Appendix F: Circulation Appendix

F.1. Existing Deficiencies

The following circulation deficiencies exist:

A. **Los Osos Valley Road between 9th Street and Pine Avenue**. Existing capacity and pedestrian deficiencies exist along this segment of Los Osos Valley Road. This is a critical pedestrian gap to tie the westerly residential neighborhoods to the central business district.

B. **Ramona Avenue**. Roadway alignments and intersections at 4th and 9th Streets are no longer efficient for the traffic volume.

C. **Doris Avenue between Rosina Drive and South Court**. The unimproved segment of this road prevents a direct motor vehicle connection between the residential area of Cuesta-by-the-Sea and Monarch Grove Elementary School.

D. **Pine Avenue**. Pine Avenue is a residential collector. Pedestrian use of the roadway shoulder is restrictive due to parked vehicles, utilities, fences, and other obstacles. These same constraints coupled with the narrow 40-foot right-of-way suggest road widening improvements for Class II bike lanes and/or sidewalks may require right-of-way from adjacent properties,

Other deficiencies and perceived problems have been identified by the community, but they cannot be measured against an engineering standard. Instead, they are based on people's perceptions, which affect how people make their transportation choices. Those deficiencies may also need to be addressed, and include the following:

E. **Los Osos Valley Road, Los Osos Creek to 9th Street**. Traffic moves too fast, the street is too wide for pedestrians to cross safely, and the wide street disrupts the character of the community. Medians are proposed to reduce the overall width of the street for traffic speed reduction and traffic access management. The one block with medians on Los Osos Valley Road west of South Bay Boulevard has been shown to reduce travel speeds.

F. **Traffic Speed**. Traffic routinely exceeds posted speed limits on many streets, such as Santa Ysabel Avenue, South Bay Boulevard, Los Osos Valley Road, Bayview Heights Drive, and Rodman Drive. The best solution may be a greater emphasis on enforcement of traffic speed laws. The County has engaged the community in an effort to produce traffic calming measures on Santa Ysabel Avenue, including median islands and raised cross walks.

G. **Unpaved roads**. Many unpaved roads cause inefficient traffic patterns, create excessive dust and discourage pedestrian and bicycle travel.

H. **Pedestrian and Bicycle Facilities**. Pedestrian and bicycle travel are discouraged by many factors, but the primary one is a lack of an adequate and convenient system of pedestrian and bicycle facilities that connect residential areas, schools and commercial areas. Class I bikeways should be developed, or Class II bikeways need to be located on streets with minimal traffic in order to encourage bicycle use by school-age children, commuters, shoppers, senior citizens, and others. Refer to the *County's Bikeway Plan* for additional information.

I. **Regional Transit Service**. Ridership on buses is low for many reasons. They include infrequent service and other service deficiencies, poor access to bus stops, lack of sheltered bus stops, a poorly located park-and-ride lot, and a lack of incentives to use transit. Since over 75 percent of workers living in Los Osos commute to jobs in other communities, providing a high level of transit service is an important need.

F.2. Proposed Improvements

Examples of specific measures to correct or improve the preceding deficiencies are described in Section 5.3, Circulation Improvements.

A. Arterials

Arterial roads carry traffic between principal arterial roads and between population centers or they may just carry large volumes of traffic within an urban or rural area. They are not intended to provide primary access to residences and are best used for controlled access to areas of retail and service commercial uses, industrial facilities and major community facilities.

1. Los Osos Valley Road

Proposed improvements include the following. In addition, refer to the proposed improvements in the following section, Los Osos Valley Road Corridor Improvements:

a. Construct center medians in the downtown corridor intended to slow traffic, encourage pedestrian activity, attract economic activity, and make the area more attractive.

b. Widen Los Osos Valley Road between Doris Avenue and Palisades Avenue to provide a continuous center left turn lane.

c. Implement traffic calming measures where feasible to slow traffic and encourage safe pedestrian travel within the central business district, such as bulb-outs, medians and raised crosswalks at intersections and mid-block locations.

d. Construct a multi-use trail on the northerly side of Los Osos Valley Road between Palisades Avenue and Doris Avenue.

2. Los Osos Valley Road Corridor Improvements

On July 24, 2007, the Board of Supervisors approved preparation of the Los Osos Valley Road Corridor Study. The study was developed to define a specific set of guidelines and serve as an overall master plan that will guide future circulation improvements within the Los Osos Valley Road right-of-way between the Los Osos Creek Bridge and Bush Drive. Community meetings were held with the Los Osos Advisory Council (LOCAC), its Visioning

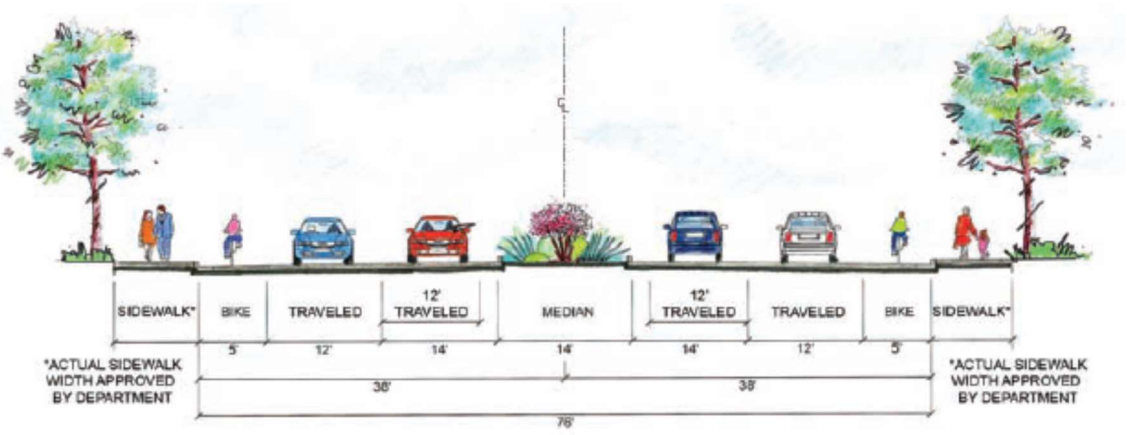
and Transportation Circulation Committees, the general public, the consultant and County Public Works. These meetings resulted in release of the community-sponsored Draft Los Osos Valley Road Corridor Study in November of 2008.

The study's recommendations are included here. They seek to strike a balance between traffic flow maximization for passers-through and the safety and convenience of pedestrians, cyclists and local traffic, for which Los Osos Valley Road is a community center.

a. **Los Osos Valley Road between Bush Drive and Sunset Drive**

The Los Osos Valley Road Corridor Study concludes that unobstructed automobile movements and safe pedestrian crossings are issues that need to be addressed. In the central business district, the study recommends a raised median to prevent unobstructed turning movements and control the turning movements at the intersections.

Figure F-1: Conceptual Los Osos Valley Road Section with Median



A raised median provides three main functions: 1) restrict the unobstructed movements and control the turning movements, 2) provide traffic calming by narrowing the roadway, causing traffic to slow down, and 3) provide an opportunity for plantings and other hardscape improvements, enhancing the streetscape and the visual character of Los Osos Valley Road.

Figure F-2: Conceptual Los Osos Valley Road Improvements – Bush Drive to Sunset Drive

i. **Los Osos Valley Road at Bush Drive.** A right turn deceleration lane is proposed for westbound Los Osos Valley Road traffic to northbound Bush Drive. This would allow traffic headed for Bush Drive to make a smooth transition, which would help reduce rear-end collisions.

Figure F-3: Los Osos Valley Road at Bush Drive

A raised and planted median along the center line of Los Osos Valley Road is proposed for traffic control. It would not allow southbound Bush Drive traffic to proceed eastbound on Los Osos Valley Road. It would also not allow eastbound Los Osos Valley Road traffic to turn left onto Bush Drive. This is proposed to reduce turning movement options and confusion caused by the severe angle of the Bush Drive intersection with Los Osos Valley Road. In effect, Bush Drive at Los Osos Valley Road becomes a "right-in/right-out only" intersection.

ii. **Los Osos Valley Road at Bayview Heights Drive.** The corridor study recommends that the improvements to the Los Osos Valley Road intersection with Bayview Heights Drive be performed within the current curb/pavement/radii system. The study also recommends that the intersection remain signalized, though the array of traffic signals and their

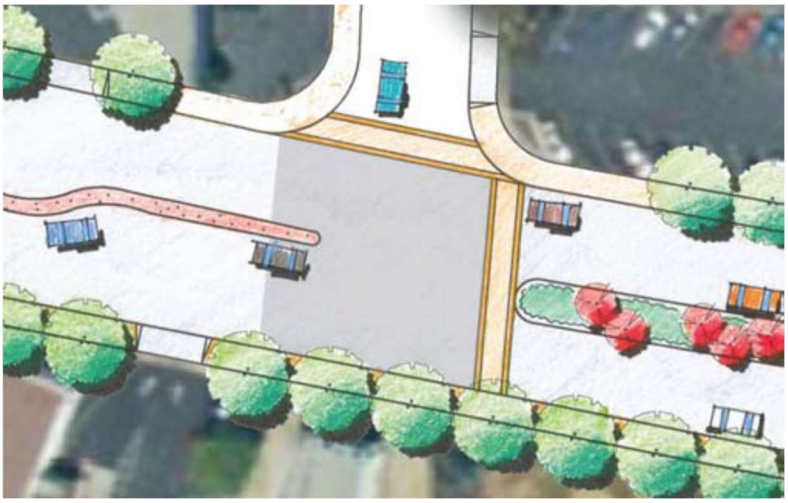
programming should be upgraded to include pedestrian crossing signals and queuing.

Figure F-4: Los Osos Valley Road at Bayview Heights Drive

The signal would also be synchronized with the other traffic signals along Los Osos Valley Road for traffic flow timing and enhanced peak hour movement. Additionally, pedestrian striping (or special pavers) across the intersection is included to better define the pedestrian areas. There is insufficient right-of-way (ROW) width to allow plantings in the raised median nearest the intersection.

iii. **Los Osos Valley Road at 10th Street.** Improvements to the Los Osos Valley Road intersection with 10th Street should be made within the current curb/pavement/radii system. The intersection is also proposed to remain signalized - though the array of traffic signals and their programming will be upgraded to include pedestrian crossing signals and queuing. The signal would also be synchronized with the other traffic signals along Los Osos Valley Road for traffic flow timing and enhanced peak hour movement.

Figure F-5: Los Osos Valley Road at 10th Street



Additionally, pedestrian striping (or special pavers) across the intersection is included to better define the pedestrian areas. However, in order to reduce potential conflicts and assist traffic flow, pedestrian crossings are confined to the northern and eastern sides of the intersection. There is sufficient right-of-way (ROW) width to allow plantings in the raised median east of 10th Street.

Additional plantings are proposed along the south side of the intersection to visually and physically reinforce that 10th Street does not proceed south through the intersection with Los Osos Valley Road.

iv. **Los Osos Valley Road at Sunset Drive.** Two options were investigated at the Los Osos Valley Road intersection with Sunset Drive. Option 1 downgrades the status of the intersection by installation of a raised and planted median that eliminates direct north/south movement and left turns from Sunset to Los Osos Valley Road and left turns from Los Osos Valley Road to Sunset. Option 2 recommends formalizing the existing intersection with improvements that retain the current array of traffic movement options. However, this option also enhances the physical plant with pedestrian striping (or special pavers) across the intersection to better define the pedestrian areas and adds a pedestrian-initiated cross walk signal.

Figure F-6: Los Osos Valley Road at Sunset Drive – Option 1

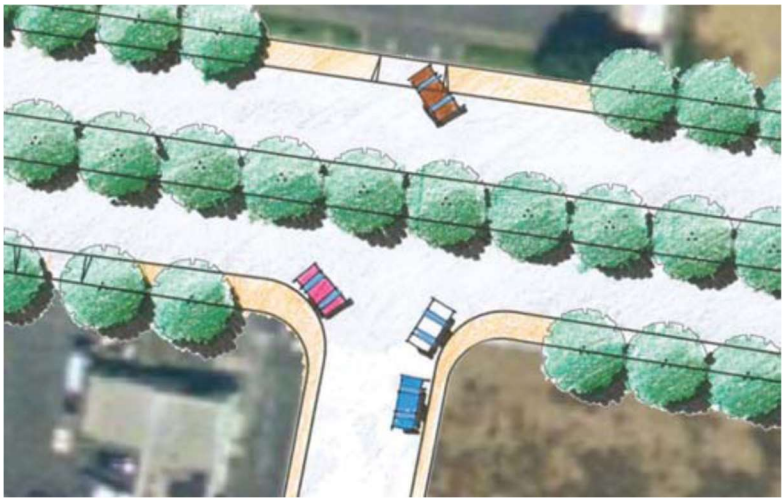


Figure F-7: Los Osos Valley Road at Sunset Drive – Option 2

A traffic signal is not included under either option, but a set of "STOP" signs is recommended in both options to control traffic onto Los Osos Valley Road. Los Osos Valley Road traffic would not be subject to a "STOP" sign under any option.

b. **Los Osos Valley Road between Sunset Drive and South Bay Boulevard**

Figure F-8: Los Osos Valley Road Improvements – Sunset Drive to South Bay Boulevard

i. **Los Osos Valley Road at Fairchild Way.** In order to provide pedestrians and cyclists with another formalized way to cross Los Osos Valley Road, the Corridor Study recommends that a new traffic signal be provided at the intersection of Los Osos Valley Road and Fairchild Way. The intersection would be incorporated into the programming with the other traffic signals along the Los Osos Valley Road corridor to address pedestrian crossing signals and queuing.

Figure F-9: Los Osos Valley Road at Fairchild Way

The signal would also be synchronized with the other traffic signals along Los Osos Valley Road for traffic flow timing and enhanced peak hour movement. The Corridor Study recommends adding pedestrian striping (or special pavers) across the intersection to better define the pedestrian areas.

ii. **Los Osos Valley Road at South Bay Boulevard.** The Corridor Study recommends an upgraded traffic signal at this intersection that would be incorporated into the programming with the other traffic signals to address pedestrian crossing signals and queuing. The signal would also be synchronized with the other traffic signals along Los Osos Valley Road for traffic flow timing and enhanced peak hour movement. This intersection should include a gateway feature for the entrance to town. The gateway may include special landscaping, monument signs or other features.

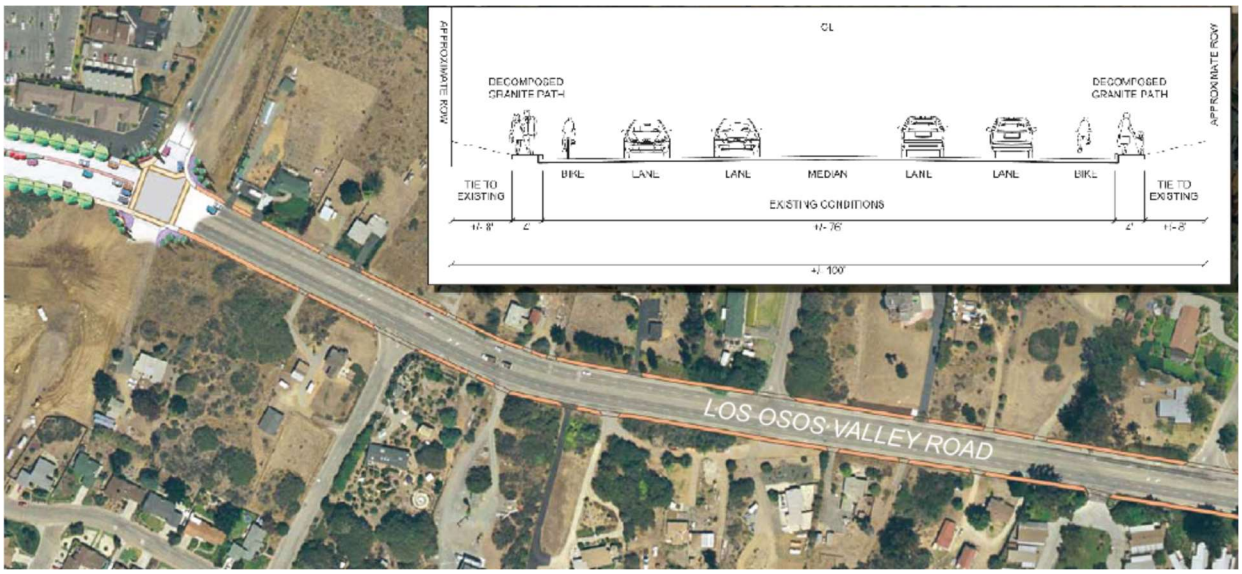
Figure F-10: Los Osos Valley Road at South Bay Boulevard

The Corridor Study recommends pedestrian striping (or special pavers) across the intersection to better define the pedestrian areas on all sides of the intersection except the east side. In addition, sidewalks should tie into the proposed trail heading southeast down Los Osos Valley Road.

c. **Los Osos Valley Road between South Bay Boulevard and Nipomo Creek Bridge**

The Los Osos Valley Road section below illustrates conceptual improvements to include the addition of a four-foot-wide pedestrian trail adjacent to the existing curb. The trail provides a safe means of travel for recreation, as well as a connection to the central business district for the residences to the south.

Figure F-11: Los Osos Valley Road Section between South Bay Boulevard and Los Osos Creek



3. **Los Osos Valley Road Corridor Study Guidelines for Amenities, Central Business District**

The following are some examples of general approaches to streetscape design within the central business district. These guidelines are crafted with an acknowledgement of contemporary xeriscaping/low-water-demand approaches to streetscape design. An encroachment permit must be issued by the County Public Works Department prior to constructing streetscape amenities within the public road right-of-way. The permit provisions will ensure that amenities are safely located, constructed in accordance with prevailing standards, and maintained. Typically, maintenance responsibilities will rest with the adjoining property owner. Alternatively, property owners may establish a Business Improvement District, Landscaping and Lighting District or request the Community Services District to assume ongoing maintenance and operation.

a. **Parking**

On-street parking is not recommended on Los Osos Valley Road within the central business district. On-site parking, if located between a building and a street, shall be screened from public rights-of-way by vegetation, a decorative wall or combination thereof with a height of a 30 - inches above the bumper stop and/or curb of the surface parking lot adjacent to the right-of-way. Parking lots shall be separated from sidewalks, streets, or alleys by a landscaped open area of at least five (5) feet between the parking area and the edge of the right-of-way.

b. **Street Furnishings**

Streetscape furniture should be consistent throughout the corridor to provide continuity, display a regional theme, reduce the need for maintenance, and reduce the need to retain an exotic street furnishing inventory. Furnishings should be set back a minimum of 2.5 feet from the face of the curb to avoid damage from vehicles. All metal parts that are not otherwise finished to sustain outdoor exposure should be painted with a glossy, rather than a matte finish.

c. **Sitting Walls**

Sitting walls built into the streetscape are recommended to maximize seating choices for pedestrians and attract pedestrians to linger and socialize in certain areas. In every instance, sitting areas (benches and sitting walls) should receive partial-to-full shade. Sitting areas should be located with a practical approach that minimizes proximity to noise, wind, and dust. On the positive side sitting areas should take advantage of proximity to locally popular gathering places (restaurants, transit stops, and school routes) and be oriented to enjoy works of art or significant views and vistas. Sitting areas should be open enough to promote security.

d. **Benches**

Benches are to have backs and arm rests (every 4 feet) for comfort. Color and style shall complement and be coordinated with the building and paving materials. Benches should be made of metal or a combination of metal, wood, recycled hybrid plastics, or similar. Metal should be painted in lighter tones to reduce heat gain during sunny days. It is recommended that benches be common “catalogue” items and not be custom-designed and built for this corridor. In this way, they can be replaced with ease and at a minimum expense in the event they are damaged.

e. **Trash Receptacles**

Trash receptacles should be provided within the corridor at locations where pedestrians pause or linger, for example, at transit stops and intersections. Receptacles should be simple, subdued, and easy to maintain and replace. It is recommended that receptacles be common “catalogue” items and not be custom-designed. Their colors should tend toward the darker shades of the color palette. As much as possible, receptacles should recede into the background. They should be built with stone, precast concrete or metal and have removable liners and lids.

f. **Pathways**

All streets along the Los Osos Valley Road Corridor swill have sidewalks in accordance with County public improvement standards. The recommended materials for pathways and areas outside the public right-of-way are brick, concrete pavers and concrete. “Stamped” and “colored” concrete is not recommended. Asphalt is prohibited unless it is a designated bikeway.

g. **Perpendicular Streets**

Perpendicular streets connecting to or crossing Los Osos Valley Road should have full sidewalk, curb, gutter, lighting, sign and pathway improvements similar or complementary to the guidelines that apply to Los Osos Valley Road.

h. **Bike Racks**

Bicycle racks should be provided within the corridor to encourage alternative transportation choices. Bicycle racks should be painted or treated metal. The design, quantity, and locations of bicycle racks will be reviewed and approved by the County. The color should complement the proposed improvements.

i. **Tree Grates**

The use of tree grates along Los Osos Valley Road should be reserved for plazas and areas along the streets within the corridor. Tree roots, especially on young trees, need protection in areas where pedestrian traffic is heavy. Without such protection, the soil becomes compacted and the trees may die from suffocation. Tree grates are only recommended where sidewalk dimensions or pedestrian movement prohibit the use of tree planting beds. If tree grates are used, the maximum size units should be installed to provide additional root space for the trees. For narrow sidewalks where tree grates are needed, 4-foot by 8-foot or 5-foot by 10-foot grates are preferred. Under no circumstances should a grate smaller than 4-by-8 feet or 6-by-6 feet be used. The tree grates should be cast iron "pedestrian-friendly" tree grates which have smaller openings to minimize tripping hazards. Large tree pits without grates are the preferred planting environment.

j. **In-Ground Planters**

In-ground planters are preferred over tree grates within the corridor. A planting bed facilitates a "greener" streetscape/creek-scape environment and allows for improved water absorption. This approach also lessens the risk of compaction and provides additional room for root growth. Pedestrians can be discouraged from walking through the planters by elevating them slightly with a coping edge or curb edge and ground covers are used, seasonal bulbs can be interspersed to provide color with a minimum amount of maintenance. In-ground planters should only be used in areas where a walkway width of at least eight feet from building face can be maintained. If planting beds are used on narrower walks, pedestrians will feel confined and may disregard the planter edges by walking through them. In these situations, it is better to use tree grates.

k. **Container Planters**

Year-round container plantings may be used in the corridor to add color and create seasonal interest. Seasonal containers should be used extensively near building entrances and in key pedestrian zones.

l. **Landscaped Medians**

Landscaped medians will utilize hardscape treatments unless the Community Services District or other local entity enters into a maintenance agreement with the County to ensure frequent and ongoing irrigation, maintenance and replanting obligations.

m. **Street Lighting**

All lighting is to be the minimum necessary to provide safer intersections, sidewalks, bike lanes and roadways. Lighting may be used for other purposes in special circumstances, for example, low wattage accent lighting of trees, lighting of designated public art, and temporary seasonal "holiday" lighting for no more than 60 days per calendar year. In every instance, the overall consideration for dark sky ambience and energy conservation is to take precedence over excessive lighting.

All lighting is to be shielded downward and minimize spillage outside of the target subject of the lighting program. Low voltage and/or "green" lighting systems should be installed when they suit the lighting program intent. Where possible, accent lighting should be low profile and hidden from general public view during non-operational hours.

Pedestrian-level lighting should be installed along roadways within the Central Business District. Private property owners are encouraged to continue pedestrian lighting as needed to illuminate pathways between public rights-of-way and buildings.

Light standards that are generally visible should be aesthetically pleasing during daylight hours and use a design based upon traditional, established and familiar public light standard designs. Lighting is not to use "fad" and "trendy" designs that are not derivative of the local culture and architecture. Lighting is also not to use designs that are ultra-contemporary and obvious products of their time that do not age gracefully. However, "Cobra-head" street lights or similar ubiquitous light standards are also not to be used.

4. **South Bay Boulevard.**

Improve its intersection with Los Osos Valley Road with a future southbound dual left turn lane under future traffic conditions.

a. Plan for a future intersection with the Ramona Avenue extension.

b. Plan for a future multi-use trail on the easterly side.

B. Collectors

Collector roads enable traffic to move to and from local roads, arterial roads and activity centers. They are the principal roads of residential areas and carry relatively high volumes of traffic. Residential driveway access should be limited according to traffic volumes, parcel sizes and sight distances.

1. **Ramona Avenue**. Complete Ramona Avenue between 10th Street and South Bay Boulevard after realignment of the Ramona Avenue at 4th Street intersection. The street will then serve as an east-west collector serving much of the area north of Los Osos Valley Road.

2. **Ravenna Avenue.** Extend between Los Osos Valley Road and Ramona Avenue as development occurs in the vicinity. This will provide a much needed north-south link between Los Osos Valley Road and the Baywood Park area.

3. **Skyline Drive.** Complete Skyline Drive between Doris and Pine Avenues, and then extend the street eastward to Palisades Avenue. Ultimately, extend the street from Palisades Avenue eastward to Nipomo Avenue at 7th Street when development occurs in that area. This east-west connection will provide access and circulation in the Morro Palisades area, and will provide connections between that area, Cuesta-by-the-Sea, and the El Moro area. The extension east of Palisades Avenue will require right-of-way acquisition.

4. **Doris Avenue.** Complete Doris Avenue from Rosina Avenue to South Court. This will provide needed motor vehicle access from Cuesta-by-the-Sea to Monarch Grove Elementary School.

5. **Fairchild Way.** Signalize its intersection with Los Osos Valley Road and extend the street northerly to Nipomo Avenue.

C. Local Roads

Local roads are used primarily for access to adjacent properties. The Los Osos Circulation Study recommends improvement of various local roads to complete the established grid street system, especially in the El Moro area.

1. Extend Van Buerden Drive westerly to limit or preclude future access of these properties to Los Osos Valley Road.

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