Appendix R-1

Alternatives Analyses

October 25, 2022

Mr. Timothy Reeves
Lewis Management Corp.
1156 N. Mountain Avenue
Upland, CA 91785

SUBJECT: WEST CAMPUS UPPER PLATEAU OFF-SITE TRAFFIC NOISE ANALYSIS ALTERNATIVES

Dear Mr. Timothy Reeves:

This letter has been prepared to document the findings for the off-site traffic noise analysis alternatives for the proposed West Campus Upper Plateau (Project) located in the jurisdiction of the March Joint Powers Authority (March JPA). The purpose of this evaluation is to evaluate the off-site traffic noise level impacts associated with two Project alternatives based on a comparison to the *West Campus Upper Plateau Noise and Vibration Impact Analysis*, October 12, 2022, prepared by Urban Crossroads, Inc., referred to hereafter as the "2022 Noise Study."

SUMMARY OF FINDINGS

According to the *West Campus Upper Plateau Trip Generation Evaluation* prepared by Urban Crossroads, Inc. on October 25, 2022, Alternatives 2 and 3 both result in a reduction in trips compared to the 2022 Traffic Study. Table 1 presents a summary of the Project related off-site traffic noise level increases. As shown on Table 1, Segment #13 (Cactus Avenue east of Meridian Parkway) will experience *potentially significant* off-site traffic noise level increases due to the proposed Project, Alternative 2 and Alternative 3 conditions ranging from 3.2 to 4.4 dBA CNEL. This exceeds the incremental noise level increase threshold on Segment #13. Segment #13 is only shown to be *less than significant* for Alternative 2 during long-range horizon year 2045 conditions. All other roadway segments are shown to experience less than significant impacts due to the proposed Project, Alternative 2 and Alternative 3.

ALTERNATIVE 2

This alternative consists of a 70% reduction in square footage to the Business Park land use, excluding the Business Park square footage associated with the Mixed-Use area. The total non-Mixed-Use Business Park square footage for Alternative 2 is 384,121 square feet (a reduction of 896,282 square feet compared to the non-Mixed-Use Business Park square footage from the 2022 Traffic Study). Alternative 2 is anticipated to generate a total of 24,728 trip-ends per day including 1,696 trucks trips.

ALTERNATIVE 3

This alternative consists of a reduction of 244,550 square feet of High-Cube Fulfillment Center use. The total High-Cube Fulfillment Center square footage (within the "Remaining Industrial" category) for Alternative 3 is 481,011 square feet. Alternative 3 is anticipated to generate a total of 34,792 trip-ends per day including 1,960 truck trips.

Mr. Timothy Reeves
Lewis Management Corp.

TABLE 1: OFF-SITE TRAFFIC NOISE LEVEL INCREASE SUMMARY

ID	Road	Segment	Receiving Land Use[1]	Incremental Noise Level Increase (dBA CNEL)[2]											
				Project Alternative				Alternative 2				Alternative 3			
				E	EA	OYC	HY	E	EA	OYC	HY	E	EA	OYC	HY
1	Alessandro Blvd.	s/o Arlington Av.	Sensitive	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
2	Alessandro Blvd.	s/o Canyon Crest Dr.	Sensitive	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
3	Trautwein Rd.	n/o Van Buren Blvd.	Sensitive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	Barton St.	n/o Van Buren Blvd.	Sensitive	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
5	Sycamore Canyon Blvd.	n/o Cottonwood Av.	Non-Sensitive	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.6	0.4	0.4	0.4
6	Meridian Pkwy.	n/o Van Buren Blvd.	Non-Sensitive	1.6	1.4	1.3	1.1	1.3	1.1	1.0	0.9	1.6	1.4	1.3	1.1
7	Day St.	n/o Alessandro Blvd.	Sensitive	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0
8	Frederick St.	n/o Cactus Av.	Non-Sensitive	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9	Alessandro Blvd.	w/o Barton St.	Sensitive	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10	Alessandro Blvd.	e/o Barton St.	Sensitive	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
11	Alessandro Blvd.	e/o Meridian Pkwy.	Non-Sensitive	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
12	Alessandro Blvd.	w/o Day St.	Sensitive	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1
13	Cactus Av.	e/o Meridian Pkwy.	Non-Sensitive	4.4	4.0	4.0	3.4	3.8	3.5	3.5	2.9	4.3	3.9	3.9	3.3
14	Cactus Av.	w/o Elsworth St.	Non-Sensitive	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2
15	Orange Terrace Pkwy.	e/o Trautwein Rd.	Sensitive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Van Buren Blvd.	w/o Wood Rd.	Sensitive	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
17	Van Buren Blvd.	e/o Wood Rd.	Sensitive	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1
18	Van Buren Blvd.	e/o Orange Terrace Pkwy.	Sensitive	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
19	Van Buren Blvd.	e/o Meridian Pkwy.	Non-Sensitive	0.5	0.4	0.2	0.2	0.4	0.3	0.1	0.2	0.4	0.4	0.2	0.2

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

TABLE 2: OFF-SITE TRAFFIC NOISE LEVEL INCREASE THRESHOLD SUMMARY

ID	Road	Segment	Receiving Land Use[1]	Limit	Incremental Noise Level Increase Threshold Exceeded?[2]											
					Project Alternative				Alternative 2				Alternative 3			
					E	EA	OYC	HY	E	EA	OYC	HY	E	EA	OYC	HY
1	Alessandro Blvd.	s/o Arlington Av.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
2	Alessandro Blvd.	s/o Canyon Crest Dr.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
3	Trautwein Rd.	n/o Van Buren Blvd.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
4	Barton St.	n/o Van Buren Blvd.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
5	Sycamore Canyon Blvd.	n/o Cottonwood Av.	Non-Sensitive	3.0	No	No	No	No	No	No	No	No	No	No	No	No
6	Meridian Pkwy.	n/o Van Buren Blvd.	Non-Sensitive	3.0	No	No	No	No	No	No	No	No	No	No	No	No
7	Day St.	n/o Alessandro Blvd.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
8	Frederick St.	n/o Cactus Av.	Non-Sensitive	3.0	No	No	No	No	No	No	No	No	No	No	No	No
9	Alessandro Blvd.	w/o Barton St.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
10	Alessandro Blvd.	e/o Barton St.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
11	Alessandro Blvd.	e/o Meridian Pkwy.	Non-Sensitive	3.0	No	No	No	No	No	No	No	No	No	No	No	No
12	Alessandro Blvd.	w/o Day St.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
13	Cactus Av.	e/o Meridian Pkwy.	Non-Sensitive	3.0	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**	**Yes**	**Yes**
14	Cactus Av.	w/o Elsworth St.	Non-Sensitive	3.0	No	No	No	No	No	No	No	No	No	No	No	No
15	Orange Terrace Pkwy.	e/o Trautwein Rd.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
16	Van Buren Blvd.	w/o Wood Rd.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
17	Van Buren Blvd.	e/o Wood Rd.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
18	Van Buren Blvd.	e/o Orange Terrace Pkwy.	Sensitive	1.5	No	No	No	No	No	No	No	No	No	No	No	No
19	Van Buren Blvd.	e/o Meridian Pkwy.	Non-Sensitive	3.0	No	No	No	No	No	No	No	No	No	No	No	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

Alternatives 2 and 3 both result in a reduction in trips compared to the 2022 Traffic Study. The off-site traffic noise analysis demonstrates that off-site traffic noise level impacts for Alternatives 2 and 3 are less that what was previously assessed in the 2022 Noise Study. If you have any questions, please contact me directly at (949) 584-3148.

Respectfully submitted,

URBAN CROSSROADS, INC.

Bill Lawson, P.E., INCE
Principal