TRANSPORTATION

GOALS

1. Construct and maintain an adequate community circulation network that is compatible with the regional transportation system.

2. Achieve a balance between parking supply and demand throughout Torrey Hills for all planned land uses as shown on **Figure 1**, the Torrey Hills **Land Use Plan**.

3. Provide a transportation system that maximizes the opportunities for public transit.

4. Provide a system of bikeways and pedestrian facilities that will encourage bicycling and walking as a means of transportation.

5. Provide a transportation system that is a convenient linkage to the community's activity centers and to the rest of the metropolitan region.

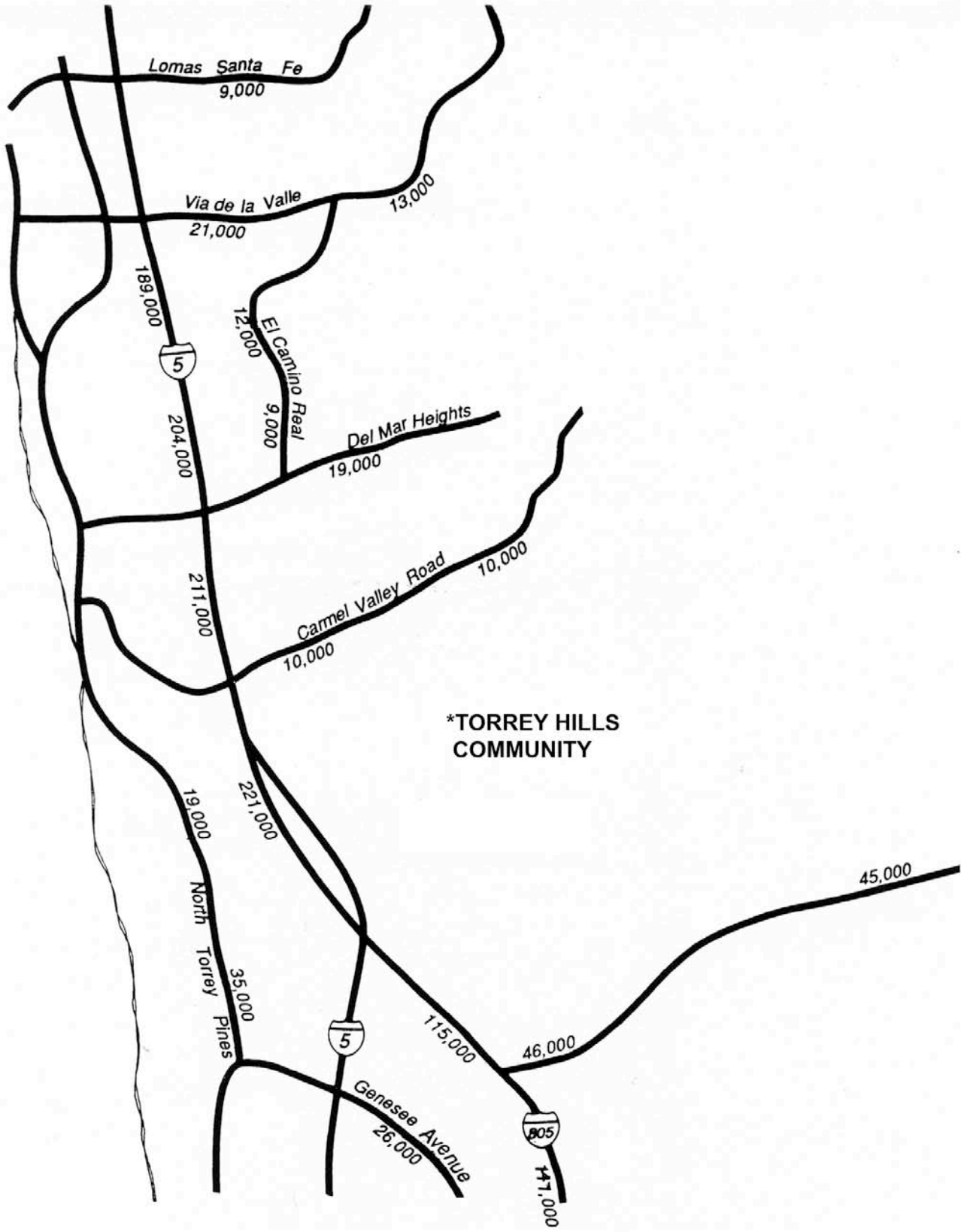
6. Develop a centralized Transportation Demand Management (TDM) program for all projects located in the community that sustains an adequate level of mobility in and around the project, minimizes peak-hour pockets of congestion and promotes the use of alternatives to the single-occupant motor vehicle.

BACKGROUND

The Torrey Hills community benefits from existing and planned transportation facilities (**Figure 10**, **1991 Average Daily Traffic**, shows existing street pattern and current traffic volumes). Interstate 5 (I-5) is a full freeway with four lanes in each direction from the vicinity of the Carmel Mountain Road bridge underpass and extending north. A short distance to the south, two separate eight-lane freeways (I-5 and Interstate 805) merge into I-5. From the merger point north, additional lanes are added to I-5 for varying distances to facilitate the merging maneuvers. Future improvements are planned for the I-5/I-805 freeways from Genesee Avenue to the south to Del Mar Heights Road in the north which will widen the freeways, provide for truck lanes and construct interchange improvements.

Public Transportation

The Metropolitan Transit District Board (MTDB) has considered a northerly extension of an LRT line that would run immediately east of I-5 along the western edge of Torrey Hills. This extension is designated as a possible future rail extension in MTDB's Rail Transit Plan. Funding for this facility is not available at this time. However, this Plan provides an opportunity to integrate the LRT or connect to the Coaster commuter rail station in Sorrento Valley through bus or shuttle services. The provision of bus or shuttle services would require private funding.



1991 Average Daily Traffic

Torrey Hills Community Plan

10 FIGURE

SPECIFIC PROPOSALS

Community Roadway Network

With this update, revision to the adopted community circulation system is planned to best accommodate the planned land uses and associated traffic volumes. **Figure 11**, **Vehicular Circulation Plan**, shows the principal streets of the Torrey Hills Community Plan. The primary elements of the community circulation system include El Camino Real/Carmel Mountain Road, Vista Sorrento Parkway and Street C within the Torrey Hills development area. Added to these are the internal loop roads and local roads designed to serve development proposals.

- El Camino Real/Carmel Mountain Road. El Camino Real/Carmel Mountain Road occurs as a north-south and east-west connection along the northern part of the community and will be constructed as a six-lane major street. Providing direct access from the community to I-5 is a section of Carmel Mountain Road constructed to six-lane primary street standards.
- Vista Sorrento Parkway. Within the Torrey Hills Community, Vista Sorrento Parkway will be constructed as a four-lane major street and will provide a north-south connection between Torrey Hills and Sorrento Valley. Portions of Vista Sorrento Parkway occur within the freeway right-of-way for I-5.
- "C" Street. Internal to the central portion of the community, the Circulation Element anticipates "C" Street as the main loop road which will provide direct vehicular connections to Vista Sorrento Parkway and Carmel Mountain Road. Street C will also provide linkages to land uses within this portion of the community and will be accessible by automobile, pedestrian, bicyclist and transit.

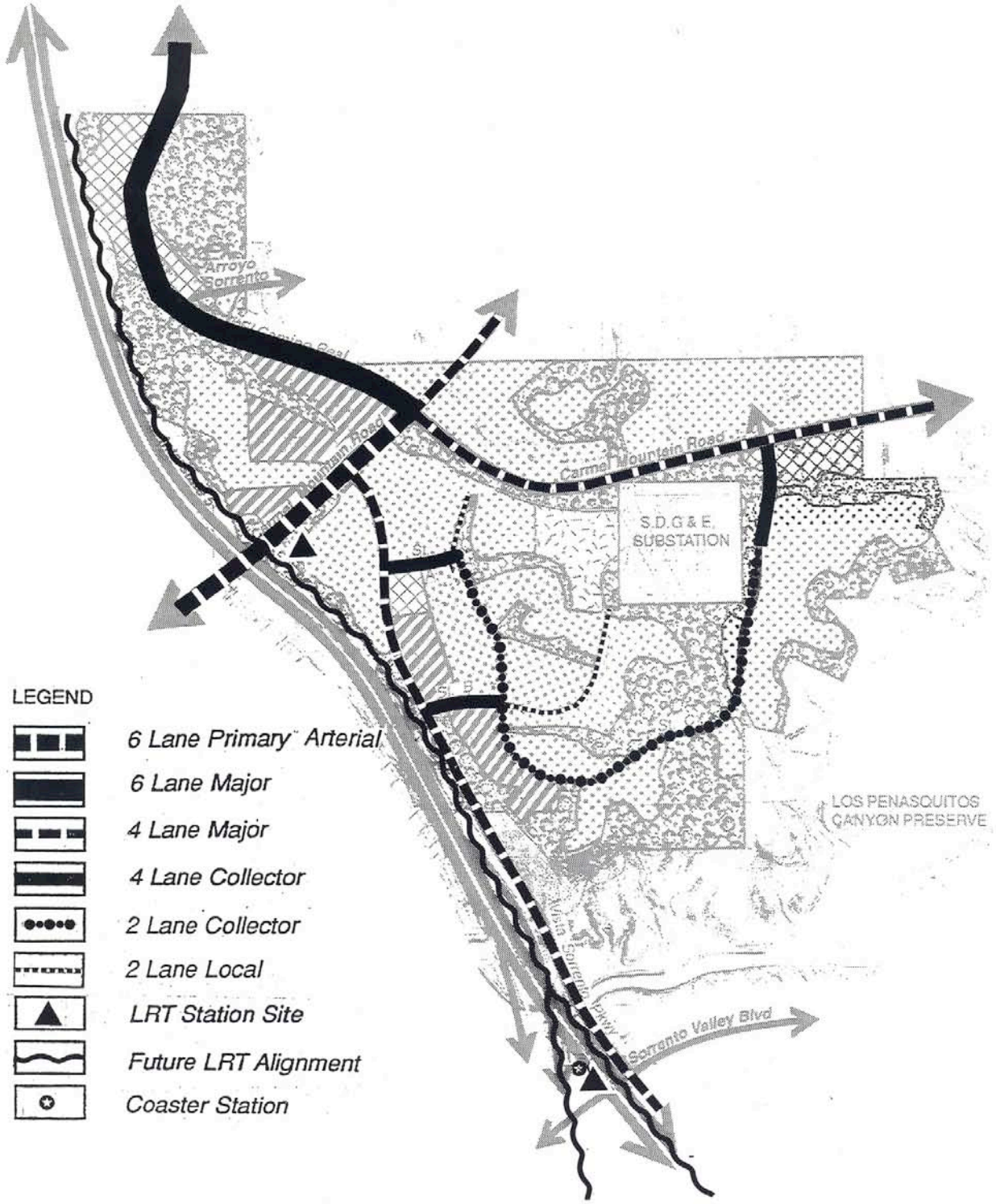
Traffic Generation

An estimate of the traffic generated by Plan buildout has been assigned to the planned circulation system. The critical elements of the system will be the major streets and the freeway interchanges. Those facilities must be constructed to accommodate the cumulative traffic demands of the community plus through traffic. The local streets totally within Torrey Hills will be designed to have adequate capacity for local traffic demands.

Traffic Distribution

The projected external traffic volumes were distributed on the planned circulation system via a specific set of distribution percentages. These percentages were derived with the cooperation of City Transportation Planning staff with data gathered from the Source Point staff of San Diego Association of Governments (SANDAG).

Source Point provided trip tables of the latest Series VIII forecast for the Carmel Valley residential zone immediately north of Torrey Hills, and the Sorrento Valley business/ industrial zone to the south of Torrey Hills. By tracing these trip tables separately for the nonresidential and the residential uses to all the traffic zones in the San Diego region via the planned regional circulation system, the distribution percentages for Torrey Hills were derived.



Vehicular Circulation
Torrey Hills Community Plan
11 FIGURE

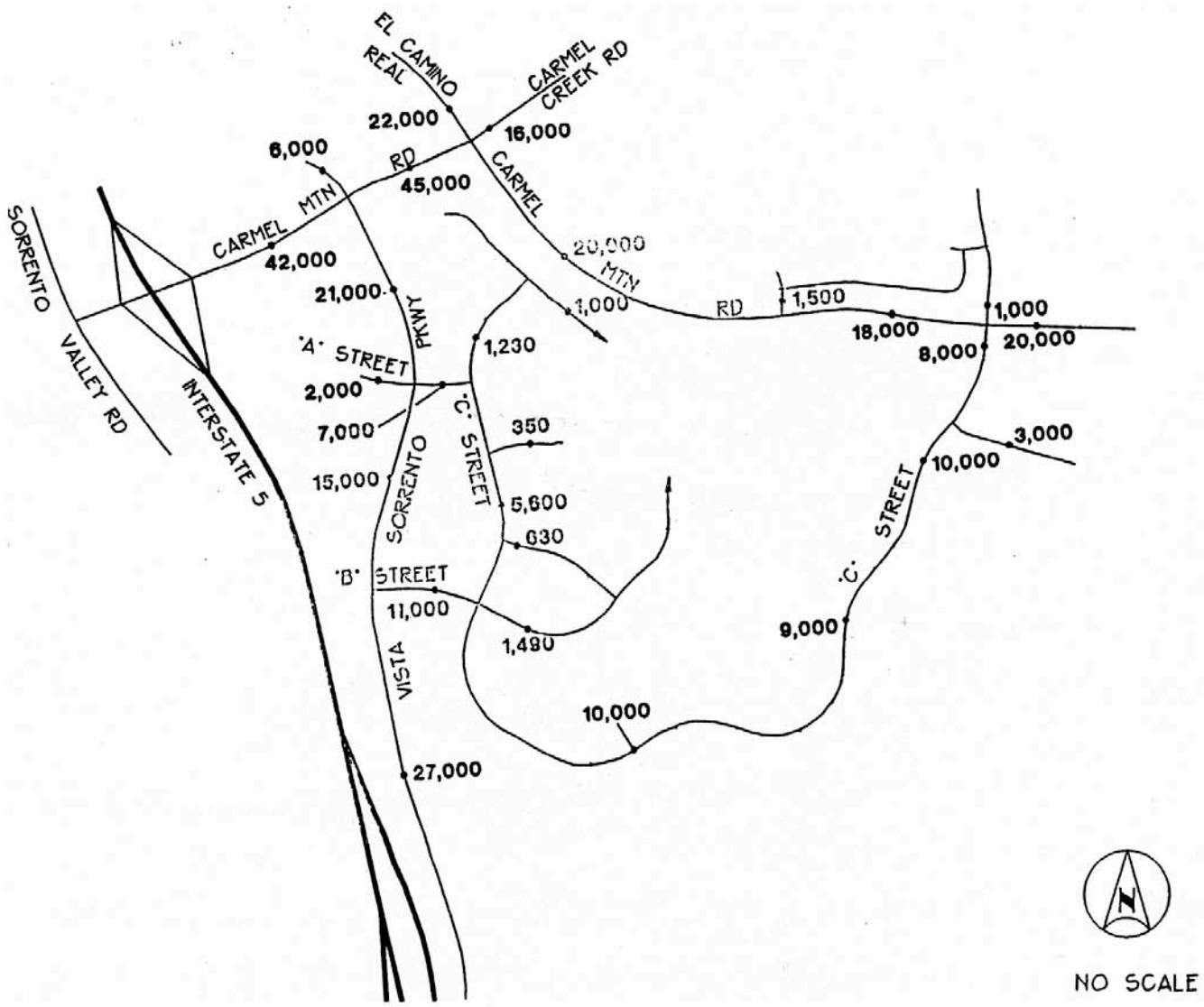
With the cooperation of the City of San Diego transportation planners, through traffic was then estimated for Torrey Hills. By combining the through traffic with the total Torrey Hills traffic as shown on **Figure 12**, **Community Plan Traffic Volumes**, a total forecasted traffic can be used in planning the Torrey Hills circulation system.

The impacts of community traffic have been carefully evaluated to determine the compatibility of the proposed roadway system with the projected traffic volumes. This evaluation included both roadway and intersection capacities. Land uses have been selected and modified as necessary to avoid congestion.

Street Widths

Based on the traffic studies conducted for the planning area, the following street widths should be provided in the Torrey Hills community pursuant to the proposed circulation system depicted on **Figure 11**. Design speed for each circulation element roadway will be as determined by the City Engineer.

- Carmel Mountain Road
  - From I-5 to El Camino Real: Six-lane Primary Arterial Street.
  - From Carmel Valley Neighborhood 10/Torrey Hills boundary to just east of Carmel Creek Road: Four-lane Major Street
- El Camino Real
  - From Carmel Mountain Road to State Route 56: Six-lane Major Street.
- Vista Sorrento Parkway
  - From Carmel Mountain Road to Sorrento Valley Boulevard: Modified Four-lane Major Street.
- Carmel Creek Road
  - From Carmel Mountain Road into Carmel Valley Neighborhood 8A: Four-lane Major Street.
- Torrey Hills "A" Street
  - Between Vista Sorrento Parkway and "C" Street: Four-lane Collector Street.
- Torrey Hills "B" Street
  - Between Vista Sorrento Parkway and "C" Street: Four-lane Collector Street.
- Torrey Hills "C" Street
  - From "A" Street to just south of Carmel Mountain Road: Two-lane Collector Street.
  - The south leg of the intersection with Carmel Mountain Road: Four-lane Collector Street.
  - The north leg of intersection with Carmel Mountain Road into Carmel Valley Neighborhood 8A: Two-lane Collector Street.


EL CAMINO REAL
CARMEL CREEK RD
22,000
16,000
6,000
RD
45,000
CARMEL
MTN
CARMEL
42,000
20,000
MTN
SORRENTO
VALLEY RD
21,000
PKWY
1,000
RD
1,500
1,000
18,000
20,000
8,000
"A" STREET
1,230
2,000
"C" STREET
350
7,000
3,000
10,000
15,000
SORRENTO
5,600
INTERSTATE 5
630
"B" STREET
"C" STREET
11,000
9,000
1,480
VISTA
10,000
27,000
N
NO SCALE

Alternative Transportation Modes

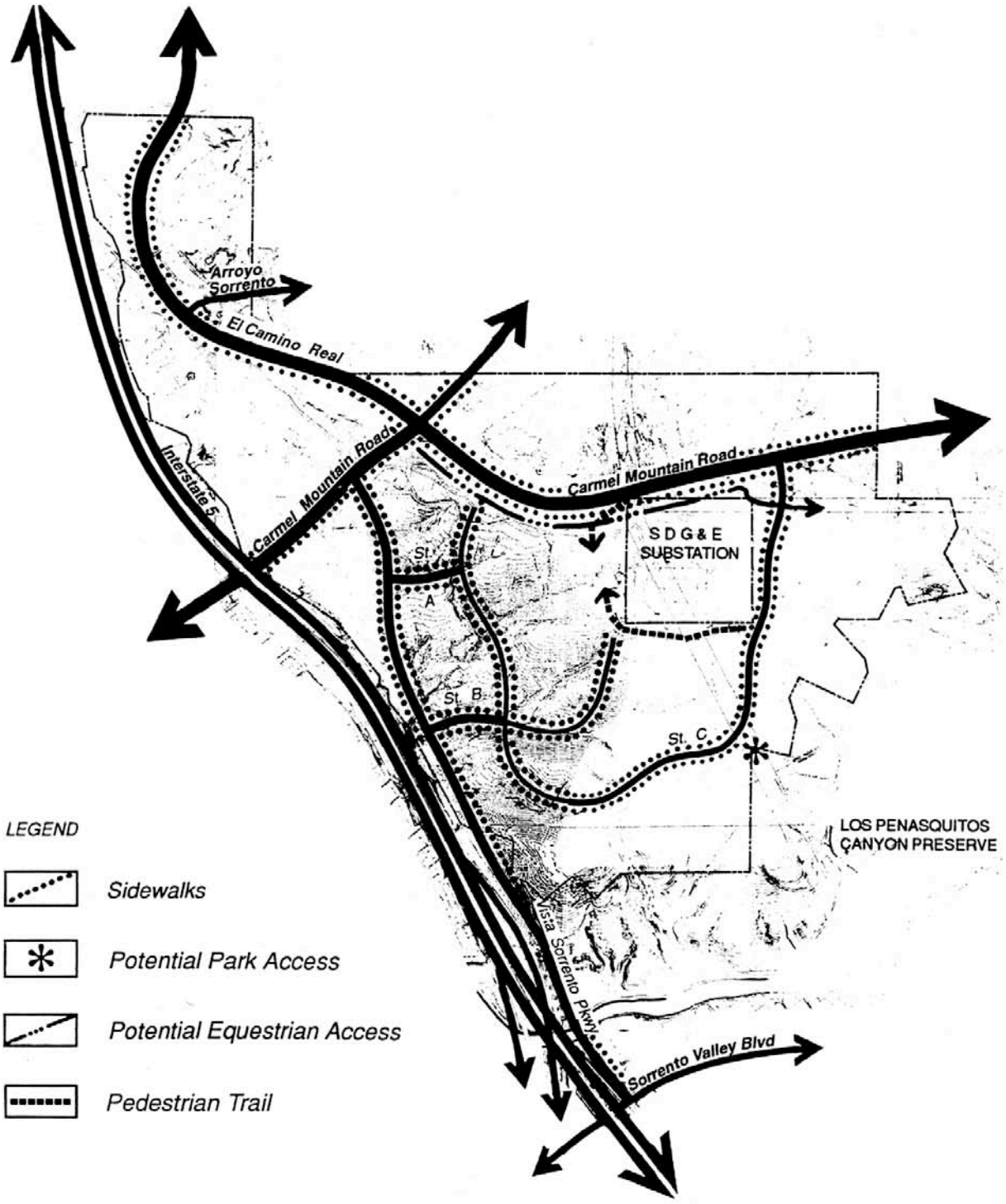
Practical alternatives to private automobile travel are encouraged for circulation within the community, and to outside surrounding areas. Commuting between work and residence is an especially important target for use of alternative transportation modes. Utilization of alternative modes can reduce traffic congestion, conserve energy, and minimize air pollution. Included in alternative transport modes are transit, bicycle travel and pedestrian circulation.

The Metropolitan Transit Development Board (MTDB) has conducted preliminary studies of a northerly extension of a Light Rail Transit (LRT) line that would run immediately east of I-5 along the west edge of the Torrey Hills community. Funding is not currently available to pursue this alignment. If the line is ultimately built, there are tentative plans for a transit stop for the LRT in Torrey Hills, near the interchange of Carmel Mountain Road and I-5, and one further north in the Carmel Valley community. The adopted development agreement for Torrey Hills requires the property owners within the community to provide the right-of-way for the LRT line to MTDB at no cost.

The North County Transit District (NCTD) is operating the Coaster, a commuter rail line through Sorrento Valley. This commuter rail line provides connections between the Santa Fe Depot in downtown San Diego to the Oceanside Transit Center. A commuter rail stop is located in Sorrento Valley in the vicinity of the I-805/I-5 junction. Shuttles provide service to Coaster patrons between the surrounding work places and the rail stop. This is funded as a two-year demonstration project. Private funding is required to continue the services beyond February 1997.

Transit includes a number of other travel alternatives such as bus, tram and para-transit using standard roadways. Local transit should be provided by local buses, trams, and/or dial-a-ride. These services should connect to routes in surrounding communities as well as the regional systems. Carmel Mountain Road, El Camino Real and Vista Sorrento Parkway would provide the best routes for local transit within the community. Transit stops should be considered in the design of streets serving the high-intensity uses, and development proposals should design street layouts that offer direct pedestrian connections to transit corridors.

Future bus service on I-5 should take into account riders going to and from the Torrey Hills community. Increased frequency of bus service on I-5 is supported by this Plan as the community builds out. In particular, this Plan supports the potential future bus express route (Route 960) which has been identified to serve the I-5 corridor from Del Mar to downtown San Diego. The planning of transit facilities for Torrey Hills must include the consideration of Route 960 as well as local transit feeder service. There is no existing or planned local transit service in this community due to funding shortfalls.



Community Trails System
Torrey Hills Community Plan
13 FIGURE

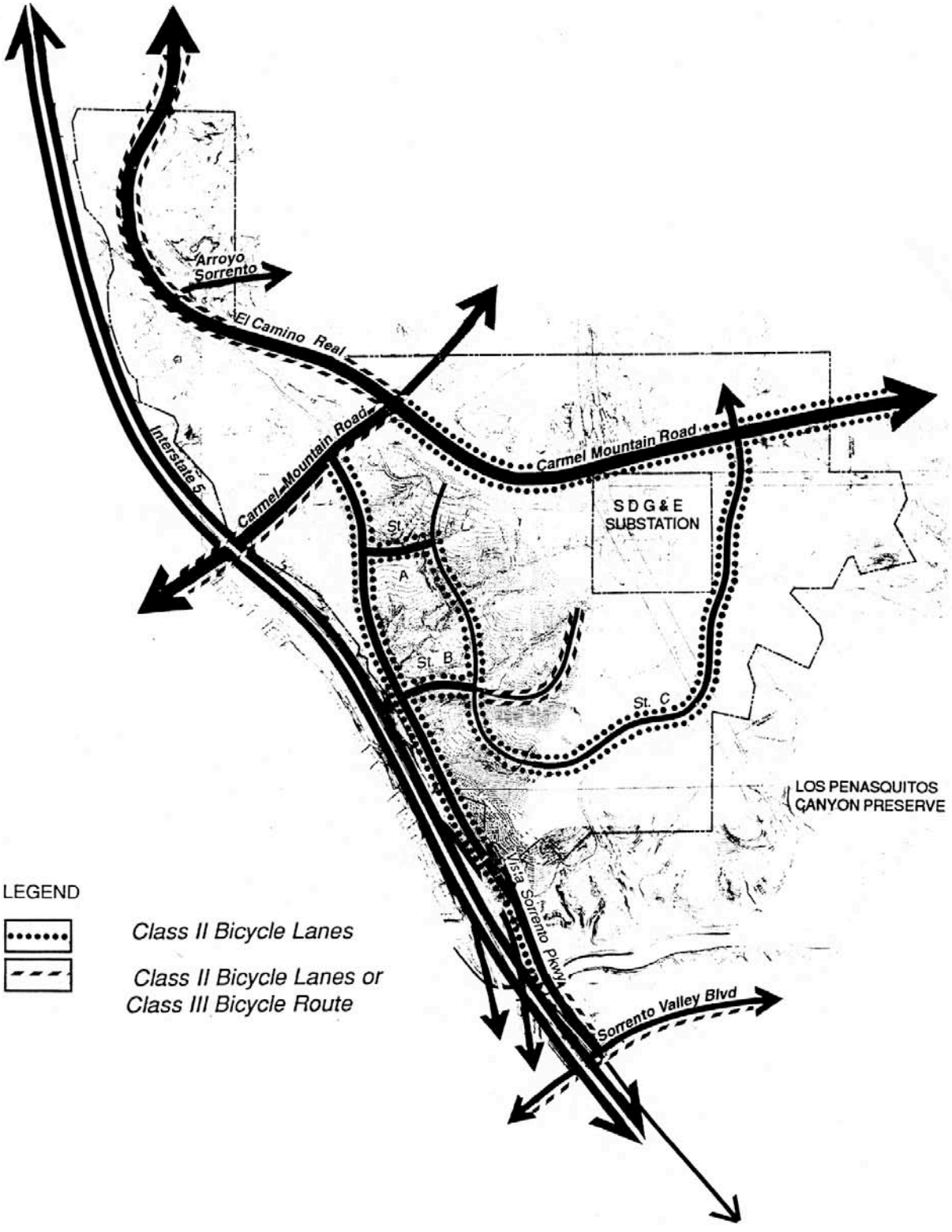
Community Pedestrian, Bicycle and Equestrian Access

A bikeway network, consisting of bicycle paths and bicycle lanes; a pedestrian/jogging trail system, consisting primarily of paved sidewalks; and opportunities for an equestrian trail are planned for the Torrey Hills community. These non-motorized transportation facilities will provide an alternative to automobile travel as well as recreational opportunities.

- Pedestrian Access. The planned pedestrian/jogging trail system is shown on **Figure 13**, **Community Trails System**. The trails system is designed to provide access to open space areas, such as Carmel Valley and Los Peñasquitos Canyon Preserve and provide a linkage of paved sidewalks and graded trails which integrates planned land uses. Proximate to the community activity nodes (i.e., the Support Commercial Center in the western part of the community, the Community Sports Park in the central portion of the community, the potential school site in the south-central portion of the community and the Torrey Hills Neighborhood Commercial Center in the eastern portion of the community), it is essential that pedestrian elements aid in linking land uses in a cohesive manner. A pedestrian access route/community trail connection should occur along the slope on the south side of Carmel Mountain Road, west of the SDG&E substation, connecting with the Community Sports Park. This trail will provide pedestrian access to the park for neighborhoods north of Carmel Mountain Road. A pedestrian access route/community trail should also be provided south of the SDG&E substation to provide a convenient direct pedestrian link between neighborhoods in the eastern part of the community with the Community Sports Park.

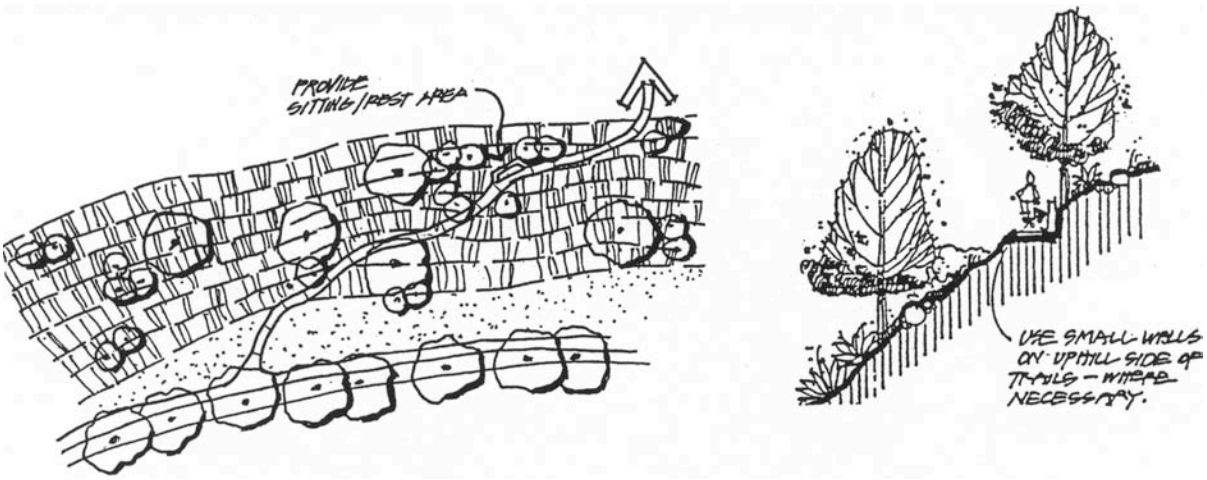
  Development of the community trail system should include resting areas (such as benches) and signage. Portions of the community trail system located in open space areas will require sensitive grading techniques which minimize impacts. This may involve switchbacks or the incorporation of small walls which will minimize impacts to steep slopes. Trails should be a minimum of six feet in width and composed of decomposed granite or compacted earth.

  Sidewalks within the community should be a minimum four feet in width and occur as non-contiguous elements along Vista Sorrento Parkway, north of "B" Street; and along "C" Street. Along these streets, the travel-way will be separated from the pedestrian by a minimum 4-1/2 foot landscaped parkway. On the southern portion of Vista Sorrento Parkway, south of "B" Street, a contiguous sidewalk will also be provided on both the north and south side of the street. Contiguous sidewalks will also be provided on both the north and south side of Carmel Mountain Road. On local streets and cul-de-sacs, sidewalks may occur immediately adjacent to the street. In some areas, opportunities may exist to limit paved sidewalks to one side of the local street (on single-loaded streets, for example).



Bikeway Plan **14** FIGURE

Torrey Hills Community Plan

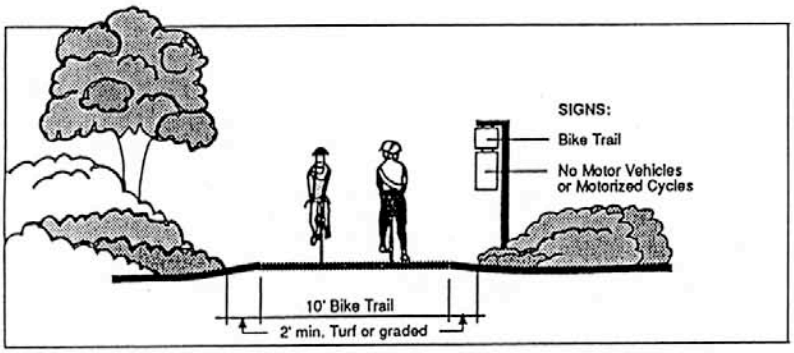


- Bicycle Access. The City of San Diego's Proposed Bikeways System shows a bikeway running through Torrey Hills along Carmel Mountain Road and El Camino Real and along Vista Sorrento Parkway (see **Figure 14**, **Bikeway Plan**). There is also a bikeway running along Arroyo Sorrento Road between El Camino real and Soledad Valley Road and Carmel creek Road. A bikeway should also be provided along Street C and along the local street which provides direct access to the Community Sports Park. Bicycle facilities classifications are illustrated on **Figure 15**, **Bicycle Facilities Classifications**.

- Equestrian Trail Opportunities. Opportunities for equestrian trails are provided within the community to serve adjacent rural areas where horses may be kept and to provide an equestrian link between trails planned for Carmel Valley, Los Peñasquitos Canyon preserve and Carmel Valley Neighborhoods 8, 8A, 8B and 10. As shown on **Figure 13**, **Community Trails System**, for Torrey Hills, equestrian access will be available generally east along the south side of Carmel Mountain Road and south along the west side of "C" Street, then connecting east through the SDG&E easement to Los Peñasquitos Canyon Preserve. It is not the intent of this Plan that property owners in the Torrey Hills community be required to dedicate right-of-way or construct and maintain equestrian trails. Private equestrian groups or the City may purchase right-of-way for the purpose of constructing and maintaining equestrian trails throughout Torrey Hills.

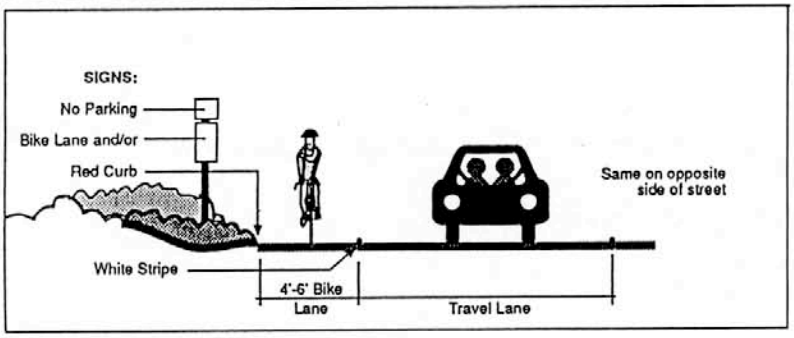
Phasing

The precise phasing of the circulation and infrastructure systems in Torrey Hills is specifically identified in the Torrey Hills Public Facilities Financing Plan. The Torrey Hills Public Facilities Financing Plan was originally adopted September 22, 1986. A revised Financing Plan was subsequently adopted on April 11, 1990. An update of the Public Facilities Financing Plan has occurred in conjunction with approval of this amended Plan. Updating of the Public Facilities Financing Plan is required on a regular basis.



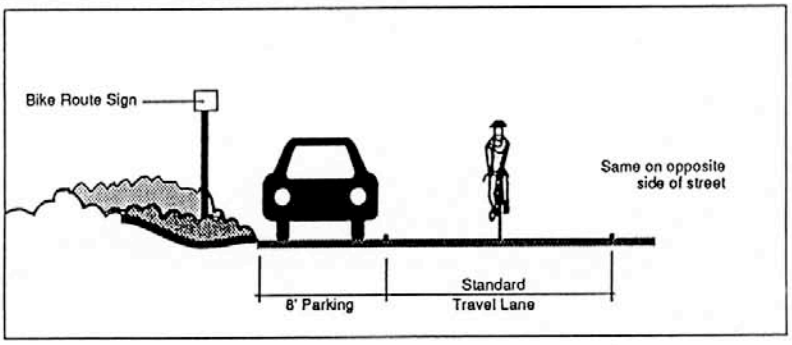
CLASS I
(Typical Location - open space)

Bicycle Path
A completely separate right-of-way for the exclusive use of non-motorized vehicles.



CLASS II
(Typical Location - major street)

Bicycle Lane
A restricted right-of-way located on the paved road surface alongside the traffic lane nearest the curb, and identified by special signs, lane striping, and pavement markings.



CLASS III
(Typical Location - neighborhood street

Bicycle Route
A shared right-of-way designated by signs only, with bicycle traffic sharing the roadway with motor vehicles.

The dimensions illustrated are subject to change.

Bikeway Facilities Classifications
Torrey Hills Community Plan
15 FIGURE

POLICIES

1. Participate in traffic and transportation studies for the North San Diego region to identify regional traffic problem areas and subsequent potential solutions.

2. Incorporate into the Torrey Hills Community Plan the improvements that are required for the Torrey Hills area as a result of north San Diego traffic and transportation studies.

3. Determine the required community roadway capacities to safely handle traffic-generated as the Torrey Hills community is built out.

4. Require that all new developments provide adequate off-street parking for vehicles in all community projects to meet their parking demands on-site or in consolidated parking facilities within close proximity to their site.

5. All streets designated as major streets and above should have Class II bicycle lanes, with the exception of Vista Sorrento Parkway, south of the Peñasquitos Creek crossing. Along this portion of Vista Sorrento Parkway, a Class II bike route should occur. Develop a system of bikeways and accompanying bicycle storage areas within the community, as shown on **Figure 13**, tying into the regional bicycle network.

6. Promote alternatives to private vehicular travel, such as public transit and transportation demand management strategies, which can be integrated with the regional circulation network.

7. Support the provision of secure park-and-ride facilities in the vicinity of access points to the major regional transportation facilities.

8. Pursue development of a transportation system including use of bus, shuttle service, park-and-ride, bicycles, etc., which will be coordinated with regional systems and with neighboring systems.

9. Development of transportation facilities shall avoid unnecessary encroachment into environmentally sensitive areas.

10. Pursue development of alternative transportation systems during the earliest stages of development to eliminate unnecessary traffic congestion and encourage the use of public transit and other transportation modes by future residents.

11. Coordinate with MTDB to expand transit services to Torrey Hills after the initial development is completed.

12. Provide the necessary easements/right-of-ways for the construction of equestrian trails by a recognized equestrian group which will be responsible for the processing of necessary environmental documentation, permits, constructing and maintaining the trails.

13. Convenient pedestrian linkages shall be provided from community activity nodes and adjacent land uses.

14. Clearly identify pedestrian access points to adjacent open space areas.

TRANSPORTATION DESIGN GUIDELINES

Roadways

1. Carmel Mountain Road shall be constructed as a six-lane primary arterial street from the I-5 interchange to El Camino Real. From Carmel Valley Neighborhood 10/Torrey Hills boundary to Carmel Creek Road, Carmel Mountain Road shall be constructed as a four-lane major street, except for at the intersection of Carmel Mountain Road and Carmel Creek Road where a six-lane major street shall be provided.

2. El Camino Real shall be constructed as a six-lane major street from Carmel Mountain Road to SR-56.

3. Vista Sorrento Parkway shall be constructed as a modified four-lane major street from Carmel Mountain Road to Sorrento Valley Boulevard.

4. Carmel Creek Road shall be constructed as a four-lane major street from Carmel Mountain Road into Carmel Valley Neighborhood 8A.

5. Torrey Hills "C" Street shall be constructed as a two-lane collector street. At the intersection with Carmel Mountain Road, "C" Street shall be constructed as a four-lane collector street on the south leg and a two-lane collector street on the north leg of intersection into Carmel Valley Neighborhood 8A.

6. Torrey Hills "A" Street and "B" Street shall be constructed as four-lane collector streets between Vista Sorrento Parkway and "C" Street.

7. Collectors, residential streets and cul-de-sacs are planned to serve various neighborhoods in the community. These shall be designed and built in accordance with City standards based upon the amount of traffic they are estimated to carry and City street design standards.

Pedestrian Walkways

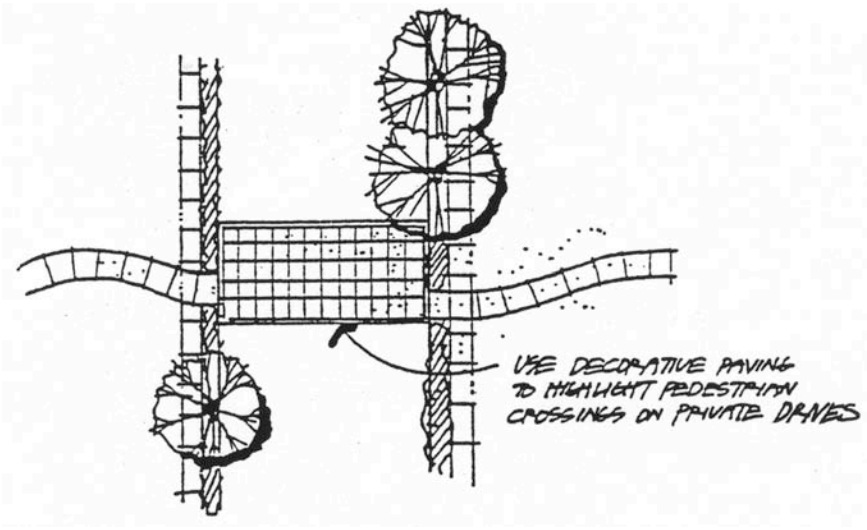
1. Pedestrian walkways shall be fully integrated with the internal site vehicular circulation system to allow safe and convenient pedestrian traffic. Special emphasis shall be placed on providing safe pedestrian access through parking areas to building entrances.

2. On-grade crossings shall be developed in conjunction with major street crossings. Pedestrian crossings may be identified at signalized intersections through special paving design, upon approval by the City Engineer. Placement of any special paving shall conform to the City's Street Design Manual.

3. Pedestrian walkways within all residential projects shall have a minimum width of four feet.

4. Provide appropriate bus stop facilities as future bus routes develop and incorporate pedestrian-oriented design to access those facilities.

5. Pedestrian mid-block crossings shall not be allowed across public right-of-ways unless traffic signals are provided or by approval of the City Engineer.



6. Provide noncontiguous sidewalks with minimum 4-1/2 foot wide parkways adjacent to Vista Sorrento Parkway, north of "B" Street and adjacent to "C" Street on both sides.

Pedestrian Access and Community Trail System

1. Provide a community trail system linking open space and development in a manner which encourages bicyclists and pedestrians.

2. Access to Los Peñasquitos Canyon Preserve shall be limited to identified pedestrian trails and access points as shown on **Figure 13**.

3. Provide signage for trails. Interpretive signage also is appropriate, particularly for trails which provide access into Los Peñasquitos Canyon Preserve.

Equestrian Trail System

1. Provide right-of-ways as necessary to allow for the construction of an equestrian trail in the general alignment shown on **Figure 13**, **Community Trail System**.

2. The design and construction of equestrian trails shall be in a manner acceptable to the City Engineer.

3. Developers in Torrey Hills shall not be responsible for the processing of permits, construction or maintenance of equestrian trails. These responsibilities shall lie with a recognized equestrian group capable and financially able to complete these tasks and which has a long-term commitment to the equestrian community in this area.

TRANSPORTATION ELEMENT ACTION PLAN

Implementing Action	Timing: Adopt With Plan	Timing: Within 5 Years	Timing: Within 20 Years	Responsibility	Funding	See for More Details
Construct a circulation system to serve the needs of the community.	●	●	●	Private/Caltrans	Private/ PFFP/ Caltrans	Page 61
Provide for bicycle and pedestrian access throughout the community and tying into the regional bikeway and trails network.	●	●	●	Private	Private	Pages 61, 69-73, 74-75
Develop TDM programs that: • Provide for preferential parking for carpooling employees. • Provide vanpooling programs as part of development projects. • Provide ridesharing programs for employees. • Establish flextime programs to provide for adjusting individual work schedules. • Establish staggered shifts to reduce travel demand during peak periods.	●	●	●	Private through requirements of PIDs/TDMs	Private	Pages 61, 73
Improve bus service and express service.	●	●	●	City/MTDB	Public (SDT)	Page 67
Coordinate with MTDB and Caltrans to ensure inclusion and expansion, if feasible, of fixed-route service corridors for bus service into Torrey Hills.	●	●	●	Private developers/ City/Caltrans/ San Diego Transit	Public	Pages 67, 73
Expand public awareness of available public transit.	●	●	●	Private users/ Tenants/City/ MTDB	Private/ Public	Page 73
Construct sun/rain shelters for pedestrian and bus passengers.	●	●	●	Private developers/ MTDB/San Diego Transit	Private	Page 74
Allow for purchase of right-of-way and construction of an equestrian trail connection to Los Peñasquitos Canyon Preserve.	●		●	City/Private equestrian group(s)	Private	Pages 71, 73, 75
Construct and maintain equestrian trails to serve the local equestrian community.	●		●	Equestrian group	Private	Pages 71, 75
Design and construct bikeways as part of the regional system that connects residential, industrial and commercial areas.	●	●	●	Private developers	Private	Pages 71-73
Install bicycle storage facilities at industrial/commercial sites and at connection points to other transportation modes.	●	●	●	Private builders/ Users/Tenants	Private	Page 73