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Date:	July 5, 2022
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To:	City of Cerritos Engineering Department
Site:	Shoemaker Avenue and Moore Street Warehouse Project
Subject:	Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis

This technical memorandum evaluates the trip generation and need to prepare a level of service (LOS) or vehicle miles traveled (VMT) analysis for the proposed industrial project located on the northwest corner of Shoemaker Ave and Moore St in the City of Cerritos. The project would remove the existing 66,519 square foot research and development center building and replace it with a 159,948 square-foot warehouse,10% of which assume to be cold storage. The proposed building would include 20 dock-high doors and one drive-through door. Access to the site would be provided via two driveways on Shoemaker Ave and one truck-only driveway on Moore St. The project site plan is shown in Figure 1.

Project Trip Generation

The project trip generation was prepared using trip rates from the Institute of Transportation Engineers (ITE)[1]. The trip rates for Research and Development Center (Land Use Code 760) were used to evaluate the existing land use and the rates for Warehousing (Land Use Code 150) were used to evaluate the proposed project. Project truck trips were determined using data from the South Coast Air Quality Management District (SCAQMD) *Warehouse Truck Trip Study Data Results and Usage*[2]. As neither the City's General Plan nor the Los Angeles County (LA County) Traffic Impact Analysis (TIA) guidelines specify Passenger Car Equivalent (PCE) factors, PCE factors as defined in the San Bernardino County CMP[3] were added to the truck trips to account for the larger vehicle size and increased roadway capacity utilized by large trucks.

Table 1 presents the trip generation estimate for the proposed project. As shown in Table 1, the project is forecast to generate 572 fewer daily PCE trips including 52 fewer PCE trips during the AM peak hour and 43 fewer PCE trips during the PM peak hour when compared to the existing land use. The decrease in trips is due to the change in use associated with the proposed project. The existing use is considered a research and development center building which has a higher trip rate per square foot than a warehouse use. Because the project would generate fewer trips than the existing use, no further analysis of vehicle trips is warranted, and the project should not be required to prepare a level of service (LOS) traffic analysis.

VMT Screening Analysis

Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating Transportation impacts. SB743 specified that the new criteria should promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks and a diversity of land uses. The bill also specified that delay-based level of service could no longer be considered an indicator of a significant impact on the environment. In response, Section 15064.3 was added to the CEQA Guidelines beginning January 1, 2019. Section 15064.3 - Determining the Significance of Transportation Impacts states that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts and provides lead

[1] *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE). 2021.

[2] *SCAQMD Warehouse Truck Trip Study Data Results and Usage, July 17, 2014.*

[3] *San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016*

agencies with the discretion to choose the most appropriate methodology and thresholds for evaluating VMT. The provisions of Section 15064.3(c) were implemented statewide beginning on July 1, 2020.

As the City of Cerritos does not have adopted VMT guidelines, the LA County TIA guidelines were utilized for this project. The LA County TIA guidelines include screening thresholds to identify if a project would be considered to have a less-than significant impact on VMT and therefore could be screened out from further VMT analysis. Section 3.1.2.1 – Non-Retail Project Trip Generation Screening Criteria, as stated in the LA County TIA guidelines, would apply to this project:

"If the answer is no to the question below, further analysis is not required, and a less than significant determination can be made.

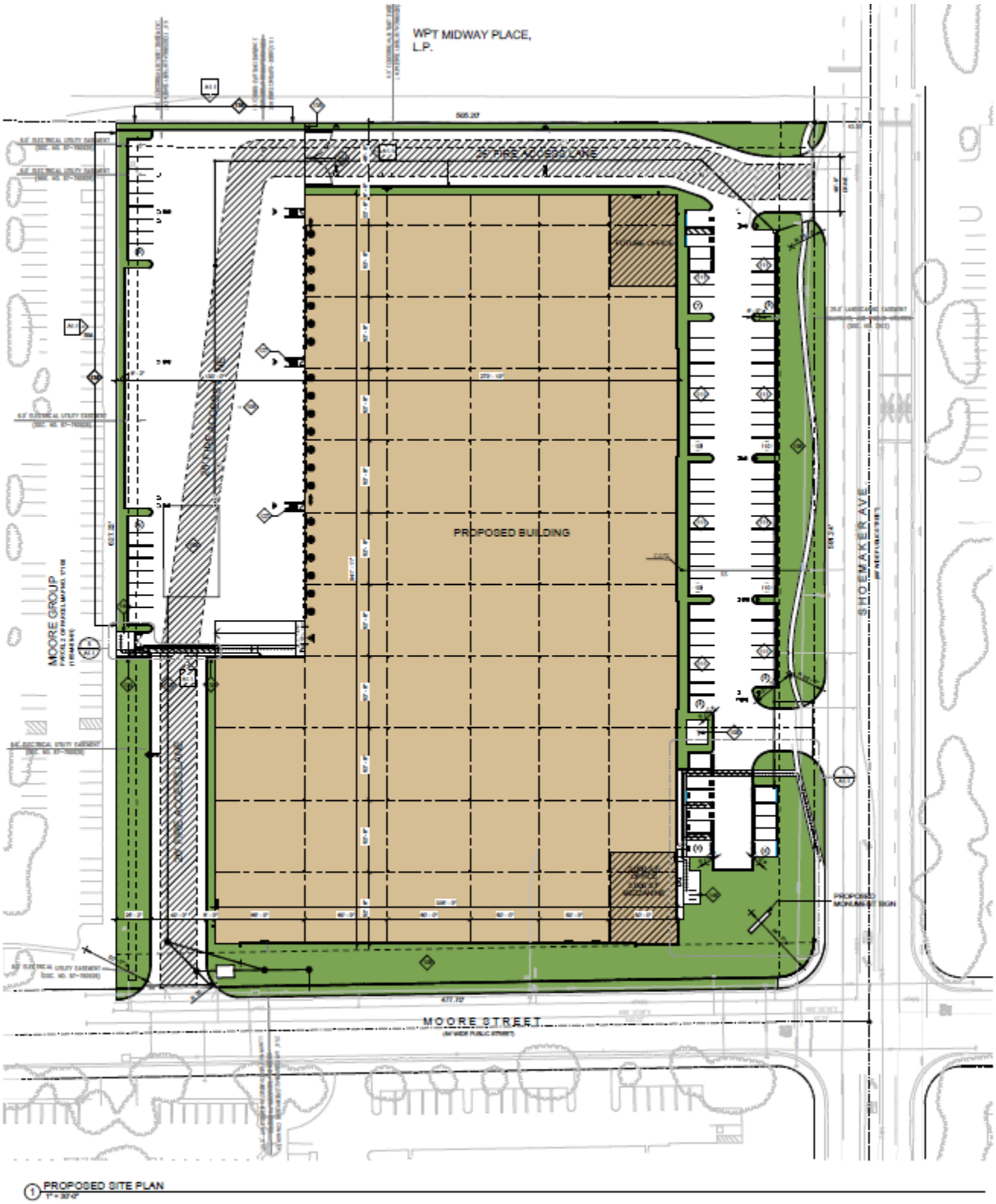
- *Does the development project generate a net increase of 110 or more daily vehicle[1] trips?"*

  A project's daily vehicle trip generation should be estimated using the most recent edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual. If the project proposed land use is not listed in the ITE Trip Generation Manual, please submit a trip generation study to Public Works for review and approval".

Based on Table 1 discussed previously, the project would generate fewer trips with the development of the proposed warehouse as compared to the existing research and development center land use. The proposed project trip generation would result in net negative trips, fewer than the net increase of 110 or more daily vehicle[1] trips threshold as stated in the LA County TIA guidelines. Therefore, no further analysis is required.

If you have any questions about this information, please contact me at (562) 833-9594 or daji@epdsolutions.com.

Figure 1: Project Site Plan



Source: Herdman Architecture + Design

Table 1: Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates[1]									
Research and Development Center		TSF	11.08	0.84	0.19	1.03	0.16	0.82	0.98
Warehouse		TSF	1.71	0.13	0.04	0.17	0.05	0.13	0.18
Project Trip Generation									
Existing Bldg	64.160	TSF	711	54	12	66	10	53	63
Vehicle Mix [2]		***Percent***							
Passenger Vehicles		72.50%	515	39	9	48	7	38	46
2-Axle truck		4.60%	33	2	1	3	0	2	3
3-Axle truck		5.70%	41	3	1	4	1	3	4
4+-Axle Trucks		17.20%	122	9	2	11	1	9	11
		100%	711	54	12	66	10	53	63
PCE Trip Generation [3]		***PCE Factor***							
Passenger Vehicles		1.0	515	39	9	48	7	39	46
2-Axle truck		1.5	49	3	2	5	1	3	4
3-Axle truck		2.0	81	6	2	8	1	6	7
4+-Axle Trucks		3.0	367	28	6	34	3	30	33
			1012	76	19	95	12	78	90
Warehouse	159.870	TSF	273	21	6	27	8	21	29
Vehicle Mix [4]		***Percent***							
Passenger Vehicles		55.30%	151	12	3	14	4	12	16
2-Axle truck		15.50%	42	3	1	4	1	3	4
3-Axle truck		4.90%	13	1	0	1	1	1	1
4+-Axle Trucks		24.30%	66	5	1	7	2	5	7
		100%	273	21	6	27	8	21	29
PCE Trip Generation [3]		***PCE Factor***							
Passenger Vehicles		1.0	151	12	3	14	4	12	16
2-Axle truck		1.5	63	5	2	6	2	5	7
3-Axle truck		2.0	27	2	1	3	2	2	3
4+-Axle Trucks		3.0	199	15	4	20	6	15	21
			440	33	10	43	15	33	47
Net PCE Trip Generation			**-572**	**-43**	**-9**	**-52**	**3**	**-45**	**-43**

TSF = Thousand Square Feet

PCE = Passenger Car Equivalent

[1] Trip rates from the Institute of Transporation Engineers, Trip Generation,11th Edition, 2021. Land Use Code 760 Research and Development Center, Land Use Code 150 Warehousing

[2] Vehicle Mix from the Warehouse Truck Trip Study Data Results and Usage, July 17, 2014. Without Cold Storage

[3] Passenger Car Equivalent (PCE) factors from the San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016.

[4] Vehicle Mix from the Warehouse Truck Trip Study Data Results and Usage, July 17, 2014. With Cold Storage