Draft Initial Study and Mitigated Negative Declaration Rancho Cielito Residential Development Project

APPENDIX J

Appendix J – Vehicle Miles Traveled (VMT) Technical Memorandum

TECHNICAL MEMORANDUM

To: Kim Zuppiger
City of Chino Hills

From: Richard Barretto, P.E., Principal
Zawwar Saiyed, P.E., Senior Transportation Engineer
Linscott, Law and Greenspan, Engineers

Subject: Vehicle Miles Traveled (VMT) Analysis for the Rancho Cielito Project, Chino Hills

As requested, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Vehicle Miles Traveled (VMT) Analysis Technical Memorandum for the proposed Rancho Cielito project (herein after referred to as "Project") in the City of Chino Hills, San Bernardino County, California. This Technical Memorandum presents the VMT screening criteria, analysis methodology, significance thresholds and VMT analyses. It should be noted that since the City of Chino Hills is still in the process of finalizing and adopting it's VMT Guidelines and Thresholds, the approach and methodology outlined in this Technical Memorandum is generally consistent with the *Technical Advisory for Evaluating Transportation Impacts In CEQA*, published by the Governor's Office of Planning and Research (OPR), December 2018 (OPR Technical Advisory), which provides additional detail on the language and analysis procedures described in this Technical Memorandum.

The Project site is 48.37-acres, consisting of 29.50-acres of vacant land and 18.87-acres of water surface area that makes up Lake Los Serranos. The Project site is generally located north of Los Serranos Boulevard, south of Lakeview Drive and east of Pipeline Avenue, in the City of Chino Hills, California and includes development of up to 354 residential apartment units, consisting of seven (7) two-story and seven (7) three-story residential carriage buildings, ten (10) three-story residential buildings and two (2) clubhouses. The Project is expected to be completed over the next four years (Year 2024), but is dependent on several factors, including timing of Project approvals, market conditions and/or Project funding.

The following sections of this Technical Memorandum provide a brief history of Senate Bill 743 (SB 743), summarize the Project description, present OPRs VMT screening criteria, analysis methodology and thresholds, Project VMT and cumulative VMT.

HISTORY OF SENATE BILL 743 (SB 743)

On September 27, 2013, Governor Jerry Brown signed Senate Bill 743 (SB 743). SB 743 created a process to change the way analysis of transportation impacts under the California Environmental Quality Act (CEQA) is conducted. The Governor's Office of Planning and Research (OPR) was tasked to amend the CEQA Guidelines to



Engineers & Planners

Traffic Transportation Parking

Linscott, Law & Greenspan, Engineers

Pasadena

Irvine San Diego Woodland Hills

Philip M. Linscott, PE (1924-2000)
William A. Law, PE (1921-2018)
Jack M. Greenspan, PE (Ret.)
Paul W. Wilkinson, PE (Ret.)
John P. Keating, PE
David S. Shender, PE
John A. Boarman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE
Walter B. Musial, PE

An LG2WB Company Founded 1966



provide an alternative to the traditional metric of automobile delay which would promote three statutory goals: 1) the reduction of greenhouse gas (GHG) emissions; 2) the development of multimodal transportation networks; and 3) a diversity of land uses. OPR concluded that the use of Vehicle Miles Traveled (VMT), with thresholds linked to GHG reduction targets, would adequately analyze a project's transportation impacts while supporting all three statutory goals.

OPR released a preliminary evaluation of alternative methods for transportation analysis in December 2013, and by August 2014, released a preliminary discussion draft of potential updates to the CEQA Guidelines, which specified VMT as the selected metric for analysis. In 2016, OPR released a draft of the proposed revisions to the CEQA Guidelines. At the same time, OPR released a new *Technical Advisory for Evaluating Transportation Impacts In CEQA*, which provides technical recommendations regarding the implementation of VMT analysis state-wide in a document external to the CEQA statute.

After extensive stakeholder outreach, OPR transmitted the final proposed revisions to the CEQA Guidelines and the current draft of the *Technical Advisory* to the California Natural Resources Agency (the body responsible for certifying, adopting, and amending the CEQA Guidelines) in November 2017. Beginning in January 2018, the California Natural Resources Agency initiated the formal rulemaking process to adopt the proposed revisions, including the new Section 15064.3 which specifies VMT as the metric for transportation analysis. On December 28, 2018, the California Office of Administrative Law filed the revised CEQA Guidelines with the Secretary of the State on behalf of the Natural Resources Agency, thereby formally implementing vehicle miles traveled as the metric for transportation analysis under CEQA. Pursuant to the adopted Section 15064.3, a lead agency may elect to implement the new criteria for analyzing transportation impacts immediately. Beginning on July 1, 2020, the criteria must be applied state-wide.

PROJECT DESCRIPTION

The Project site is 48.37-acres, consisting of 29.50-acres of vacant land and 18.87-acres of water surface area that makes up Lake Los Serranos. The Project site is generally located north of Los Serranos Boulevard, south of Lakeview Drive and east of Pipeline Avenue, in the City of Chino Hills, California.

The surrounding uses include Lake Los Serranos Club, a 306-space mobile home park serving seniors age 55 plus are located north of the Project site. A combination of single family and multi-family residential and a multi-family project currently under construction for 95 townhome units (Lago Los Serranos) are located to the south. A small lot single family residential neighborhood commonly referred to as "upper Los Serranos" is located to the southwest. A small lot single family residential



neighborhood commonly referred to as "lower Los Serranos" is located to the east. A single family residential neighborhood commonly referred to as Glenmeade is located to the west. *Figure 1* presents a vicinity map that illustrates the general location of the Project site and surrounding street system. *Figure 2* displays the existing site aerial of current site layout.

The Rancho Cielito Project site will total 48.46-acres. Proposed Tentative Parcel Map would create four (4) parcels consisting of the following:

- □ Parcel 1: East Village 13.296 acres with 166 apartments (12.48 du/acre)
- □ Parcel 2: West Village 13.374 acres with 188 apartments (14.06 du/acre)
- □ Parcel 3: 1.051 acres (Los Serranos Club Office and residence) and
- □ Parcel 4: Lake Los Serranos 20.74 acres would remain as is and would be maintained by the Rancho Cielito complex.

The proposed Project (17SPR02) would include the development of a new residential community with to 354 residential apartment units, consisting of seven (7) two-story and seven (7) three-story residential carriage buildings, ten (10) three-story residential buildings and two (2) clubhouses. The Project will offer both active and passive recreational opportunities. The East Village will include a playground for children 2-12 years of age, neighborhood barbeque areas, clubhouse pool/spa, fitness center, picnic areas, lakeside seating/vistas, designated shore fishing areas and trails. The West Village will include a playground for children ages 2-12, turf play field, neighborhood barbeque areas, clubhouse pool/spa, peninsula boardwalk with covered viewing platform, lakeside seating/vistas, designated shore fishing areas and trails. Two clubhouse recreation areas with swimming pools, shade trellises and full amenities will be provided for the residents.

Figure 3 presents the proposed site plan prepared by Architects Orange. The Rancho Cielito Project includes a total of 907 parking spaces combined, with 427 spaces provided in the East Village and 480 spaces provided in the West Village.

The Project is expected to be constructed in several phases over the next four years or so by 2024, but is dependent on several factors, including the timing of Project approval, Project funding and/or market conditions.

Access and circulation for the Project would accommodate vehicles, pedestrians, bicycles and equestrians and would include roadways, sidewalks and trails.

Vehicular access to the East Village will be provided via two un-signalized drive entries. The main Project entry from public streets is located off of Valle Vista Drive at the crest of the hill approximately mid-way between Ramona Avenue and Country



Club Drive. The secondary entry is located off of Ramona Avenue approximately mid-way between the intersection of Ramona Avenue/Bird Farm Road and Mesa Boulevard. From the main entry at Valle Vista Drive, vehicles will access the interior of the Project through a private gate located just beyond an entry call box. The main entry shall be used by residents, resident guests and visitors to the leasing center. The other two entries from public streets will be gated and used for resident access only. There is an interior 30' wide primary drive aisle which runs through the center and length of the Project connecting the neighborhoods and parking areas. The aesthetics of this interior roadway is free of on-street parking and enhanced by two bridges and two roundabouts which anchor the heart of each village.

Vehicle access to the West Village will be provided via one un-signalized drive entry from public streets aligned with Montecito Drive at its intersection with Los Serranos Boulevard. The second access is via a bridge from the East Village over the lake. Both access improvements are a part of the Project's Design Features.

Proposed improvements to be completed as a part of the Project along Los Serranos Boulevard, Valle Vista Drive, and Ramona Avenue bordering the subject property, subject to approval by the City of Chino Hills includes improving these public street to ultimate half-section improvements, inclusive of paved roadway improvements, curb and gutter, sidewalks and landscaping.

Pedestrian circulation would be provided via existing public sidewalks along Pipeline Avenue within the vicinity of the Project, as well as along the south side of Los Serranos Boulevard. The proposed Project will construct sidewalks Project frontage along the north side of Los Serranos Boulevard and the west side of Ramona Avenue. The existing sidewalk system within the Project vicinity provides direct connectivity to the major thoroughfares of Pipeline Avenue and Ramona Avenue and pedestrian connectivity to the existing residential, recreational, institutional and commercial development in the surrounding area.

PROJECT SCREENING CRITERIA

Under the VMT methodology, screening is used to determine if a project will be required to conduct a detailed VMT analysis. Since the City of Chino Hills currently does not have adopted VMT screening criteria, the following section discusses the various screening methods recommended by the State of California in the *OPR Technical Advisory* and whether the Project will screen-out, either in its entirety, or partially based on individual land uses.



Proximity to Transit Facilities

As noted previously, the CEQA Guidelines were amended to include section 15064.3, "Determining the Significance of Transportation Impacts". Subsection (b)(1) states in part:

"Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact."

Pursuant to the statute, development projects may be screened out of VMT analysis based on proximity to certain transit facilities due to the presumption of less than significant impacts. The *Technical Advisory* reiterates this screening criteria, but also highlights certain project-specific or location-specific characteristics which may indicate the project will still generate "significant levels of VMT", even when located within one-half mile of a major transit stop or a stop along a high-quality transit corridor. These characteristics relate to the project's floor area ratio (FAR), parking supply, and number of dwelling units, as well as consistency with the applicable Sustainable Communities Strategy (SCS). If the project has any characteristics which indicate that the presumption of less than significant impacts as stated in the CEQA Guidelines may not be appropriate, the *OPR Technical Advisory* recommends that the project should not be screened out of further VMT analysis.

Based on the above, the proposed Project will not screen-out since it is not within one-half mile of neither an existing major transit stop¹ nor a stop along an existing high-quality transit corridor².

Small Projects

The *OPR Technical Advisory* recommends that VMT analyses be conducted for projects which are forecast to generate 110 or more average daily trips (ADT). The CEQA Guidelines provide a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet³. OPR states that "typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact." OPR thus reasons that projects which are forecast to generate fewer than 110 daily

¹ Public Resources Code Section 21064.3: "Major Transit Stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."

² Public Resources Code Section 21155: "For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours."

³ CEQA Guidelines Section 15301, Subsection (e)(2).



trips would be comparable to categorically exempt projects and could be presumed to cause less than significant impacts.

Based on the above, the proposed Project will not screen-out since it generates more than 110 daily trips.

Map-Based Screening

An additional screening methodology is provided for residential and office land use projects. Lead agencies may prepare maps based on a regional travel demand model or travel survey data to illustrate areas that are currently below the selected VMT threshold. OPR reasons that if a project has similar characteristics to the existing area (i.e., density, mix of uses, transit service, etc.), it will tend to exhibit similar VMT. Therefore, if a project is fully located within an area identified as having a below-threshold VMT, it may be presumed to also have less than significant VMT impacts and be screened out from requiring a detailed VMT analysis.

It should be noted that this Project is located in a low VMT area (for both VMT/Service Population and VMT/Capita), but since the City of Chino Hills currently does not have adopted VMT screening criteria, it was determined to conduct a full VMT analysis to be conservative.

Based on the above, the proposed Project will not screen-out since no map-based screening is currently available.

Additional Screening Considerations

OPR provides additional recommendations on when the presumption of less than significant impacts may be appropriate, in addition to the formally recommended screening criteria described above. For instance, in the discussion regarding retail projects, the *OPR Technical Advisory* advises lead agencies that because local serving retail projects tend to improve retail destination proximity, shorten trips, and reduce VMT, they may be presumed to have less than significant impacts. Agencies may choose to define what constitutes local serving retail in their jurisdiction, although OPR suggests a threshold size of 50,000 square feet or less. Thus, lead agencies may choose to screen out projects based on the type and size of the land use(s) being proposed.

Further, OPR states that mixed-use projects should analyze each land use individually.

Based on the above, the proposed Project will not screen-out since it is not considered a local serving development.



Additionally, the *OPR Technical Advisory* cites research that could support the presumption of less than significant impacts for 100% affordable housing projects, on the basis that low-wage workers are more likely to choose housing close to their workplaces, thus reducing commute distances and VMT.

Based on the above, the proposed Project will not screen-out since it is not a 100% affordable housing project.

Flow Chart 1 presents the recommended screening criteria, as discussed above, for land use projects consistent with the OPR Technical Advisory. It should be noted that a land use project only needs to satisfy one of the screening criteria of the flow chart to qualify for screening.

Based on the above, the proposed Project will not screen-out, thus requiring a full VMT analysis as presented in this Technical Memorandum.

VEHICLE MILES TRAVELED (VMT) ANALYSIS METHODOLOGY

According to OPR, Projects that do not screen out based on the aforementioned criteria shall complete a full VMT analysis. In the absence of adopted City of Chino Hills VMT guidelines, the VMT analysis methodology as provided by OPR has been utilized. The following summary of the guidelines has been prepared based on a review of the revisions to the CEQA Guidelines and OPR's current *Technical Advisory*.

It should be noted that according to OPR, "vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project. Here, the term "automobile" refers to on-road passenger vehicles, specifically cars, and light trucks. The primary reason being, as mentioned previously, is to align with the State's three statutory goals; (1) reduction of GHG emissions; (2) development of multi-modal networks; and (3) a diversity of land uses.

OPR's Guidance on Methodology for Residential Projects

According to OPR, tour-based and trip-based approaches offer the most viable methods for determining VMT from residential projects and for comparing those results to VMT thresholds. These approaches also offer the simplest methodology for determining VMT reductions from mitigation measures for residential projects.

Based on the above, a full VMT analysis utilizing the San Bernardino County Transportation Analysis Model (SBTAM) has been used to determine the VMT for the Project and for the City of Chino Hills average and will provide the following:

Home-based average VMT per Capita for residential land uses.



Finally, the Project average VMT will then be compared to the City of Chino Hills average to determine whether or not the Project will have a significant impact based on the significance thresholds defined in this Technical Memorandum.

OPR's Guidance on Methodology for Cumulative Impacts

OPR states that a Project's cumulative impacts are based on a determination of whether the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." When using an absolute VMT metric, i.e., total VMT, analyzing the combined impacts for a cumulative impacts analysis may be appropriate. A project that falls below the threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the Project impact. Accordingly, a less than significant Project impact would imply a less than significant cumulative impact, and vice versa.

VEHICLE MILES TRAVELED (VMT) SIGNIFICANCE THRESHOLDS

As previously discussed, a project that meets the screening criteria will require preparation of a detailed transportation analysis. The project VMT will be evaluated in order to determine if the project is expected to cause a significant transportation impact. Under the VMT methodology, a transportation impact is considered significant if the project-related VMT is equal to or exceeds the thresholds.

Mitigation of project transportation impacts is required whenever VMT generated by the proposed development causes an increase of the analyzed VMT by an amount greater than the predetermined significance thresholds.

The following section discusses the VMT impact thresholds recommended by the State for residential projects.

OPR's Guidance on Thresholds for Residential Projects

Public Resources Code Section 21099 provides the criteria for determining the significance of transportation impacts. There are three statutory goals that the significance criteria must promote: (1) reduction of GHG emissions; (2) development of multi-modal networks; and (3) a diversity of land uses. The *OPR Technical Advisory* provides OPR's recommendations for quantitative thresholds of significance, which align with the State's three statutory goals. The recommended significance thresholds were developed from legislative mandates and state policies (i.e., AB 32, SB 375, SB 391 and a number of Executive Orders) that established quantitative GHG emissions reduction targets.

The *OPR Technical Advisory* states that a fifteen percent (15%) reduction in VMT is achievable for development projects in a variety of place types and is consistent with



SB 743's direction to OPR to select a threshold that aligns with the State's three statutory goals.

For residential projects, the existing VMT per capita may be measured from city or regional averages. If city VMT per capita is used as a basis for a significance threshold in an Metropolitan Planning Organization (MPO) area, the project should not cumulatively exceed the population or number of units specified in the SCS for that city and should be consistent with the SCS. Exceeding the population or the number of units specified in the SCS would undermine the GHG reduction targets stated in SB 375.

For residential projects located in unincorporated county areas, the Technical Advisory provides additional recommendations as a basis for significance thresholds:

• "The local agency can compare a residential project's VMT to (1) the region's VMT per capita, or (2) the aggregate population-weighted VMT per capita of all cities in the region."

If aggregate VMT per capita is used as a basis for a significance threshold in an MPO area, the project should also not cumulatively exceed the population or number of units specified in the SCS for that city and should be consistent with the SCS.

The Technical Advisory applies the thresholds for residential projects to either household (i.e., tour-based) VMT or home-based (i.e., trip-based) VMT assessments. It should be noted that the metric used to determine project VMT and the city-wide or regional VMT must be consistent (i.e., "apples to apples" comparison).

It should be noted that the *OPR Technical Advisory* provides recommendations for thresholds of significance for only three types of development, focusing only on the project types which tend to have the greatest effect on VMT. The *OPR Technical Advisory* does not provide recommendations on thresholds for other kinds of development projects. The three main development project types, residential, office, and retail may be considered proxies for developments which exhibit certain trip/travel characteristics as shown below:

- "Residential" may be considered a proxy for a development which generates new trips.
- "Office" may be considered a proxy for a development which generates primarily work trips.
- "Retail" may be considered a proxy for a development which primarily attracts already existing trips, leading to a diversion of trips rather than generating new trips.



If a project can be demonstrated to match one of these proxy categories, the applicable thresholds may be utilized. Thus, the proposed Project is expected to generate new trips and have been analyzed under the Residential thresholds as listed below:

A proposed Residential project exceeding a level of 15% below average existing regional (in this case City of Chino Hills) VMT per capita may indicate a significant transportation impact.

VEHICLE MILES TRAVELED (VMT) ANALYSIS

Summarized below are the average VMT/Capita values utilizing SBTAM for the City of Chino Hills and for the Project. It should be noted that the Project is located in Traffic Analysis Zone (TAZ) 53614301 (ID 1462) and the Project development totals were converted into Socio-Economic Data (SED) and inputted into the SBTAM.

City Average VMT/Capita

The City Average VMT/Capita is listed below:

- Year 2016 Average VMT/Capita = 20.65
- 15% Below Year 2016 Average VMT/Capita = 17.55

Project Average VMT/Capita

The Project Average VMT/Capita is listed below:

Year 2016 Average VMT/Capita = 16.24 (21.36% Below City Average)

Project Significant VMT Impact

As shown above, the proposed Project Average VMT/Capita is 21.36% below the City average VMT/Capita and based on the criteria outlined in this report, the proposed Project does not exceed a level of 15% below existing City of Chino Hills VMT/Capita (i.e. VMT/Capita = 17.55) and thus does not have a Project significant VMT impact.

Cumulative Significant VMT Impact

As previously mentioned and according to the *OPR Technical Advisory*, a less than significant Project impact would imply a less than significant cumulative impact. Hence, there is no Cumulative significant VMT impact.

CONCLUSION

Consistent with the *OPR Technical Advisory* and based on the VMT methodology, criteria, guidelines, thresholds and results outlined in this Technical Memorandum,

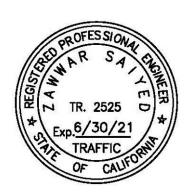


the proposed Project will not have a significant Project VMT impact nor a significant cumulative impact.

* * * * * * * * * * *

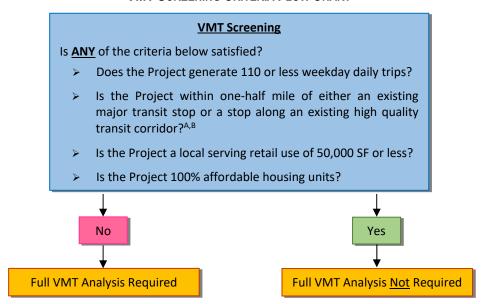
We appreciate the opportunity to provide this Technical Memorandum. Should you have any questions regarding the memorandum, please contact us at (949) 825-6175.

cc: File



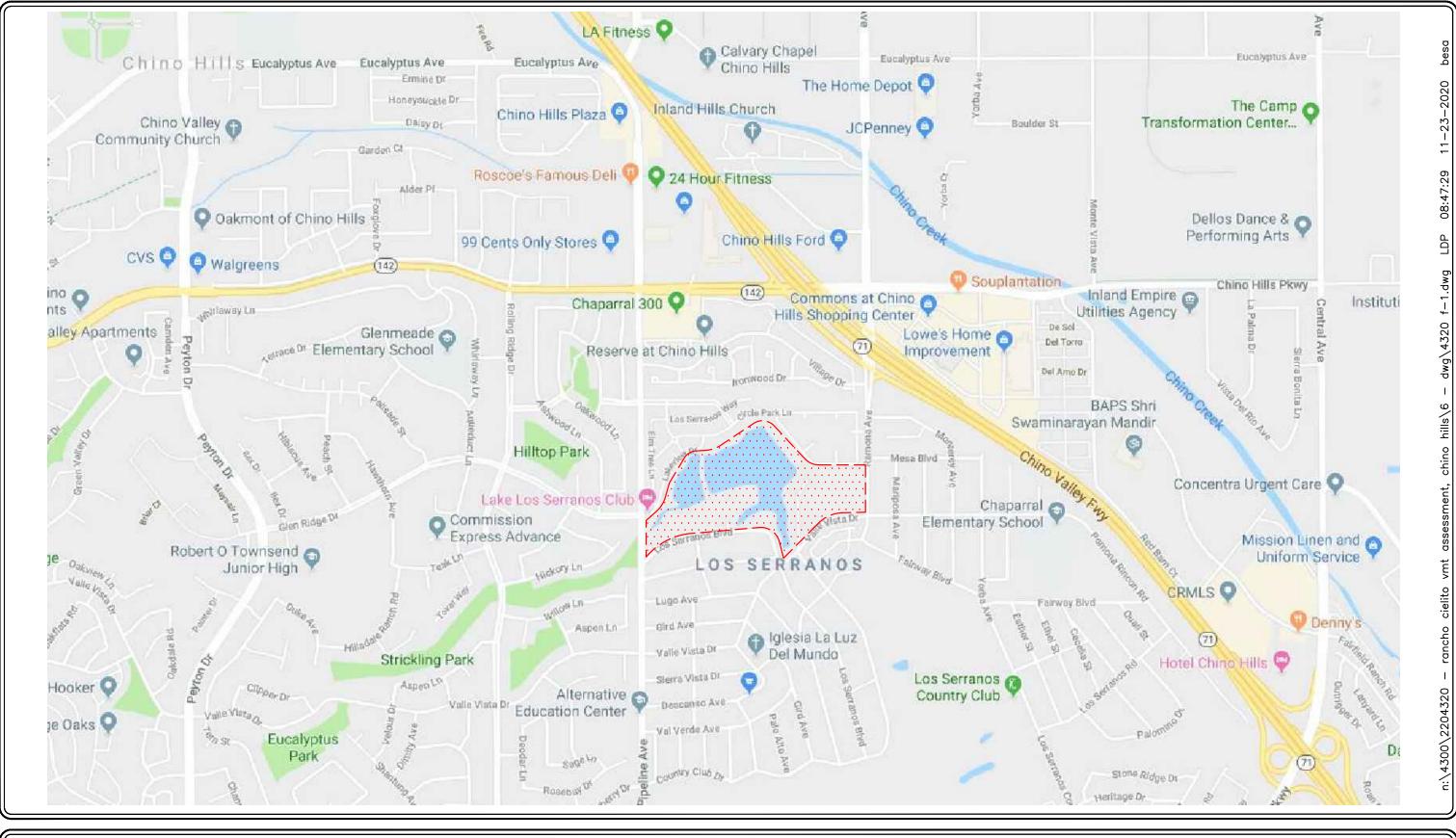


FLOW CHART 1 VMT SCREENING CRITERIA FLOW CHART



Notes:

- A. "Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.
- B. "High-quality transit corridor" means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.







SOURCE: GOOGLE

KEY

PROJECT SITE

FIGURE 1

VICINITY MAP

RANCHO CIELITO, CHINO HILLS







SOURCE: GOOGLE

KEY

= PROJECT SITE

FIGURE 2

EXISTING SITE AERIAL

RANCHO CIELITO, CHINO HILLS







SOURCE: ARCHITECTS ORANGE

FIGURE 3