

Table I. Distance to CNEL Contour Lines, Existing, BRG Grantville

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.**	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane CL	Distance to Traffic CNEL Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
FRIARS ROAD												
1-15 NB Ramps to Rancho Mission Rd.	6	50	ABOVE	1.84%	0.74%	59,881	75.0	235	100	78	50	---
Rancho Mission Rd. to Santo Rd.	6	50	ABOVE	1.84%	0.74%	46,477	74.0	170	95	74	---	---
FAIRMOUNT AVENUE												
1-8 EB Off Ramp to Camino Del Rio N.	6	50	ABOVE	1.84%	0.74%	48,581	74.0	170	95	74	---	---
MISSION GORGE ROAD												
Mission Gorge Pl. to Twain Ave.	4	30	AT	1.84%	0.74%	26,268	67.0	183	75	---	---	---
Twain Ave. to Vandever Ave.	4	30	AT	1.84%	0.74%	23,041	66.5	170	69	---	---	---
Priam Rd. to Zion Ave.	6	45	AT	1.84%	0.74%	42,915	72.5	428	300	83	---	---
West of Princess View Dr.	6	45	AT	1.84%	0.74%	23,717	70.0	300	150	50	---	---
West of Jackson Dr.	6	55	ABOVE	1.84%	0.74%	18,703	71.0	110	82	57	---	---
WARENG ROAD												
Zion Ave. to Orcutt Ave.	4	35	AT	1.84%	0.74%	16,771	66.5	170	69	---	---	---
South of Orcutt Ave.	4	35	AT	1.84%	0.74%	18,705	66.5	170	69	---	---	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

** 'AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

Table 3. Distance to CNEL Contour Lines, Horizon Year 2030 With Project, BRG Grantville

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.**	% Trucks		Avg. Daily Traffic 2030 + Proj.	CNEL @ 50' From Near Lane C/L 2030 + Proj.	Distance to Traffic CNEL Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
FRIARS ROAD												
I-15 NB Ramps to Rancho Mission Rd.	6	50	ABOVE	1.84%	0.74%	77,800	76.5	335	115	84	61	---
Rancho Mission Rd. to Santo Rd.	6	50	ABOVE	1.84%	0.74%	64,400	75.5	268	105	80	54	---
FAIRMOUNT AVENUE												
I-8 EB Off Ramp to Camino Del Rio N.	6	50	ABOVE	1.84%	0.74%	76,600	76.5	335	115	84	61	---
MISSION GORGE ROAD												
Mission Gorge Pl. to Twain Ave.	4	30	AT	1.84%	0.74%	54,300	70.5	320	143	56	---	---
Twain Ave. to Vandever Ave.	4	30	AT	1.84%	0.74%	51,000	70.0	300	130	50	---	---
Friars Rd. to Zion Ave.	6	45	AT	1.84%	0.74%	58,700	74.0	520	255	110	---	---
West of Princess View Dr.	6	45	AT	1.84%	0.74%	39,500	72.0	395	185	75	---	---
West of Jackson Dr.	6	55	ABOVE	1.84%	0.74%	34,500	73.5	155	93	72	---	---
WARING ROAD												
Zion Ave. to Orcutt Ave.	4	35	AT	1.84%	0.74%	18,800	66.5	170	69	---	---	---
South of Orcutt Ave.	4	35	AT	1.84%	0.74%	20,700	67.0	185	75	---	---	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

** 'AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

Table 4. Distance to CNEL Contour Lines, Alternative 2030, BRG Grantville

General Plan Area Opp Map

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.**	% Trucks		Avg. Daily Traffic Alt. 2030	CNEL @ 50' From Near Lane C/L Alt. 2030	Distance to Traffic CNEL Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
FRIARS ROAD												
I-15 NB Ramps to Rancho Mission Rd.	6	50	ABOVE	1.84%	0.74%	79,008	76.5	335	115	84	61	---
Rancho Mission Rd. to Santo Rd.	6	50	ABOVE	1.84%	0.74%	65,608	75.5	268	105	80	54	---
FAIRMOUNT AVENUE												
I-8 EB Off Ramp to Camino Del Rio N.	6	50	ABOVE	1.84%	0.74%	88,195	77.0	370	120	86	64	---
MISSION GORGE ROAD												
Mission Gorge Pl. to Twain Ave.	4	30	AT	1.84%	0.74%	65,895	71.0	340	155	62	---	---
Twain Ave. to Vandever Ave.	4	30	AT	1.84%	0.74%	62,595	71.0	340	155	62	---	---
Friars Rd. to Zion Ave.	6	45	AT	1.84%	0.74%	60,391	74.0	520	255	110	---	---
West of Princess View Dr.	6	45	AT	1.84%	0.74%	41,191	72.5	428	200	83	---	---
West of Jackson Dr.	6	55	ABOVE	1.84%	0.74%	36,191	74.0	170	95	74	---	---
WARING ROAD												
Zion Ave. to Orcutt Ave.	4	35	AT	1.84%	0.74%	17,999	66.5	170	69	---	---	---
South of Orcutt Ave.	4	35	AT	1.84%	0.74%	19,899	67.0	185	75	---	---	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

** 'AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

TABLE 4.2-1
Existing Daily Roadway Segment Conditions

Roadway Segment	Lanes/ Classification	LOS E Capacity	Average Daily Traffic (ADT)	Volume to Capacity Ratio	Level of Service
Friars Road					
I-15 NB Ramps to Rancho Mission Road	6 Lane Prime	60,000	59,881	1.00	E
Rancho Mission Road to Santo Road	6 Lane Prime	60,000	46,477	0.78	C
Fairmount Avenue					
I-8 EB Off Ramp to Camino Del Rio North	4 Lane Major	40,000	48,581	1.22	F
Mission Gorge Road					
Mission Gorge Place to Twain Avenue	4 Lane Major	40,000	26,268	0.66	C
Twain Avenue to Vandever Avenue	4 Lane Major	40,000	23,041	0.58	C
Friars Road to Zion Avenue	6 Lane Prime	60,000	42,915	0.72	C
West of Princess View Drive	5 Lane Prime	50,000	23,717	0.47	B
West of Jackson Drive	6 Lane Major	50,000	18,703	0.37	A
Waring Road					
Zion Avenue to Twain Avenue	4 Lane Major	40,000	16,771	0.42	B
South of Twain Avenue	4 Lane Major	40,000	18,705	0.47	B

Notes: NB = North Bound, EB = East Bound

Source: Katz, Okitsu & Associates, 2004.

TABLE 4.2-4
Trip Generation for the Proposed Project

Land Use	Intensity	Trip Rate	Per	Daily Trips	AM Trips	In	Out	PM Trips	In	Out
Community Plan Land Use Intensities										
Neighborhood Commercial	-241 KSF	72	KSF	-17,366	-695	-417	-278	-1,910	-955	-955
Community Shopping Center	349 KSF	49	KSF	17,087	513	308	205	1,709	854	854
Specialty Retail/ Strip Commercial	195 KSF	36	KSF	7,018	211	126	84	632	316	316
Industrial (Manufacturing/ Assembly)	4,110 KSF	4	KSF	16,439	3,288	2,959	329	3,288	658	2,630
Industrial (Business Park)	629 KSF	16	KSF	10,057	1,207	398	809	1,207	241	966
Industrial (Small Industrial Park)	371 KSF	15	KSF	5,569	613	551	61	668	134	535
Industrial (Large Industrial Park)	1,036 KSF	8	KSF	8,285	911	820	91	994	199	795
Commercial Office	-169 KSF	20	KSF	-3,161	-411	-370	-41	-443	-89	-354
Institutional (Library)	-69 KSF	20	KSF	-1,379	-28	-19	-8	-138	-69	-69
Residential Single Family	48 DU	10	DU	485	39	8	31	48	34	15
Residential Multi-Family	86 DU	8	DU	686	55	11	44	69	48	21
Religious Facility	-117 KSF	9	KSF	-1,054	-42	-34	-8	-84	-42	-42
Park (Developed)	-19 AC	50	AC	-957	-38	0	0	-77	0	0
Industrial Extraction (Quarry)	-101 AC	100	AC	-10,114	-1,517	-1,062	-455	-1,618	-647	-971
Agriculture	-1 AC	2	AC	-1	0	0	0	0	0	0
Hospital	0 KSF	20	KSF	0	0	0	0	0	0	0
Commercial Recreation (Golf)	2 AC	8	AC	12	1	1	0	1	0	1
TOTAL COMMUNITY PLAN TRIPS				31,606	4,107	3,280	863	4,346	682	3,741

Notes: KSF = thousand square feet, DU = dwelling units, AC = acres

Source: City of San Diego Trip Generation Manual, September 1998.

TABLE 4.2-5
Horizon Year 2030 Daily Roadway Segment Conditions
with the Community Plan Project

Roadway Segment	Lanes/Class	Horizon without Project			Project Added	Horizon with Project			Comparison	
		ADT	V/C	LOS		ADT	V/C	LOS	Increase in V/C	Sig?
Friars Road										
I-15 NB Ramps to Rancho Mission Road	6/Prime	69,000	1.165	F	7,900	77,800	1.297	F	0.132	Yes
Rancho Mission Road to Santa Road	6/Prime	56,500	0.942	E	7,900	64,400	1.073	F	0.132	Yes
Fairmont Avenue										
I-8 EB Off Ramp to Camino Del Rio North	4/Major	59,500	1.488	F	17,100	76,600	1.915	F	0.428	Yes
Mission Gorge Road										
Mission Gorge Place to Twain Avenue	4/Major	37,200	0.930	E	17,100	54,300	1.358	F	0.428	Yes
Twain Avenue to Vandever Avenue	4/Major	33,900	0.848	D	17,100	51,000	1.275	F	0.428	Yes
Friars Road to Zion Avenue	6/Prime	52,400	0.873	D	6,300	58,700	0.978	E	0.105	Yes
West of Princess View Drive	5/Prime	33,200	0.664	C	6,300	39,500	0.790	C	0.126	No
West of Jackson Drive	6/Major	28,200	0.564	C	6,300	34,500	0.690	C	0.126	No
Waring Road										
Zion Avenue to Twain Avenue	4/Major	16,100	0.403	B	2,700	18,800	0.470	B	0.067	No
South of Twain Avenue	4/Major	18,000	0.450	B	2,700	20,700	0.518	B	0.067	No

Notes: V/C = Volume/Capacity Ratio
Sig = Significant

Source: Katz, Okitsu & Associates, 2004

TABLE 4.2-6
Year 2030 Peak Hour Intersection Conditions with the Community Plan Project

Intersection	2030 Without		2030 With		Increase in Delay (sec.)	Significant?
	Delay (sec.)	Level of Service	Delay (sec.)	Level of Service		
AM Peak Hour						
1. Friars & I-15 SB Ramps	42.5	D	43.8	D	1.3	No
2. Friars & I-15 NB Ramps	8.3	A	8.2	A	-0.1	No
3. Friars & Rancho Mission Rd	25.1	C	25.8	C	0.7	No
4. Friars & Mission Gorge Rd	17.6	B	48.0	D	30.4	No
5. Zion & Mission Gorge Rd	42.4	D	54.7	D	12.3	No
6. Princess View & Mission Gorge Rd	22.9	C	28.9	C	6.0	No
7. Jackson & Mission Gorge Rd	15.0	B	15.7	B	0.7	No
10. Twain & Mission Gorge Rd	48.5	D	151.5	F	103.0	Yes
11. Fairmont Ave & Mission Gorge Rd	18.6	B	77.0	E	58.4	Yes
12. Cam. Del Rio/ I-8 WB Off & Fairmount Ave	138.0	F	268.1	F	130.1	Yes
13. Fairmont Ave & I-8 WB On Ramp*	0.0	A	0.0	A	0.0	No
14. I-8 EB On and Off Ramps & Fairmount Ave	25.0	C	77.2	E	52.2	Yes
25. Zion & Waring Rd	26.5	C	33.1	C	6.6	No
26. Twain & Waring Rd	15.6	B	15.8	B	0.2	No
PM Peak Hour						
1. Friars & I-15 SB Ramps	67.2	E	86.0	F	18.8	Yes
2. Friars & I-15 NB Ramps	16.5	B	22.3	C	5.8	No
3. Friars & Rancho Mission Rd	24.5	C	24.7	C	0.2	No
4. Friars & Mission Gorge Rd	50.9	D	161.1	F	110.2	Yes
5. Zion & Mission Gorge Rd	40.3	D	50.4	D	10.1	No
6. Princess View & Mission Gorge Rd	24.1	C	22.2	C	-1.9	No
7. Jackson & Mission Gorge Rd	13.3	B	14.5	B	1.2	No
10. Twain & Mission Gorge Rd	70.0	E	177.6	F	107.6	Yes
11. Fairmont Ave & Mission Gorge Rd	25.1	C	133.8	F	108.7	Yes
12. Cam. Del Rio/ I-8 WB Off & Fairmount Ave	222.1	F	387.9	F	165.8	Yes
13. Fairmont Ave & I-8 WB On Ramp*	0.0	A	0.0	A	0.0	No
14. I-8 EB On and Off Ramps & Fairmount Ave	19.8	B	26.4	C	6.6	No
25. Zion & Waring Rd	26.6	C	31.1	C	4.5	No
26. Twain & Waring Rd	13.3	B	13.7	B	0.4	No

Notes: * = Unsignalized Intersection, NB = North Bound, SB = South Bound, EB = East Bound, WB = West Bound
Source: Katz, Okitsu & Associates, 2004

TABLE 4.2-7
 Horizon Year 2030
 Mitigated Daily Roadway Segment Conditions

Street Segment	Horizon with Project (4-Lane Major)			Horizon with Project (6-Lane Major)			Increase in V/C
	ADT	V/C	LOS	ADT	V/C	LOS	
Fairmont Avenue							
I-8 East Bound Off Ramp to Camino Del Rio North	76,600	1.915	F	76,600	1.532	F	-383

Notes: V/C = Volume/Capacity Ratio
 ADT = Average Daily Trip

Source: Katz, Okitsu & Associates, 2004.

4.2.6 Conclusion

The following roadway segments would be significantly impacted as a result of proposed redevelopment activities:

- Friars Road from I-15 North Bound Ramps to Rancho Mission Road (LOS F);
- Friars Road from Rancho Mission Road to Santo Road (LOS F);
- Fairmount Avenue from I-8 East Bound Off Ramp to Camino Del Rio North (LOS F);
- Mission Gorge Road from Mission Gorge Place to Twain Avenue (LOS F);
- Mission Gorge Road from Twain Avenue to Vandever Avenue (LOS F); and,
- Mission Gorge Road from Friars Road to Zion Avenue (LOS E).

The following intersections would be significantly impacted as a result of proposed redevelopment activities:

- Friars & I-15 South Bound Ramps (PM Peak hour);
- Friars & Mission Gorge Road (PM Peak hour);
- Twain & Mission Gorge Road (AM and PM Peak hours);
- Fairmount Avenue & Mission Gorge Road (AM and PM Peak hours);
- Camino Del Rio & I-8 West Bound Off Ramp & Fairmount Avenue (AM and PM Peak hours); and,
- I-8 East Bound On and Off Ramps & Fairmount Avenue (AM Peak hour).

The following ramp meter locations would be significantly impacted as a result of proposed redevelopment activities:

- Friars Road to I-15 North (AM Peak hour);
- Friars Road to I-15 South (loop) (PM Peak Hour); and,