



### ADOPTED APRIL 6, 2002 CITY COUNCIL RESOLUTION NO. 2002-08 EFFECTIVE DATE JUNE 12, 2003

Prepared for
THE CITY OF ENCINITAS
COMMUNITY DEVELOPMENT DEPARTMENT

By
PELA LANDSCAPE ARCHITECTURE - PLANNING

#### **Encinitas City Council**

Christy Guerin, Mayor
James Bond, Deputy Mayor
Dennis Holz
Maggie Houlihan
Jerome Stocks

#### **City of Encinitas Planning Commission**

Adam Birnbaum, Chair
Joyce Crosthwaite, Vice-Chair
Lester H. Bagg
Alice Jacobson
Anne Patton

#### City of Encinitas Parks and Recreation Commission

Sue Bobbit, Chair Joseph Aurora Michael Callies Edgar Engert Douglas Goad Russell Levan Robert Nanninga

#### **Recreational Trails Advisory Committee**

Maggie Houlihan, Council Member
Jerome Stocks, Council Member
Chuck DuVivier, (City Council, Former member)
Sheila Cameron, (City Council, Former member)
Joyce Crosthwaite, Vice-Chair, Planning Commission
Anne Patton, Planning Commission
Rusty Wells, (Planning Commission, Former member)
Sue Bobbitt, Chair, Parks and Recreation Commission
Douglas Goad, Parks and Recreation Commission
Russell Levan, Parks and Recreation Commission
Don Houston, (Parks and Recreation Commission, Former member)
Paul Kaczorowski, (Parks and Recreation Commission, Former member)
Jerome Stocks, (Parks and Recreation Commission, Former member)

#### **City of Encinitas Staff**

Patrick Murphy, Community Development Director
Gary T. Barberio, Senior Planner and Project Manager
Ileana R. Ovalle, Assistant Planner
Kimberly A. Young, Planning Technician
Phil Cotton, Interim Community Services Director
John R. Frenken, Parks Supervisor
Blair Knoll, Associate Civil Engineer
Wendy Barto, GIS Coordinator
Frank M. McDermott III, GIS Analyst

Consultant
Pamela & Michael Elliott, PELA
Landscape Architecture Planning

	Summary
	Introduction
	Setting
	General Plan
	Public Participation
	Goals & Objectives
	Trails Master Plan
	Trail Segments
	Standards
	Path Standards
	Trail Standards
	Implementation Plan
	Methods of Acquiring Trails
	Phasing
	Implementation Costs
	Maintenance Plan
1	Management Issues
	Maintenance Costs
	Environmental
	Appendices
	A. Workshop & Commission Presentations Agendas & Summaries
	B. Trails Master Plan Map
	2. 1 1

7

59 62

A

В



# **SUMMARY**

### **SUMMARY**

The Recreational Trails Master Plan is the culmination of a long planning process that has included an in depth field analysis of trail routes, public workshops and commission presentations to ascertain citizen needs, extensive coordination with an Advisory Committee, as well as coordination with City staff from the Community Services, Community Development, and Engineering Services Departments.

**Introduction:** Defines the geographic constraints and opportunities of the planning

effort; how the trails master plan relates to the General Plan; and the

nature and extent of public involvement in the process.

**Trails Plan:** The section begins with the goals & objectives which were presented to

> the public at the first workshop and were modified based on the input received. They form the framework under which the master plan was prepared. Included in this section is a listing of proposed trail segments,

with a map of the entire trails system included as an Appendix.

**Standards:** Contains narrative and graphic descriptions of path and trail standards.

**Implementation** 

This section delineates methods for acquiring trails, installation Plan:

responsibility for each trail segment, a phasing plan and cost estimates

associated with implementation.

**Maintenance** 

Plan:

Issues related to the long term management and maintenance of the trail including access control, volunteer management, a safety checklist, trail

etiquette, maintenance costs and liability issues.

**Environmental** 

**Analysis:** 

This section summarizes the environmental analysis completed for the

Recreational Trails Master Plan.

**Appendices:** The appendices contain the agendas and summaries for the public

> workshops and public hearings of the Parks and Recreation Commission, Planning Commission, and City Council hearings, and a map of the entire

trails system.



# **INTRODUCTION**

### INTRODUCTION

#### **City of Encinitas Setting**

The City of Encinitas is located in northern San Diego County and has a population of approximately 60,000 people. Incorporated in 1986, the City includes the communities of Cardiff-by-the-Sea, Old Encinitas, New Encinitas, Leucadia, & Olivenhain. The City is bound by the Pacific Ocean on the west, the Batiquitos Lagoon on the north, and the San Elijo Lagoon on the south. Escondido Creek, a major east-west drainage, traverses the southern boundary of the City and ultimately empties into the San Elijo Lagoon.

#### **General Plan**

The City's General Plan was adopted in 1989 and contains goals, policies and programs to guide development. In the Recreation Element of the General Plan a generalized trail system was provided as part of the Recreation Facilities Plan (Figure 4, Recreation Element of the General Plan). The Recreation Facilities Plan identified generalized routes for hiking, bicycling and pedestrian recreation as well as general standards for the trail system. However, the trails were not fully articulated due to the general nature of the document. In August of 1997, the City, recognizing the need to take the planning process one step further, began formulation of a more detailed plan for trails using the General Plan as a starting point. The following goals and policies set forth by the Circulation and Recreation Elements of the General Plan have been further developed in this Recreational Trails Master Plan:

#### **Circulation Element**

**POLICY 4.4:** Where possible, establish a separate system of hiking trails, bicycle paths and equestrian trails from which motorized vehicles shall be banned.

#### **Recreation Element**

**POLICY 1.16:** Future trails in addition to those planned for in this element may be added to the existing system to enhance the recreational opportunities of the City.

**POLICY 2.2:** Provide and maintain an inter-linking network of trails for horseback riding, hiking, and bicycling; minimizing the cost of the trail system by encouraging the use of drainage channels, flood plains, existing trails, public lands, excess street rights-of-way, and major utility rights-of-way.

The generalized trails defined in the Recreation Facilities Plan were analyzed as a first step in the planning process, followed by a comprehensive field analysis to identify new trail segments which could fill gaps that existed in the original plan and to expand and enrich the recreational opportunities of the trail system. This analysis also included trails requested for inclusion by members of the community.

The Recreational Trails Master Plan provides a comprehensive long range planning document that provides flexibility. Trail alignments and standards have been developed based on current information and known future conditions with the idea that as circumstances change, the plan can accommodate changing conditions and still remain effective. For instance, trail alignments on private parcels that have no current development plans have been designated based on existing topography and alignment of proposed streets. When development occurs in these areas, the City will work closely with the developer to adjust the alignment based on the proposed plans in order to maintain community character, meet the needs of the City's recreational users, avoid or minimize environmental impacts, and maintain the viability of the development project.

#### **Unique Opportunity**

The City of Encinitas has many unique aspects which enable the development of an exceptional trail system including:

- over 10 miles of existing City-maintained trails;
- approximately 5 miles of existing trails in the San Elijo Lagoon managed by the County of San Diego;
- over 17 miles of easements dedicated for trails that are pending implementation;
- numerous city parks, schools, beaches, and lagoons which provide natural destination points, staging areas and rest areas;
- adjacency to a well developed trail system in Rancho Santa Fe, which provides recreational opportunities and linkages to regional connections; and,
- a dedicated, well informed and highly organized group of trail activists who are

willing to devote their time and economic resources to preserving and enhancing current trails, and to developing and maintaining new trail opportunities.

#### **Public Participation**

To insure a high level of public participation in the planning process, two workshops were held to solicit citizen input. The workshops were well attended and provided valuable information to the design team in ascertaining the needs of the community. Agendas and summaries of comments received from these workshop sessions are contained in the Appendices.

In addition, the City Council formed a Recreational Trails Advisory Committee, consisting of two City Council members, two Planning Commissioners, and three Parks and Recreation Commissioners, who provided input and direction throughout the process. The advisory committee held over fourteen meetings, all of which were legally posted and open to the public. The first draft of the Recreational Trails Master Plan was also presented at public meetings of the Parks and Recreation and Planning Commissions for their review and input early on in the process. The first draft was also presented at two additional public workshops held in November 2000, which were advertised through a citywide public notice mailed to every residence in the City.

Finally, the final draft of the Recreational Trails Master Plan was reviewed in a public hearing of the Planning Commission held on November 15, 2001 and was considered at public hearings of the City Council on February 20 & March 18, 2002 and approved at a public hearing of the City Council on April 6, 2002. The California Coastal Commission certified the Plan on June 12, 2003.

As previously mentioned, the City of Encinitas is unique and highly enriched by the dedication of the trails activists in the community. The continued support of these concerned citizens will be crucial to ensuring the full implementation of the trail system. Although implementation of the full plan will take many years, its success will be determined by the level of participation and commitment carried by the citizenry, the City Council, and City staff.

#### **Goals & Objectives**

The following page contains the goals & objectives which were presented, discussed and modified during the first workshop. They represent the guiding direction for the planning of the trails system.

#### City of Encinitas Recreational Trails Master Plan

- 1. Is aimed at a variety of recreational users and shall be designated as primarily a soft surface trail system, with hard surfacing where appropriate, providing recreational opportunities for hikers, bicyclists, and equestrians, while restricting motorized vehicles from trails.
- 2. Will provide for a loop trail system, where possible, with varying loop lengths within the system.
- 3. Will provide for diversity in trail experiences including variety in difficulty, terrain, environment and the exploration of interpretive opportunities.
- 4. Will link recreational opportunities within the City of Encinitas providing for connections between parks, open space, schools, community facilities, and trail systems in adjacent jurisdictions.
- 5. Will be designated with safety as a paramount concern and will:
  - -minimize vehicular crossings,
  - -maximize the separation between roads and trails (with plantings and distance)
  - -maximize visibility and warning signage where interface between vehicles and the trail does occur, and
  - -provide access for patrol, emergency vehicles and maintenance.
- 6. Will address issues of regular upkeep and patrol to insure trail safety and reduce exposure to liability to the City and adjacent landowners.
- 7. Will be signed with a system of easily recognized markers which will allow users to clearly recognize the trail system.
- 8. Will, whenever possible, be designated in locations that will provide the community with recreational trails, yet minimize the financial burden to the City of Encinitas through:
  - -designations on private parcels where future development will implement the trail;
  - -location of trails along existing paths, roads and utility easements;  $\boldsymbol{\&}$
  - -minimizing the need for property acquisition.
- 9. Will minimize impacts to adjacent landowners from trespass, loss of privacy, damage and property loss associated with the trail.
- 10. Will locate trails with environmental sensitivity to minimize the impact to the environment.



# TRAILS PLAN

### TRAILS PLAN

Descriptions of each trail segment are contained in this section in a chart, with a map of the entire trail system included as an Appendix. The chart categorizes each segment by surface material type, by phase of anticipated implementation, and by implementation responsibility. Every trail segment constructed by the City shall include the development and implementation of a Citizen Participation Plan (Municipal Code Section 23.06.010), which will ensure early and effective citizen participation in the design and construction of each trail segment.

Trail segments descriptions included in the chart and as indicated on the map provide general direction for the implementation of the trail system. It is understood that alternative trail alignments and locations may be considered at the time of implementation based on community character, environmental, and private property concerns. It is also understood, that additional trail segments may need to be dedicated or acquired in the future to enhance the overall effectiveness of the trail system.

Trails are defined by the following three types:

- **Type A**Natural hard surface paths. These are planned in the older sections of the City, primarily in Cardiff, Leucadia and Old Encinitas, and are in lieu of sidewalks within the existing street right-of-way. Standards for Type A routes are defined in the Path standards.
- **Type B** Soft surface trail. These routes are similar to the trails which are existing throughout the City. Standards for Type B routes are defined in the Trails standards.
- **Type C** Sidewalks. These routes are sidewalks which complete linkages in the trail system. Note that not all existing and proposed sidewalks are shown on this plan, only those that were determined to be critical connections to the recreational trails system. Those indicated will be installed in conformance with adopted City sidewalk standards.

#### **Trail Users:**

All trails shall be designated as multi-use providing opportunities for pedestrians, bicyclists, and equestrians. No motorized vehicles except authorized trail maintenance vehicles and emergency vehicles shall be allowed on the trails. Should conflicts arise on specific trail segments in the future, the City may restrict the use on certain segments to avoid environmental degradation, conflicts with properties adjacent to the trail, or trail user conflicts.

### TRAIL SEGMENTS

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
1	A/C	118	Public	City/ Developer	2/D	Grandview St. (north side of street) between N. Coast Highway 101 & existing sidewalk
2	A/C	580	Public	City/ Developer	2/D	W. Leucadia Blvd. between N. Coast Highway 101 & Neptune Avenue
3	С	1298	Public	City	1	"B" St. on both sides of street between S. Coast Highway 101 & Moonlight Beach
4	В	678	Public	City	2	"B" St. adjacent to Cottonwood Creek between Coast Highway 101 & 3 <sup>rd</sup> St.
5	С	272	Public	City	1	Encinitas Blvd. (north side) under the train overpass
6	С	931	Public	City/ Developer	1/D	South Coast Highway 101 between "D" Street & Encinitas Blvd. Connecting the existing sidewalks on both sides of the street
8A	A	2994	Public	City/ Developer	2/D	La Costa Avenue (north side) between I-5 and North Coast Highway 101
11	A	8964	Public	City	1	Orpheus Ave.(east/south sides) between Leucadia Village and Vulcan Ave. utilizing Caltrans ROW and street ROW
12	A/C	4253	Public	City/ Developer	1/D	Leucadia Blvd. between I-5 & Vulcan Ave. on both sides of the street
13	A	3010	Public	City/ Developer	2/D	Oceanview Ave.(east side) between Leucadia Blvd. & Union St. utilizing road ROW and Caltrans ROW
14	A	622	Public	City/	2/D	Union St. (north side) between

Trail Types A: Natural hard surface path

B: Soft surface trail

C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
				Developer		Oceanview Ave. & CalTrans ROW
15	В	769	Public	City	1	Caltrans ROW between Union St. & Sanitation District Property
16	В	3472	Public	City	1	Sanitation District Property. Exact trail location to be determined during park design
17	С	1453	Public	City	1	Encinitas Blvd.(north & south sides) under the freeway overpass
18	С	4044	Public	City/ Developer	1/D	Encinitas Blvd. (north & south sides) connecting existing sidewalk segments between the freeway overpass and Manchester Ave.
19	A	962	Public	City/ Developer	1/D	Cornish Dr. (east side) between "D" St. & Requeza St.
20	A/C	211	Public	City/ Developer	1/D	E. "E" St. (north side) between Cornish Dr. & existing sidewalk next to City Hall
21	A	1694	Public	City/ Developer	1/D	Requeza St. (south side) between Cornish Dr. & the existing sidewalk on the east side of the freeway. (Note: freeway overpass has sidewalk on the south side)
21A	A	1317	Public	City/ Developer	1/D	Devonshire Dr. (east side) between Melba Rd. and Requeza St. connecting to existing sidewalk segment
22	С	1008	Public	City/ Developer	1/D	Requeza St. (north side) between trail segment #52 & Nardo Rd. connecting existing sidewalk segments
23	A	3537	Public	City/ Developer	2/D	Arden Dr (east side) between "D" St. and Santa Fe Dr.
24	A/C	2883	Public	City/ Developer	1/D	Santa Fe Dr.(north & south sides) between Vulcan Ave. & Devonshire Dr. / Rubenstein Ave.
26	С	1354	Public	City	1	Santa Fe Dr.(north & south sides) under freeway overpass
27	С	2279	Public	City/ Developer	1/D	Santa Fe Dr.(south side) connecting existing sidewalk segments between the freeway overpass and Lake Dr.

Trail Types A: Natural hard surface path B: Soft surface trail C: Sidewalk

TRAIL	TRAIL	LENGTH	RIGHT OF WAY	INSTALLED	PHASE	REMARKS
#	TYPE	(IN FEET)	(ROW) STATUS	BY		
28	С	3005	Public	City/ Developer/ School Dist.	1/D	Santa Fe Dr. (north side) between Nardo Rd. & Bonita Dr. and between Lake Dr./Oceanic Dr. & Wootan Dr.
29	A	2283	Public	City/ Developer	1/D	Santa Fe Dr.(south side) between Lake Dr. & El Camino Real
30	С	369	Public	City/ Developer	1/D	Regal Rd. (west side) between Requeza St. & Santa Fe Dr. connecting existing sidewalk segments
31	A/C	625	Acquisition	City/ Developer	3/D	Rossini Canyon between Santa Fe Dr. and the rear of the shopping center adjacent to the west property line service road
32	В	1410	Public	Developer	D	Rossini Canyon between the rear of the shopping center on Santa Fe Dr. & Warwick Ave.
33	A	1561	Public	City/ Developer	3/D	Warwick Ave.(south side) between MacKinnon Ave. & Rossini Dr. Street is only currently installed between Somerset Ave. & Starlight Dr.
34	A	1740	Public	City/ Developer	1/D	MacKinnon (west side) between existing sidewalk at freeway overpass to end of the street at Liverpool Dr.
35	A	4175	Public	City/ Developer	1/D	Summit Ave.(west side) between Santa Fe Dr. & Montgomery Ave.
36	В	1837	Developer/ Acquisition	City/ Developer	2/D	From the end of MacKinnon Ave. southerly across the slope at the west of the apartment complex to the San Elijo water treatment facility complex
37	В	2316	Public	City	2	San Elijo water treatment facility complex adjacent to the drainage channel to Manchester Ave.
38	В	263	Public	City	1	Norfolk Dr. between Manchester Ave. & Newcastle Ave. Using street ROW which is not being utilized
39	В	265	Public	City/ County of San Diego	2	Manchester Ave.(south side) between the lagoon visitor's center entrance to the existing trail
40	В	2795	Public	City/	1	Manchester Ave.(south side)

Trail Types A: Natural hard surface path

B: Soft surface trail

C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
				County of San Diego		connecting the existing trails at the visitor's center and the trails under the freeway overpass
41	В	2243	Developer/ Acquisition	Developer	D	Loop or overlook on undeveloped property adjacent to Skyloft Rd.
42	A	6986	Public	City/ Developer	1/D	Piraeus St. (east side) between La Costa Ave. & Leucadia Blvd
42A	A	341	Public	City/ Developer	1/D	Olympus St. (north side) between Piraeus St. & Arbor Ct.
43	В	4155	Public	City/ Developer	1/D	Saxony Road (east side) between La Costa Ave. & Quail Hollow Dr.
44	В	2241	Developer/ Acquisition	Developer/ City	D/2	On undeveloped property connecting Swallowtail Rd. & Saxony Rd.
45	В	1135	Acquisition	City	1	West of Bonnie Bluff Ct. within open space easement connecting Blue Heron Dr. & Bella Vista Dr.
47	A	982	Public	City/ Developer	1/D	Normandy Rd. (north side) between Piraeus St. & Urania Ave
48	В	515	Developer/ Acquisition	City/ Developer	1/D	North end of Sidonia St connecting to Indian Head Canyon
49	A	3860	Public	City/ Developer	1/D	Saxony Rd. (east side) between Leucadia Blvd. & Encinitas Blvd.
50	В	1938	Developer	Developer	D	Connecting Saxony Rd. & Quail Gardens Dr.
51	A/B	4410	Public	City/ Developer	1/D	Quail Gardens Rd. (east & west sides) between Encinitas Blvd. And bikeways & trails within Encinitas Ranch
52	B/A	757	Developer/ Acquisition	Developer	D	Undeveloped property connecting sidewalks at the end of Calle Magdalena & Requeza St.
53	С	1597	Public	City	1	West Lake St. (east & west sides) between Encinitas Blvd. & Requeza St. connecting existing sidewalk segments
54	A/C	4134	Public	City/ Developer	2/D	Nardo Rd./MacKinnon Ave. (west side) between Requeza St. & existing sidewalk at freeway overpass

Trail Types A: Natural hard surface path B: Soft surface trail C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
57	A	1841	Public	City	1	Via Cardiff Dr.(west side) between the freeway overpass & Birmingham Dr.
59	С	1539	Public	City/ Developer	1/D	Birmingham Dr. (north side) between Montgomery Ave. & the freeway connecting existing sidewalks
60	A/C	1622	Public	City/ Developer	1/D	Birmingham Dr. (north & south sides) between Via Cardiff Dr. & Lake Dr. connecting existing sidewalks
61	A	1117	Public	City/ Developer	1/D	Birmingham Dr. (south side) between Lake Dr. & Crest Dr.
62	A	2578	Public	City/ Developer	2/D	Lake Dr. (east side) between Santa Fe Dr. & existing sidewalk near Sea Village
63	A	5295	Public	City/ Developer	2/D	Crest Dr. (west side) between Santa Fe Dr. & existing sidewalk near Este Vista Ct.
64	В	2112	Developer/ Acquisition	Developer/ School District	D	Undeveloped property on the west side of El Camino Real at Manchester Ave. connecting to trail segment #65
65	В	1894	Acquisition	Developer	D	Open space between trail segment #64 and trail segment #66.
66	В	3426	Developer/ Acquisition	Developer	D	Undeveloped property on the north side of Manchester Ave. east of the freeway connecting to trail segment #65.
67	B/A	895	Developer	Developer	D	Undeveloped property. This segment connects the trail from the City of Carlsbad on the west side of El Camino Real to the sidewalk on Leucadia Blvd.
68	В	4854	Acquisition	City	1	Open space behind existing residences on Willowhaven Rd. & Orchard View Rd. adjacent to a drainage channel. Pathways currently exist in this location and are maintained by HOA

Trail Types A: Natural hard surface path

B: Soft surface trail

C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
69	В	2392	Acquisition	City	2	Open space area to the south of Home Depot connecting to trail segment #70
70	В	2050	Acquisition	City	1	Powerline easement, connecting to trail segment #68 and #69
71	В	929	Developer/ Acquisition	Developer/ City	D/1	Connecting Olivenhain Rd. side walk to trail #68 and to the City of Carlsbad planned trail
72	В	5037	Acquisition	City	1	Powerline easement from northern boundary of Flora Vista School to Encinitas Blvd.
73	В	5619	Acquisition	City	1	Powerline easement from the old landfill through the Manchester Conservation Bank Area to Manchester Ave.
74	В	2271	Public	City	1	Old landfill road
75	В	4905	Acquisition	City	3	Loop through old landfill site. Exact location to be determined during planning for this area
76	В	9995	Acquisition	City	1	Manchester Conservation Bank trails. Exact locations to be determined during planning for this area
77	В	4739	Public	City/ Developer	1/D	Manchester Ave. (north side) from El Camino Real to Manchester Conservation Bank Area trails
78	В	2317	Public	City/ Developer	1/D	Manchester Ave. (north side) from the Manchester Conservation Bank Area trails to existing sidewalk near the intersection of Rancho Santa Fe Rd.
79	В	5655	Public	City/ Developer	1/D	Manchester Ave.(south/east side) connecting segment #40 at I-5 to El Camino Real
80	В	369	Public	City	2	Connection between proposed SunVista City park and Diegueno Junior High
80A	С	748	Public	City	1	Mountain Vista Dr. (south side) connecting the existing sidewalk to trail segment #80B

Trail Types

A: Natural hard surface path

B: Soft surface trail

C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
80B	В	166	Public	City	1	End of Mountain Vista Dr.
ООВ	Б	100	Tuone	City	1	connecting to 11 <sup>th</sup> Street on utility easement
81	B/A	9701	Public	City/ Developer	1/D	Rancho Santa Fe Rd. (east and west sides) between City limits (at Carlsbad) to El Camino del Norte
82	B/A	4718	Public	City/ Developer	1/D	Rancho Santa Fe Rd. (east side) El Camino Del Norte to Encinitas Blvd.
84	В	876	Developer/ Acquisition	Developer	D	Desert Rose Way (east side) connecting City of Carlsbad trail to "C" St.
85	В	935	Developer/ Acquisition	Developer	D	Via di Felicita connecting trial #84 to an existing trail and to a trail in the City of Carlsbad.
86	В	1006	Public	City/ Developer	1/D	Camino del Rancho (south side) between Calle Santa Catalina to the end of Camino del Rancho
87	В	668	Public	City/ Developer	1/D	Calle Santa Catalina (east side) between Rancho Santa Fe Rd. & Camino del Rancho
87A	В	343	Acquisition	City	1	Connecting Rancho Santa Fe Rd. with Cole Ranch Rd./ Chelsea Ln.
88	В	383	Acquisition	City	1	Utility easements at the rear of two residences on Regal Ridge-Crystal Ridge and on the west side of one residence on Calle Santa Cruz to connect existing trail IOD's between Camino del Rancho & Calle Santa Cruz
89	В	5002	Public	City/ Developer	1/D	Cole Ranch Rd. (east or west side) between Calle Santa Cruz & 5 <sup>th</sup> Street. The City will continue to pursue a viable trail segment along Cole Ranch Road between 7 <sup>th</sup> Street and 5 <sup>th</sup> Street to connect trail #89 with trail #82.
90	В	854	Public	City/ Developer	1/D	Lone Jack Rd. (north side) between Rancho Santa Fe Rd. and the existing trail.
91	В	1820	Public	City/ Developer	1/D	Lone Jack Rd. (south side) from Rancho Santa Fe Rd. to the bend
92	В	807	Public	City	1	Lone Jack Rd. (east side) between the bend and Little Oaks Park
93	В	6553	Public/ Acquisition	City/ Developer	1/D	Lone Jack Rd. (west & north sides) between the bend and Fortuna Ranch Rd.

Trail Types A: Natural hard surface path B: Soft surface trail C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
94	B/C	3385	Public	City/ Developer	1/D	El Camino del Norte (north side) from the existing trail adjacent to Wiro Park to Val Sereno Dr. The City will continue to pursue a viable trail segment alignment to provide public access within the Lake Val Sereno Open Space area.
95	В	1761	Public	City/ Developer	1/D	El Camino del Norte (south side) from Rancho Santa Fe Rd. to the City limits connecting to the bridge over Escondido Creek
96	В	778	Public	City/ Developer	1/D	Along vacated Lone Jack Rd. between the bend and El Camino del Norte on the trail IOD
97	В	798	Acquisition	City/ Developer	2/D	At rear of residences on Windmill Ranch Rd. adjacent to Escondido Creek connecting El Camino del Norte to 9 <sup>th</sup> St.
98	В	330	Acquisition	City/ Developer	2/D	9 <sup>th</sup> St. (south side) from the end of the current street & trail connecting to trail segment #97
99	В	384	Public	City/ Developer	2/D	9 <sup>th</sup> St. (south side) from Rancho Santa Fe Rd. to Cole Ranch Rd. utilizing the street ROW not used for road
100	В	302	Public	City/ Developer	2/D	7 <sup>th</sup> St. (north side) from Rancho Santa Fe Rd. to Cole Ranch Rd.
101	В	775	Public	City/ Developer	2/D	5 <sup>th</sup> St. (south side) from Cole Ranch Rd. to trail segment #102
102	В	787	Acquisition	Developer/ City	D/3	At the east and south side of parcel connecting 5 <sup>th</sup> St. and trail segment #103
103	В	1205	Acquisition/ Public	City/ Developer	2/D	On the drainage easement connecting trail segment #102 to the existing trail IOD adjacent to the Rhoades School
104	A/C	227	Public	Developer/ City	D/3	South Rancho Santa Fe Rd. –La Bajada (north side) connecting the existing trail segment IOD to the City limits. The city should work

Trail Types A: Natural hard surface path B: Soft surface trail C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
						with the County to plan a trail and modifications to the bridge on the north side to provide for a protected trail crossing similar to what currently exists on the south side of the bridge.
104A	В	916	Acquisition	Developer/ City	D/2	Peppertree Lane connecting Rancho Santa Fe Rd. to 4 <sup>th</sup> St.
105	С	508	Public	Developer/ City	D/3	South Rancho Santa Fe RdLa Bajada (south side) connecting existing sidewalk to bridge
106	В	756	Developer/ Acquisition & Acquisition	City/ Developer	1/D	At the northerly boundary of the large open space parcel (Lot 28). Optional alignment: At rear of residences on Lone Jack Rd. connecting Little Oaks Park to existing Brookside trail.
107	В	616	Acquisition	City/ Developer	2/D	Across open space parcel (Lot 28) connecting existing Brookside trail to existing IOD
107A	В	569	Public & Acquisition	City/ Developer	1/D	Camino del Rancho (west or east side) connecting segment #93 (Lone Jack Rd.) to the existing Brookside trail
108	В	1128	Acquisition	City	2	Across open space parcel (Lot 28) connecting existing IOD and existing Brookside trail.
110	В	322	Acquisition	City	3	Across open space parcel connecting existing trail to the south of the Escondido Creek to a trail in Rancho Santa Fe
111	В	5599	Developer/ Developer/ Acquisition	Developer	D	Across undeveloped land south of the Wildflower development and north of Escondido Creek providing connections between the existing trails in the Wildflower area to trails adjacent to Escondido Creek & to the County to the east
112	В	1316	Public & Developer/ Acquisition	City/ Developer	2/D	Dusty Trail Rd. (north side) between Copper Crest and trail segment # 116 (the proposed extension of Lone Jack Rd.)
113	В	2748	Public & Developer/ Acquisition	City/ Developer	2/D	Copper Crest (west side) between Dusty Trail Rd. & Lone Jack Rd. including a spur on Wishbone Way to connect to an existing trail

Trail Types

A: Natural hard surface path

B: Soft surface trail

C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
116	В	7197	Developer/ Acquisition	Developer	D	Proposed extension of Lone Jack Rd. on undeveloped property between the current end of Lone Jack Rd. to it's terminus, including connections back to the existing trails in the Knights Bridge development. The exact location of trail to be determined at the time of development.
117	В	3025	Developer/ Acquisition	Developer	D	Undeveloped land connecting trail segment #116 and the water tower. The exact location of trail to be determined at the time of development.
118	В	1409	Developer	Developer	D	Water tower loop
119	В	2615	Acquisition	City/ OMWD	3/D	OMWD land connecting the water tower and to the City of San Marcos
120	В	2337	Acquisition	City/ OMWD	3/D	OMWD land connecting to the City of San Marcos & Elfin Forest
121	В	9287	Developer	Developer	D	Rancho Summit Dr. connecting the water tower, and Canyon de Oro / Fortuna Ranch Rd.
122	В	2204	Developer	Developer	D	Connecting the existing trail to the small water tower and then connecting to trail segment #121.
123	В	2462	Developer/ Acquisition	Developer	D	Undeveloped land connecting Elfin Forest to trail segment #124 (Canyon de Oro / Fortuna Ranch Rd.)
124	В	4883	Developer/ Acquisition	Developer	D	Undeveloped land adjacent to proposed extension of Canyon de Oro / Fortuna Ranch Rd.) connecting to Elfin Forest
125	В	856	Developer/ Acquisition	Developer	D	Undeveloped land adjacent to proposed extension of Fortuna

Trail Types A: Natural hard surface path B: Soft surface trail C: Sidewalk

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	RIGHT OF WAY (ROW) STATUS	INSTALLED BY	PHASE	REMARKS
						Ranch Rd. connecting to County planned trails
126	В	1162	Developer/ Acquisition	Developer	D	Undeveloped land connecting trail segment #124 (Canyon de Oro / Fortuna Ranch Rd.) to County planned trails

#### **PHASES:**

Phase 1 Highest Priority Phase 2 Second Priority

Phase 3 To be implemented at the time of development of that parcel or adjacent parcel with

the responsibility for implementation to be determined at that time.

Phase D To be implemented by a private party as a condition of approval for development on

the parcel it crosses.

### **Summary - Proposed Trails**

Trail Type	Phase I	Phase II	Phase III	Phase D	Total
				Developer	
				Implemented	
A	46,178'	22,868'	2,186'	227'	71,459'
Path	8.7 miles	4.3 miles	.4 mile	.04 mile	13.5
					miles
В	97,052'	17,459'	10,179'	59,443'	184,133'
Trail	18.4 miles	3.3 miles	1.9 miles	11.2 miles	34.9
					miles
С	21,140'	0	0	508'	21,648'
Sidewalk	4.0 miles			.1 mile	4.1 miles
Total	164,370'	40,327'	12,365'	60,178'	277,240'
Proposed	<b>31.1</b> miles	<b>7.6</b> miles	2.3 miles	11.4 miles	52.5
_					miles

### **Existing Trails**

Trails within the Encinitas Ranch Specific Plan	10.5 miles
Existing in remainder of City	17 miles
San Elijo Lagoon Trails (County of San Diego)	5.8 miles
Total Existing	33.3 miles



# **STANDARDS**

### **STANDARDS**

#### Introduction

Paths and trails included in the Master Plan shall be developed in accordance with the following standards. In certain locations where physical or environmental constraints preclude the practical implementation of a path or trail under the following standards, the City of Encinitas reserves the right to modify the standards in order to preserve the continuity of the system, avoid or minimize environmental impacts, and preserve community character. The City's goal is to design and construct path and trail segments in as natural a condition as possible, while still ensuring public safety, avoiding environmental impacts, and preserving community character. Deviations from the standards are subject to the approval of the City of Encinitas. These modifications will be made only after a determination is made that public safety or environmental resources will not be impacted. Although the plan endeavors to provide standards for all conceivable occurrences, it is impossible to ensure that every detail will be addressed. Therefore, site specific conditions may dictate the redesign or refinement of standards to meet unusual field circumstances.

The purpose of the Recreational Trail Standards are to:

- Ensure trail safety by:
  - minimizing trail hazards, including natural & vehicular interface;
  - minimizing trail deterioration; and,
  - providing for adequate surveillance to reduce crime and vandalism.
- Protect the rights of adjacent landowners, thus making the trail a sought after amenity.
- Minimize maintenance costs.
- Provide for a consistent trail identity that maintains the unique flavor of each neighborhood yet presents a cohesive trail system.
- Avoid or minimize disturbance to the natural environment.
- Maximize the enjoyment of users through a diversity of experiences.
- Reduce liability exposure to the City of Encinitas.

.

### **PATH STANDARDS**

Paths will be installed in lieu of sidewalks in areas defined as Trail Type A, on the master plan per the following standards.

**PATH WIDTH:** 4 - 6 feet depending on street conditions.

**SETBACK:** The path is to be set back from:

• the top of any slopes exceeding 3:1 a minimum of 2 feet; and,

• retaining walls/fences above 4 feet in height a minimum of 2 feet.

**GRADE:** 5% (1:20) maximum.

**CROSS GRADE:** 2% maximum.

VERTICAL

**CLEARANCE:** 15 feet minimum beneath structures or tree limbs.

**SURFACING:** Paths should be designed to maintain the rural feel of existing streets

and shall be designed and constructed in as natural a condition as possible. Surfacing will be selected, on a case by case basis, to provide flexibility to residents in determining which surfacing is the most compatible with the neighborhood's character and desires. Appropriate surface materials could include, but would not be limited to, asphalt, earth toned colored concrete, native soil, soil cement, or

compacted decomposed granite.

### TRAIL STANDARDS

Trails designated as Type B on the master plan, shall be installed per the following standards and shall be designed and constructed in as natural a condition as possible:

TRAIL TREAD

8 feet

WIDTH:

6 feet may be utilized, with 2 foot by 15 foot turnouts every quarter mile, upon the approval of the City (See "Turnout" detail).

A narrower width may be utilized in natural open space or environmentally sensitive areas, where areas immediately adjacent to the trail can provide level spaces for turnouts as necessary.

EASEMENT WIDTH:

10 - 12 feet. Easements less than 12 feet, only upon approval of the City.

GRADE:

Trail segments shall be 12% or less. However, slopes above this for short distances will be allowed using the following requirements:

- Under most all circumstances slope should not exceed 20%.
- 15% to 20% slopes should be no longer than 250 feet with 10 foot long breaks in grade which do not exceed 5%.
- 12% to less than 15% slopes should be no longer than 500 feet with 10 foot long breaks in grade which do not exceed 5%.
- To decrease grade, utilize terrace steps (See "Terrace Steps" detail). Terrace steps should not be utilized on trails which are designated as handicap accessible.

Water bars should be installed (See "Water Bars" detail) where trail gradient and soil types indicate that erosion will compromise the trail tread surface.

**CROSS GRADE:** 

Should not exceed 2%. Low grades help prevent drainage problems; steep grades allow the water to run faster, building up erosive force. See details for typical cross-sections and drainage requirements.

**GRADING:** 

Hillside trails should be benched into native material. Trails proposed to be constructed on fill slopes will be allowed only with the recommendation of a registered civil or geo-technical engineer.

Drainage and grading design plans shall be submitted to the City by a registered civil engineer or landscape architect.

SIGHT LINES & CURVATURE

The design speed for trail travel should not exceed 10 miles per hour. With this assumption, sight distance should be no less than 50 feet.

VERTICAL CLEARANCE:

15 feet minimum beneath structures or tree limbs.

TRAIL TREAD:

Trail tread is to be decomposed granite, installed as follows: Scarify tread areas to a depth of 6 inches removing rocks, clods and all undesirable materials. Fine grade and compact native soil to a 90% relative compaction as determined by A.S.T.M.-1557-78. Evenly spread 4 inches (minimum) of decomposed granite (crushed or decomposed granite with maximum 1/4 inch diameter particles).

On the approval of the City, native soil may be substituted for the decomposed granite tread, where it is determined that the soil type and the absence of moisture will provide a trail surface that will provide an acceptable tread for users.

At road or driveway crossings, pavement, for the width of the trail, shall be rough textured to prevent horses from slipping. Pavement material at road and driveway crossings shall be heavy brushed concrete or other similar material approved by the City (See "Intersection Crossing" detail).

**WEED CONTROL:** 

As weeds appear, they shall be controlled chemically, mechanically, or culturally. There must be strict supervision of the applicator(s) to ensure that chemical applications are confined only to the trail tread and are applied per State and N.P.D.E.S. (National Pollution Discharge Elimination System) standards. Light mulch, as approved by the City, may be used on the trail tread to control weeds.

#### **WATER BARS:**

Water bars shall be installed (See "Water Bars" detail) where trail gradient and soil types indicate that erosion will compromise the trail tread surface. If minor rivulets appear over time, water bars shall be installed to decrease the chances of more serious erosion.

Effective water bars minimize the speed, volume and distance traveled by water down a trail. The actual number and spacing of water bars depends on the steepness of slope, the amount of water entering a trail, the construction of the tread (hillsides or steps), and the availability of places to divert water. Generally, the greater the slope and the more water channeled by a trail, the greater the need for water bars. Placement should be near the top of the slope to catch water before it gains momentum.

#### **VEGETATION:**

Vegetation adjacent to the trail tread shall be preserved as much as possible to protect the aesthetic quality of the trail. Vegetation should be cleared to a height of 15 feet and a width of 8 feet within the trail easement. Pruning along trails should be selective.

Stumps may be treated to prevent sprouting. Dead and dying limbs and snags which may fall on the trail should be removed. Groundcover plants and low shrubs should not be cleared except from the actual trail tread. Where a trail is on a side slope, the vegetation on the uphill side will be more invasive and should be cut back more severely than vegetation on the downhill side.

#### **FENCING:**

Trail fencing shall be constructed of a material as approved by the City, and shall be installed on one side of the trail unless a determination is made by the City that fencing is not necessary for safety, environmental resource protection, or private property reasons. Fencing may not be necessary or desired where the trail is located in open space areas where a fence would be visually obtrusive to the natural environment, or in less natural areas, where vegetation, non-trail fencing, or other physical features provide adequate delineation of the trail.

Fencing material may include, but is not limited to, PVC, post and rail, peeler poles, or woodcrete. Fencing material should be compatible in character with the physical location of the trail and shall be designed to safely accommodate the expected users of the trail segment.

In general, fences shall be installed:

- in areas where side slopes exceed 3:1;
- on switchbacks in order to prevent short-cutting;
- on the trail side of retaining walls;
- along flood control channels or other hazards; and,
- at street intersections to delineate the trail entrance. The entry fence should consist of a section on either side of the trail tread of two rail segments long (See "Intersection Crossing" detail).

**SIGNAGE:** 

Trail markers (See "Trail Marker" detail) shall generally be installed every 1/4 mile. Signage should occur at all street and trail intersections and at trail heads. Trail markers shall have symbol decals affixed to both sides in the same position. Signage should alternate from one side of the trail to the other and signs shall be installed clear of the trail tread.

Appropriate warning signs should be installed to detail hazards, clearance requirements, approaching intersections, the need to stop or yield, and staging and rest areas. Street signage warning motorists of trail crossings should be located in advance of trail crossings. Signs should meet City, County and State standards.

**BARRIERS:** 

All proposed trails are restricted to use by pedestrians, equestrians and bicyclists only, and can be made difficult for use by motorcyclists by creating a barrier at trail entrances if motorcycle use becomes a problem. The barrier should consist of a treated 2½ inch rail set 1 to 3 feet above the ground. Affixed to the barrier should be highly visible reflective materials which will enable trail users to see the barrier at night. The barrier shall be regularly maintained to ensure maximum visibility. These barriers are difficult to cross with a motorcycle, but may be stepped over by hikers and riders. Installation of barriers shall occur where motorcycle use becomes a problem.

#### **UNDERPASSES:**

Underpasses or culverts used for trail undercrossings should conform to the following standards:

Height: 15 feet MinimumWidth: 12 feet Minimum

In underpasses 50 feet or longer, illumination should be installed in the passage to provide a minimum of one uniform foot candle. The specific designs for underpasses should meet the individual situation and should be designed by a registered engineer and submitted to the City for review and approval.

### CREEK CROSSINGS:

On trails & paths which will be utilized by pedestrians, equestrians, and bicyclists, provide a bridge or culvert over creeks or drainages, the design of which shall be performed by a registered engineer using the following standards:

#### Bridge:

- Width: 8 foot tread minimum.
- Bridge and ramp slopes: 8% maximum.
- Surface or tread: Non-skid or non-slip surface such as wood, textured concrete or asphalt.
- Rails: Install protective side railings.

#### Culverts:

For small drainages, culvert should have a 12 inch minimum diameter for ease of cleaning. They should have 12 inch minimum cover and be sloped approximately 2%. The size, slope and cover of culverts should be calculated to ensure that the trail is passable at all times. In general the trail tread above the culvert should be a minimum 12 inch deep compacted decomposed granite or native soil. Soil should be protected with rip-rap from concentrated flows, particularly at culvert outlets. Headwalls and outlets should be protected and concealed with boulders where possible

On some trails, where usage is determined by City staff to be primarily equestrians, a wet crossing (or ford) may be used where the velocity and depth of the water is acceptable the majority of the year (See "Wet Crossing" detail).

As soon as practical after heavy rains, the City shall inspect all creek crossings to determine if closure of a crossing is necessary and to conspicuously post the closure if warranted until the crossing is determined to be again safe.

## LOW LYING AREAS:

Where wet areas exist that are not feasible to drain, utilize turnpike construction (See "Turnpike" detail). Turnpike technique involves a raised tread bound by treated log sides bordered by a trench on each side of the tread. This will enable the trail tread to be raised to a height above the water level.

In unusually wet areas, turnpike construction will prove to be unsatisfactory. Puncheon construction should therefore be used (See "Puncheon" detail). A puncheon consists of a deck, or flooring, approximately 8 feet wide using treated planks or landscape timbers laid on stringers. The stringers should be set on mud sills and should generally be placed at each edge of the widened trail at about 3 foot centers.

The mud sills should be set at right angles to the trail at 6 foot to 8 foot intervals. Proper subdrainage should be provided under the stringers and mud sills. The decking should then be securely spiked to the stringers. Cover the deck with a layer of decomposed granite or native soil to cushion the traffic and save wear and tear on the deck planks caused by shod horses.

The specific designs for turnpikes and puncheons should meet the individual situation and should be designed by a registered engineer and submitted to the City for review and approval.

## INTERSECTION DESIGN:

The design of intersections where vehicles and the trail interface shall require that both the motorist and trail user are informed of the potential conflicts. "Roadway Intersection Ahead" signs shall be posted to inform trail users that they are approaching a roadway intersection. Signage and road markings shall also be utilized to inform vehicles of the trail crossing. All crossings at grade shall be striped and signed (See "Intersection Crossing" detail). Slip-resistant paving (such as a heavy broom finished concrete) should be utilized to provide a non-skid surface. This slip-resistant surface shall be subject to the review and approval of the City. At signalized

intersections, trail signage shall be installed advising trail users to wait at the crossing activation button until the signal indicates safe crossing.

At intersections where trails cross streets, the City will review on a case by case basis, any special circumstances in regard to right turn on red which may represent a potential hazard.

# TRAIL DIFFICULTY STANDARDS:

The following standards should be used in determining the degree of difficulty a trail user will encounter on any given trail:

### **♦ NOT DIFFICULT**

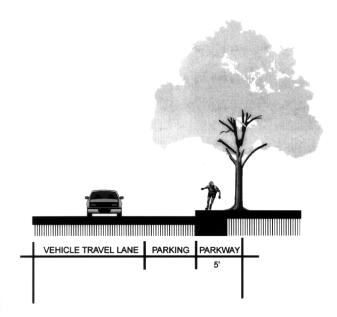
- Majority of the trail is on a 0% 8% slope. No slopes exceed 10%.
- Trail is well marked, maintained, cleared, and graded.
- Frequent access points, so that there is a possibility of any length of trip.
- Great for leisure hikes and would present no difficulty for equestrians or bicyclists.

#### **♦ MODERATE**

- Majority of the trail is on an 8% 12% slope. No slopes exceed 15%.
- Less clearance and more climbs.
- Less access points.
- Better for the intermediate rider or bicyclist or experienced hiker.

### **◆ DIFFICULT**

- Majority of the trail is on a 12% or greater slope or the trail has slopes which exceed 15%.
- Requires one to be in good physical condition and an experienced rider.
- May require bicyclists to have advanced skills.



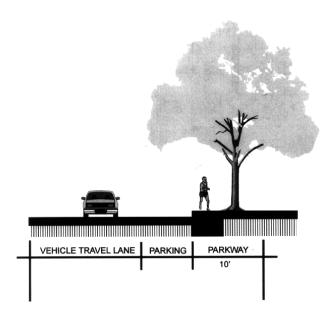
5' PARKWAY APPLICABLE TO: LIMITED PRIME ARTERIAL SPECIAL CASE LOCAL (PARKING ONE SIDE) SPECIAL CASE ONE-WAY LOCAL (SEE PUBLIC ROAD SECTIONS - APPENDIX C)

-PATH (IN LIEU OF SIDEWALK) TO BE LOCATED WITHIN PARKWAY. PATH WIDTH TO BE 4' - 5' DEPENDING ON STREET CONDITIONS

-LOCATE ALL UTILITIES OUTSIDE OF PATH TREAD AT OUTSIDE EDGE OF PARKWAY

-SEE PATH STANDARDS FOR ADDITIONAL REQUIREMENTS

### 5' PARKWAY WIDTH



10' PARKWAY APPLICABLE TO:
PRIME ARTERIAL
MAJOR ARTERIAL
COLLECTOR
AUGMENTED LOCAL/CIRCULATION ELEMENT LOCAL
URBAN LOCAL
SEMI-RURAL LOCAL
RURAL LOCAL
RURAL CIRCULATION ELEMENT LOCAL
ONE-WAY LOCAL
(SEE PUBLIC ROAD SECTIONS - APPENDIX C)

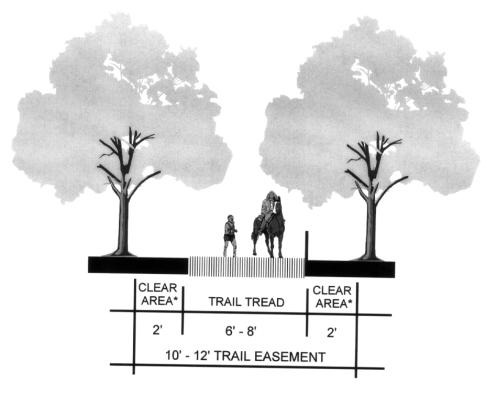
-PATH (IN LIEU OF SIDEWALK) TO BE LOCATED WITHIN PARKWAY. PATH WIDTH TO BE 4'-6' DEPENDING ON STREET CONDITIONS AND MAY MEANDER WITHIN THE PARKWAY

-LOCATE ALL UTILITIES OUTSIDE OF PATH TREAD AT OUTSIDE EDGE OF PARKWAY

-SEE PATH STANDARDS FOR ADDITIONAL REQUIREMENTS

### 10' PARKWAY WIDTH



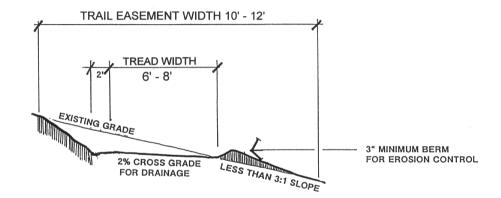


\*CLEAR AREA / TURNOUT AREA - ZONE OF LOW VEGETATION (1' OR LESS)

- -LOCATE ALL UTILITIES OUTSIDE OF TRAIL TREAD AT EDGES OF TRAIL EASEMENT
- -LOCATE FENCE OUTSIDE OF TRAIL TREAD & TURNOUT
- -WHERE TRAIL IS LESS THAN 8' WIDE, SEE "TURNOUT" DETAIL
- -SEE TRAIL STANDARDS FOR ADDITIONAL REQUIREMENTS

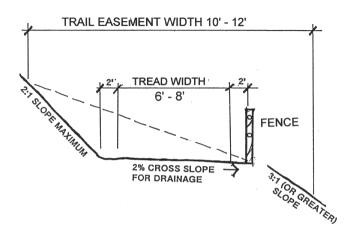


### SIDE SLOPES LESS THAN 3:1



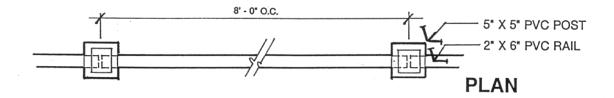
DRAINAGE AND IRRIGATION SYSTEMS FOR ALL UP SLOPES SHALL BE DESIGNED TO PREVENT RUN-OFF ON TO TRAIL.

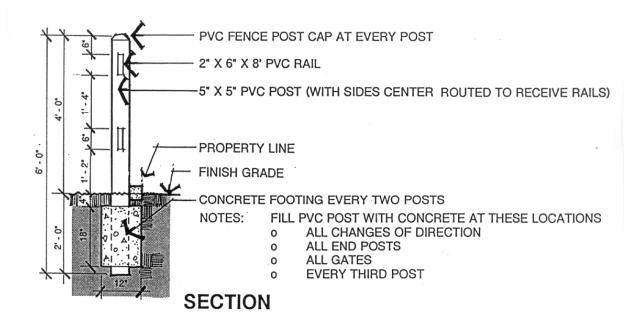
### SIDE SLOPES GREATER THAN 3:1



DRAINAGE AND IRRIGATION SYSTEMS FOR ALL UP SLOPES SHALL BE DESIGNED TO PREVENT RUN-OFF ON TO TRAIL.

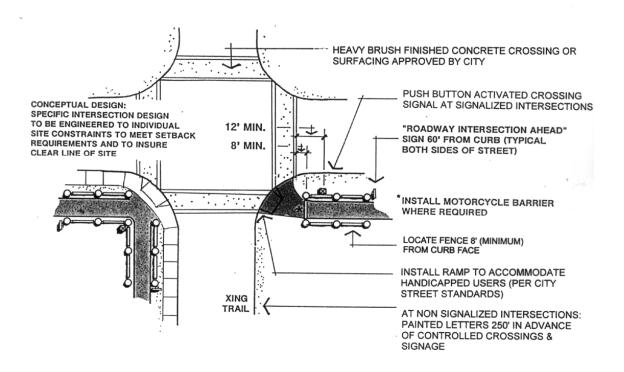






OTHER FENCING MATERIAL MAY BE UTILIZED, WHEN APPROVED BY THE CITY

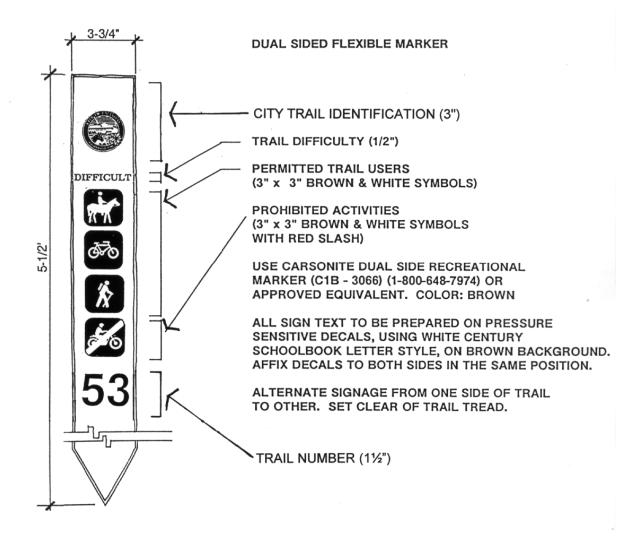




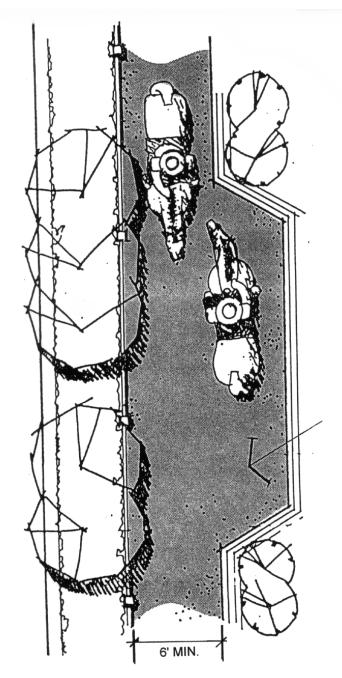


NOTE: DETAIL SHOWS TYPICAL SIGNAGE. CONSULT CITY FOR SPECIFIC TRAIL NUMBER, DIFFICULTY, & PERMITTED TRAIL USERS FOR EACH TRAIL SEGMENT.

TRAIL MARKERS SHOULD BE INSTALLED EVERY 1/4 MILE







2' X 15' TURNOUT FOR PASSING

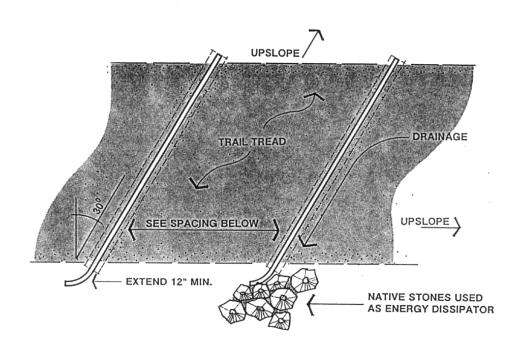
INSTALL EVERY 1/4 MILE, WHERE TRAIL TREAD IS LESS THAN 8', OR AS DETERMINED BY CITY

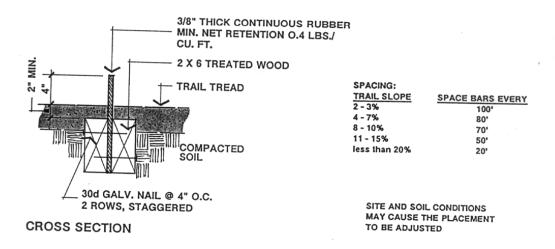
TYPICAL TRAIL TREAD SHALL NOT BE LESS THAN 6' IN ANY LOCATION



TURNOUT

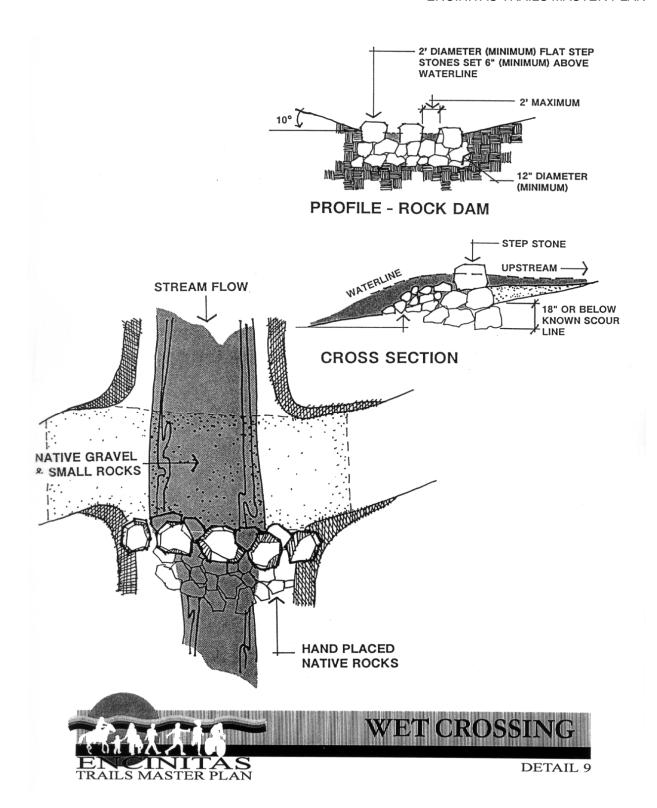
DETAIL 7

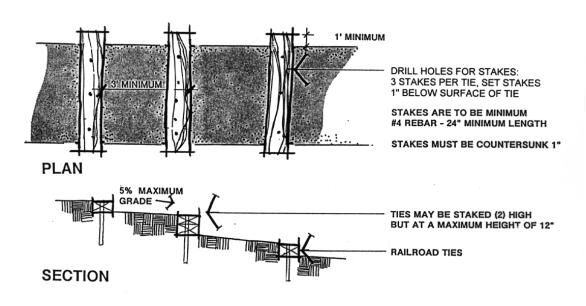




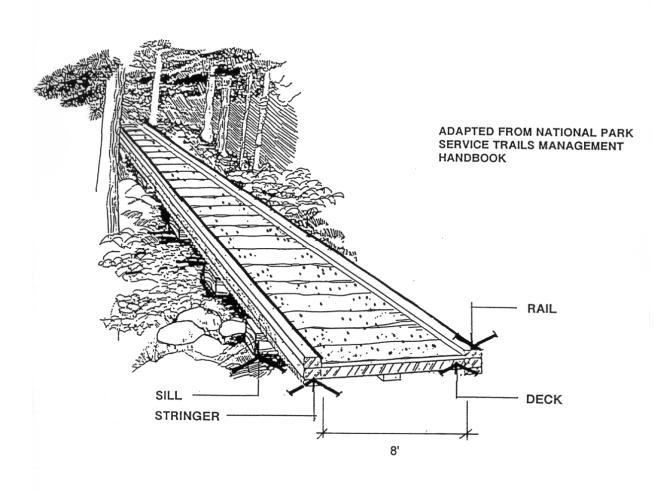
NOT TO SCALE



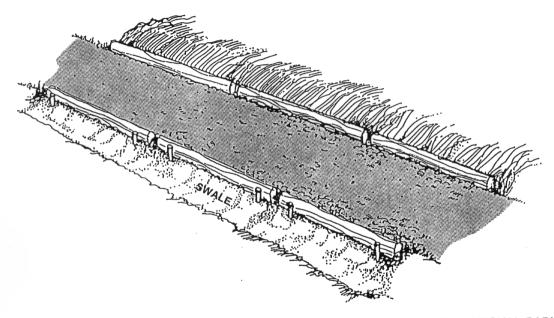




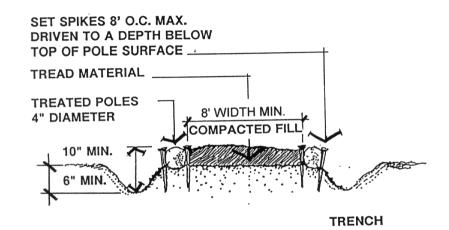








ADAPTED FROM NATIONAL PARK SERVICE TRAILS MANAGEMENT HANDBOOK







# **IMPLEMENTATION**

## IMPLEMENTATION PLAN

In this section, the implementation of the trails plan will be addressed. Included in the analysis will be the various methods of acquiring trail segments, installation responsibility, phasing and implementation costs. Every trail segment constructed by the City shall include the development and implementation of a Citizen Participation Plan (Municipal Code Section 23.06.010), which will ensure early and effective citizen participation in the design and construction of each trail segment. At the rear of this section is a summary which gives the total number of trails proposed, by type and phase, as well as the number of trails that currently exists in the City.

### METHODS OF ACQUIRING TRAILS

There are several avenues which the City can use to acquire trail segments:

A. Dedications and Donations

B. Cooperative Agreements

C. Purchase

### A. DEDICATIONS AND DONATIONS:

### Dedications

### 1. Acquisitions from Developers

Whenever a development proposal such as, but not limited to, a tentative map, tentative parcel map, use permit, design review permit, or coastal development permit includes a proposed or existing trail as identified on the Recreational Trails Master Plan, the City shall require both the dedication and improvement of the trail segment(s) as a condition of approval if a nexus can be found between the proposed project and the requested trail dedication and improvement. Although the Master Plan delineates trail locations, the specific location of a trail can be fine-tuned on individual parcels to accommodate specific development proposals. However, the trail exit and entry points should be sited consistent with the adopted Master Plan to ensure continuity of the trail system.

#### Donations

### 1. Establishing a Non-profit Advocacy Organization

A coalition of trail advocates could organize a non-profit group (ex: "Friends of Encinitas Trails") that would support the trail's realization and solicit donations for its development and management. For the sake of fund-raising legitimacy, the organization would need to have a 501-C3 tax status. Land conservation groups play an important constituency-building and watchdogging role as well. Such a group could play a vital and ongoing role in assisting the City in raising funds both privately and from grants.

### 2. Service Organizations

Service, community and fraternal organizations can offer volunteer workers for trail construction and maintenance, as well as solicit free or wholesale materials and construction equipment for trail construction (wood, asphalt, etc.) The City should encourage groups of this type to join forces to implement the trail system. In addition, the City could create and underwrite "trail adoption" programs, that enable service and hiking/bicycle clubs to maintain particular sections of the trail.

### 3. Gifts Catalog

Preparation of a line item "wish list" which could be distributed to service groups and the public would be valuable in securing donations. A description of trail components such as "a half mile of trail along San Elijo Lagoon" and "an interpretive sign for birds found along Escondido Creek" along with their associated costs could be included.

### **B.** COOPERATIVE AGREEMENTS:

The City should formulate joint agreements with public and private agencies which are responsible for utility corridors to establish permanent trail segments. In Encinitas, these would include the various water and sewer districts, and San Diego Gas & Electric.

The City, in conjunction with the County of San Diego, could also enact an ordinance in accordance with Government Code Section 51200 et. seq., the California Land Conservation Act of 1965, which would permit the City to acquire trail easements from landowners in return for lower tax assessments on that portion of the property.

### C. PURCHASE:

Although purchase of easements is the least preferred alternative, due to cost, it may prove necessary on private parcels where development has already occurred and where there is little prospect of re-development that would allow the City to condition the implementation of the trail.

The following are ideas for supplemental funding through State, Local and Federal sources:

### • State and Local Funding Sources:

### 1. Developer Fees

The California Planning, Zoning and Development Laws (Section 66477, Quimby Act) allow a City to collect fees from developers in exchange for the rights to develop a property. These can be "in lieu" of the required dedications of open space or as the County of Riverside currently does, a surcharge (\$50) for each new dwelling that is used for trail implementation.

### 2. Trail Fees

The City could consider the establishment of a pleasure riding tax in accordance with the provisions of Government Code Section 53940 et seq. in order to finance the acquisition, construction and maintenance of the trail system. The monies collected from this tax must be placed in a special fund, and can only be used to defray the reasonable expense of collecting such tax and for the maintenance, acquisition and construction of trails for equestrians and bicyclists. These funds may be used as local matching monies for any federal or state grants for such purposes or for matching funds in the acquisition and development of a federal or state trails project.

### 3. Bonds and Initiatives

Locally applied bond issues or land use control propositions can be used to further the goals of trails and park land development. These instruments may take the form of ballot measures that are drafted by agencies and/or citizenry, or alternatively as bond acts drafted by state legislators for passage in the California State Assembly and Senate.

Their purposes include financing acquisition, designating specific land areas for conservation, or setting basic land use policies. The success of any local bond measure depends on active local backing. In addition, if it requires levying additional property taxes, voters must approve it by a two-thirds majority.

### 4. Fund Raising Special Events

The City, with the assistance of trail advocacy groups like the Encinitas Trails Coalition, could sponsor a special event such as a trail ride or walk-a-thon. This could take place along a portion of the trail that has safe passage, but is in need of improvement or along completed segments adjacent to segments that need acquisition or development. Local merchants who derive business from the equestrian community (tack and feed) or bicycle stores could also help sponsor this event.

Events of this kind help to generate revenues as well as building support for the further development and continued maintenance of the trail system. The San Joaquin River Parkway and Conservation Trust in Fresno, California, organizes a variety of annual events to raise money for the Trust. One of the most successful events was "Evening on the River," which featured dinner and entertainment. This event raised approximately \$10,000. Another popular event is a bike rally, featuring a variety of distance rides, which raises public awareness of the Parkway in addition to money. Sponsors are the key to a successful event. They can donate t-shirts, food, printing, and other services. Sponsors also help to defray event costs, thereby increasing the amount raised.

(Source: Economic Impacts of Protecting Rivers, Trails and Greenway Corridors, 1990)

### **Grant Funding Sources**

The following are potential sources of federal, state, and local grant funding sources for trail implementation:

- -TEA-21 Transportation Enhancement Activities Program (TEA; SANDAG)
- -TEA-21 Congestion Management & Air Quality Program (CMAQ)
- -TEA-21 Surface Transportation Program (STP)
- -TEA-21 Recreational Trails Program (CA DPR)
- -TEA-21 National Highway System
- -TEA-21 National Scenic Byways Program
- -Environmental Enhancement and Mitigation Program (EEM; CTC)
- -Land and Water Conservation Fund (CA DPR)
- -Habitat Conservation Fund Program (CA DPR)
- -Safe Routes to School Program (SRS; Caltrans)
- -Bicycle Transportation Account Program (Caltrans)
- -AB 2766 Vehicle Registration Funds (APCD)
- -Transportation Development Act (TDA; SANDAG)
- -TransNet (SANDAG)

### **PHASING**

The following chart categorizes the proposed trail segments delineated in the Trails Plan section into the following phases:

Phase 1	Highest Priority
Phase 2	Second Priority
Phase 3	To be implemented at the time of development with the timing and
	responsibility to be determined at that time.
Phase D	To be implemented by a private party as a condition of approval for

development.

The phasing plan has no specific time line, since the availability of funds for implementation is variable. Therefore, the phasing plan provides general direction for prioritizing implementation of individual segments. It is understood that the proposed phasing plan may be fined tuned based on future circumstances and that the completion of the trail system will only be possible through a partnership of involvement between the recreational community, property owners, developers, and the City.

### **Phase I Segments:**

TRAIL #	TRAIL	LENGTH (IN FEET)	INSTALLED	PHASE	REMARKS
#	TYPE	(IN FEET)	BY		
3	С	1298	City	1	"B" St. on both sides of street between Coast Highway 101 & Moonlight Beach
5	С	272	City	1	Encinitas Blvd. (north side) under the train overpass
6	С	931	City/ Developer	1/D	South Coast Highway 101 between "D" St. & Encinitas Blvd. connecting the existing sidewalks on both sides of the street
11	A	8964	City	1	Orpheus Ave.(east/south sides) between Leucadia Village and Vulcan Ave. utilizing Caltrans ROW and street ROW
12	A/C	4253	City/ Developer	1/D	Leucadia Blvd. between I-5 & Vulcan Ave. on both sides of the street
15	В	769	City	1	Caltrans ROW between Union St. & Sanitation District Property
16	В	3472	City	1	Sanitation District Property.

# ENCINITAS TRAILS MASTER PLAN IMPLEMENTATION

TRAIL TRAIL LENGTH INSTALLED PHASE					REMARKS	
I KAIL #	TYPE	(IN FEET)	INSTALLED BY	rnase	KEWAKAS	
#	1111	(11,1111)	DI			
					Exact trail location to be determined during park design	
17	С	1453	City	1	Encinitas Blvd.(north & south sides) under the freeway overpass	
18	С	4044	City/ Developer	1/D	Encinitas Blvd. (north & south sides) connecting existing sidewalk segments between the freeway overpass and Manchester Ave.	
19	A	962	City/ Developer	1/D	Cornish Dr.(east side) between "D" St. and Requeza St.	
20	A/C	211	City/ Developer	1/D	East "E" St. (north side) between Cornish Dr. & existing sidewalk next to City Hall	
21	A	1694	City/ Developer	1/D	Requeza St. (south side) between Cornish Dr. & the existing sidewalk on the east side of the freeway. (Note: freeway overpass has sidewalk on the south side)	
21A	A	1317	City/ Developer	1/D	Devonshire Dr. (east side) between Melba Rd. and Requeza St. connecting to existing sidewalk segment	
22	С	1008	City/ Developer	1/D	Requeza St. (north side) between trail segment #52 and Nardo Rd. connecting existing sidewalk segments	
24	A/C	2883	City/ Developer	1/D	Santa Fe Dr.(north & south sides) between Vulcan Ave. & Devonshire Dr. / Rubenstein Ave.	
26	С	1354	City	1	Santa Fe Dr. (north & south sides) under freeway overpass	
27	С	2279	City/ Developer	1/D	Santa Fe Dr. (south side) connecting existing sidewalk segments between the freeway overpass and Lake Dr.	
28	С	3005	City/ Developer/	1/D	Santa Fe Dr. (north side) between Nardo Rd. & Bonita	

THE A TT	(DD A TT	IENIOPI	TAICELATTE	DILACE	IMPLEMENTATION DEMANDES
TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	INSTALLED BY	PHASE	REMARKS
			School Dist.		Dr. and between Lake Dr./Oceanic Dr. & Wootan Dr.
29	A	2283	City/ Developer	1/D	Santa Fe Dr. (south side) between Lake Dr. & El Camino Real
30	С	369	City/ Developer	1/D	Regal Rd. (west side) between Requeza St. & Santa Fe Dr. connecting existing sidewalk segments
34	A	1740	City/ Developer	1/D	MacKinnon (west side) between existing sidewalk at freeway overpass to end of the street at Liverpool Dr.
35	A	4175	City/Developer	1/D	Summit Ave. (west side) between Santa Fe Dr. & Montgomery Ave.
38	В	263	City	1	Norfolk Dr. between Manchester Ave. & Newcastle Ave. Using street ROW which is not being utilized
40	В	2795	City/ County of San Diego	1	Manchester Ave. (south side) connecting the existing trails at the visitor's center and the trails under the freeway overpass
42	A	6986	City/ Developer	1/D	Piraeus St. (east side) between La Costa Ave. & Leucadia Blvd.
42A	A	341	City/ Developer	1/D	Olympus Street (north side) between Piraeus St. & Arbor Ct.
43	В	4155	City/ Developer	1/D	Saxony Rd. (east side)between La Costa Ave. & Quail Hollow Dr.
45	В	1135	City	1	West of Bonnie Bluff Ct. within open space easement connecting Blue Heron Drive & Bella Vista Drive

# ENCINITAS TRAILS MASTER PLAN IMPLEMENTATION

IMPLEMENT DISTRICT DI						
TRAIL #	TRAIL TYPE	(IN FEET)	INSTALLED BY	PHASE	REMARKS	
47	A	982	City/ Developer	1/D	Normandy Rd. (north side) between Piraeus St. & Urania Ave.	
48	В	515	City/ Developer	1/D	North end of Sidonia St. connecting to Indian Head Canyon	
49	A	3860	City/ Developer	1/D	Saxony Rd. (east side) between Leucadia Blvd. & Encinitas Blvd.	
51	A/B	4410	City/ Developer	1/D	Quail Gardens Rd. (east & west sides) between Encinitas Blvd. And bikeways & trails within Encinitas Ranch	
53	С	1597	City	1	West Lake St. (east & west sides) between Encinitas Blvd. & Requeza St. connecting existing sidewalk segments	
57	В	1841	City	1	Via Cardiff Dr.(west side) between the freeway overpass & Birmingham Dr.	
59	С	1539	City/ Developer	1/D	Birmingham Dr. (north side) between Montgomery Ave. & the freeway connecting existing sidewalks	
60	C/A	1622	City/ Developer	1/D	Birmingham Dr. (north & south sides) between Via Cardiff Dr. & Lake Dr. connecting existing sidewalks	
61	A	1117	City/ Developer	1/D	Birmingham Dr. (south side) between Lake Dr. & Crest Dr.	
68	В	4854	City	1	Open space behind existing residences on Willowhaven Rd. & Orchard View Rd. adjacent to a drainage channel. Pathways currently exist in this location and are	

49

# ENCINITAS TRAILS MASTER PLAN IMPLEMENTATION

TRAIL	TRAIL	LENGTH	INSTALLED	PHASE	REMARKS
#	TYPE	(IN FEET)	BY	FHASE	REMAKAS
"			<i></i>		
					maintained by HOA
70	В	2050	City	1	Powerline easement, connecting to trail segment #68 and #69
72	В	5037	City	1	Powerline easement from northern boundary of Flora Vista School to Encinitas Blvd.
73	В	5619	City	1	Powerline easement from the old landfill through the Manchester Conservation Bank Area to Manchester Avenue
74	В	2271	City	1	Old landfill road
76	В	9995	City	1	Manchester Conservation Bank trails. Exact locations to be determined during planning for this area
77	В	4739	City/ Developer	1/D	Manchester Ave. (north side) from El Camino Real to Manchester Conservation Bank Area trails
78	В	2317	City/ Developer	1/D	Manchester Ave. (north side) from the Manchester Conservation Bank Area trails to existing sidewalk near the intersection of Rancho Santa Fe Rd.
79	В	5655	City/ Developer	1/D	Manchester Ave. (south/east side) connecting segment #40 at I-5 to El Camino Real
80A	С	369	City	1	Mountain Vista Dr. (south side) connecting the existing sidewalk to trail segment # 80B
80B	В	166	City	1	End of Mountain Vista Dr. connecting to 11 <sup>th</sup> Street on utility easement
81	B/A	9701	City/ Developer	1/D	Rancho Santa Fe Rd. (east and west sides) between City limits (at Carlsbad) to El Camino del Norte

TRAIL	TRAIL	LENGTH	INSTALLED	PHASE	REMARKS
#	TYPE	(IN FEET)	BY		
82	B/A	4718	City/ Developer	1/D	Rancho Santa Fe Rd. (east side) El Camino Del Norte to Encinitas Blvd.
86	В	1006	City/ Developer	1/D	Camino del Rancho (south side) between Calle Santa Catalina to the end of Camino del Rancho
87	В	668	City/ Developer	1/D	Calle Santa Catalina (east side) between Rancho Santa Fe Rd. & Camino del Rancho
87A	В	343	City	1	Connecting Rancho Santa Fe Rd. with Cole Ranch Road/ Chelsea Ln.
88	В	383	City	1	Utility easements at the rear of two residences on Regal Ridge-Crystal Ridge and on the west side of one residence on Calle Santa Cruz to connect existing trail IOD's between Camino del Rancho & Calle Santa Cruz
89	В	5002	City/ Developer	1/D	Cole Ranch Rd. (east or west side) between Calle Santa Cruz & 5 <sup>th</sup> St. The City will continue to pursue a viable trail segment alignment along Cole Ranch Road between 7 <sup>th</sup> Street and 5 <sup>th</sup> Street to connect trail #89 with trail #82.
90	В	854	City/ Developer	1/D	Lone Jack Rd. (north side) between Rancho Santa Fe Rd. and the existing trail.
91	В	1820	City/ Developer	1/D	Lone Jack Rd. (south side) from Rancho Santa Fe Rd. to the bend
92	В	807	City	1	Lone Jack Rd. (east side) between the bend and Little Oaks Park
93	В	6553	City/ Developer	1/D	Lone Jack Rd. (west & north sides) between the bend and

TRAIL	TRAIL	LENGTH	INSTALLED	PHASE	REMARKS
#	TYPE	(IN FEET)	BY		
					Fortuna Ranch Rd.
94	B/C	3385	City/ Developer	1/D	El Camino del Norte (north side) from the existing trail adjacent to Wiro Park to Val Sereno Dr. The City will continue to pursue a viable trail segment alignment to provide public access within the Lake Val Sereno Open Space area.
95	В	1761	City/ Developer	1/D	El Camino del Norte (south side) from Rancho Santa Fe Rd. to the City limits connecting to the bridge over Escondido Creek
96	В	778	City/ Developer	1/D	Along vacated Lone Jack Rd. between the bend and El Camino del Norte on the trail IOD
106	В	756	City/ Developer	1/D	At the northerly boundary of the large open space parcel (Lot 28). Optional alignment: At rear of residences on Lone Jack Rd. connecting Little Oaks Park to existing Brookside trail.
107A	В	569	City/ Developer	1/D	Camino del Rancho (west or east side) Connecting segment #93 (Lone Jack Rd.) to the existing Brookside trail
114	В	300	City/ Developer	1/D	Lone Jack Rd. (west side) from the existing trail to Copper Crest Rd.

### **Phase II Segments:**

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	INSTALLED BY	PHASE	REMARKS
1	A/C	118	City/ Developer	2/D	Grandview St. (north side of street) between N. Coast Highway 101 & existing sidewalk
2	A/C	580	City/	2/D	W. Leucadia Blvd. between N.

TRAIL	TRAIL	LENGTH	INSTALLED	PHASE	REMARKS
#	TYPE	(IN FEET)	BY		
			<b>D</b> 1		
			Developer		Coast Highway 101 & Neptune Ave.
4	В	678	City	2	"B" St. adjacent to Cottonwood
			·		Creek between S. Coast
					Highway 101 & 3 <sup>rd</sup> St.
8A	A	2994	City/	2/D	La Costa Avenue (north side)
			Developer		between I-5 and North Coast Highway 101
13	A	3010	City/	2/D	Oceanview Ave.(east side)
			Developer	_, _	between Leucadia Blvd. &
			•		Union St utilizing road ROW
					and Caltrans ROW
14	A	622	City/	2/D	Union St. (north side) between
			Developer		Oceanview Ave. & CalTrans
23	A	3537	City/	2/D	ROW Arden Dr. (east side) between
23	A	3337	Developer	2/10	"D" St. and Santa Fe Dr.
36	В	1837	City/	2/D	From the end of MacKinnon
	_		Developer	_, _	Ave. southerly across the
			•		slope at the west of the
					apartment complex to the San
					Elijo water treatment facility
37	В	2316	City	2	complex
37	Ь	2310	City	2	San Elijo water treatment facility complex adjacent to
					the drainage channel to
					Manchester Ave.
39	В	265	City/	2	Manchester Ave.(south side)
			County of San		between the lagoon visitor's
			Diego		center entrance to the existing
	:		·		trail
54	A/C	4134	City/	2/D	Nardo Rd./MacKinnon Ave.
			Developer		(west side) between Requeza
					St. & existing sidewalk at freeway overpass
62	A	2578	City/	2/D	Lake Dr. (east side) between
			Developer	_, _	Santa Fe Dr. & existing
					sidewalk near Sea Village
63	A	5295	City/	2/D	Crest Dr. (west side) between
			Developer		Santa Fe Dr. & existing
	D	2202	C':	2	sidewalk near Este Vista Ct.
69	В	2392	City	2	Open space area to the south
					of Home Depot connecting to trail segment #70
					uan segment #/U

TRAIL	TRAIL	LENGTH	INSTALLED	PHASE	REMARKS
#	TYPE	(IN FEET)	BY	THASE	KEMAKIS
80	В	369	City	2	Connection between proposed SunVista City park and Diegueno Junior High
97	В	798	City/ Developer	2/D	At rear of residences on Windmill Ranch Rd. adjacent to Escondido Creek connecting El Camino del Norte to 9 <sup>th</sup> St.
98	В	330	City/ Developer	2/D	9 <sup>th</sup> St. (south side) from the end of the current street & trail connecting to trail segment 97
99	В	384	City/ Developer	2/D	9 <sup>th</sup> St. (south side) from Rancho Santa Fe Rd. to Cole Ranch Rd. utilizing the street ROW not used for road
100	В	302	City/ Developer	2/D	7 <sup>th</sup> St. (north side) from Rancho Santa Fe Rd. to Cole Ranch Rd.
101	В	775	City/ Developer	2/D	5 <sup>th</sup> St. (south side) from Cole Ranch Rd. to trail segment #102
103	В	1205	City/ Developer	2/D	On the drainage easement connecting trail segment #102 to the existing trail IOD adjacent to the Rhoades School
107	В	616	City/ Developer	2/D	Across open space parcel (Lot 28) connecting existing Brookside trail to existing IOD
108	В	1128	City	2	Across open space parcel (Lot 28) connecting existing IOD and existing Brookside trail.
112	В	1316	City/ Developer	2/D	Dusty Trail Rd. (north side) between Copper Crest and trail segment # 116 (the proposed extension of Lone Jack Rd.)
113	В	2748	City/ Developer	2/D	Copper Crest (west side) between Dusty Trail and Lone Jack Rd. including a spur on Wishbone Way to connect to

TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	INSTALLED BY	PHASE	REMARKS
					an existing trail

Phase III Segments:

Phase III Segments:			54		
TRAIL #	TRAIL TYPE	LENGTH (IN FEET)	INSTALLED BY	PHASE	REMARKS
31	A/C	625	City/ Developer	3/D	Rossini Canyon between Santa Fe Dr. and the rear of the shopping center adjacent to the west property line service road
33	A	1561	City/ Developer	3/D	Warwick Ave.(south side) between MacKinnon Ave. & Rossini Dr. Street is only currently installed between Somerset Ave. & Starlight Dr.
75	В	4905	Cit <b>§</b> 5	3	Loop through old landfill site. Exact location to be determined during planning for this area
110	В	322	City	3	Across open space parcel connecting existing trail to the south of the Escondido Creek to a trail in Rancho Santa Fe
119	В	2615	City/ OMWD*	3/D	OMWD land connecting the water tower and to the City of San Marcos
120	В	2337	City/ OMWD*	3/D	OMWD land connecting to the City of San Marcos & Elfin Forest

<sup>\*</sup>OMWD - Olivenhain Municipal Water District

## **Summary - Proposed Trails**

Trail Type	Phase I	Phase II	Phase III	Phase D Developer Implemented	Total
A	46,178'	22,868'	2,186'	227'	71,459'
Path	8.7 miles	4.3 miles	.4 mile	.04 mile	13.5 miles
В	97,052'	17,459'	10,179'	59,443'	184,133'
Trail	18.4 miles	3.3 miles	1.9 miles	11.2 miles	34.9 miles
С	21,140'	0	0	508'	21,648'
Sidewalk	4.0 miles			.1 mile	4.1 miles
Total	164,370	40,327	12,365	60,178	277,240
Proposed	<b>31.1 miles</b>	<b>7.6</b> miles	2.3 miles	<b>11.4 miles</b>	52.5
					miles

## **Existing Trails**

Trails within the Encinitas Ranch Specific Plan	10.5 miles
Existing in remainder of City	17 miles
San Elijo Lagoon Trails (County of San Diego)	5.8 miles
Total Existing	33.3 miles

## **IMPLEMENTATION COSTS**

Multi-purpose trail	Per Mile <sup>1</sup>
Compacted dirt trail tread <sup>2</sup> 45,000 <sup>3</sup> (with no gradient problems)	\$ 25,000 - \$
Multi-purpose trail Compacted dirt trail tread (with gradient problems)	\$ 40,000 - \$ 65,000
Signage - Trail markers (4 per mile)	\$220
Fencing <sup>4</sup>	\$ 42,240
Bridge (pre-fabricated, does not include land)	\$ 50,000 - \$ 100,000
Rest areas	\$ 5,000 - \$ 10,000
Trail Rules Sign	\$ 250
Miscellaneous Water Bars (where needed)	\$200

The trail system will comprise approximately 32.3 miles in phase one, 11.3 miles in phase two, and 2.3 miles in phase three.

<sup>&</sup>lt;sup>2</sup> Cost can vary considerably depending on subgrade work and soil stabilization. Cost figures above are based on ideal situations not requiring the use of imported soils.

Using probation crews the cost could be as low as \$7,000 - \$10,000 per mile

The estimate per mile is for continuous PVC fencing of the trail on one side. In most areas, a continuous fence will not be necessary.



# **MAINTENANCE**

### MAINTENANCE PLAN

The maintenance of the soft-surface trail segments, consistent with the trail standards, shall be the responsibility of the City's Community Services Department, while the maintenance of the hard surface path and sidewalk segments, consistent with the path and adopted City sidewalk standards, shall be the responsibility of the City's Public Works Department.

### MANAGEMENT ISSUES

### **Trails Coordinator:**

The City currently has a Parks Supervisor staff position assigned to trail activities which includes regular patrols of the trail system, a quarterly written evaluation of each trail, and oversight of contract maintenance personnel. Where corrective action is needed, contract personnel are dispatched to perform the necessary work including clearing of vegetation, weed control, repair of drainage or erosion problems, replacement of stolen, damaged, or obsolete signs and repair of damaged fencing. This is an excellent way to insure safe trail conditions and should continue as presently being performed.

### **Recreational Trail Inspection Report Form:**

The City utilizes a Recreational Trail Inspection Report form (Appendix B) to document the conditions of trail segments. This form is an excellent tool and is a critical link in the process of accident prevention. It is a practical way to prevent foreseeable accidents because it prompts employees and supervisors to systematically inspect for hazardous conditions and remedy these conditions before they exist.

### **Encroachments:**

All parties that have encroached on the designated trail should be immediately notified that removal of these obstructions is required. The encroachments pose a safety and liability risk to the City and to the encroacher, therefore their immediate correction is necessary.

### **Access Control:**

In providing for trails, the City should seek to ensure that the rights of residents and property owners, including their peace, privacy, safety, health and property, are not jeopardized by unmanaged, inappropriate, or irresponsible public use. With the use of signage, fencing, and active trail management the City can direct access to the locations designated in this Master Plan.

#### **Motorized Vehicles Control:**

Except for authorized maintenance and emergency vehicle access needs, the trail system is for non-motorized use only. Trail entry points will be designed to discourage motorized vehicle use. Trail signage, barriers, fences, and active trail management will help restrict use by motorized vehicles.

### **Trail Closures:**

Some trail sections may need to be temporarily closed due to hazardous conditions. These may occur when heavy rains cause trail washouts or when landslides block the use of the trail. Construction on or adjacent to the trail could also force the closure of the trail because of safety concerns. These conditions should be corrected as soon as possible and the trail reopened to use by the public. Any unsatisfactory condition and corrective action should be noted on the Recreational Trail Inspection form.

As soon as practical after heavy rains, the City shall inspect all creek crossings to determine if closure of a crossing is necessary and to conspicuously post the closure is warranted until the crossing is determined to be again safe.

When a trail must be closed due to construction, the City should advise the individuals performing the construction that the area must be posted prior to the closure with notice of the dates that the trail will be closed and advising of an alternate route. The signage should also indicate the expected date of trail re-opening. The City should work with the applicant to design an alternate route to ensure safety and convenience to trail users. Prior to reopening, City staff should inspect the trail to ensure that the trail is safe and ready for use.

### **Daylight Hour Trail Use:**

Evening use of the trail will be prohibited. Trail signage will indicate this restriction. The evening closure serves several purposes:

- 1. Reduces the impact of the trail on neighboring private properties by limiting hours of use, and
- 2. Allows law enforcement personnel to take corrective action against violators on the trail who may have criminal intent.

#### **Trail Brochure:**

A simple brochure should be prepared and distributed to trail users. It can be distributed through tack and feed stores, bicycle stores, trail heads, staging areas and at the City of Encinitas Community Services Department. The brochure should include a trail map designating all trails by their assigned trail number, which will also appear on trail markers. Rest areas, staging areas, police stations, fire stations and hospitals should be indicated. Points of interest such as historical structures, unique vegetation, wildlife habitats and view opportunities could also be noted. This brochure should contain a map of completed and proposed sections of the system and also should include:

- 1. Standard trail etiquette;
- 2. Emergency contact phone numbers (Police, Fire, & Sheriff); and,
- 3. Information on how the public can help to implement the remainder of the trail system (ex: donations, public involvement, volunteer groups).

### **Trail Etiquette:**

- 1. Reckless/negligent use on all trails will be prohibited. All persons shall ride or operate at a safe, controlled speed and in a responsible manner. Excessive speed and reckless/negligent operation are prohibited.
- 2. Control your horse or bicycle. Be alert and attentive.
- 3. Keep to the right of the trail.
- 4. Pick up litter when you find it, even if its not yours.
- 5. In soggy areas, try to avoid wet areas in order to diminish ruts from forming.
- 6. Remain only on designated trails. Respect closures and do not trespass on private property. Obey all directional and instructional signs.
- 7. Safety helmets are recommended for bicyclists and equestrians.
- 8. Yielding: Except as dictated by special conditions, bicyclists shall yield to both pedestrians and equestrians, and pedestrians shall yield to equestrians. Equestrians shall be aware and considerate of bicyclists and pedestrians.
- 9. Make known your approach well in advance. A friendly greeting is considerate and works well; don't startle others. Show your respect when passing others by slowing down or even stopping. Anticipate that other trail users may be around corners or in blind spots.
- 10. Never spook animals. All animals are startled by an unannounced approach, sudden movements, or loud noise. This can be dangerous for you, for others, and for the animals. Give animals extra room and time to adjust to you.
- 11. Motorized vehicles are prohibited.

### **Volunteer Management:**

In many cities, volunteer organizations not only advocate for trail implementation, but also physically maintain large portions of the trail system for the City. Groups such as this are critical to the full development of the trail system and its continued maintenance. The city should also explore "trail adoption" programs, inviting service organizations to undertake patrol and maintenance of other segments. The Encinitas Trails Coalition, with assistance from the City could also organize a "trail maintenance day" where large numbers of citizens could be called into assistance for a yearly clean up of the trail system.

### **Trail Users:**

All trails shall be designated as multi-use providing opportunities for pedestrians, bicyclists, and equestrians. No motorized vehicles except authorized trail maintenance vehicles and emergency vehicles shall be allowed on the trails. Should conflicts arise on specific trail segments in the future, the City may restrict the use on certain segments to avoid environmental degradation, conflicts with properties adjacent to the trail, or trail user conflicts.

## **MAINTENANCE COSTS**

The following figures are estimated annual & monthly maintenance expenditures per mile of trail. The trail system at completion will comprise approximately 80 miles\*.

	Cost per mile	Total Cost
Total Annual Operation & Maintenance Costs	\$ 2,600	\$ 208,000
Monthly Costs	\$ 217	\$ 17,333

<sup>\*</sup>Does not includes the San Elijo Lagoon trails

**Trail Maintenance Comparisons** 

City	Encinitas	Poway	Vista	Otay
Miles of Trails	12 miles	61 miles	15 miles	25 miles
	existing;		existing;	
	80 miles planned		72 miles planned	
Trail Type	Natural & paved	Natural	Natural & paved	Natural
Cost per mile	\$ 2,617*	\$ 2,033	\$ 2,050	\$ 2,500
Maintenance	Contract	1 staff, 1 CCC, Adopt a	CCC, Adopt a trail program for minor	
		trail program for	maintenance. Most	
		minor maintenance	maintenance	
			funded through	
			assessment district	

<sup>\*</sup>Based on FY 98-99. Includes maintenance contract, equipment costs, repairs & supplies.

Equipment & supplies \$ 11,422 Maintenance Contract \$ 19,979

Total: \$31,401

Poway & Vista CCC crews cost \$ 100/day for a 15 person crew



# **ENVIRONMENTAL**

## **ENVIRONMENTAL**

As required by the California Environmental Quality Act (CEQA), the City of Encinitas completed an Environmental Initial Assessment (EIA) for the purpose of determining whether the Recreational Trails Master Plan project might have a significant effect on the environment. It was determined from the EIA that the project could not have a significant effect on the environment and a Negative Declaration was prepared. The Negative Declaration was circulated for a 30-day public review period, which ran from December 9, 1999 to January 10, 2000. The Negative Declaration found that although the project could have a significant effect on the environment related to geological problems, water, biological resources, cultural resources, and mandatory findings of significance, there would not be a significant effect in this case because of the mitigation measures and/or impact controls incorporated into the project.

The Negative Declaration was adopted by the City Council with the adoption of the Recreational Trails Master Plan. The Negative Declaration is on file with the City of Encinitas Community Development Department, and may be referenced for the discussion of the mitigation measures and/or impact controls incorporated into the project and details of the environmental review.



# **APPENDICES**

# WORKSHOPS & COMMISSION PRESENTATIONS AGENDAS & SUMMARIES



**APPENDIX A** 

## TRAILS MASTER PLAN MAP



**APPENDIX B** 

