APPENDIX K2

SB 743 VMT ANALYSIS

SB 743 VMT Analysis
for:

CADO Warehouse

In the City of Menifee

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SB 743 VMT Analysis
CADO Warehouse Project
November 9, 2023

BACKGROUND

In 2013, SB 743 was signed into law by California Governor Jerry Brown with a goal of reducing Greenhouse Gas (GHG) emissions, promoting the development of infill land use projects and multimodal transportation networks, and to promote a diversity of land uses within developments. One significant outcome resulting from this statue is the removal of automobile delay and congestion, commonly known as Level of Service (LOS), as a basis for determining significant transportation impacts under the California Environmental Quality Act (CEQA).

The Governor's Office of Planning and Research (OPR) selected Vehicle Miles Traveled (VMT) as the principal measure to replace LOS for determining significant transportation impacts. VMT is a measure of total vehicular travel that accounts for the number of vehicle trips and the length of those trips. OPR selected VMT, in part, because jurisdictions are already familiar with this metric. VMT is already used in CEQA to study other potential impacts such as GHG, air quality, and energy impacts and is used in planning for regional Sustainable Communities Strategies (SCS).

VMT also allows for an analysis of a project's impact throughout the jurisdiction rather than only in the vicinity of the proposed project allowing for a better understanding of the full extent of a project's transportation-related impact. It should be noted that SB 743 does not disallow an agency to use LOS for other planning purposes outside the scope of CEQA.

This section documents SB 743 VMT analysis based on City of Menifee VMT Guidelines[1]

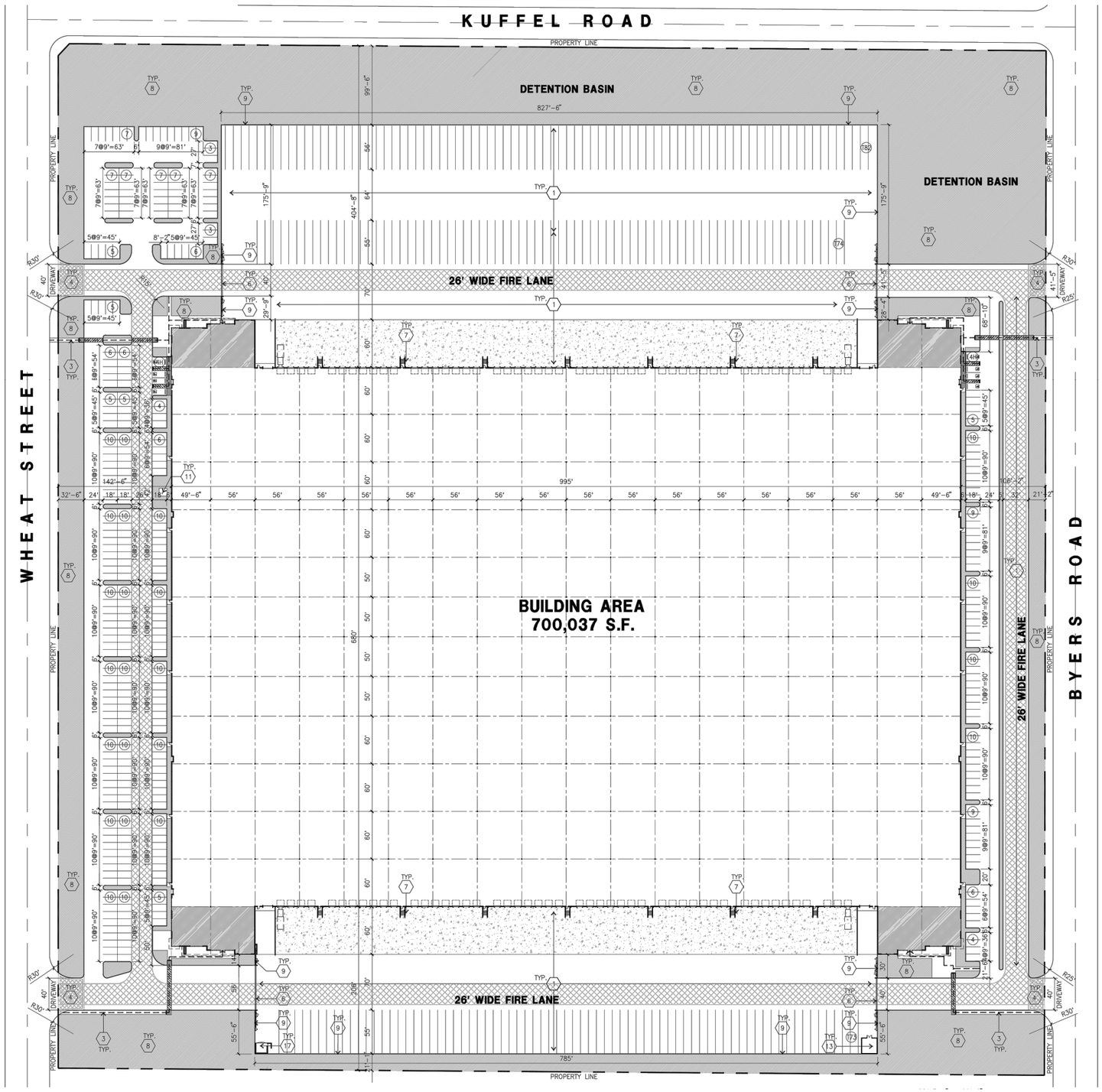
PROJECT DESCRIPTION

The CADO Warehouse project site is located on the southwest corner of the intersection of Kuffel Road at Byers Road, just south of Ethanac Road in the City of Menifee. The project site is approximately 36.8 acres and is generally bounded by Kuffel Road to the north, Byers Road to the east, Wheat Street to the east, and Corsica Lane to the south. The project site is currently vacant. The project consists of the construction of a warehouse building totaling approximately 700,037 square feet. A copy of the project site plan is provided on **Figure 1.**

VMT SCREENING

A VMT screening was conducted for the proposed project. Based on the City of Menifee's VMT screening criteria, the proposed project would not screen out of a VMT analysis. The project's VMT screening scoping form is provided in ***Appendix A***.

[1] *City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled, January 2022*



NOT TO SCALE

FIGURE 1
SITE PLAN

VMT THRESHOLDS

Based on the City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (VMT Guidelines; January 2022), a project would result in a significant project generated VMT impact if either of the following conditions are satisfied:

1. The baseline project generated VMT per service population exceeds the County of Riverside General Plan Buildout VMT per service population, or
2. The cumulative project generated VMT per service population exceeds the County of Riverside General Plan Buildout VMT per service population

ANALYSIS SCENARIOS

The VMT analysis was completed using the most current version of Riverside County's Transportation Model, RIVCOM (referred to as the "RIVCOM Model"). The model is trip-based and considered interaction between different land uses based on socio-economic data such as population, households, and employment. Adjustments in socio-economic data (employment) were made to the appropriate Traffic Analysis Zones (TAZ) in the RIVCOM Model to reflect the project's proposed land uses.

The model inputs and outputs from the RIVCOM model are included in **Appendix B** of the report. The current version of the RIVCOM Model maintains a base year condition of 2018 which, for the purposes of analysis, is considered to be representative of existing conditions. The planning horizon for the RIVCOM Model is 2045.

VMT analysis was conducted for existing and cumulative scenarios and results were compared to the existing conditions. The analysis includes the following scenarios:

- **Existing Conditions** – Based on 2018 RIVCOM Model conditions
- **Existing Plus Project Conditions** – Based on 2018 RIVCOM Model with the proposed CADO Warehouse
- **Cumulative No Project Conditions** – Based on 2045 RIVOM Model conditions without the proposed CADO Warehouse
- **Cumulative Plus Project Conditions** – Based on 2045 RIVCOM Model conditions the proposed CADO Warehouse

CADO WAREHOUSE LAND USE CONVERSION

In order to evaluate the project's VMT, the land use plan needed to be first converted into a RIVCOM compatible dataset. This dataset relied on land use assumptions developed by as part of the CADO Warehouse Project and the trip generation estimates for the Project.

The resultant land use data was coded into the RIVCOM Model for analysis. Generally speaking, for VMT analysis purposes this represented the following broad land use category:

- Employee-Based VMT (land uses where the principal source of VMT relates to worker commutes)

VMT ANALYSIS

PROJECT-GENERATED VMT

As described in the City of Menifee traffic impact analysis guidelines, VMT significance thresholds are based on land use type, broadly categorized as efficiency metrics. Efficiency metrics include VMT/Capita (Residential) and Work VMT/employee (Employee-Based VMT).

The calculation of VMT efficiency metrics has two components – the total number of trips generated and the average trip length of each vehicle. As the proposed project has only non-residential trips, trip attractions were used from all home-based-work trip purpose matrices. Using the peak and off-peak person trip matrices, skim (distances) matrices and appropriate occupancy rates, VMT was calculated for the CADO Warehouse traffic analysis zones (TAZs). **Exhibit 1** shows the efficiency metric results for the analysis scenarios.

Exhibit 1 – Project VMT Impact Evaluation – Efficiency Metrics

Analysis Scenario	Employment-Based VMT/EMP	VMT Impact
Riverside County Average	28.94	
Existing Plus Project		
Project HBW VMT / Employee	22.3	No
Cumulative Plus Project Conditions		
Project HBW VMT / Employee	19.4	No

Based on the results in **Exhibit 1** and the City of Menifee traffic impact study guidelines, the following initial unmitigated results are determined:

- The proposed project's Employment-Based VMT land use **does not exceed the City's VMT threshold under any project scenario.**

PROJECT EFFECT ON VMT

Consistent with state guidelines, VMT analyses take into account the length of all trips generated by a Project, whether they occur within a City or outside it. The VMT per service population summarized in Exhibit 1 (previously mentioned) is the total VMT produced by the Project, both inside and outside the City boundaries, divided by the total service population (population and employment). Therefore, the VMT efficiency and travel patterns within the City should be consistent with the VMT efficiency and travel patterns outside the City. As noted in Exhibit 1, the VMT per service population for the proposed project is less than the City's VMT threshold. This finding should remain consistent whether the entirety of the project's VMT is considered, or if only the VMT within the City is considered. This is because both the Project and the rest of the City, under which the threshold was developed, will have consistent travel patterns and so the relative VMT per service population between the project and the remainder of the City should remain consistent within the City as with what is summarized in Exhibit 1. Therefore, it can be determined that under baseline conditions, the proposed project effect on VMT would be considered a less-than-significant impact on VMT within the City, consistent with the findings summarized in Exhibit 1.

In addition, the City's VMT Guidelines state that the cumulative no project shall reflect the adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). As such, if a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant. The proposed land use is consistent with the City's General Plan; therefore, the proposed project's cumulative VMT impact is considered less-than-significant.

Based on the Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impact in CEQA (December 2018), "a project that falls below an efficiency-based threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less-than-significant cumulative impact, and vice versa." Since the project is consistent with the adopted Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS), the "project effect on VMT" is presumed to have a less-than significant impact.

VMT REDUCING DESIGN PRINCIPLES, POLICIES, AND IMPROVEMENTS

The City of Menifee provides Industrial Good Neighbor Policies for new industrial project sites, which are provided in **Appendix C**. Although the Project's VMT impact is considered to be less than significant, the Industrial Good Neighbor Policies require Transportation Demand Management (TDM) measures for industrial uses with over 100 employees to reduce work-related vehicle trips.

CONCLUSION

Based on the results of this analysis, the following findings are made:

- The proposed project's Employment-Based VMT **does not exceed the threshold under any project scenario and as a result are determined to not have a significant transportation impact** based on the City's adopted thresholds**.**

- Based on the City's VMT Guidelines, if a project is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), then the cumulative impacts shall be considered less than significant. The proposed land use is consistent with the City's General Plan; therefore, **the proposed project's cumulative VMT impact is considered less-than-significant.**

APPENDIX A

VMT SCREENING SCOPING FORM

Attachment A: Project Scoping Form

This scoping form shall be completed and submitted to the City of Menifee to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	CADO Warehouse Project
Project Address:	SE Corner of Kuffel/Wheat and SW Corner of Kuffel/Byers
Project Opening Year:	2024
Project Description:	700,037 SF warehouse building with 389 vehicular parking stalls and 234 trailer stalls.

	Consultant:	**Developer:**
Name:	Kimley-Horn and Associates, Inc.	
Address:	3880 Lemon St, Suite 420	
	Riverside, CA 92501	
Telephone:	714-786-6117	
Fax/Email:	trevor.briggs@kimley-horn.com	

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual, 11th Edition

Current General Plan Land Use: Vacant

Proposed General Plan Land Use: Warehouse/Industrial

Current Zoning: EDC

Proposed Zoning: EDC

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				517	122	639
PM Trips				343	536	879

Trip Internalization: ☐ Yes ☒ No (_____% Trip Discount)

Pass-By Allowance: ☐ Yes ☒ No (_____% Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses (see Page 11 of the guidelines related to LOS assessment and Pages 24-26).

Is the project screened from VMT assessment? ☐ Yes ☒ No

VMT screening justification (see Pages 24-26 of the guidelines): See attached VMT screening assessment.

VMT Analysis Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used RIVCOM
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

See Attachment B

Signatures

TIA Preparer: Trevor Briggs City (Approved by): _____

CEQA VEHICLE MILES TRAVELED (VMT) ASSESSMENT

Senate Bill 743 (SB 743) was approved by California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular "Level of Service" (LOS) for evaluating transportation projects. OPR has prepared a technical advisory ("OPR Technical Advisory") for evaluating transportation impacts in CEQA and has recommended that Vehicle Miles Traveled (VMT) replace LOS as the primary measure of transportation impacts. The Natural Resources Agency has adopted updates to CEQA Guidelines to incorporate SB 743 that requires VMT for the purposes of determining a significant transportation impact under CEQA.

The City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (January 2022) provides details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed level analysis. Screening thresholds are broken down into the following three criteria:

1. Transit Priority Area (TPA) Screening
2. Low VMT Area Screening
3. Project Type Screening

Land development projects that meet one or more of the above screening thresholds may be presumed to create a less-than-significant impact on transportation and circulation. The screening thresholds were reviewed and evaluated for this project.

Transit Priority Area (TPA) Screening

A project located within a TPA as determined by the Western Riverside Council of Governments (WRCOG) VMT Screening Tool would be considered to have a less-than-significant transportation impact. Based on the WRCOG VMT Screening Tool, the proposed project is not located within a TPA.

The Transit Priority Area threshold is not met.

Low VMT Generating Area

A project located within a low VMT generating area as determined by the Western Riverside Council of Governments (WRCOG) VMT Screening Tool and the City's guidelines would be considered to have a less-than-significant transportation impact. Based on the WRCOG VMT Screening Tool and the City's guidelines, the proposed project is not located within a low VMT generating area. Results of the WRCOG VMT Screening Tool are provided in **Attachment A**.

The Low VMT Generating Area threshold is not met.

Project Type Screening

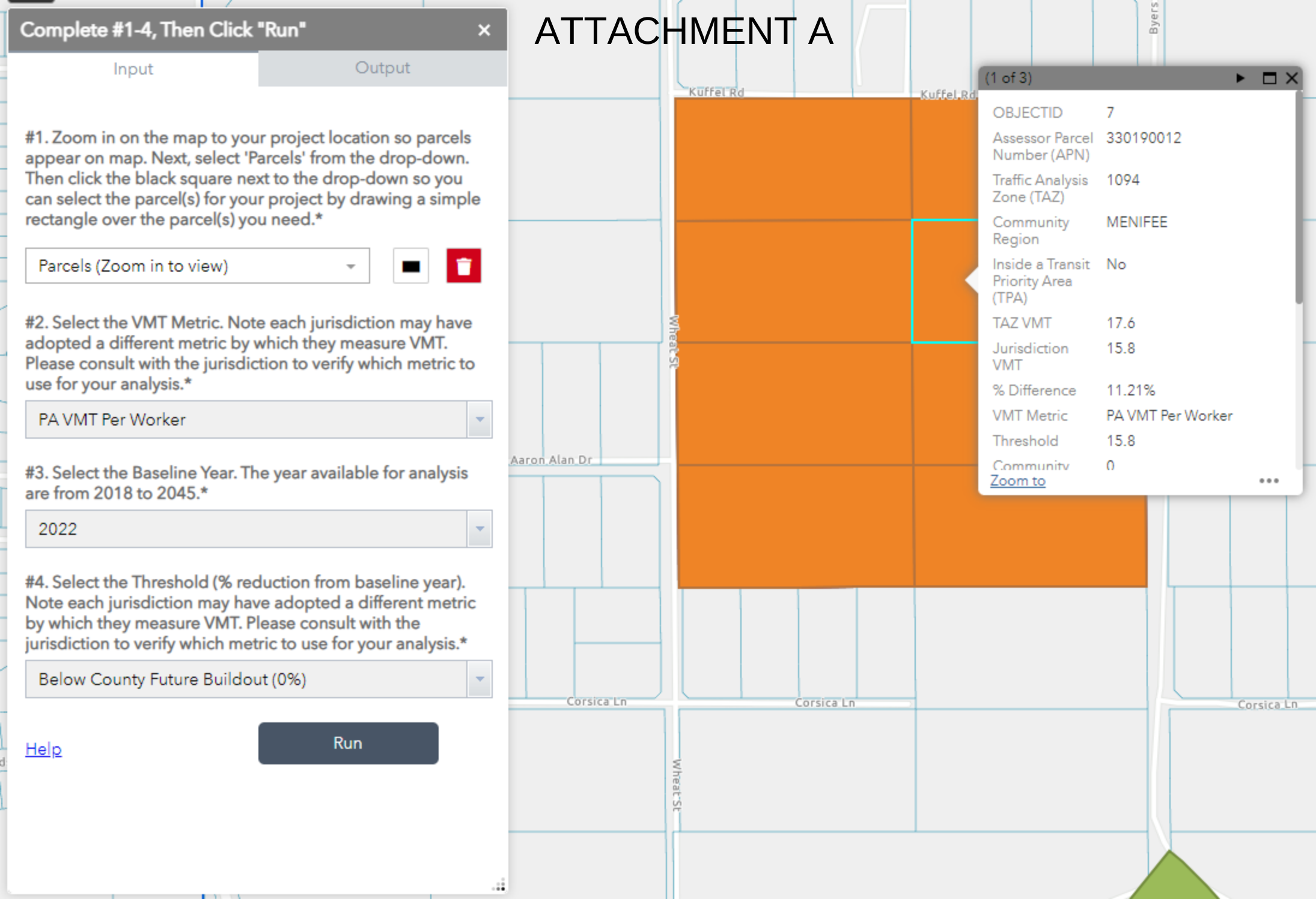
The City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* identify that the following project types would be presumed to have a less-than-significant VMT impact:

- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving retail uses less than 50,000 square feet, including:
    - Gas stations
    - Banks
    - Restaurants
    - Shopping Center
- Local-serving hotels (e.g. non-destination hotels)
- Student housing projects on or adjacent to college campuses
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (Public libraries, fire stations, local government)
- Local-serving community colleges that are consistent with the assumptions noted in the RTP/SCS Affordable or supportive housing
- Assisted living facilities
- Senior housing as defined by the U.S. Department of Housing and Urban Development (HUD)
- Projects generating less than 110 daily vehicle trips
    - This generally corresponds to the following "typical" development potentials:
        - 11 single family housing units
        - 16 multi-family, condominiums, or townhouse housing units
        - 10,000 sq. ft. of office
        - 15,000 sq. ft. of light industrial
        - 63,000 sq. ft. of warehousing
        - 79,000 sq. ft. of high cube transload and short-term storage warehouse

The project will involve the construction a 700,037 square-foot industrial building that generates more than 110 daily trips; therefore, the project would not be screened out based on project type.

The Project Type Screening threshold is not met.

ATTACHMENT A



Attachment B

Model Land Use Inputs and Conversion Factors

ITE 155: High-Cube Fulfillment Center Warehouse: 700.037 KSF = 855 Employees (1 Employee per 819 SF[1])
The Vehicle Miles Traveled (VMT) analysis will be conducted based on the RIVCOM model using the Home-Based Work VMT per Employee metric.

[1] Source: *SCAG Employment Density Survey (October 2001)*

APPENDIX B

RIVCOM MODEL INPUTS

CADO Warehouse Vehicle Miles Traveled Analysis

TAZ 1094

	TAZ	Daily_Home-Based (incl. IEHB) Prod VMT	Daily_HBW (incl. EIHBW) Attr VMT	Daily_Total Auto OD From VMT	Daily_Total Auto OD To VMT	Daily_Total Auto OD Intra VMT	Daily_Total Truck OD From VMT	Daily_Total Truck OD To VMT	Daily_Total Truck OD Intra VMT	Daily_Total OD From VMT	Daily_Total OD To VMT	Daily_Total OD Intra VMT	Daily_Total_Trip Len	Population	Enrollment	Employment	VMT/ EMP
2018 Base	1094	2035.04	83.35	1427.40	1301.02	0.14	39.91	39.99	0.00	1467.31	1341.01	0.14	13.32	79	0	3	27.8
2018 Project	1094	1965.42	19097.95	11600.25	12385.38	2.53	39.02	39.08	0.00	11639.27	12424.46	2.53	18.63	79	0	858	22.3
2045 Base	1094	2582.40	9692.08	7201.85	7482.15	0.92	446.45	444.47	0.09	7648.31	7926.62	1.01	14.68	141	0	494	19.6
2045 Project	1094	2557.88	26163.63	16141.40	17152.72	3.52	445.57	444.03	0.09	16586.97	17596.75	3.61	15.68	141	0	1349	19.4

RIVCOM Model

	2018 Baseline	2045 Cumulative
VMT	19,098	26,164
Employment	858	1,349
VMT/EMP	22.3	19.4
County Avg	32.08	28.94
Impact?	No	No
WRCOG Tool-County Avg	14.90	15.80

https://fehrandpeers.maps.arcgis.com/apps/webappviewer/index.html?id=4e34ad3196464c8086c881189237b25c

APPENDIX C

CITY OF MENIFEE'S INDUSTRIAL GOOD NEIGHBOR POLICIES

APPENDIX A

INDUSTRIAL GOOD NEIGHBOR POLICIES

PURPOSE

The purpose of the Good Neighbor Policies (Policies) is to provide local government and developers with ways to address environmental and neighborhood compatibility issues associated with permitting warehouse, logistics and distribution facilities. These Policies are designed to promote economic vitality and sustainability of businesses, while still protecting the general health, safety, and welfare of the public and sensitive receptors. within the City of Menifee. Sensitive receptors include residential neighborhoods, schools, public parks, playgrounds, day care centers, nursing homes, hospitals, and other public places where residents are most likely to spend time.

The intent of the City of Menifee's Good Neighbor Policies, in siting new warehouse, logistics and distribution uses, include:

1. Minimize impacts to sensitive uses
2. Protect public health, safety, and welfare by regulating the design, location and operation of facilities
3. Protect neighborhood character of adjacent communities

APPLICABILITY

The Policies apply to all new warehouse, logistics and distribution facilities ("industrial uses"), excluding pending applications that have been deemed complete as the effective day of this policy, that include any building larger than 100,000 square feet in size or any sized building with more than 10 loading bays (dock-high). These Policies apply in addition to the provisions of the Development Code, and act as a supplement to the City-wide Design Guidelines adopted by the City on April 15, 2020. Project-level review under CEQA would continue to apply to any project, regardless of the total square footage. The hearing body has the discretion and authority to approve projects that deviate from the guidance provided in this policy, subject to unique site-specific conditions such as topography and other relevant factors.

The following summarizes the Policies for the City of Menifee:

General Performance Standards

1. Truck traffic shall generally be routed to impact the least amount of sensitive receptors, (e.g. access locations, use of traffic control features, signage).
2. To the maximum extent feasible, buildings shall be designed so that truck driveways and loading docks are oriented away from sensitive receptors to minimize impacts.
3. Sufficient landscape buffers and walls shall be provided on-site to screen sensitive receptors from truck access, parking, and storage.
4. Building massing shall be consistent with the City's Industrial Design Guidelines so as to reduce visual dominance on adjacent sensitive receptors.
5. Community outreach throughout the planning process shall occur. The level of public outreach for each project shall be determined by City staff based on the project's scope and surroundings.

A. Site Design, Access, and Layout

1. Buildings shall be set back a minimum of one foot for every one foot of building height, but no less than 25 feet, when adjacent to a sensitive receptor.
2. Dock high doors shall be a minimum of 250' from the property line of adjacent sensitive receptors.
3. When not adjacent to sensitive receptors, truck courts and trailer parking should face internal to the site when feasible to avoid screen walls being the most prominent street feature. A "wing-wall" may also be installed perpendicular to the loading dock areas to further attenuate noise related to truck activities and also address aesthetics by screening the loading area.

4. Decorative walls shall be used to screen industrial uses from adjacent sensitive receptors. Landscaping (and berming for walls greater than six feet in height) shall be used to reduce the visual impact of the walls.
5. To the maximum extent feasible, truck driveways shall not be placed on any portion of the street that fronts sensitive receptors.
6. Facilities shall be designed to provide adequate on-site parking and queuing for trucks/trailers away from sensitive receptors.
7. Check-in gates and/or guard booths are required to be positioned with a minimum of 150 feet inside the property line for on-site truck queuing. An additional 75 feet of on-site queuing shall be added for every 20 loading docks beyond 40 up to 300 feet. Multiple lanes (minimum lane width of 12 feet) are permitted to achieve the required on-site truck queuing. The general queuing and spill-over of trucks onto surrounding public streets are prohibited. Commercial trucks and/or trailers shall not be parked on the public road right- of-way or adjacent to sensitive receptors.
8. Required passenger vehicle parking should be separated from enclosed truck parking/truck court, and have separate primary access.
9. Underground stormwater facilities are preferred over above-ground basins. If above- ground facilities are needed, these should be designed so that the depth (i.e. under 18") does not require perimeter fencing and can be incorporated as additional landscape buffer.
10. A minimum of 50% of site plantings shall be evergreen broadleaf tree species.
11. Front setbacks shall include a minimum 25-foot landscape planter. For property lines adjacent to a sensitive receptor, side setbacks shall include a minimum 10 foot landscape planter, and rear setbacks shall include a minimum 5 foot landscape planter.
12. No parking shall be permitted in the landscape setback area.

B. Signage and Information

1. Require on-site signage for directional guidance to trucks entering and exiting the facility to minimize potential impacts on sensitive receptors.
2. Anti-idling signs are required to be posted at warehouses to stipulate a 3-minute idling restriction.
3. Legible, durable, weather-proof signs are required at all truck exit driveways directing truck drivers to the truck route and State Highway System.
4. During construction, signs are required to be in public view with contact information for a designated representative of the building occupant and an SCAQMD representative who is designated to receive complaints about excessive dust, fumes, or odors on this site.
5. New and existing industrial uses shall provide truck drivers with information on the closest restaurants, fueling stations, truck repair facilities, and lodging (i.e. by posting in offices/breakrooms).

C. Environmental Considerations

a) Air Quality

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new logistics and warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of industrial uses and adoption of all feasible mitigation of significant impacts. As updated by South Coast Air Quality Management District (AQMD) and California Air Resource Board (CARB), the following policies apply:

1. In compliance with CEQA, conduct SCAQMD URBEMIS and EMFAC computer models to identify the significance of air quality impacts on sensitive receptors.
    a) Require an air quality analysis to ensure air quality protection, in accordance with the Air Quality Management District (AQMD) guidelines, for both project-specific and cumulative impact analysis.

b) Require “Health Risk Assessments” for industrial uses within 1,000 feet of sensitive receptors.

2. Minimize the air quality impacts of trucks on sensitive receptors

   a) Design facilities with queuing of trucks on-site and away from sensitive receptors.

   b) Prevent the queuing of trucks on streets or elsewhere outside of the facility.

   c) The installation of on-site electric hook-ups to eliminate idling of main and auxiliary engines during loading and unloading of cargo and when trucks are not in use and required where transport refrigeration units (TRUs) are proposed to be used.

3. Require Transportation Demand Management measures for industrial uses with over one hundred employees to reduce work-related vehicle trips.

4. Use of electric-powered hand tools, forklifts, aerial lifts, materials lifts, hoists, pressure washers, plate compactors, and air compressors, when feasible.

5. For buildings with 50 or more dock high doors, site plans are required to identify a planned location for future electric truck charging stations and install conduit to that location. A ratio of one charging station shall be required for every 50 dock high doors.

6. The following environmentally responsible construction practices are required:

   a) Use of most readily available technology (CARB Tier 3, Tier 4 Interim, and Tier 4 Compliant equipment).

   b) Designate an area of the construction site where electric-powered construction vehicles and equipment can charge if the utility provider can feasibly provide temporary power for this purpose.

   c) The maximum daily disturbance area (actively graded area) shall be determined by the Air Quality Study.

d) Streets adjacent to the development site shall be swept on a regular basis as determined by the City inspector to remove any construction related debris and dirt.

e) Construction equipment maintenance records and data sheets, which includes equipment design specifications and equipment emission control tier classifications, as well as any other records necessary to verify compliance with items listed above, shall be kept on-site and furnished to the City upon request.

b) Noise and Traffic

Noise impacts associated with industrial uses can be the most impactful to sensitive receptors and include various sources, such as unloading, truck movement, rooftop mechanical equipment, and PA systems.

1. Use of perimeter walls, buildings, and/or enhanced landscaping to reduce noise impacts as appropriate.
2. If a public address (PA) system is being used in conjunction with an industrial use, the PA system shall be oriented away from sensitive receptors and the volume set at a level not readily audible past the property line.
3. Prepare a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations to minimize impacts to sensitive receptors.
4. See B5 through B8 above in Site Design, Access and Layout section.