APPENDIX I.2

Memorandum RE: Jaeger Ranch Traffic Impact Study, Draft Other Considerations

Kimley»Horn

Memorandum

To:	Olga Sciorelli, P.E., QSD, QSP Land Planning Manager K. Hovnanian® Homes of California, Inc.
From:	Chris Gregerson, P.E., T.E.
Re:	Jaeger Ranch Traffic Impact Study DRAFT *Other Considerations*
Date:	August 28, 2018

Rancho Cordova Parkway Widening Trigger Analysis

The need to widen Rancho Cordova Parkway from two lanes to four lanes along the project extents was analyzed between Existing and Cumulative plus Proposed Project conditions. This trigger analysis incorporated not only the development assumptions that would increase traffic along this roadway segment, but also the connection of the roadway south to Grant Line Road and north to US 50. The analysis resulted in the need for the roadway to be widened by 2034. This would equate to approximately 570 SFR and 566 AAR dwelling units that can be constructed before the roadway segment is required to be widened.

Peak-Hour Traffic Signal Warrant Evaluation

The need for traffic signalization was assessed based on the peak-hour warrant methodologies noted in Section 4.C of the *California Manual on Uniform Traffic Control Devices (CMUTCD)*, *2014 Edition with April 2017 revisions* (CaMUTCD). The peak-hour traffic signal warrant analysis was performed for the two unsignalized intersections in the Existing (2017) scenario, including the side street stop controlled (SSSC) intersection at Jackson Road and Eagles Nest Road (Intersection #3), and the all-way stop controlled (AWSC) intersection at Grant Line Road and Kiefer Boulevard (Intersection #8). In both cases, the speed limit on the major street is greater than 40 miles per hour, indicating that the 70% reduction factor option is appropriate and thus, a signal is warranted for both intersections. Figure 4C-4 of the CMUTCD is included in Appendix G for reference. For the Rancho Cordova Parkway intersection with Chrysanthy Boulevard (Intersection #6), while a signal is assumed for the Cumulative and Cumulative plus Proposed Project scenarios, it is not warranted using the peak-hour traffic signal warrant. Thus, there is no development trigger that would require a signal be installed at the intersection.

Bicycle and Pedestrian Facilities Evaluation

The project applicant is proposing constructing greater than two miles of bicycle facilities throughout the project including several connections to existing and proposed regional trails. The project is proposing to construct one 10-foot to 12-foot wide Class I bike trail connecting to an existing trail in the northeastern portion of the project and two recreational trails connecting to pedestrian and bicycle facilities on the eastern and western portions of the project. The project application is proposing that these facilities shall be incorporated into the City's bikeway master plan. In addition, the project will include sidewalks, stop signs, standard pedestrian crossing warning signs, lane striping to provide a bicycle lane along applicable roadways, bicycle parking, signs to identify pedestrian and bicycle paths, and pedestrian signal heads. Sidewalks will be constructed as part of the frontage improvements along all new roadway construction for Jaeger Road/Rancho Cordova Parkway and Chrysanthy Boulevard in conformance with City and County design standards. Circulation and access to all proposed public spaces will include sidewalks that meet Americans with Disabilities Act standards.

Site Plan, Access, and On-site Circulation Evaluation

The site plan for the proposed project (Error! Reference source not found.) was qualitatively reviewed for general access and on-site
circulation. According to the site plan, primary access to the site will be provided from Chrysanthy Boulevard at the intersection of Rancho Cordova Parkway/Jaeger Road. The combination of these access points, as well as the on-site circulation system appears to provide adequate access to/from Chrysanthy Boulevard, Rancho Cordova Parkway and the surrounding transportation network. Additional access will be provided in the future, as Chrysanthy Boulevard, Rancho Cordova Parkway and Americanos Boulevard are constructed and extended.

Vehicle Miles Traveled (VMT) Analysis

As a part of the traffic impact study performed for the Jaeger Ranch development, Kimley-Horn prepared a project-related Vehicle Miles Traveled (VMT) analysis using Sacramento Area Council of Government's (SACOG) SACSIM travel demand model. Consistent with the City's expectations and our Scope of Services, this VMT analysis is reported in speed bins as well as for an average trip distance. Please note that this analysis was always intended to be provided as information only, and was not to be included in the formal study report nor as a part of the project's environmental review process. This memorandum transmits the subject VMT data for the proposed project.

The VMT analysis was completed for two plus project analysis scenarios, Existing (2017) and Cumulative (2040) Conditions. Table 1 below summarizes the results of this analysis. This analysis was completed using SACOG's SACSIM TDM and summarizes the number of vehicles traveling to and from the project site. The VMT is divided into 5 mph speed bins which correspond to the average speed on roadways in the surrounding area. The total VMT is a summation of the VMT in each speed bin for the two analysis scenarios, white the average trip length is calculated by dividing the total VMT by the number of trips produced in the model.

Table 1 – VMT Analysis Results for Existing (2017) and Cumulative (2040) Conditions

Speed Bin (mph)	VMT	
	Existing	Cumulative
0 - 5	40	25
6 - 10	660	553
11 - 15	525	595
16 - 20	1,940	1,028
21 - 25	2,399	2,038
26 - 30	7,211	4,071
31 - 35	6,295	15,432
36 - 40	23,250	20,857
41 - 45	20,934	8,065
46 - 50	5,325	6,512
51 - 55	10,296	8,192
56 - 60	7,361	2,848
61 - 65	1,285	329
66+	160	48
Total	**87,680**	**70,593**
Average Trip Length (mi.)	***14.2***	***11.2***

Existing conditions include Chrysanthy Boulevard only built to the project's northwest corner, and all trips accessing the surrounding network via Chrysanthy Boulevard. Rancho Cordova Parkway is not constructed to Douglas Road in Existing Conditions and all other assumptions are consistent with Existing (2017) conditions in the surrounding area. As shown, both the total VMT and average trip length are greater in Existing Conditions than Cumulative Conditions.