



## MEMORANDUM

**FROM:** Dokken Engineering  
**TO:** Capital SouthEast Connector Joint Powers Authority  
**RE:** Response to El Dorado Hills Area Planning Advisory Committee White Rock Road Noise Study Report Subcommittee Review

This memorandum provides responses to comments received from the El Dorado Hills Area Planning Advisory Committee after its review of the Noise Study Report for White Rock Rd.

<b>EDHAPAC COMMENTS</b>	<b>DOKKEN RESPONSES</b>
<i>Update the existing NSR taking into consideration the following future impacts including:</i>	
<p>The influx of significant traffic from major development in recent years and future planned including:</p> <ul style="list-style-type: none"><li>• The Folsom Ranch Development</li><li>• Sierra Monte Development</li><li>• El Dorado Hills Heritage 1, Heritage 2, Heritage 3</li><li>• Lake View Village Development</li><li>• Town Center West Development</li><li>• New Empire Ranch Interchanges from White Rock to HWY 50</li></ul>	<p>Traffic forecasts include the developments referenced, as well as many others throughout the region.</p> <p>Traffic forecasts for the project were developed using regional travel demand models including SACOG's SACSIM, El Dorado County's Travel Demand Model, and City of Folsom's Folsom Ranch. Accordingly, consideration was given to the present and anticipated development in the area.</p>
<p>The increase of the speed limit to 55 mph.</p>	<p>The noise model is prepared utilizing observed speed collected during noise measurements, not speed limits.</p>
<p>Folsom banning truck traffic on East Bidwell that will increase truck traffic on White Rock Road.</p>	<p>The City of Folsom currently lists East Bidwell St as a commercial and STAA truck route. The City of Folsom confirmed that there are no current restrictions of truck traffic along East Bidwell St.</p> <p>In the future, when proposed quarries in Sacramento County become operational, the City of Folsom has reserved the right to redirect truck traffic from East Bidwell Street to</p>



	<p>Prairie City Road, entirely within the City of Folsom.</p> <p>The traffic forecasts used estimates of future truck traffic along White Rock Road identified in the Sacramento County Quarry Truck Management Plan and the noise model did not predict noise thresholds within El Dorado County would be exceeded.</p>
<p>Following NSR NEPA requirement for addressing project impacts: the existing traffic studies need to be projected out to at least 2050 vs the 2035.</p>	<p>The Noise Study Report is compliant with NEPA Standards and was reviewed by Caltrans.</p>
<p>Apparent Inconsistencies in Table B for receptors #1-7a is showing:</p> <p>Noise dBA that is actually decreasing (and/or the same) in some cases despite 2 additional through lanes being added to the existing 2 lanes and traffic moving closer to receptors</p> <p>Noise dBA exterior of Church (#1) having reduced noise under the Build alternative</p> <p>Noise for receptors #1-7a (residential) range from 53-62 dBA and for receptors #8-11b (open areas) with the same roadway cross-section, range from 57-75 dBA.</p>	<p>FHWA's Traffic Noise Model ("TNM") version 2.5 was used to determine the existing and future noise volumes for sensitive receivers along White Rock Road.</p> <p>The model imports the engineering linework from CAD as well as topography lines from survey, which is then utilized to create a 3D representation of the existing and future environment.</p> <p>The TNM uses traffic forecasts to estimate volumes of vehicles during peak hours in each travel lane. Each travel lane requires an input, and peak volumes are split evenly between each lane.</p> <p>This distribution of traffic volumes between each lane occasionally results in forecasted noise levels decreasing in the Build Scenario versus the No-Build Scenario.</p> <p>Additionally, the new lanes in the Build Scenario shift some of the traffic volumes away from the receivers, which contributes to the decrease in noise levels.</p> <p>For receptors #8-11b, the traffic is modeled closer to the receptor under the Build Condition. The increase in predicted noise levels at these receptors is accurately reflected in the model.</p>



<i>Modeling that Impacts to include:</i>	
Proposed 4-lane cross-section thoroughfare in which traffic is moved closer to property, in some cases approximately 24-feet (especially on the north side of White Rock)	The TNM utilized the proposed 4 lane road cross section that is planned to be constructed.
Use speed of 55 mph for proposed facility to predict build-out, worst-case (level-of service (LOS) C) alternative vs the 40-mph used for modeling	See response above.
Use LOS C traffic for predicted future (worst case) traffic which equates to 2,200 total PM peak hour traffic vs the 810 – 1,300 (Table 3.5) shown. Based on AASHTO Green Book.	As stated above, traffic forecasts for the project were developed using regional travel demand models including SACOG's SACSIM, El Dorado County's Travel Demand Model, and City of Folsom's Folsom Ranch.  AASHTO standards for LOS provide upper limits for roadway level of service; however, noise models require the specific inputs from traffic forecasts.
Update truck mix % accordingly based on recent Folsom ordinance of restricting large trucks on Prairie City Road and East Bidwell and forcing them to use White Rock/Latrobe/Silva PKWY connection to HWY 50	See response above.
The need to take new noise readings for existing/new receptors as warranted - aka Receptor #R5 (represents 15 dwellings) is a public park which Section 4(f) – parkland protection could be invoked with new readings closer to the existing wall and useable area. #R6 – not sure location (end of a street) was selected?	Noise measurements are collected for the purposes of validating the model only.  The noise measurements are compared to the traffic model forecasts by using traffic counts collected at the time of the measurement. The comparison verifies if the TNM's existing conditions are accurately predicting the noise levels.  Noise measurements were within 3 dBA of the model, as such the model was considered to accurately predict the sound volumes, and no adjustments are necessary.  The noise measurement locations were coordinated with residents and selected using topographic equivalence along the alignment.
It is noted in the NSR (2015) that rubberized pavement is being considered for Segment E1: rubberized pavement can reduce noise in the "short-term" but is not recognized as long-term (perpetuity) NEPA mitigation	Rubberized asphalt is an approved mitigation measure under CEQA to mitigate exceedances of El Dorado County's noise thresholds.



	<p>Under NEPA, the Noise Abatement Criteria was not exceeded, and noise mitigation was not required under NEPA.</p>
<p>Caltrans Highway Design Manual, Chapter 1100 (September 2006) which state sound walls are required to be designed to intercept the line-of-sight from the exhaust stack of a truck (11.5 ft) to the first tier of receivers (5.5 ft). The communities of Stonebriar, Shadow Hills, Spring Field Meadows have only 5-foot privacy walls and Four Seasons has only 8-foot walls. Recent development along Latrobe Road currently has sound walls over 12 feet.</p>	<p>The Caltrans Highway Design Manual Section 1102.3 Noise Barrier Height and Position states that “for design purposes, the noise barrier should intercept the line of sight from the exhaust stack of a truck to the receptor;” however, this is a recommendation, and not a requirement.</p> <p>Any considered soundwalls are evaluated with a benefit/cost analysis, in which soundwalls may be approved by Caltrans even in the event that they do not intercept line of sight with an exhaust stack, as long as they achieve a 7 dBA reduction for one receiver, and are feasible to construct and reasonable cost based on number of benefitted receivers.</p> <p>As no soundwalls were required under NEPA, the project was not required to evaluate truck exhaust stacks line-of-sight impacts.</p>

## **Conclusion**

After all comments were considered, it is determined that changes to the Noise Study Report are not required, the findings of the Noise Study Report are accurate, and implementation of the project will not result in noise impacts to receivers after mitigation measures are implemented.