

Appendix A. Transportation Impact Analysis



MEMORANDUM

TO: Gardena Owner LP

FROM: Brian Hartshorn and Lauren Mullarkey-Williams

DATE: April 15, 2022

RE: Transportation Assessment for the
1600 W. 135th Street Project
Gardena, California

Ref: J1958

Gibson Transportation Consulting, Inc. was asked to prepare a local transportation assessment for the proposed warehouse/office project (Project) located at 1600 W. 135th Street (Project Site) in the of the City of Gardena, California (City). The base assumptions and technical methodologies (i.e., trip generation, vehicle miles traveled [VMT], etc.) used in this assessment were established in conjunction with the City and are consistent with *SB 743 Implementation Transportation Analysis Updates* (Fehr & Peers, June 2020) (City Guidelines) and in compliance with *California Environmental Quality Act (CEQA) Guidelines* (California Code of Regulations, Title 14, Section 15000 and following). This memorandum summarizes the assessment.

PROJECT DESCRIPTION

The Project Applicant proposes the development of approximately 180,860 square feet (sf) of industrial uses and 10,000 sf of office uses that would replace the approximately 148,788 sf of manufacturing, 49,138 sf of warehouse, and 32,693 sf of office uses currently occupying the Project Site. Vehicular access would be provided via two 45-foot driveways on 135th Street at the northwest and northeast corners of the Project Site. A total of 220 parking spaces would be provided on-site. The Project is anticipated to be completed in Year 2024.

The conceptual Project Site plan is illustrated in Figure 1.

PROJECT LOCATION

The Project Site is located in a designated industrial land use area of the City. Surrounding the Project Site is 135th Street to the north and industrial uses to the east, south, and west. The Project Site is located within 0.25 miles of bus stops at the intersection of Western Avenue & 135th Street, which provide service to GTrans Line 2 and Line 4.

The Project Site location is illustrated in Figure 2.

TRIP GENERATION ESTIMATES

Due to the industrial composition of the Project, three distinct land uses were assessed as part of the trip generation estimation to determine which type of industrial land use would generate the worst-case traffic demand. Manufacturing, warehouse, and high-cube distribution center uses were each evaluated and then compared to the existing uses on site.

The number of peak hour trips generated by the Project was estimated using rates for manufacturing, warehouse, and high-cube distribution center uses, along with general office (for the ancillary office component) published in *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers [ITE], 2021), which are based on surveys of similar land uses at sites around the country and are provided as both daily rates and morning and afternoon peak hour rates. They relate the number of vehicle trips traveling to and from the Project Site to the density of each land use.

Additionally, a reduction was applied to account for the removal of the existing land uses, which currently generate trips to the local roadway network, from the Project Site. These existing trips were also estimated based on *Trip Generation Manual, 11th Edition*.

- Manufacturing Use: As shown in Table 1A, if the Project is developed as a manufacturing facility, it is anticipated to result in a reduction of 178 daily trips, with 21 fewer morning peak hour trips and 18 fewer afternoon peak hour trips than the existing uses.
- Warehousing Use: As shown in Table 1B, if the Project operates as a warehousing use, it is anticipated to result in a reduction of 728 daily trips, with 113 fewer morning peak hour trips and 119 fewer afternoon peak hour trips than the existing uses.
- High-Cube Distribution Center Use: As shown in Table 1C, if the Project is developed as a high-cube distribution center, it is anticipated to result in a reduction of 784 daily trips, with 130 fewer morning peak hour trips and 134 fewer afternoon peak hour trips than the existing uses.

The Project, when evaluated as a manufacturing facility, provides the most conservative trip generation estimates and, thus, manufacturing uses were assumed in subsequent analyses.

VMT IMPACT ASSESSMENT

State of California Senate Bill 743 (Steinberg, 2013) (SB 743), made effective in January 2014, required the Governor's Office of Planning and Research to change the CEQA guidelines regarding the analysis of transportation impacts. Under SB 743, the focus of transportation analysis shifted from driver delay (level of service [LOS]) to VMT in order to reduce greenhouse gas emissions, create multimodal networks, and promote mixed-use developments.

The City Guidelines define the methodology for analyzing a project's VMT impacts in accordance with SB 743 and include criteria for screening low VMT generating projects out of a detailed VMT analysis.

VMT Screening Criteria

The City Guidelines identify the following three VMT screening criteria to determine what level of VMT analysis is required.

1. Project Type Screening. Projects that generate fewer than 110 daily trips, local serving retail projects below 50,000 sf, and affordable housing projects may be screened out of a detailed VMT analysis.
2. Low VMT Area Screening. Projects located within a low VMT generating Transportation Analysis Zone, as defined by the Southern California Association of Governments regional Travel Demand Forecasting Model, may be screened out of a detailed VMT analysis.
3. Transit Proximity Screening. Projects located within 0.5 miles of an existing or planning major transit stop or stop along a high-quality transit corridor may be screened out of a detailed VMT analysis so long as the following criteria apply:
 - The project has a floor area ratio of 0.75 or above
 - The project does not provide more parking than what is required by the City
 - The project is consistent with applicable Sustainable Community Strategies as determined by the City
 - The project does not replace affordable residential units with fewer moderate- or high-income residential units

Projects that satisfy at least one of the three screening identified above may be screened out of a detailed VMT analysis.

VMT Screening Analysis Results

As discussed above and shown in Table 1A, the Project would generate fewer than 110 daily trips and, therefore, would be screened out of a detailed VMT analysis. Thus, based on the City Guidelines, the Project would result in a less-than-significant VMT impact and no further analysis is required.

LOCAL TRANSPORTATION ASSESSMENT

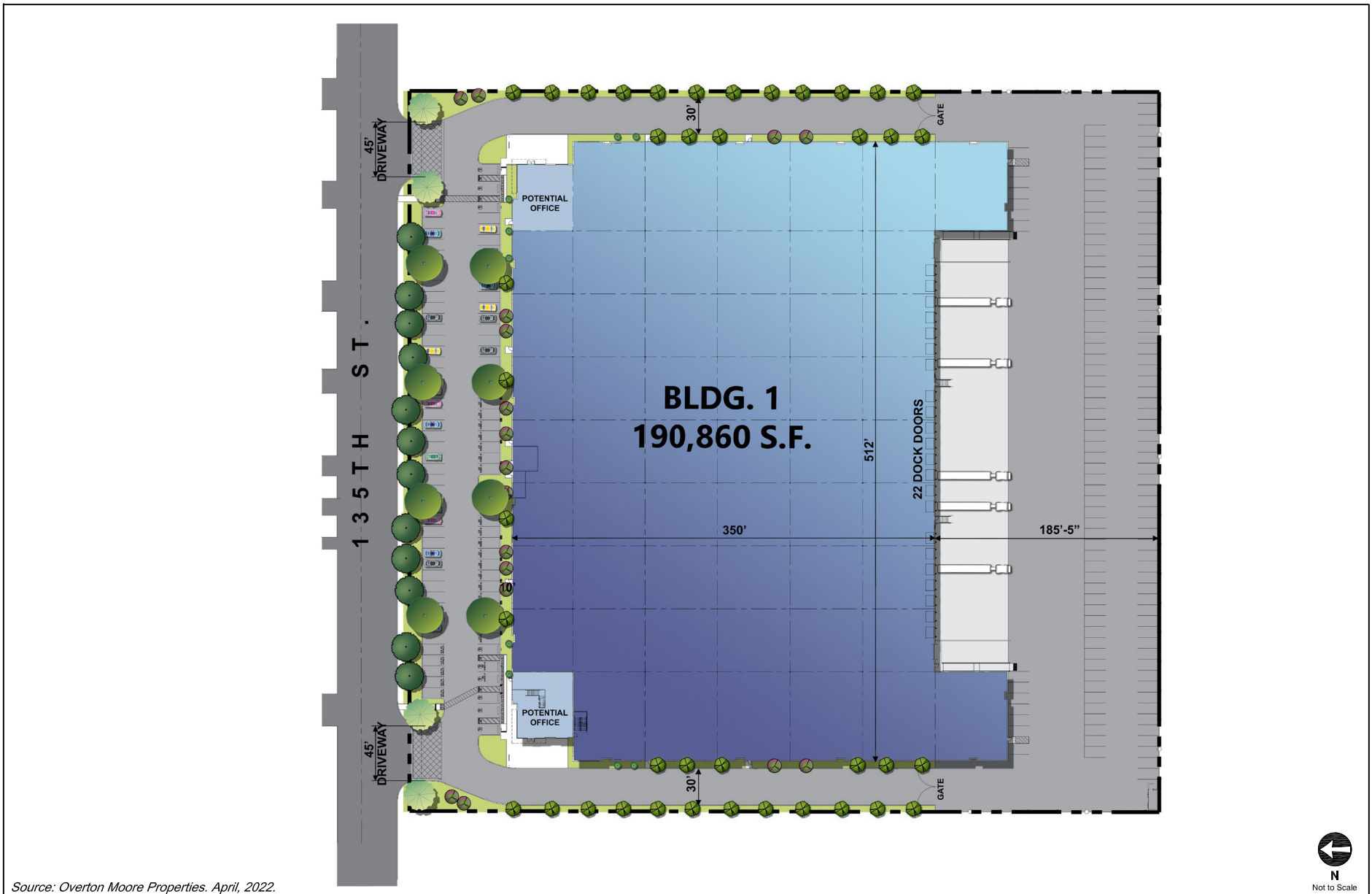
The City Guidelines include an outline of the procedures for studying a project's effects on the local transportation system beyond what is required to comply with CEQA under SB 743. For projects generating less than 20 peak hour trips, a summary of a project's trip generation and assignment is required, and no cumulative project review or LOS analysis is necessary.

As discussed above and shown in Table 1A, the Project is anticipated to generate 178 fewer daily trips, 21 fewer morning peak hour trips and 18 fewer afternoon peak hour trips than those currently generated by on-site uses. Based on these results, adjacent intersections and roadway segments are anticipated to experience less traffic demand and/or congestion from the proposed Project uses.

While the Project traffic is expected to reduce overall demand in the vicinity, City Guidelines also require this assessment to include traffic distribution pattern assumptions. Given that the proposed Project and existing uses on site consist of similar industrial land uses, it is anticipated that Project travel patterns would also be similar. As such, the estimated trips were assigned to the local roadway network based on the location of residences and commercial centers from which employees and visitors of the Project would be drawn, characteristics of the street system serving the Project Site, local traffic patterns, proximity to nearby freeway interchanges, and the location of the proposed driveways. The geographic trip distribution pattern is shown in Figure 3.

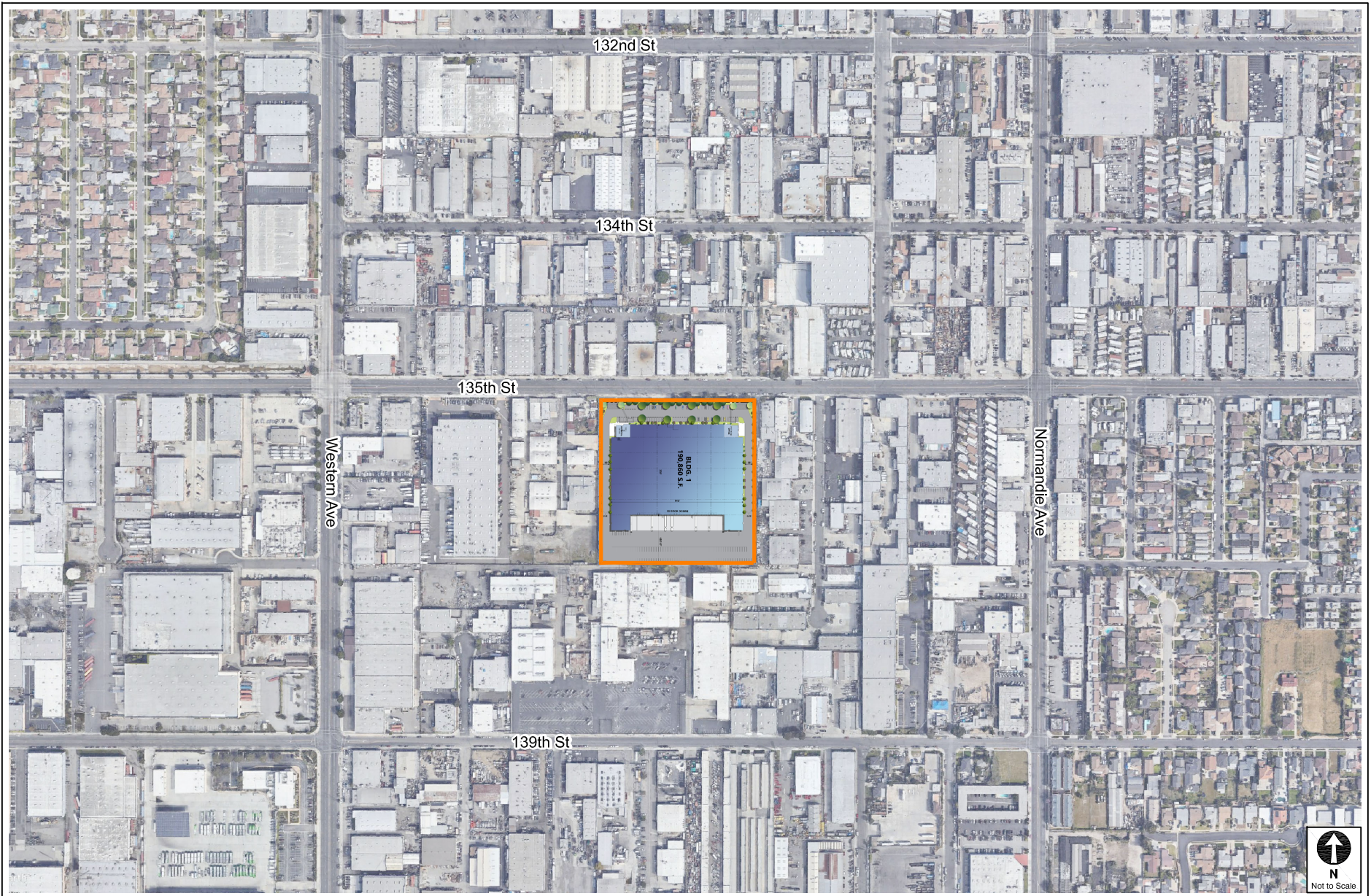
SUMMARY

After accounting for the removal of existing uses on site, the Project would result in net negative trip generation. Based on the City Guidelines, the Project satisfies the Project Type Screening criteria by generating fewer than 110 daily trips. As such, the Project would be screened from performing a detailed VMT analysis, and it can be concluded that the Project would result in a less-than-significant VMT impact. Further, the local transportation assessment includes a geometric distribution assignment and demonstrates the Project would result in lessened traffic demand and/or congestion at adjacent intersections and along roadway segments due to the reduction in overall traffic. Therefore, no local transportation impacts are anticipated by the proposed Project uses.



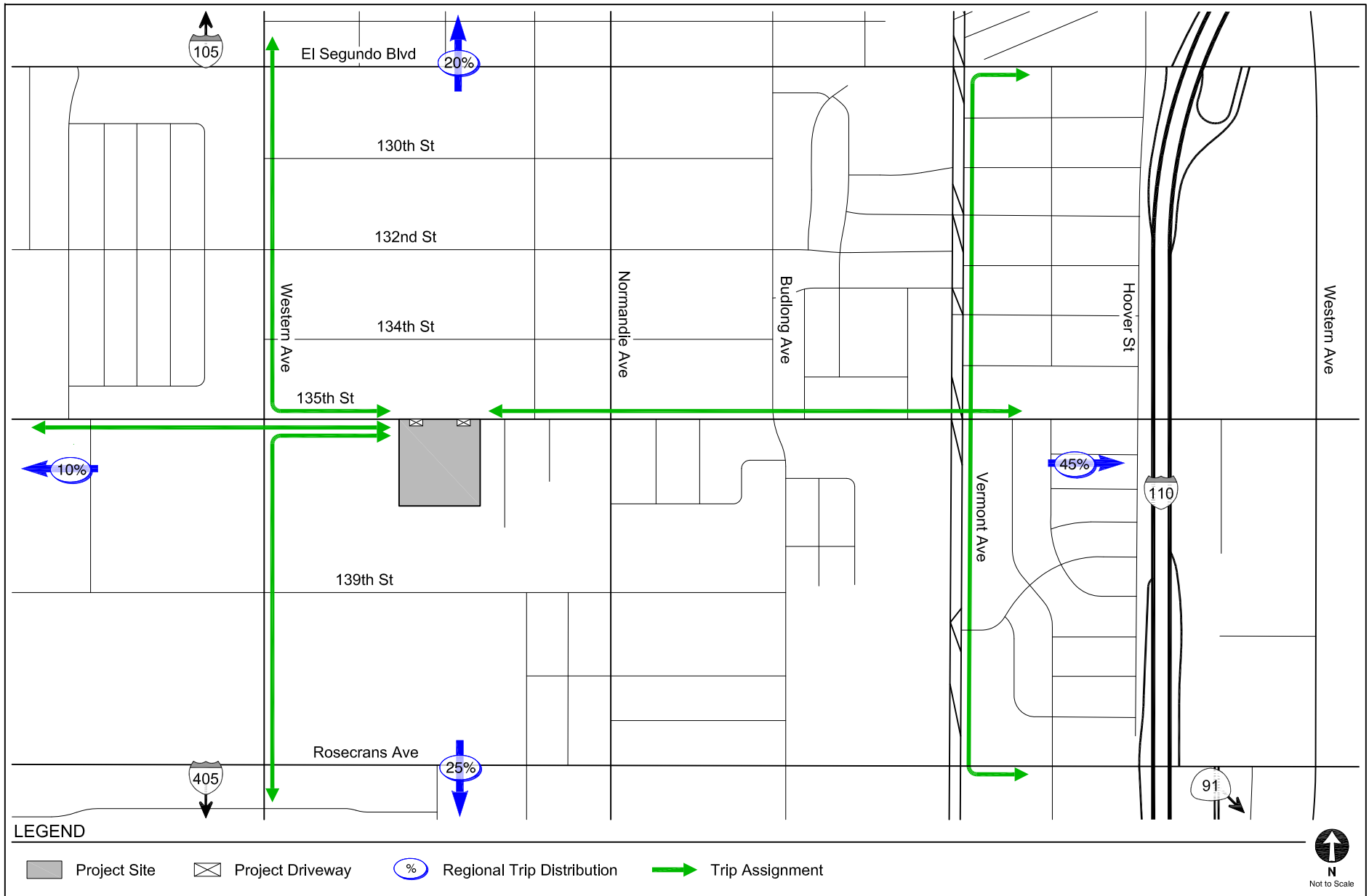
PROJECT SITE PLAN

FIGURE
1



PROJECT SITE LOCATION

FIGURE
2



PROJECT TRIP DISTRIBUTION

FIGURE 3

**TABLE 1A
PROJECT TRIP GENERATION ESTIMATES**

TRIP GENERATION RATES									
Land Use	ITE Land Use	Size	Daily	Morning Peak Hour [a]			Afternoon Peak Hour [a]		
				In	Out	Total	In	Out	Total
Manufacturing	140	per 1,000 sf	4.75	76%	24%	0.68	31%	69%	0.74
General Office Building	710	per 1,000 sf	10.84	88%	12%	1.52	17%	83%	1.44

TRIP GENERATION ESTIMATES									
Land Use	ITE Land Use	Size	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
<u>Proposed Project</u>									
Manufacturing	140	180.86 ksf	859	93	30	123	42	92	134
General Office Building	710	10 ksf	108	13	2	15	2	12	14
<i>Subtotal - Proposed Project</i>			967	106	32	138	44	104	148
<u>Existing Uses to be Removed</u>									
Manufacturing	140	148.788 ksf	(707)	(77)	(24)	(101)	(34)	(76)	(110)
Warehousing	150	49.138 ksf	(84)	(6)	(2)	(8)	(3)	(6)	(9)
General Office Building	710	32.693 ksf	(354)	(44)	(6)	(50)	(8)	(39)	(47)
<i>Subtotal - Existing Uses to be Removed</i>			(1,145)	(127)	(32)	(159)	(45)	(121)	(166)
NET DIFFERENCE IN TRIPS			(178)	(21)	0	(21)	(1)	(17)	(18)

Notes:

ksf: 1,000 square feet

[a] Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.

**TABLE 1B
PROJECT TRIP GENERATION ESTIMATES**

TRIP GENERATION RATES									
Land Use	ITE Land Use	Size	Daily	Morning Peak Hour [a]			Afternoon Peak Hour [a]		
				In	Out	Total	In	Out	Total
Warehousing	150	per 1,000 sf	1.71	77%	23%	0.17	28%	72%	0.18
General Office Building	710	per 1,000 sf	10.84	88%	12%	1.52	17%	83%	1.44

TRIP GENERATION ESTIMATES									
Land Use	ITE Land Use	Size	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
<u>Proposed Project</u>									
Warehousing	150	180.86 ksf	309	24	7	31	9	24	33
General Office Building	710	10 ksf	108	13	2	15	2	12	14
<i>Subtotal - Proposed Project</i>			<i>417</i>	<i>37</i>	<i>9</i>	<i>46</i>	<i>11</i>	<i>36</i>	<i>47</i>
<u>Existing Uses to be Removed</u>									
Manufacturing	140	148.788 ksf	(707)	(77)	(24)	(101)	(34)	(76)	(110)
Warehousing	150	49.138 ksf	(84)	(6)	(2)	(8)	(3)	(6)	(9)
General Office Building	710	32.693 ksf	(354)	(44)	(6)	(50)	(8)	(39)	(47)
<i>Subtotal - Existing Uses to be Removed</i>			<i>(1,145)</i>	<i>(127)</i>	<i>(32)</i>	<i>(159)</i>	<i>(45)</i>	<i>(121)</i>	<i>(166)</i>
NET DIFFERENCE IN TRIPS			(728)	(90)	(23)	(113)	(34)	(85)	(119)

Notes:

ksf: 1,000 square feet

[a] Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.

**TABLE 1C
PROJECT TRIP GENERATION ESTIMATES**

TRIP GENERATION RATES									
Land Use	ITE Land Use	Size	Daily	Morning Peak Hour [a]			Afternoon Peak Hour [a]		
				In	Out	Total	In	Out	Total
High-Cube Transload and Short-Term Storage General Office Building	154	per 1,000 sf	1.40	77%	23%	0.08	28%	72%	0.10
	710	per 1,000 sf	10.84	88%	12%	1.52	17%	83%	1.44

TRIP GENERATION ESTIMATES									
Land Use	ITE Land Use	Size	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
<u>Proposed Project</u>									
High-Cube Transload and Short-Term Storage	154	180.86 ksf	253	11	3	14	5	13	18
General Office Building	710	10 ksf	108	13	2	15	2	12	14
<i>Subtotal - Proposed Project</i>			361	24	5	29	7	25	32
<u>Existing Uses to be Removed</u>									
Manufacturing	140	148.788 ksf	(707)	(77)	(24)	(101)	(34)	(76)	(110)
Warehousing	150	49.138 ksf	(84)	(6)	(2)	(8)	(3)	(6)	(9)
General Office Building	710	32.693 ksf	(354)	(44)	(6)	(50)	(8)	(39)	(47)
<i>Subtotal - Existing Uses to be Removed</i>			(1,145)	(127)	(32)	(159)	(45)	(121)	(166)
NET DIFFERENCE IN TRIPS			(784)	(103)	(27)	(130)	(38)	(96)	(134)

Notes:

ksf: 1,000 square feet

[a] Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.