January 19, 2023

Mr. Edgar Corral
BERGMAN KPRS
2850 Saturn Street
Brea, California 92821

RE: M&J Pallet Building Transportation Study Screening Assessment
Project No. 19601

Dear Mr. Corral:

Ganddini Group, Inc. is pleased to provide this Transportation Study Screening Assessment for the proposed M&J Pallet Building in the County of San Bernardino. The purpose of this screening assessment is to determine if preparation of a traffic impact analysis with level of service (LOS) analysis or vehicle miles traveled (VMT) analysis is necessary based on the transportation study guidelines and screening criteria established by the County of San Bernardino. We trust the findings of this analysis will aid you and the County of San Bernardino in assessing the project.

PROJECT DESCRIPTION

The project site is located at 12152 East End Avenue in the County of San Bernardino, California. The project site is currently zoned Community Industrial (CI) and is developed with one residence on commercial property.

The proposed project consists of the removal of the existing residential structure for the construction of a 26,122 square foot industrial building that includes 18,122 square feet of warehouse and 8,000 square feet of manufacturing. Vehicular access is proposed by two driveways on East End Avenue. The proposed site plan is shown in Attachment A.

PROJECT TRIPS

Table 1 shows the project trip generation based on trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for ITE Land Use Code 140 (Manufacturing), Land Use Code 150 (Warehouse) were determined to adequately represent the proposed uses and were selected for calculation of the project trip generation forecast. The number of trips generated is determined by multiplying the trip generation rates and directional distributions by the land use quantity. To provide a conservative assessment, no credits were applied for the trips that will be displaced by removal of the existing residential use.

As shown in Table 1, the proposed project is forecast to generate 68 daily vehicle trips, including 11 vehicle trips during the AM peak hour and 12 vehicle trips during the PM peak hour.

TRUCK TRIPS

The project trip generation was also calculated in terms of Passenger Car Equivalent (PCE) trips. The percentage of truck trips was obtained from the ITE Trip Generation Manual. The truck mix by axle type was determined based on South Coast Air Quality Management District (SCAQMD) recommendations for high-cube warehousing facilities without cold-storage for the proposed warehousing use and the City of Fontana *Truck Trip Generation Study* (August 2003) for the proposed manufacturing use. Truck trips were converted to PCE trips based on the following factors: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

As also shown in Table 1, the proposed project is forecast to generate approximately 90 daily PCE trips, including 15 PCE trips during the AM peak hour and 21 PCE trips during the PM peak hour.

CRITERIA FOR THE PREPARATION OF TRAFFIC IMPACT ANALYSES

The project has been screened for both level of service (LOS) analysis and vehicle miles traveled (VMT) analysis using the established criteria as specified in the County of San Bernardino *Transportation Impact Study Guidelines*, July 2019 ["County TIA Guidelines"].

LEVEL OF SERVICE SCREENING CRITERIA (GENERAL PLAN CONFORMITY)

As specified in the County TIA Guidelines, the requirement to prepare a transportation impact study with level of service (LOS) analysis should be based on one or more of the following criteria:

- If a project generates more than 100 or more trips without consideration of pass-by trip reductions during any peak hour.
- If a project is located within 300 feet of the intersection of two streets designated as Collector or higher on the County's General Plan circulation system or an impacted intersection as determined by the County Traffic Division.
- If the project creates a safety or operational concerns.
- If a project generates less than 100 trips without consideration of pass-by trip reductions during any peak hour, a study may be required if there are special concerns.

The proposed project is forecast to generate fewer than 100 peak hour trips and is located more than 300 feet from the nearest intersection of two streets designated as Collector or higher on the County's General Plan circulation system. Assuming the project shall construct all on-site and off-site improvements (if any) following County design standards, the project is not anticipated to create any new safety or operational concerns. Therefore, the proposed project does not warrant the preparation of a transportation impact study with LOS analysis based on the County-established screening criteria.

VEHICLE MILES TRAVELED SCREENING CRITERIA (CEQA)

Vehicle miles traveled (VMT) refers to the amount and distance of automobile travel attributable to a project or region. The project VMT screening assessment has been prepared in accordance with County TIA Guidelines, which were developed based on guidance from the Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (State of California, December 2018). The OPR Technical Advisory provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

The County TIA Guidelines identify screening criteria for certain types of projects that typically reduce VMT and may be presumed to result in a less than significant VMT impact. To qualify for VMT screening, the project need only satisfy one of the following screening criteria:

- Projects located within a Transit Priority Area (TPA)
  - Projects located within one-half mile radius of a major transit stop[1] or high-quality transit corridor[2]
- Projects located within a low VMT area
  - Site location can be verified with the web-based or map-based VMT Screening Tool[3]
- Project Type Screening
  - Local serving land uses
  - Projects which generate less than net new 110 daily vehicle trips

TPA SCREENING

Projects located within a TPA, defined as within one-half mile of a major transit stop or high-quality transit corridor, may be presumed to result in a less than significant VMT impact absent substantial evidence to the contrary. This presumption may not apply, however, if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;

2. Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking)

3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the jurisdiction with input from the Metropolitan Planning Organization): or

4. Replaces affordable residential units with a smaller number of moderate or high-income residential units.

Based on a review of the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool, the proposed project is not located within a TPA; therefore, the project does not satisfy the TPA screening criteria.

LOW VMT AREA SCREENING

Residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area. Based on the County-established thresholds, a project would satisfy the low VMT screening criteria if it is located in a traffic analysis zone (TAZ) that does not exceed four percent below the County average total daily VMT per service population.

To identify if the project is in a low VMT area, the SBCTA VMT Screening Tool was used. The SBCTA VMT Screening Tool was developed from the San Bernardino Transportation Analysis Model (SBTAM) travel

[1] A major transit stop is defined as an existing rail transit station, ferry terminal with bus or rail service, or the intersection of two or more major bus routes with less than 15-minute headways during the peak commute hours (Pub. Resources Code, § 21064.3.).

[2] Fixed route bus service with less than 15-minute headways during the peak commute hours (Pub. Resources Code, § 21155).

[3] The SBCTA VMT Screening Tool was developed from the San Bernardino Transportation Analysis Model (SBTAM) travel forecasting model to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs).

forecasting model to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs). TAZs are geographic polygons similar to census block groups used to represent areas of homogenous travel behavior. Projects located in areas that incorporate similar features of the TAZ will tend to exhibit similar VMT. This presumption may not be appropriate if the project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

The proposed project is consistent with existing zoned land uses in the project TAZ and there does not appear to be anything unique about the project that would otherwise be misrepresented utilizing the data from the SBCTA VMT Screening Tool. In this case, the proposed project consists of industrial uses only; therefore, the applicable service population is the worker population, and the project TAZ VMT has been calculated for VMT per worker population.

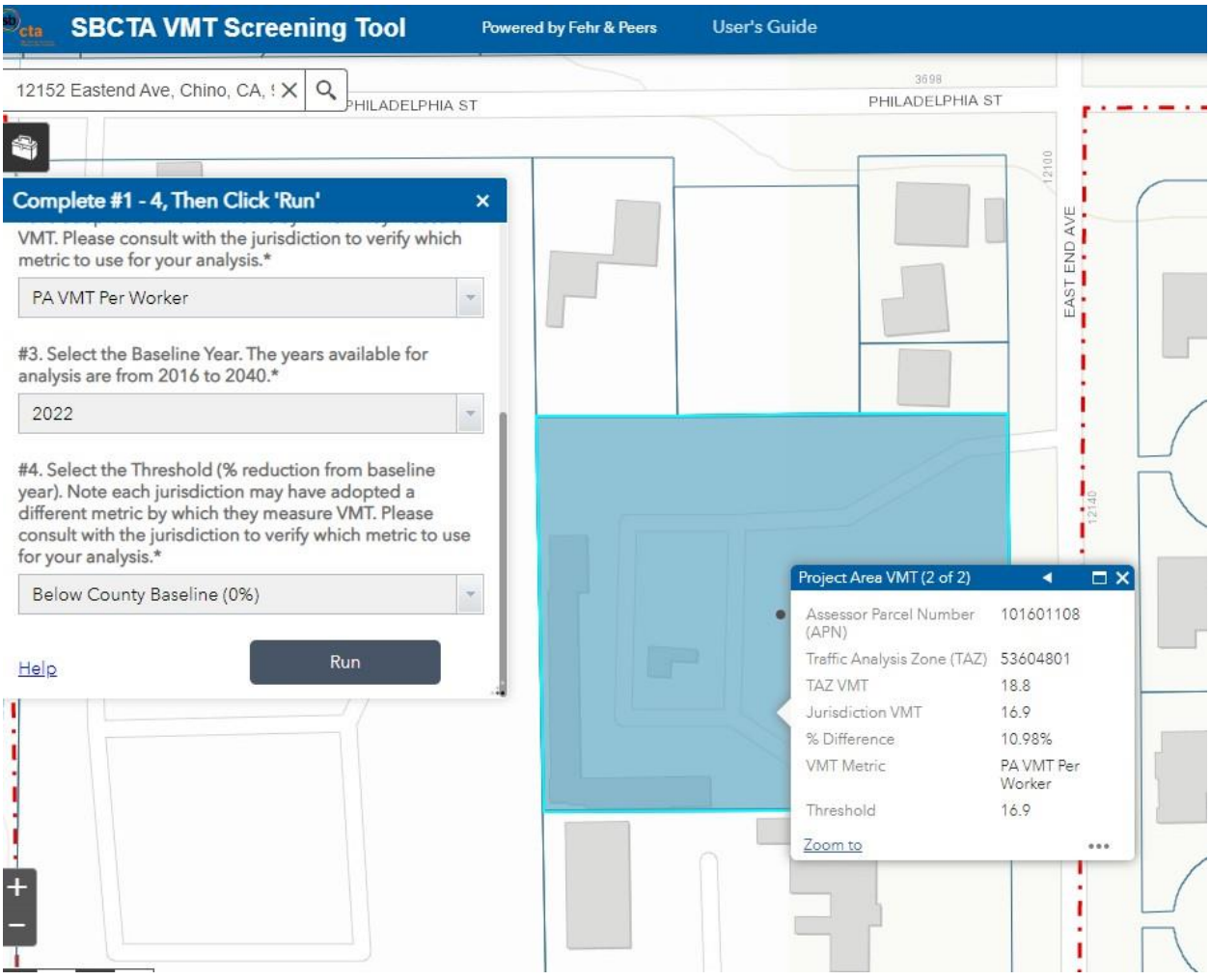


Exhibit A – SBCTA VMT Screening Tool Results

Exhibit A shows the SBCTA VMT Screening Tool results for the project site, which is located within TAZ 53604801. As shown in Exhibit A, the baseline year (2022) VMT per service population for the project TAZ is equal to 18.8 and the County baseline is equal to 16.9. Therefore, the proposed project does not satisfy the County-established screening criteria for projects located in a low VMT area.

PROJECT TYPE SCREENING

The County TIA Guidelines identify the several types of projects that may be presumed to have a less than significant VMT impact as they are local serving and thus can be expected to reduce VMT or they are small enough to have a negligible impact:

- Projects consisting of local servicing land use
  - K-12 schools
  - Local-serving retail less than 50,000 square feet
  - Local parks
  - Day care centers
  - Local-serving gas stations
  - Local-serving banks
  - Student housing projects
  - Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Projects generating with less than 110 daily vehicle trips.[4] This generally corresponds to the following typical development potentials:
  - 11 single-family residential dwelling units
  - 16 multi-family residential dwelling units
  - 10,000 square feet of office
  - 15,000 square feet of light industrial
  - 63,000 square feet of warehousing
  - 79,000 square feet of high-cube transload and short-term storage warehouse
  - 12 hotel rooms

As previously shown in Table 1, the proposed redevelopment project is forecast to generate approximately 68 daily vehicle trips. The proposed project satisfies the County-established VMT screening criteria for projects generating less than 110 daily vehicle trips. Therefore, preparation of a transportation impact study with VMT analysis is not warranted and the project may be presumed to have a less than significant VMT impact.

CONCLUSIONS

The proposed project is forecast to generate 68 daily vehicle trips, including 11 vehicle trips during the AM peak hour and 12 vehicle trips during the PM peak hour. This equates to approximately 90 daily PCE trips, including 15 PCE trips during the AM peak hour and 21 PCE trips during the PM peak hour.

The proposed project satisfies the County-established level of service (LOS) screening criteria for projects generating fewer than 100 peak hour trips and more than 300 feet from a classified intersection. Therefore, the proposed project does not warrant the preparation of a level of service transportation impact study based on the County-established LOS screening criteria.

[4] As specified by the OPR Technical Advisory, the term vehicle refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty trucks should only be included in a traffic impact analysis for modeling convenience and ease of calculation (e.g., where data provided combine auto and heavy freight VMT) (CEQA Guidelines, § 15064.3, subd. (a)). Therefore, heavy-duty truck trips should not contribute to a finding of significant traffic (VMT) impact.

Mr. Edgar Corral
BERGMAN KPRS
January 19, 2023

The proposed project satisfies the County-established VMT screening criteria for projects generating less than 110 daily vehicle trips. Therefore, preparation of a transportation impact study with VMT analysis is not warranted and the project may be presumed to result in a less than significant VMT impact.

It has been a pleasure to assist you with this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 795-3100.

Sincerely,
GANDDINI GROUP, INC.

Perrie Ilercil, P.E. (AZ)
Senior Engineer

Giancarlo Ganddini, PE, PTP
Principal

Table 1 (1 of 2)
Project Trip Generation

TRIP GENERATION RATES PER TSF[1]								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	Source[2]	In	Out	Rate	In	Out	Rate	Daily Rate
Manufacturing								
All Vehicles	ITE 140	76%	24%	0.680	31%	69%	0.740	4.750
Trucks Only	ITE 140	56%	44%	0.030	41%	59%	0.030	0.450
Passenger Car (95.6% AM, 95.9% PM, 90.5% Daily)		0.494	0.156	0.650	0.220	0.490	0.710	4.300
Truck (4.4% AM, 4.1% PM, 9.5% Daily)		0.017	0.013	0.030	0.012	0.018	0.030	0.450
Truck Mix:	Fontana							
2-Axle Trucks (11.0%)	Fontana	0.002	0.001	0.003	0.001	0.002	0.003	0.050
3-Axle Trucks (36.0%)	Fontana	0.006	0.005	0.011	0.005	0.006	0.011	0.162
4+ Axle Trucks (53.0%)	Fontana	0.009	0.007	0.016	0.007	0.009	0.016	0.239
Warehousing								
All Vehicles	ITE 150	77%	23%	0.170	28%	72%	0.180	1.710
Trucks Only	ITE 150	52%	48%	0.020	52%	48%	0.030	0.600
Passenger Car (88.2% AM, 83.3% PM, 64.9% Daily)		0.116	0.035	0.151	0.042	0.108	0.150	1.110
Truck (11.8% AM, 16.7% PM, 35.1% Daily)		0.010	0.010	0.020	0.016	0.014	0.030	0.600
Truck Mix:	SCAQMD							
2-Axle Trucks (16.7%)	SCAQMD	0.002	0.001	0.003	0.003	0.002	0.005	0.100
3-Axle Trucks (20.7%)	SCAQMD	0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+ Axle Trucks (62.6%)	SCAQMD	0.007	0.006	0.013	0.010	0.009	0.019	0.376

VEHICLE TRIPS GENERATED								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	Quantity	In	Out	Total	In	Out	Total	Daily
Manufacturing	8.000 TSF							
Passenger Car		4	1	5	2	4	6	34
Trucks								
2-Axle Trucks		0.0	0.0	0.0	0.0	0.0	0.0	0
3-Axle Trucks		0.0	0.1	0.1	0.1	0.0	0.1	1
4+ Axle Trucks		0.1	0.0	0.1	0.0	0.1	0.1	2
All Trucks		0	0	0	0	0	0	3
Subtotal - Manufacturing	8.000 TSF	4	1	5	2	4	6	37
Warehousing	18.112 TSF							
Passenger Car		2	1	3	1	2	3	20
Trucks								
2-Axle Trucks		0.0	0.1	0.1	0.1	0.0	0.1	2
3-Axle Trucks		0.0	0.1	0.1	0.0	0.1	0.1	2
4+ Axle Trucks		0.1	0.1	0.2	0.1	0.2	0.3	7
All Trucks		0	0	0	0	1	1	11
Subtotal - Warehousing	18.112 TSF	2	1	3	1	3	4	31

Table 1 (2 of 2)
Project Trip Generation

VEHICLE TRIPS GENERATED (Cont.)								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	Quantity	In	Out	Total	In	Out	Total	Daily
Total	44.224 TSF							
Total Passenger Cars		6	2	8	3	6	9	54
Total Trucks								
2-Axle Trucks[3]		0	1	1	1	0	1	2
3-Axle Trucks[3]		0	1	1	1	1	1	3
4+ Axle Trucks[3]		1	0	1	1	1	1	9
All Trucks		1	2	3	1	2	3	14
TOTAL VEHICLE TRIPS GENERATED	**44.224 TSF**	**7**	**4**	**11**	**4**	**8**	**12**	**68**

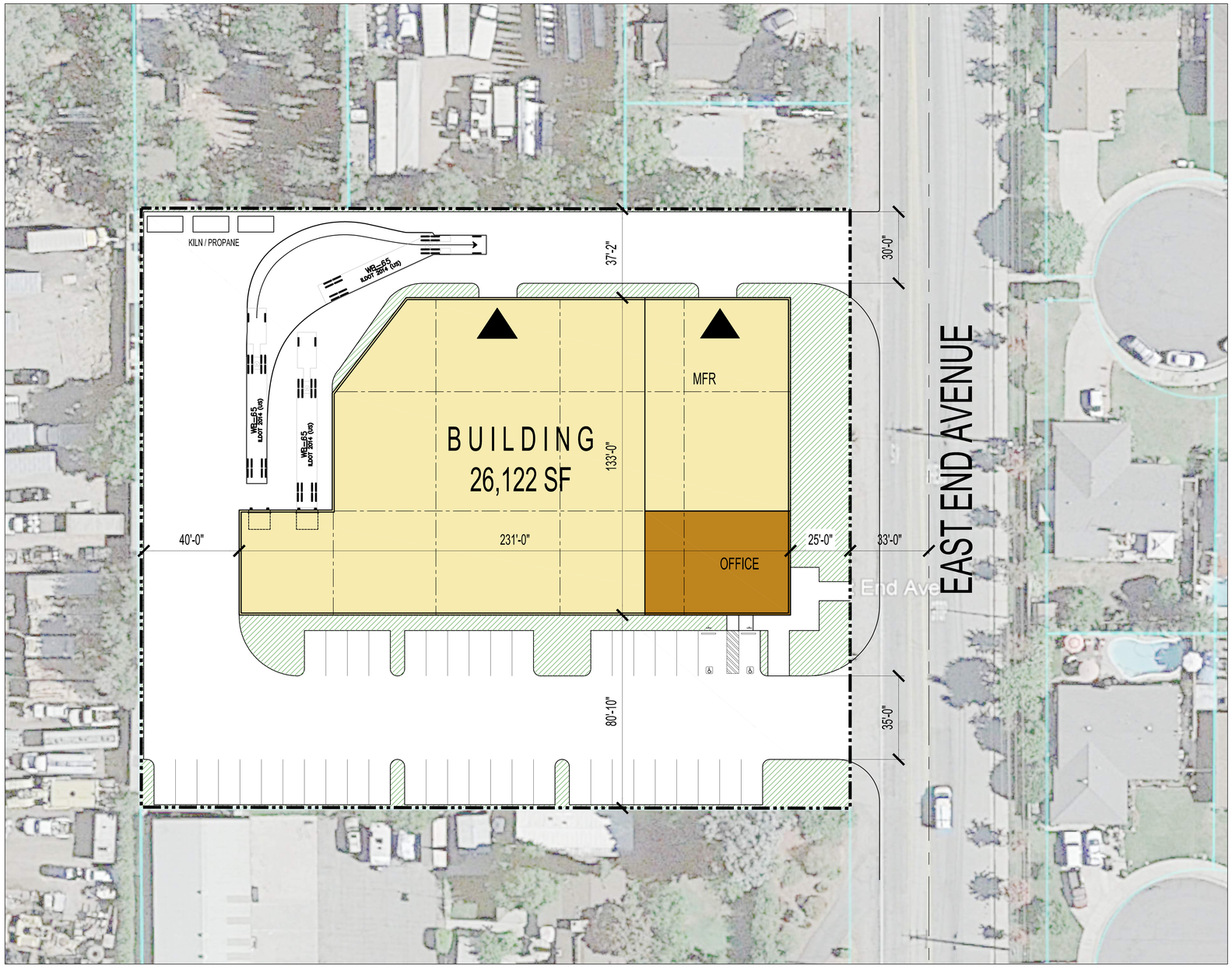
PCE[4] TRIPS GENERATED								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	PCE Factor[5]	In	Out	Total	In	Out	Total	Daily
Passenger Car	1.0	6	2	8	3	6	9	54
Trucks								
2-Axle Trucks[3]	1.5	0	2	2	2	0	2	3
3-Axle Trucks[3]	2.0	0	2	2	2	2	4	6
4+ Axle Trucks[3]	3.0	3	0	3	3	3	6	27
Subtotal		3	4	7	7	5	12	36
TOTAL PCE TRIPS GENERATED		**9**	**6**	**15**	**10**	**11**	**21**	**90**

Notes:

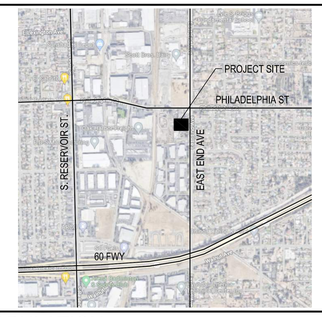
1. TSF = Thousand Square Feet
2. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = ITE Land Use Code.
   Fontana = City of Fontana Truck Trip Generation Study (August 2003); recommended truck mix for Heavy Industrial classification.
   SCAQMD = South Coast Air Quality Management District recommendations for non-cold storage high-cube warehouse.
3. Truck vehicle totals rounded up to whole values for a conservative analysis of small industrial projects that have a small percentage of trucks by axle. Truck PCE totals rounded up to a whole value after PCE factor applied to unrounded by axle totals.
4. PCE = passenger car equivalent.
5. (4) Source: San Bernardino County Congestion Management Program (2016), Appendix B.

ATTACHMENT A

SITE PLAN



VICINITY MAP



TABULATION

Chino, SB County

SITE AREA		74,546	SF
		1.71	Acres
BUILDING AREA			
1ST FLOOR	WAREHOUSE	18,122	SF
	MFR	5,500	SF
	OFFICE	2,500	SF
TOTAL		**26,122**	**SF**
PROJECT FACT			
	FAR PROVIDED		0.35
	CLEAR HEIGHT		28'
	BLDG HEIGHT		35'
ZONING			
ZONE ORDINANCE			IC
MAX BUILDING HEIGHT			75'
SET BACK			
	FRONT	25'	
	SIDE/REAR	0'	
PARKING REQ			
	AUTO PARKING		
	SIZE		9' X 19'
	OFFICE	1/250	10
	WAREHOUSE	1/1000	19
	MFR	1/500	11
	TOTAL		**40**
PROJECT PROVIDED			
PARKING PROVIDED			
	AUTO PARKING		
	STANDARD	9'X19'	33
	ADA STANDARD	9'X19'	1
	ADA VAN	12'X19'	1
	CLEAN / EV		9
	TOTAL		44

LEGEND

- WAREHOUSE/MFR
- OFFICE
- GRADE LEVEL DOOR

NORTH

NOTE

THIS IS A CONCEPTUAL SITE PLAN. DIMENSIONS, BUILDING AREA, AND NOTES AS SHOWN ON THE PROJECT TABULATION WILL NEED TO BE VERIFIED ONCE INFORMATION BECOMES AVAILABLE. THIS IS ONLY MEANT TO SERVE TO QUANTIFY AND ILLUSTRATE THE GENERAL BUILDING AND SITE ORIENTATION AS WELL UNDERSTANDING BASIC PARAMETERS OF THE SITE.

LHA

PROJECT: 12152 East End Avenue		DATE: 11.29.2022	VERSION: 06
LOCATION Chino / SB County CA		PROJECT NO. 22-344	SCALE: 1"= 20'

M&J Pallets