

March 4, 2020

Mr. Eric Flodine  
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**SUBJECT: RANCHO DIAMANTE (TTM No. 36841) VEHICLE MILES TRAVELLED (VMT) ASSESSMENT**

Dear Mr. Eric Flodine:

The following Vehicle Miles Travelled (VMT) Assessment has been prepared for the proposed Rancho Diamante (TTM No. 36841) development (referred to as “Project”), which is located on the southwest corner of Old Warren Road and New Stetson Avenue, in the City of Hemet. The Project is proposed to include the development of 588 single family detached residential dwelling units and approximately 100,000 square feet (sf) of commercial retail (see Exhibit 1).

## **BACKGROUND**

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of VMT as the replacement for automobile delay-based level of service (LOS). In December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). While a lead agency has the option to immediately apply the new VMT based analysis methodology and thresholds for the purposes of evaluating transportation impacts, statewide application of the new guidelines is required July 1, 2020.

The OPR published an updated Technical Advisory on Evaluating Transportation Impacts in CEQA in December 2018, which provided guidance in evaluating transportation impacts based on VMT. The OPR’s current Technical Advisory has the following recommended numeric thresholds:

- For residential projects, a proposed project exceeding a level of 15% below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as City VMT per capita.
- For office projects, a proposed project exceeding a level of 15% below existing regional VMT per employee may indicate a significant transportation impact.
- For retail projects, a net increase in total VMT may indicate a significant transportation impact.
- Numerical thresholds are not provided for other project types such as industrial uses.

In March 2019, the Western Riverside Council of Governments (WRCOG) published a SB 743 Implementation Pathway Document Package (“WRCOG Document”). The WRCOG Document includes

recommendations on VMT assessment methodology, thresholds of significance and examples of potential mitigation measures.

The WRCOG Document recommends use of the Riverside County Transportation Analysis Model (RivTAM) for VMT impact analysis in the WRCOG region. RivTAM is a sub-regional travel demand model based on the regional travel demand model maintained by Southern California Association of Governments (SCAG). In addition, WRCOG provided the following thresholds to determine significant transportation impacts based on VMT were presented as part of the SB 743 Implementation Pathway roll-out:

- Below City-wide average VMT
- Below WRCOG regional average VMT

As the City of Hemet has yet to formally adopt VMT thresholds of significance for purposes of determining transportation impacts under CEQA, the methodology presented in the OPR's Technical Advisory has been used for the purposes of this evaluation.

## **PROJECT VMT**

The calculation of vehicle miles traveled has two components – the total number of trips generated and the average trip length of each vehicle. RivTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households and employment.

### **PROJECT HOME-BASED (HB) VMT/CAPITA**

Project HB VMT/Capita was calculated using the most current version of RivTAM. Adjustments in socio-economic data (households and population) were made to the appropriate traffic analysis zone (TAZ) within the RivTAM model to reflect the Project's proposed land use (i.e., 588 dwelling units). Socio-economic data inputs were derived based on Riverside County General Plan, Appendix E-2: Socioeconomic Build-out Assumptions and Methodology. The Project HB VMT per Capita as calculated based on RivTAM is 30.64.

### **RETAIL VMT**

The Project proposes a mix of residential and commercial retail. The Project's retail component is expected to generate a daily VMT of 23,300.

### **CITYWIDE AVERAGE HB VMT/CAPITA**

The average HB VMT/Capita for the City of Hemet was calculated from the RivTAM model. The City of Hemet baseline average VMT/SP is 25.4.

## REGIONAL VMT WITHOUT AND WITH PROJECT RETAIL COMPONENT

The daily total VMT for the WRCOG region without and with the Project's retail component was calculated based on the RivTAM model. The daily total VMT for WRCOG region without the Project's retail component was found to be 38,274,048. The daily total VMT for WRCOG region with the Project's retail component was found to be 38,266,797. The Project's retail component is anticipated to result in a net reduction of 7,251 VMT within the WRCOG region.

## IMPACT AND MITIGATION

The Project generates 30.64 HB VMT/Capita, which is higher than the 25.4 baseline average HB VMT/Capita for the City of Hemet and the 21.59 HB VMT/Capita threshold based on OPR's recommendation of 15% below existing Citywide VMT/Capita. As such, the Project's transportation impact based on VMT is potentially significant.

Transportation demand management (TDM) strategies have been evaluated for reducing VMT impacts determined to be potentially significant. The effectiveness of TDM strategies to reduce VMT has been determined based on the SB 743 Implementation TDM Strategy Assessment (February 26, 2019, Fehr & Peers) prepared for WRCOG. The memo evaluated 50 transportation measures presented in the CAPCOA 2010 report Quantifying Greenhouse Gas Mitigation Measures and indicated 41 are applicable at building and site level. The remaining measures are functions of, or depend on, site location and/or actions by local and regional agencies or funders.

Review of the 41 transportation measures identified by CAPCOA, indicates that only 7 of those measures may be effective at the project level, which is consistent with WRCOG's findings. Evaluation of potentially applicable TDM strategies in the context of the Project is summarized below. As indicated, of the seven TDMs with potential application to the Project, only three would provide for any potentially meaningful reduction in VMT, which are described below:

- Measure 1: Increase Diversity of Land Uses. Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transport. For example, when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trip needs.

Remarks: The Project proposes the 588 single family detached residential dwelling units and approximately 100,000 square feet (sf) of neighborhood commercial retail. In order for the above measure to apply, at least three of the following will be located on or off-site within ¼ mile of the Project: Residential Development, Retail Development, Park, Open Space, or Office. The Project includes residential, neighborhood retail and park in the development plan. The Project's proposed colocation of varied residential, neighborhood retail, park, and open spaces within ¼ mile proximity together with supporting amenities would tend to decrease the propensity for vehicle travel for local residents.

- Measure 2: Provide Pedestrian Network Improvements. Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive. This mode shift results in people driving less and thus a reduction in VMT.

Remarks: Pedestrian connections shall be provided to surrounding areas consistent with the City's General Plan. Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive. The Project would provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site. The Project would minimize barriers to pedestrian access and interconnectivity.

- Measure 3: Provide Traffic Calming Measures. Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift will result in a decrease in VMT. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.

Remarks: It is recommended that applicable traffic calming measures be considered as part of the final site design to encourage pedestrian and bicycle activity.

Implementation of applicable TDM strategies (Measure 1: Increase Land Use Diversity, Measure 2: Provide Pedestrian Network Improvements and Measure 3: Provide Traffic Calming Measures) have the potential to reduce the Project VMT/Capita.

Land use context is a major factor relevant to the potential application and effectiveness of TDM measures. More specifically, the land use context of the Project is characteristically suburban. Of itself, the Project's suburban context acts to reduce the range of feasible TDM measures and moderates their potential effectiveness. Relevant discussion in this regard is presented in *WRCOG SB 743 Implementation Pathway Document Package* (Fehr + Peers [for WRCOG]) March 2019, excerpted in pertinent part below:

The Technical Advisory relies on the *Quantifying Greenhouse Gas Mitigation Measures*, (CAPCOA) 2010 resource document to help justify the 15 percent reduction in VMT threshold stating, ". . . fifteen percent reduction in VMT are achievable at the project level in a variety of place types . . .". A more accurate reading of the CAPCOA document is that a fifteen percent is the maximum reduction when combining multiple mitigation strategies for the *suburban center*<sup>1</sup> place type. For *suburban*<sup>2</sup> place types 10 percent is the maximum and requires a project to contain a diverse land use mix, workforce housing, and project-specific transit. It is also important to note that the maximum percent reductions were not based on data or research comparing the actual performance of VMT

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<sup>1</sup> **Suburban Center:** A project typically involving a cluster of multi-use development within dispersed, low-density, automobile dependent land use patterns (a suburb). The center may be an historic downtown of a smaller community that has become surrounded by its region's suburban growth pattern in the latter half of the 20th Century. The suburban center serves the population of the suburb with office, retail and housing which is denser than the surrounding suburb (*Quantifying Greenhouse Gas Mitigation Measures*, p. 60).

<sup>2</sup> **Suburban:** A project characterized by dispersed, low-density, single-use, automobile dependent land use patterns, usually outside of the central city . . . (*Quantifying Greenhouse Gas Mitigation Measures*, p. 60).

reduction strategies in these place types. Instead, the percentages were derived from a limited comparison of aggregate citywide VMT performance for Sebastopol, San Rafael, and San Mateo where VMT performance ranged from 0 to 17 percent below the statewide VMT/capita average based on data collected prior to 2002. Little evidence exists about the long-term performance of similar TDM strategies in different land use contexts. As such, VMT reductions from TDM strategies cannot be guaranteed in most cases (*WRCOG SB 743 Implementation Pathway Document Package*, pp. 65 – 66).

Based on available research, projects located within a suburban context, a maximum 10% reduction in VMT is achievable when combining multiple mitigation strategies. Furthermore, to even achieve a 10% reduction in VMT, a project would need to contain a diverse land use mix, workforce housing and project-specific transit options. For the Project considered here, this could result in 27.58 HB VMT/Capita, which would still exceed the Citywide average of 25.4 HB VMT/Capita for the City of Hemet.

In summary, the Project’s HB VMT/Capita could potentially exceed applicable thresholds. The Project would implement TDM measures that could potentially reduce HB VMT/Capita impacts. Even with implementation of TDM measures, HB VMT/Capita impacts could not be reduced to levels that would be less-than-significant. The Project VMT impact is therefore considered significant and unavoidable.

**Cumulative VMT Impacts**

As summarized in *WRCOG SB 743 Implementation Pathway Document Package* . . . “VMT thresholds based on an efficiency form of the metric such as VMT per capita, can address project and cumulative impacts in a similar manner that some air districts do for criteria pollutants and GHGs (*WRCOG SB 743 Implementation Pathway Document Package*, p. 67). In this respect, significant and unavoidable VMT impacts at the Project level would also be considered cumulatively significant.

As discussed previously, the Project proposes a mix of residential and commercial retail. Proposed retail is expected to reduce the vehicle miles traveled by the residents from not only the Project, but also the residents in the surrounding area. Based on the RivTAM model, the Project’s retail component is expected to result in a net reduction in VMT for the WRCOG region.

If you have any questions, please contact me directly at (949) 336-5992.

Respectfully submitted,

URBAN CROSSROADS, INC.



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EXHIBIT 1 : TENTATIVE TRACT MAP NO. 36841

