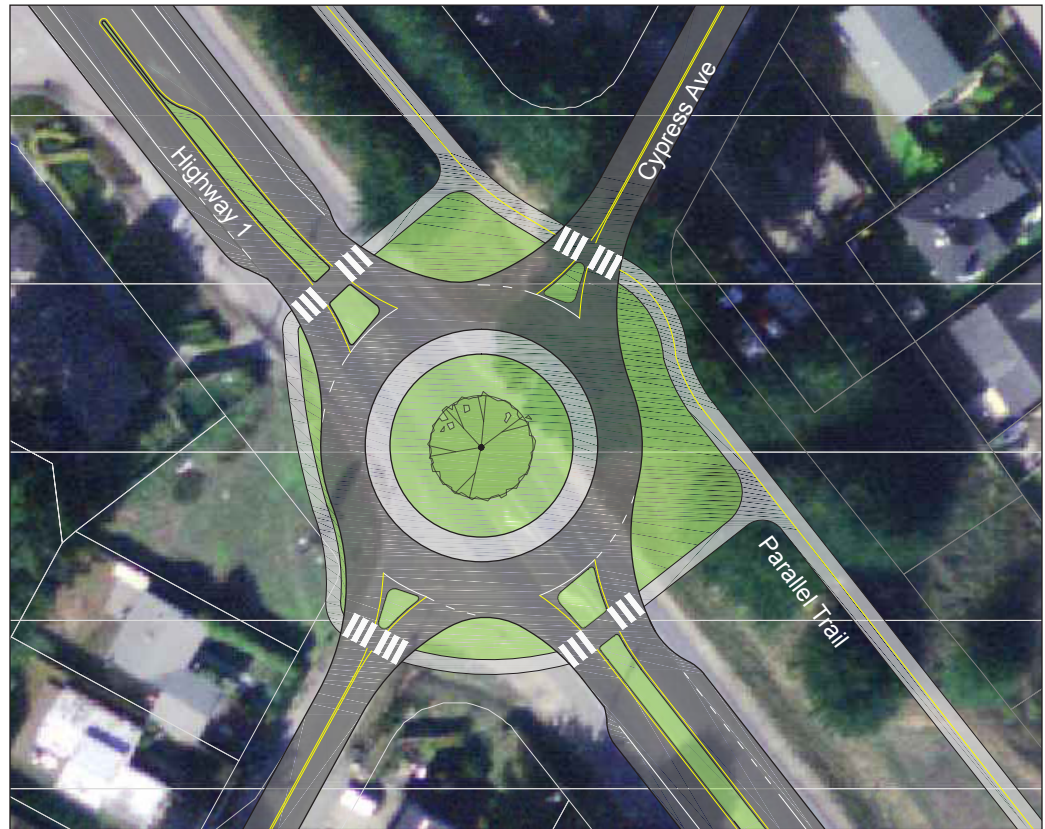


Cypress Avenue

The drawing illustrates a roundabout at the south entry to central Moss Beach at Cypress Avenue, a street that provides access to Seal Cove, Princeton and Pillar Point Harbor via Airport Road. The roundabout would facilitate efficient turning movements, especially left turns from Cypress onto the highway southbound, and from Cypress onto the highway northbound. The roundabout would also create enhanced crossing conditions for Parallel Trail users.



both locations for installation of a roundabout, sized and equipped with a mountable truck apron for large turning vehicles.

Based on traffic counts from the 2010 Environmental Impact Report prepared for the proposed Big Wave development, a traffic evaluation by the consultant team engineer using roundabout analysis methodology from the 2010 Highway Capacity Manual showed that single-lane roundabouts at Etheldore/Vallemar Street and Cypress Avenue would operate well within capacity under current loads. If the Big Wave were to be built, with added future left turn volumes from eastbound Cypress to northbound Highway 1, a conventional analysis shows the northbound direction of Highway 1 would operate near capacity at Cypress Avenue during a portion of the weekday pm peak hour. A summary of the results of the analysis at Cypress is included in the Appendix.



Example of a single lane roundabout in Keene City, New Hampshire. Photo source: New Hampshire Department of Transportation: www.nh.gov/dot/org/projectdevelopment/highwaydesign/roundabouts/index.htm

Capacity Analysis: Roundabout at Cypress Avenue, Moss Beach

MOVEMENT SUMMARY											
											Site: HW1@Cypress (PM) - HCM 2010
Highway 1 at Cypress Roundabout											
Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Highway 1											
3	L	35	3.0	0.725	15.8	LOS C	6.9	175.8	0.47	0.82	23.3
8	T	696	3.0	0.725	15.8	LOS C	6.9	175.8	0.47	0.50	25.9
18	R	11	3.0	0.725	15.8	LOS C	6.9	175.8	0.47	0.58	24.8
Approach		741	3.0	0.725	15.8	LOS C	6.9	175.8	0.47	0.52	25.7
East: Cypress											
1	L	11	3.0	0.027	7.7	LOS A	0.1	2.1	0.57	0.83	21.2
6	T	1	3.0	0.027	7.7	LOS A	0.1	2.1	0.57	0.54	20.8
16	R	1	3.0	0.027	7.7	LOS A	0.1	2.1	0.57	0.66	21.7
Approach		13	3.0	0.027	7.7	LOS A	0.1	2.1	0.57	0.79	21.2
North: Highway 1											
7	L	7	3.0	0.648	12.8	LOS B	5.3	135.0	0.33	0.88	23.4
4	T	602	3.0	0.648	12.8	LOS B	5.3	135.0	0.33	0.47	26.7
14	R	68	3.0	0.648	12.8	LOS B	5.3	135.0	0.33	0.52	25.1
Approach		677	3.0	0.648	12.8	LOS B	5.3	135.0	0.33	0.47	26.5
West: Cypress											
5	L	55	3.0	0.152	8.1	LOS A	0.5	13.1	0.55	0.88	20.6
2	T	7	3.0	0.152	8.1	LOS A	0.5	13.1	0.55	0.57	20.8
12	R	26	3.0	0.152	8.1	LOS A	0.5	13.1	0.55	0.71	22.1
Approach		88	3.0	0.152	8.1	LOS A	0.5	13.1	0.55	0.81	21.1
All Vehicles		1520	3.0	0.725	13.9	LOS B	6.9	175.8	0.41	0.52	25.7
<p>Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control. Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010). Roundabout Capacity Model: US HCM 2010. HCM Delay Model used. Geometric Delay not included.</p>											
<p>Processed: Thursday, September 15, 2011 2:12:32 PM Copyright © 2000-2011 Akcelik and Associates Pty Ltd SIDRA INTERSECTION 5.1.6.2039 www.sidrasolutions.com Project: H:\Projects - Open\S-Z\SAN MATEO COUNTY Midcoast Hwy 1 Study 10640\06. Data Analysis & Spreadsheets\Traffic Analysis\San Mateo.sip 8001255, NELSON NYGAARD CONSULTING ASSOCIATES, SINGLE</p>											



The summary above shows a single-lane roundabout operating well for all directions at Cypress Avenue in Moss Beach.