April 12, 2017

Sean Marciniak
Miller Starr Regalia
1331 North California Boulevard
Walnut Creek, CA 94596

Re: Lincoln Landing EIR

Dear Mr. Marciniak:

TJKM has completed a review of the MTS roadway system as it relates to the traffic study for the Lincoln Landing project in Hayward. TJKM examined near-term and long-term impacts with and without the Lincoln Landing project for the a.m. and p.m. peak hours on four roadway segments:

- I-238 west of I-580
- I-580 north of I-238
- Jackson Street (SR 92) north of Santa Clara Street
- I-880 south of SR 92

A summary of the results is attached, labeled Tables 1 to 5. Under existing conditions in the a.m. peak hour, (Table 1) one roadway segment (Jackson Street) operates at LOS E; the remaining seven segments operate at LOS D or better. In the p.m. peak hour (Table 2) one segment on I-880 operates at LOS E and the remaining segments operate at LOS D or better. With Lincoln Landing project added, there is no change in the LOS in either the a.m. or p.m. on any segment. In addition, there is no change in the volume to capacity ratio and the percent increase attributable to the project at the LOS E segments is 0.07 percent in the a.m. and 0.13 percent in the p.m. peak hour. There are no significant impacts under near-term conditions.

Under cumulative conditions, TJKM examined 2040 conditions with and without the project. In the a.m. peak hour, (Table 3) one segment on I-880 operates at LOS F without the project. The other seven segments operate at LOS D or better. When project traffic is added, there is no change in LOS or in the volume to capacity ratio. The project adds less than 0.1 percent traffic to this segment.

These changes are minimal and less than significant in all cases, and under all methodologies. For instance, in the nearby Tri-Valley area of Alameda County (i.e., Dublin, Pleasanton, and Livermore), the LOS standard for Congestion Management Agency analysis of roadway segments is LOS E. An impact would be considered significant when the project traffic causes a Metropolitan Transportation System network segment to fall from an acceptable LOS E (roadway segment, freeway segment, or freeway ramp v/c ratio of 0.99 or less) in the No Project case to an unacceptable LOS F (v/c of 1.00 or more); or, if a segment is already operating at LOS F in the No Project case, the v/c ratio increases by more than 0.02 (for example, from 1.03 to

1.06). As shown in Tables 1 through 4, the Project does not cause a degradation of LOS on local freeway segments, and never increases the v/c ratio on these highways by more than 0.01.

Please contact me if there are any questions on this matter.

Very truly yours,

Chris D. Kinzel, P.E.
Vice President

Cc: Attachments

Table 1 : Existing and Existing plus Project Conditions AM Peak Hour

No	Study Segments	Direction	# Lanes	No Project Volume AM Peak Hour	Project Volumes AM Peak Hour	With Project Volume	Percent Increase	V/C Ratio No Project	V/C Ratio plus Project	No Project LOS	Plus Project LOS	Change from LOS E or better to LOS F	LOS F and Change in V/C > 0.02
1	I-238 west of I-580	Eastbound	3	1,728	9	1,737	0.52	0.27	0.28	A	A	No	No
		Westbound	3	5,208	17	5,225	0.33	0.83	0.83	D	D	No	No
2	I-580 north of I-238	Northbound	4	6,373	25	6,398	0.39	0.76	0.76	C	C	No	No
		Southbound	4	3,985	14	3,999	0.35	0.47	0.48	A	A	No	No
3	Jackson Street east of Santa Clara Street	Eastbound	3	2,236	17	2,253	0.76	0.35	0.36	A	A	No	No
		Westbound	3	3,083	31	3,114	1.01	0.49	0.49	A	A	No	No
4	I 880 South of State Route 92	Northbound	4	8,227	6	8,233	0.07	0.98	0.98	E	E	No	No
		Southbound	4	7,032	10	7,042	0.14	0.84	0.84	D	D	No	No

Table 2 : Existing and Existing plus Project Conditions PM Peak Hour

No	Study Segments	Direction	# Lanes	No Project Volume PM Peak Hour	Project Volumes PM Peak Hour	With Project Volume	Percent Increase	V/C Ratio No Project	V/C Ratio plus Project	No Project LOS	Plus Project LOS	Change from LOS E or better to LOS F	LOS F and Change in V/C > 0.02
1	I-238 west of I-580	Eastbound	3	4,456	23	4,479	0.52	0.71	0.71	C	C	No	No
		Westbound	3	3,405	16	3,421	0.47	0.54	0.54	A	A	No	No
2	I-580 north of I-238	Northbound	4	4,402	24	4,426	0.55	0.52	0.53	A	A	No	No
		Southbound	4	6,935	34	6,969	0.49	0.83	0.83	D	D	No	No
3	Jackson Street east of Santa Clara Street	Eastbound	3	3,077	31	3,108	1.01	0.49	0.49	A	A	No	No
		Westbound	3	2,251	43	2,294	1.91	0.36	0.36	A	A	No	No
4	I 880 South of State Route 92	Northbound	4	7,253	14	7,267	0.19	0.86	0.87	D	D	No	No
		Southbound	4	7,833	10	7,843	0.13	0.93	0.93	E	E	No	No

Table 3 : Cumulative and Cumulative plus Project Conditions AM Peak Hour

No	Study Segments	Direction	# Lanes	No Project Volume AM Peak Hour	Project Volumes AM Peak Hour	With Project Volume	Percent Increase	V/C Ratio No Project	V/C Ratio plus Project	No Project LOS	Plus Project LOS	Change from LOS E or better to LOS F	LOS F and Change in V/C > 0.02
1	I-238 west of I-580	Eastbound	3	2,049	9	2,058	0.44	0.33	0.33	A	A	No	No
		Westbound	3	5,119	17	5,136	0.33	0.81	0.82	D	D	No	No
2	I-580 north of I-238	Northbound	4	7,437	25	7,462	0.34	0.89	0.89	D	D	No	No
		Southbound	4	4,583	14	4,597	0.31	0.55	0.55	A	A	No	No
3	Jackson Street east of Santa Clara Street	Eastbound	3	2,482	17	2,499	0.68	0.39	0.40	A	A	No	No
		Westbound	3	3,033	31	3,064	1.02	0.48	0.49	A	A	No	No
4	I 880 South of State Route 92	Northbound	4	8,463	6	8,469	0.07	1.01	1.01	F	F	No	No
		Southbound	4	6,505	10	6,515	0.15	0.77	0.78	C	C	No	No

Table 4 : Cumulative and Cumulative plus Project Conditions PM Peak Hour

No	Study Segments	Direction	# Lanes	No Project Volume PM Peak Hour	Project Volumes PM Peak Hour	With Project Volume	Percent Increase	V/C Ratio No Project	V/C Ratio plus Project	No Project LOS	Plus Project LOS	Change from LOS E or better to LOS F	LOS F and Change in V/C > 0.02
1	I-238 west of I-580	Eastbound	3	4,689	23	4,712	0.49	0.74	0.75	C	C	No	No
		Westbound	3	3,544	16	3,560	0.45	0.56	0.57	A	A	No	No
2	I-580 north of I-238	Northbound	4	5,192	24	5,216	0.46	0.62	0.62	B	B	No	No
		Southbound	4	7,958	34	7,992	0.43	0.95	0.95	E	E	No	No
3	Jackson Street east of Santa Clara Street	Eastbound	3	3,063	31	3,094	1.01	0.49	0.49	A	A	No	No
		Westbound	3	2,647	43	2,690	1.62	0.42	0.43	A	A	No	No
4	I 880 South of State Route 92	Northbound	4	6,904	14	6,918	0.20	0.82	0.82	D	D	No	No
		Southbound	4	7,595	10	7,605	0.13	0.90	0.91	E	E	No	No

MTS Freeway and Roadway Segment Analysis

Operations of the MTS freeway and surface street segments were assessed based on volume-to-capacity (V/C) ratios.

For freeway segments, a per-lane capacity of 2,100 vehicles per hour was used. For surface streets, a per-lane capacity of 1,100 vehicles per hour was used.

This methodology is consistent with the approach used for other projects in both Dublin and other communities within Alameda County.

These capacities do not reflect additional capacity provided at intersections through turn pockets. Roadway segments with a V/C ratio greater than 1.0 are assigned LOS F. Volume-to-capacity ratios and the corresponding levels of service are shown in the table below.

Level of Service Criteria for Roadway Segment Analysis

Level of Service	V/C[1]
A	<= 0.60
B	0.61 to 0.70
C	0.71 to 0.80
D	0.81 to 0.90
E	0.91 to 1.00
F	> 1.00

Notes: [1]Volume to Capacity ratio, Source: 2000 Highway Capacity Manual