MEMORANDUM

To:	Mr. Ryan Binns Harris and Associates	Date:	February 3, 2023
From:	John Boarman, P.E. Narasimha Prasad LLG, Engineers	LLG Ref:	3-22-3709
Subject:	Pico Avenue Apartments – Transportation Assessment		

LINSCOTT LAW & GREENSPAN engineers

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Linscott, Law & Greenspan (LLG) Engineers has prepared this due diligence transportation assessment for the Pico Avenue Apartments (hereafter referred to as the Project). The Project proposes to develop 16 multifamily attached units on the west side of Pico Avenue, north of San Marcos Boulevard in the City of San Marcos.

The purpose of this memo is to conduct a transportation assessment including an access assessment and a VMT assessment for the Project. Included in this memo are the following:

- Existing Conditions Description
- Existing Traffic Volumes
- Vehicle Miles Traveled (VMT) Assessment
- Project Trip Generation and Assignment
- Project Access Analysis
- Conclusions

Figure 1 shows the Project site plan.

A. EXISTING CONDITIONS DESCRIPTION

Following is a brief description of the roadways in the vicinity of the Project site:

Pico Avenue

Pico Avenue is currently constructed as a 3-lane undivided roadway with two lanes northbound and one lane southbound. A center two-way-left-turn lane is provided with turn lanes at the intersections with Mission Avenue and San Marcos Boulevard. The posted speed limit is 25 mph. On-street parking is prohibited. Curb, gutter and sidewalks are provided on both sides of the roadway. There are no existing bicycle facilities along Pico Avenue.

Mission Road

Mission Road is currently constructed as a 4-lane undivided roadway with a two-way left-turn lane west of Firebird Lane. Between Firebird Lane and San Marcos Boulevard, Mission Road is built as a 4-lane divided roadway. East of San Marcos

Boulevard, it is built as a 6-lane divided roadway. The posted speed limit is 45 mph. On-street parking is prohibited. Curb, gutter and sidewalks are provided on both sides of the roadway. Class II bike lanes are provided east of Pico Avenue.

San Marcos Boulevard

San Marcos Boulevard is currently constructed as a 4-lane divided roadway. The posted speed limit is 40 mph. On-street parking is prohibited. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided.

Figure 2 depicts the Existing conditions.

B. EXISTING TRAFFIC VOLUMES

Peak hour intersection turning movement volume counts were conducted on Thursday, January 12, 2023, and 24-hour segment volumes counts were conducted at Thursday, January 26, 2023, when schools were in session.

Figure 3 contains the Existing traffic volumes. ***Attachment A*** contains the fieldwork count sheets. ***Table 1*** summarizes the existing segment volumes.

TABLE 1
EXISTING SEGMENT VOLUMES

Street Segment	Existing [a]
Mission Road	
Knoll Road to Pico Avenue	14,510
San Marcos Boulevard	
Pico Avenue to Twin Oaks Valley Road	5.860
Pico Avenue	
Mission Road to San Marcos Boulevard	31,200

Footnotes:

a. Counts conducted on January 26, 2023.

C. VMT ASSESSMENT

The regional VMT per capita is 18.9. Per the *City's Transportation Impact Analysis Guidelines (November 16, 2020)*, the Project would not have a significant VMT impact if VMT per capita for the Project is below the threshold of 85% of the regional VMT per Capita, or 16.1 VMT per capita.

Using the SANDAG screening map for residential projects under VMT per capita, the Project would be expected to generate 11.9 VMT/capita for census tract 200.28. The Project's VMT per capita is below the threshold and hence the Project is presumed to have less than significant VMT impact.

Table 2 shows the VMT analysis results. ***Attachment B*** includes the result of the SANDAG screening map.

TABLE 2
PROJECT VEHICLE MILES TRAVELED ANALYSIS

Geography	VMT per Capita
San Diego Region	18.9
Significance Threshold (85% of the San Diego regional Average)	16.1
Project Site - Pico Avenue Apartments	11.9
Exceeds Threshold?	**No**

D. PROJECT TRIP GENERATION AND ASSIGNMENT

The Project trip generation calculations were conducted using the trip generation rates published in SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for San Diego Region (April 2002)*. Based on the project description, the condominium category was used which SANDAG specifies as 8 trips / unit.

Table 3 summarizes the Project trip generation calculations. As shown in *Table 3*, the proposed Project is calculated to generate 128 daily trips with 10 AM peak hour trips (2 inbound / 8 outbound) and 13 PM peak hour trips (9 inbound / 4 outbound).

The Project traffic was distributed and assigned along Mission Road and San Marcos Boulevard based on the site location, access to SR78, existing traffic patterns in the area and anticipated traffic patterns to and from the site. Based on the above, 25%

were assumed to be oriented to the north of the Project site and 75% were assumed to be oriented to the south of the Project site.

Table 4 summarizes the Existing + Project segment volumes. ***Figure 4*** depicts the Project traffic distribution and ***Figure 5*** depicts the Project traffic volumes and ***Figure 6*** contains the Existing + Project traffic volumes.

TABLE 4
EXISTING + PROJECT SEGMENT VOLUMES

Street Segment	Existing	Existing + Project
Mission Road		
Knoll Road to Pico Avenue	14,510	14,536
San Marcos Boulevard		
Pico Avenue to Twin Oaks Valley Road	5.860	5,956
Pico Avenue		
Mission Road to San Marcos Boulevard	31,200	31,277

E. PROJECT ACCESS ASSESSMENT

Table 5 summarizes the Existing and Existing + Project intersection operations. As shown in *Table 5*, with the addition of Project traffic volumes, both Project driveways are calculated to operate at LOS B.

Attachment C contains the Existing and Existing + Project intersection analysis worksheets.

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TABLE 3
TRIP GENERATION SUMMARY

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
		Rate [a]	Volume	% of ADT	In:Out Split [a]	Volume			% of ADT	In:Out Split [a]	Volume		
						In	Out	Total			In	Out	Total
Multifamily Attached Units	16 dwelling units	8 / DU[b]	128	8%	20:80	2	8	10	10%	70:30	9	4	13

Footnotes:

a. Rates are based on SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002.
b. Rates are based on condominium rate of 8 / DU.

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TABLE 5
EXISTING + PROJECT INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project	
			Delay[a]	LOS[b]	Delay	LOS
1. Pico Ave / Project North Dwy	DNE [c]	AM	–	–	10.1	B
		PM	–	–	11.1	B
2. Pico Ave / Project South Dwy / San Marcos Unified School District Dwy	TWSC[d]	AM	11.3	B	11.4	B
		PM	14.2	B	14.5	B

Footnotes:

a. Average delay expressed in seconds per vehicle
b. Level of Service
c. This driveway does currently exist and will be built by the Project as a TWSC intersection.
d. TWSC – Two-Way Stop Controlled intersection. Worst-case movement approach delay and LOS reported.

General Notes:

DNE – does not exist.

UNSIGNALIZED

Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

A. CONCLUSIONS

Based on the analysis conducted for the Project, no CEQA VMT impacts were calculated. No Project-induced deficiencies were calculated at the Project access driveways and no improvements are necessary to accommodate Project traffic.

Please let us know if you have any questions. Thank you.

Sincerely,

Linscott, Law & Greenspan, Engineers

John Boarman, P. E.
Principal

Narasimha Prasad
Senior Transportation Engineer

cc: File

FIGURES

TABLES

ATTACHMENTS

ATTACHMENT A

FIELDWORK COUNT SHEETS

Traffic Counts

Pico Avenue Apartments

Date: 12-Jan-23

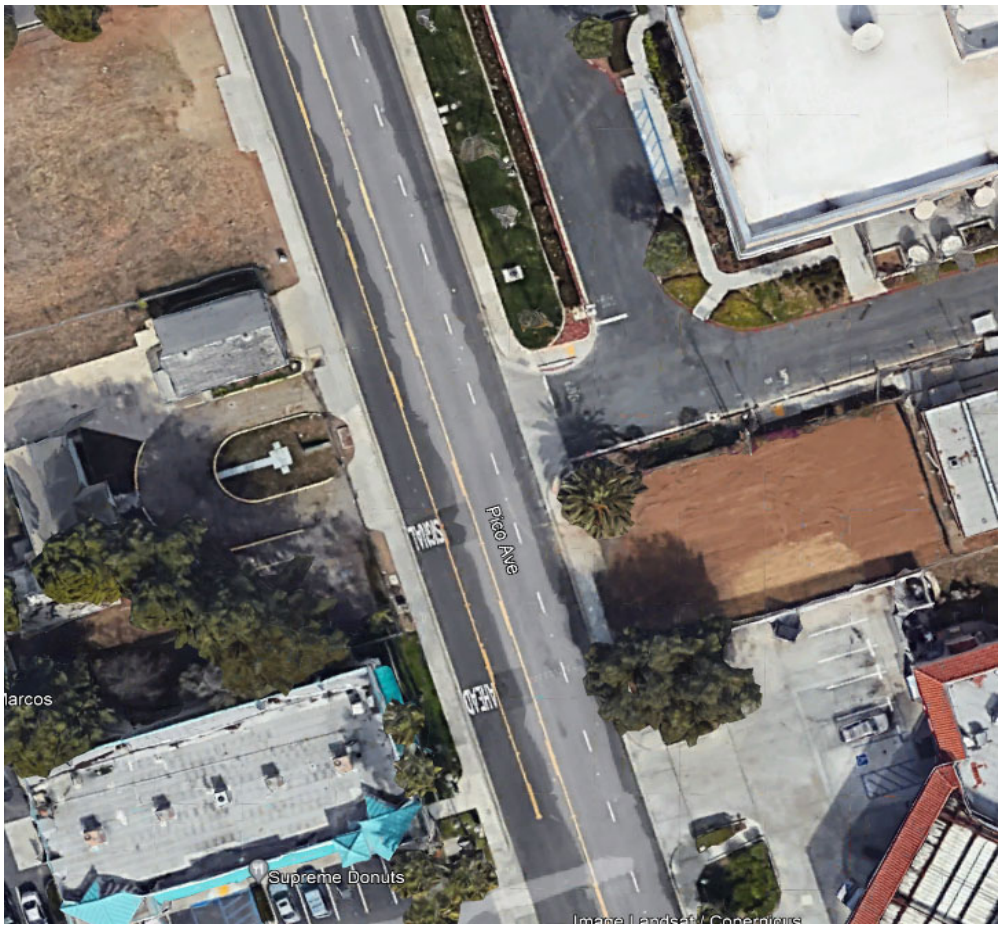
Day: Thursday

Pear Hour: AM

Time	School District Driveway		Pico Avenue			
	WB		SB		NB	
	Left	Right	Left	Through	Right	Through
7:30	0	0	6	33	7	24
7:45	0	0	6	56	17	35
8:00	2	1	6	54	10	34
8:15	3	3	3	47	4	37
Total	**5**	**4**	**21**	**190**	**38**	**130**

Pear Hour: PM

4:30	8	1	1	41	3	52
4:45	8	1	0	51	0	48
5:00	6	0	0	82	0	59
5:15	3	1	0	49	0	45
Total	**25**	**3**	**1**	**223**	**3**	**204**



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4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **BC 23-006 #01 East Mission Road between Knoll Road & Pico Avenue**

Date: **Thursday, January 26, 2023** Total Daily Volume: **14512** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
42	28	19	44	75	193	444	973	1108	580	525	540	631	737	934	1727	1782	1870	969	465	352	272	118	84
12	7	6	7	10	27	62	165	304	173	130	133	124	167	157	345	454	472	333	131	94	83	39	32
14	9	4	10	14	32	107	193	319	137	129	130	154	203	199	418	443	457	285	88	84	75	26	18
5	5	5	10	22	54	104	295	249	123	134	130	181	191	273	494	422	467	185	119	100	57	25	25
11	7	4	17	29	80	171	320	236	147	132	147	172	176	305	470	463	474	166	127	74	57	28	9

Date: **Thursday, January 26, 2023** Total Daily Volume: **8356** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
25	15	9	19	31	82	165	425	456	260	256	278	308	387	587	1160	1230	1264	634	265	210	158	75	57
6	5	2	4	5	10	29	71	139	72	63	68	59	80	86	261	322	329	229	76	52	53	24	19
9	5	3	5	6	13	37	80	121	63	65	57	79	108	100	302	307	309	197	48	52	41	18	15
4	3	3	4	6	22	38	126	100	51	66	70	91	98	195	316	279	302	116	67	55	31	17	18
6	2	1	6	14	37	61	148	96	74	62	83	79	101	206	281	322	324	92	74	51	33	16	5

Date: **Thursday, January 26, 2023** Total Daily Volume: **6156** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
17	13	10	25	44	111	279	548	652	320	269	262	323	350	347	567	552	606	335	200	142	114	43	27
6	2	4	3	5	17	33	94	165	101	67	65	65	87	71	84	132	143	104	55	42	30	15	13
5	4	1	5	8	19	70	113	198	74	64	73	75	95	99	116	136	148	88	40	32	34	8	3
1	2	2	6	16	32	66	169	149	72	68	60	90	93	78	178	143	165	69	52	45	26	8	7
5	5	3	11	15	43	110	172	140	73	70	64	93	75	99	189	141	150	74	53	23	24	12	4

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4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **BC 23-006 #02 East San Marcos Boulevard between Pico Avenue & Twin Oaks Valley Road**

Date: **Thursday, January 26, 2023** Total Daily Volume: **31197** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
139	96	74	130	302	682	1178	1936	2075	1545	1654	1753	1978	1735	2102	2602	2745	2887	1921	1272	975	703	472	241
36	32	21	29	39	94	260	375	532	434	390	475	483	415	442	622	653	728	609	353	263	159	161	66
48	27	22	31	73	146	254	455	553	369	399	431	523	427	497	664	664	743	532	292	243	221	94	57
20	14	16	33	108	223	323	489	521	366	406	408	486	434	547	674	720	722	364	260	223	199	125	62
35	23	15	37	82	219	341	617	469	376	459	439	486	459	616	642	708	694	416	367	246	124	92	56

Date: **Thursday, January 26, 2023** Total Daily Volume: **14590** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
71	47	22	35	86	214	552	808	938	615	656	742	832	837	1064	1443	1399	1405	976	634	484	376	217	137
20	17	4	9	14	23	137	140	232	152	157	189	150	189	212	352	355	345	329	188	143	96	71	40
25	13	10	9	17	47	118	181	252	158	171	161	222	202	243	379	352	352	273	141	127	117	45	33
8	9	3	5	28	73	148	213	245	165	158	205	237	212	270	385	345	340	200	123	98	102	52	35
18	8	5	12	27	71	149	274	209	140	170	187	223	234	339	327	347	368	174	182	116	61	49	29

Date: **Thursday, January 26, 2023** Total Daily Volume: **16607** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
68	49	52	95	216	468	626	1128	1137	930	998	1011	1146	898	1038	1159	1346	1482	945	638	491	327	255	104
16	15	17	20	25	71	123	235	300	282	233	286	333	226	230	270	298	383	280	165	120	63	90	26
23	14	12	22	56	99	136	274	301	211	228	270	301	225	254	285	312	391	259	151	116	104	49	24
12	5	13	28	80	150	175	276	276	201	248	203	249	222	277	289	375	382	164	137	125	97	73	27
17	15	10	25	55	148	192	343	260	236	289	252	263	225	277	315	361	326	242	185	130	63	43	27

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4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **BC 23-006 #03 Pico Avenue between East Mission Road & East San Marcos Boulevard**

Date: **Thursday, January 26, 2023** Total Daily Volume: **5858** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
26	9	14	13	31	79	219	393	439	250	259	285	357	315	363	495	611	599	355	288	208	147	62	41
6	3	5	2	7	9	50	69	147	61	73	80	94	74	77	103	155	165	125	83	81	45	25	7
11	4	4	2	8	10	43	92	120	56	52	70	99	90	86	119	127	131	73	66	51	43	10	7
2	1	3	4	10	19	59	114	95	69	77	63	83	76	89	121	176	167	71	67	33	33	15	13
7	1	2	5	6	41	67	118	77	64	57	72	81	75	111	152	153	136	86	72	43	26	12	14

Date: **Thursday, January 26, 2023** Total Daily Volume: **2785** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
14	8	8	11	11	36	95	176	196	122	130	134	170	163	175	218	290	267	174	153	110	67	32	25
5	3	2	1	2	6	17	30	80	35	34	26	44	45	38	44	71	71	52	40	36	19	10	5
7	4	3	2	3	1	20	43	52	26	25	43	49	57	45	45	62	68	36	30	27	16	7	2
0	1	1	4	4	7	27	51	33	31	44	26	37	26	44	52	74	58	35	46	20	16	11	10
2	0	2	4	2	22	31	52	31	30	27	39	40	35	48	77	83	70	51	37	27	16	4	8

Date: **Thursday, January 26, 2023** Total Daily Volume: **3073** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
12	1	6	2	20	43	124	217	243	128	129	151	187	152	188	277	321	332	181	135	98	80	30	16
1	0	3	1	5	3	33	39	67	26	39	54	50	29	39	59	84	94	73	43	45	26	15	2
4	0	1	0	5	9	23	49	68	30	27	27	50	33	41	74	65	63	37	36	24	27	3	5
2	0	2	0	6	12	32	63	62	38	33	37	46	50	45	69	102	109	36	21	13	17	4	3
5	1	0	1	4	19	36	66	46	34	30	33	41	40	63	75	70	66	35	35	16	10	8	6

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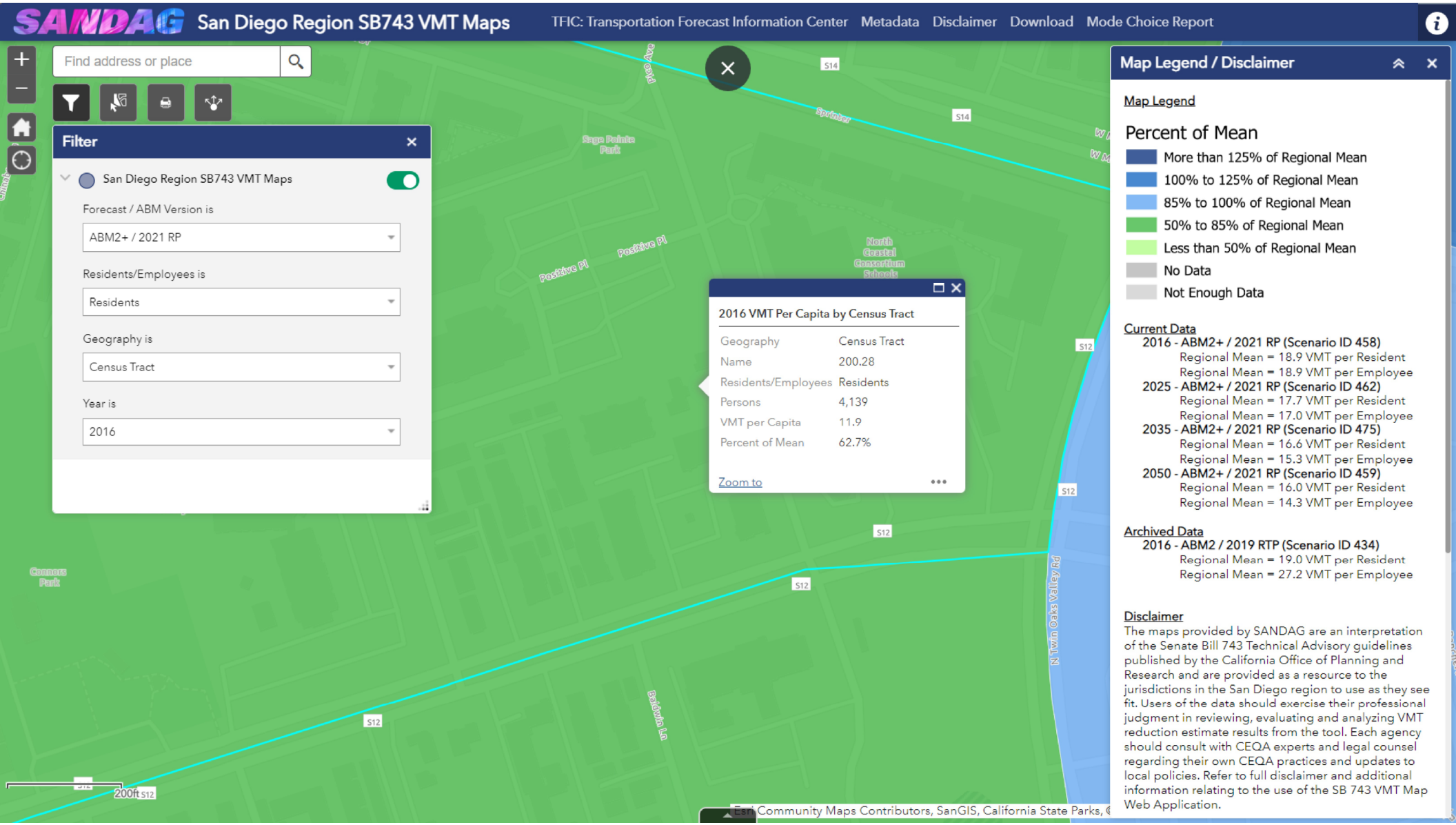
ATTACHMENT B

SANDAG SCREENING MAP


SANDAG
San Diego Region SB743 VMT Maps
TFIC: Transportation Forecast Information Center
Metadata
Disclaimer
Download
Mode Choice Report
Find address or place
Filter
San Diego Region SB743 VMT Maps
Forecast / ABM Version is
ABM2+ / 2021 RP
Residents/Employees is
Residents
Geography is
Census Tract
Year is
2016
2016 VMT Per Capita by Census Tract
Geography Census Tract
Name 200.28
Residents/Employees Residents
Persons 4,139
VMT per Capita 11.9
Percent of Mean 62.7%
Zoom to
Map Legend / Disclaimer
Map Legend
Percent of Mean
More than 125% of Regional Mean
100% to 125% of Regional Mean
85% to 100% of Regional Mean
50% to 85% of Regional Mean
Less than 50% of Regional Mean
No Data
Not Enough Data
Current Data
2016 - ABM2+ / 2021 RP (Scenario ID 458)
Regional Mean = 18.9 VMT per Resident
Regional Mean = 18.9 VMT per Employee
2025 - ABM2+ / 2021 RP (Scenario ID 462)
Regional Mean = 17.7 VMT per Resident
Regional Mean = 17.0 VMT per Employee
2035 - ABM2+ / 2021 RP (Scenario ID 475)
Regional Mean = 16.6 VMT per Resident
Regional Mean = 15.3 VMT per Employee
2050 - ABM2+ / 2021 RP (Scenario ID 459)
Regional Mean = 16.0 VMT per Resident
Regional Mean = 14.3 VMT per Employee
Archived Data
2016 - ABM2 / 2019 RTP (Scenario ID 434)
Regional Mean = 19.0 VMT per Resident
Regional Mean = 27.2 VMT per Employee
Disclaimer
The maps provided by SANDAG are an interpretation of the Senate Bill 743 Technical Advisory guidelines published by the California Office of Planning and Research and are provided as a resource to the jurisdictions in the San Diego region to use as they see fit. Users of the data should exercise their professional judgment in reviewing, evaluating and analyzing VMT reduction estimate results from the tool. Each agency should consult with CEQA experts and legal counsel regarding their own CEQA practices and updates to local policies. Refer to full disclaimer and additional information relating to the use of the SB 743 VMT Map Web Application.
Sage Pointe Park
Positive Pl
North Coastal Consortium Schools
Connors Park
Baldwin Ln
N Twin Oaks Valley Rd
Sprinter
S12
S14
200ft
Esri Community Maps Contributors, SanGIS, California State Parks,

ATTACHMENT C

EXISTING AND EXISTING + PROJECT INTERSECTION ANALYSIS WORKSHEETS

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	0	4	0	130	38	21	190	0
Future Vol, veh/h	0	0	0	5	0	4	0	130	38	21	190	0
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	30	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	38	38	38	81	81	81	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	13	0	11	0	160	47	25	224	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	374	501	244	478	478	124	234	0	0	217	0	0
Stage 1	284	284	-	194	194	-	-	-	-	-	-	-
Stage 2	90	217	-	284	284	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	570	471	794	484	486	904	1332	-	-	1351	-	-
Stage 1	722	676	-	790	740	-	-	-	-	-	-	-
Stage 2	908	723	-	722	676	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	545	453	779	468	467	887	1319	-	-	1338	-	-
Mov Cap-2 Maneuver	545	453	-	468	467	-	-	-	-	-	-	-
Stage 1	715	656	-	782	733	-	-	-	-	-	-	-
Stage 2	889	716	-	702	656	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	11.3	0	0.8
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1319	-	-	-	592	1338	-	-
HCM Lane V/C Ratio	-	-	-	-	0.04	0.018	-	-
HCM Control Delay (s)	0	-	-	0	11.3	7.7	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	0	3	0	204	3	1	223	0
Future Vol, veh/h	0	0	0	25	0	3	0	204	3	1	223	0
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	30	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	88	88	88	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	32	0	4	0	232	3	1	328	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	466	585	348	584	584	138	338	0	0	245	0	0
Stage 1	340	340	-	244	244	-	-	-	-	-	-	-
Stage 2	126	245	-	340	340	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	493	422	694	409	423	886	1220	-	-	1320	-	-
Stage 1	674	639	-	739	703	-	-	-	-	-	-	-
Stage 2	865	703	-	674	639	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	481	413	681	401	414	869	1208	-	-	1307	-	-
Mov Cap-2 Maneuver	481	413	-	401	414	-	-	-	-	-	-	-
Stage 1	667	632	-	732	696	-	-	-	-	-	-	-
Stage 2	853	696	-	667	632	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	14.2	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1208	-	-	-	426	1307	-	-
HCM Lane V/C Ratio	-	-	-	-	0.084	0.001	-	-
HCM Control Delay (s)	0	-	-	0	14.2	7.8	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	1	135	211	0
Future Vol, veh/h	1	3	1	135	211	0
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	30	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	81	81	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	1	167	248	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	354	268	258	0	-	0
Stage 1	258	-	-	-	-	-
Stage 2	96	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	631	770	1305	-	-	-
Stage 1	784	-	-	-	-	-
Stage 2	917	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	618	755	1293	-	-	-
Mov Cap-2 Maneuver	618	-	-	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	908	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1293	-	715	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.8	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	3	5	0	4	1	131	38	21	193	0
Future Vol, veh/h	1	0	3	5	0	4	1	131	38	21	193	0
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	30	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	38	38	38	81	81	81	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	13	0	11	1	162	47	25	227	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	380	508	247	487	485	125	237	0	0	219	0	0
Stage 1	287	287	-	198	198	-	-	-	-	-	-	-
Stage 2	93	221	-	289	287	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	565	467	791	477	481	903	1329	-	-	1349	-	-
Stage 1	720	674	-	786	737	-	-	-	-	-	-	-
Stage 2	904	720	-	718	674	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	540	449	776	459	462	886	1316	-	-	1336	-	-
Mov Cap-2 Maneuver	540	449	-	459	462	-	-	-	-	-	-	-
Stage 1	713	654	-	778	729	-	-	-	-	-	-	-
Stage 2	884	712	-	695	654	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	11.4	0	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1316	-	-	700	584	1336	-	-
HCM Lane V/C Ratio	0.001	-	-	0.006	0.041	0.018	-	-
HCM Control Delay (s)	7.7	-	-	10.2	11.4	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	3	207	225	1
Future Vol, veh/h	1	1	3	207	225	1
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	30	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	88	88	68	68
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1	3	235	331	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	476	352	342	0	-	0
Stage 1	342	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	532	691	1215	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	520	678	1203	-	-	-
Mov Cap-2 Maneuver	520	-	-	-	-	-
Stage 1	709	-	-	-	-	-
Stage 2	870	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1203	-	589	-	-
HCM Lane V/C Ratio	0.003	-	0.004	-	-
HCM Control Delay (s)	8	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	25	0	3	4	207	3	1	224	1
Future Vol, veh/h	0	0	2	25	0	3	4	207	3	1	224	1
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	30	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	88	88	88	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	2	32	0	4	5	235	3	1	329	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	480	600	350	600	599	139	340	0	0	248	0	0
Stage 1	342	342	-	257	257	-	-	-	-	-	-	-
Stage 2	138	258	-	343	342	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	482	414	693	399	414	884	1217	-	-	1316	-	-
Stage 1	672	637	-	726	694	-	-	-	-	-	-	-
Stage 2	851	694	-	671	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	469	404	680	389	404	867	1205	-	-	1303	-	-
Mov Cap-2 Maneuver	469	404	-	389	404	-	-	-	-	-	-	-
Stage 1	663	630	-	716	684	-	-	-	-	-	-	-
Stage 2	836	684	-	662	630	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	14.5	0.1	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1205	-	-	680	413	1303	-	-
HCM Lane V/C Ratio	0.004	-	-	0.003	0.087	0.001	-	-
HCM Control Delay (s)	8	-	-	10.3	14.5	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-