

Overview of Key Design Issues

<u>Issue</u>	<u>Alternative 4A</u>	<u>Alternative 5</u>
Drive Lane Widths	<p>Predominately One 10'-6" Wide Drive Lane Northbound, except as noted: ⁵</p> <p><i>Two 10' Wide Drive Lanes from A Street to Captain Kenos</i> ⁶</p> <p><i>One 11' Wide Drive Lane/Left-Turn Lane and One 10' Drive Lane (Through Traffic) from Captain Kenos to Encinitas Veterinary Clinic (just south of Marcheta Street)</i> ⁷</p> <p><i>Two 10' Wide Drive Lanes from Europa Street to just north of Leucadia Blvd.</i> ⁸</p> <p><i>Two 10' Wide Drive Lanes from Bishop's Gate (Sea Bluff) to La Costa Avenue</i> ⁹</p> <p>Two 10' Wide Drive Lanes Southbound</p>	<p>Predominately Two 10' Wide Drive Lanes Northbound, Except as noted:</p> <p><i>One 11' Wide Drive Lane/Left-Turn Lane and One 10' Drive Lane (Through Traffic) from Captain Kenos to Encinitas Veterinary Clinic (just south of Marcheta Street)</i> ⁷</p> <p>Two 10' Wide Drive Lanes Southbound</p>
Parking ¹⁰	<p>Provides Reverse Angle Parking and Parallel Parking</p> <p><i>263 Spaces Provided</i> ¹¹ <i>(+38 Spaces over Existing)</i></p>	<p>Provides Parallel Parking Only</p> <p><i>233 Parking Spaces Provided</i> ¹¹ <i>(+7 Spaces Over Existing)</i></p>

Refer to sheets 4-6 of 6 for footnotes

Alternative Design Comparison Matrix
Sheet 2 of 6



North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Overview of Key Design Issues

<u>Issue</u>	<u>Alternative 4A</u>	<u>Alternative 5</u>
Bike Lane Widths	<p>Northbound Bike Lane: Predominately 8' Wide, except as noted: 6' Wide from A Street to Encinitas Veterinary Clinic (just south of Marcheta Street) ¹²</p> <p>5' Wide From Europa Street to just north of Leucadia Blvd. ¹³</p> <p>6' Wide From Bishop's Gate (Sea Bluff) to La Costa Avenue ¹⁴</p> <p>Southbound Bike Lane: Predominately 7' Wide, except as noted: 5' Wide From Europa Street to just north of Leucadia Blvd. ¹³</p>	<p>Northbound Bike Lane: Predominately 6' Wide, except as noted: 5' Wide from Europa Street to just north of Leucadia Blvd. ¹³</p> <p>Southbound Bike Lane: Predominately 7' Wide, except as noted: 5' Wide From Europa Street to just north of Leucadia Blvd. ¹³</p>
Tree Canopy ¹⁶	<p>92% of Existing Trees will Remain</p> <p><u>Total Number of Trees = 1,111</u> 847 Proposed Trees 56 Existing Trees to be Relocated 208 Existing Trees to Remain in Place 21 Trees Proposed for Removal ¹⁶</p>	<p>90% of Existing Trees will Remain</p> <p><u>Total Number of Trees = 928</u> 672 Proposed Trees 70 Existing Trees to be Relocated 186 Existing Trees to Remain in Place 29 Trees Proposed for Removal ¹⁶</p>
Number of U-Turns ¹⁷	<p>Northbound = 19</p> <p>Southbound = 11</p>	<p>Northbound = 19</p> <p>Southbound = 11</p>
Number of Bus Stops ¹⁸	<p>Northbound = 11</p> <p>Southbound = 11</p>	<p>Northbound = 11</p> <p>Southbound = 11</p>

Refer to sheets 4-6 of 6 for footnotes

Alternative Design Comparison Matrix
Sheet 3 of 6



North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Overview of Key Design Issues Footnotes

- ¹ At the south end of the proposed project's limit of work (A Street), the northbound and southbound drive lanes meet the existing road configuration, which are two lanes in each direction. In Alternative 4A, the northbound lanes maintain the existing two lane configuration until a transition to one lane occurs approximately 385' south of Marcheta Street.
- ² In Alternative 4A, two northbound through lanes are provided from Europa Street through Leucadia Blvd. to accommodate traffic volumes at the traffic signal located at Leucadia Blvd. After Leucadia Blvd, the northbound traffic lanes merge back to the one lane configuration.
- ³ In Alternative 4A, after exiting the roundabout located at Bishop's Gate (Sea Bluff), two northbound travel lanes are provided and maintained until the end of the project at La Costa Avenue.
- ⁴ The existing speed limit within the project area on North Highway 101 is 40 MPH.
- ⁵ Per the City of Encinitas Fire Department, at no time does Alternative 4A reduce the width of the northbound road configuration under the required 20' curb-to-curb dimension. When a 10'-6" drive lane is proposed, it is accompanied by an 8' wide bike lane and a 1'-6" buffer lane (painted stripes) in order to meet the 20' curb-to-curb provision for emergency vehicles.
- ⁶ In Alternative 4A, at the south end of the proposed project's limit of work (A Street), the northbound and southbound drive lanes meet the existing road configuration, which are two lanes in each direction.
- ⁷ In both Alternatives 4a and 5, along this road segment, there is no median proposed to separate northbound and southbound traffic. This configuration is provided to accommodate left turns into the businesses on the west side of the street from the northbound lanes. In order to provide additional separation between the two inside traffic lanes in the northbound and southbound directions, these lanes are proposed with an 11' drive lane width.
- ⁸ In Alternative 4A, two northbound through lanes are provided from Europa Street through Leucadia Blvd. to accommodate traffic volumes at the traffic signal located at Leucadia Blvd. After Leucadia Blvd, the northbound traffic lanes merge back to the one lane configuration.

Alternative Design Comparison Matrix
Sheet 4 of 6



North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Overview of Key Design Issues Footnotes

- ⁹ In Alternative 4A, after exiting the roundabout located at Bishop's Gate (Sea Bluff), two northbound travel lanes are provided and maintained until the end of the project at La Costa Avenue.
- ¹⁰ The existing on-street parking spaces are not marked or painted, so the number of cars that can park along any given block will vary according to the spacing of each individual vehicle. The estimated number of existing parking spaces within the project area was calculated by dividing the length of existing curb available for parking by 23', which is the standard length of an on-street parallel parking space. Based on that approach, the estimated number of existing parking spaces is 225 spaces.
- ¹¹ The number of parking spaces proposed for each alternative design at Workshop #4 included accommodations for accessible parking spaces on each block to meet the Americans with Disabilities Act (ADA), and increased vehicular sight distances at every intersection that respond to increased design speeds (from 25MPH to 30MPH) and recommendations from the City of Encinitas Engineering Department. The inclusion of both of these items reduced the amount of proposed parking from previous alternative designs.
- ¹² In Alternative 4A, a 6' bike lane is provided where two-northbound lanes are proposed. In this case, from A Street to the point where the northbound lanes merge to become one lane that occurs just south of Marcheta Street.
- ¹³ In both Alternatives 4A and 5, the width of the northbound and southbound bike lanes is reduced to 5' from Europa Street, though the intersection at Leucadia Blvd., continuing north for approximately 300' to just south of Jasper Street. The reduced width is necessary to accommodate the number of drive lanes required at this intersection within the available right-of-way. In this section of road, the road is six lanes wide, and includes: two drive lanes in the northbound and southbound direction; a dedicated right turn lane in the northbound direction onto Leucadia Blvd. headed east; a dedicated left turn lane in the northbound direction onto Leucadia Blvd. headed west; a dedicated left turn lane in the southbound direction onto Leucadia Blvd. headed east.
- ¹⁴ In Alternative 4A, a 6' bike lane is provided where two-northbound lanes are proposed. In this case, from the roundabout at Bishop's Gate (Sea Bluff) to the north end of the project at La Costa Avenue.

Alternative Design Comparison Matrix
Sheet 5 of 6

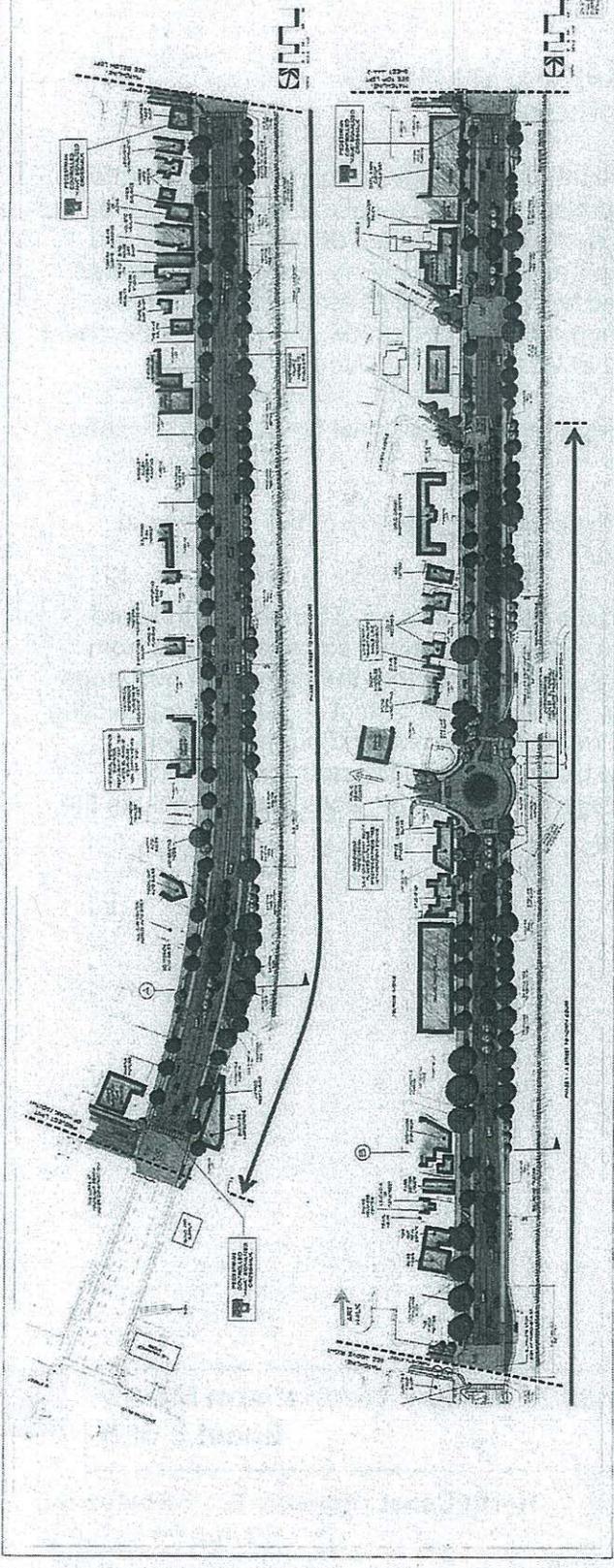


North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Overview of Key Design Issues Footnotes

- ¹⁵ In April 2008, the City contracted with Right-of-Way Engineering Services to perform a survey of all existing trees within the project area with a caliper size of 4" or greater. This information was used by the consultants for conceptual design purposes and field work. Throughout the course of the project, the inventory of existing trees has changed due to tree removals conducted by North County Transit District and the City of Encinitas. At the time of Workshop #4 in October 2009, the existing tree count was 285; down from a tree count of 301 at Workshop #3 in November 2008.
- ¹⁶ All trees proposed for removal will be evaluated by an arborist for possible relocation, prior to making the decision for removal.
- ¹⁷ The existing number of U-Turns within the project area are 18 in the northbound direction; 11 in the southbound direction.
- ¹⁸ The existing number of bus stops within the project area are 11 in the northbound direction; 11 in the southbound direction. The City received correspondence from North County Transit in September 2009, which stated that the number of bus stops is not likely to change in the near future. However, the district is currently conducting a Mobility Study to evaluate the current market conditions and current service performance of the BREEZE fixed route bus services. This study will ultimately produce a series of recommendations regarding its bus services that will include the services provided within the project area.

ALTERNATIVE #4A



Alternative 4A Summary

Road Configuration / Traffic Control

One 10.5' Wide Northbound Drive Lane
(Note: 20' min. curb-to-curb provided at all times along single NB lane)

Two 10' Wide Southbound Drive Lanes

Five Roundabouts:
El Portal
Jupiter Street
Grand View Street
Bishop's Gate (Sea Bluff)
La Costa Blvd.

One Traffic Signal:
Leucadia Blvd.

Parking Spaces

263 Parking Spaces Proposed
Mix of Parallel and Reverse Angle Parking

Bike Lanes

Width Varies:
5' (min.) to 8' (max.) Northbound
5' (min.) to 7' (max.) Southbound

Traffic Design Speed

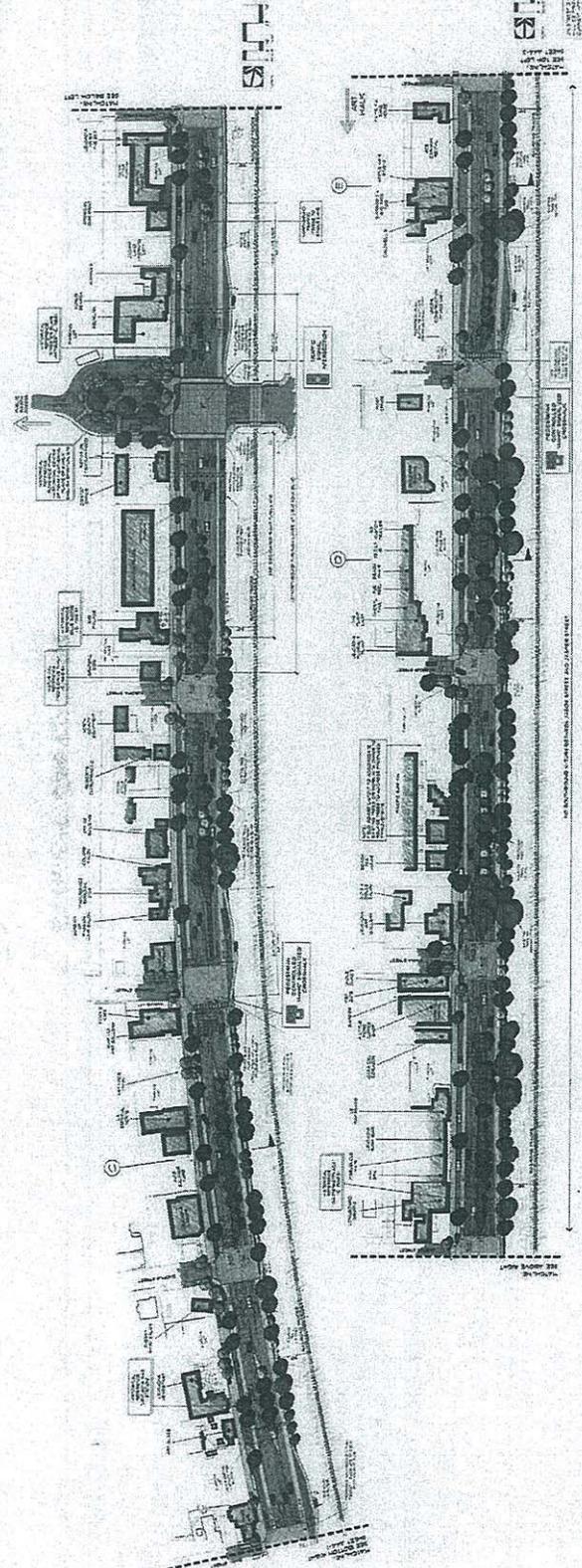
30 MPH

Tree Canopy

Alternative #4A further develops and refines Alternative 4, which was presented at Workshop #3, and continues to maintain 92% of existing trees.

Alternative #4A
Sheet 1 of 3

ALTERNATIVE #4A



Alternative 4A Summary

Road Configuration / Traffic Control

One 10.5' Wide Northbound Drive Lane
(Note: 20' min. curb-to-curb provided at all times along single NB lane)
 Two 10' Wide Southbound Drive Lanes
 Five Roundabouts:
 El Portal
 Jupiter Street
 Grand View Street
 Bishop's Gate (Sea Bluff)
 La Costa Blvd.
 One Traffic Signal:
 Leucadia Blvd.

Parking Spaces

263 Parking Spaces Proposed
 Mix of Parallel and Reverse Angle Parking

Bike Lanes

Width Varies:
 5' (min.) to 8' (max.) Northbound
 5' (min.) to 7' (max.) Southbound

Traffic Design Speed

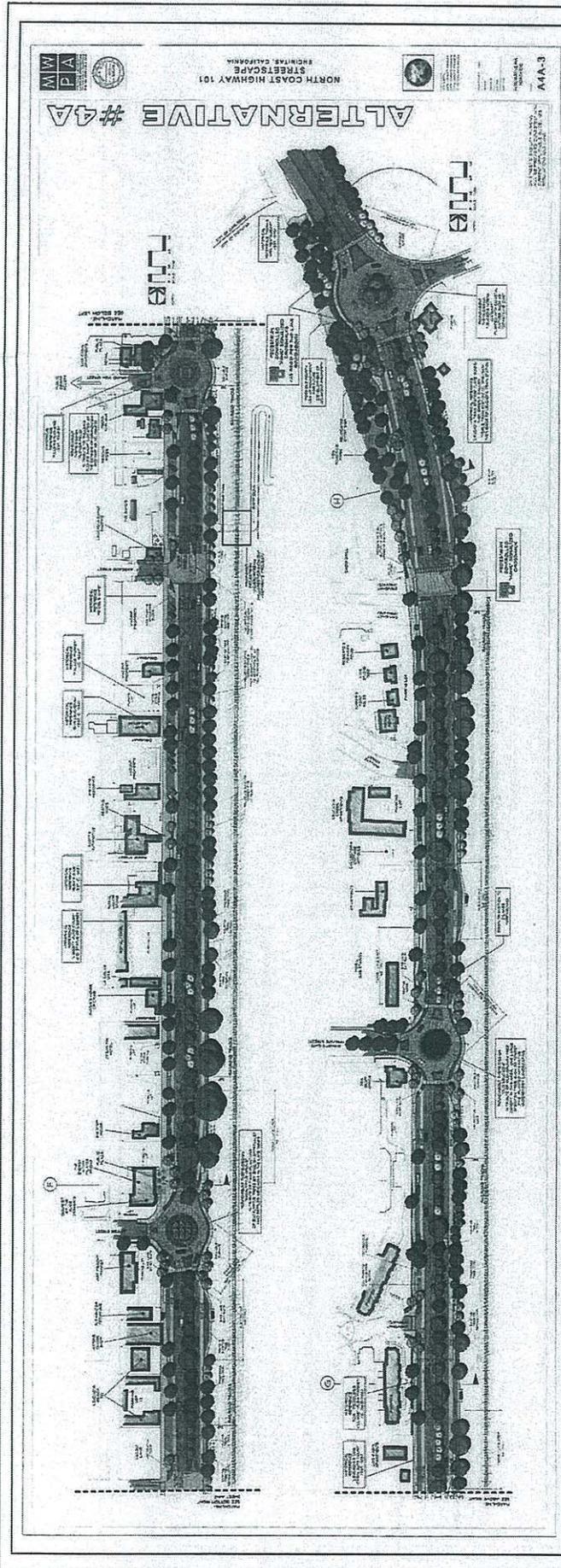
30 MPH

Tree Canopy

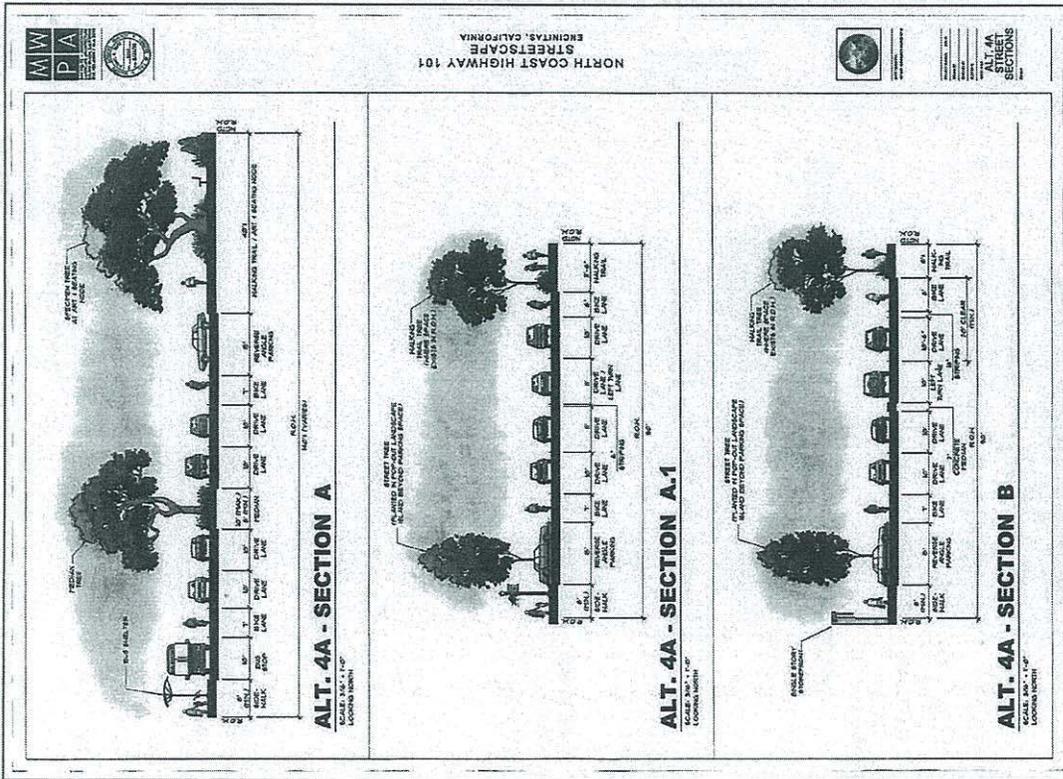
Alternative #4A further develops and refines Alternative 4, which was presented at Workshop #3, and continues to maintain 92% of existing trees.

Alternative #4A

Sheet 2 of 3

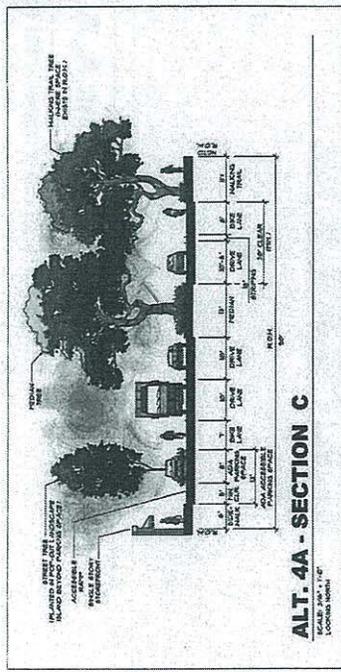


<p>Road Configuration / Traffic Control</p> <p>One 10.5' Wide Northbound Drive Lane <i>(Note: 20' min. curb-to-curb provided at all times along single NB lane)</i></p> <p>Two 10' Wide Southbound Drive Lanes</p> <p>Five Roundabouts: El Portal Jupiter Street Grand View Street Bishop's Gate (Sea Bluff) La Costa Blvd.</p> <p>One Traffic Signal: Leucadia Blvd.</p>	<p>Parking Spaces</p> <p>263 Parking Spaces Proposed Mix of Parallel and Reverse Angle Parking</p> <p>Bike Lanes</p> <p>Width Varies: 5' (min.) to 8' (max.) Northbound 5' (min.) to 7' (max.) Southbound</p> <p>Traffic Design Speed</p> <p>30 MPH</p>	<p>Tree Canopy</p> <p>Alternative #4A further develops and refines Alternative 4, which was presented at Workshop #3, and continues to maintain 92% of existing trees.</p>
<p>Alternative 4A Summary</p>		
<p>Alternative #4A Sheet 3 of 3</p>		

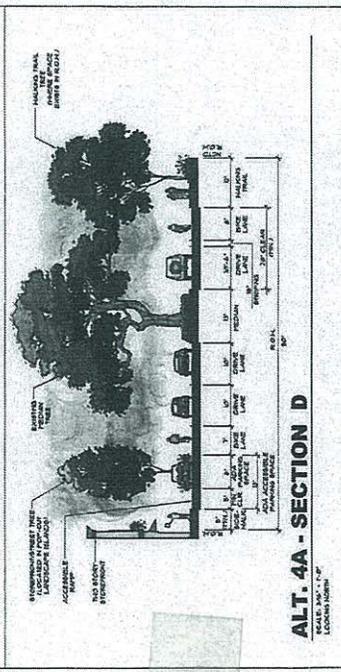


Alternative 4A Street Sections A, A.1 & B

North Coast Highway 101 Streetscape
 Workshop #4 Exhibits
 187



ALT. 4A - SECTION C
 SCALE: 1/8" = 1'-0"
 LOOKING NORTH



ALT. 4A - SECTION D
 SCALE: 1/8" = 1'-0"
 LOOKING NORTH

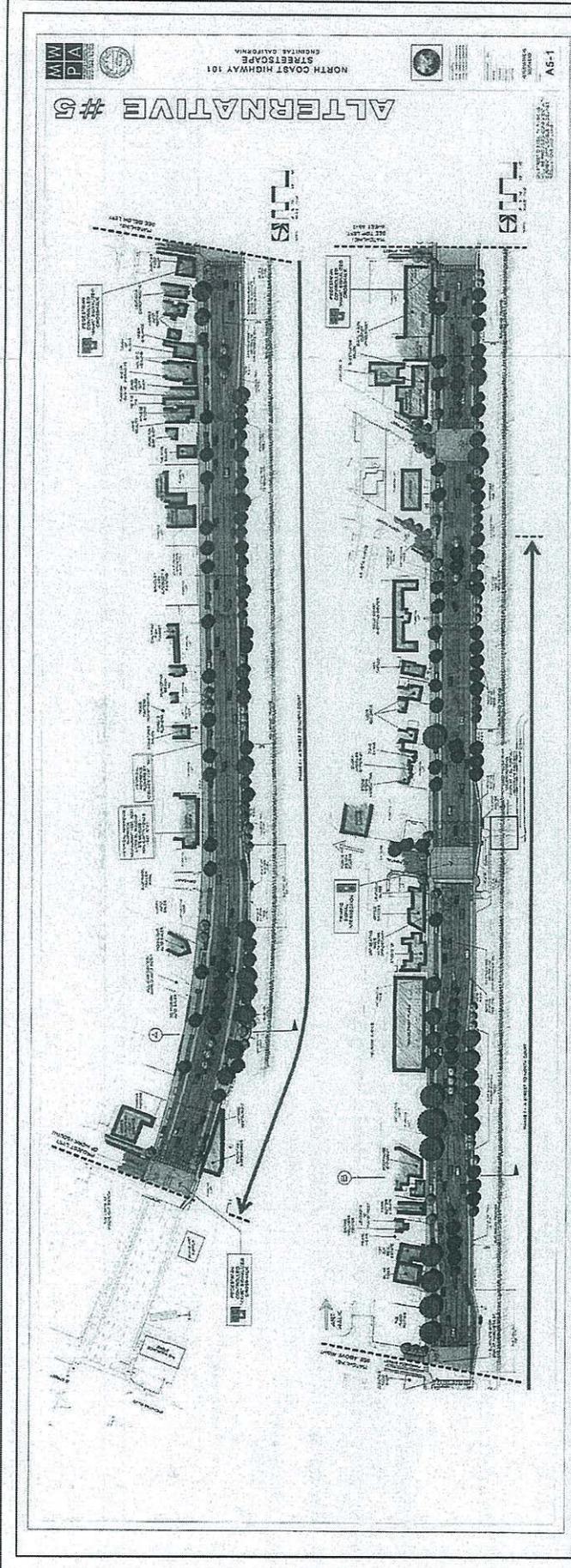
NORTH COAST HIGHWAY 101
 STREETSCAPE
 SHERMAN, CALIFORNIA



NOTE:
 FOR ALTERNATIVE 4A SECTIONS E, F, G & H
 SEE WORKSHOP #3, ALTERNATIVE 4 SECTIONS
 (NO CHARGES MADE)

Alternative 4A Street Sections C & D

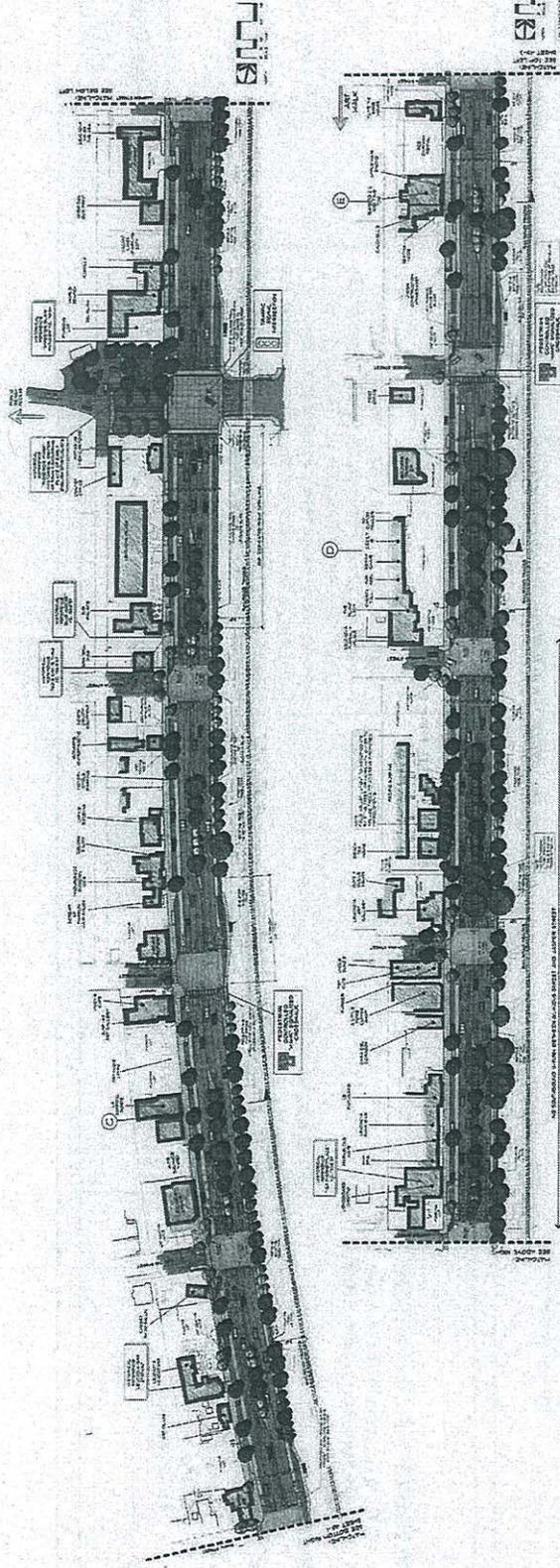
North Coast Highway 101 Streetscape
 Workshop #4 Exhibits
 188



Alternative #5
Sheet 1 of 3

<u>Alternative #5</u>		
<p>Road Configuration / Traffic Control Two 10' Wide Northbound Drive Lane Two 10' Wide Southbound Drive Lanes</p> <p>No Roundabouts:</p> <p>Four Traffic Signals: El Portal Leucadia Blvd. Grand View Street La Costa Blvd.</p>	<p>Parking Spaces 233 Parking Spaces Proposed Parallel Parking Only</p> <p>Bike Lanes Width Varies: 5' (min.) to 6' (max.) Northbound 5' (min.) to 7' (max.) Southbound</p> <p>Traffic Design Speed 35 MPH</p>	<p>Tree Canopy Alternative #5 provides improvements similar to the existing street configuration and utilizes traffic signals to control intersections. The proposed drive lanes predominantly occupy the same locations as the existing drive lanes. As such, the majority of the existing trees can be saved, except where new turn lanes or other improvements may interfere.</p> <p>Alternative #5 maintains 90% of the existing tree canopy.</p>

ALTERNATIVE #5



Alternative #5

Road Configuration / Traffic Control

Two 10' Wide Northbound Drive Lane
 Two 10' Wide Southbound Drive Lanes
 No Roundabouts
 Four Traffic Signals:
 El Portal
 Leucadia Blvd.
 Grand View Street
 La Costa Blvd.

Parking Spaces

233 Parking Spaces Proposed
 Parallel Parking Only

Bike Lanes

Width Varies:
 5' (min.) to 6' (max.) Northbound
 5' (min.) to 7' (max) Southbound

Traffic Design Speed

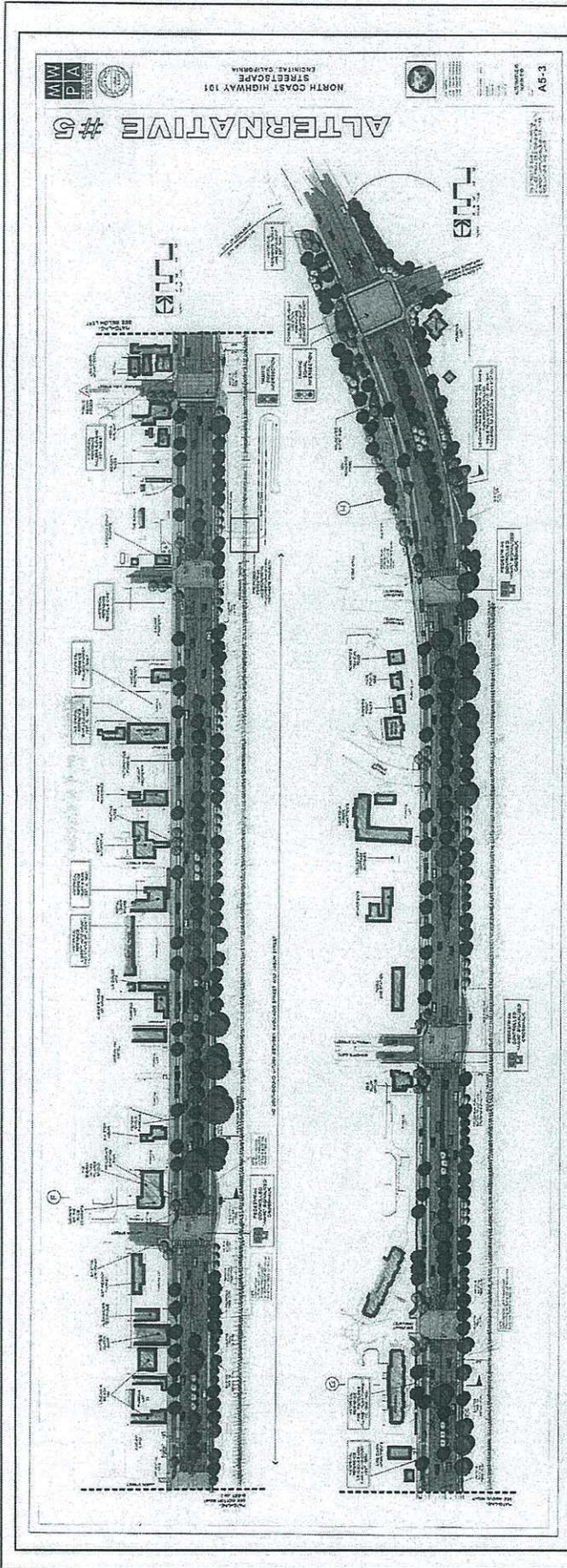
35 MPH

Tree Canopy

Alternative #5 provides improvements similar to the existing street configuration and utilizes traffic signals to control intersections. The proposed drive lanes predominantly occupy the same locations as the existing drive lanes. As such, the majority of the existing trees can be saved, except where new turn lanes or other improvements may interfere.

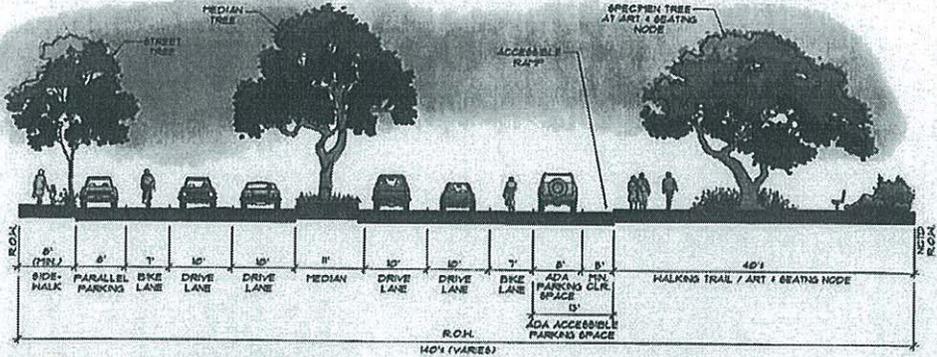
Alternative #5 maintains 90% of the existing tree canopy.

Alternative #5
 Sheet 2 of 3



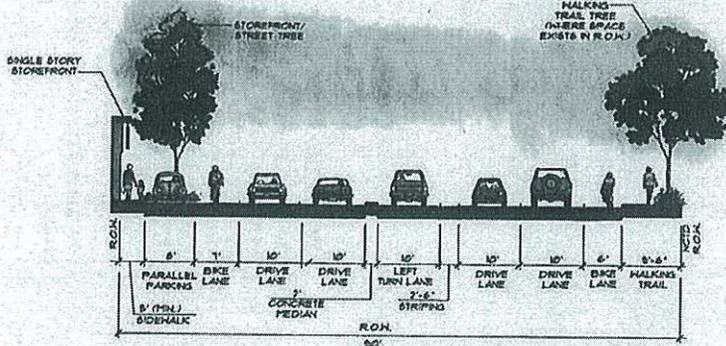
Alternative #5
Sheet 3 of 3

<p>Road Configuration / Traffic Control Two 10' Wide Northbound Drive Lane Two 10' Wide Southbound Drive Lanes</p> <p>No Roundabouts:</p> <p>Four Traffic Signals: El Portal Leucadia Blvd. Grand View Street La Costa Blvd.</p>	<p>Parking Spaces 233 Parking Spaces Proposed Parallel Parking Only</p> <p>Bike Lanes Width Varies: 5' (min.) to 6' (max.) Northbound 5' (min.) to 7' (max.) Southbound</p> <p>Traffic Design Speed 35 MPH</p>	<p>Tree Canopy Alternative #5 provides improvements similar to the existing street configuration and utilizes traffic signals to control intersections. The proposed drive lanes predominantly occupy the same locations as the existing drive lanes. As such, the majority of the existing trees can be saved, except where new turn lanes or other improvements may interfere.</p> <p>Alternative #5 maintains 90% of the existing tree canopy.</p>
<p>Alternative #5</p>		



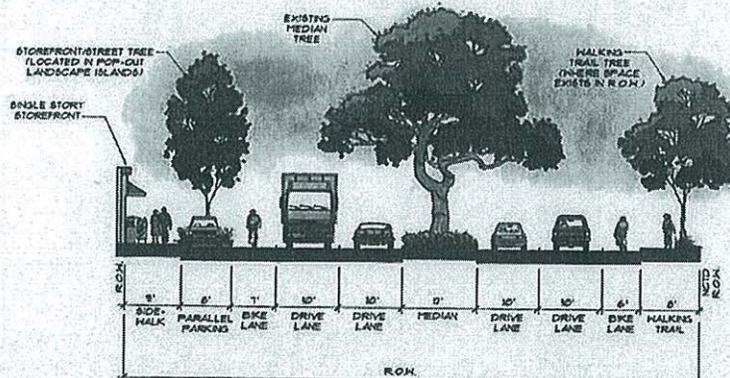
ALT. 5 - SECTION A

SCALE: 3/16" = 1'-0"
LOOKING NORTH



ALT. 5 - SECTION B

SCALE: 3/16" = 1'-0"
LOOKING NORTH



ALT. 5 - SECTION C

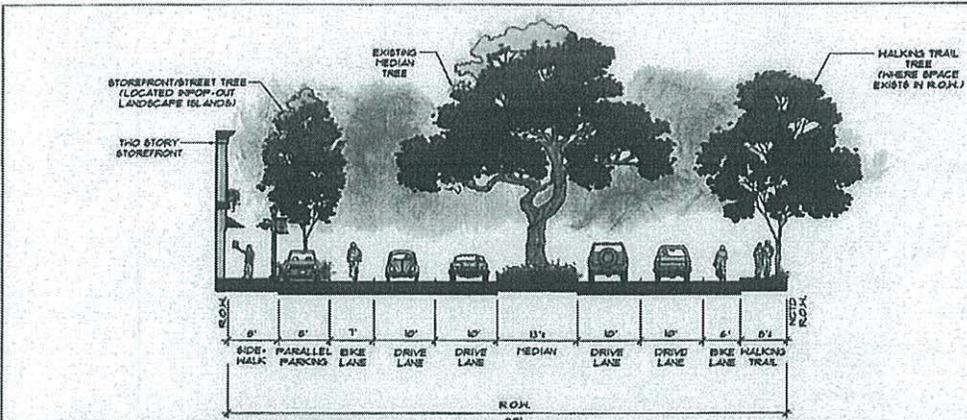
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LOOKING NORTH

NORTH COAST HIGHWAY 101
STREETSCAPE
ENCINITAS, CALIFORNIA



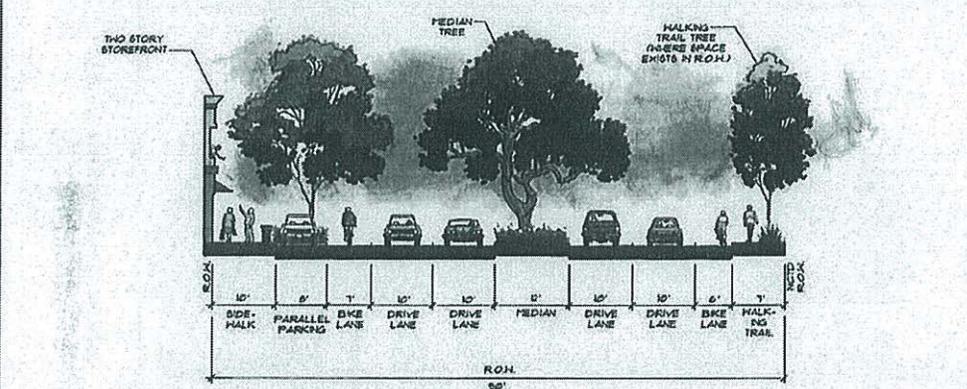
Alternative 5 Street Sections A, B & C

North Coast Highway 101 Streetscape
Workshop #4 Exhibits



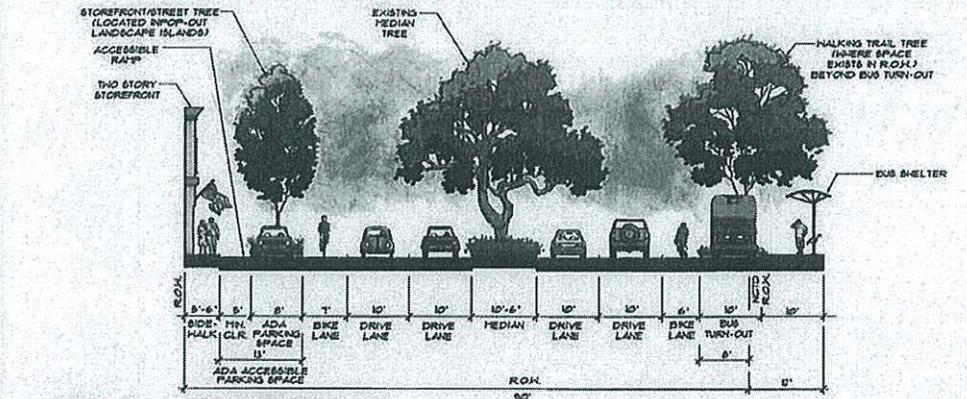
ALT. 5 - SECTION D

SCALE: 3/8" = 1'-0" LOOKING NORTH



ALT. 5 - SECTION E

SCALE: 3/8" = 1'-0" LOOKING NORTH



ALT. 5 - SECTION F

SCALE: 3/8" = 1'-0" LOOKING NORTH



NORTH COAST HIGHWAY 101
STREETSCAPE
ENCINITAS, CALIFORNIA

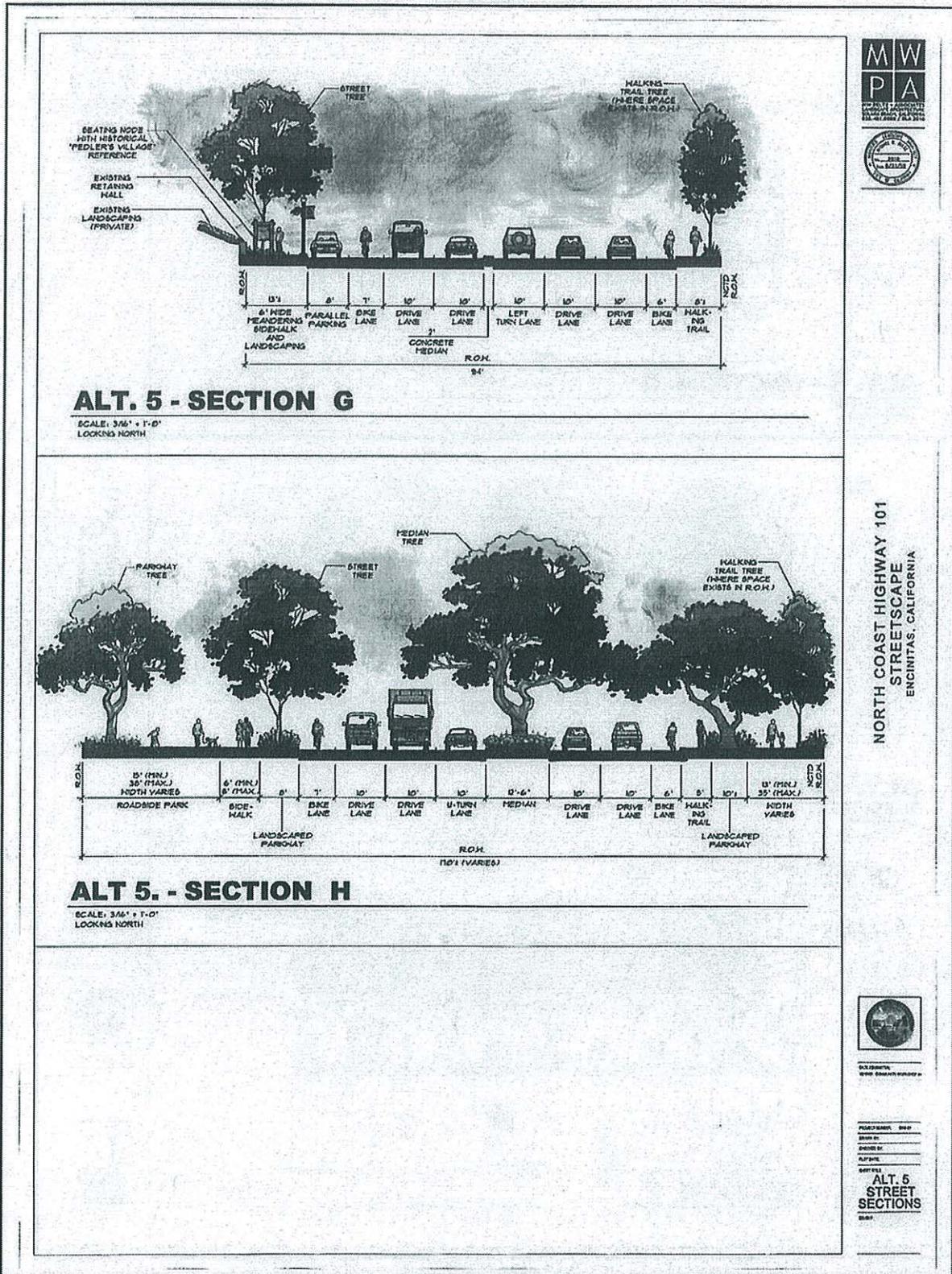


DATE: 08/11/2011

PROJECT: ALT. 5 STREET SECTIONS

Alternative 5 Street Sections D, E & F

North Coast Highway 101 Streetscape Workshop #4 Exhibits



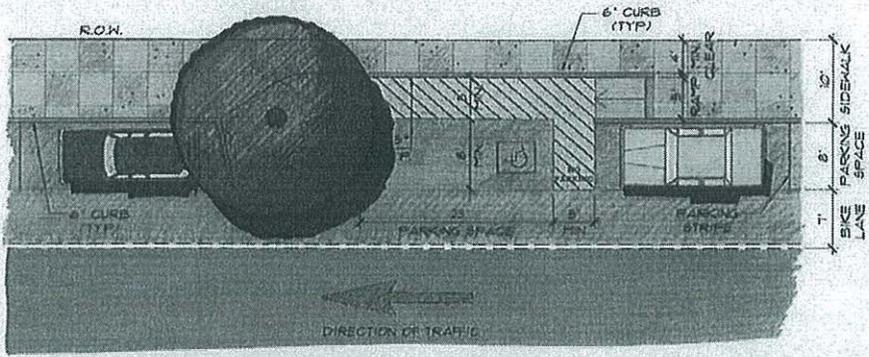
NORTH COAST HIGHWAY 101
 STREETSCAPE
 ENCINITAS, CALIFORNIA



PROJECT: **ALT. 5 STREET SECTIONS**
 DATE: **08/11/11**

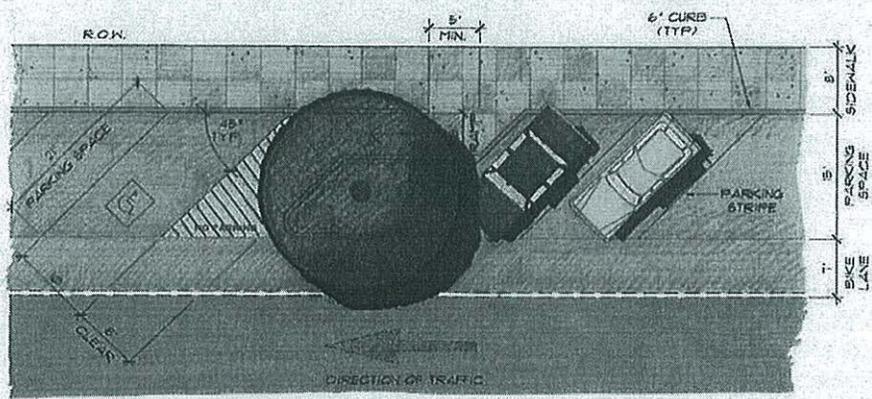
Alternative 5 Street Sections G & H

North Coast Highway 101 Streetscape Workshop #4 Exhibits



**ACCESSIBLE ON-STREET PARKING
PARALLEL**

SCALE: 1/4" = 1'-0"
PLAN VIEW



**ACCESSIBLE ON-STREET PARKING
REVERSE ANGLE**

SCALE: 1/4" = 1'-0"
PLAN VIEW

NORTH COAST HIGHWAY 101
STREETSCAPE
ENCINITAS, CALIFORNIA



PROJECT NUMBER	2007
DATE	08/01/07
PROJECT	ENCINITAS
DISTRICT	ENCINITAS
PROJECT NAME	ACCESSIBLE PARKING
DATE	08/01/07

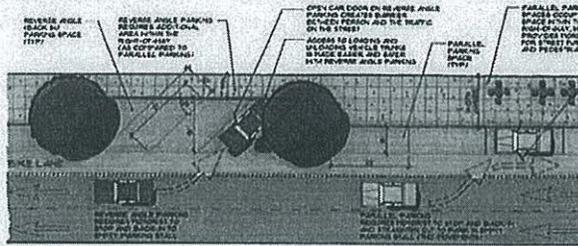
Exhibit #1

North Coast Highway 101 Streetscape
Workshop #4 Exhibits

WHAT IS REVERSE ANGLE PARKING?

ILLUSTRATED BELOW, REVERSE ANGLE PARKING IS SIMILAR TO 'TRADITIONAL' ANGLED PARKING EXCEPT YOU ENTER THE SPACE BY BACKING INTO IT, INSTEAD OF PULLING FORWARD INTO THE SPACE.

REVERSE ANGLE PARKING OPERATES UNDER THE SAME BASIC PREMISE THAT PARALLEL PARKING DOES, WHICH REQUIRES THE DRIVER TO STOP, SEE THE PARKING SPACE AND 'BACK IN' (OR REVERSE) INTO THE PARKING STALL. BECAUSE OF THE SIMILARITIES IN ACCESSING THE PARKING SPACE (BACKING IN), REVERSE ANGLE PARKING AND PARALLEL PARKING CAN BE STRATEGICALLY LOCATED ADJACENT EACH OTHER TO MAKE FULL POTENTIAL OF THE AVAILABLE SPACE IN THE RIGHT-OF-WAY.



NOTES / CONSIDERATIONS:

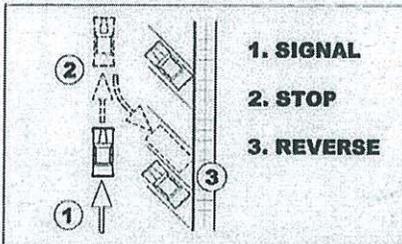
1. HIGH-COMPACTIBLE NEIGHBORING LAND USES AND IMPROVED SIGNAGE/PAVEMENT ALLOWING CONCRETE LANE DIVIDERS WOULD PERMIT TO PROVIDE AVAILABLE ON-STREET PARKING SPACES.
2. GIVEN THE SAFE LEAD-IN OR GIVE REVERSE ANGLE PARKING CONSIDERATION APPROPRIATELY AND SPACES YIELD TO PARALLEL PARKING OTHER PARALLEL PARKING SPACES.
3. WHEN LOCATED ADJACENT TO PARALLEL PARKING SPACES, REVERSE ANGLE PARKING PROVIDES ADDITIONAL SPACE FOR PEDESTRIANS IN THE RIGHT-OF-WAY.
4. OPEN DOORS ON PARALLEL PARKING CAN INTERFERE WITH BICYCLIST AND PEDESTRIAN TRAFFIC. OPEN CAR DOORS ON REVERSE ANGLE PARKING CAN PROVIDE A PROTECTIVE BARRIER BETWEEN PEOPLE AND THE BAY STREET.

HOW DOES REVERSE ANGLE PARKING WORK?

JUST LIKE PARALLEL PARKING:

1. SEE AN AVAILABLE PARKING SPACE AND SIGNAL TO HARM OTHER DRIVERS THAT YOU INTEND TO PARK.
2. PULL PAST THE PARKING SPACE AND STOP.
3. REVERSE INTO THE PARKING SPOT.

THESE THREE SIMPLE STEPS ARE ILLUSTRATED IN THE DIAGRAM BELOW:



FREQUENTLY ASKED QUESTIONS ABOUT REVERSE ANGLE PARKING:

- Q:** IS BACKING INTO STALLS DIFFICULT?
- A:** THE BACKING MANEUVER MAY BE UNFAMILIAR, BUT IS THE SAME (OR EASIER) THAN PARALLEL PARKING, A COMMON TASK ON CITY STREETS TODAY.
- Q:** IS IT SO EASY TO JUST PULL FORWARD INTO A STANDARD ANGLE STALL (HEAD-IN), DOESN'T THIS CONVENIENCE MAKE IT BETTER THAN BACKING IN?
- A:** IT BOILS DOWN TO SAFETY, AND WHEN YOU WANT TO HAVE YOUR 'CONVENIENCE' WITH 'TRADITIONAL' ANGLE (HEAD-IN) PARKING IT MAY BE EASIER TO PULL INTO THE SPACE, BUT YOU STILL HAVE TO REVERSE OUT BLINDLY, WHICH CAN BE UNSAFE. WITH REVERSE ANGLE PARKING, IT MAY BE MORE DIFFICULT TO BACK INTO THE SPACE, BUT IT IS EASIER TO SEE ONCOMING TRAFFIC AND SAFER TO EXIT THE PARKING SPACE. WITH EITHER TYPE OF PARKING, YOU HAVE TO DRIVE IN REVERSE AT SOME POINT.
- Q:** WHY SHOULD WE CONVERT TO REVERSE ANGLE PARKING?
- A:** IT IS SAFER THAT 'TRADITIONAL' ANGLED PARKING FOR BICYCLISTS USING THE ROADWAY SINCE DRIVERS CAN SEE THEM EASIER AND MUCH SOONER WHEN EXITING THEIR PARKING STALLS. ALSO, WHEN THE PARKED VEHICLE CAR DOORS ARE OPEN, A PROTECTIVE BARRIER IS PLACED BETWEEN THE PERSON ENTERING OR EXITING THE VEHICLE AND MOVING TRAFFIC ON THE ADJACENT STREET.
- Q:** WON'T THE TRANSITION TO REVERSE ANGLE PARKING BE DIFFICULT AND CONFUSING FOR MOTORIST?
- A:** THE TRANSITION WOULD BE AIDED WITH SIGNS AND OTHER PAVEMENT MARKINGS TO CLARIFY THE APPROPRIATE USE OF THESE PARKING STALLS. AT FIRST, 'SPEED' CARS MAY BE PLACED IN A FEW PARKING STALLS TO PROVIDE A VISUAL EXAMPLE OF THE CORRECT WAY TO PARK.
- Q:** WHERE ELSE IS REVERSE ANGLE PARKING USED?
- A:** SANTA BARBARA, SAN FRANCISCO, VENTURA, CHICO, BOLANA BEACH, HONOLULU, PORTLAND, SALEM, WASHINGTON D.C., TACOMA, TUCSON, SALT LAKE CITY, INDIANAPOLIS, NEW YORK, ARLINGTON, CHARLOTTE, PHILADELPHIA, SYRACUSE, SEATTLE, KNOXVILLE, AND MANY MORE.

REVERSE ANGLE PARKING - PROS & CONS / FAQ's

WHAT ARE THE POTENTIAL BENEFITS OF REVERSE ANGLE PARKING?

IMPROVED VISIBILITY AND INCREASED FIELD OF VISION

MOTORISTS ARE NOT FORCED TO BACK OUT BLINDLY FROM THEIR PARKING SPACE AS WITH 'TRADITIONAL' ANGLED PARKING.

WHEN LEAVING THE PARKING SPACE, MOTORISTS ARE ABLE TO EASILY SEE ONCOMING VEHICLES AND BICYCLES.

IMPROVED SAFETY

FOR CHILDREN
WITH REVERSE ANGLE PARKING, CAR DOORS OPEN IN A MANNER THAT DIRECTS CHILDREN TO THE BACK OF THE VEHICLE, USHERING THEM TOWARDS THE SIDEWALK RATHER THAN THE STREET.

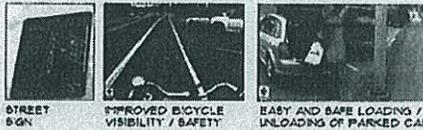
FOR CYCLISTS
AS VEHICLES EXIT THE PARKING STALL, THEY ARE ABLE TO SEE CYCLISTS IN THE ROADWAY.

IMPROVED LOADING AND UNLOADING

TRUNKS ARE FACING THE SIDEWALK AND OPEN CAR DOORS OFFER PROTECTION FROM THE TRAFFIC ON THE ADJACENT STREET, ALLOWING FOR SAFE LOADING AND UNLOADING OF THE PARKED VEHICLE.

IMPROVED ACCESSIBLE PARKING

ACCESSIBLE PARKING SPACES CAN BE ACCESSED BY RAMPED LOCATED ADJACENT TO THE PARKING STALL AND REDUCE POTENTIAL CONFLICTS WITH PEDESTRIAN TRAFFIC FLOW ON SIDEWALKS.



WHAT ARE POTENTIAL DOWNSIDES OF REVERSE ANGLE PARKING?

VEHICLES OVERHANGING SIDEWALK

SIMILAR DRAWBACKS OCCUR WITH 'TRADITIONAL' (OR HEAD-IN) ANGLED PARKING AND CAN BE OVERCOME WITH PROPER DESIGN. PLACEMENT OF WHEELSTOPS OR LOCATION OF PARKING STALLS ONLY WHERE ADEQUATE SIDEWALK WIDTHS OCCUR.

VEHICLES BACKING INTO STREET FURNITURE

THIS CAN BE ALLEVIATED WITH PROPER DESIGN AND PLACEMENT.

VEHICLE EXHAUST OVER SIDEWALKS

WITH REVERSE ANGLE PARKING, VEHICLE EXHAUST PIPES ARE DIRECTLY FACING THE SIDEWALK AND IDLING CARS CAN BE PROBLEMATIC FOR PEDESTRIANS AND OUTDOOR DINING AREAS BY REDUCING AIR QUALITY AND INCREASING NOISE.

THIS PROBLEM CAN BE REDUCED WITH STRATEGICALLY PLACING REVERSE ANGLE STALLS AWAY FROM PUBLIC GATHERING SPACES, WITH LOCAL ORDINANCES PROHIBITING IDLING CARS AND (IN TIME) WITH REDUCED-EMISSION MOTOR VEHICLES. BUT THE PROBLEM CAN NOT BE ELIMINATED.

POTENTIAL TRAFFIC CONGESTION FROM VEHICLES STOPPING TRAFFIC TO ACCESS PARKING STALLS

AS WITH PARALLEL PARKING, BACKING INTO PARKING SPACES REQUIRES PARKING VEHICLES TO FIRST STOP IN THE TRAVEL LANE. THIS WILL CAUSE FOR SOME TRAFFIC BLOCKING (CLAMING) AND CONGESTION AT BUSY TIMES.



NORTH COAST HIGHWAY 101
STREETSCAPE
ENCINITAS, CALIFORNIA



DATE: 08/20/2014
TIME: 09:00 AM

REVERSE ANGLE PARKING

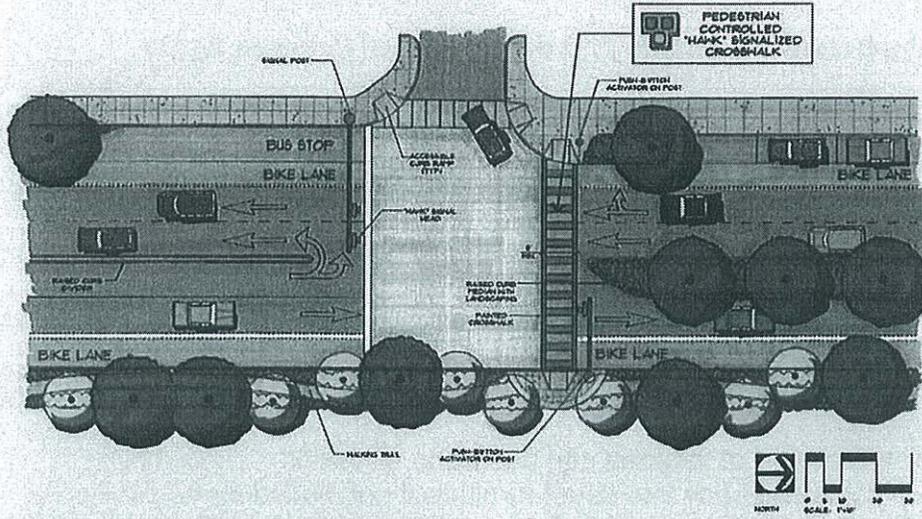
Exhibit #2

North Coast Highway 101 Streetscape
Workshop #4 Exhibits

WHAT IS A PEDESTRIAN CONTROLLED "HAWK" SIGNALIZED CROSSWALK?

ILLUSTRATED BELOW, A PEDESTRIAN CONTROLLED "HAWK" SIGNALIZED CROSSWALK TEMPORARILY STOPS TRAFFIC TO ALLOW PEDESTRIANS SAFE CROSSING, WHILE ALSO ALLOWING STOPPED VEHICLES TO PROCEED AS SOON AS THE PEDESTRIANS HAVE CROSSED. THE SIGNAL IS "DARK" UNTIL ACTIVATED BY A PEDESTRIAN WHO WISHES TO CROSS. A PUSH BUTTON DEVICE IS LOCATED ON EACH SIDE OF THE INTERSECTION TO ACTIVATE THE SIGNAL, WHILE DIFFERENT IN APPEARANCE TO THE DRIVER, TO THE PEDESTRIAN THIS SIGNAL WORKS THE SAME AS ANY BUTTON-ACTIVATED TRAFFIC SIGNAL.

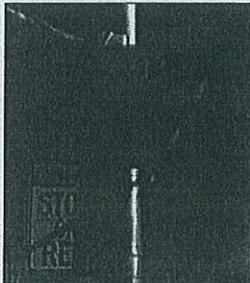
"HAWK" STANDS FOR: "HIGH INTENSITY ACTIVATED CROSSWALK"



EXAMPLES OF "HAWK" CROSSWALKS

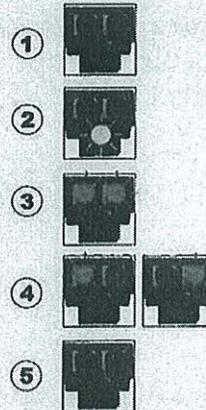


CLOSE-UP OF HAWK SIGNAL HEAD



A "HAWK" SIGNAL HEAD PROVIDES YELLOW AND RED INDICATIONS, THE SEQUENCE OF OPERATION IS DESCRIBED BELOW AND ILLUSTRATED TO THE RIGHT.

- 1 THE CONFIGURATION FOR A "HAWK" SIGNAL HEAD IS TWO RED LENSES ABOVE A YELLOW LENS IN A "MICKY MOUSE EARS" FORMAT. WHEN NOT IN USE, THE "HAWK" SIGNAL IS "DARK"
- 2 ONCE ACTIVATED, THE YELLOW LIGHTS ON THE "HAWK" SIGNAL HEAD ARE ILLUMINATED, FIRST FLASHING, THEN TURNING SOLID YELLOW ALERTING MOTORIST TO SLOW DOWN AND PREPARE TO STOP FOR A CROSSING PEDESTRIAN
- 3 AFTER A FEW SECONDS, THE YELLOW LIGHT TURNS OFF AND THE TWO RED LIGHTS TURN ON, WHICH STOP TRAFFIC AND ALLOW THE PEDESTRIAN TO ENTER THE INTERSECTION SAFELY
- 4 SECONDS LATER, THE TWO RED LIGHTS CHANGE FROM A SOLID GLOW TO ALTERNATING FLASHING RED LIGHTS. THIS SEQUENCE OF ALTERNATING RED FLASHING LIGHTS PERMITS "STOP-AND-GO" VEHICLE OPERATIONS (SIMILAR TO A STOP SIGN), WHICH ALLOWS THE MOTORIST TO PROCEED ONCE THE PEDESTRIAN CLEARED THE CROSSWALK
- 5 THE "HAWK" SIGNAL RETURNS TO A "DARK" (NO LIGHTS) SETTING AT THE CONCLUSION OF THE CYCLE UNTIL ACTIVATED AGAIN BY A PEDESTRIAN PUSHING THE BUTTON DEVICE



"HAWK" SIGNALIZED CROSSWALK



NORTH COAST HIGHWAY 101
STREETSCAPE
ENCINITAS, CALIFORNIA



ENCINITAS
CITY ENGINEER'S OFFICE

PROJECT NUMBER: 2004-001

DATE: 01/01/04

DESIGNED BY: [blank]

DRAWN BY: [blank]

CHECKED BY: [blank]

DATE: 01/01/04

"HAWK" SIGNAL

SCALE: 1"=10'

Exhibit #3

North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Frequently Asked Questions

Q: What are the potential benefits and downsides of Reverse Angle Parking?

A: Potential benefits include:

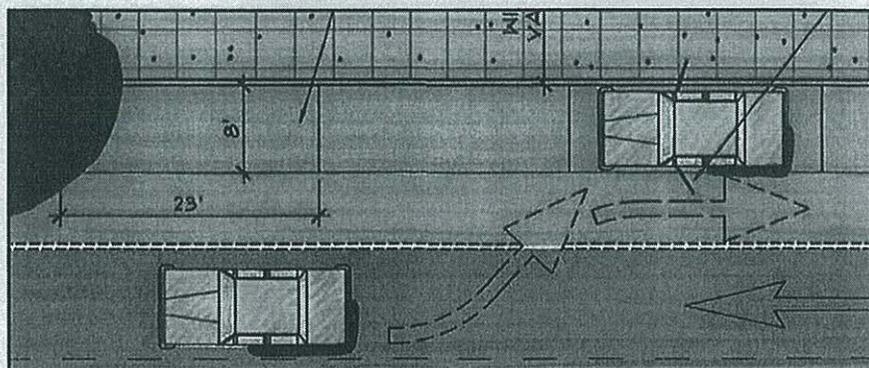
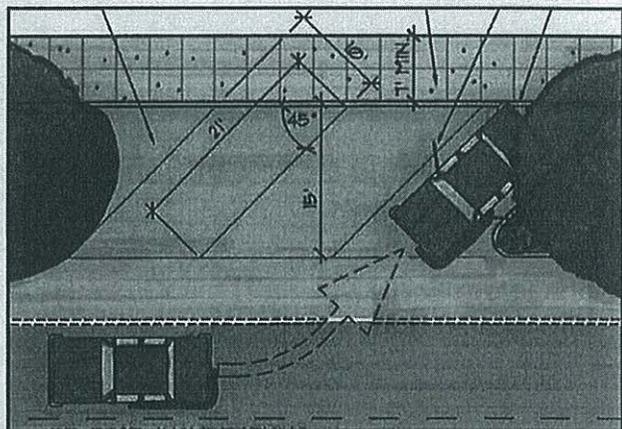
1. Improved visibility and increased field of vision when leaving parking space, which increases safety for drivers and bicyclists.
2. Improved safety because open car doors create a buffer between pedestrians and the traffic on the street.
3. Improved ADA accessible parking over parallel parking for safety and layout within the R.O.W. reasons.

Potential downsides include:

1. The rear end of vehicles can overhang sidewalk.
2. Vehicles can back into street furniture if not placed strategically.
3. Potential traffic congestion from vehicles stopping traffic to access parking stalls

Reverse Angle Parking (shown top, right) and Parallel Parking (shown bottom, right) share similarities:

Both types of parking require the driver to first pass the parking space, and operate in reverse to park.



Frequently Asked Questions
Sheet 1 of 10



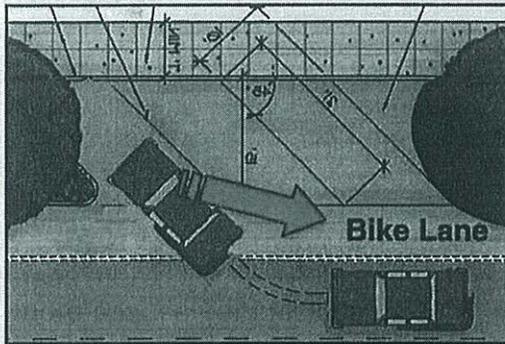
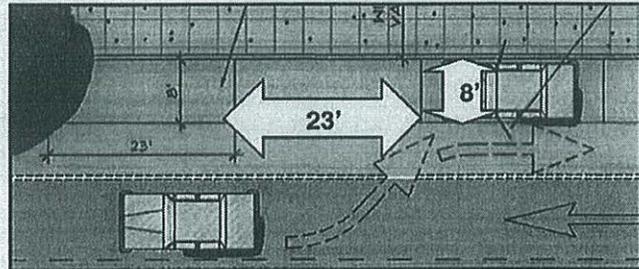
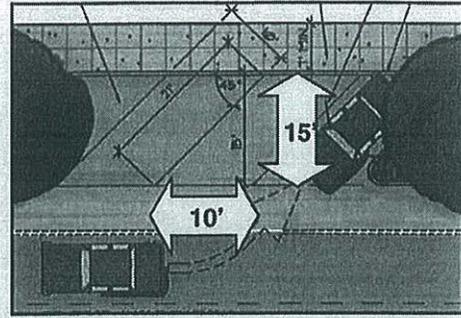
North Coast Highway 101 Streetscape
Workshop #4 Exhibits

198

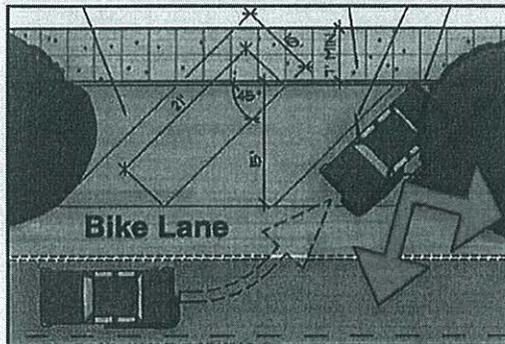
Differences between the two types of parking include the amount of space they occupy within the available public right-of-way.

Reverse Angle Parking (shown top, right) uses more R.O.W. width, but can yield more spaces per block because it requires less space along the curb.

Parallel parking (shown bottom, right) uses less R.O.W. width, but yields fewer number of spaces per block because it requires more space along the curb.



Drivers exiting Head-In parking must look behind and through vehicle to see oncoming traffic and bicyclists (as illustrated by red arrows), often encroaching into bike lane before seeing possible conflicts.



Drivers exiting Reverse Angle Parking spaces are provided improved sight visibility for oncoming traffic and bicyclists, as illustrated by red arrows.

Although Head-In and Reverse Angle parking both require the same amount of space within the R.O.W., Head-In parking does not have the same sight visibility advantages offered by Reverse Angle Parking when leaving the parking space.

This is an important factor to consider when coupling angled parking with a bike lane.

Bike lanes should not be combined with head-in parking for sight visibility and safety reasons.

Frequently Asked Questions
Sheet 2 of 10



North Coast Highway 101 Streetscape
Workshop #4 Exhibits

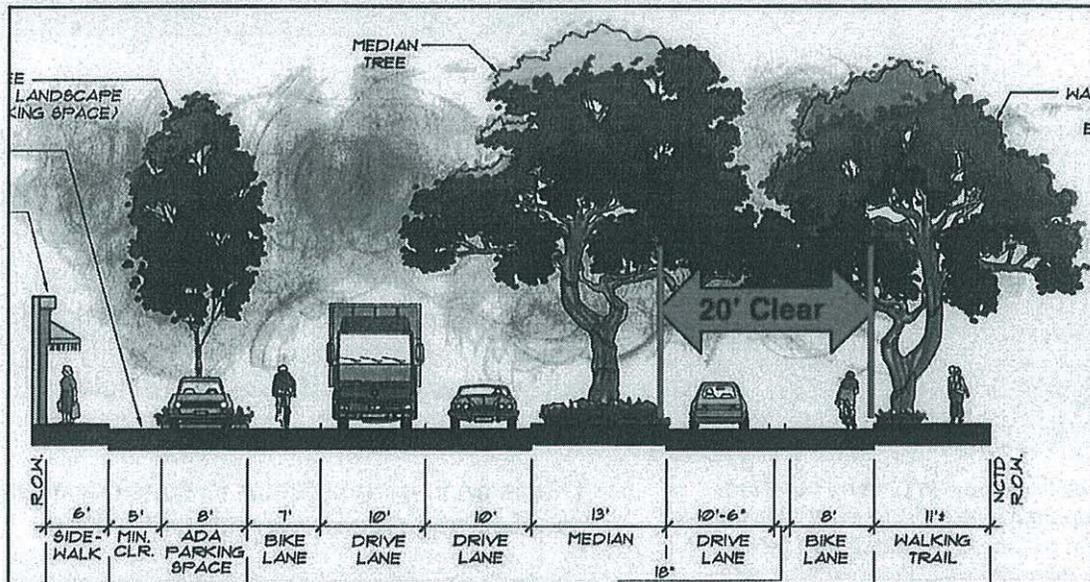
Frequently Asked Questions

Q: Alternative 4A proposes one lane northbound. How does this affect emergency vehicles responding to calls?

A: For the project, the Encinitas Fire Department will accept a 20 foot minimum distance from curb-to-curb for one-way traffic flow.

Where one-way traffic is proposed on Alternative 4A, 20 feet of drivable surface from curb-to-curb is provided for the northbound direction of traffic.

In Addition, the Encinitas Fire Department has been involved with reviewing the project and also was a participant in the Stakeholder's Meetings to ensure compliance with their strict standards for Public Safety.



Alternative #4 - Typical roadway section looking north

Frequently Asked Questions
Sheet 3 of 10



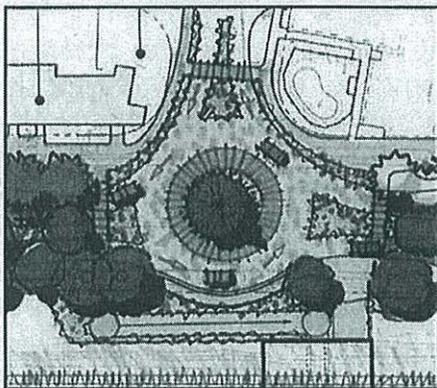
North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Frequently Asked Questions

Q: Do Roundabouts fit in the public R.O.W.? Do Roundabout impact private property?

A: Not all of the proposed roundabouts will fit inside the public right-of-way; it depends on the amount of available right-of-way and the design of the roundabout. All roundabouts will meet Federal Highway Administration (FHWA) standards, and are proposed with a minimum inscribed diameter of 100'.

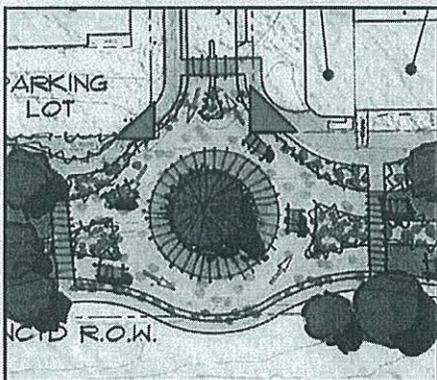
As proposed in Alternative #4A, there will be varying degrees of impact to private property as shown below:



El Portal Street

El Portal Street

The existing right-of-way and width of the existing intersection at this location will accommodate the proposed roundabout with no impacts to private property.



Jupiter Street

Jupiter Street

The proposed roundabout at Jupiter Street would have minor impacts to the adjacent private properties. However, it will not impact the existing structures or interfere with the operations of the current businesses on these properties.

The proposed roundabout would overlap the corners of the private property in the areas indicated in red (see left).

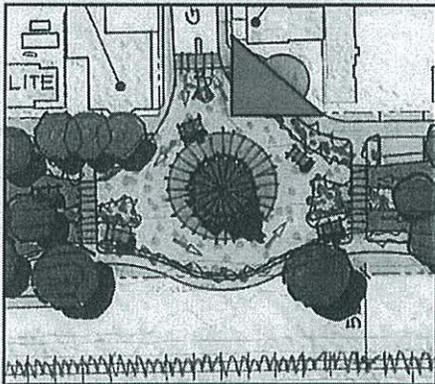
Frequently Asked Questions
Sheet 4 of 10



North Coast Highway 101 Streetscape
Workshop #4 Exhibits



Roundabout studies on the possible impacts to private properties on north and south sides of Grandview Street



Grand View Street



Possible encroachment into NCTD right-of-way, if permitted

Grand View Street

The proposed roundabout would have significant impacts to the adjacent private properties. These impacts would likely affect the existing structures and interfere with the operations of the current businesses on these properties.

In order to minimize the possible impacts of the proposed roundabout on both of the properties located north and south of the intersection, the roundabout could be placed off-center, or to one side of the intersection. Doing so would allow at least one of the properties to go unaffected. The yellow shaded areas on the graphics to the left illustrate the potential impacts to properties if the roundabout is placed off-center with Grandview Street.

As shown in Alternative #4A, the proposed roundabout is located off-center, in this case to the north, in order to only affect one of the properties (see the graphic located to the left for the impacted area indicated in red).

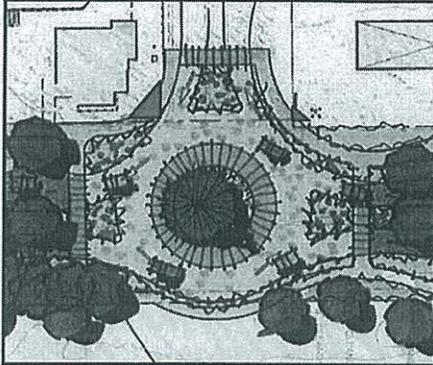
Another option to provide the proposed roundabout at Grand View Street, without creating any impacts to private property, is to shift the roundabout to the east. This would require placing a portion of the roundabout into the right-of-way owned by North County Transit District (NCTD). The amount of encroachment would be less than 15', if allowed, and could be coordinated with the pedestrian under-crossing project currently proposed at this location to minimize impacts to NCTD property.

The graphic shown (see bottom, left) illustrates in red the potential roundabout encroachment into NCTD right-of-way. Although discussions are still pending, NCTD has not authorized encroachment into the right-of-way

**Frequently Asked Questions
Sheet 5 of 10**



**North Coast Highway 101 Streetscape
Workshop #4 Exhibits**

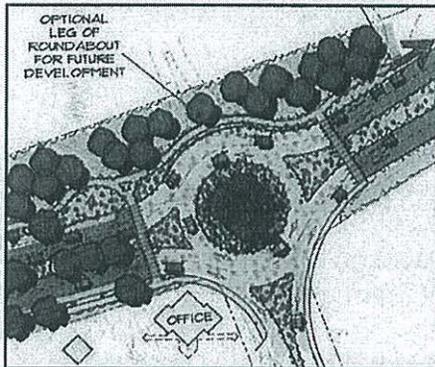


Bishops Gate (Sea Bluff)

Bishops Gate (Sea Bluff)

The proposed roundabout at Bishops Gate would have minor impacts to the adjacent private properties. However, it will not impact the existing structures or interfere with the operations of the current businesses on these properties.

The proposed roundabout would overlap the corners of the private property in the areas indicated in red (see left).



La Costa Avenue

La Costa Avenue

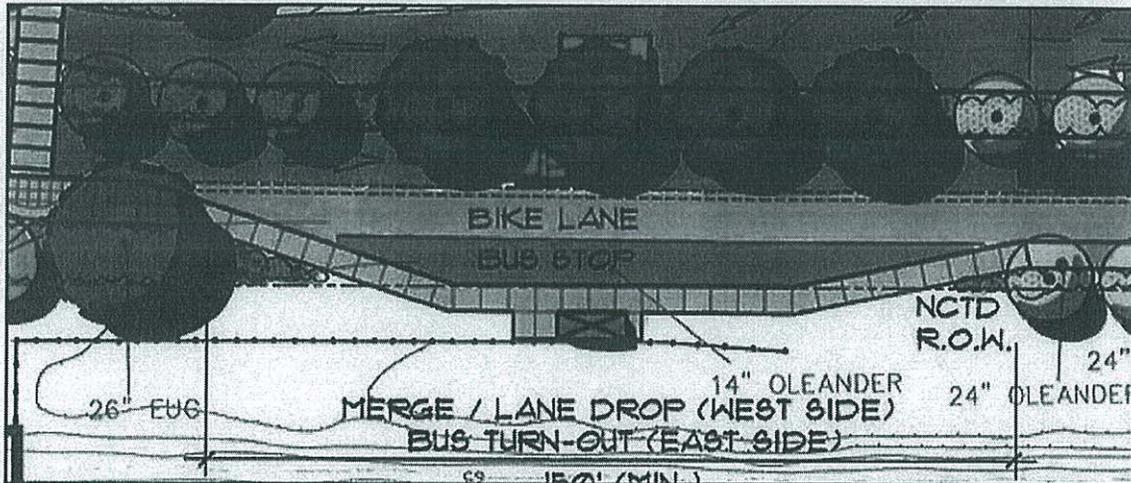
The proposed roundabout at La Costa Avenue is designed with two-lanes in each direction. The available right-of-way at this intersection is likely to accommodate the two-lane roundabout without encroachment or impacts to private properties.

However, it may be advantageous to coordinate with any potential development on the west side of Highway 101 to incorporate a fourth leg of the roundabout. Doing so may require some placement of the driveway on the adjacent property to facilitate traffic flow into this property.

Frequently Asked Questions

Q: Can we use any NCTD Right-of-Way?

A: No. Except at Bus Turn-Outs, we are prohibited from entering NCTD's property.



Example of a Bus Turn-Out, which enters the NCTD right-of-way. No other encroachments into the right-of-way are allowed.

Q: What are the specific locations for driveways and street furniture?

A: All of the existing driveways access points will be worked into the proposed design, as well as the parking lots that accompany them.

Once a Design Framework has been established we will be able to address specifics, such as site furnishings and driveway details.

Q: Will Drainage Problems along the corridor be addressed?

A: Yes. Once a Design Framework has been established we will be able to address specific engineering issues, such as drainage.

Frequently Asked Questions
Sheet 7 of 10



North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Frequently Asked Questions

Q: How much traffic will be diverted to side streets adjacent to Highway 101?

A: Alternative #4A

- 4,000 to 5,000 ADT are expected to be diverted to I-5
- Up to 2,000 ADT are expected to divert to Vulcan Avenue
 - Vulcan Avenue will continue to operate at LOS C or better
 - The Vulcan Avenue intersections will operate adequately
 - Not a significant impact
- Up to 100 ADT are expected to divert to Neptune Avenue
 - Not a significant impact

Alternative #5

- 1,000 to 2,000 ADT are expected to be diverted to I-5
- Up to 2,000 ADT are expected to divert to Vulcan Avenue
 - Continues to operate at LOS C or better
 - The Vulcan Avenue intersections will operate adequately
 - Not a significant impact
- Up to 100 ADT are expected to divert to Neptune Avenue
 - Not a significant impact

Q: What are the anticipated drive times?

A: The average existing drive time (calculated in minutes) on Highway 101 from La Costa Avenue to Encinitas Boulevard in both NB and SB directions during the AM and PM peak hours and the estimated drive time for the 2030 alternatives are as follows:

Scenario	AM Peak		PM Peak	
	Northbound	Southbound	Northbound	Southbound
Existing	4:47	5:18	5:26	4:48
No Build	8:23	6:10	10:40	5:26
Alternative #4A	7:56	6:48	7:56	6:29
Alternative #5	8:14	6:39	9:45	6:13

**Frequently Asked Questions
Sheet 8 of 10**



**North Coast Highway 101 Streetscape
Workshop #4 Exhibits**

Frequently Asked Questions

Q: How Can One Northbound Lane Handle the Traffic Volume?

A: There are many factors that contribute to the ability for one northbound traffic lane to accommodate the volume of traffic through the project area.

First, there is a lack of traffic "friction" along the northbound lanes to impede the flow of the traffic volumes. Traffic "friction" includes site specific factors such as: presence of on-street parking, number of driveways, number of intersecting streets, and high levels of pedestrian activities associated with businesses and public spaces. Since these specific activities are non-existent, or very limited, on the east side of the street, traffic flows in the northbound direction are not as impacted (or delayed) as compared to the southbound direction.

Secondly, the traffic volumes on Highway 101 for the proposed Alternative #4A will be lower than in the "No Build" alternative due to the projected traffic diversion of approximately 4,000 to 5,000 Average Daily Traffic Volumes (ADT's) onto I-5. There will also be approximately 2,000 ADT's diverted to Vulcan Avenue. The anticipated lower number of cars using the corridor contributes to the ability for one lane northbound to function adequately.

Thirdly, knowing that the intersections along the corridor will govern the operations and flow of traffic, the use of roundabouts to manage these intersections also contributes to the operational efficiency of one-lane in the northbound direction. With the use of roundabouts, traffic will be permitted to flow continuously, as opposed to the use of traffic lights or the use of stop signs. Roundabouts will also increase the efficiency for vehicles entering the corridor from side streets by decreasing the wait time to enter onto Highway 101.

Lastly, to accommodate the existing traffic signal and traffic operations at Leucadia Blvd., Alternative #4A provides two lanes of through traffic in the northbound direction from Europa Street to south of Jasper Street and dedicated left and right turn lanes at the Leucadia Blvd. intersection. These additional drive and turning lanes will help relieve possible congestion at this intersection and maintain traffic flow along the northbound direction of travel at the traffic signal.

Frequently Asked Questions
Sheet 9 of 10



North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Frequently Asked Questions

Q: What are some examples of roads with one-lane traffic that have similar traffic volumes and road conditions as this project?

A: The following one-lane road segments have similar traffic volumes as the proposed project:

1. Encinitas: Leucadia Boulevard (West of Orpheus) = 17,300 ADT
2. Encinitas: Highway 101 (South of Swami's) = 16,400 ADT
3. San Diego: Torrey Pines Road (South of Del Mar) = 20,000 ADT
4. Del Mar: Camino Del Mar (South of Via De La Valle) = 16,600 ADT
5. San Diego: La Jolla Blvd. (Bird Rock) = 22,000 ADT

In addition, two other north county coastal cities neighboring the City of Encinitas are considering modifications to their community's segments of Highway 101.

1. The City of Oceanside, located approximately 10 miles north of the Encinitas/Leucadia project area on Highway 101, is currently in the process of master planning 3 miles of the corridor with its "Coast Highway Vision and Strategic Plan" project. This plan includes many of the same traffic calming and walkability concepts explored in the City of Encinitas' North Coast Highway 101 Streetscape project, including: roundabouts, bike lanes, pedestrian sidewalk improvements, landscaping and possible reductions in the number of drive lanes.
2. The City of Solana Beach, located immediately south of Encinitas on Highway 101 (approximately 4 miles from the project area), is currently studying its 2 mile portion of the Highway 101 corridor. These plans include many of the same traffic calming and walkability concepts explored in the City of Encinitas' North Coast Highway 101 Streetscape project, including: roundabouts, bike lanes, pedestrian sidewalk improvements, landscaping and possible reductions in the number of drive lanes.

Frequently Asked Questions
Sheet 10 of 10



North Coast Highway 101 Streetscape
Workshop #4 Exhibits

Linscott Law & Greenspan

Traffic Impact Analysis
Highway 101 Streetscape



City of
Encinitas

ATTACHMENT 3

October 6th, 2009

Diane Langager
Principal Planner
City of Encinitas

Subject: North Cost Highway 101 Streetscape and Alternative Design #4

Diane,

Can you please pass on to the citizens at your next community meeting that the fire marshal has reviewed and approved the plans for the streetscape project along North Coast Highway 101. In the area where the road transitions from two lanes to one lane, the fire department can pass vehicles during emergency responses, since traffic will be able to pull into bike lane to allow emergency vehicles to pass. The approved design provides an overall 20 feet with the drive lane and bike lane combined. **This width will allow fire apparatus to pass large vehicles as well.**

In regards to the roundabouts; we understand the need to circulate traffic in a safe and efficient manner. Upon approaching a roundabout, emergency vehicles have priority during a response. It is important to note that even though fire apparatus must slow down when approaching and negotiating the roundabout, this would still hold true for a regular four way intersection, since emergency vehicles responding to calls must slow and sometimes stop when approaching any intersection. **Therefore, the roundabout will meet fire department needs and be built to specifications that allow use by all emergency vehicles.**

Thank you!

A handwritten signature in black ink, appearing to read "Robert Scott".

Robert Scott, CFI
Fire Marshal
Encinitas Fire Department



CITY OF ENCINITAS
 PLANNING & BUILDING DEPARTMENT
 Legal Notice of City Council Public Hearing
 North Coast Highway 101 Streetscape Project



Notice is hereby given that a City Council meeting will be held on **Wednesday, the 13th of January 2010 at 6:00 p.m.**, to review and discuss the plan alternatives, 4a and 5, of the North Coast Highway 101 Streetscape Project.

PLACE OF MEETING: Council Chambers; Encinitas Civic Center; 505 S. Vulcan Avenue; Encinitas, CA 92024

In early 2008, the City initiated a streetscape project to enhance the North Coast Highway 101 corridor. Community input has been heavily utilized to create design concepts for beautification, landscape, pedestrian, circulation, and parking improvements for an approximate two mile stretch from A Street to La Costa Avenue. To date, four workshops and additional public meetings and presentations have been held to receive citizen input in developing the project design. To allow for additional public input related to project alternatives, the City conducted a fourth Community Workshop at which time two plan alternatives, 4a & 5 were presented along with the results of additional traffic analysis.

The meeting is being held to receive public comment and to allow for review and discussion of the plan alternatives by the City Council. An overview of the design & community participation process, the project plan alternatives, design and traffic calming concepts and traffic analysis will be presented by the project consultants. Additionally, staff will be seeking Council direction on which plan alternative, Plan 4a or 5, the City should pursue.

Project information and the plans are available for review at the Planning and Building Department at 505 South Vulcan Avenue, Encinitas, CA 92024; 760 633-2710.

Contact: Diane Langer, Principal Planner, 760-633-2714 or dlanger@cityofencinitas.org

City e-alerts: Subscribe to City e-alerts www.cityofencinitas.org/CE/E-SubscriptionsLogin to receive e-mail notification of upcoming events for the North 101 Streetscape project.

City's Website: More detailed information is available on the City's website www.cityofencinitas.org; click on City Projects under the Government heading found on the main page

The public is encouraged to attend the City Council meeting and be active participants.

Disability Accommodations: Please notify the Planning & Building Department (760/633-2710) at least 48 hours prior to the workshop if disability accommodations are needed.

Received at Jan 13, 2010 Page 1 of 1
Item # 7

Mayor Dan Dalager, and Encinitas City Council Members;
1-13-10

Jan 13, 2010

My name is Doug Giacomazza. I've been an Encinitas Fireman for over 25 years. I've driven our Fire Trucks for over 12 years. I have absolutely no problem whatsoever navigating the roundabouts. They work much better than stop signs or signals. The majority of engineers I work with feel the same way. I do not believe they impeded response times. Along with many, I give my support to N. 101's Streetscape plan 4a.

Thank you,
Douglas Giacomazza

