

MEMORANDUM

Date: December 14, 2006

To: Ms. Valerie Young, City of Redwood City – Planning Department

CC: Mr. Rich Haygood, City of Redwood City – Public Works Department

From: Jason Nesdahl and Franziska Holtzman

Subject: *Trip Generation Estimate for the North Main Street Precise Plan, Redwood City, California*

SJ06-909

This memorandum presents the results of a trip generation analysis conducted for the proposed North Main Street Precise Plan located on 9.5 acres near Veterans Boulevard and Brewster Avenue in Redwood City, California. The proposed project entails the Precise Plan and General Plan and Zoning Map amendments for properties located at 305, 333, 369, and 373 Main Street and 1001 Veterans Boulevard in Redwood City, California. The proposed General Plan Amendment would change the project area’s current land use designations from Commercial/Office Park to Heavy Commercial/Mixed Use.

The proposed Precise Plan is divided into four separate planning areas. Table 1 summarizes the four planning areas and the existing land uses.

TABLE 1 EXISTING USES OF PROPOSED PRECISE PLAN AREAS					
Precise Plan Area #	Parcel Number	Address	Land Use	Parcel Size (ac.)	Bldg. Sq. ft.
1	052-385-21	No address	City-owned parcel occupied by ingress/egress roadway to bridge over Redwood Creek to Mervyn's Plaza	.72	n/a
2	052-383-04	No address	City-owned parcel occupied by storm water pump station	.06	n/a
	052-383-38	305 Main St.	Vacant office building (former Niku)	2.4	55,245
3	052-383-25	333 Main St.	Vacant office building (former School District office)	2.4	40,000
	052-383-26	No address	Vacant parcel adjacent to Redwood Creek	.05	n/a
	052-383-37	353 Main St.	Mixed medical-professional office building	1.8	16,230
4	052-383-34	1001 Veterans Blvd.	Carl's Jr. restaurant (includes drive-thru)	.80	4,000
	052-383-35	373 Main St.	Straw Hat Pizza restaurant	.80	3,800
	052-383-36	369 Main St.	Medical office building (under construction)	.46	7,800
Source: Redwood City staff					

Existing Trip Generation

The amount of traffic generated by the existing uses on the project site was estimated by applying the daily and peak hour trip rate, and inbound/outbound splits published in the Institute of Transportation Engineers (ITE) *Trip Generation, 7th Edition*. The current uses on the proposed Precise Plan area consist of a mix of general office, medical office and fast-food restaurants. The vacant office buildings at 305, 333, and 369 Main Street were assumed to be fully occupied for the purpose of this analysis.

Fast food establishments typically attract pass-by trips (i.e. drivers using roadways that pass by the site will stop off on their way to/from their origin/destination). Therefore, some of the trips generated by the fast food uses would remain on the roadway system even with the removal of those establishments. A 25% pass-by trip reduction was applied to the Straw Hat Pizza restaurant. A pass-by rate of 40% was applied to the Carl's Jr. restaurant, since it has a drive-thru window and likely attracts more pass-by trips.

Based on the existing uses and corresponding trip generation rates shown in Table 2, the existing uses generate approximately 3,825 daily trips, 431 AM peak hour trips (317 inbound and 114 outbound), and 526 PM peak hour trips (138 inbound and 388 outbound) if all buildings are fully occupied at the specified uses.

Project Trip Generation

The land uses for Areas 1 and 2 of the proposed Precise Plan would not change. In areas 3 and 4, the proposed project would replace 64,030 square feet (s.f.) of office and medical office buildings and 7,800 s.f. of restaurant uses with 344 multi-family residential units, 2,500 s.f. of local-serving commercial, and 2,500 s.f. of local-serving restaurant. The amount of traffic generated by the proposed Precise Plan was estimated by applying the corresponding ITE trip generation rates. The existing trips were subtracted from the proposed project trips to obtain the net-added trips.

Similar to the existing uses, a 25% pass-by trip reductions was applied to the proposed restaurant uses in the Main Street Precise Plan.

As shown in Table 2, the proposed Precise Plan will generate approximately 3,226 daily trips, 301 AM peak-hour trips (143 inbound and 158 outbound trips), and 357 PM peak-hour trips (165 inbound and 192 outbound). This results in a net decrease of 599 daily trips, a net decrease of 130 AM peak-hour trips, and a net decrease of 169 PM peak-hour trips as compared to the existing uses.

To present a more conservative project trip generation estimate, no mixed-used reductions were applied to either the existing or proposed uses. Applying a mixed-use reduction factor would reduce the proposed project's trip estimates and therefore result in fewer net new trips projected for the proposed Precise Plan

Conclusions

The proposed Precise Plan would generate a net decrease of 599 daily trips, a net decrease of 130 AM peak-hour trips, and a net decrease of 169 PM peak-hour trips over the existing land uses on the 9.5 acre project site.

Table 2: Trip Generation Estimates for the Main Street Development (Net Project Trips by Precise Plan Area)															
Parcel Number	Land Use	ITE		Trip Generation Rates			Trip Generation Estimates								
							AM Peak Hour			PM Peak Hour					
							Daily	Inbound	Outbound	Total	Inbound	Outbound	Total		
Precise Plan Area 1															
<u>Existing Uses</u>															
052-385-21	City-owned parcel occupied by ingress/egress roadway to bridge over Redwood Creek to Mervyn's Plaza			0.72	acres	N/A	N/A	N/A	0	0	0	0	0	0	
<u>Proposed Uses</u>															
	City-owned parcel occupied by ingress/egress roadway to bridge over Redwood Creek to Mervyn's Plaza			0.72	acres	N/A	N/A	N/A	0	0	0	0	0	0	
Net Project Trips for Precise Plan Area 1:									0	0	0	0	0	0	
Precise Plan Area 2															
<u>Existing Uses</u>															
052-383-04	City-owned parcel occupied by stormwater pump station			0.60	acres	N/A	N/A	N/A	0	0	0	0	0	0	
052-383-38	Vacant office building	General Office Building	710	55,245	s.f.	15.30	2.12	2.55	845	103	14	117	24	117	
<i>Total Trips for Existing Uses in Precise Plan Area 2:</i>									845	103	14	117	24	117	
<u>Proposed Uses</u>															
052-383-04	City-owned parcel occupied by stormwater pump station			0.60	acres	N/A	N/A	N/A	0	0	0	0	0	0	
052-383-38	Office Building	General Office Building	710	55,245	s.f.	15.30	2.12	2.55	845	103	14	117	24	117	
<i>Total Trips for Proposed Uses in Precise Plan Area 2:</i>									845	103	14	117	24	117	
Net Project Trips for Precise Plan Area 2:									0	0	0	0	0	0	
Precise Plan Area 3															
<u>Existing Uses</u>															
052-383-25	Vacant Office building (former School District office)	General Office Building	710	40,000	s.f.	16.48	2.25	3.10	659	79	11	90	21	103	
052-383-26	Vacant parcel			0.50	acres	N/A	N/A	N/A	0	0	0	0	0	0	
052-383-37	Mixed medical-professional office building	MOB	720	8,115	s.f.	36.13	2.48	3.70	293	16	4	20	8	22	
		General Office Building	710	8,115	s.f.	23.78	3.08	10.84	193	22	3	25	15	73	
<i>Total Trips for Existing Uses in Precise Plan Area 3:</i>									1,145	117	18	135	44	198	
<u>Proposed Uses</u>															
052-383-25	Multi-family residential at density of 44 du/acres (total acres 4.2)	Townhomes/Condos	230	184	d.u.	5.86	0.46	0.54	1,078	14	70	84	66	33	
052-383-26	Vacant parcel			0.50	acres	N/A	N/A	N/A	0	0	0	0	0	0	
<i>Total Trips for Proposed Uses in Precise Plan Area 3:</i>									1,078	14	70	84	66	33	
Net Project Trips for Precise Plan Area 3:									-67	-103	52	-51	22	-165	
Precise Plan Area 4															
<u>Existing Uses</u>															
052-383-34	Carl's Jr. restaurant (incl. drive-thru)	Fast Food w/ drive thru	934	4,000	s.f.	496.12	53.11	34.64	1,984	108	104	212	72	67	
									Passby Trip Reduction (40%):	-794	-43	-42	-85	-29	-27
									Net Fast Food with drive thru trips:	1,190	65	62	127	43	40
052-383-35	Straw Hat Pizza restaurant	High turn-over sitdown restaurant	932	3,800	s.f.	127.15	11.52	10.92	483	23	21	44	25	16	
									Passby Trip Reduction (25%):	-121	-6	-5	-11	-6	-4
									Net High turn-over sitdown restaurant trips:	362	17	16	33	19	12
052-383-36	Medical office building (under construction)	MOB	720	7,800	s.f.	36.13	2.48	3.72	282	15	4	19	8	21	
<i>Total Trips for Existing Uses in Precise Plan Area 4:</i>									1,835	97	82	179	70	73	
<u>Proposed Uses</u>															
052-383-34	Multi-family residential at density of 80 du/acres (total acres 2.0)	Townhomes/Condos	230	160	d.u.	5.86	0.46	0.54	957	13	62	75	59	29	
052-383-36	Local-serving restaurant	High turn-over sitdown restaurant	932	2,500	s.f.	127.15	11.52	10.92	318	15	14	29	16	11	
									Passby Trip Reduction (25%):	-80	-4	-4	-7	-4	-3
									Net High turn-over sitdown restaurant trips:	239	11	11	22	12	8
052-383-36	Local-serving commercial	Shopping Center	820	2,500	s.f.	42.94	1.03	3.75	107	2	1	3	4	5	
<i>Total Trips for Proposed Uses in Precise Plan Area 4:</i>									1,303	26	74	100	75	42	
Net Project Trips for Precise Plan Area 4:									-532	-71	-9	-79	5	-31	
Gross Existing Trip Generation:									3,825	317	114	431	138	388	
Gross Proposed Trips:									3,226	143	158	301	165	192	
Net New Trips (Proposed - Existing):									-599	-174	43	-130	27	-196	

Notes: Trip generation estimates based on rates and equations presented in Trip Generation, 7th Edition (Institute of Transportation Engineers (ITE), 2003)

