



OAK RIDGE HIGH SCHOOL VERIZON PROJECT

VERIZON SITE NAME: SERRANO

SITE ADDRESS: 1120 HARVARD WAY, EL DORADO HILLS, CA 95762

COUNTY APPLICATION NUMBER: CUP20-0006

VERIZON WIRELESS REPRESENTATIVES:

- Ericson Malana, Verizon Wireless Radiofrequency Engineer
- Paul Albritton, Mackenzie & Albritton LLP
- Sara King, Epic Wireless Group

THIRD PARTY SPECIALISTS:

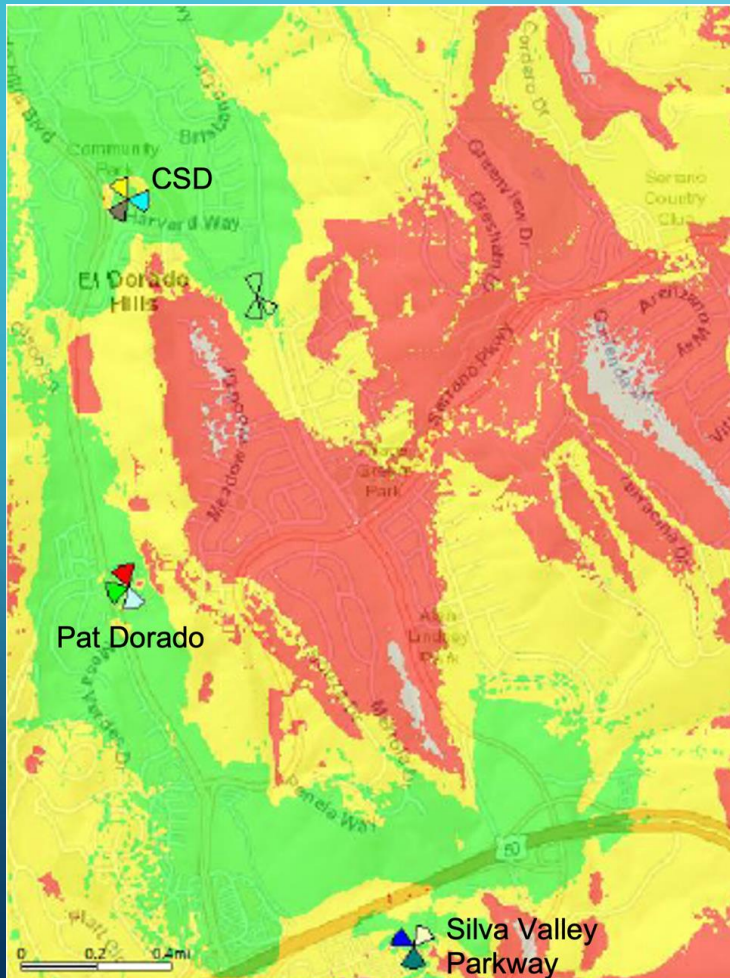
- Bob Crookham, Musco Lighting
- Bill Hammet, Hammett & Edison

EL DORADO UNION HIGH SCHOOL DISTRICT REPRESENTATIVES:

- Bob Whittenberg, Assistant Superintendent

SIGNIFICANT GAP IN SERVICE

Existing coverage

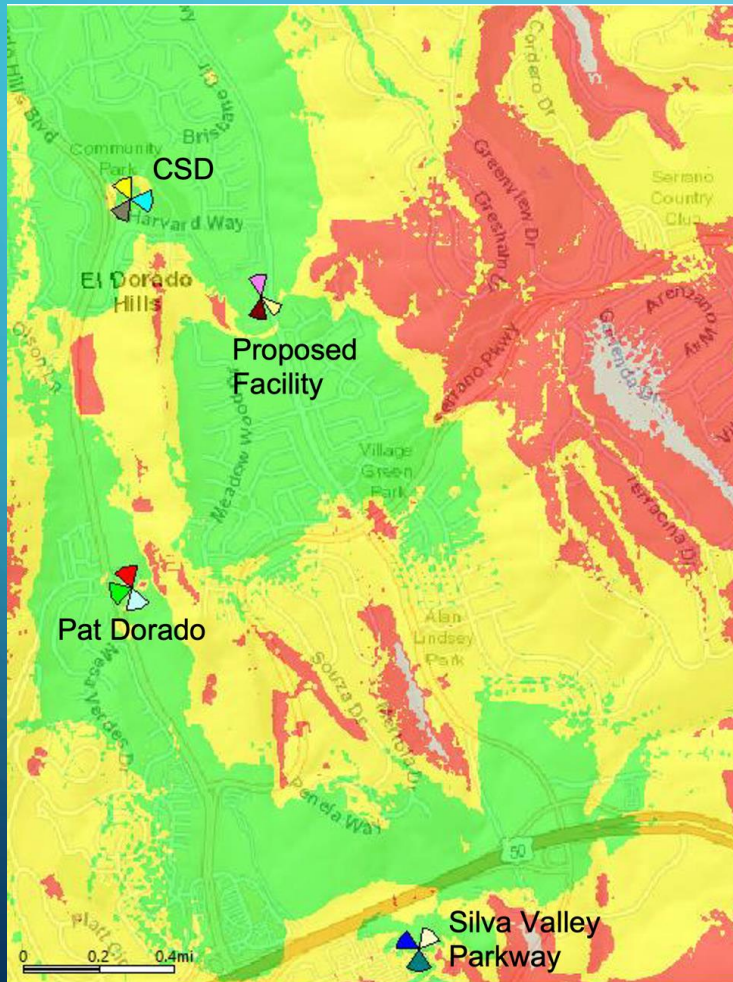


- CSD rooftop facility is low in height
- Pat Dorado facility is on opposite side of ridge
- Silva Valley Parkway facility is distant (1.7 miles south)
- Broad gap in coverage in areas along Silva Valley Parkway





AWS LTE RSRP Coverage	
■	In-building ≥ -75 dBm
■	In-vehicle ≥ -85 dBm
■	Outdoor ≥ -95 dBm
■	Unreliable. ≥ -105 dBm

IMPROVED SERVICE

Proposed coverage



- 1.08 square miles of improved coverage
- New in-vehicle coverage to:
 - 0.8 miles of Silva Valley Parkway (17,400 vehicle trips per weekday)
 - 0.5 miles of Serrano Parkway (13,300 vehicle trips per weekday)
- Will relieve congestion on surrounding facilities, improving network performance in greater area

AWS LTE RSRP Coverage	
	In-building ≥ -75 dBm
	In-vehicle ≥ -85 dBm
	Outdoor ≥ -95 dBm
	Unreliable. ≥ -105 dBm

ALTERNATIVES

- **Five alternative locations were considered but none of the alternatives were viable for the following reasons:**
 - **Too far away to serve the gap**
 - **Blocked by terrain**
 - **Property owner was not interested**
 - **Legal access rights unachievable.**

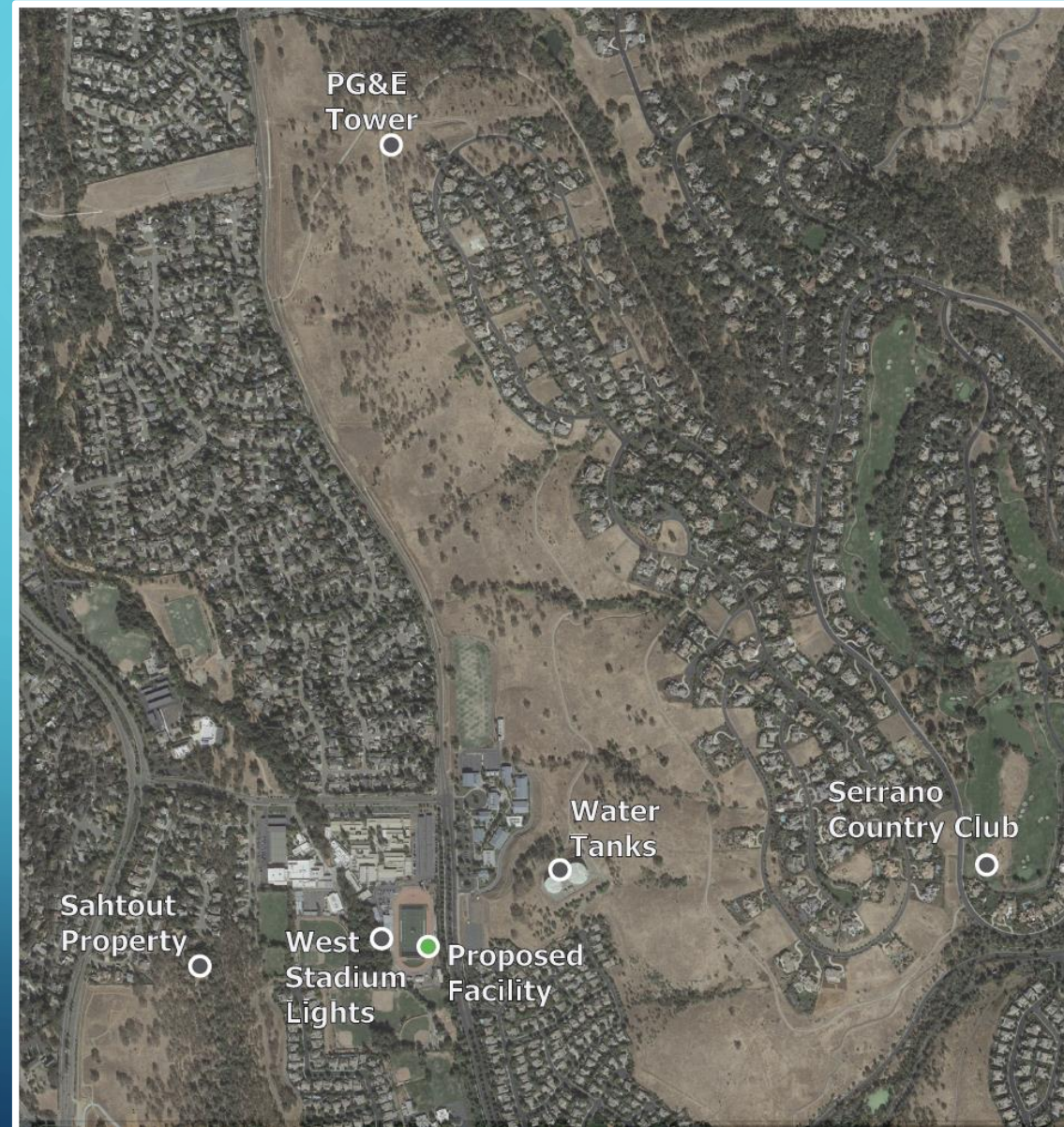

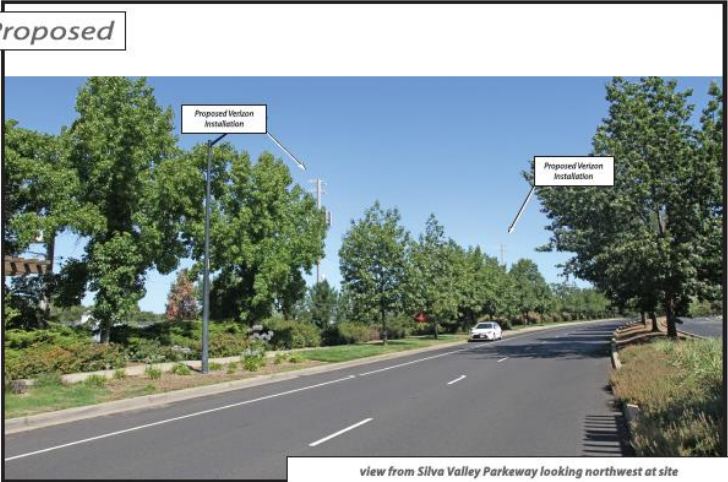


PHOTO SIMULATIONS

Existing



Proposed




view from Silva Valley Parkway looking northwest at site

239662 Serrano
1120 Harvard Way, El Dorado Hills, CA
Photosims Produced on 5-24-2021


AdvanceSim
Photo Simulation Solutions
Contact (925) 200-6507

verizon

Existing



Proposed



view from Silva Valley Parkway looking southwest at site

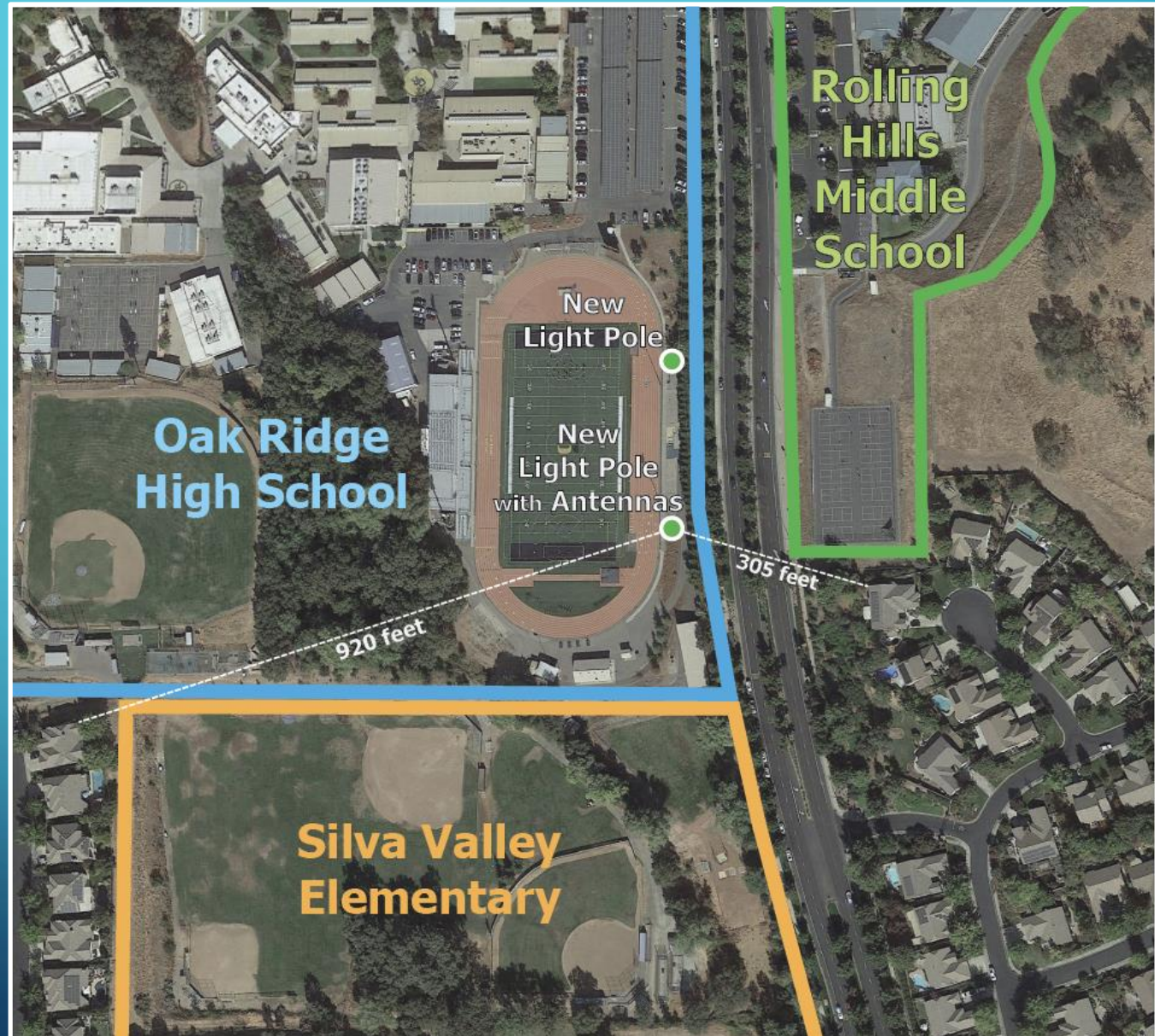
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1120 Harvard Way, El Dorado Hills, CA
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verizon

PROJECT SETTING

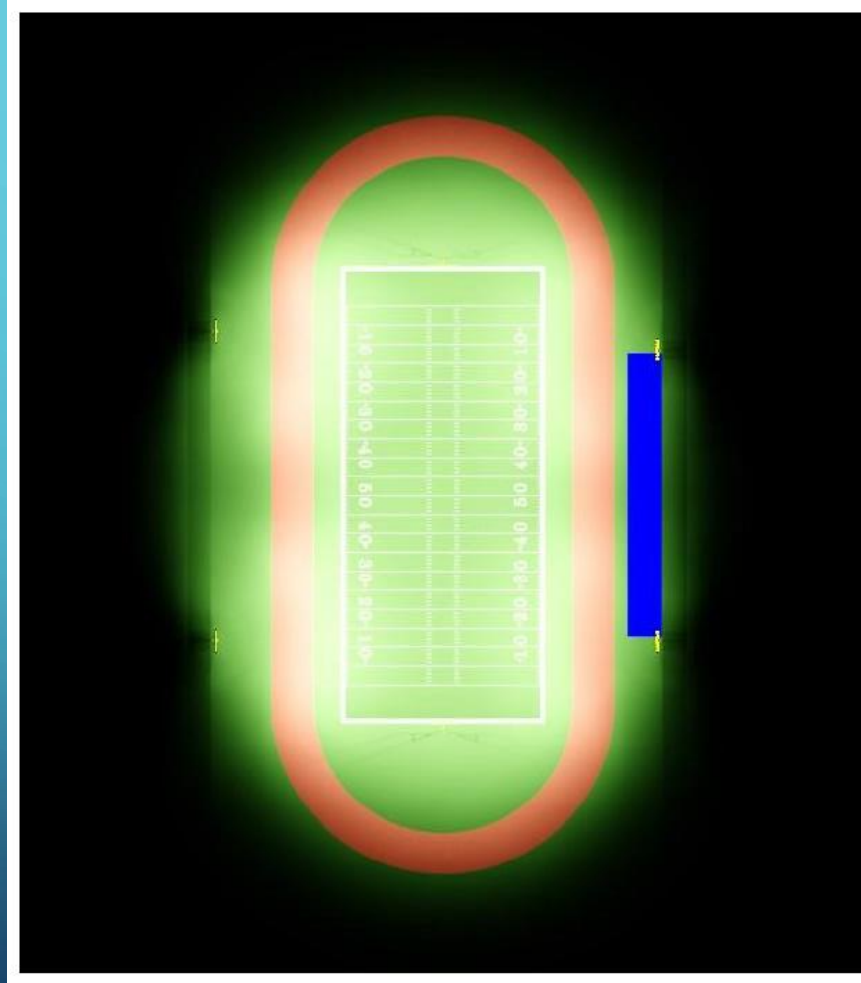
- Surrounded by three school properties
- Closest residences:
 - Over 300 feet southeast
 - Over 900 feet southwest



LIGHTING



Musco technical lighting analysis images – report concluded no impact to surrounding community.



NOISE

- Existing speakers will be relocated to the new poles at the same height.
- Per Hammett & Edison's analysis: "there would be no impact from the Verizon Wireless proposal on noise levels to the nearby houses from the High School's speaker system at the football field."



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CONSULTING ENGINEERS
BROADCAST & WIRELESS

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CONSULTANT

BY E-MAIL: SARA.KING@EPICWIRELESS.NET

May 21, 2021

Ms. Sara King
Epic Wireless Group LLC
605 Coolidge Drive, Suite 100
Folsom, California 95630

Dear Sara:

As you requested, we have reviewed the Findings for Denial from the Planning Commission action on March 11, 2021, regarding the Verizon Wireless base station installation proposed at Oak Ridge High School in El Dorado Hills, California. In particular, Findings 3.b. and 4.a. reference an increase in height of the existing loudspeakers when they are relocated to the two replacement light poles on the east side of the football field, but Sheet A-5 of the submitted drawings shows that the speakers are to be mounted at the same height as they are today. While the new poles are taller and will be installed slightly uphill from the existing poles, the speakers are to be mounted at the same elevation above the playing field, and there is not any change in the speaker orientation shown in the drawings.

Thus, the height and orientation of the speakers relative to the houses to the southeast and southwest are unchanged. The distances change a little: about 25 feet closer toward the southeast, out of 370 feet, and about 9 feet further away from the southwest, out of 920 feet. For the houses to the southeast, the calculated difference in sound level is just 0.6 dBA, well below the 3 dBA change that is considered "barely perceptible."

Therefore, based on the information and analysis above, it is my professional opinion that there would be no impact from the Verizon Wireless proposal on noise levels at nearby houses from the High School's speaker system at the football field. Please let me know if any further information is required on this matter.

Sincerely yours,

William F. Hammett, P.E.

lw

Enclosure

cc: Ms. Lauren Jongsma – BY EMAIL LAUREN.JONGSMA@EPICWIRELESS.NET



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K0JG

CONCLUSION

- Project will improve the school facilities with high efficiency, more consistent, and better quality lighting.
- The project will provide additional income to school from Verizon Wireless rent
- The project will enhance Verizon Wireless service for schools, residents, commuters and first responders
- This project is the least intrusive means by which to fill this coverage gap and will provide significant benefits to the community.