90	0.90
8P	Across E approach	11	35.5	LOS D	0.0	0.0	0.90	0.90
6P	Across N approach	11	35.5	LOS D	0.0	0.0	0.90	0.90
4P	Across W approach	11	35.5	LOS D	0.0	0.0	0.90	0.90
All Pedestrians		44	35.8				0.90	0.90

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual pedestrian movements: Delay (HCM).

Kearney/Madera - PM
Road diet with roundabout

Kearney / Madera
Signals - Actuated Cycle Time = 91 seconds

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South	South Madera										
3	L	60	3.0	0.323	43.6	LOS D	2.5	63.6	0.86	0.74	16.2
8	T	716	3.0	0.934	45.2	LOS D	41.1	1053.2	1.00	1.06	15.1
18	R	66	3.0	0.934	52.8	LOS D	41.1	1053.2	1.00	1.06	15.1
Approach		842	3.0	0.934	45.7	LOS D	41.1	1053.2	0.99	1.03	15.2
East	West Kearney										
1	L	55	3.0	0.312	46.6	LOS D	2.4	60.6	0.88	0.75	15.6
6	T	139	3.0	0.343	34.6	LOS C	5.6	144.5	0.86	0.70	17.4
16	R	136	3.0	0.615	26.9	LOS C	4.2	107.8	0.63	0.76	20.3
Approach		329	3.0	0.615	33.4	LOS C	5.6	144.5	0.77	0.73	18.1
North	South Madera										
7	L	132	3.0	0.400	45.4	LOS D	5.7	145.0	0.90	0.79	15.8
4	T	467	3.0	0.641	23.6	LOS C	19.9	509.0	0.82	0.74	20.3
14	R	67	3.0	0.641	31.3	LOS C	19.9	509.0	0.82	0.92	19.8
Approach		666	3.0	0.641	28.7	LOS C	19.9	509.0	0.83	0.77	19.2
West	West Kearney										
5	L	67	3.0	0.392	47.9	LOS D	3.0	76.8	0.90	0.76	15.3
2	T	128	3.0	0.317	34.3	LOS C	5.2	132.4	0.86	0.69	17.5
12	R	39	3.0	0.051	11.3	LOS B	0.5	13.2	0.33	0.69	26.9
Approach		235	3.0	0.392	34.4	LOS C	5.2	132.4	0.78	0.71	17.8
All Vehicles		2073	3.0	0.934	37.0	LOS D	41.1	1053.2	0.88	0.86	17.0

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual vehicle movements: Delay (HCM) & Degree of Saturation.
Approach LOS values are based on average delay for all vehicle movements and the worst degree of saturation (v/c ratio) for any vehicle movement.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per ped
2P	Across S approach	11	38.4	LOS D	0.0	0.0	0.90	0.90
8P	Across E approach	11	36.9	LOS D	0.0	0.0	0.90	0.90
6P	Across N approach	11	36.9	LOS D	0.0	0.0	0.90	0.90
4P	Across W approach	11	36.9	LOS D	0.0	0.0	0.90	0.90
All Pedestrians		44	37.3				0.90	0.90

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS D. LOS Method for individual pedestrian movements: Delay (HCM).

Parking Survey

Off-Street Parking Inventory and Occupancy, Along South Madera Avenue

Off-Street	Side	From	To	Capacity	Occupied		Occupancy	Time	Date	Land Use	Location
OFF	E	RR Tracks	A	26	12	14	46%	3:30 PM	12-Jul-11	Adventist Health Community Care	Back
OFF	E	A	B	11	6	5	55%	3:30 PM	12-Jul-11	Kerman Inn Motel	Back
OFF	E	A	B	11	1	10	9%	3:30 PM	12-Jul-11	Kerman Inn Motel	Side
OFF	E	A	B	6	0	6	0%	3:30 PM	12-Jul-11	Kerman Dental Center	Front
OFF	E	A	B	17	1	16	6%	3:30 PM	12-Jul-11	Kerman Dental Center	Corner
OFF	E	B	C	19	9	10	47%	3:30 PM	12-Jul-11	Kerman City Hall	Back
OFF	E	B	C	24	18	6	75%	3:30 PM	12-Jul-11	Kerman City Hall	Back
OFF	E	C	D	37	1	36	3%	3:30 PM	12-Jul-11	Hardware/ CA Dept. of Ag	Corner
OFF	E	D	E	17	8	9	47%	12:00 PM	10-Jun-11	BANK OF AMERICA	Side
OFF	E	E	F	7	0	7	0%	12:00 PM	10-Jun-11	LA RAMADA	Front
OFF	E	F	G	10	2	8	20%	12:00 PM	10-Jun-11	La Estrella	Side
OFF	E	F	G	12	2	10	17%	12:00 PM	10-Jun-11	Tio Chema	Side
OFF	E	G	Kearney	6	3	3	50%	12:00 PM	10-Jun-11	6 Auto Repair	Side
OFF	E	Kearney	Sunset	61	19	42	31%	12:30 PM	10-Jun-11	Rite Aid	Side
OFF	E	Kearney	Sunset	24	6	18	25%	12:30 PM	10-Jun-11	FasTrip	Side
OFF	E	Sunset	Stanislaus	24	1	23	4%	4:00 PM	10-Jun-11	Insurance Co. (Redwood?)	Back
OFF	E	Sunset	Stanislaus	21	9	12	43%	4:00 PM	10-Jun-11	Community Bank of the CV	Front
OFF	E	Sunset	Stanislaus	22	6	16	27%	3:30 PM	10-Jun-11	WestAmerica Bank	Side
OFF	W	RR Tracks	A	14	5	9	35%	3:30 PM	12-Jul-11	Camco	Corner
OFF	W	A	B	29	0	29	0%	3:30 PM	12-Jul-11	Vacant Lot	Corner
OFF	W	A	B	6	0	6	0%	3:30 PM	12-Jul-11		Back
OFF	W	A	B	12	1	11	8%	3:30 PM	12-Jul-11	La Princesa	Side
OFF	W	A	B	6	3	3	50%	3:30 PM	12-Jul-11	La Princesa	Back
OFF	W	B	C	23	4	19	18%	3:30 PM	12-Jul-11	Maria's	Corner
OFF	W	B	C	5	1	4	20%	3:30 PM	12-Jul-11	Sebastian	Back
OFF	W	C	D	37	14	23	38%	3:00 PM	12-Jul-11	Sebastian	Corner
OFF	W	C	D	No Data	No Data	n/a	n/a			Gun Shop	Back
OFF	W	D	E	25	7	18	28%	2:00 PM	10-Jun-11	Corona Real Bakery	Back
OFF	W	D	E	3	1	2	33%	2:00 PM	10-Jun-11	Bellissima Bridal	Back
OFF	W	D	E	4	2	2	50%	2:00 PM	10-Jun-11	Bellissima Bridal	Back
OFF	W	D	E	12	2	10	17%	2:00 PM	10-Jun-11	??	Back
OFF	W	D	E	15	0	15	0%	2:00 PM	10-Jun-11	Gravel lot S. of E Street	Side
OFF	W	E	F	7	2	5	29%	2:00 PM	10-Jun-11	Valley Properties	Back
OFF	W	E	F	12	3	9	24%	2:00 PM	10-Jun-11	Lucero Market	Side
OFF	W	E	F	14	12	2	86%	2:00 PM	10-Jun-11		Back
OFF	W	E	F	14	0	14	0%	2:00 PM	10-Jun-11		Back
OFF	W	F	G	6	0	6	0%	2:00 PM	10-Jun-11		Back
OFF	W	F	G	19	3	16	16%	2:00 PM	10-Jun-11		Side
OFF	W	F	G	3	0	3	0%	2:00 PM	10-Jun-11		Back
OFF	W	F	G	27	8	19	30%	2:00 PM	10-Jun-11	Kerman Market	Side
OFF	W	G	Kearney	49	19	30	39%	2:30 PM	10-Jun-11	United Health Centers	Back
OFF	W	Kearney	Sunset	5	0	5	0%	2:30 PM	10-Jun-11	Star Market	Front
OFF	W	Kearney	Sunset	11	8	3	73%	2:30 PM	10-Jun-11	Valley Optometric	
OFF	W	Kearney	Sunset	20	12	8	60%	2:30 PM	10-Jun-11	Valley Optometric	
OFF	W	Kearney	Sunset	10	7	3	70%	2:30 PM	10-Jun-11	Citibank	
OFF	W	Sunset	Stanislaus	23	9	14	39%	3:00 PM	10-Jun-11	Valley Shopping Center	Corner
OFF	W	Sunset	Stanislaus	45	9	36	20%	3:00 PM	10-Jun-11	Mariscos El Chontal	Side
OFF	W	Sunset	Stanislaus	7	2	5	29%	3:00 PM	10-Jun-11	Hinds Hospice	Back
OFF	W	Sunset	Stanislaus	6	1	5	17%	3:00 PM	10-Jun-11	Hinds Hospice	Side
OFF	W	Stanislaus	San Joaquin	18	6	12	33%	3:00 PM	10-Jun-11	County Agricultural Department	Back
OFF	W	San Joaquin	Whitesbridge	No Data	No Data	n/a	No Data	3:30 PM	10-Jun-11	Bank	Back
OFF	W	San Joaquin	Whitesbridge	14	5	9	36%	3:30 PM	10-Jun-11	Smith Auto Parts	Side
OFF	W	San Joaquin	Whitesbridge	11	2	9	18%	3:30 PM	10-Jun-11	Quest Diagnostics	Side
OFF	W	San Joaquin	Whitesbridge	27	5	22	19%	3:30 PM	10-Jun-11	Kentucky Fried Chicken	Back
OFF	W	San Joaquin	Whitesbridge	8	3	5	38%	3:30 PM	10-Jun-11	Kerman Valley Food Super Center	Front
OFF	W	San Joaquin	Whitesbridge	30	5	25	17%	3:30 PM	10-Jun-11	Carl's Junior	Front & Back
Summary											
Off-Street	**Both**	**C**	**F**	**204**	**52**	152	**26%**				
Off-Street	**Both**	**C**	**Kearney**	**336**	**89**	247	**27%**				
Off-Street	**Both**	**RR Tracks**	**Whitesbridge**	**932**	**265**	667	**28%**				

On-Street Parking Inventory and Occupancy, South Madera Avenue

Street	Side	From	To	ParkableCurb	Spaces	Occupied	Available	Occupancy	Time	Date
S Madera Ave	E	A	B	251'	13	2	11	15%	3:30 PM	12-Jul-11
S Madera Ave	E	B	C	272'	14	3	11	21%	3:30 PM	12-Jul-11
S Madera Ave	E	C	D	209'	11	3	8	27%	12:00 PM	10-Jun-11
S Madera Ave	E	D	E	165'	9	1	8	12%	12:00 PM	10-Jun-11
S Madera Ave	E	E	F	184'	10	4	6	41%	12:00 PM	10-Jun-11
S Madera Ave	E	F	G	185'	10	4	6	41%	12:00 PM	10-Jun-11
S Madera Ave	E	G	Kearney	181'	10	0	10	0%	12:00 PM	10-Jun-11
S Madera Ave	E	Kearney	Sunset	416'	22	1	21	5%	12:30 PM	10-Jun-11
S Madera Ave	E	Sunset	Stanislaus	343'	18	0	18	0%	3:30 PM	10-Jun-11
S Madera Ave	E	Stanislaus	Whitesbridge	589'	31	4	27	13%	3:30 PM	10-Jun-11
S Madera Ave	W	A	B	206'	11	0	11	0%	3:30 PM	12-Jul-11
S Madera Ave	W	B	C	286'	15	1	14	7%	3:30 PM	12-Jul-11
S Madera Ave	W	C	D	281'	15	8	7	54%	1:30 PM	10-Jun-11
S Madera Ave	W	D	E	261'	14	7	7	51%	1:30 PM	10-Jun-11
S Madera Ave	W	E	F	295'	16	3	13	19%	2:00 PM	10-Jun-11
S Madera Ave	W	F	G	253'	13	3	10	23%	2:00 PM	10-Jun-11
S Madera Ave	W	G	Kearney	258'	14	0	14	0%	2:30 PM	10-Jun-11
S Madera Ave	W	Kearney	Sunset	362'	19	6	13	31%	2:30 PM	10-Jun-11
S Madera Ave	W	Sunset	Stanislaus	495'	26	2	24	8%	2:30 PM	10-Jun-11
S Madera Ave	W	Stanislaus	San Joaquin	169'	9	3	6	34%	3:00 PM	10-Jun-11
S Madera Ave	W	San Joaquin	Whitesbridge	442'	23	0	23	0%	3:30 PM	10-Jun-11
Summary										
South Madera Ave	**Both**	**C**	**F**		**73**	**26**	47	**35%**		
South Madera Ave	**Both**	**C**	**Kearney**		**120**	**33**	87	**28%**		
South Madera Ave	**Both**	**A**	**Whitesbridge**		**321**	**55**	266	**17%**		

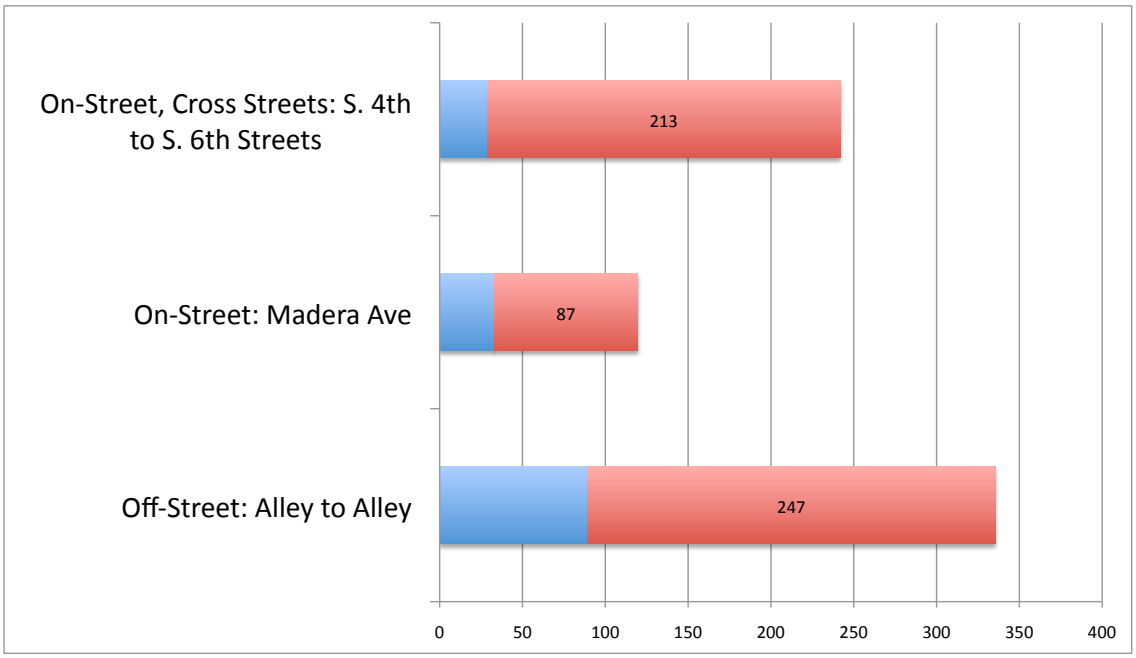
On-Street Parking Inventory and Occupancy, Cross Streets Within One Block of South Madera Avenue

Street	Side	From	To	ParkableCurb	Spaces	Occupied	Available	Occupancy	Time	Date
A	BOTH	S Madera Ave	S 6th Street	420'	22	7	15	32%	3:30 PM	12-Jul-11
B	BOTH	S Madera Ave	S 6th Street	500'	26	2	24	8%	3:30 PM	12-Jul-11
C	Both	S Madera Ave	S 6th Street	n/a	20	5	15	25%	12:00 PM	10-Jun-11
D	Both	S Madera Ave	S 6th Street	540'	26	0	26	0%	12:00 PM	10-Jun-11
E	Both	S Madera Ave	S 6th Street	540'	28	6	22	21%	12:00 PM	10-Jun-11
F	Both	S Madera Ave	S 6th Street	380'	20	3	17	15%	12:00 PM	10-Jun-11
G	Both	S Madera Ave	S 6th Street	380'	20	0	20	0%	12:00 PM	10-Jun-11
Kearney	NE	S Madera Ave	S 6th Street	100'	5	0	5	0%		10-Jun-11
Sunset	Both	S Madera Ave	S 6th Street	420'	22	1	21	5%	1:00 PM	10-Jun-11
Stanislaus	Both	S Madera Ave	S 6th Street	540'	28	5	23	18%	3:30 PM	10-Jun-11
A	BOTH	S. 4th Street	S Madera Ave	420'	22	1	21	5%	3:30 PM	12-Jul-11
B	BOTH	S. 4th Street	S Madera Ave	460'	24	3	21	12%	3:30 PM	12-Jul-11
C	BOTH	S. 4th Street	S Madera Ave	346'	18	6	12	33%	3:00 PM	12-Jul-11
D	Both	S. 4th Street	S Madera Ave	500'	26	5	21	19%	1:30 PM	10-Jun-11
E	Both	S. 4th Street	S Madera Ave	500'	26	0	26	0%	1:30 PM	10-Jun-11
F	Both	S. 4th Street	S Madera Ave	270'	14	2	12	14%	2:00 PM	10-Jun-11
G	Both	S. 4th Street	S Madera Ave	368'	19	0	19	0%	2:00 PM	10-Jun-11
Kearney	Both	S. 4th Street	S Madera Ave	330'	17	2	15	12%	2:30 PM	10-Jun-11
Sunset	Both	S. 4th Street	S Madera Ave	420'	22	2	20	9%	3:00 PM	10-Jun-11
Stanislaus	Both	S. 4th Street	S Madera Ave	500'	26	1	25	4%	3:00 PM	10-Jun-11
Sam Joaquin	Both	S. 4th Street	S Madera Ave	500'	26	3	23	11%	3:00 PM	10-Jun-11
Summary										
On-Street, Cross Stree	**Both**	**C**	**F**		**180**	**27**	**153**	**15%**		
On-Street, Cross Stree	**Both**	**C**	**Kearney**		**242**	**29**	**213**	**12%**		
On-Street, Cross Stree	**Both**	**A**	**Whitesbridge**		**462**	**54**	**408**	**12%**		

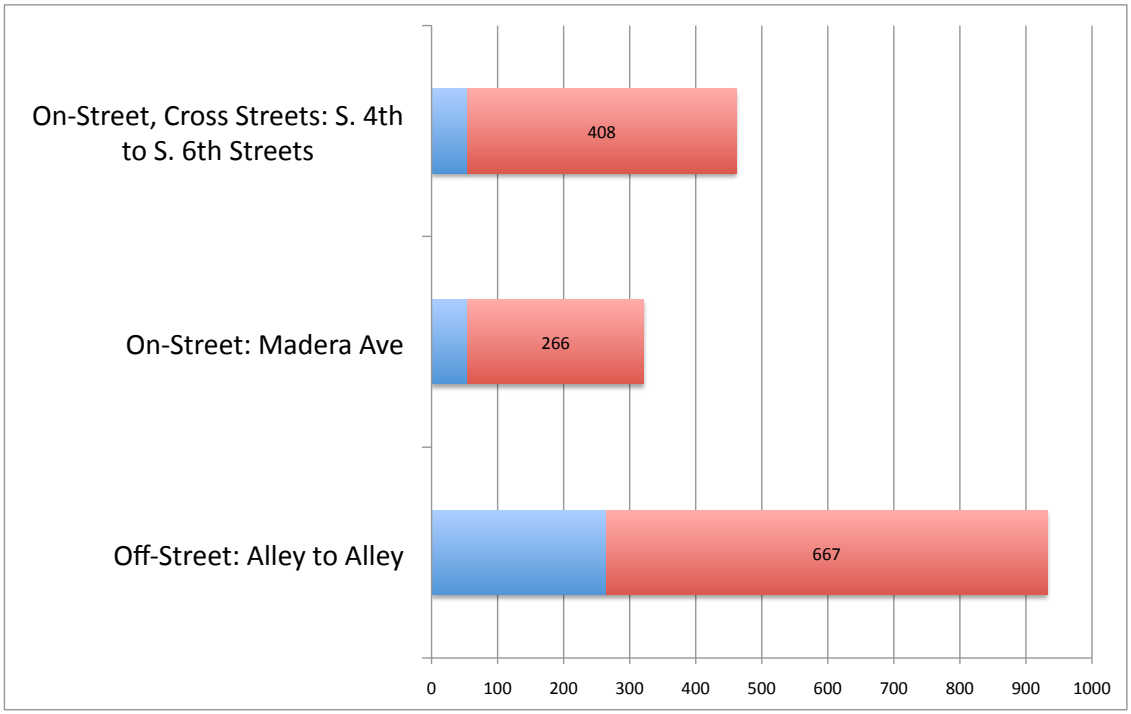
Parking Inventory Summary				
Street	**Spaces**	**Occupied**	**Available**	**Occupancy**
Madera Avenue Parking Supply and Occupancy: C to F				
Off-Street: Alley to Alley	204	52	152	26%
On-Street: Madera Ave	73	26	47	35%
On-Street, Cross Streets: S. 4th to S. 6th Streets	180	27	153	15%
Total	**457**	**105**	**352**	**23%**
Madera Avenue Parking Supply and Occupancy: C to Kearney				
Off-Street: Alley to Alley	336	89	247	27%
On-Street: Madera Ave	120	33	87	28%
On-Street, Cross Streets: S. 4th to S. 6th Streets	242	29	213	12%
Total	**697**	**151**	**546**	**22%**
Madera Avenue Parking Supply and Occupancy: RR Tracks to Whitesbridge				
Off-Street: Alley to Alley	932	265	667	28%
On-Street: Madera Ave	321	55	266	17%
On-Street, Cross Streets: S. 4th to S. 6th Streets	462	54	408	12%
Total	**1715**	**374**	**1341**	**22%**

Parking Supply and Occupancy: C to F

Parking Supply and Occupancy: C to Kearney



Parking Supply and Occupancy: SPRR line to Whitesbridge



Detailed Preliminary Cost Estimate

YAMABE & HORN ENGINEERING, INC.
2985 North Burl Ave., Suite 101
Fresno, CA 93727
(559) 244-3123, Fax (559) 244-3120

Preliminary Engineer's Estimate
Madera Avenue Streetscape: "Baseline" Strategy
City of Kerman, CA

November 28, 2011
Prepared By: JJ
Checked By: JJ

SUMMARY

Location	Tier #1[1]	Tier #2[2]	Tier #3[3]	Tier #4[4]	Tier #5[5]	Tier #6[6]	Total
Plaza Veterans Park							
S/O California Ave.	$ -	$ -	$ 46,800	$ -	$ -	$ -	$ 46,800
California Ave. Intersection	$ 3,400	$ -	$ 68,000	$ 57,400	$ -	$ -	$ 128,800
California Ave. to B St.	$ 3,500	$ -	$ -	$ 46,300	$ -	$ -	$ 49,800
B St. Intersection	$ 3,400	$ -	$ 41,400	$ 57,400	$ -	$ -	$ 102,200
B St. to C St.	$ 3,100	$ -	$ -	$ 35,000	$ -	$ -	$ 38,100
C St. Intersection	$ 3,100	$ -	$ 192,600	$ 57,400	$ -	$ -	$ 253,100
Sub-Total =	$ 16,500	$ -	$ 348,800	$ 253,500	$ -	$ -	$ 618,800
Historic Commercial Core							
C St. to D St.	$ 37,800	$ -	$ -	$ 46,300	$ 33,500	$ -	$ 117,600
D St. Intersection	$ 2,800	$ 124,900	$ -	$ 57,400	$ -	$ -	$ 185,100
D St. to E St.	$ 38,400	$ -	$ -	$ 46,300	$ 6,400	$ -	$ 91,100
E St. Intersection	$ 3,500	$ 157,800	$ -	$ 57,400	$ -	$ 122,100	$ 340,800
E. St. to F St.	$ 38,400	$ -	$ -	$ 46,300	$ 33,200	$ -	$ 117,900
F St. Intersection	$ 2,700	$ 124,900	$ -	$ 57,400	$ -	$ -	$ 185,000
Sub-Total =	$ 123,600	$ 407,600	$ -	$ 311,100	$ 73,100	$ 122,100	$ 1,037,500
Mixed Commercial Area							
F St. to G St.	$ 38,400	$ -	$ -	$ 46,300	$ 10,400	$ -	$ 95,100
G. St. Intersection	$ 3,500	$ 106,000	$ -	$ 57,400	$ -	$ -	$ 166,900
G St. to Kearney Blvd.	$ 38,200	$ -	$ -	$ 46,300	$ 15,500	$ -	$ 100,000
Kearney Blvd. Intersection	$ 4,300	$ 13,700	$ -	$ 57,400	$ -	$ 122,100	$ 197,500
Kearney Blvd. to Sunset Ave.	$ 40,900	$ -	$ -	$ 112,100	$ 43,700	$ -	$ 196,700
Sunset Ave. Intersection	$ 3,600	$ 140,600	$ -	$ 57,400	$ -	$ -	$ 201,600
Sunset Ave. to Stanislaus Ave.	$ 40,900	$ -	$ -	$ 112,100	$ 53,600	$ -	$ 206,600
Stanislaus Ave. Intersection	$ 3,600	$ 106,100	$ -	$ 57,400	$ -	$ 122,100	$ 289,200
Stanislaus Ave. to San Joaquin Ave.	$ 3,100	$ -	$ -	$ 29,400	$ 26,200	$ -	$ 58,700
San Joaquin Ave. Intersection	$ 88,500	$ -	$ -	$ 34,300	$ -	$ -	$ 122,800
Sub-Total =	$ 265,000	$ 366,400	$ -	$ 610,100	$ 149,400	$ 244,200	$ 1,635,100
Auto-Oriented Commercial Area							
San Joaquin Ave. to Whitesbridge Rd.	$ 7,400	$ -	$ -	$ 191,800	$ 105,600	$ -	$ 304,800
Sub-Total =	$ 7,400	$ -	$ -	$ 191,800	$ 105,600	$ -	$ 304,800
Total =	$ 412,500	$ 774,000	$ 348,800	$ 1,366,500	$ 328,100	$ 366,300	$ 3,596,200

FOOTNOTES:
(1) Tier #1 improvements include high-visibility crosswalk striping, parking signing & striping, and mid-block crossings, including crossing at San Joaquin Avenue.
(2) Tier #2 improvements include curb extensions at all intersections, excluding intersections within the Plaza Park Area.
(3) Tier #3 improvements include all median, intersection, and park improvements within the Plaza Park Area.
(4) Tier #4 improvements include lighting and street furniture.
(5) Tier #5 improvements include shortened turn pockets and median landscaping.
(6) Tier #6 improvements include traffic signal replacement with decorative traffic signal poles and mast arms.

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S/O CALIFORNIA AVE.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #3						
1	Mobilization	1	LS	$	1,400.00	$	1,400
2	Traffic Control	1	LS	$	1,100.00	$	1,100
3	Dust Control	1	LS	$	1,100.00	$	1,100
4	Demolition	1	LS	$	2,700.00	$	2,700
5	Concrete Median Curb	360	LF	$	25.00	$	9,000
6	Median Island Topsoil Backfill	2,355	SF	$	1.50	$	3,533
7	Striping: Left-Turn Pocket Modification	1	LS	$	400.00	$	400
8	Landscape Irrigation - Median	2,355	SF	$	3.50	$	8,243
9	Landscape Planting - Median	2,355	SF	$	2.50	$	5,888
		CONSTRUCTION SUBTOTAL =				$	33,400
		MISCELLANEOUS			40%	$	13,400
		TIER #3 SUBTOTAL =				**$**	**46,800**
S/O CALIFORNIA AVE.					**TOTAL =**	**$**	**46,800**

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CALIFORNIA AVE. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	195	LF	$ 7.00	$ 1,365
	CONSTRUCTION SUBTOTAL =				$ 2,400
	MISCELLANEOUS			40%	$ 1,000
	TIER #1 SUBTOTAL =				**$ 3,400**
	TIER #3				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Traffic Control	1	LS	$ 1,600.00	$ 1,600
3	Dust Control	1	LS	$ 1,600.00	$ 1,600
4	Demolition	1	LS	$ 4,000.00	$ 4,000
5	Concrete Curb and Gutter	148	LF	$ 30.00	$ 4,440
6	Concrete Handicap Ramp	8	EA	$ 4,000.00	$ 32,000
7	Median Island Topsoil Backfill	400	SF	$ 1.50	$ 600
8	Landscape Irrigation - Median	400	SF	$ 3.50	$ 1,400
9	Landscape Planting - Median	400	SF	$ 2.50	$ 1,000
	CONSTRUCTION SUBTOTAL =				$ 48,600
	MISCELLANEOUS			40%	$ 19,400
	TIER #3 SUBTOTAL =				**$ 68,000**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
CALIFORNIA AVE. INTERSECTION				**TOTAL =**	**$ 128,800**

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CALIFORNIA AVE. TO B ST.

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Signing & Striping: Parking	600	LF	$ 2.50	$ 1,500
	CONSTRUCTION SUBTOTAL =				$ 2,500
	MISCELLANEOUS			40%	$ 1,000
	TIER #1 SUBTOTAL =				**$ 3,500**
	TIER #4				
1	Mobilization	1	LS	$ 1,600.00	$ 1,600
2	Decorative Street Light - 10' Single-Head	6	EA	$ 4,000.00	$ 24,000
3	Street Furniture	2	EA	$ 3,750.00	$ 7,500
	CONSTRUCTION SUBTOTAL =				$ 33,100
	MISCELLANEOUS			40%	$ 13,200
	TIER #4 SUBTOTAL =				**$ 46,300**
CALIFORNIA AVE. TO B ST.				**TOTAL =**	**$ 49,800**

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Preliminary Engineer's Estimate
Madera Avenue Streetscape: "Baseline" Strategy
City of Kerman, CA

November 28, 2011
Prepared By: JJ
Checked By: JJ

B ST. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	196	LF	$ 7.00	$ 1,372
	CONSTRUCTION SUBTOTAL =				$ 2,400
	MISCELLANEOUS			40%	$ 1,000
	TIER #1 SUBTOTAL =				**$ 3,400**
	TIER #3				
1	Mobilization	1	LS	$ 1,200.00	$ 1,200
2	Traffic Control	1	LS	$ 1,000.00	$ 1,000
3	Dust Control	1	LS	$ 1,000.00	$ 1,000
4	Demolition	1	LS	$ 2,400.00	$ 2,400
6	Concrete Handicap Ramp	6	EA	$ 4,000.00	$ 24,000
	CONSTRUCTION SUBTOTAL =				$ 29,600
	MISCELLANEOUS			40%	$ 11,800
	TIER #3 SUBTOTAL =				**$ 41,400**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
B ST. INTERSECTION				**TOTAL =**	**$ 102,200**

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Madera Avenue Streetscape: "Baseline" Strategy
City of Kerman, CA

November 28, 2011
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B ST. TO C ST.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Signing & Striping: Parking	468	LF	$	2.50	$	1,170
	CONSTRUCTION SUBTOTAL =					$	2,200
	MISCELLANEOUS				40%	$	900
	TIER #1 SUBTOTAL =					**$**	**3,100**
	TIER #4						
1	Mobilization	1	LS	$	1,200.00	$	1,200
2	Decorative Street Light - 10' Single-Head	5	EA	$	4,000.00	$	20,000
3	Street Furniture	1	EA	$	3,750.00	$	3,750
	CONSTRUCTION SUBTOTAL =					$	25,000
	MISCELLANEOUS				40%	$	10,000
	TIER #4 SUBTOTAL =					**$**	**35,000**
B ST. TO C ST.					**TOTAL =**	**$**	**38,100**

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Madera Avenue Streetscape: "Baseline" Strategy
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November 28, 2011
Prepared By: JJ
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C ST. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	165	LF	$ 7.00	$ 1,155
	CONSTRUCTION SUBTOTAL =				$ 2,200
	MISCELLANEOUS			40%	$ 900
	TIER #1 SUBTOTAL =				**$ 3,100**
	TIER #3				
1	Mobilization	1	LS	$ 5,500.00	$ 5,500
2	Traffic Control	1	LS	$ 4,500.00	$ 4,500
3	Dust Control	1	LS	$ 4,500.00	$ 4,500
4	Demolition	1	LS	$ 11,200.00	$ 11,200
5	Concrete Curb	782	LF	$ 20.00	$ 15,640
6	Concrete Median Curb	411	LF	$ 25.00	$ 10,275
7	Concrete Sidewalk	630	SF	$ 8.00	$ 5,040
8	Concrete Handicap Ramp	9	EA	$ 4,000.00	$ 36,000
9	Drainage Improvements - Minor	1	LS	$ 10,000.00	$ 10,000
10	Median Nose Crossing/Refuge	1	EA	$ 1,500.00	$ 1,500
11	Median Island Topsoil Backfill	1,653	SF	$ 1.50	$ 2,480
12	Landscape Irrigation - Median	1,653	SF	$ 3.50	$ 5,786
13	Landscape Planting - Median	1,653	SF	$ 2.50	$ 4,133
14	Landscape Irrigation - Intersection	2	LS	$ 6,000.00	$ 12,000
15	Landscape Planting - Intersection	2	LS	$ 4,500.00	$ 9,000
	CONSTRUCTION SUBTOTAL =				$ 137,600
	MISCELLANEOUS			40%	$ 55,000
	TIER #3 SUBTOTAL =				**$ 192,600**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
C ST. INTERSECTION				**TOTAL =**	**$ 253,100**

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City of Kerman, CA

November 28, 2011
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C ST. TO D ST.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	1,100.00	$	1,100
2	Traffic Control	1	LS	$	900.00	$	900
3	Dust Control	1	LS	$	900.00	$	900
4	Demolition	1	LS	$	2,200.00	$	2,200
5	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
6	Mid-Block Curb Extensions	1	LS	$	3,400.00	$	3,400
7	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
8	Signing & Striping: Parking	480	LF	$	2.50	$	1,200
9	Striping: Mid-Block Crosswalk	57	LF	$	12.00	$	684
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Mid-Block Crossing	1	LS	$	2,600.00	$	2,600
12	Landscape Planting - Mid-Block Crossing	1	LS	$	2,000.00	$	2,000
	CONSTRUCTION SUBTOTAL =					$	27,000
	MISCELLANEOUS				40%	$	10,800
	TIER #1 SUBTOTAL =					**$**	**37,800**
	TIER #4						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Decorative Street Light - 10' Single-Head	6	EA	$	4,000.00	$	24,000
3	Street Furniture	2	EA	$	3,750.00	$	7,500
	CONSTRUCTION SUBTOTAL =					$	33,100
	MISCELLANEOUS				40%	$	13,200
	TIER #4 SUBTOTAL =					**$**	**46,300**
	TIER #5						
1	Mobilization	1	LS	$	1,000.00	$	1,000
2	Traffic Control	1	LS	$	750.00	$	750
3	Dust Control	1	LS	$	750.00	$	750
4	Demolition	1	LS	$	2,000.00	$	2,000
5	Concrete Median Curb	112	LF	$	25.00	$	2,800
6	Median Island Topsoil Backfill	650	SF	$	1.50	$	975
7	Striping: Left-Turn Pocket Modification	1	LS	$	400.00	$	400
8	Landscape Irrigation - Median	2,540	SF	$	3.50	$	8,890
9	Landscape Planting - Median	2,540	SF	$	2.50	$	6,350
	CONSTRUCTION SUBTOTAL =					$	23,900
	MISCELLANEOUS				40%	$	9,600
	TIER #5 SUBTOTAL =					**$**	**33,500**
C ST. TO D ST.					**TOTAL =**	**$**	**117,600**

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City of Kerman, CA

November 28, 2011
Prepared By: JJ
Checked By: JJ

D ST. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	141	LF	$ 7.00	$ 987
	CONSTRUCTION SUBTOTAL =				$ 2,000
	MISCELLANEOUS			40%	$ 800
	TIER #1 SUBTOTAL =				**$ 2,800**
	TIER #2				
1	Mobilization	1	LS	$ 3,600.00	$ 3,600
2	Traffic Control	1	LS	$ 2,900.00	$ 2,900
3	Dust Control	1	LS	$ 2,900.00	$ 2,900
4	Demolition	1	LS	$ 7,250.00	$ 7,250
5	Concrete Handicap Ramp	6	EA	$ 4,000.00	$ 24,000
6	Intersection Curb Extensions	1	LS	$ 6,000.00	$ 6,000
7	Drainage Improvements - Major	1	LS	$ 30,000.00	$ 30,000
8	Median Crossing/Refuge	1	LS	$ 2,000.00	$ 2,000
9	Landscape Irrigation - Intersection	1	LS	$ 6,000.00	$ 6,000
10	Landscape Planting - Intersection	1	LS	$ 4,500.00	$ 4,500
	CONSTRUCTION SUBTOTAL =				$ 89,200
	MISCELLANEOUS			40%	$ 35,700
	TIER #2 SUBTOTAL =				**$ 124,900**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
D ST. INTERSECTION				**TOTAL =**	**$ 185,100**

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Checked By: JJ

D ST. TO E ST.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	1,100.00	$	1,100
2	Traffic Control	1	LS	$	900.00	$	900
3	Dust Control	1	LS	$	900.00	$	900
4	Demolition	1	LS	$	2,300.00	$	2,300
5	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
6	Mid-Block Curb Extensions	1	LS	$	3,400.00	$	3,400
7	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
8	Signing & Striping: Parking	600	LF	$	2.50	$	1,500
9	Striping: Mid-Block Crosswalk	57	LF	$	12.00	$	684
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Mid-Block Crossing	1	LS	$	2,600.00	$	2,600
12	Landscape Planting - Mid-Block Crossing	1	LS	$	2,000.00	$	2,000
	CONSTRUCTION SUBTOTAL =					$	27,400
	MISCELLANEOUS				40%	$	11,000
	TIER #1 SUBTOTAL =					**$**	**38,400**
	TIER #4						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Decorative Street Light - 10' Single-Head	6	EA	$	4,000.00	$	24,000
3	Street Furniture	2	EA	$	3,750.00	$	7,500
	CONSTRUCTION SUBTOTAL =					$	33,100
	MISCELLANEOUS				40%	$	13,200
	TIER #4 SUBTOTAL =					**$**	**46,300**
	TIER #5						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Dust Control	1	LS	$	500.00	$	500
4	Demolition	1	LS	$	500.00	$	500
5	Landscape Irrigation - Median	426	SF	$	3.50	$	1,491
6	Landscape Planting - Median	426	SF	$	2.50	$	1,065
	CONSTRUCTION SUBTOTAL =					$	4,600
	MISCELLANEOUS				40%	$	1,800
	TIER #5 SUBTOTAL =					**$**	**6,400**
D ST. TO E ST.					**TOTAL =**	**$**	**91,100**

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E ST. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	208	LF	$ 7.00	$ 1,456
	CONSTRUCTION SUBTOTAL =				$ 2,500
	MISCELLANEOUS			40%	$ 1,000
	TIER #1 SUBTOTAL =				**$ 3,500**
	TIER #2				
1	Mobilization	1	LS	$ 4,600.00	$ 4,600
2	Traffic Control	1	LS	$ 3,700.00	$ 3,700
3	Dust Control	1	LS	$ 3,700.00	$ 3,700
4	Demolition	1	LS	$ 9,200.00	$ 9,200
5	Concrete Handicap Ramp	8	EA	$ 4,000.00	$ 32,000
6	Intersection Curb Extensions	1	LS	$ 6,000.00	$ 6,000
7	Drainage Improvements - Major	1	LS	$ 30,000.00	$ 30,000
8	Median Nose Crossing/Refuge	2	EA	$ 1,500.00	$ 3,000
9	Utility Relocation - Major	1	LS	$ 10,000.00	$ 10,000
10	Landscape Irrigation - Intersection	1	LS	$ 6,000.00	$ 6,000
11	Landscape Planting - Intersection	1	LS	$ 4,500.00	$ 4,500
	CONSTRUCTION SUBTOTAL =				$ 112,700
	MISCELLANEOUS			40%	$ 45,100
	TIER #2 SUBTOTAL =				**$ 157,800**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
	TIER #6				
1	Mobilization	1	LS	$ 4,000.00	$ 4,000
2	Traffic Control	1	LS	$ 3,200.00	$ 3,200
3	Decorative Traffic Signal Poles & Arms	1	LS	$ 80,000.00	$ 80,000
	CONSTRUCTION SUBTOTAL =				$ 87,200
	MISCELLANEOUS			40%	$ 34,900
	TIER #6 SUBTOTAL =				**$ 122,100**
E ST. INTERSECTION				**TOTAL =**	**$ 340,800**

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E ST. TO F ST.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	1,100.00	$	1,100
2	Traffic Control	1	LS	$	900.00	$	900
3	Dust Control	1	LS	$	900.00	$	900
4	Demolition	1	LS	$	2,300.00	$	2,300
5	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
6	Mid-Block Curb Extensions	1	LS	$	3,400.00	$	3,400
7	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
8	Signing & Striping: Parking	600	LF	$	2.50	$	1,500
9	Striping: Mid-Block Crosswalk	57	LF	$	12.00	$	684
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Mid-Block Crossing	1	LS	$	2,600.00	$	2,600
12	Landscape Planting - Mid-Block Crossing	1	LS	$	2,000.00	$	2,000
	CONSTRUCTION SUBTOTAL =					$	27,400
	MISCELLANEOUS				40%	$	11,000
	TIER #1 SUBTOTAL =					**$**	**38,400**
	TIER #4						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Decorative Street Light - 10' Single-Head	6	EA	$	4,000.00	$	24,000
3	Street Furniture	2	EA	$	3,750.00	$	7,500
	CONSTRUCTION SUBTOTAL =					$	33,100
	MISCELLANEOUS				40%	$	13,200
	TIER #4 SUBTOTAL =					**$**	**46,300**
	TIER #5						
1	Mobilization	1	LS	$	1,000.00	$	1,000
2	Traffic Control	1	LS	$	800.00	$	800
3	Dust Control	1	LS	$	800.00	$	800
4	Demolition	1	LS	$	2,000.00	$	2,000
5	Landscape Irrigation - Median	3,185	SF	$	3.50	$	11,148
6	Landscape Planting - Median	3,185	SF	$	2.50	$	7,963
	CONSTRUCTION SUBTOTAL =					$	23,700
	MISCELLANEOUS				40%	$	9,500
	TIER #5 SUBTOTAL =					**$**	**33,200**
E ST. TO F ST.					**TOTAL =**	**$**	**117,900**

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F ST. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	129	LF	$ 7.00	$ 903
	CONSTRUCTION SUBTOTAL =				$ 1,900
	MISCELLANEOUS			40%	$ 800
	TIER #1 SUBTOTAL =				**$ 2,700**
	TIER #2				
1	Mobilization	1	LS	$ 3,600.00	$ 3,600
2	Traffic Control	1	LS	$ 2,900.00	$ 2,900
3	Dust Control	1	LS	$ 2,900.00	$ 2,900
4	Demolition	1	LS	$ 7,250.00	$ 7,250
5	Concrete Handicap Ramp	6	EA	$ 4,000.00	$ 24,000
6	Intersection Curb Extensions	1	LS	$ 6,000.00	$ 6,000
7	Drainage Improvements - Major	1	LS	$ 30,000.00	$ 30,000
8	Median Crossing/Refuge	1	LS	$ 2,000.00	$ 2,000
9	Landscape Irrigation - Intersection	1	LS	$ 6,000.00	$ 6,000
10	Landscape Planting - Intersection	1	LS	$ 4,500.00	$ 4,500
	CONSTRUCTION SUBTOTAL =				$ 89,200
	MISCELLANEOUS			40%	$ 35,700
	TIER #2 SUBTOTAL =				**$ 124,900**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
F ST. INTERSECTION				**TOTAL =**	**$ 185,000**

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F ST. TO G ST.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	1,100.00	$	1,100
2	Traffic Control	1	LS	$	900.00	$	900
3	Dust Control	1	LS	$	900.00	$	900
4	Demolition	1	LS	$	2,300.00	$	2,300
5	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
6	Mid-Block Curb Extensions	1	LS	$	3,400.00	$	3,400
7	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
8	Signing & Striping: Parking	600	LF	$	2.50	$	1,500
9	Striping: Mid-Block Crosswalk	57	LF	$	12.00	$	684
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Mid-Block Crossing	1	LS	$	2,600.00	$	2,600
12	Landscape Planting - Mid-Block Crossing	1	LS	$	2,000.00	$	2,000
	CONSTRUCTION SUBTOTAL =					$	27,400
	MISCELLANEOUS				40%	$	11,000
	TIER #1 SUBTOTAL =					**$**	**38,400**
	TIER #4						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Decorative Street Light - 10' Single-Head	6	EA	$	4,000.00	$	24,000
3	Street Furniture	2	EA	$	3,750.00	$	7,500
	CONSTRUCTION SUBTOTAL =					$	33,100
	MISCELLANEOUS				40%	$	13,200
	TIER #4 SUBTOTAL =					**$**	**46,300**
	TIER #5						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Dust Control	1	LS	$	500.00	$	500
4	Demolition	1	LS	$	550.00	$	550
5	Landscape Irrigation - Median	895	SF	$	3.50	$	3,133
6	Landscape Planting - Median	895	SF	$	2.50	$	2,238
	CONSTRUCTION SUBTOTAL =					$	7,400
	MISCELLANEOUS				40%	$	3,000
	TIER #5 SUBTOTAL =					**$**	**10,400**
F ST. TO G ST.					**TOTAL =**	**$**	**95,100**

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Checked By: JJ

G ST. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	208	LF	$ 7.00	$ 1,456
	CONSTRUCTION SUBTOTAL =				$ 2,500
	MISCELLANEOUS			40%	$ 1,000
	TIER #1 SUBTOTAL =				**$ 3,500**
	TIER #2				
1	Mobilization	1	LS	$ 3,000.00	$ 3,000
2	Traffic Control	1	LS	$ 2,500.00	$ 2,500
3	Dust Control	1	LS	$ 2,500.00	$ 2,500
4	Demolition	1	LS	$ 6,200.00	$ 6,200
5	Concrete Handicap Ramp	8	EA	$ 4,000.00	$ 32,000
6	Intersection Curb Extensions	1	LS	$ 6,000.00	$ 6,000
7	Drainage Improvements - Minor	1	LS	$ 10,000.00	$ 10,000
8	Median Nose Crossing/Refuge	2	EA	$ 1,500.00	$ 3,000
9	Landscape Irrigation - Intersection	1	LS	$ 6,000.00	$ 6,000
10	Landscape Planting - Intersection	1	LS	$ 4,500.00	$ 4,500
	CONSTRUCTION SUBTOTAL =				$ 75,700
	MISCELLANEOUS			40%	$ 30,300
	TIER #2 SUBTOTAL =				**$ 106,000**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
G ST. INTERSECTION				**TOTAL =**	**$ 166,900**

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Preliminary Engineer's Estimate
Madera Avenue Streetscape: "Baseline" Strategy
City of Kerman, CA

November 28, 2011
Prepared By: JJ
Checked By: JJ

G ST. TO KEARNEY BLVD.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	1,100.00	$	1,100
2	Traffic Control	1	LS	$	900.00	$	900
3	Dust Control	1	LS	$	900.00	$	900
4	Demolition	1	LS	$	2,300.00	$	2,300
5	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
6	Mid-Block Curb Extensions	1	LS	$	3,400.00	$	3,400
7	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
8	Signing & Striping: Parking	575	LF	$	2.50	$	1,438
9	Striping: Mid-Block Crosswalk	57	LF	$	12.00	$	684
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Mid-Block Crossing	1	LS	$	2,600.00	$	2,600
12	Landscape Planting - Mid-Block Crossing	1	LS	$	2,000.00	$	2,000
	CONSTRUCTION SUBTOTAL =					$	27,300
	MISCELLANEOUS				40%	$	10,900
	TIER #1 SUBTOTAL =					**$**	**38,200**
	TIER #4						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Decorative Street Light - 10' Single-Head	6	EA	$	4,000.00	$	24,000
3	Street Furniture	2	EA	$	3,750.00	$	7,500
	CONSTRUCTION SUBTOTAL =					$	33,100
	MISCELLANEOUS				40%	$	13,200
	TIER #4 SUBTOTAL =					**$**	**46,300**
	TIER #5						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Dust Control	1	LS	$	500.00	$	500
4	Demolition	1	LS	$	900.00	$	900
5	Landscape Irrigation - Median	1,452	SF	$	3.50	$	5,082
6	Landscape Planting - Median	1,452	SF	$	2.50	$	3,630
	CONSTRUCTION SUBTOTAL =					$	11,100
	MISCELLANEOUS				40%	$	4,400
	TIER #5 SUBTOTAL =					**$**	**15,500**
G ST. TO KEARNEY BLVD.					**TOTAL =**	**$**	**100,000**

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KEARNEY BLVD. INTERSECTION

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Striping: Intersection Crosswalk	300	LF	$	7.00	$	2,100
	CONSTRUCTION SUBTOTAL =					$	3,100
	MISCELLANEOUS				40%	$	1,200
	TIER #1 SUBTOTAL =					**$**	**4,300**
	TIER #2						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Demolition	1	LS	$	800.00	$	800
4	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
	CONSTRUCTION SUBTOTAL =					$	9,800
	MISCELLANEOUS				40%	$	3,900
	TIER #2 SUBTOTAL =					**$**	**13,700**
	TIER #4						
1	Mobilization	1	LS	$	2,000.00	$	2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$	6,000.00	$	24,000
3	Street Furniture	4	EA	$	3,750.00	$	15,000
	CONSTRUCTION SUBTOTAL =					$	41,000
	MISCELLANEOUS				40%	$	16,400
	TIER #4 SUBTOTAL =					**$**	**57,400**
	TIER #6						
1	Mobilization	1	LS	$	4,000.00	$	4,000
2	Traffic Control	1	LS	$	3,200.00	$	3,200
3	Decorative Traffic Signal Poles & Arms	1	LS	$	80,000.00	$	80,000
	CONSTRUCTION SUBTOTAL =					$	87,200
	MISCELLANEOUS				40%	$	34,900
	TIER #6 SUBTOTAL =					**$**	**122,100**
KEARNEY BLVD. INTERSECTION					**TOTAL =**	**$**	**197,500**

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Checked By: JJ

KEARNEY BLVD. TO SUNSET AVE.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	1,200.00	$	1,200
2	Traffic Control	1	LS	$	1,000.00	$	1,000
3	Dust Control	1	LS	$	1,000.00	$	1,000
4	Demolition	1	LS	$	2,400.00	$	2,400
5	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
6	Mid-Block Curb Extensions	1	LS	$	3,400.00	$	3,400
7	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
8	Signing & Striping: Parking	1,160	LF	$	2.50	$	2,900
9	Striping: Mid-Block Crosswalk	57	LF	$	12.00	$	684
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Mid-Block Crossing	1	LS	$	2,600.00	$	2,600
12	Landscape Planting - Mid-Block Crossing	1	LS	$	2,000.00	$	2,000
	CONSTRUCTION SUBTOTAL =					$	29,200
	MISCELLANEOUS				40%	$	11,700
	TIER #1 SUBTOTAL =					**$**	**40,900**
	TIER #4						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Decorative Street Light - 10' Single-Head	14	EA	$	4,000.00	$	56,000
3	Street Furniture	6	EA	$	3,750.00	$	22,500
	CONSTRUCTION SUBTOTAL =					$	80,100
	MISCELLANEOUS				40%	$	32,000
	TIER #4 SUBTOTAL =					**$**	**112,100**
	TIER #5						
1	Mobilization	1	LS	$	1,300.00	$	1,300
2	Traffic Control	1	LS	$	1,000.00	$	1,000
3	Dust Control	1	LS	$	1,000.00	$	1,000
4	Demolition	1	LS	$	2,600.00	$	2,600
5	Landscape Irrigation - Median	4,214	SF	$	3.50	$	14,749
6	Landscape Planting - Median	4,214	SF	$	2.50	$	10,535
	CONSTRUCTION SUBTOTAL =					$	31,200
	MISCELLANEOUS				40%	$	12,500
	TIER #5 SUBTOTAL =					**$**	**43,700**
KEARNEY BLVD. TO SUNSET AVE.					**TOTAL =**	**$**	**196,700**

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SUNSET AVE. INTERSECTION

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Striping: Intersection Crosswalk	224	LF	$ 7.00	$ 1,568
	CONSTRUCTION SUBTOTAL =				$ 2,600
	MISCELLANEOUS			40%	$ 1,000
	TIER #1 SUBTOTAL =				**$ 3,600**
	TIER #2				
1	Mobilization	1	LS	$ 4,100.00	$ 4,100
2	Traffic Control	1	LS	$ 3,300.00	$ 3,300
3	Dust Control	1	LS	$ 3,300.00	$ 3,300
4	Demolition	1	LS	$ 8,200.00	$ 8,200
5	Concrete Handicap Ramp	8	EA	$ 4,000.00	$ 32,000
6	Intersection Curb Extensions	1	LS	$ 6,000.00	$ 6,000
7	Drainage Improvements - Major	1	LS	$ 30,000.00	$ 30,000
8	Median Nose Crossing/Refuge	2	EA	$ 1,500.00	$ 3,000
9	Landscape Irrigation - Intersection	1	LS	$ 6,000.00	$ 6,000
10	Landscape Planting - Intersection	1	LS	$ 4,500.00	$ 4,500
	CONSTRUCTION SUBTOTAL =				$ 100,400
	MISCELLANEOUS			40%	$ 40,200
	TIER #2 SUBTOTAL =				**$ 140,600**
	TIER #4				
1	Mobilization	1	LS	$ 2,000.00	$ 2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$ 6,000.00	$ 24,000
3	Street Furniture	4	EA	$ 3,750.00	$ 15,000
	CONSTRUCTION SUBTOTAL =				$ 41,000
	MISCELLANEOUS			40%	$ 16,400
	TIER #4 SUBTOTAL =				**$ 57,400**
SUNSET AVE. INTERSECTION				**TOTAL =**	**$ 201,600**

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SUNSET AVE. TO STANISLAUS AVE.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	1,200.00	$	1,200
2	Traffic Control	1	LS	$	1,000.00	$	1,000
3	Dust Control	1	LS	$	1,000.00	$	1,000
4	Demolition	1	LS	$	2,400.00	$	2,400
5	Concrete Handicap Ramp	2	EA	$	4,000.00	$	8,000
6	Mid-Block Curb Extensions	1	LS	$	3,400.00	$	3,400
7	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
8	Signing & Striping: Parking	1,150	LF	$	2.50	$	2,875
9	Striping: Mid-Block Crosswalk	57	LF	$	12.00	$	684
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Mid-Block Crossing	1	LS	$	2,600.00	$	2,600
12	Landscape Planting - Mid-Block Crossing	1	LS	$	2,000.00	$	2,000
	CONSTRUCTION SUBTOTAL =					$	29,200
	MISCELLANEOUS				40%	$	11,700
	TIER #1 SUBTOTAL =					**$**	**40,900**
	TIER #4						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Decorative Street Light - 10' Single-Head	14	EA	$	4,000.00	$	56,000
3	Street Furniture	6	EA	$	3,750.00	$	22,500
	CONSTRUCTION SUBTOTAL =					$	80,100
	MISCELLANEOUS				40%	$	32,000
	TIER #4 SUBTOTAL =					**$**	**112,100**
	TIER #5						
1	Mobilization	1	LS	$	1,600.00	$	1,600
2	Traffic Control	1	LS	$	1,300.00	$	1,300
3	Dust Control	1	LS	$	1,300.00	$	1,300
4	Demolition	1	LS	$	3,100.00	$	3,100
5	Landscape Irrigation - Median	5,174	SF	$	3.50	$	18,109
6	Landscape Planting - Median	5,174	SF	$	2.50	$	12,935
	CONSTRUCTION SUBTOTAL =					$	38,300
	MISCELLANEOUS				40%	$	15,300
	TIER #5 SUBTOTAL =					**$**	**53,600**
SUNSET AVE. TO STANISLAUS AVE.					**TOTAL =**	**$**	**206,600**

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Checked By: JJ

STANISLAUS AVE. INTERSECTION

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Striping: Intersection Crosswalk	224	LF	$	7.00	$	1,568
	CONSTRUCTION SUBTOTAL =					$	2,600
	MISCELLANEOUS				40%	$	1,000
	TIER #1 SUBTOTAL =					**$**	**3,600**
	TIER #2						
1	Mobilization	1	LS	$	3,100.00	$	3,100
2	Traffic Control	1	LS	$	2,500.00	$	2,500
3	Dust Control	1	LS	$	2,500.00	$	2,500
4	Demolition	1	LS	$	6,200.00	$	6,200
5	Concrete Handicap Ramp	8	EA	$	4,000.00	$	32,000
6	Intersection Curb Extensions	1	LS	$	6,000.00	$	6,000
7	Drainage Improvements - Minor	1	LS	$	10,000.00	$	10,000
8	Median Nose Crossing/Refuge	2	EA	$	1,500.00	$	3,000
9	Landscape Irrigation - Intersection	1	LS	$	6,000.00	$	6,000
10	Landscape Planting - Intersection	1	LS	$	4,500.00	$	4,500
	CONSTRUCTION SUBTOTAL =					$	75,800
	MISCELLANEOUS				40%	$	30,300
	TIER #2 SUBTOTAL =					**$**	**106,100**
	TIER #4						
1	Mobilization	1	LS	$	2,000.00	$	2,000
2	Decorative Street Light - 14' Double-Head	4	EA	$	6,000.00	$	24,000
3	Street Furniture	4	EA	$	3,750.00	$	15,000
	CONSTRUCTION SUBTOTAL =					$	41,000
	MISCELLANEOUS				40%	$	16,400
	TIER #4 SUBTOTAL =					**$**	**57,400**
	TIER #6						
1	Mobilization	1	LS	$	4,000.00	$	4,000
2	Traffic Control	1	LS	$	3,200.00	$	3,200
3	Decorative Traffic Signal Poles & Arms	1	LS	$	80,000.00	$	80,000
	CONSTRUCTION SUBTOTAL =					$	87,200
	MISCELLANEOUS				40%	$	34,900
	TIER #6 SUBTOTAL =					**$**	**122,100**
STANISLAUS AVE. INTERSECTION					**TOTAL =**	**$**	**289,200**

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STANISLAUS AVE. TO SAN JOAQUIN AVE.

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	500.00	$	500
2	Traffic Control	1	LS	$	500.00	$	500
3	Signing & Striping: Parking	461	LF	$	2.50	$	1,153
	CONSTRUCTION SUBTOTAL =					$	2,200
	MISCELLANEOUS				40%	$	900
	TIER #1 SUBTOTAL =					**$**	**3,100**
	TIER #4						
1	Mobilization	1	LS	$	1,000.00	$	1,000
2	Decorative Street Light - 10' Single-Head	5	EA	$	4,000.00	$	20,000
	CONSTRUCTION SUBTOTAL =					$	21,000
	MISCELLANEOUS				40%	$	8,400
	TIER #4 SUBTOTAL =					**$**	**29,400**
	TIER #5						
1	Mobilization	1	LS	$	800.00	$	800
2	Traffic Control	1	LS	$	600.00	$	600
3	Dust Control	1	LS	$	600.00	$	600
4	Demolition	1	LS	$	1,600.00	$	1,600
5	Concrete Median Curb	122	LF	$	25.00	$	3,050
6	Median Island Topsoil Backfill	659	SF	$	1.50	$	989
7	Striping: Left-Turn Pocket Modification	1	LS	$	400.00	$	400
8	Landscape Irrigation - Median	1,774	SF	$	3.50	$	6,209
9	Landscape Planting - Median	1,774	SF	$	2.50	$	4,435
	CONSTRUCTION SUBTOTAL =					$	18,700
	MISCELLANEOUS				40%	$	7,500
	TIER #5 SUBTOTAL =					**$**	**26,200**
STANISLAUS AVE. TO SAN JOAQUIN AVE.					**TOTAL =**	**$**	**58,700**

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SAN JOAQUIN AVE. INTERSECTION

Item No.		Quantity	Unit		Unit Price		Total
	TIER #1						
1	Mobilization	1	LS	$	2,600.00	$	2,600
2	Traffic Control	1	LS	$	2,100.00	$	2,100
3	Dust Control	1	LS	$	2,100.00	$	2,100
4	Demolition	1	LS	$	5,200.00	$	5,200
5	Concrete Handicap Ramp	5	EA	$	4,000.00	$	20,000
6	Intersection Curb Extensions	1	LS	$	6,000.00	$	6,000
7	Drainage Improvements - Minor	1	LS	$	10,000.00	$	10,000
8	Median Crossing/Refuge	1	LS	$	2,000.00	$	2,000
9	Striping: Intersection Crosswalk	93	LF	$	7.00	$	651
10	Signing: Mid-Block Crosswalk	1	LS	$	2,000.00	$	2,000
11	Landscape Irrigation - Intersection	1	LS	$	6,000.00	$	6,000
12	Landscape Planting - Intersection	1	LS	$	4,500.00	$	4,500
	CONSTRUCTION SUBTOTAL =					$	63,200
	MISCELLANEOUS				40%	$	25,300
	TIER #1 SUBTOTAL =					**$**	**88,500**
	TIER #4						
1	Mobilization	1	LS	$	1,200.00	$	1,200
2	Decorative Street Light - 14' Double-Head	2	EA	$	6,000.00	$	12,000
3	Street Furniture	3	EA	$	3,750.00	$	11,250
	CONSTRUCTION SUBTOTAL =					$	24,500
	MISCELLANEOUS				40%	$	9,800
	TIER #4 SUBTOTAL =					**$**	**34,300**
SAN JOAQUIN AVE. INTERSECTION					**TOTAL =**	**$**	**122,800**

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SAN JOAQUIN AVE. TO WHITESBRIDGE RD.

Item No.		Quantity	Unit	Unit Price	Total
	TIER #1				
1	Mobilization	1	LS	$ 500.00	$ 500
2	Traffic Control	1	LS	$ 500.00	$ 500
3	Signing & Striping: Parking	1,720	LF	$ 2.50	$ 4,300
	CONSTRUCTION SUBTOTAL =				$ 5,300
	MISCELLANEOUS			40%	$ 2,100
	TIER #1 SUBTOTAL =				**$ 7,400**
	TIER #4				
1	Mobilization	1	LS	$ 6,500.00	$ 6,500
2	Decorative Street Light - 10' Single-Head	24	EA	$ 4,000.00	$ 96,000
3	Decorative Street Light - 14' Double-Head	2	EA	$ 6,000.00	$ 12,000
4	Street Furniture	6	EA	$ 3,750.00	$ 22,500
	CONSTRUCTION SUBTOTAL =				$ 137,000
	MISCELLANEOUS			40%	$ 54,800
	TIER #4 SUBTOTAL =				**$ 191,800**
	TIER #5				
1	Mobilization	1	LS	$ 3,100.00	$ 3,100
2	Traffic Control	1	LS	$ 2,500.00	$ 2,500
3	Dust Control	1	LS	$ 2,500.00	$ 2,500
4	Demolition	1	LS	$ 6,200.00	$ 6,200
5	Concrete Median Curb	222	LF	$ 25.00	$ 5,550
6	Median Island Topsoil Backfill	2,108	SF	$ 1.50	$ 3,162
7	Striping: Left-Turn Pocket Modification	1	LS	$ 400.00	$ 400
8	Landscape Irrigation - Median	8,659	SF	$ 3.50	$ 30,307
9	Landscape Planting - Median	8,659	SF	$ 2.50	$ 21,648
	CONSTRUCTION SUBTOTAL =				$ 75,400
	MISCELLANEOUS			40%	$ 30,200
	TIER #5 SUBTOTAL =				**$ 105,600**
SAN JOAQUIN AVE. TO WHITESBRIDGE RD.				**TOTAL =**	**$ 304,800**

MASTER ITEM LIST

	STREET IMPROVEMENTS			
SI-1	Mobilization	LS	5.0% of total construction; $500 Min.	
SI-2	Traffic Control	LS	4.0% of total construction; $500 Min.	
SI-3	Dust Control	LS	4.0% of total construction; $500 Min.	
SI-4	Demolition	LS	10.0% of total construction; $500 Min.	
SI-5	Concrete Curb and Gutter	LF	$	30.00
SI-6	Concrete Curb	LF	$	20.00
SI-7	Concrete Median Curb	LF	$	25.00
SI-8	Concrete Sidewalk	SF	$	8.00
SI-9	Concrete Handicap Ramp	EA	$	4,000.00
SI-10	Concrete Valley Gutter	SF	$	10.00
SI-11	Intersection Curb Extensions	LS	$	6,000.00
SI-12	Drainage Improvements - Minor	LS	$	10,000.00
SI-13	Drainage Improvements - Major	LS	$	30,000.00
SI-14	Median Nose Crossing/Refuge	EA	$	1,500.00
SI-15	Mid-Block Curb Extensions	LS	$	3,400.00
SI-16	Median Crossing/Refuge	LS	$	2,000.00
SI-17	Median Island Topsoil Backfill	SF	$	1.50
	UTILITY RELOCATION			
UR-1	Utility Relocation - Minor	LS	$	2,500.00
UR-2	Utility Relocation - Major	LS	$	10,000.00
	SIGNING & STRIPING			
SS-1	Signing & Striping: Parking	LF	$	2.50
SS-2	Striping: Intersection Crosswalk	LF	$	7.00
SS-3	Striping: Mid-Block Crosswalk	LF	$	12.00
SS-4	Signing: Mid-Block Crosswalk	LS	$	2,000.00
SS-5	Striping: Left-Turn Pocket Modification	LS	$	400.00
	TRAFFIC SIGNAL IMPROVEMENTS			
TS-1	Decorative Traffic Signal Poles & Arms	LS	$	80,000.00
	LANDSCAPING			
LS-1	Landscape Irrigation - Median	SF	$	3.50
LS-2	Landscape Irrigation - Intersection	LS	$	6,000.00
LS-3	Landscape Irrigation - Mid-Block Crossing	LS	$	2,600.00
LS-4	Landscape Planting - Median	SF	$	2.50
LS-5	Landscape Planting - Intersection	LS	$	4,500.00
LS-6	Landscape Planting - Mid-Block Crossing	LS	$	2,000.00
	STREET LIGHTING			
SL-1	Decorative Street Light - 10' Single-Head	EA	$	4,000.00
SL-2	Decorative Street Light - 14' Double-Head	EA	$	6,000.00
	STREET FURNITURE			
SF-1	Street Furniture	EA	$	3,750.00

Assumptions:

1) Miscellaneous costs include 12% Design Engineering, 8% Construction Engineering, & 20% Contingency.
2) Concrete improvement costs include the cost of minor HMA pavement replacement, where applicable.
3) Concrete handicap ramp cost includes the cost of replacement of 20 LF of concrete curb & gutter and 100 SF of concrete sidewalk.
4) Intersection curb extension cost includes curb extensions on NW and SE corners at full intersections; or SW and SE corners at intersections with only left-turn pocket.
5) Striping cost for mid-block crosswalk is greater than for intersection crosswalk due to required advance yield lines and pavement markings for mid-block crossings.
6) Decorative traffic signal poles & arms cost assumes direct replacement of existing poles and arms with no relocation and use of the existing traffic pole bases.
7) Street furniture includes the following: one (1) park bench @ $2000, one (1) trash receptacle @ $1250, and one (1) bike rack @ $500.