ADMINISTRATIVE DRAFT INITIAL STUDY
Transportation Enhancement and ADA Improvements for Dapplegray School at Palos Verdes Drive North

SCH No. 2023040182

LEAD AGENCY:

City of Rolling Hills Estates

4045 Palos Verdes Drive North
Rolling Hills Estates, Ca 90274
Telephone 310.377.1577 • Fax 310.377.4468
www.RHE.city

David Wahba
Public Works Director
(310) 377-1577 ext. 103

Prepared by:

WILLDAN ENGINEERING

13191 Crossroads Parkway North, Suite 405
Industry, CA 91746
Contact: Mr. Salvador Lopez
slopez@willdan.com

April 2023

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CITY OF ROLLING HILLS ESTATES

ENVIRONMENTAL CHECKLIST FORM AND INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

1. **Project Title:**

   Transportation Enhancement and ADA Improvements: Dapplegray School at Palos Verdes Drive North

2. **State Clearinghouse Number:**

3. **Lead Agency Name and Address:**

   City of Rolling Hills Estates
   4045 Palos Verdes Drive North
   Rolling Hills Estates, California, 90274
   https://www.ci.rolling-hills-estates.ca.us/

   310-377-1577

4. **Contact Person, Phone, Email:**

   David Wahba
   Public Works Director
   (310) 377-1577 ext. 103
   DavidW@RollingHillsEstates.gov

5. **Project Location:**

   Intersection of London Lane (Dapplegray School driveway) and Palos Verdes Drive North;
   Latitude/longitude: 33.7730N, 118.3389W

6. **Property Owner:**

Name:	City of Rolling Hills Estates
Physical Address:	4045 Palos Verdes Drive North
Mailing Address:	4045 Palos Verdes Drive North
Email:	davidw@rollinghillsestatesca.gov
URL:	https://www.RHE.city

7. **Project Sponsor's Name and Address:**

Name:	(Same as above)
Physical Address:	
Mailing Address:	
Email:	
URL:	

8. **General Plan Designation:**

   Institutional/Open Space

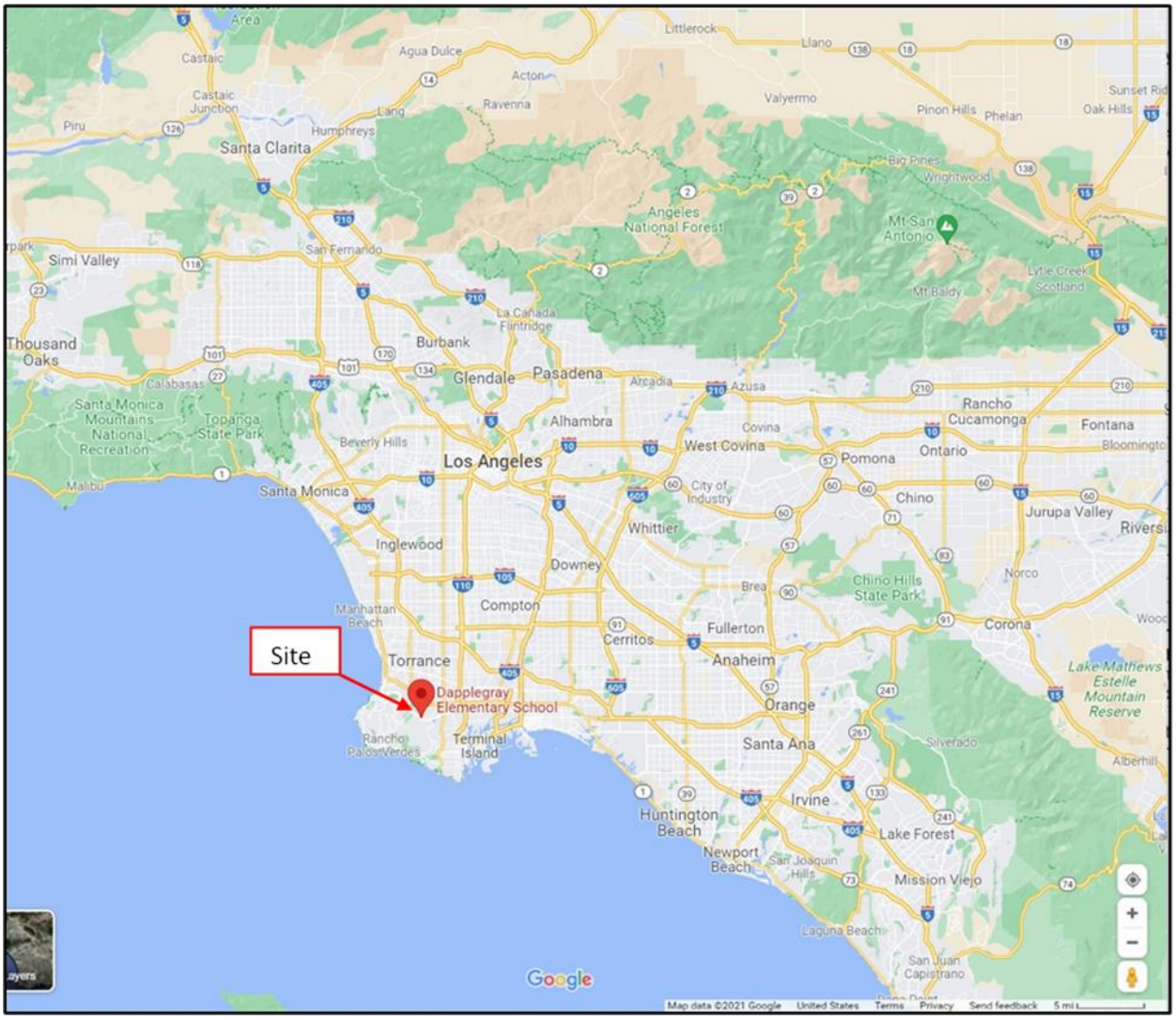


Figure PD - 1 Regional Vicinity

9. Zoning:

Institutional

10. Project Description:

Background

In 2006, the City of Rolling Hills Estates analyzed a modification to the Peninsula Village Overlay District. This analysis identified the impacts of modifying the Overlay District to provide an effective balance between residential and commercial uses and envisioned developing up to 900 total residential units and approximately 1.1 million square feet of commercial uses.

In 2007, a Technical Memorandum was prepared to address the impacts of the Residential Alternatives Analysis at the Palos Verdes Drive North/Dapplegray School Driveway. The Memorandum identified measures to mitigate the proposed Overlay District's impacts, which included restriping for a westbound shared through lane

and right-turn lane and widening of the eastbound approach to accommodate a second through lane. The current project implements these measures.

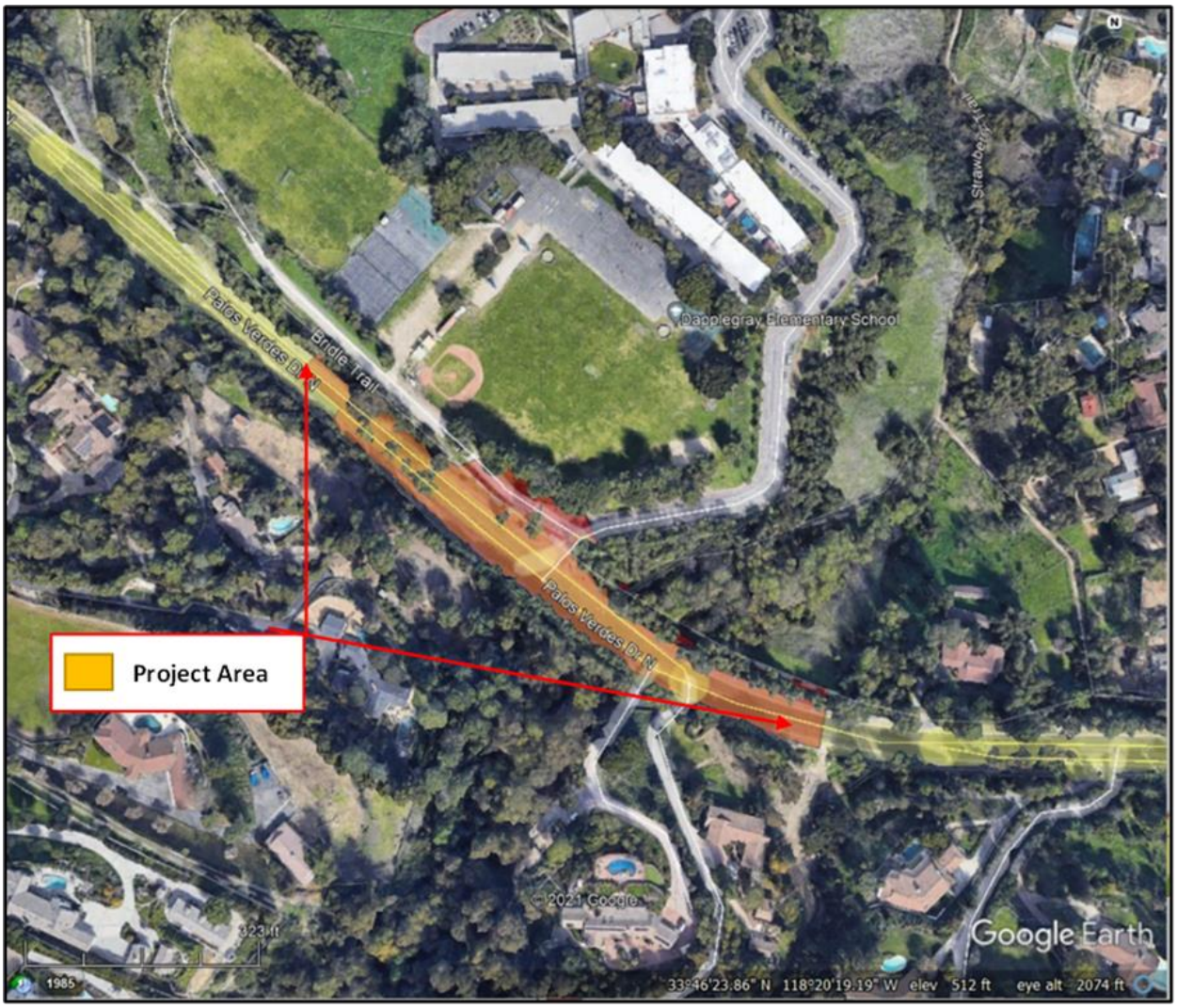


Figure PD - 2 Aerial View

Project Components

Palos Verdes Drive North is a primary roadway providing access to the cities on the peninsula including Rolling Hills, Rancho Palos Verdes, Palos Verdes Estates and Rolling Hills Estates. The proposed project will widen an approximate 1,015' segment of the roadway east and west of Dapplegray Lane, along the frontage of the Dapplegray Elementary School campus in order to enhance traffic flow and to improve the intersection's accessibility (ADA access). Widening will include two additional through lanes - one eastbound and one westbound lane. The project will also include these features:

- Replacing 8-inch traffic signal heads with 12-inch heads;
- Replacing a temporary signal pole with a custom steel pole according to city specifications;
- Adding illuminated street name signs;
- Upgrading ADA access ramps;

- Removing and replacing two bus shelters according to city specifications;
- Constructing six cast-in-place earth-colored and textured concrete retaining walls of various heights;
- Removing +/- 39 non-native trees to accommodate widening, new medians, and retaining wall construction
- Re-aligning a segment of the bridle trail after retaining walls are constructed;
- Constructing and planting a new raised median with trees, bunchgrasses and groundcover; and
- Other improvements.

See Exhibit A for full-size drawings and photosimulations of the retaining walls. Drawings showing limits of excavation, schematic construction plans and wall profiles are shown in Figure PD - 4 Street Improvement Plan and Profile (1) - Figure PD - 11 Retaining Wall No. 5 (Schematic Illustration) below.

The project would take approximately 24 months to complete. Initial grading and excavation would be scheduled outside of the rainy season, and to the extent feasible, outside of bird-nesting season (approximately February 1 – September 15). At the time of this writing, the City assumes that work would take place on one side of the roadway at a time, and that Palos Verdes Drive North would remain open to two-way vehicle travel.

Roadway widening will require excavating the slopes on both sides of the roadway. Five cast-in-place concrete retaining walls are planned to ensure slope stability and to prevent erosion; these walls are numbered 1-5 on sheets 6-10 of the construction drawings (See Appendix A, Construction Drawings). The exposed wall faces would vary according to the height of retained slope, and would be shorter on the wall ends than the wall midpoints (see Table PD - 1Retaining Wall Schedule, Figure PD - 7 - Figure PD - 11 below; Exhibit A). Note that wall heights indicated on Figure 3 below represent the total retaining wall heights, including the portions of walls that are below the ground surface. An earth-toned concrete coloring agent would be added to the concrete mix.

Table PD - 1 Retaining Wall Schedule

Retaining Wall No.	Length	Visible Height Range (Above Ground Surface)	Total Wall Height (From Top of Footing)
1	350.70’	2’-5.78’	4’-7.78’
2	101.42’	1.5’-5.19’	3’-7.19’
3	215.07’	2’-5.30’	3’-6.8’
4	214.31’	8”	2’-3’
5	194.04’	<1’-3.19’	2’-4.69’

Current earthwork estimates include excavating 1005 cubic yards (CY) of soil and backfilling 135 CY for the road widening. Retaining wall construction would require excavating 1,996 CY and backfilling 1,576 CY. Approximately 1,290 CY of excavated soil and rock associated with cutting back the slopes from PVDN will be transported off-site to a sanitary landfill where it would be used as cover material; the Azusa landfill, 33.5 miles from City Hall, is the closest landfill to the project site available to alternatively, the project contractor may move the material to another construction site to be used as fill soil.

The reconstructed medians would be planted with Western Redbud (*Cercis occidentali*s) and Peruvian (California) Pepper (*Schinus molle*; non-native) trees (see Figure PD - 12 Planting Plan below). The proposed shrub, groundcover and ornamental grass palette includes Smooth Agave (*Agave desmettiana*), Santa Barbara Sage (*Salvia leucantha* “Santa Barbara,” Dwarf Bearberry (*Arctostaphylos uva-ursi* “Point Reyes;” groundcover manzanita), and Pink Muhly (grass). New irrigation would include a combination of drip lines and bubbler heads and would have the capacity to deliver approximately 39,751 gallons of water annually (see Appendix A, Sheet 17).

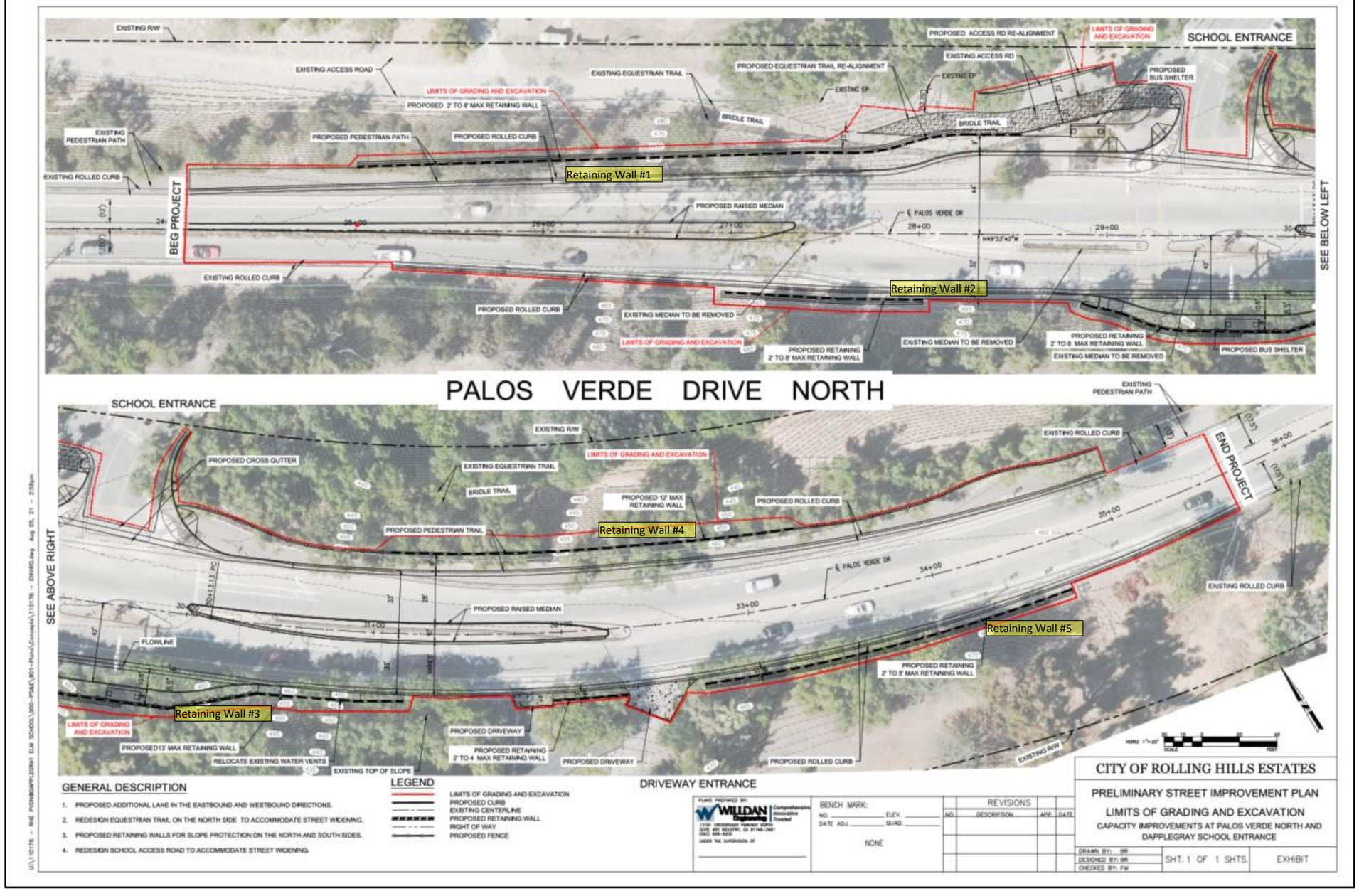
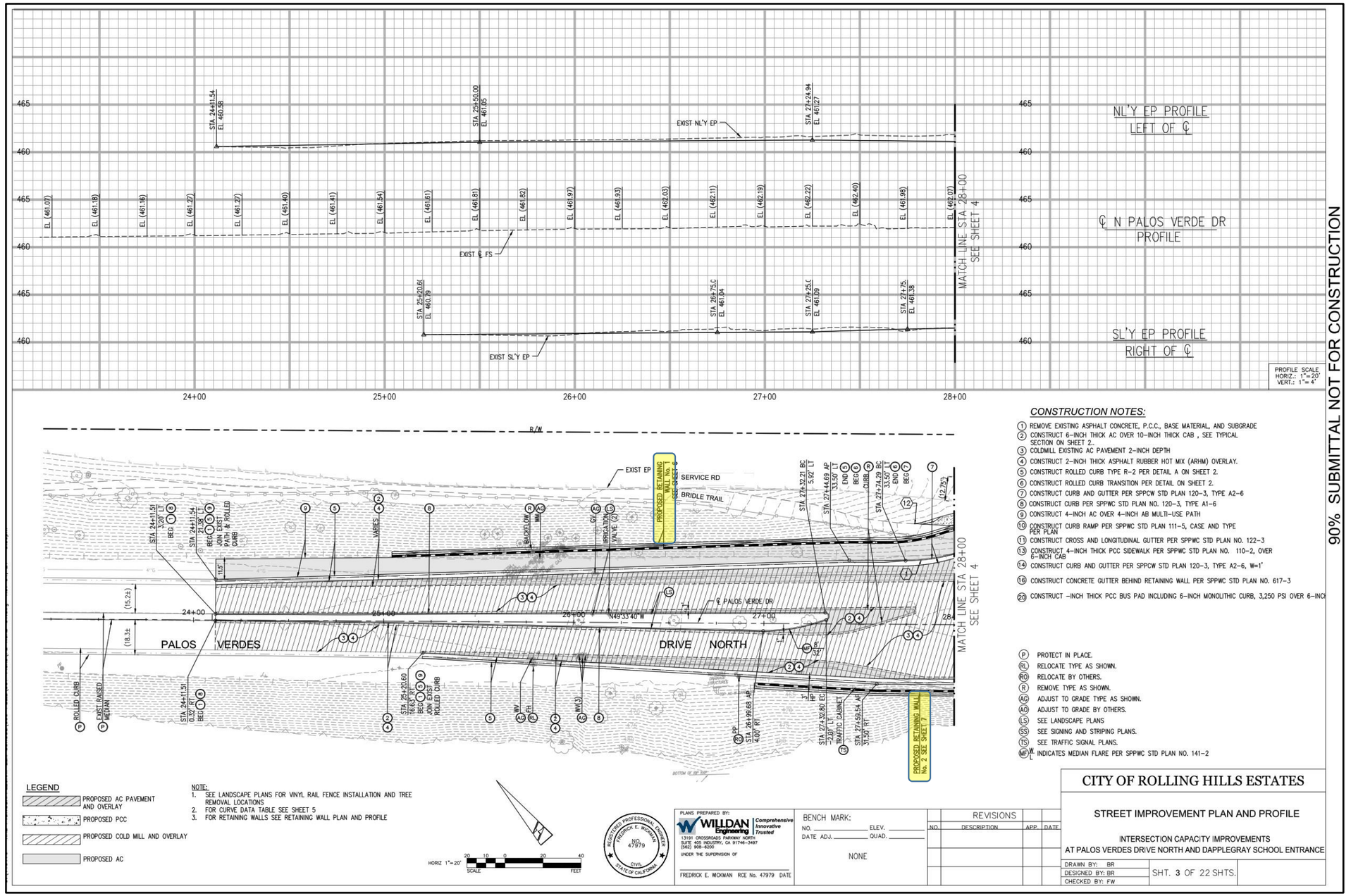


Figure PD - 3 Project Area Showing Limits of Grading

Note: Retaining wall dimensions on this plan shown reflect <u>total</u> wall and footing height, not exposed wall faces. See Figures PD-9 – PD-11 for exposed wall faces.



CONSTRUCTION NOTES:

1. REMOVE EXISTING ASPHALT CONCRETE, P.C.C., BASE MATERIAL, AND SUBGRADE
2. CONSTRUCT 6-INCH THICK AC OVER 10-INCH THICK CAB , SEE TYPICAL SECTION ON SHEET 2..
3. COLDMILL EXISTING AC PAVEMENT 2-INCH DEPTH
4. CONSTRUCT 2-INCH THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY.
5. CONSTRUCT ROLLED CURB TYPE R-2 PER DETAIL A ON SHEET 2.
6. CONSTRUCT ROLLED CURB TRANSITION PER DETAIL ON SHEET 2.
7. CONSTRUCT CURB AND GUTTER PER SPPCW STD PLAN 120-3, TYPE A2-6
8. CONSTRUCT CURB PER SPPWC STD PLAN NO. 120-3, TYPE A1-6
9. CONSTRUCT 4-INCH AC OVER 4-INCH AB MULTI-USE PATH
10. CONSTRUCT CURB RAMP PER SPPWC STD PLAN 111-5, CASE AND TYPE PER PLAN
11. CONSTRUCT CROSS AND LONGITUDINAL GUTTER PER SPPWC STD PLAN NO. 122-3
13. CONSTRUCT 4-INCH THICK PCC SIDEWALK PER SPPWC STD PLAN NO. 110-2, OVER 6-INCH CAB
14. CONSTRUCT CURB AND GUTTER PER SPPCW STD PLAN 120-3, TYPE A2-6, W=1'
16. CONSTRUCT CONCRETE GUTTER BEHIND RETAINING WALL PER SPPWC STD PLAN NO. 617-3
20. CONSTRUCT -INCH THICK PCC BUS PAD INCLUDING 6-INCH MONOLITHIC CURB, 3,250 PSI OVER 6-INCH

(P) PROTECT IN PLACE.
(RL) RELOCATE TYPE AS SHOWN.
(RO) RELOCATE BY OTHERS.
(R) REMOVE TYPE AS SHOWN.
(AG) ADJUST TO GRADE TYPE AS SHOWN.
(AO) ADJUST TO GRADE BY OTHERS.
(LS) SEE LANDSCAPE PLANS
(SS) SEE SIGNING AND STRIPING PLANS.
(TS) SEE TRAFFIC SIGNAL PLANS.
(MF) INDICATES MEDIAN FLARE PER SPPWC STD PLAN NO. 141-2

REGISTERED PROFESSIONAL ENGINEER FREDRICK E. WICKMAN NO. 47979 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
WILLDAN Engineering Comprehensive Innovative Trusted
13191 CROSSROADS PARKWAY NORTH
SUITE 405 INDUSTRY, CA 91746-3497
(562) 908-6200
UNDER THE SUPERVISION OF
FREDRICK E. WICKMAN RCE No. 47979 DATE

BENCH MARK:
NO. _____ ELEV. _____
DATE ADJ. _____ QUAD. _____
NONE

NO.	REVISIONS DESCRIPTION	APP.	DATE

CITY OF ROLLING HILLS ESTATES

STREET IMPROVEMENT PLAN AND PROFILE

INTERSECTION CAPACITY IMPROVEMENTS
AT PALOS VERDES DRIVE NORTH AND DAPPLEGRAY SCHOOL ENTRANCE

DRAWN BY: BR
DESIGNED BY: BR
CHECKED BY: FW
SHT. 3 OF 22 SHTS.

90% SUBMITTAL NOT FOR CONSTRUCTION

Figure PD - 4 Street Improvement Plan and Profile (1)

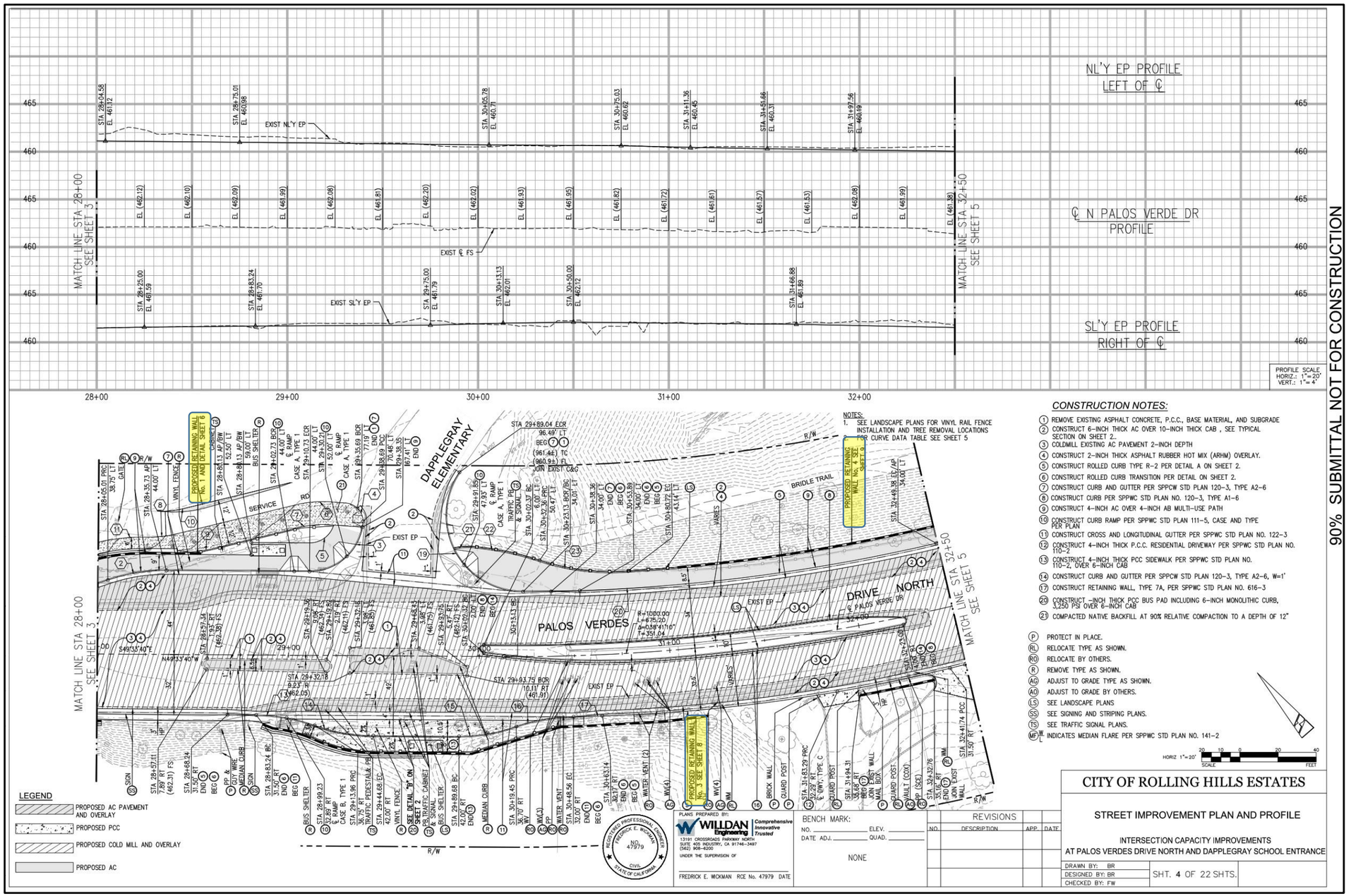
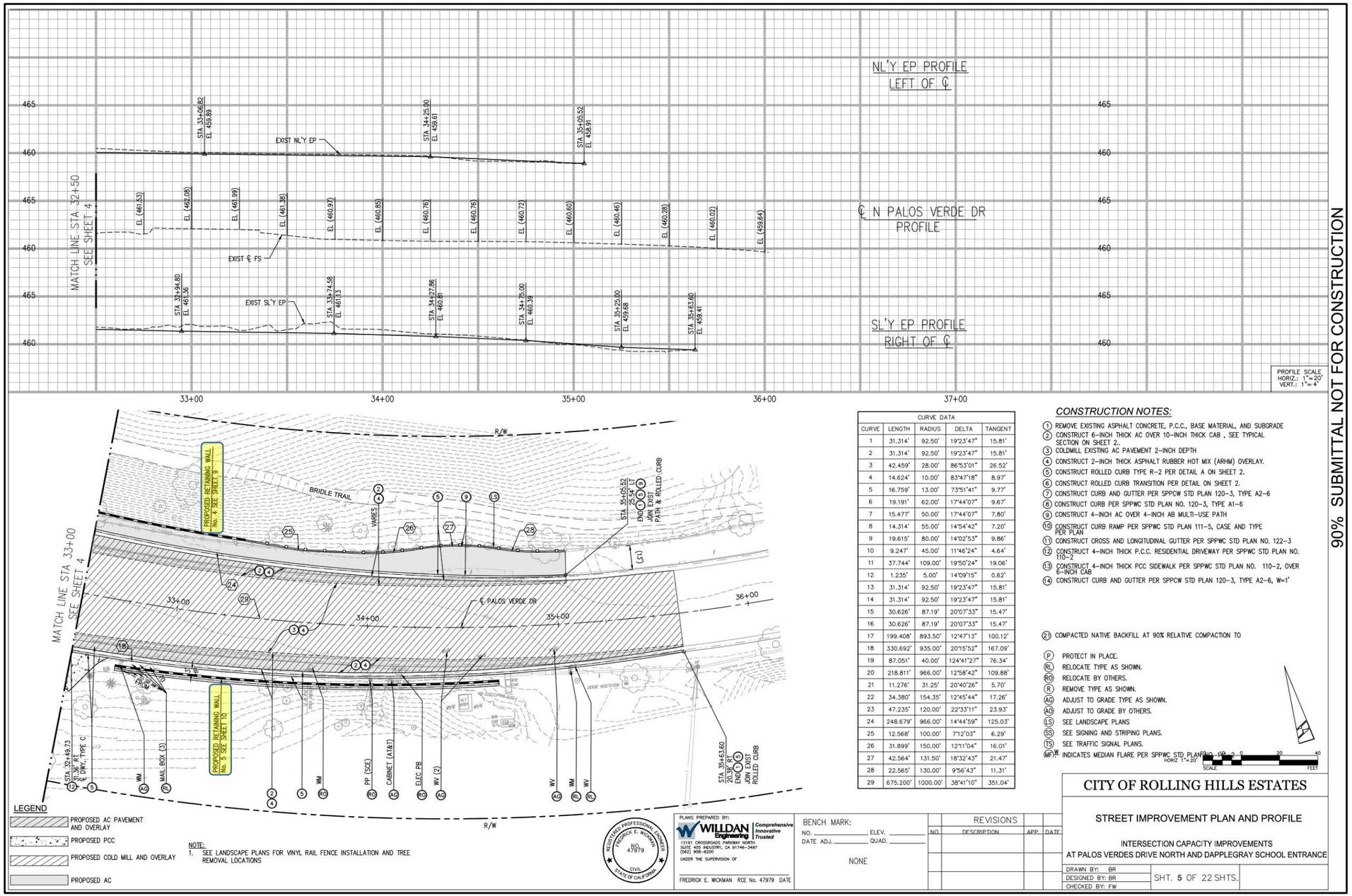


Figure PD - 5 Street Improvement Plan and Profile (2)



CURVE DATA				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
1	31.314'	92.50'	19°23'47"	15.81'
2	31.314'	92.50'	19°23'47"	15.81'
3	42.459'	28.00'	86°53'01"	26.52'
4	14.624'	10.00'	83°47'18"	8.97'
5	16.759'	13.00'	73°51'41"	9.77'
6	19.191'	62.00'	17°44'07"	9.67'
7	15.477'	50.00'	17°44'07"	7.80'
8	14.314'	55.00'	14°54'42"	7.20'
9	19.615'	80.00'	14°02'53"	9.86'
10	9.247'	45.00'	11°46'24"	4.64'
11	37.744'	109.00'	19°50'24"	19.06'
12	1.235'	5.00'	14°09'15"	0.62'
13	31.314'	92.50'	19°23'47"	15.81'
14	31.314'	92.50'	19°23'47"	15.81'
15	30.626'	87.19'	20°07'33"	15.47'
16	30.626'	87.19'	20°07'33"	15.47'
17	199.408'	893.50'	12°47'13"	100.12'
18	330.692'	935.00'	20°15'52"	167.09'
19	87.051'	40.00'	124°41'27"	76.34'
20	218.811'	966.00'	12°58'42"	109.88'
21	11.276'	31.25'	20°40'26"	5.70'
22	34.380'	154.35'	12°45'44"	17.26'
23	47.235'	120.00'	22°33'11"	23.93'
24	248.679'	966.00'	14°44'59"	125.03'
25	12.568'	100.00'	7°12'03"	6.29'
26	31.899'	150.00'	12°11'04"	16.01'
27	42.564'	131.50'	18°32'43"	21.47'
28	22.565'	130.00'	9°56'43"	11.31'
29	675.200'	1000.00'	38°41'10"	351.04'

CONSTRUCTION NOTES:

① REMOVE EXISTING ASPHALT CONCRETE, P.C.C., BASE MATERIAL, AND SUBGRADE
② CONSTRUCT 6-INCH THICK AC OVER 10-INCH THICK CAB , SEE TYPICAL SECTION ON SHEET 2.
③ COLDMILL EXISTING AC PAVEMENT 2-INCH DEPTH
④ CONSTRUCT 2-INCH THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY.
⑤ CONSTRUCT ROLLED CURB TYPE R-2 PER DETAIL A ON SHEET 2.
⑥ CONSTRUCT ROLLED CURB TRANSITION PER DETAIL ON SHEET 2.
⑦ CONSTRUCT CURB AND GUTTER PER SPPCW STD PLAN 120-3, TYPE A2-6
⑧ CONSTRUCT CURB PER SPPWC STD PLAN NO. 120-3, TYPE A1-6
⑨ CONSTRUCT 4-INCH AC OVER 4-INCH AB MULTI-USE PATH
⑩ CONSTRUCT CURB RAMP PER SPPWC STD PLAN 111-5, CASE AND TYPE PER PLAN
⑪ CONSTRUCT CROSS AND LONGITUDINAL GUTTER PER SPPWC STD PLAN NO. 122-3
⑫ CONSTRUCT 4-INCH THICK P.C.C. RESIDENTIAL DRIVEWAY PER SPPWC STD PLAN NO. 110-2
⑬ CONSTRUCT 4-INCH THICK PCC SIDEWALK PER SPPWC STD PLAN NO. 110-2, OVER 6-INCH CAB
⑭ CONSTRUCT CURB AND GUTTER PER SPPCW STD PLAN 120-3, TYPE A2-6, W=1'

㉑ COMPACTED NATIVE BACKFILL AT 90% RELATIVE COMPACTION TO

(P) PROTECT IN PLACE.
(RL) RELOCATE TYPE AS SHOWN.
(RO) RELOCATE BY OTHERS.
(R) REMOVE TYPE AS SHOWN.
(AG) ADJUST TO GRADE TYPE AS SHOWN.
(AO) ADJUST TO GRADE BY OTHERS.
(LS) SEE LANDSCAPE PLANS
(SS) SEE SIGNING AND STRIPING PLANS.
(TS) SEE TRAFFIC SIGNAL PLANS.
(MF) INDICATES MEDIAN FLARE PER SPPWC STD PLAN

HORIZ 1"=20'
SCALE 0 20 40
FEET

PLANS PREPARED BY:
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Comprehensive Innovative Trusted
13191 CROSSROADS PARKWAY NORTH
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REGISTERED PROFESSIONAL ENGINEER FREDRICK E. WICKMAN NO. 47979 CIVIL STATE OF CALIFORNIA

FREDRICK E. WICKMAN RCE No. 47979 DATE

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NONE

REVISIONS			
NO.	DESCRIPTION	APP.	DATE

CITY OF ROLLING HILLS ESTATES

STREET IMPROVEMENT PLAN AND PROFILE

INTERSECTION CAPACITY IMPROVEMENTS
AT PALOS VERDES DRIVE NORTH AND DAPPLEGRAY SCHOOL ENTRANCE

DRAWN BY: BR
DESIGNED BY: BR
CHECKED BY: FW

SHT. 5 OF 22 SHTS.

90% SUBMITTAL NOT FOR CONSTRUCTION

Figure PD - 6 Street Improvement Plan and Profile (3)

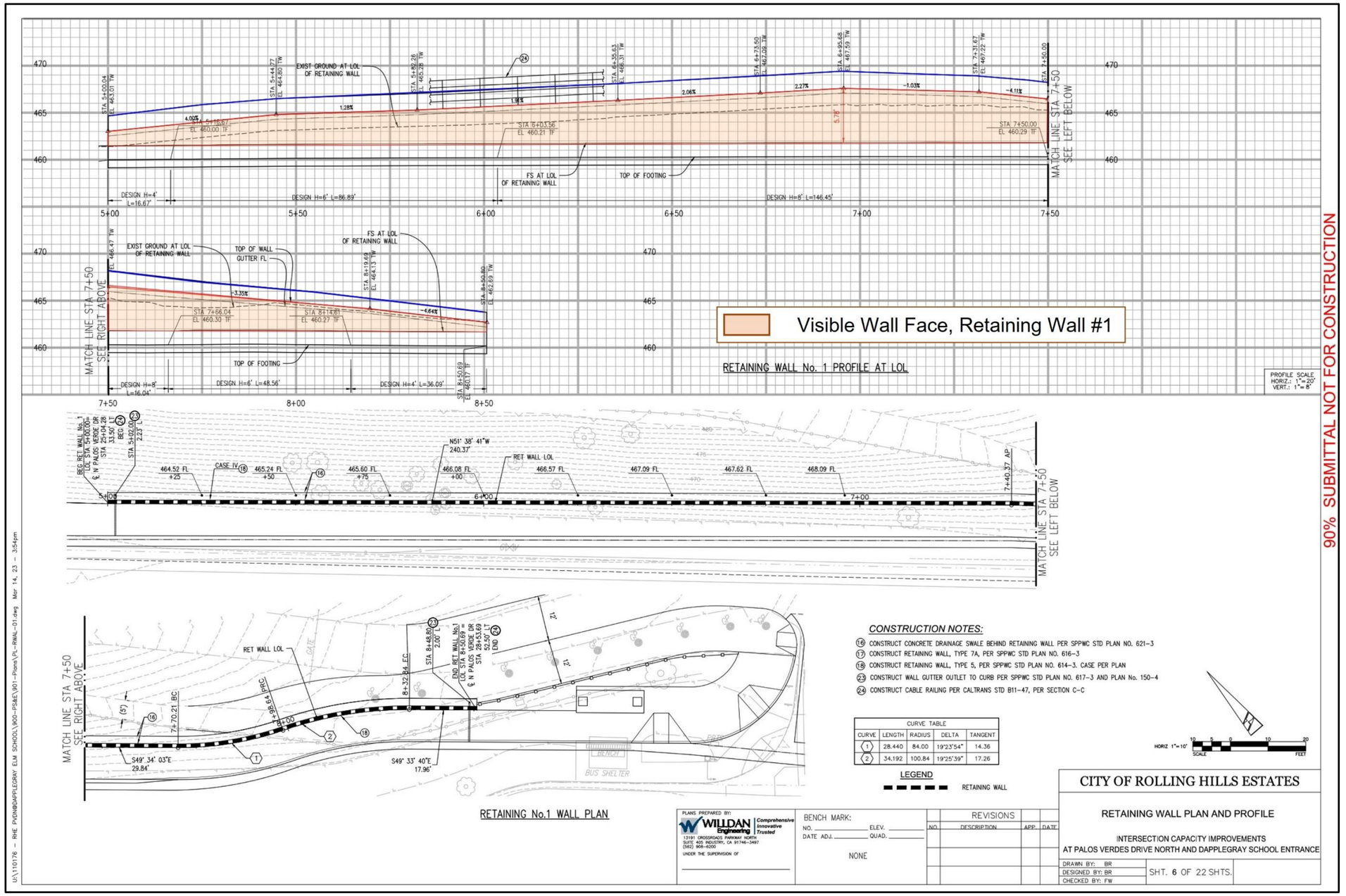


Figure PD - 7 Retaining Wall No. 1 (Schematic Illustration)
N. Side of PVDN, West of London Lane

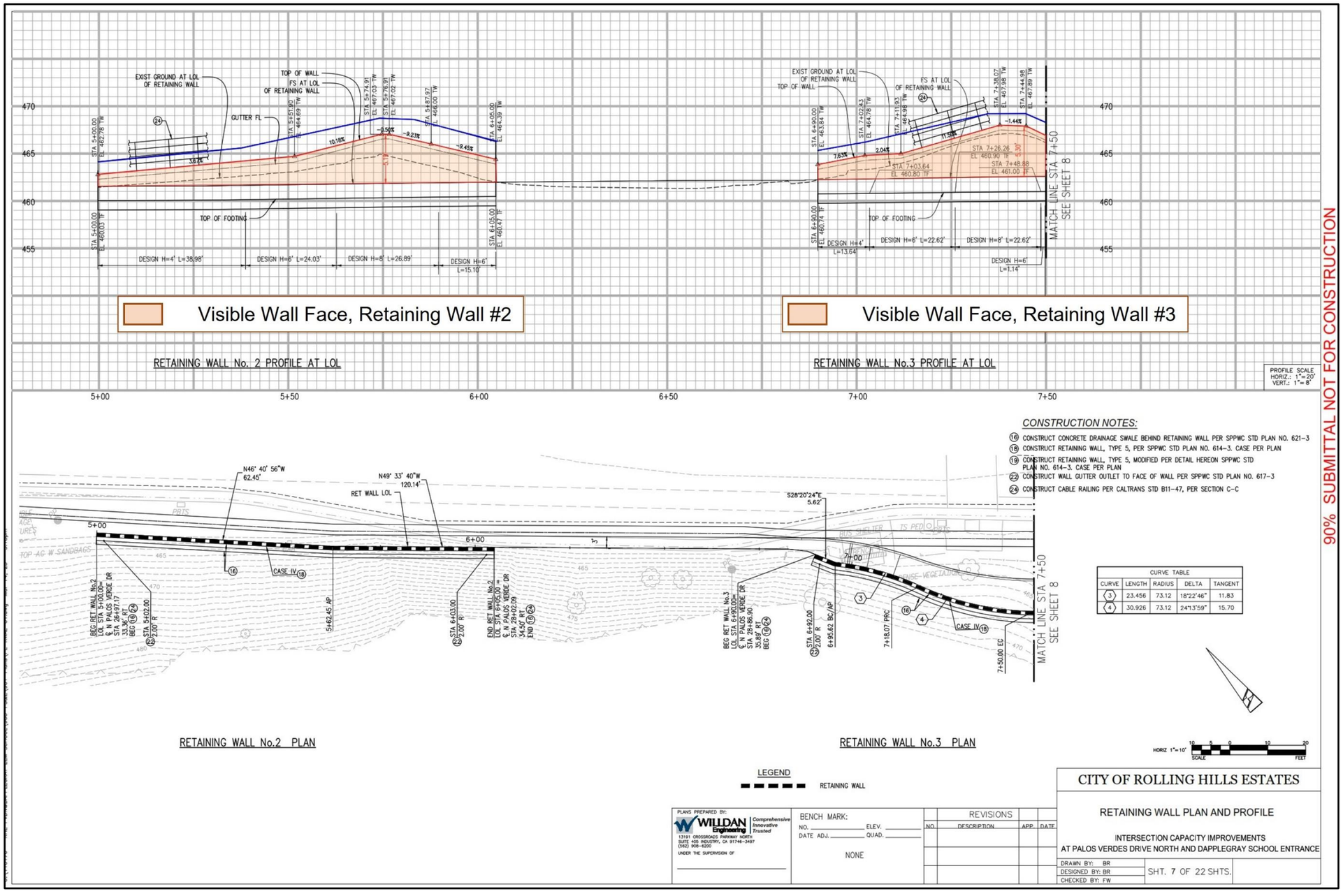


Figure PD - 8 Retaining Walls No. 2, 3 (Schematic Illustration)

Wall No. 2 is on the S. side of PVDN, W. of London Lane; Wall No. 3 is on S side of PVDN, opposite London Lane

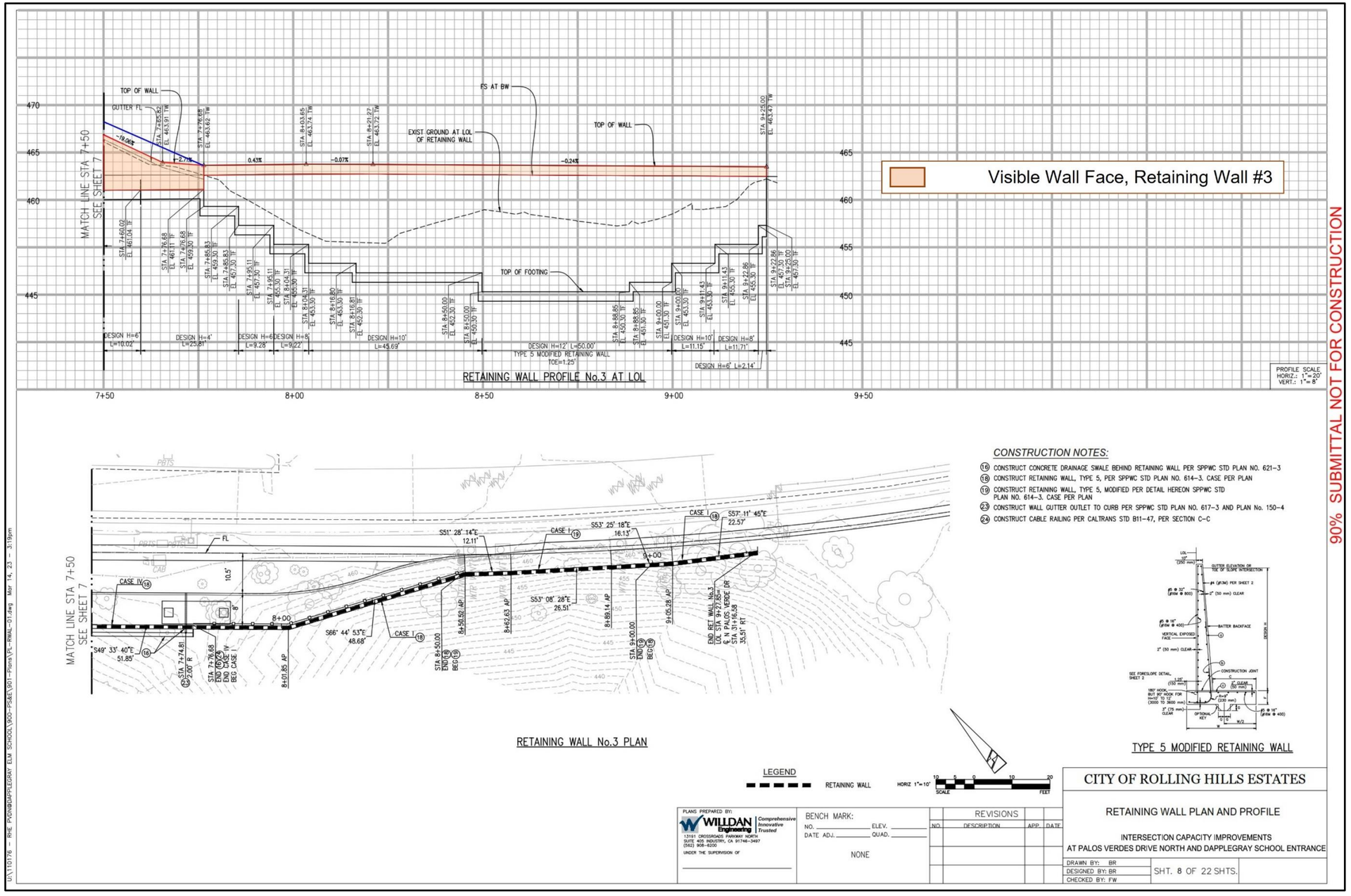


Figure PD - 9 Retaining Wall No. 3 (Schematic Illustration)
S. Side of PVDN at London Lane

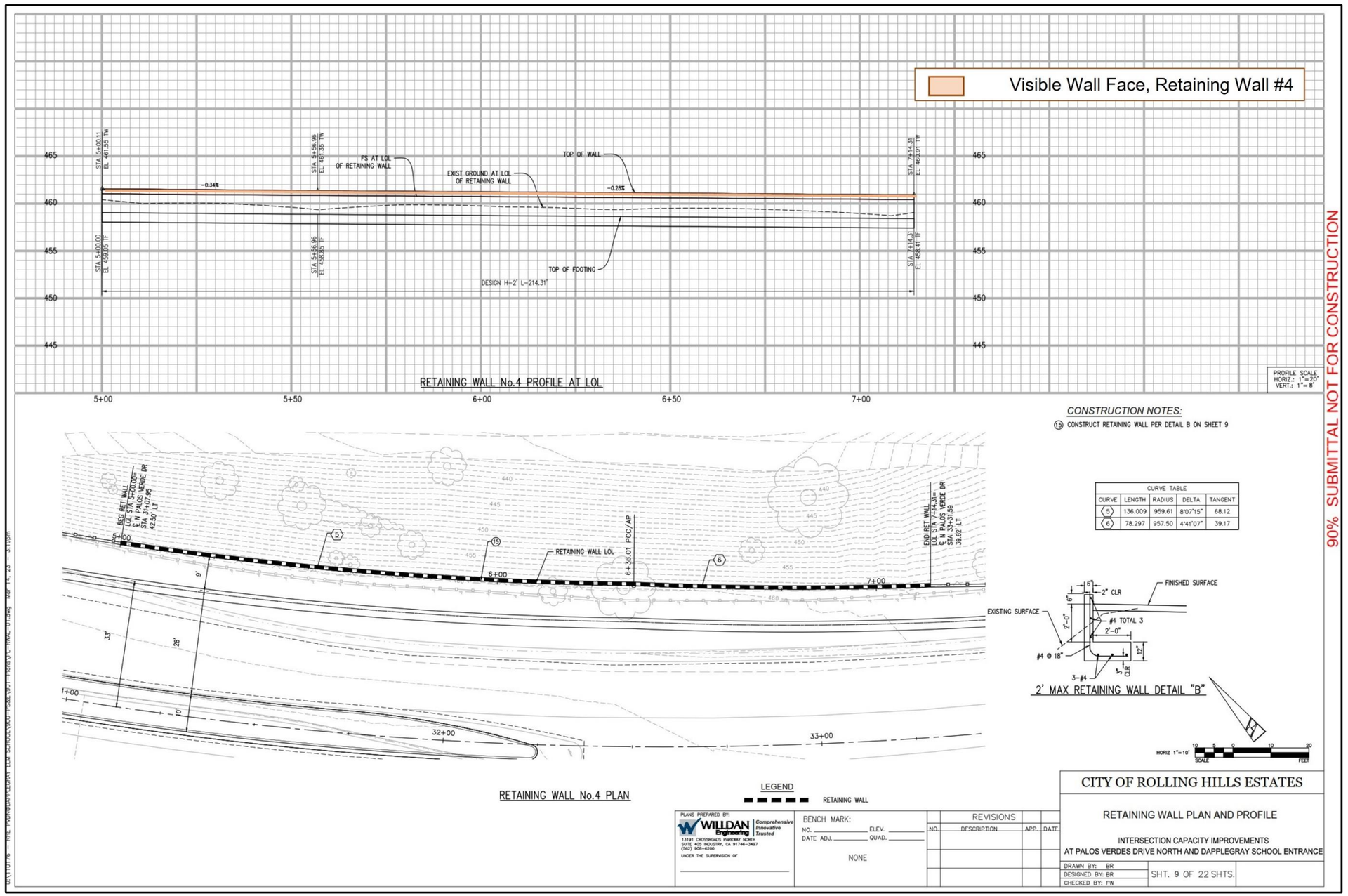


Figure PD - 10 Retaining Wall No. 4 (Schematic Illustration)
N. side of PVDN, E. of London Lane, visible from equestrian trail

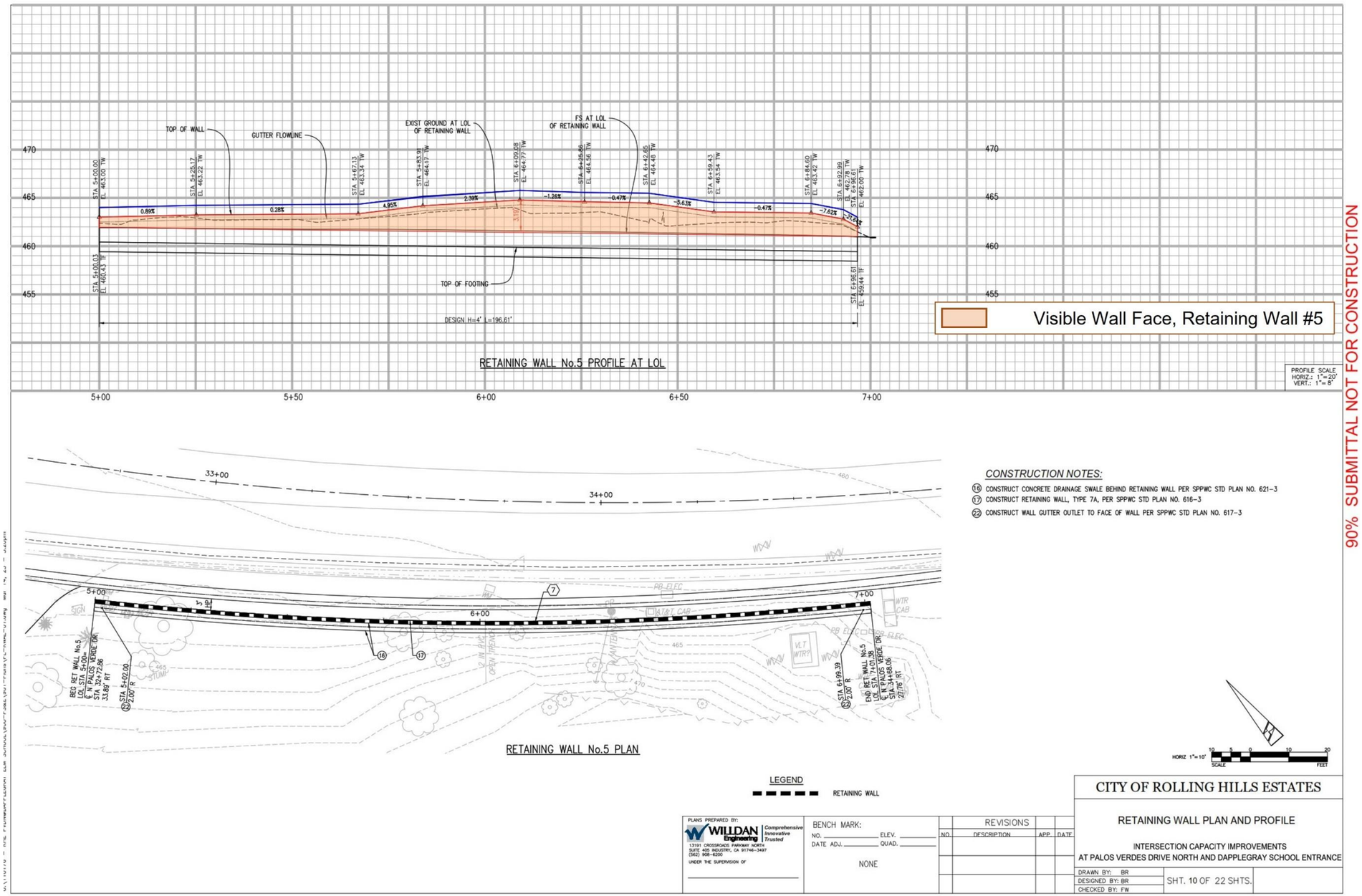
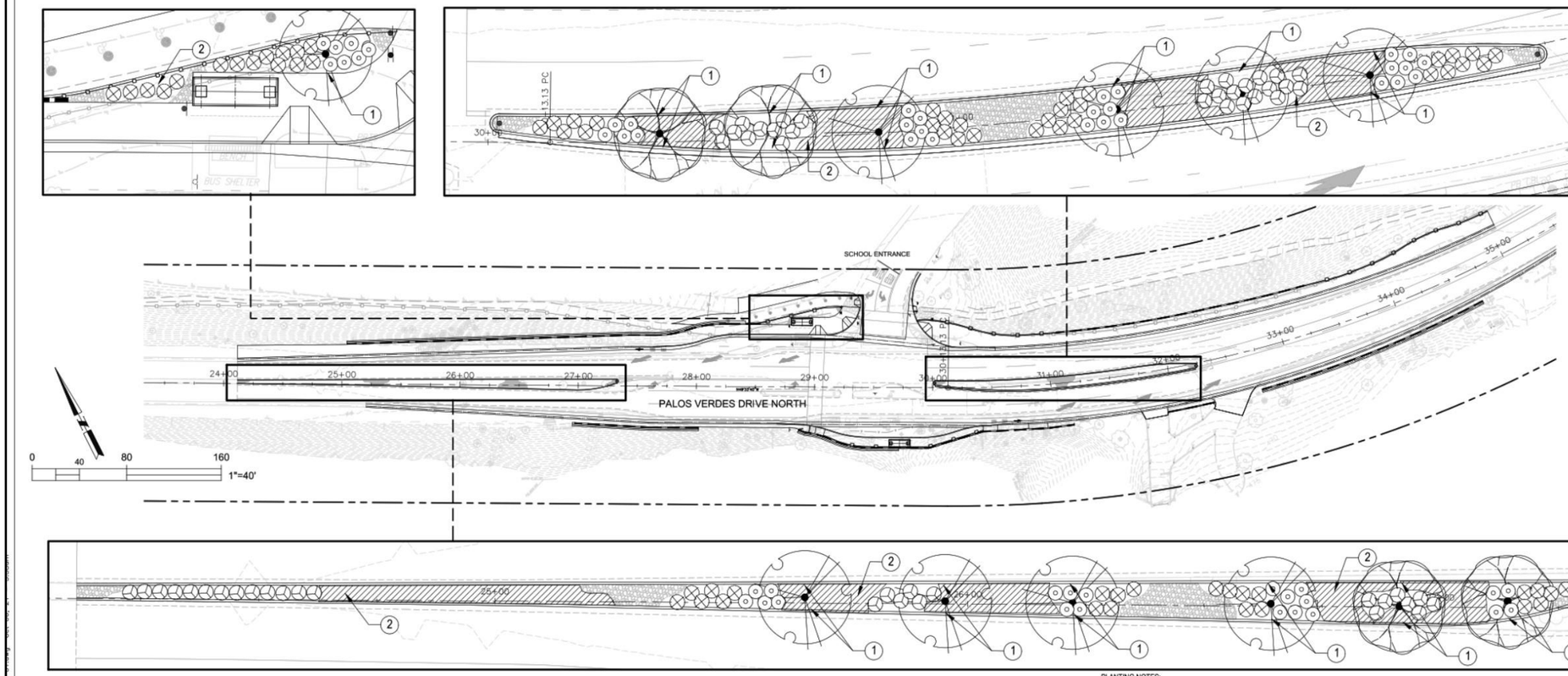


Figure PD - 11 Retaining Wall No. 5 (Schematic Illustration)
S. Side of PVDN, E. of London Lane



90% SUBMITTAL NOT FOR CONSTRUCTION

PLANTING LEGEND

TREES

SYM	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS	DET.	SHT.	HT. SP.	WUCOLS
	CERCIS OCCIDENTALIS	WESTERN RED BUD	24 GAL.	4	STANDARD	1 & 2	L-8	20' 15'-20'	L
	SCHINUS MOLLE	CALIFORNIA PEPPER	24 GAL.	9	STANDARD	1 & 2	L-8	25'-50' 25'-40'	L

SHRUBS

SYM	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS	DET.	SHT.	HT. SP.	WUCOLS
	AGAVE DESMETTIANA	*SMOOTH AGAVE*	5 GAL.	54	SPACING PER PLAN	3	L-8	3' 3'	L
	SALVIA LEUCANTHA 'SANTA BARBARA'	*SANTA BARBARA SAGE*	5 GAL.	67	SPACING PER PLAN	3		3' 3'	L
	MUHLENBERGIA CAPILLARIS 'REGAL MIST'	*PINK MUHLY*	5 GAL.	54	SPACING PER PLAN	3		3' 3'	L

GROUNDCOVERS

	ARTOSTRAPHYLUS UVA-URSI 'POINT REYES'	*BEARBERRY*	1 GAL.	148	SPACING @ 36" O.C.	3	L-8	12" 15"	L

WUCOLS: WATER USE CLASSIFICATIONS OF LANDSCAPE SPECIES
H: HIGH M: MODERATE L: LOW

PLANTING CONSTRUCTION NOTE:

1. FURNISH AND INSTALL ROOT CONTROL BARRIER. SEE DETAIL 1, PLAN NO L-8 .
2. FURNISH AND INSTALL 3" LAYER OF REDWOOD CHIPS PER GENERAL NOTE NO. 3.

PLANTING NOTES:

1. VERIFY EXACT TREE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL CHALK LAYOUT SHRUB MASSES AND GROUNDCOVERS WITHIN THE PLANTING AREAS AND VERIFY WITH ENGINEER PRIOR TO INSTALLATION.
3. CONTRACTOR SHALL FURNISH AND INSTALL 3-INCH LAYER OF SHREDDED REDWOOD CHIPS, LARGE GRIND, AS TOP DRESS IN ALL SHRUB & GROUNDCOVER AREAS. REDWOOD CHIPS AVAILABLE THROUGH RECYCLED WOOD PRODUCTS. (877)GROW RWP hank@rwpmulch.com
4. ALL PLANTING BACKFILL AMENDMENTS SHALL BE SUPPLEMENTED WITH "TRI-C HUMATE PLUS" & "MYCO PAK" MANUFACTURED BY TRI-C (909) 590-1790 https://www.tri-corganics.com/ BACKFILL MIXTURE SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS.
5. KEEP REDWOOD CHIPS 6 INCHES CLEAR FROM SHRUB STEM.
6. QUANTITIES SHOWN ON LEGEND ARE FOR CONVENIENCE ONLY, CONTRACTOR SHALL VERIFY EXACT QUANTITY OF EACH SHRUB & GROUNDCOVER SPECIES WITH ENGINEER PRIOR TO COMMENCING PLANTING.

TREES, SHRUBS AND GROUNDCOVER PROCUREMENT

CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACT GROW, AT THE CONTRACTOR'S EXPENSE, ALL THE PLANTS LISTED ON THE PLANTING LEGEND. CONTRACTOR SHALL PROVIDE TO THE CITY AN INVOICE OF ALL THE LISTED PLANTS THAT WILL BE CONTRACT GROWN AND/OR RESERVED. THE PROCUREMENT INVOICE STATEMENT SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL WITHIN 15 DAYS OF AWARD OF CONTRACT.

TREES & SHRUBS AVAILABLE THROUGH LANDSCAPE RESOURCE INC. (760)798-9810 aj@landscaperesourcesinc.com, Tvega722@gmail.com

REGISTERED LANDSCAPE ARCHITECT JOHN HIDALGO No. 3551 Exp. 07-31-23 STATE OF CALIFORNIA

PLANS PREPARED BY:
WILLDAN Engineering Comprehensive Innovative Trusted
13191 CROSSROADS PARKWAY NORTH SUITE 405 INDUSTRY, CA 91746-3497 (562) 908-6200
UNDER THE SUPERVISION OF
JOHN HIDALGO R.L.A. 3551 DATE

BENCH MARK:
NO. _____ ELEV. _____
DATE ADJ. _____ QUAD. _____
NONE

NO.	REVISIONS DESCRIPTION	APP.	DATE

CITY OF ROLLING HILLS ESTATES

STREET MEDIAN & PARKWAY PLANTING PLAN

INTERSECTION CAPACITY IMPROVEMENTS
AT PALOS VERDES DRIVE NORTH AND DAPPLEGRAY SCHOOL ENTRANCE

DRAWN BY: BN
DESIGNED BY: BN
CHECKED BY: JH

SHT. 18 OF 22 SHTS.

PLAN NO. L-4

Figure PD - 12 Planting Plan

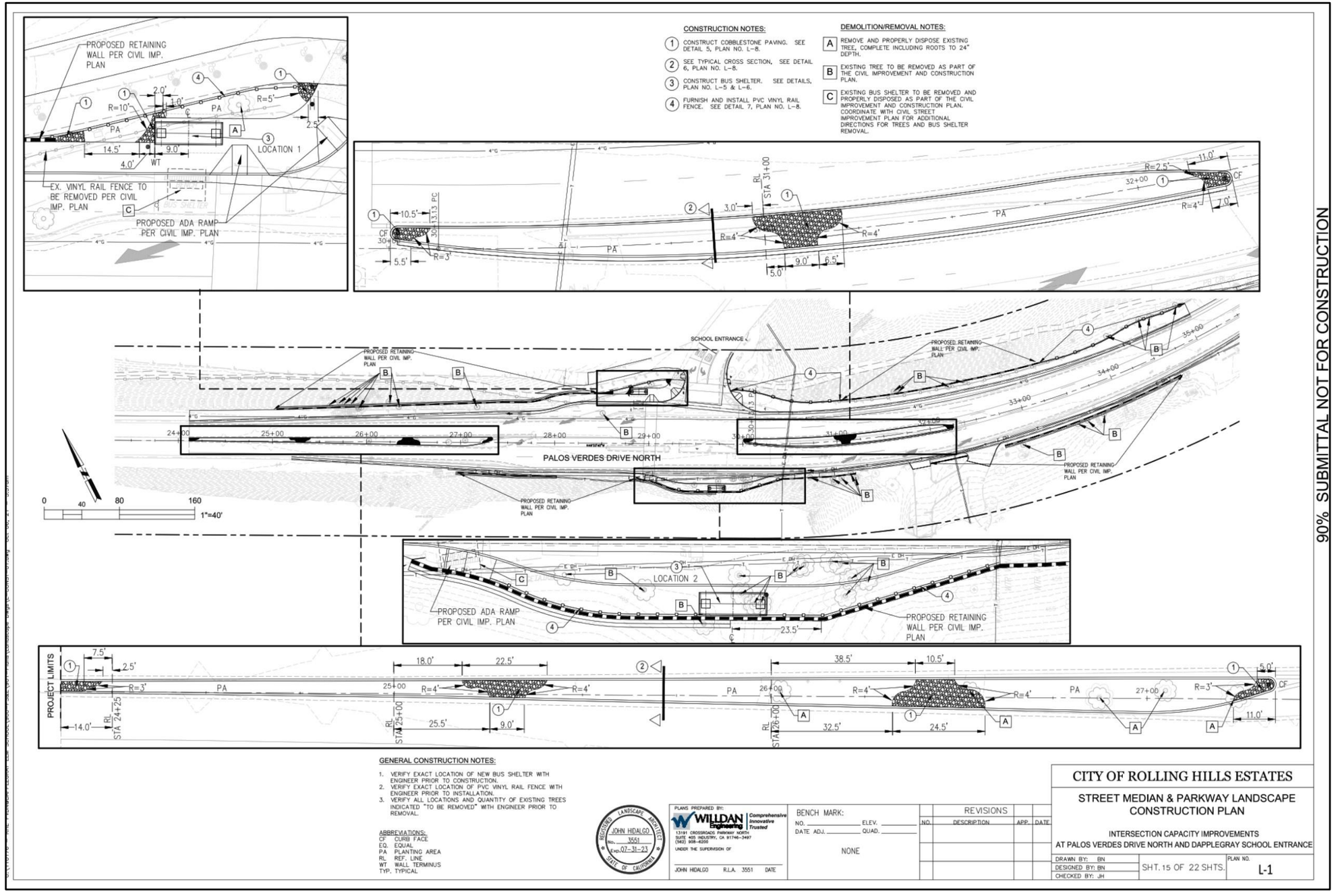


Figure PD - 13 Street Median & Parkway Landscape Construction Plan

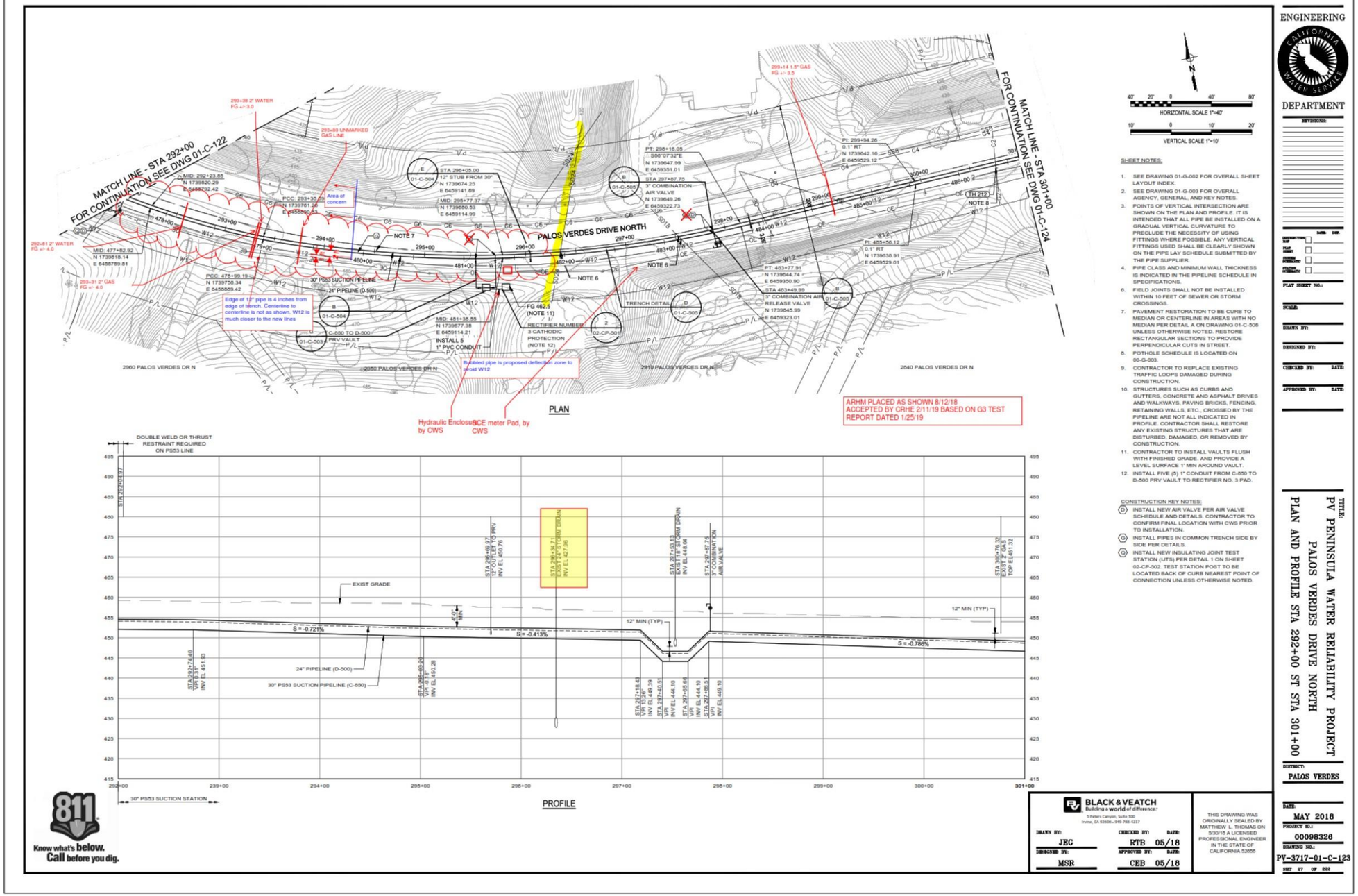


Figure PD - 14 As-Built Drawing Showing Storm Drain Location, West of London Lane

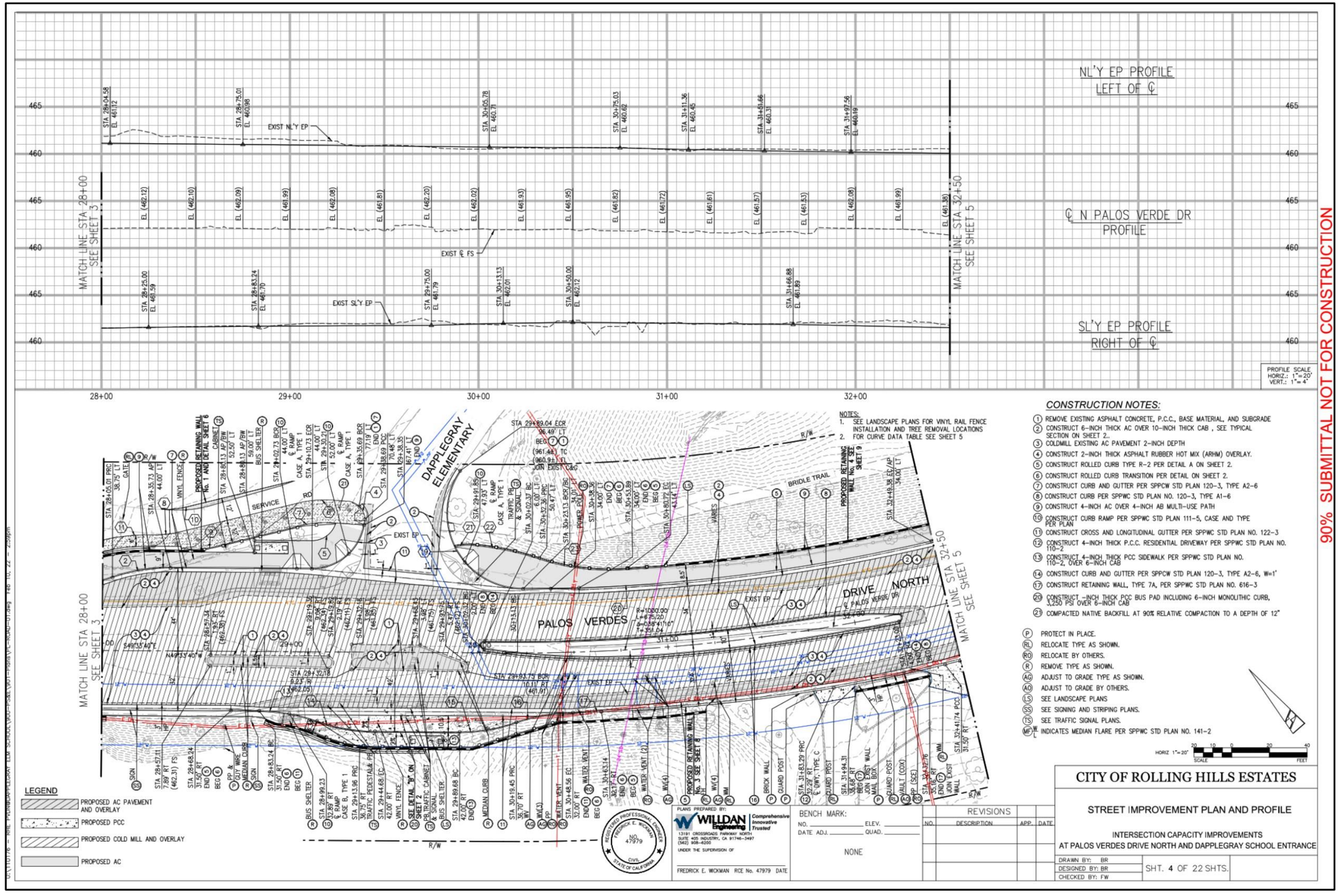


Figure PD - 15 Project 90% Plans Showing Storm Drain Location, East of London Lane

11. Surrounding Land Uses and Setting:

Palos Verdes Drive North (PVDN) is a two-lane arterial roadway that traverses the City generally from west to east; the segment that comprises the project site trends northwest to southeast. London Lane proceeds generally northbound from PVDN and serves as the entry drive to the Dapplegray Elementary School campus. There are turn pockets on PVDN in each direction to channel vehicles toward London Lane. The proposed construction would extend approximately 1,160' along PVDN, centered at the PVDN/London Lane intersection.

The Dapplegray Elementary School borders the project on the north, and single-family residences occupy the area to the east, west, and south of the project. Most residences are set back from PVDN such that they cannot be seen from the street. Several equestrian trails traverse the area, and the Bridle Trail passes along the north side of PVDN through the project site.

The PVDN/London Lane intersection is signalized. Signals are mounted on custom-manufactured, post-and-beam style poles, painted white. There are two bus shelters on PVDN at the intersection, one in each travel direction.

Vegetation. Vegetation at and around the project site consists generally of introduced ornamental plant material, including Eucalyptus. Brazilian Pepper, Peruvian Pepper, Shamel Ash, Mexican Fan Palms, Afghan Pine, and Italian Stone Pine trees, with various groundcovers and grasses, planted in an informal, "natural" distribution. Many trees on-site are in poor condition, resulting from improper pruning and topping (see Appendix D, Arborist's Report, p. 16). A drainage course described below contains no riparian or other native vegetation (see Appendix B, Biological Resources Report, p. 13). There are landscaped medians planted with Eucalyptus trees and ornamental bunchgrasses northwest of Palos Verdes Drive North's intersection with the Dapplegray school driveway.

Geology. The project site elevation ranges from approximately 460 to 470 feet above mean sea level (msl). The site lies entirely within the lower part of the fossil-bearing Altamira Shale Member of the Monterey Formation, which is of middle Miocene age (See Appendix X, Paleontological Resources Assessment, Exhibit IV, Geologic Map). The Palos Verdes Fault trends southeast-northwest approximately one mile northeast of the project site. Modern cut-and-fill resulting from PVDN road construction overlies bedrock on the site.

Hydrology/Wetlands. An unnamed drainage feature southeast of the PVDN/London Lane intersection extends southwest to northeast and conveys rainwater under PVDN through a 24' diameter culvert into a basin on the Rolling Hills Country Club (See culvert schematic on Figure PD - 15 and original topography and drainage course on Figure PD - 18). The culvert is buried 30' beneath the roadway and discharges approximately 70 feet north of and 38 feet below the roadbed. The channel bed is unvegetated sand and gravel with minor characteristics of bed and bank. Tree species along the channel in the project vicinity consist of non-native Brazilian and/or Peruvian Pepper and Eucalyptus species. There are no mapped wetlands on the project site.

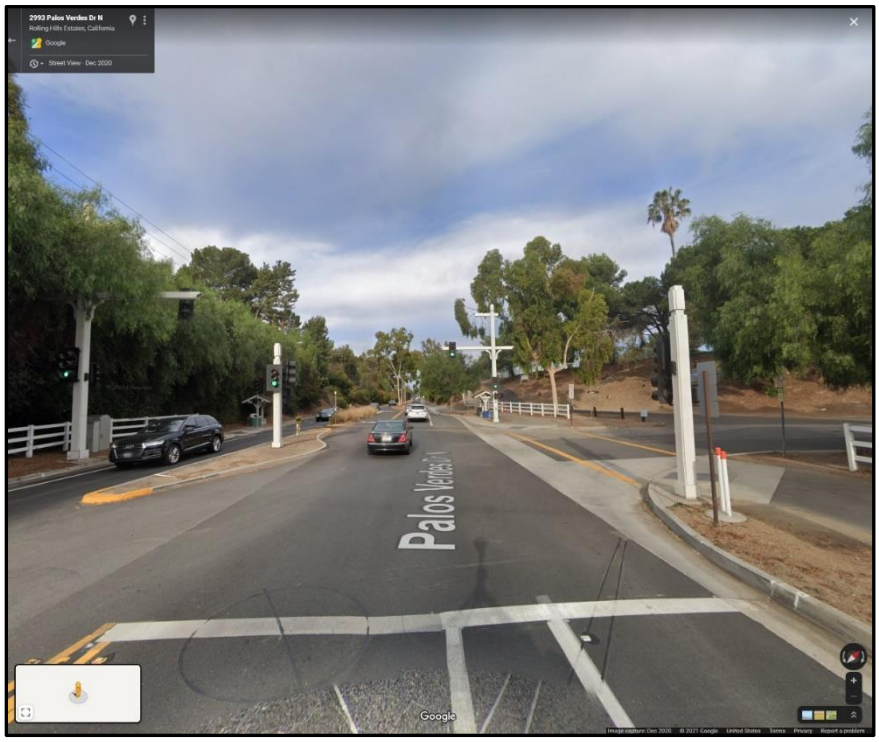
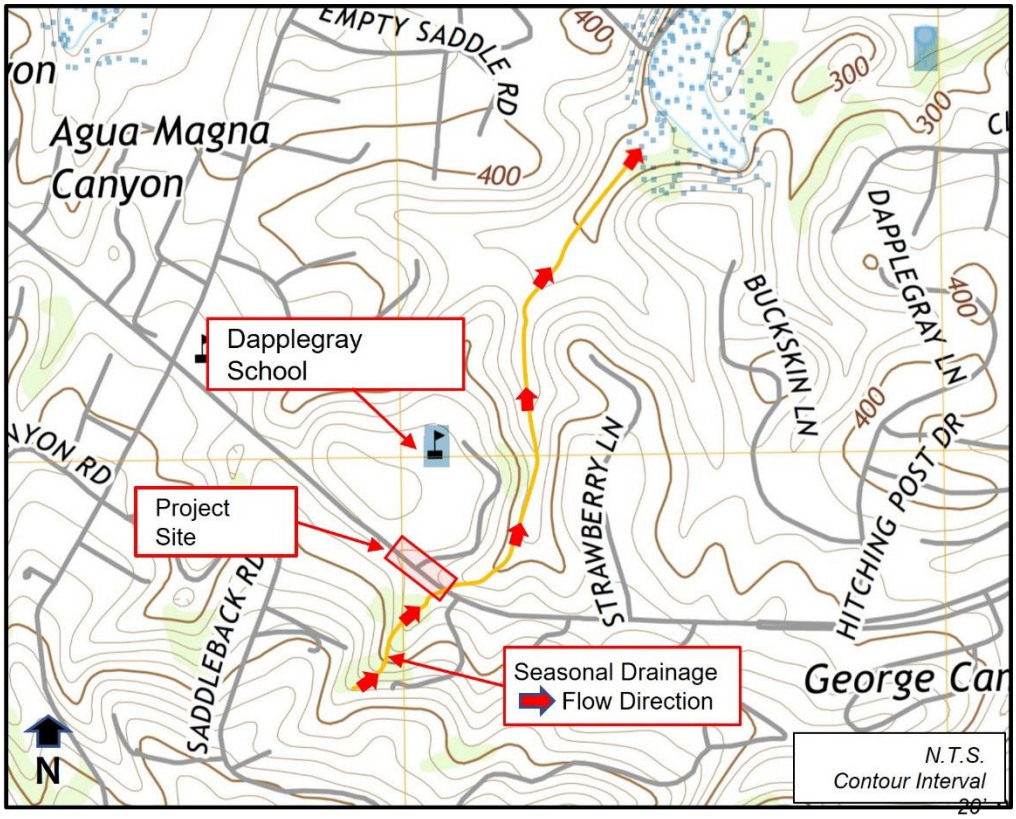


Figure PD - 16 PVDN at London Lane, facing NW

Figure PD - 17 PVDN W of London Lane, facing SE



Source: United States Geological Survey, Torrance Quadrangle (2018)
Available at: https://store.usgs.gov/filter-products?country=US&region=CA&sort=relevance&lq=Torrance accessed October 27, 2021).

Figure PD - 18 Seasonal Drainage Course

(Project site is approximated; see Figure PD-15 and discussion of culvert above)

12. Purpose and Authority

The California Environmental Quality Act (CEQA) requires that all State and local agencies consider the environmental consequences of projects over which they have discretionary authority. The Initial Study (IS) is the first step in determining whether a lead agency must prepare an Environmental Impact Report (EIR) or may prepare a Negative Declaration (or Mitigated Negative Declaration) for the project. The IS provides decision-makers and the public with information concerning the environmental effects of a proposed project, possible ways to reduce or avoid the possible environmental damage, and in the case of an EIR, identify alternatives to the project.

CEQA Guidelines §15063(a-d) describes the Initial Study's scope as follows:

(a) Following preliminary review, the Lead Agency shall conduct an Initial Study to determine if the project may have a significant effect on the environment. If the Lead Agency can determine that an EIR will clearly be required for the project, an Initial Study is not required but may still be desirable.

1. All phases of project planning, implementation, and operation must be considered in the Initial Study of the project.
2. To meet the requirements of this section, the lead agency may use an environmental assessment or a similar analysis prepared pursuant to the National Environmental Policy Act.
3. An initial study may rely upon expert opinion supported by facts, technical studies or other substantial evidence to document its findings. However, an initial study is neither intended nor required to include the level of detail included in an EIR.
4. The lead agency may use any of the arrangements or combination of arrangements described in Section 15084(d) to prepare an initial study. The initial study sent out for public review must reflect the independent judgment of the Lead Agency.

(b) *Results*.

1. If the agency determines that there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the Lead Agency shall do one of the following:
    A. Prepare an EIR, or
    B. Use a previously prepared EIR which the Lead Agency determines would adequately analyze the project at hand, or
    C. Determine, pursuant to a program EIR, tiering, or another appropriate process, which of a project's effects were adequately examined by an earlier EIR or negative declaration. Another appropriate process may include, for example, a master EIR, a master environmental assessment, approval of housing and neighborhood commercial facilities in urban areas, approval of residential projects pursuant to a specific plan described in section 15182, approval of residential projects consistent with a community plan, general plan or zoning as described in section 15183, or an environmental document prepared under a State certified regulatory program. The lead agency shall then ascertain which effects, if any, should be analyzed in a later EIR or negative declaration.
2. The Lead Agency shall prepare a Negative Declaration if there is no substantial evidence that the project or any of its aspects may cause a significant effect on the environment.

(c) *Purposes*. The purposes of an Initial Study are to:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration.
2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.
3. Assist in the preparation of an EIR, if one is required, by:
    A. Focusing the EIR on the effects determined to be significant,
    B. Identifying the effects determined not to be significant,
    C. Explaining the reasons for determining that potentially significant effects would not be significant, and
    D. Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
4. Facilitate environmental assessment early in the design of a project;
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;
6. Eliminate unnecessary EIRs;
7. Determine whether a previously prepared EIR could be used with the project.

(d) *Contents*. An Initial Study shall contain in brief form:

1. A description of the project including the location of the project;
2. An identification of the environmental setting;
3. An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map, photographs, or an earlier EIR or negative declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found.
4. A discussion of the ways to mitigate the significant effects identified, if any;
5. An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;
6. The name of the person or persons who prepared or participated in the Initial Study.

The City of Rolling Hills Estates has accordingly prepared this Initial Study, and anticipates adopting a Mitigated Negative Declaration. The following Initial Study/Environmental Checklist Form evaluates the project's environmental impacts and applies mitigation measures as required.

13. Incorporation by Reference

This analysis incorporates by reference the General Plan 2020 Update Draft EIR (SCH #1992031016)(3/6/1992), the General Plan 2020 (1992), the Rolling Hills Estates General Plan Update Existing Conditions Report (January 2018), the draft General Plan 2040 Update, the draft General Plan 2040 Update Program Environmental Impact Report (released for public review 10/21/2021), and all technical studies prepared for the analysis of the

proposed project as listed below. These documents and accompanying staff reports, resolutions and findings are available for public review at the City of Rolling Hills Estates City Hall, 4045 Palos Verdes Drive North, Rolling Hills Estates, CA 90274.

Technical Studies Attached as Appendices to this IS
(In-line references will use the abbreviations in parentheses)

- **Appendix A,** Willdan Engineering, *Air Quality/GHG Emissions Road Construction Emissions Model Analysis* (October 2021) (**Willdan I**)
- **Appendix B,** ELMT Consulting, *Biological Resources Assessment* (September 2021) (**ELMT I**)
- **Appendix C,** ELMT Consulting, *Delineation of State and Federal Jurisdictional Waters* (September 2021) (**ELMT II**)
- **Appendix D,** Golden State Land and Tree Assessment, *Tree Survey and Arborist Report* (August 2021) (**Golden State**)
- **Appendix E,** HANA Resources, Inc., *Phase I Cultural Resources Assessment For Dapplegray School Intersection Project, City Of Rolling Hills Estates, Los Angeles County, California* (September 2021) (**HANA I**)
- **Appendix F,** HANA Resources, *Noise Study For Dapplegray School Intersection Project, City Of Rolling Hills Estates, Los Angeles County, California* (May 2021) (**HANA II)**
- **Appendix G,** Willdan Engineering, Geotechnical Group, *Geotechnical Investigation Report, Palos Verdes Drive North and Dapplegray Elementary School Intersection Improvements, Rolling Hills Estates, California* (July 2021) (**Willdan II**)
- **Appendix F,** HANA Resources*, Paleontological Resources Assessment for Dapplegray School Intersection Project, City of Rolling Hills, Estates, Los Angeles County, California* (August 2021) (**HANA III**)

14. Intended Uses of This Initial Study

The City of Rolling Hills Estates, as the Lead Agency for this project, will use this Initial Study to determine whether to adopt a Negative Declaration or a Mitigated Negative Declaration for the proposed improvements to the intersection of Palos Verdes Drive North and the Dapplegray Elementary School Driveway. This Initial Study will also provide environmental information to other agencies affected by the project, or which are likely to have an interest in the project. Various State and Federal agencies exercise control over certain aspects of the study area. The various public, private, and political agencies and jurisdictions with a particular interest in the proposed project, may include but are not limited to the following:

- California Air Resources Board (CARB)
- California Department of Transportation (Caltrans)
- California Emergency Management Agency
- California Regional Water Quality Control Board (CRWQB)
- County of Los Angeles Public Works
- Los Angeles County Department of Public Works
- Los Angeles County Fire Department
- Los Angeles County Metropolitan Transit Authority
- Los Angeles County Sheriff's Department
- South Coast Air Quality Management District (SCAQMD)
- Southern California Association of Governments (SCAG)
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino Tongva Indians of California Tribal Council

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☒	Aesthetics	☐	Agriculture/Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☒	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	☒	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

David Wahba — April 7, 2023

Signature — *Date*

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. **"Negative Declaration: Less Than Significant With Mitigation Incorporated"** applies where the incorporation of mitigation measures has reduced an effect from **"Potentially Significant Impact"** to a **"Less Than Significant Impact."** The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. *Section 15063(c)(3)(D).* In this case, a brief discussion should identify the following:
   a) **Earlier Analyses Used**. Identify and state where they are available for review.
   b) **Impacts Adequately Addressed**. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) **Mitigation Measures**. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. **Supporting Information Sources**: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. *This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.*
9. The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and b) the mitigation measure identified, if any, to reduce the impact to less than significant.

I. AESTHETICS

Except as provided in Public Resources Code Section 21099(d) (which prohibits a significance determination regarding aesthetics impacts for transit-oriented infill projects within transit priority areas),

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? *(Public views are those that are experienced from publicly accessible vantage point.)* If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☒	☐	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Discussion:

a) **No Impact.** The proposed project would not affect scenic vistas because (1) views of and from the project site are limited by topography (the existing roadcut bordering each side of PVDN), and the roadway itself would not be considered a scenic vista as compared to the City's parks, open spaces, and the Pacific Ocean, and (2) the project would not introduce any view-blocking features. No impacts to scenic vistas are anticipated.

b) **No Impact**. PVDN is not a state scenic highway but is a local arterial. Accordingly, the project would not affect scenic resources within a *state* scenic highway corridor.

c) **Less Than Significant Impact With Mitigation Incorporated.** The proposed project would change the existing visual environment and character of this portion of PVDN, but as described further below, mitigation measures can reduce impacts to less than significant levels. *Note that the proposed street widening is itself a mitigation measure as described in the Project Description above.*

The Rolling Hills Estates 2020 General Plan Update designates PVDN as a scenic corridor. As noted in the project description, the visual environment reflects a rural-suburban setting, with landscaped parkways and medians (see Figure PD - 16 and Figure PD - 17 above. Landscaping is not formally manicured and is "natural" in appearance; trees and shrubbery cover much of the embankment surfaces on both sides of the street. Exposed soil is covered with tan-colored shredded bark. White three-rail fencing parallels the northeast side of the street. Bus shelters and the traffic light fixtures at the intersection of PVDN and London Lane are constructed of white-painted lumber in a rustic ranch style. The viewing public is comprised of motorists, equestrians, pedestrians, and cyclists who travel along PVDN. No residences front directly on PVDN.

Widening will require excavation and construction of retaining walls along the length of the project, as well as removing approximately 39 trees of generally poor health and aesthetic condition (Golden State, p. 16). The PVDN medians would be re-landscaped with suitable trees, shrubs and groundcover. Because of limited right-of-way area post-construction, no replacement trees or shrubs are proposed around the retaining walls, although final construction design might include planting pockets for clinging vines on the wall surfaces. Replacement structures, signage, and street lighting would be constructed to match existing City structures in visual appearance.

Retaining Walls. The project's five proposed retaining walls are shown in Figures PD-7 to PD-11 above, with dimensions listed in Table PD - 1 above. Wall lengths will range from 100' to approximately 350' long. Four of five wall faces would be graduated in height, from less than 1' to 2' at the ends, to 3' – 5.78' in the middle portions; the remaining wall face along the equestrian trail (Wall No. 4) would be no more than one foot in height throughout. Several walls would be constructed in a curvilinear shape, corresponding to the roadway embankment surface; i.e., in plan view, the walls trace a curvilinear path conforming to the retained slope. Cast-in-place reinforced concrete with a dark tan color additive is proposed for the wall material itself. No surface texture is proposed, although final design options may include natural-appearing rock formation textures, similar to those seen on local freeway embankments. As noted above, retaining wall construction would require removing approximately 39 trees, excavating 1,996.13 CY of earth and backfilling 1,575 CY.

The City has not established design standards for retaining walls in public infrastructure projects. As such, the retaining walls' visual impact will be evaluated according to their potential to interfere with public views and the overall character of the street, as well as the typical duration that pedestrians, equestrians, cyclists, and motorists would perceive the walls while in motion.

Concrete retaining walls with smooth unbroken faces and well-defined edges add a strong element of the "built" environment and can contrast harshly with "soft" vegetated slopes. Introducing concrete surfaces into a setting that appears "natural" (despite the roadway and nearby structures) can be considered a significant impact. This impact would be perceived for varying amounts of time depending on the travel speed along PVDN. Table I-1 below illustrates the transit time for the most common travel modes; motorists would be impacted on average for less than 30 seconds, and pedestrians walking at a moderate pace would be impacted for nearly five minutes.

Table AES - 1 Visual Perception Time

Transportation Method	**Velocity** *(miles/hour)*	**Perception time** *(time = distance/velocity)**
Vehicle	40	17 seconds
Cyclists	15	46 seconds
Pedestrian, running	7	1.6 minutes
Equestrian (horse at walk)	4	2.9 minutes
Pedestrian, walking	2.5	4.6 minutes
**Note*: time is shown in units appropriate to the mode of travel (hours have been converted from fractional units).		

The degree of impact depends substantially on viewers' sensitivities. The preferred visual environment of RHE's residents can be inferred from the existing patterns of residential construction, landscaping, equestrian trails, and parkland. As noted in the Environmental Setting above, arterial streets in RHE are landscaped in a semi-natural pattern, and many residences are set well back from the right-of-way, behind a landscaped buffer. This indicates that RHE residents strongly prefer a park-like landscape, rather than one that emphasizes the built environment in an urban form. Accordingly, the visual

character of the retaining walls, even if viewed for relatively short time intervals, would very likely constitute a significant aesthetic impact to RHE residents.

Various methods are available to reduce the visual impact of flat vertical concrete surfaces. Among these are adding surface texture either by using in-form molds or by applying sculpted textural material to the exposed surfaces after the walls are in place. Textures could include simulated rock outcrop patterns, laid stone patterns, brick, or similar surface treatments to soften the appearance of flat concrete surfaces in the landscape. Wall surfaces can also be partially obscured by clinging vines, such as creeping fig (*Ficus pumila*), catclaw vine (*Macfadyena unguis-cati*), or Boston ivy (*Parthenocissus tricuspidata*) – these would require establishing planting pockets along each wall face and installing sub-surface irrigation. Finally, murals or decorative imagery could be painted on the larger walls. Mitigation Measure AES-1 requires that the City incorporate one or more of these methods for the retaining walls. With this mitigation in place, remaining aesthetic impacts of the retaining walls is anticipated to be less than significant.

d) **Less Than Significant Impact.** The proposed project would replace the existing lighting with new fixtures that would largely resemble the existing ones and would not add new lighting or glare-producing surfaces. Glare is caused either by high-intensity lighting arrays, such as those used in sports fields or vehicle dealerships, or by flat, light-colored or shiny surfaces that reflect sunlight or vehicle headlights. The new streetlights would conform to City standards and would be designed with the lowest possible levels as directed by the current General Plan:

> ***Exterior Light.*** Exterior lighting along scenic corridors will be limited to those systems necessary for security and safety. Lighting intensities will be kept to the lowest possible levels and all such lighting will be screened and directed away from view of scenic routes. Special attention will be paid to the design of light poles used in the corridors, traffic signal standards, and other equipment (City of Rolling Hills Estates, 1992 General Plan, pp. 5-19, 20).

The retaining wall faces, if left untreated, would potentially be a source of glare from either reflected sunlight or vehicle headlights. However, Mitigation Measure AES-1 would require surface texture, plant materials, or other solutions to improve the appearance of the retaining walls above so that reflected light would scatter and not create excessive glare. Remaining light and glare impacts are anticipated to be less than significant.

Mitigation Measure

AES-1: To reduce the aesthetic and glare impacts of the project's retaining walls, the City shall incorporate one or more of the following measures into the wall design for all retaining walls that face PVDN, except for Wall No. 4 (measures may be combined to accomplish the effect of adding varied form, color, and shape to the wall faces). All finished concrete shall be sealed with an anti-graffiti coating in addition to manufacturer-recommended sealers. This list of measures is not intended to limit potential design solutions, and other measures may be selected by the City provided that they are proven to accomplish the goals of aesthetic improvement and glare reduction.

A. Construct walls using in-form molds to provide surface texture simulating rock outcrops, laid brick, stacked stone, or other pattern that provides substantial relief to the finished surface.

B. Apply vertical concrete overlay to the exposed finished wall surfaces to provide surface texture as described in (A) above.

C. Apply natural or simulated stone overlay to the exposed finished wall surfaces to provide surface texture as described in (A) above.

D. Within six months of project completion, the City shall commission a mural project to decorate all exposed wall faces. The mural project shall be scheduled for completion within one year of commissioning.

E. Incorporate planting pockets along all retaining walls that face PVDN and accompanying tamper-resistant irrigation devices (emitters, bubblers, etc.) into the project design, and specify appropriate clinging vine plant material, including but not limited to creeping fig (*Ficus pumila*), catclaw vine (*Macfadyena unguis-cati*), or Boston ivy (*Parthenocissus tricuspidata*). Planting pockets shall be spaced according to the recommendation of a registered landscape architect or master gardener to ensure a minimum of 80% wall coverage at plant maturity.

II. AGRICULTURE AND FORESTRY RESOURCES.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact Discussion:

a) **No Impact.** The proposed project would not convert prime or any other farmland to non-agricultural use because there is no such farmland in the vicinity of the project site. See Figure II-1 below.

b) **No Impact.** The proposed project would not conflict with agricultural zoning or a Williamson Act contract, because all zoning designations adjacent to the project area are for institutional and residential uses (City of Rolling Hills Estates Zoning Map, available at https://www.ci.rolling-hills-estates.ca.us/Home/ShowDocument?id=4054 (accessed January 11, 2022); City of Rolling Hills Zoning Map, available at https://cms5.revize.com/revize/rollinghillsca/Goverment/Planning%20And%20Community%20Services/ZONING%20in%20City%20of%20Rolling%20Hills.pdf (accessed January 11, 2022)). The City of Rolling Hills Estates Zoning Map indicates that there is agricultural zoning north of the project area, but that land is used as a park, not for agriculture.

c) **No Impact.** The proposed project would not conflict with forest or timberland zoning, because forest and timberland zoning and uses are not present in the City.

d) **No Impact.** The proposed project would not result in forest land loss or conversion, because forest and timberland zoning and uses are not present in the City.

e) **No Impact.** Nothing in the proposed capacity improvements along PVDN would affect forest land, because as noted above, there is no forest land in the vicinity.

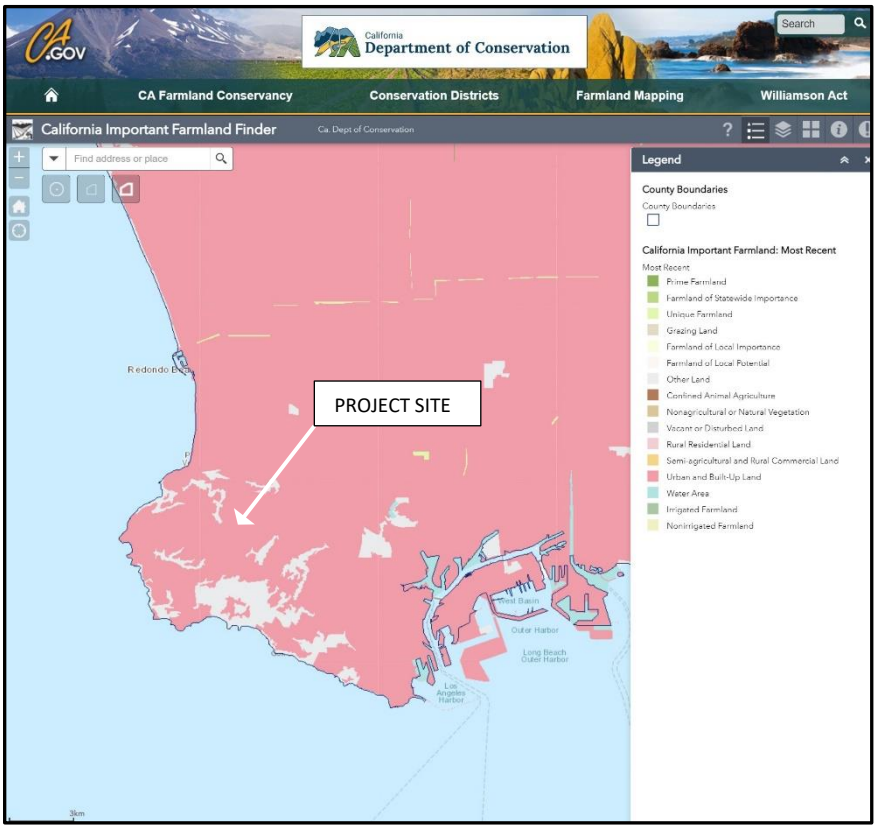


Figure AG - 1 Important Farmland Map

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☒	☐	☐

Background:

The project is located within the South Coast Air Basin. The South Coast Air Quality Management District (SCAQMD) has jurisdiction and regulatory authority within the Air Basin, and is responsible for the region's Air Quality Management Plan (AQMP), which sets forth regulations and various control measures to reduce air pollution and bring the region into compliance with federal Clean Air Act (CAA) and California Clean Air Act (CCAA) standards by various target years. The 2016 AQMP includes control measures for both stationary and mobile sources of air pollutants; the control measures are further codified into Rules or set forth as policies for jurisdictions within the Air Basin. Rules set specific limits for emissions from various stationary sources, including specific types of equipment, industrial processes, paints, solvents, and consumer products. Limits on airborne "fugitive" dust from construction and particulates from diesel engines are also set forth and enforceable. To measure ongoing AQMP progress, the SCAQMD monitors air quality at 38 locations throughout the Air Basin and has enforcement authority over a four-county area (Los Angeles, Orange, Riverside and San Bernardino Counties). See the SCAQMD website, http://www.aqmd.gov/, for comprehensive information regarding the AQMP and the SCAQMD's overall responsibilities.

As of 2019, the South Coast Air Basin is considered to be in "non-attainment" for three criteria pollutants: ozone; particulate matter(PM_{10}); and respirable particulate matter ($PM_{2.5}$) (See SCAQMD National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), available at *http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14* (accessed March 31, 2022). To moderate the effects of public and private development projects on non-attainment, the SCAQMD sets regional and local emissions significance thresholds for CEQA compliance for reactive organic gases/ozone precursors (ROG), carbon monoxide (CO), nitrogen oxides (NOx), PM_{10} and $PM_{2.5}$ (see Tables AQ-1 and AQ-2 below for threshold values). Generally, if a project's construction and operational emissions do not exceed these thresholds, they are assumed to be "less-than-significant;" moreover, if the estimated emissions exceed thresholds but can be reduced to below thresholds by applying mitigation measures, emissions levels may be deemed less than significant with mitigation incorporated. The local, or "localized," emissions thresholds are a means of assessing NOx, CO, PM_{10} and $PM_{2.5}$ emission concentration at various distances from emission sources at projects that are less than five acres in area (see

http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds (accessed March 31, 2022)).

AQMP implementation also encompasses the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures (RTP/SCS). SCAG develops the RTP/SCS every four years; the current plan for 2024-2050 is in development (see *https://scag.ca.gov/connect-socal* (accessed March 31, 2022). The RTP/SCS is a long-range regional transportation plan that provides for the development and integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG region. The RTP/SCS also outlines land use growth strategies that provide for more integrated land use and transportation planning, and that maximize transportation investments to achieve the California Air Resources Board (CARB) regional greenhouse-gas (GHG)-reduction targets. Strategies such as developing park-and-ride facilities are part of the RTP/SCS Congestion Management Plan.

SCAG also develops the biennial Federal Transportation Improvement Program (FTIP). The FTIP is a multimodal program of capital improvement projects to be implemented over a six-year period. The FTIP implements the programs and projects in the RTP/SCS, which must be consistent with achieving air quality goals.

Impact Discussion:

a) **No Impact.** The proposed project is not anticipated to conflict with or to obstruct air quality plan implementation, because the construction and operational phases will be required to comply with various regulations and emissions thresholds that implement those plans. Specifically, as encouraged by the current Regional Transportation Plan, the project will create accessible pedestrian facilities, and will re-construct the existing equestrian trail that parallels PVDN. These facilities incrementally increase regional compliance with air quality plan goals to reduce vehicle use and accompanying emissions, and to expand pedestrian connectivity. Accordingly, the proposed project will not negatively affect air quality plan implementation.

b) **Less Than Significant Impact.** Project construction would generate air pollutants from earth disturbance and equipment/vehicle exhaust, including the criteria pollutants listed in the Background section above, specifically particulate matter (PM10), fine particulate matter (PM2.5) and ozone (O3). Heavy equipment would also generate carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NOx), and sulfur dioxide (SO2). As discussed below and illustrated in Table AQ-1, the project's emissions are estimated to be below both local and regional significance thresholds. Once construction is complete, project-related emissions would revert to the baseline existing before the project. Moreover, such "operational" emissions are likely to be lower than the baseline: emissions tend to be greater while a vehicle is stopped and the engine is idling than when the vehicle is in motion. The project is intended to allow through traffic to pass by vehicles turning into London Lane to access Dapplegray Elementary School, reducing congestion and idling vehicles at the intersection.

   The project's construction-phase air pollutants were estimated using the Roadway Construction Emissions Model (version 9.0.0), available at *http://www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools* (accessed March 31, 2022)). The output tables from this model are included in Appendix A of this Initial Study and the model results summarized in Tables AQ-1 and AQ-2. The model quantifies both ROG and NOx emissions. Note that the model does not quantify ozone emissions, because ozone is generated photochemically in the atmosphere by sunlight reacting with ozone precursors, such as reactive organic gases/volatile organic compounds (ROG/VOC) and oxides of nitrogen, and varies with air temperature and available light (See U.S. Environmental Protection Agency,

AirNow, Air Quality Guide to Ozone, https://www.epa.gov/ground-level-ozone-pollution, (accessed March 31, 2022)).

Construction would take approximately twenty-four months. The Road Construction Model separates typical construction projects into four general phases: grubbing/land clearing, grading/excavation, installation of drainage and utility infrastructure, and paving, and estimates the time period for each phase as a subset of the project duration. Each phase would use different construction equipment, at rates derived from statewide construction averages. To determine the "unmitigated" emissions, no equipment was assumed to use emissions-controlling mechanisms. Emissions did not exceed regional thresholds for maximum daily emissions or the SCAQMD localized thresholds for West Coastal L.A. County at a distance of 50 meters from the site boundary (the nearest sensitive receptor is a single-family residence, approximately 59 meters from the site boundary, and the Dapplegray School building is separated from the project site by approximately 152 meters. Note that actual emissions would likely be lower than the model-estimated volumes because all construction equipment would not be operated continuously or simultaneously. Finally, SCAQMD Rules 401-403 regulate visible emissions, nuisance emissions, and fugitive dust from construction operations. Accordingly, because the project's estimated emissions are below accepted thresholds, and emissions such as fugitive dust are minimized by compliance with SCAQMD Rules, the project's air pollutant emissions are anticipated to be less than significant.

c) **Less Than Significant Impact.** Project construction would not expose sensitive receptors to substantial pollutant concentrations, because as shown in Table AQ-1 below, estimated construction emissions are considerably below the SCAQMD Local Significance Thresholds. Sensitive receptors, such as children at the Dapplegray Elementary School, equestrians (as well as horses/dogs, etc.) using the Bridle Trail, or residents near the project area would therefore not be exposed to substantial pollutant concentrations. After construction ends, emissions would be expected to return to baseline levels; emissions concentrations may be reduced somewhat because fewer vehicles would be idling waiting for through-lanes to clear at the London Lane/Palos Verdes Drive N intersection.

d) **Less Than Significant With Mitigation Incorporated**. Project construction could expose workers and trail users to temporary odors from construction equipment engine exhaust and asphalt application. Odors associated with asphalt would be short-term and would not be present after asphalt cures. However, sensitive individuals could consider such odors to be objectionable, even if short-term. Common asphalt additives can substantially reduce asphalt odors and reduce short-term impacts to less-than-significant levels (see, e.g., Ecosorb, Asphalt Odor Control, available at https://ecosorbindustrial.com/industries/asphalt/ (accessed October 10, 2022) and Asphalt Solutions, Greatly Reduce Asphalt Odors Emitted During Asphalt Production or Lay Down, available at http://www.asphaltsolutions.com/ (accessed October 10, 2022)). Mitigation Measure AQ-1 requires that an odor-reducing additive be used with all project asphalt application. With this mitigation, asphalt odors anticipated to be less than significant. Long-term odors are not expected to be substantial, or to affect a substantial number of people, because construction odors will no longer be present, and odors associated with passing vehicles are not expected to exceed those that are currently present.

Table AQ-1 Estimated Construction Emissions[1] (without Mitigation) (lbs./day on the worst day)					
	ROG	**CO**	**NOx**	**PM_{10}**	**$PM_{2.5}$**
Grubbing/Land Clearing	0.97	9.89	9.58	10.42	2.45
Grading/Excavation	4.75	44.30	48.94	12.06	3.93
Drainage/Utilities/Sub-Grade	2.72	28.47	25.72	11.09	3.08
Paving	1.25	17.39	12.02	0.60	0.53
Maximum Daily Emissions (lbs./day) (note: MDE is not the sum of column values, but the maximum expected emissions on the "worst" day)	4.75	44.30	48.94	12.06	3.93
SCAQMD Regional Thresholds[a]	75	550	100	150	55
Exceeds regional threshold?	**NO**	**NO**	**NO**	**NO**	**NO**
SCAQMD Local Significance Thresholds[b] (Localized Source Receptor Zone 3 – West Coastal LA County, 50m from site boundary)	N/A	1158	128	23	7
Exceeds local threshold?	N/A	**NO**	**NO**	**NO**	**NO**

[a] South Coast Air Quality Management District, South Coast AQMD Air Quality Significance Thresholds, available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2 (accessed March 30, 2022).

[b] South Coast Air Quality Management District, Localized Significance Thresholds, available at http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds (accessed March 30, 2022).

Assumptions:

- Project construction duration approximately 24 months; 22 working days/month.
- Maximum of 43,560 square feet (1 acre) disturbed per day.
- Total net soil export (retaining wall excavation volume less backfill volume): 1,207 cubic yards (CY)
- Estimated volume of vegetative material to be chipped and exported: 150 CY
- Haul truck capacity: 20 CY

Mitigation Measure

AQ-1: Asphalt Odor Suppression. Asphalt odor-suppression additives shall be required for all on-site hot-mix asphalt applications. Project engineering specifications shall incorporate additive specifications. This requirement shall be placed in all engineering notes sections on project plans.

IV. BIOLOGICAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Note: the discussions and conclusions below rely on the Biological Assessment prepared by ELMT Consulting, September 2021, and on the Tree Survey/Arborist Report, prepared by Golden State Land & Tree Assessment (August 23, 2021), as referenced on p. 22 above. These reports describe the biological environment of the site and surrounding area, and contain descriptions of the federal and state statutes and regulations enacted to protect biological resources, including the federal Endangered Species Act of 1973 (ESA), the Migratory Bird Treaty Act of 1918 (MBTA), the California Endangered Species Act (1984), the California Fish and Game Code, the Native Plant Protection Act, plant sensitivity classifications established by the California Native Plant Society (CNPS), and the Rolling Hills Estates Municipal Code, Sections 12.20.020, 12.20.040, 12.20.070 (Local Tree Regulation). The biology team conducted a field visit to the site on June 24, 2021; the arborist examined the on-site trees on July 15, 2021.

Impact Discussion:

a) **Less Than Significant with Mitigation Incorporated**. The proposed project may affect some sensitive wildlife species, particularly the Cooper's hawk, the Rufous hummingbird, and potentially the Monarch butterfly. Based on habitat requirements for specific species and the availability and quality of on-site and adjacent habitats, the biological assessment determined that the project site has a high potential to support Cooper's hawks, and a moderate potential to support monarch butterflies (California overwintering population) and Rufous hummingbirds. The report notes that no Monarch roosting populations have been recorded for the site or environs, and that the essential food source for monarch butterfly larvae, milkweed (*Asclepias* ssp.) was not present on the site (ELMT I (Appendix B), p. 13). All other special-status wildlife species were presumed not to occur on the project site because suitable habitat is not present (Id., p. 18).

None of the aforementioned species are federally- or state-listed as endangered or threatened; however, most birds are protected under the MBTA, and monarch butterflies are projected to be listed under the ESA in 2024 and are considered a Species of Greatest Conservation Need in California.[1] In order to ensure impacts to Cooper's hawks and Rufous hummingbirds do not occur, a pre-construction nesting-bird clearance survey shall be conducted before vegetation removal and soil excavation. If the survey reveals active nests, buffer areas will be established and monitored to avoid disturbing occupants. Additionally, to ensure impacts to a monarch California overwintering population do not occur, a clearance survey shall be conducted, and avoidance methods established. Mitigation Measures BIO-1 and BIO-2 below require such surveys, as well as monitoring, establishing buffers, and follow-up reporting if an overwintering population is observed. Implementing these measures is expected to reduce remaining impacts to less-than-significant levels.

No special-status plant species were observed during the field investigation; moreover, most plants present on-site consisted of non-native ornamental species. Based on habitat requirements for the special-status species listed in ELMT I, known species distributions, and the quality and availability of habitats present, the biological assessment determined that the project site does not have the potential to support any of the special-status plant species known to occur in the vicinity of the site (id.). The proposed project will be confined to existing developed and disturbed areas, and areas that primarily support non-native vegetation. As a result, no impacts to special-status plant species are expected to occur. No additional surveys are recommended.

b) **Less Than Significant with Mitigation Incorporated**. The proposed project may affect a single unnamed drainage feature east of London Lane that flows through a culvert under Palos Verdes Drive North and continues northward into Bent Spring Canyon and Alta Loma Park (see Figure PD-16 above). This feature conveys water from rainfall and urban runoff, and exhibits few characteristics of a seasonal stream other than a gravel bed (ELMT I, p. 14) and soil scour features indicating an "Ordinary High-Water Mark" (OHWM)(Id.). No riparian or other vegetation is present, and except for several ponded areas of runoff water the streambed was dry and covered with leaf litter at the time of the biological survey. Tree canopy consists of Peruvian pepper trees (*Schinus molle*, formerly referred to as "California Pepper") (Id.). These ornamental/cultivated trees are native to the Peruvian Andes and are considered to have "limited" invasive potential in California.[2] Other than this drainage, no sensitive habitats were identified on-site. (ELMT I, p. 14).

[1] See California Department of Fish and Wildlife, Monarch Butterfly, at https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly (accessed January 11, 2022).

[2] See California Invasive Plant Council, *Schinus molle*, available at https://www.cal-ipc.org/plants/profile/schinus-molle-profile/ (accessed January 11, 2022).

The California Department of Fish and Wildlife (CDFW) has jurisdiction under California Fish and Game Code § 1602 (F&G Code § 1602) over ephemeral/seasonal streambeds for wildlife protection and requires a Lake and Streambed Alteration (LSA) Agreement when a project activity may substantially adversely affect fish and wildlife resources. Specifically, F&G Code § 1602 "requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or
- Deposit or dispose of material into any river, stream, or lake."

The LSA webpage further states that " 'any river, stream, or lake' includes those that are dry for periods of time as well as those that flow year round. If you are not certain a particular activity requires notification, CDFW recommends you notify." [3]

Constructing Retaining Wall No. 4 may require alteration of, or encroachment into, the drainage course. CDFW may determine that this activity would substantially adversely affect wildlife resources. Accordingly, if pre-construction surveys show that the onsite drainage feature will be impacted, the City must notify the CDFW to determine if a Lake and Streambed Alteration Agreement (LSA) is required. Mitigation Measure BIO-3 below requires the City to file an LSA notification with the CDFW and to comply with all required LSA agreement provisions.

c) **No Impact.** The proposed project would not affect state or federally-protected wetlands, because none exists on or near the project site. There are no inundated areas, or wetland features with wetland-obligate[4] plant species that would be considered wetlands as defined by Section 404 of the Clean Water Act occur within the proposed project footprint (ELMT I, p. 20). Accordingly, project implementation would not cause substantial adverse effects on state or federally protected wetlands.

d) **No Impact.** The proposed project would not affect wildlife movement or existing wildlife corridors, in part because the surrounding area is developed with residential and institutional uses, and properties are typically fenced. Nearby valleys, ravines and equestrian trail connections can support wildlife movement to open spaces; however, the small valley/drainage course noted above drains through a small-diameter culvert that is not suitable for large wildlife (ELMT I, p. 20). Any wildlife movement that would occur through the project site would likely follow existing pathways, which will not be permanently removed. As such, project activities are not expected to modify or compromise wildlife movement opportunities through the area or otherwise prevent the surrounding habitat from continuing to function as a corridor.

e) **Less Than Significant Impact.** The proposed project would not conflict with local policies or ordinances protecting biological resources, because the City's existing policies generally address undeveloped land and natural landforms, rather than roadway corridors (General Plan Policies 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.2.1). Policy 5.1.2 and its implementation measures seek to limit "excessive grading" and "ensure development conforms to grading requirements in the Municipal Code and California Building Code"; the proposed retaining walls have been designed to minimize the volume of soil removal and to conform to California Building Code requirements. While the Rolling Hills Estates Municipal Code addresses

[3] California Department of Fish and Wildlife, L*ake and Streambed Alteration Program*, available at https://wildlife.ca.gov/Conservation/Environmental-Review/LSA (accessed January 11, 2022).

[4] *Obligate* wetland plants are those that require saturated wetland soils to germinate, grow, and reproduce. *Facultative* wetland plants are those that generally require saturated wetland soils, but may occur elsewhere.

street tree removal, planting, and maintenance, there are no express definitions of "heritage trees" or a tree protection ordinance (RHEMC § 12.20, Street Trees). The Rolling Hills Estates General Plan Policy 5.2.5 directs the City to "establish an Urban Forestry program to maintain a resilient and healthy tree canopy in the City," but to date there is no evidence that this program has been initiated. Impacts associated with conflicts to resource-protecting policies or ordinances are thus anticipated to be less than significant.

f) **No Impact.** The project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. Therefore, impacts to any local, regional, or state habitat conservation plans are not expected to occur from development of the proposed project, and mitigation is not required (See General Plan Figure 5-4).

Mitigation Measures

BIO-1: Migratory Birds/MBTA Compliance. All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA) and California Fish and Game Code Sections 3503, 3511 and 3513. The MBTA governs the taking and killing of migratory birds, their eggs, parts, and nests and prohibits the take of any migratory bird, their eggs, parts, and nests. Compliance with the MBTA shall be accomplished by completing the following:

A. Vegetation removal *should* optimally be conducted between September 1 and January 31.

B. If vegetation removal and construction activities near tree canopy (or shrub cover that will be retained) will take place inside the peak nesting season (between February 1 and August 31), the City shall engage a qualified biologist to (1) perform a pre-construction survey to identify any active nesting locations within 72 hours before vegetation removal and construction activities begin and (2) to monitor construction activities if nests are discovered (Biological Monitor).

C. If the biologist does not find any active nests during the pre-construction survey, construction work may proceed, and no monitoring shall be required. The biologist conducting the survey shall document a negative survey (no nests observed) with a report indicating that no impacts to active avian nests will occur.

D. If the biologist finds an active nest within the pre-construction survey area, the biologist shall map its location on an aerial photograph and shall determine whether the nest may be impacted. If so, the biologist shall delineate an appropriate buffer zone around the nest on the map and in the field. The size of the buffer shall be determined by the biologist and shall be based on the nesting species, its sensitivity to disturbance, expected types of disturbance, and location in relation to the construction activities. *These buffers are typically 300 feet from the nests of non-listed species and 500 feet from the nests of raptors and listed species, and are subject to CDFW discretion.*

E. Only construction activities that have been approved by the Biological Monitor, if any, shall take place within the buffer zone until the nest is vacated. The Biological Monitor shall supervise construction activities near active nests to ensure that no inadvertent impacts on these nests occur.

F. Results of the pre-construction survey and any subsequent monitoring reports shall be provided to the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that

construction activities can proceed within the buffer area without jeopardizing the survival of young birds.

BIO-2 – Monarch Butterfly Survey: If vegetation removal will occur inside the peak overwintering season (between September 16th and March 14th), the City shall engage a qualified biologist to conduct a pre-construction survey within 72 hours prior to construction activities to ensure no overwintering populations of monarch are located within the proposed project footprint.

A. If the biologist does not find an overwintering population, the construction work may proceed as specified in Mitigation Measure BIO-1 above. The biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to monarch overwintering populations shall occur.

B. If the biologist observes an overwintering population of monarchs within the project footprint, the biologist shall notify the City, and no construction activities shall proceed until butterflies have vacated the site.

C. The biologist shall prepare a long-term Monarch Butterfly Overwintering Habitat Management Plan to restore overwintering habitat in the project vicinity. The City shall begin plan implementation within one year of project completion.

BIO-3 – LSA Agreement Notification and Compliance: Prior to preparing construction bid documents, the City shall notify the California Department of Fish and Wildlife Lake and Streambed Alteration Program about the project using the process outlined on the LSA webpage of the CDFW website. If the CDFW requires an Agreement, including measures to avoid and/or repair damage to the ephemeral streambed, the City shall implement those measures as directed. CDFW mitigation measures shall be included in the construction contract bid documents. If the CDFW does not require an Agreement, no further action is required.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Note: This section relies upon the Phase I Cultural Resources Assessment prepared for the project, referenced above as HANA I and incorporated as Appendix E.

Impact Discussion:

a) **No Impact**. The proposed project would not affect historical resources because there are none within the project footprint or on the project site (Hana I, p. 25).

b) **Less Than Significant With Mitigation Incorporated.** The proposed project is unlikely to affect archaeological resources because most of the excavation will disturb already-existing fill soils that

resulted from the construction of Palos Verdes Drive North or would extend into bedrock where no such resources would be expected (Hana, pp. 25-26). A records search indicated that there are numerous documented "finds" on the Palos Verdes Peninsula, but these are not within the project boundary, and the cultural resource study findings suggest that there is a low potential for encountering resources (id.). A portion of project construction would extend into adjacent ravines that might contain native/undisturbed surface soil, but these locations are too steep to likely support prehistoric cultural features (id.). However, communication from the Gabrieleno/Tongva San Gabriel Band of Mission Indians and the Gabrielino Tongva Indians of California Tribal Council indicated that the project area was within their traditional territory and their ancestors would have made extensive use of the natural resources throughout the Palos Verdes Peninsula. Although the probability for encountering cultural/tribal materials is extremely low, there remains a possibility that such resources could be discovered during construction. Mitigation Measure CULT-1 requires pre-construction worker training; Mitigation Measure CULT-2 requires that all work stop upon any discovery, and that an archeological monitor be contracted to assess the findings and to retrieve the material (id.). With these measures in place, remaining impacts are anticipated to be less than significant.

c) **Less Than Significant With Mitigation Incorporated.** The proposed project is unlikely to affect human remains, because as noted above, most construction would extend into existing fill soils, with limited excavation of native soils in steep terrain. However, should human remains be discovered during project construction, California Public Resources Code § 5097.98 requires that work stop, and that the County Coroner's office be notified. The coroner will determine whether the remains are recent human origin or of older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the California Native American Heritage Commission (NAHC). The NAHC is responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by California Health and Safety Code § 7050.5. The MLD will make recommendations within 24 hours of his or her notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (Hana I, p. 26). Mitigation Measure CULT-3 incorporates these statutory requirements. Remaining impacts are expected to be less than significant.

Mitigation Measures

CULT-1: Pre-construction Briefing. Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting, such as a tailgate training, accompanied by a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.

CULT-2: Treatment and Evaluation of Discovered Resources: If archaeological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource,

the City shall contact the Native American Heritage Commission (NAHC) to report the discovery, and shall contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.

CULT-3: Treatment and Evaluation of Human Remains. As required by California Public Resources Health and Safety Code Section §§ 7050.5-7055, if human remains are encountered during project construction, work shall stop in the vicinity of the find. The City shall immediately notify the County Coroner who will determine whether the remains are of recent human origin or of older Native American lineage. If the latter, the City shall notify the Native American Heritage Commission (NAHC) to report the discovery, and shall subsequently notify the most likely descendant (MLD) as directed by the NAHC. The MLD is required to make recommendations for disposition of the remains within 24 hours of his or her notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, on- or off-site burial, and ritual ceremonies on- or off-site.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact Discussion:

a) **Less Than Significant.** The proposed project would not be expected to result in significant environmental impacts associated with wasteful, inefficient, or unnecessary consumption of energy resources, simply because it would not be in the construction contractor's interest to use – and pay for – excessive energy resources (e.g., motor fuels, electricity, natural gas, etc.). "Wasteful" energy consumption implies that the energy used to construct and operate a project greatly exceeds that required to do so. It would be unreasonable, and economically inefficient, to use substantially greater amounts of energy resources than needed either to construct or to operate the proposed facility. Moreover, as illustrated above in Table AQ-1, the project's estimated construction emissions are substantially below air quality significance thresholds; these emissions serve as an analogue of energy consumption because they are generated by the equipment that uses energy (fuel, electricity) to operate. In the absence of energy-consumption thresholds, the relatively low construction emissions represent reasonable energy consumption to construct the project. After construction, energy consumption by the project will be limited to streetlight and signal electricity use, which is likely to be greatly reduced from the present fixtures' consumption because highly-efficient LED lamps would replace older, less-efficient fixtures.

b) **Less Than Significant.** The proposed project would not be expected to conflict with or obstruct renewable energy or energy efficiency plans, largely because project construction equipment engines

must comply with California Air Resources Board permitting requirements for on- and off-road diesel equipment (see California Air Resources Board, *In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation*), available at https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation (accessed October 14, 2022). As noted above, reductions in emissions correlate with reductions in energy consumption.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Note: This section relies upon the geotechnical study prepared for the project, incorporated by reference above as Appendix G, on information contained within the City of Rolling Hills Estates General Plan, Safety Element, available at https://www.ci.rolling-hills-estates.ca.us/home/showpublisheddocument/20662/637946319938070000 (accessed October 28, 2022), and on the paleontological study prepared for the project, incorporated by reference above as Appendix

Impact Discussion:

a) (i-iv) **Less Than Significant Impact.** The proposed project would not result in substantial adverse effects or risks of loss, injury, or death involving fault rupture, ground shaking, ground failure, or landslides because as shown on Figure 7-2 of the Rolling Hills Estates General Plan Safety Element, replicated as Figure Geo-1 below, the project area is not underlain by a fault zone and is not situated in either a known landslide area or liquefaction zone. While the project improvements, including the retaining walls, would likely experience strong ground shaking during a seismic event on any of the numerous faults located in southern California, anticipated losses or risks of injury or death would be reduced by

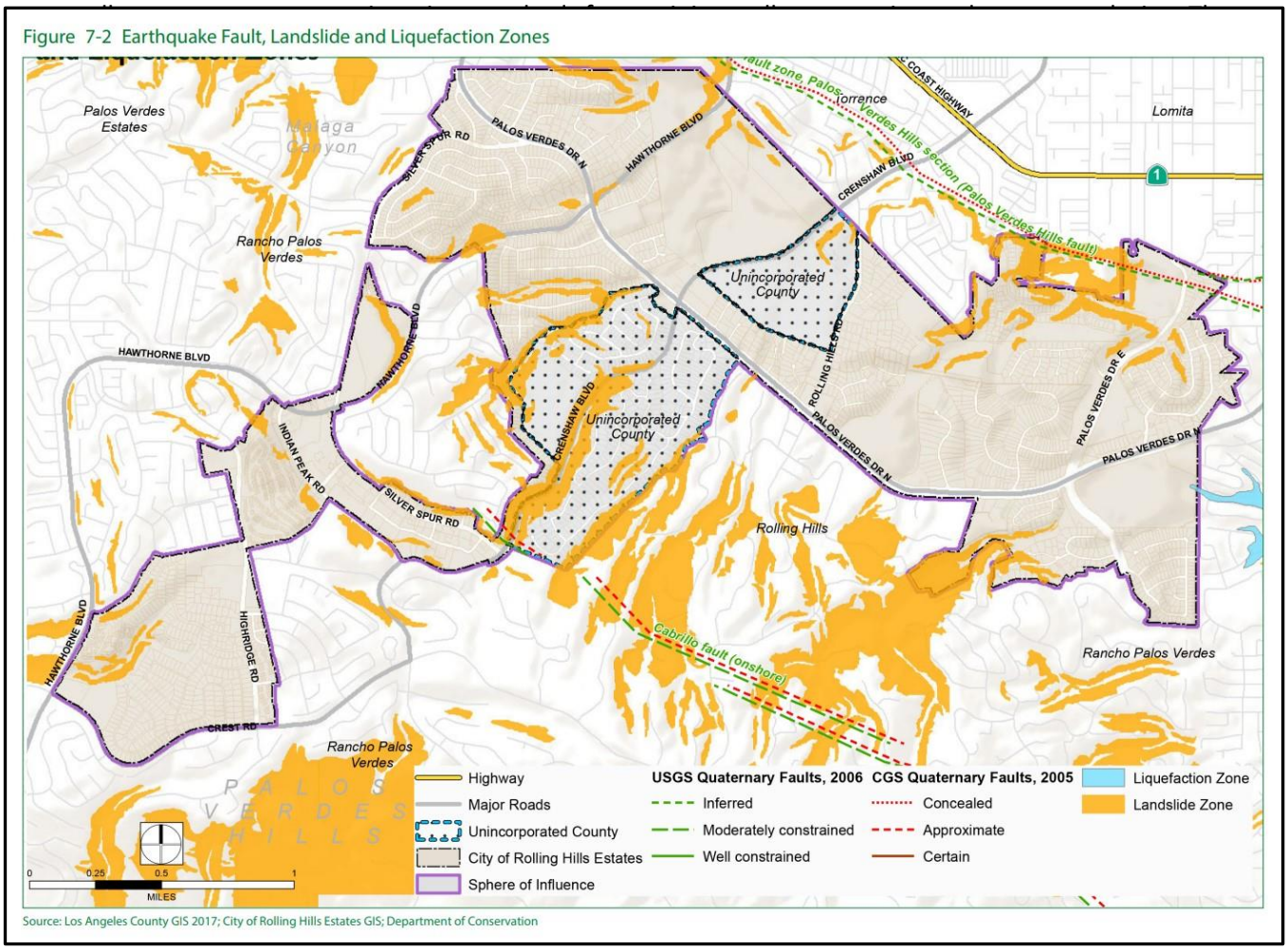


Figure GEO - 1 Rolling Hills Estate General Plan Safety Element, Figure 7-2

Earthquake Fault, Landslide and Liquefaction Zones

b) **Less Than Significant Impact.** The proposed project would not result in substantial soil erosion or topsoil loss because the project construction contractor will be required to contain runoff and siltation from the site per the provisions of a Stormwater Pollution Prevention Plan. This plan, which is subject to City approval, must include erosion-control and sediment-control Best Management Practices (BMPs) to manage potential construction-related pollutants. Erosion-control BMPs, such as site watering during grading operations, are designed to prevent erosion, and sediment controls, such as burlap rolls around catch basins, are designed to trap sediment once it has been mobilized by wind or water. With these measures in place, remaining impacts associated with soil erosion are anticipated to be less than significant.

c) **Less Than Significant Impact.** The proposed project would not be anticipated to cause substantial risks of injury, death, or property loss, resulting from unstable soils, because as shown on Figure Geo-1, soils in the project area are not subject to liquefaction or landslide risk. Project construction would not change the project area's underlying geology. Moreover, the geotechnical study prepared for the project indicates that the project area soils are suitable for the proposed construction, with the caveat that any soils unsuitable for use as fill behind the proposed retaining walls be over-excavated and replaced with compacted engineered fill material, along with appropriate drainage devices (Willdan II, Appendix D to the Geotechnical Investigation Report). As discussed in (a) above, project design and construction would be required to incorporate the geotechnical study's recommendations.

d) **Less Than Significant Impact.** The proposed project would not be anticipated to cause substantial risks to life or property associated with expansive soils, because as discussed in (a) above, the project area's soils were determined to be competent to support project construction, provided that the geotechnical study's recommendations are incorporated into the project design.

e) **No Impact.** The proposed infrastructure project would not generate wastewater and thus would not require septic or other means of wastewater disposal.

f) **Less Than Significant with Mitigation Incorporated.** The proposed project's excavation for retaining wall construction could extend into the Altamira shale formation, which is known to contain significant marine fossil deposits. The paleontological report prepared for the project (HANA III) concluded that important paleontological resources might be encountered when previously undisturbed soils/sediments are excavated. The report advises that the project incorporate Mitigation Measure Geo-1 below to reduce any impacts to less than significant levels. This measure requires that a qualified professional paleontologist prepare a Paleontological Resource Impact Management Plan (PRIMP), be present when excavation reaches undisturbed sediment, that sand samples be taken, and any fossils be retrieved and properly curated.

Mitigation Measure

GEO-1: Paleontological Resource Protection/Recovery/Curation: Before project excavation begins, the City shall contract with a qualified professional paleontologist to prepare a Paleontological Resource Impact Management Plan (PRIMP), and to implement that plan. At a minimum, the plan shall abide by the Society of Vertebrate Paleontologists (SVP; https://vertpaleo.org/) *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*, including monitoring excavation of undisturbed sediment, wet-screening of sand samples, identification of any significant fossils encountered, reporting of the project monitoring and findings, and curation of any significant fossils in a permanent scientific collection.

VIII. GREENHOUSE GAS EMISSIONS

Additional background is included in this section because of the evolving nature of both the issue itself and the regulatory framework governing greenhouse gas emissions that changes frequently.

Greenhouse gases (GHGs) emitted by human activity are generally understood to contribute cumulatively to global climate change, resulting in projected increases in ocean temperatures, melting of polar ice and associated sea level rise, changes to weather and precipitation patterns, and overall planetary warming. GHGs accumulate in the atmosphere allowing incoming short-wavelength visible sunlight to penetrate, while restricting outgoing terrestrial long-wavelength heat radiation from exiting the atmosphere. This phenomenon creates a greenhouse effect where Earth's heat is essentially trapped. The principal greenhouse gases (GHGs) include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Collectively, GHGs are measured as carbon dioxide equivalents (CO_2e) of metric tonnes (MT). [5]

Fossil-fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of global GHG emissions, and approximately 37% of California's GHG emissions (California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, (CARB Scoping Plan) Figure 3, p. 11, available at https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan (accessed October 31, 2022).

The Global Warming Solutions Act of 2006 (Assembly Bill 32/AB 32), the principal legislation governing GHG emissions in California, mandated reducing California's GHG emissions to 1990 levels by 2020 and tasked the California Air Resources Board (CARB) with regulating GHG emissions as well as coordinating with other state agencies to implement AB 32's reduction goals. Subsequent legislation and executive orders target various GHG-emission sources and set forth strategies for local agencies, including Senate Bill (SB) 1368 (emissions performance standards for utilities), SB 375 (sustainable communities strategies), SB 535 (Greenhouse Gas Reduction Fund, identifying disadvantaged communities for investment), EO S-03-05 (GHG-reduction goal of 80% by 2050 from 1990 levels), EO S-20-06 (biofuels and biomass electricity generation targets), EO S-01-07 (low carbon fuel standard), EO S-13-08 (climate adaptation strategy/sea level rise), EO B-16-12 (zero-emission vehicle program), EO B-18-12 (state agencies directed to purchase zero-emission vehicles), and EO B-30-15 (sets GHG emissions target for 2030 at 40% below 1990 levels).

Senate Bill 375 was enacted to link land use and transportation in a manner that would reduce vehicle miles traveled (VMT), thereby reducing GHG emissions. Under SB 375, the California Air Resources Board (CARB) is responsible for establishing GHG emission-reduction targets, and regional Metropolitan Planning Organizations (MPOs) are responsible for preparing and adopting "Sustainable Communities Strategies" that achieve CARB's targets. In 2018, the CARB reported California was not "on track" to achieve the SB 375 GHG targets, and that more effort to reduce VMT throughout the state was required to correspondingly reduce GHGs from personal vehicles (CARB, 2018 Progress Report: California's Sustainable Communities and Climate Protection Act

[5] Climate change is predicted to adversely affect human health and infrastructure, wildlife habitats, biological resources agriculture capacity, and other resources. Considerable information regarding global climate change and California's role in counteracting human-caused warming may be found in the California Air Resources Board publication, *California's 2017 Climate Change Scoping Plan*, available at https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf (accessed November 29, 2022). The *Los Angeles Region Report for California's Fourth Climate Change Assessment* provides region-specific climate science information and projections, available at https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf (accessed November 29, 2022). *See also* numerous reports available at United Nations' Intergovernmental Panel on Climate Change website, https://www.ipcc.ch/ (accessed November 29, 2022).

(November 2018), pp. 21-28 available at https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf (accessed October 31, 2022).

EO-B-30-15 (codified in 2016 by SB 32) accelerated the GHG-emissions target for 2030 to 40 percent below 1990 levels. EO-B-30-15 also provided the CARB with additional direction for refining the Climate Change Scoping Plan, setting forth five "pillars" for accomplishing GHG reduction, including:

1. Reducing today's petroleum use in cars and trucks by up to 50 percent;
2. Increasing from one-third to 50 percent of electricity derived from renewable sources;
3. Doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner;
4. Reducing the release of methane, black carbon, and other short-lived climate pollutants;
5. Managing farm and rangelands, forests, and wetlands so they can store carbon; and
6. Periodically updating the state's climate adaptation strategy, Safeguarding California.

The CARB's 2017 Climate Change Scoping Plan, cited above, in part implements EO B-30-15, and sets forth a "reference scenario" as a baseline for measuring how much GHG emissions can be reduced in several economic sectors. This scenario illustrates the level of GHG emissions generated statewide through 2030 with existing policies and programs, but without any further action to reduce GHGs. This level is estimated to be approximately 400 million metric tonnes (MMTs) of CO2e from all sources in 2030. The CARB's statewide 2030 target level of emissions is approximately 260 MMTs (CARB Scoping Plan, Figure 6, *2017 Scoping Plan Scenario*, p. 24). The Scoping Plan estimates that the change from 1990 levels in the residential and commercial sectors must be from 44 MMTCO2e to 38-40 MMTCO2e by 2030, a four to eight percent reduction (id., Table 3, p. 31).

CARB's In-Use Off-Road Diesel and Large-Spark Ignition Rules requires construction-equipment operators to retire, replace, or repower older engines by fleet size category (small, medium, and large), and to achieve specific hydrocarbon (HC) + NOX fleet average emission level (FAEL) standards that become more stringent over time. Operators are required to label, maintain records, and report each piece of equipment subject to FAEL (See SCAQMD, *Regulations and Other Commitments*, available at https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/facility-based-mobile-source-measures/regs-commitments#Construction%20Equipment%20-%20Existing%20State, accessed November 29, 2022).

The Southern California Association of Governments (SCAG) is the local MPO that includes the City of Rolling Hills Estates, and is developing a Regional Climate Adaptation Framework, which will assist local and regional jurisdictions in managing the negative impacts of climate change. The study will look at how the Southern California region can work together to plan and prepare for the impacts of sea level rise, extreme heat, increasingly frequent and damaging wildfires, and other climate-related issues.

The SCAG also develops and implements the Regional Transportation Program/Sustainable Communities Strategy discussed in Section III, Air Quality, above. Strategies in the RTP, such as promoting park-and-ride facilities, contribute to reducing the region's GHG emissions by reducing vehicle miles traveled.

Significance Thresholds. Compliance with GHG-reduction strategies may not itself demonstrate that an individual project's impacts are less than significant; however, unless an emissions target or threshold, based on substantial evidence has been adopted by a local agency, consistency with such strategies may be the only measure of a project's impacts. To date, SCAG, Los Angeles County, and Rolling Hills Estates have not set quantified CO2e emissions targets or numeric thresholds; the SCAQMD has set a CO_2e threshold only for stationary industrial sources (10,000 metric tonnes per year).

It is possible to determine the significance of a project's CO_2e emissions by assessing a project's consistency with an SCS or with the CARB Scoping Plan and regulations. If the project is consistent with a plan's goals, policies, or

is specifically identified within a Plan, a finding of "less than significant" or "less than significant with mitigation incorporated" may be appropriate.

The City of Rolling Hills Estates' General Plan, Sustainability Element (SE), discusses the City's contribution to regional greenhouse gas emissions, but does not set a project-specific threshold for those emissions. The SE sets forth multiple strategies for the City to reduce its overall GHG emissions under Air Quality and GHG Goal 9-1:

AQG Goal 9-1: Reduce greenhouse gas emissions

> *AQG Policy 9-1-1*: Cooperate with the state to implement Senate Bill (SB) 32, which calls for reducing greenhouse gas (GHG) emissions to 40% below 1990 levels by 2030; Executive Order S-3-05, which calls for 80% below 1990 levels by 2050; SB 743, which requires new development projects to be assessed based on their potential to increase per capita vehicle miles traveled (VMT) instead of using level of service (LOS) (traffic congestion) towards the State's GHG emission reduction goals effective July 1, 2020; and future legislation designed to reduce GHG emissions.
>
> *AQG Policy 9-1-2:* Lower the emissions caused by motor vehicles through education and outreach strategies that reduce VMT and encourage the adoption of near-zero emission and zero-emission vehicles.
>
> *AQG Policy 9-1-3:* Promote energy-efficient building construction and operation practices that reduce emissions and improve air quality.
>
> *AQG Policy 9-1-4:* Implement "carbon sinks," such as urban forests and soil amendments, to help meet the City Climate Action Plan's (CAP) current goal of reducing greenhouse emissions by 49% below 2005 levels, and future reduction goals resulting from updates to the City CAP.
>
> *AQG Policy 9-1-5:* Continue to seek out opportunities within the City for "carbon sinks" to provide for regenerative, revegetation, and redevelopment projects sites such as the Palos Verdes Landfill.

The City's 2017 Climate Action Plan (CAP) identifies community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste. The CAP includes GHG-emission inventories for 2005 and 2012, which show that the City has achieved significant decreases in emissions, particularly in the on-road transportation, solid waste, and energy sectors (City of Rolling Hills Estates, *Climate Action Plan* (2017), Tables 3 and 4; available at https://southbaycities.org/sites/default/files/RHE%20CAP.pdf (accessed 10/29, 2022)).

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Impact Discussion:

a) **Less Than Significant Impact.** The proposed project would generate greenhouse gas emissions directly during construction, and indirectly during operation from (likely minimal) emissions associated with power generation required for LED traffic signal operation. The Road Construction Emissions Model

prepared for the project *estimates* that project construction would generate approximately 1641 MT of CO2e, with maximum emissions occurring during the excavation and grading phase (estimated by the model to be 10-11 months in duration; note that *measured* emissions are likely to vary from the estimated amounts, because the actual construction duration, and equipment selection and hours of operation, are not determined at the time of this report's preparation). However, because these emissions would end when construction is completed, overall project GHG impacts are anticipated to be less-than-significant.

b) **No Impact**. The proposed project is consistent with, and required by, a mitigation measure adopted for the Peninsula Village Overlay District as discussed in the Project Description, above.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Impact Discussion:

a) **Less Than Significant Impact.** The proposed project would not be anticipated to subject the public or the environment to *significant* hazards associated with the routine transport, use, or disposal of hazardous materials, because any such materials used in project construction (paints, solvents, etc.) would be used

by trained workers, dispensed from, and stored in appropriately-labeled manufacturers' containers. Leftover materials would be handled according to the respective Manufacturer's Safety Data Sheet (MSDS). Moreover, hazardous material use, transport, and disposal are subject to numerous federal and state regulations enacted to minimize hazards to the public. The City Building Inspector, the Los Angeles County Fire Department, the SCAQMD, EPA, and CalEPA have enforcement authority to ensure compliance with hazardous material-handling regulations. Although no hazard can be completely eliminated, with compliance, hazards to the public and the environment would be less than significant.

b) **Less Than Significant Impact.** The proposed project would not be anticipated to create a significant hazard to the public or to the environment due to foreseeable upsets and/or accidents involving hazardous material release, because as noted in (a) above, any hazardous materials used on-site would be handled by properly-trained workers in accordance with applicable regulations and the materials' MSDSs. Such materials would also not be expected to be present on-site in quantities posing an extraordinary risk. As noted above, hazardous material use, storage, and disposal is subject to federal and state regulations, which are enforced by several local authorities. With these regulations and enforcement mechanisms in place, impacts are not expected to be significant.

c) **Less Than Significant Impact.** The proposed project, although within one-quarter mile of the existing Dapplegray Elementary School, would not require using acutely-hazardous material nor would it be expected to emit acutely-hazardous emissions or handle acutely-hazardous materials. The project is likely to require handling of hazardous materials, such as paint and solvents. However, as discussed in Section III, Air Quality, above, the project's anticipated emissions (including those from coatings) would be substantially below SCAQMD Local Significance Thresholds, indicating that project construction would not pose a significant risk to students, faculty, staff, or visitors. Moreover, such emissions would cease when project construction is complete.

d) **No Impact.** The project site is not located on a federal or state list of hazardous materials sites, as evidenced by the Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control (DTSC). There are no such sites in the project vicinity. Figures Haz-1 -3 below show the site location and known hazardous-material-release sites nearby. No impacts associated with hazardous materials sites are anticipated.

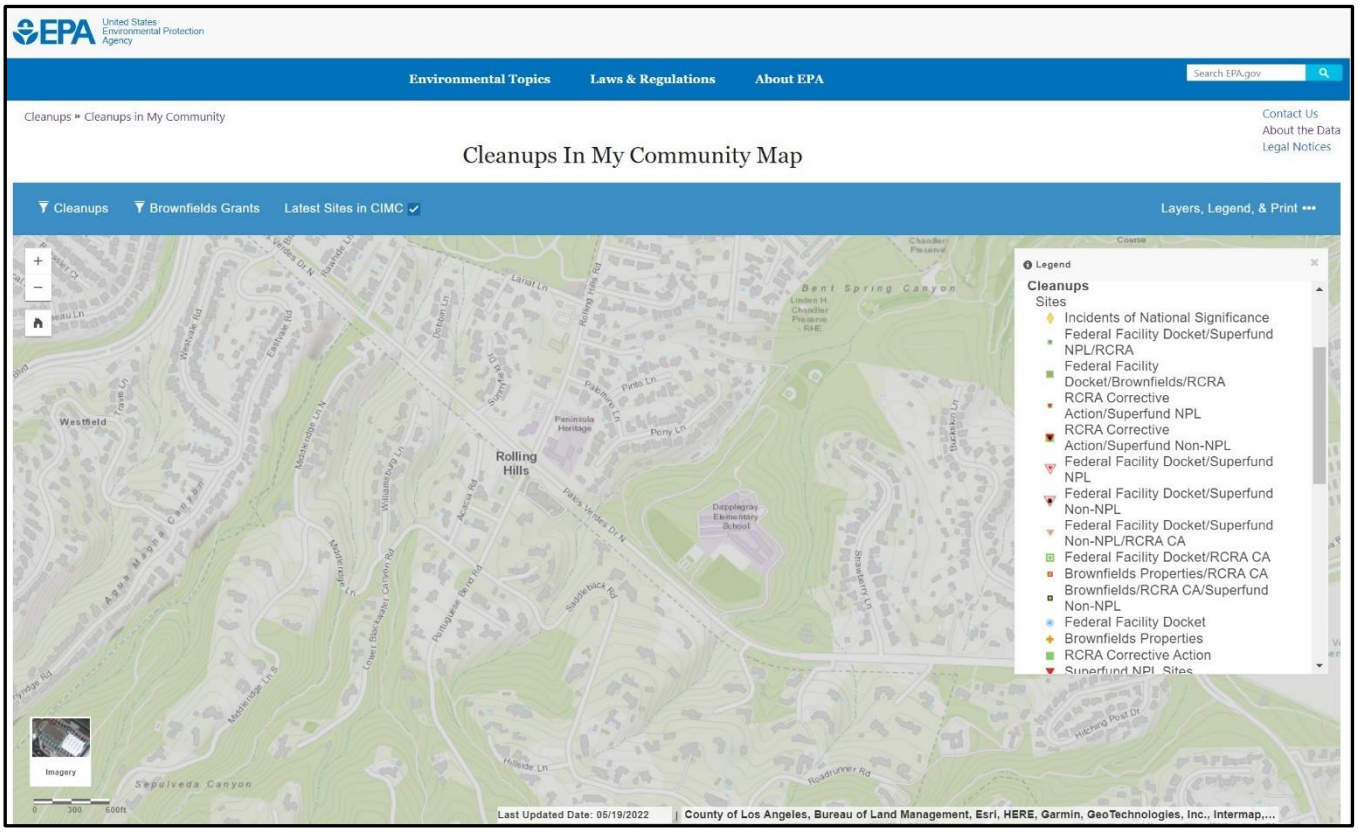


Figure HAZ - 1 U.S. EPA "Cleanups in My Community" Database

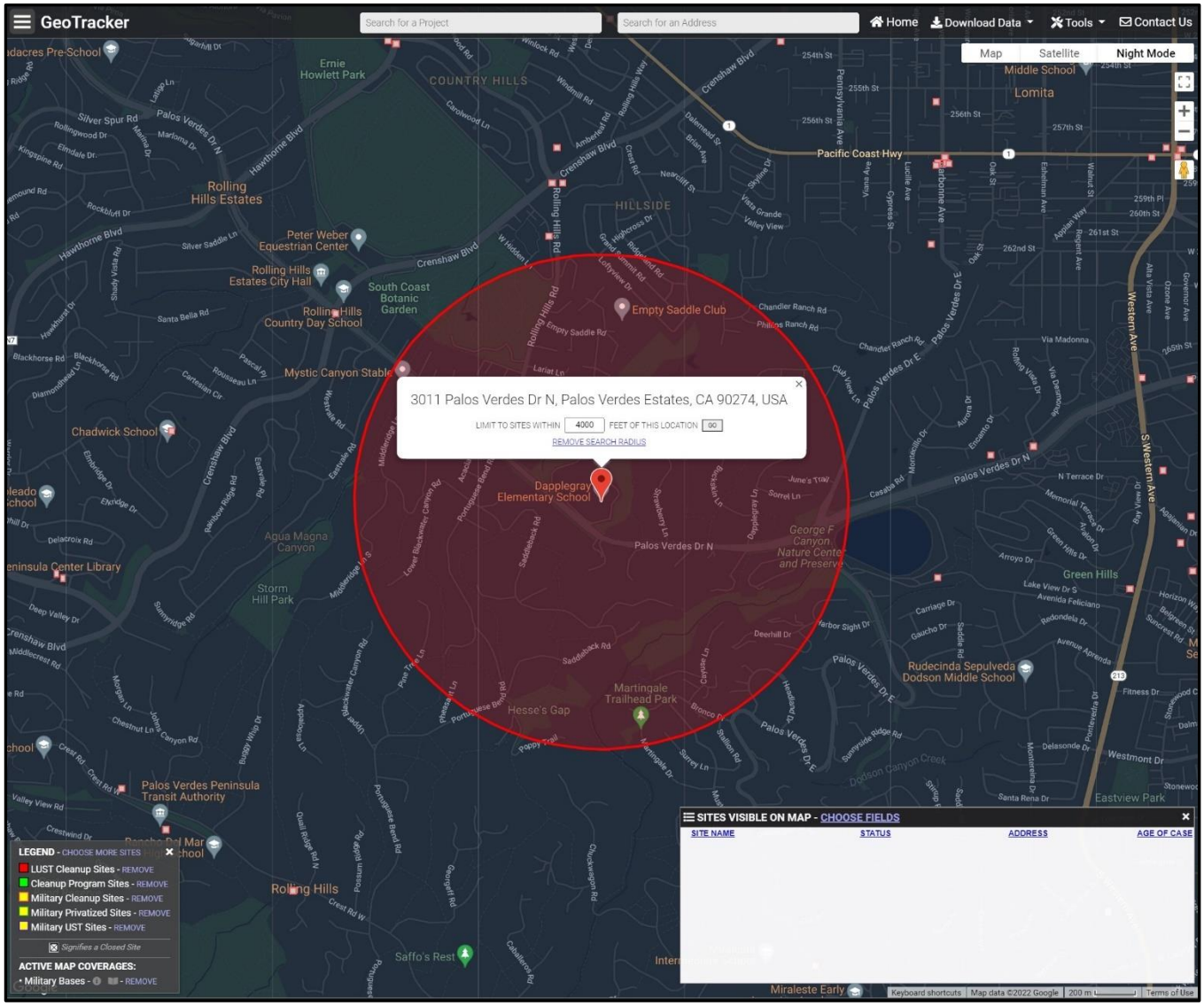


Figure HAZ - 2 California Water Resources Control Board Geotracker Database

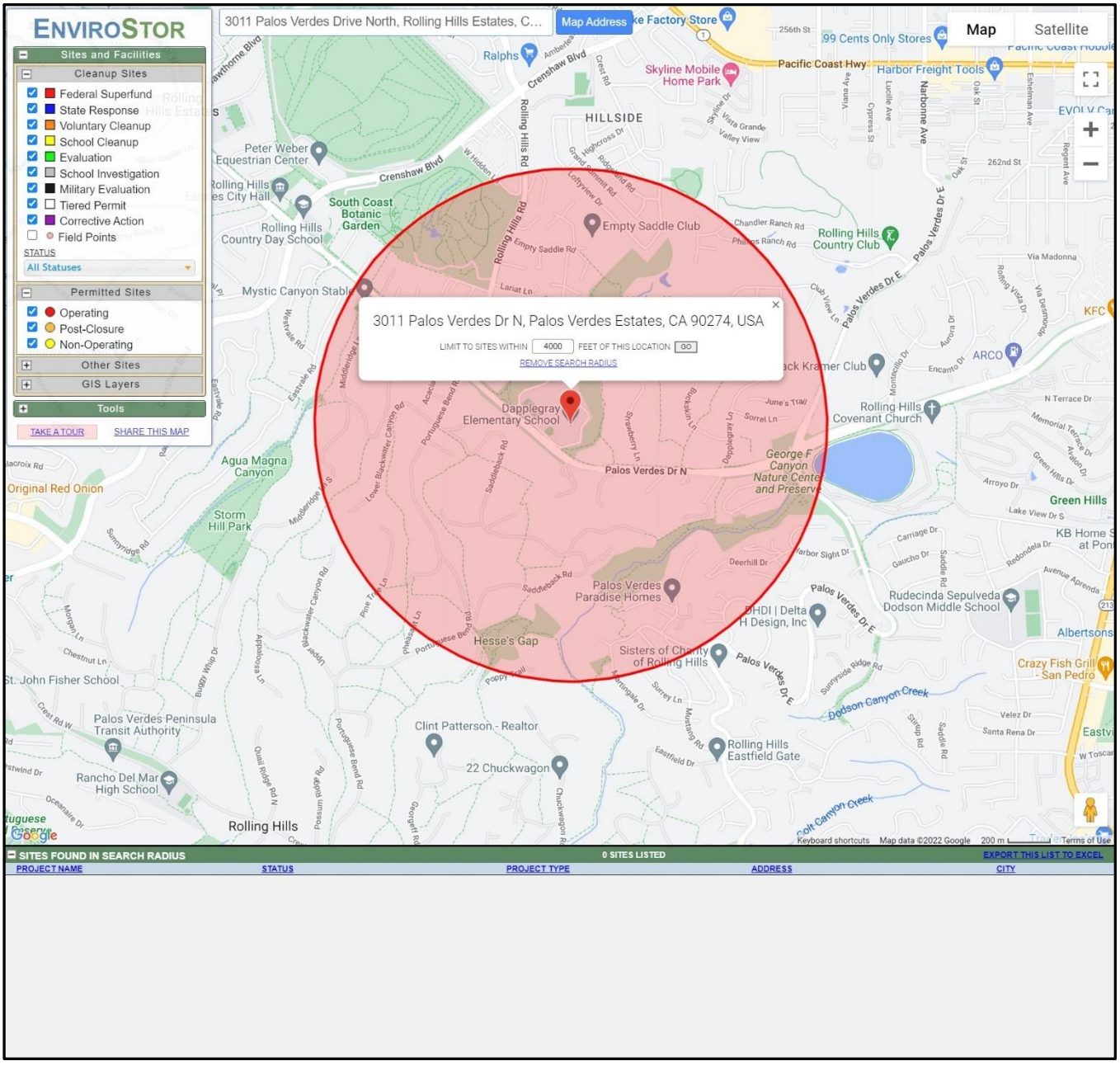


Figure HAZ - 3 California DTSC Envirostor Database

e) **Less Than Significant Impact.** The project site is located approximately 12 miles south-southwest of the Los Angeles International Airport (LAX), 11 miles west-southwest of the Long Beach Airport (LGB), and 10 miles south of the Hawthorne Municipal Airport (HHR), and is approximately 1.5 miles south of the Torrance Municipal Airport (Zamperini Field) safety zone perimeter (see Torrance General Plan, *Safety Element*, Figure S-5, citing the Los Angeles County Airport Land Use Plan (1991), available at https://www.torranceca.gov/home/showpublisheddocument/2724/636302127533630000 (accessed November 30, 2022). Moreover, the intersection-improvement project would not introduce new habitable structures or sensitive receptors that would be susceptible to airport hazards or noise. Temporary construction equipment noise affecting construction workers (as discussed in Section XIII,

Noise, below) would likely mask any airport noise audible at the project site; moreover, construction companies must comply with Cal-OSHA regulations for workers' hearing protection. Impacts associated with airport safety zones or noise are thus anticipated to be less than significant.

f) **Less Than Significant Impact.** The project site lies along a designated evacuation route from the Palos Verdes Peninsula, Palos Verdes Drive North (RHE General Plan Safety Element, Fig. 7-11, Access to Evacuation Routes). The project is not anticipated to interfere with emergency evacuation because the roadway would not be closed during construction, and construction would stop in the event of an emergency requiring evacuation.

g) **Less Than Significant Impact.** The intersection-improvement project would not expose people or structures to significant risk of loss, injury, or death involving wildland fires more than the existing wildfire risk, because the general configuration of Palos Verdes Drive North would not change, and the project itself would not increase the local population or add flammable structures. The entire Palos Verdes Peninsula is in a Very High Fire Hazard Severity Zone (RHE General Plan Safety Element, p. 7-6); the project would not affect this classification. As noted in (f) above, work would stop in the event of a nearby wildland fire that would foreseeably affect Palos Verdes Drive North's function as an evacuation route.

X. HYDROLOGY AND WATER QUALITY

See Appendix C, ELMT Consulting, *Delineation of State and Federal Jurisdictional Waters* (September 2021) (ELMT II), for a hydrological description of the project area.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact Discussion:

a) **Less Than Significant Impact.** The proposed project would not violate water quality standards or waste discharge requirements and would not be anticipated to degrade surface or groundwater quality, because numerous existing regulatory controls will apply to the project to protect surface and groundwater resources. The proposed project would construct roadway, sidewalk, median, and equestrian trail improvements that would add minor amounts of impervious surfaces (sidewalk paving); the proposed retaining walls and associated excavation would moderately change local drainage patterns. Project construction must comply with applicable federal, State, and local water quality regulations. Specifically, the federal Clean Water Act (CWA) assigns jurisdiction to federal, state, and local agencies over specific activities that could affect stream channels, wetlands, and other water bodies. Section 402(p) of the CWA sets forth the National Pollutant Discharge Elimination System

(NPDES) storm water permitting program, administered by the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) under delegation by the United States Environmental Protection Agency (U.S. EPA). Where projects would affect an area larger than one acre, the project proponent must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which details the BMPs for reducing or eliminating pollutant discharge from construction areas.

BMPs for the project would include, but not be limited to:

- Good housekeeping: conducting an inventory of products used, implementing proper storage & containment, and properly cleaning all leaks from equipment and vehicles;
- Non-storm water management: properly washing vehicles in contained areas, cleaning streets, and minimizing irrigation runoff;
- Erosion control: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, permanent seeding;
- Sediment control: straw wattles along drainage pathways and around storm drains;
- Run-off and run-on controls: berms and run-off/on diversions;
- Screens on catch basins and on connector pipes to prevent trash from entering waterways;
- Inspection, maintenance, and repair of BMPs to ensure continued efficacy.

By applying these and other BMPs, impacts are anticipated to be less than significant, and no supplementary mitigation measures would be required.

b) **Less Than Significant Impact**. The proposed project would not deplete groundwater supplies or result in lowered ground water tables because the project would not result in substantial water demand during construction or operation and would not significantly increase impermeable surface area. Groundwater recharge in the immediate project area is limited because the Palos Verdes Peninsula is located on a consolidated rock formation where there are no groundwater resources (RHE General Plan Conservation Element, p. 5-10). The proposed roadway, sidewalk, and median improvements would not be expected to deplete groundwater supplies in part because construction activities (concrete mixing, water application for dust control, etc.) would use limited amounts of water; the proposed landscaping associated with the project would both replace existing landscaping and add new plant material; all new plants would be varieties selected to require minimal irrigation at maturity. The irrigation system would be *capable* of delivering approximately 39,751 gallons of water annually, although the actual plants' water requirements would likely be lower. During droughts, the City would be able to scale irrigation volume according to water conservation requirements. Impacts with respect to groundwater supply would accordingly be less than significant.

c) See explanations below:

i. **Less Than Significant Impact.** The proposed project would not be anticipated to result in substantial erosion or siltation on- or off-site, because the BMPs described in (a) above operate to minimize erosion and siltation.

ii. **Less Than Significant Impact.** The proposed project would not be anticipated to result in substantial surface runoff or flooding, because the BMPs described in (a) above operate to minimize surface runoff. Project construction would not affect the existing storm drain culvert that conveys stormwater runoff from south to north underneath PVDN, as the culvert lies approximately 30' beneath the roadbed and project excavation would not extend to that depth (see Project Description-Hydrology/Wetlands above). When project construction is complete, surface drainage will be similar to the pre-project condition.

iii. **Less Than Significant Impact.** The proposed road-widening and intersection improvement project would not create runoff water nor would it appreciably change the project area's topography so as to change runoff patterns from their present condition. Irrigation runoff would not be expected to occur, as all new irrigation will be supplied from drip emitters at slow rates.

iv. **No Impact.** The project area is not in a flood zone (RHE General Plan Safety Element, Fig. 7-4, pp. 7-14 – 7-17); project construction is not expected to impede flash flood flows that are carried through the 30'-deep storm-drain culvert described above and in the Project Description because construction would not extend to the culvert depth.

d) **No Impact.** The project area is not in a flood hazard, tsunami or seiche zone (RHE General Plan Safety Element, Fig. 7-4 and discussion on p. 7-18)

e) **Less Than Significant Impact.** The proposed project would not be anticipated to conflict with, or obstruct implementation of, a water quality control plan or a sustainable groundwater management plan because as described in (a) above, BMPs will apply to protect surface and groundwater resources and as noted in (b) above, the City will be able to scale irrigation volumes according to water-conservation requirements.

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Impact Discussion:

a) **No Impact.** The proposed project would not divide an established community because all work will be conducted on an existing roadway, and no barriers restricting vehicle, pedestrian or equestrian movement across the roadway would be introduced. The project would also re-align and rebuild the existing equestrian trail along the north side of PVDN so that the trail's function would be restored.

b) **No Impact**. The proposed project would not cause significant impacts resulting from conflicts with land use plans, policies, or regulations, in part because the project implements mitigation for the Peninsula Village Overlay District as explained in the Project Description, above. The project is further consistent with the following General Plan Policy:

- Mobility Element Policy 3.1.3: *Design streets to reflect Rolling Hills Estates' values and rural feel*.

In compliance with this policy, the proposed project will incorporate design elements, described in Section I, *Aesthetics*, like those that are present throughout the City's road network to maintain consistency in the streetscape's rural appearance.

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Impact Discussion:

a) **No Impact.** The proposed project would not result in losing availability of a known, valuable, mineral resource because there are no mineral resources within the City boundaries (see RHE General Plan Conservation Element, p. 5-20).

b) **No Impact.** The proposed project would not result in the loss of availability of any designated mineral-resource-recovery sites, because there are no such sites within the City (id.).

XIII. NOISE

Responses in this section are based on the *Noise Study for the Dapplegray School Intersection Project*, prepared for the project by HANA Resources (HANA II), incorporated as Appendix F. Please refer to this study for background on sound levels, noise (e.g., unwanted sound) measurement and analysis, vibration, and detailed citations to sources.

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Impact Discussion:

a) **Less Than Significant Impact.** The proposed project would generate temporary construction noise affecting surrounding noise-sensitive receivers (residences, Dapplegray Elementary School, trail users), but as explained below, construction contractors must comply with the RHE Municipal Code Section

8.32.050 (Noise Ordinance). Compliance would reduce any noise impacts to less than significance levels without additional mitigation measures.

Noise Description/examples*.* Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., human and animal ears). Sound is measured in decibels (dB). The average unimpaired human ear can detect sound as low as 3 dB (HANA II, p. 5); hearing can be damaged by prolonged exposure to sound levels of approximately 75-85 dB.[6] Typical sound levels experienced in the human environment range from zero (the lowest threshold of human hearing), 50 (a quiet urban area during the day, or, e.g., a dishwasher in an adjacent room), 80 (a diesel truck moving at 50 mph, measured 50' from the truck, or a garbage disposal three feet away), 95 (gas lawnmower three feet away), to 110 ("typical" rock band) (HANA II, Table 1, p. 6, citing Caltrans). *Noise* is defined as sound that is loud, unpleasant, unexpected, or undesired (Id., p. 5). The discussion below uses "sound" and "noise" interchangeably.

Ambient Sound Levels. Noise in the project area is generated primarily by vehicle traffic along PVDN; ambient noise levels are generally highest during the daytime and afternoon peak-period when traffic is flowing without congestion, because vehicle noise lowers as speed is reduced. Intermittent noise sources in the area include tree-trimming and chipping equipment, leaf blowers, and lawn mowers.

To determine generalized ambient sound levels, measurements were taken on April 28, 2021, at four locations near the project area (see Figure Noise-1 and Table Noise-2 below) during non-peak and peak travel times. Noise measured at the four stations indicated that the non-peak measurements for stations 1 - 3 were higher than the peak measurements; noise measured at station 4 yielded a lower value during non-peak. During peak traffic, vehicle noise was reduced because vehicles slowed while merging into one lane. Non-peak traffic flow was less restricted allowing maximum speeds up to 40 mph along the roadway and thus generated higher noise levels. Notably, major tree trimming activity during the non-peak period (chain saws and a chipper) contributed to ambient sound levels. Accordingly, the sound level measurements represent a point-in-time scenario simulating an average of the sound environment in the project area where other noise sources intermittently add to the noise produced by vehicle traffic.

Construction Noise Impacts**.** Construction activity would result in temporary increases in ambient noise in the project area on an intermittent basis and, as such, would expose surrounding noise-sensitive receptors to increased noise. The nearest receptors include the Dapplegray Elementary School on the north and single-family residences on large lots to the north and south. Heavy equipment would move across the site intermittently or continuously depending on the nature of the construction activity (e.g., excavation, demolition, grading, paving, etc.). Noise would increase as equipment moves closer to a receptor and decrease as equipment moves away. Accordingly, maximum hourly noise levels were estimated at various distances from the construction activity to the nearest receptors (stations 1-4 as noted above).

Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) (2006). The RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6

[6] Magiera A, Solecka J. *Environmental noise, its types and effects on health*. Rocz Panstw Zakl Hig. 2021;72(1):41-48. doi: 10.32394/rpzh.2021.0147. PMID: 33882683, available at https://pubmed.ncbi.nlm.nih.gov/33882683/ (accessed November 29, 2022).

dBA per doubling of distance for stationary equipment. Noise measurements and estimated cor

Source: HANA II, Exhibit IV, p. 11

Figure Noise - 1 Location of Sensitive Receptors/Noise Measurement Stations

Table Noise - 1 Estimated Construction Noise Levels at Receptors

Distance[a]	**554 feet**	**118 feet**	**128 feet**
Station ID	**STA 1**	**STA 2**	**STA 4**
Receiver ID	**Receptor 1** (School)	**Receptor 2** (Residence)	**Receptor 3** (Residence)
Construction Equipment	**Approximate L_{eq}/L_{max} dBA**		
Backhoe	52.7 / 56.7	66.1 / 70.1	65.4 / 69.4
Concrete Mixing Truck	53.9 / 57.9	67.4 / 71.3	66.7 / 70.6
Concrete Saw	61.7 / 68.7	75.1 / 82.1	74.4 / 81.4
Dozer	56.8 / 60.8	70.2 / 74.2	69.5 / 73.5
Dump Truck	51.6 / 55.6	65 / 69	64.3 / 68.3
Grader	60.1 / 64.1	73.6 / 77.5	72.9 / 76.8
Jackhammer	61 / 68	74.4 / 81.4	73.7 / 80.7
Total	66.8 / 68.7	80.3 / 82.1	79.6 / 81.4

See Appendix B of Noise Study (Appendix F of this document) for RCNM results

[a] Linear distance from receptor to nearest Project boundary

Table Noise - 2 Summary of Noise Measurement Results (April 28, 2021)

Station ID	**Measurement Location**	**Sample Times** (recorded to nearest minute)	**Approx. Distance & Direction from Primary Noise Source**	**Leq (dBA)**	**Lmin (dBA)**	**Lmax (dBA)**
1	Dapplegray Elementary School	07:56 – 08:17	554 ft NE of intersection of PVDN and Dapplegray Elementary School road	61.2	50.8	67.3
		12:51 – 13:11		74.8	59.5	81.2
2	Roadway Intersection	08:23 – 08:44	30 ft from intersection of PVDN and Dapplegray Elementary School road; westbound side	66.5	64.1	70.1
		13:19 – 13:39		79.8	69.4	86.9
3	Residence 2901 Bridle Trail	08:54 – 09:14	30 ft from intersection of PVDN and Dapplegray Elementary School road; westbound side	67.3	66.6	68.6
		08:54 – 09:14		70.0	67.5	73.8
4	Residence 2950 PVDN	09:17 – 09:37	128 ft SSW of east end of PVDN; eastbound side	79.4	60.5	87.9
		14:07 – 14:28		55.2	54.1	55.8

See Appendix A of the Noise Study (Appendix F of this document) for noise monitoring data.

Significance thresholds. The RHE General Plan, Noise Element, illustrates noise levels and land use compatibility for various land uses present in the City (see HANA II, p. 13, Table 5). These levels are used to determine whether a new proposed use would be compatible with existing uses. Should a proposed use exceed unacceptable levels, the use should either be discouraged, or measures applied to reduce noise exposure. The proposed project is not a land use per se but would generate construction noise over an approximately two-year period. RHE Municipal Code Section 8.32.050 (Noise Ordinance), sets forth quantitative exterior noise standards for residential/agricultural, commercial, and industrial quarry

uses. For residential areas, exterior noise levels are assigned a baseline of 55 dBA. Noise levels are deemed to be excessive when they exceed an additional five dB over a 20-minute period in any hour, an additional ten dBA over a 10-minute period, or an additional 15 dB over a one-minute period. Accordingly, for residential areas, such noise levels would be attained at 60 dBA, 65 dBA, and 70 dBA over the respective time periods for purposes of RHE MC compliance. However, Table Noise-2 indicates that the project area ambient noise levels appear to be generally higher than the statutory baseline, indicating that project construction equipment might exceed the noise ordinance thresholds at higher noise levels (HANA II, p. 23).

All noise generators must comply with the Noise Ordinance. The Ordinance permits construction on Mondays through Fridays between 7:00 a.m. and 5:00 p.m., and on Saturdays from 9:00 a.m. through 5:00 p.m., subject to the noise standards discussed above (RHE Municipal Code Section 8.32.210). Ordinance compliance might require contractors to implement noise control measures such as construction management techniques, construction equipment controls, use of temporary sound barriers, or monitoring and responding to noise complaints. Section 8.32.210(F) requires that a contractor or homeowner apply for a variance if noise levels are expected to exceed noise standards. The variance would be issued with conditions (Section 8.32.230(D)) that would mandate noise control measures.

Because the City ordinance effectively sets for a process for preventing excessive noise from construction projects, with measures applicable to specific construction conditions, no further mitigation measures are required. Impacts are anticipated to be less than significant.

Operational Noise Impacts. The proposed intersection improvement will not generate new vehicle trips or incrementally increase traffic on the PVDN roadway. The noise model predicted that traffic is estimated to produce noise levels ranging from 62.30 dBA LA_{eq} at station 3 to 50.50 dBA LA_{eq} at station 1. Traffic noise was also modeled at eight receiver locations without ambient field measurements with results ranging from 59.31 dBA LA_{eq} to 47.72 LA_{eq} (HANA II, p. 22). Linear distances to the additional receivers from the nearest project roadway segment range from 153 feet to 366 feet. Notably, *modeled* noise levels at two receiver locations (stations 1 and 3) where field measurements were taken were lower than their measured ambient noise levels for both peak and non-peak time periods. The modeled noise level at station 4 exceeded the non-peak traffic level by less than 10 dBA (5.51 dBA) and is well below the peak traffic noise measurement.

The acceptable daytime noise level for residential land use is 55 dBA (HANA II, Table 6). However, none of the ambient noise measurement locations conform to the City's residential daytime land use criteria. However, the results of the TNM indicates that the noise level at six of the modeled receiver locations would comply (HANA II, Table 10). Ambient noise associated with traffic (and other intermittent and temporary activities) already exceeds the City's noise standards for the Project area and surrounding residential receptors. Generally, the modeled traffic noise associated with the proposed Project does not exceed the ambient conditions and six locations would meet the City's noise standard for residential land use. Accordingly, project traffic-related noise impacts would be less than significant.

b) **Less Than Significant Impact.** Certain types of construction equipment can generate high levels of ground borne vibration. Construction of the proposed project would potentially utilize bulldozers, loaded trucks, and jackhammers during construction phases. Vibration impacts are assessed based on the distance from the location of vibration-intensive construction activities, conservatively assumed to be at edge of the project site, to the edge of nearby off-site structures. Based on the distance of nearby structures to the project site, equipment was modeled from a minimum distance of 30 feet to maximum

distance of 554 feet. Table Noise-5 below, *Vibration Levels at Representative Receptors,* shows estimated ground borne vibration levels from proposed project equipment.

Construction Vibration Impacts. Construction equipment like bulldozers, loaders, jackhammers, loaded trucks, etc., can generate high levels of ground borne vibration. Like noise impacts, vibration impacts are assessed based on the distance from the location of vibration-intensive construction activities, conservatively assumed to be at the edge of the project site, to the edge of nearby off-site structures. Vibration amplitudes can be expressed in peak particle velocity (PPV), using inches per second (in./sec.) as the unit of measure. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is generally used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (HANA II, p. 8). Tables Noise-3 through Noise-5 show typical vibration effects.

Based on the distance of nearby structures to the project site, construction equipment was modeled from a minimum distance of 30 feet to maximum distance of 554 feet (Figure Noise-1 above). Table Noise-6, Vibration Levels at Representative Receptors, shows estimated ground borne vibration levels resulting from project construction.

The Caltrans Transportation and Construction Vibration Guidance Manual (HANA II, p. 18) was used to evaluate potential construction vibration impacts related to both potential building damage and human annoyance. Caltrans indicates that construction vibration impacts would be significant if vibration levels exceed 1.0 in/sec PPV (transient sources) and 0.5 in/sec PPV (continuous/frequent intermittent sources) for new residential structures, which are the limits where minor architectural damage may occur to each type of buildings (id.). Construction vibration impacts would also typically cause human annoyance at nearby receivers if vibration levels exceeded 0.25 in/sec PPV, the limit where vibration becomes distinctly perceptible.

Table Noise - 3 Vibration Damage Potential

Building Type	Maximum PPV (in./sec.)	
	Transient Sources	Continuous/ Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile Buildings	0.2	0.1
Historic and some old buildings	0.5	0.24
Other residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation (Caltrans) *Transportation and Construction Vibration Guidance Manual* (CT-HWANP-RT-20-365.01.01) (April 2020), available at http://website.dot.ca.gov/env/noise/docs/tcvgm-sep2013.pdf (accessed April 2021).

Table Noise - 4 Vibration Annoyance Potential

Human Response	Maximum PPV (in./sec.)	
	Transient Sources	Continuous/ Frequent Intermittent Sources
Severe/Disturbing	2.0	0.4
Strongly Perceptible	0.9	0.10
Distinctly Perceptible	0.25	0.04
Barely Perceptible	0.04	0.01

Source: California Department of Transportation (Caltrans) *Transportation and Construction Vibration Guidance Manual* (CT-HWANP-RT-20-365.01.01) (April 2020), available at http://website.dot.ca.gov/env/noise/docs/tcvgm-sep2013.pdf (accessed April 2021).

Table Noise - 5 Typical Construction Equipment Vibration Levels

Equipment	PPV (in./sec.) at 25'	Velocity Decibels at 25'
Large Dozer	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Dozer	0.003	58

Sources: California Department of Transportation (Caltrans) *Transportation and Construction Vibration Guidance Manual* (CT-HWANP-RT-20-365.01.01) (April 2020), available at http://website.dot.ca.gov/env/noise/docs/tcvgm-sep2013.pdf (accessed April 2021); *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, (CT-HWANP-RT-13069.25.2)(2013), available at https://www.dtsc-ssfl.com/files/lib_ceqa/ref_draft_peir/Chap4_10-Noise/Caltrans_2013a_Tech_Noise_Supplement.pdf (accessed April 2021).

Table Noise - 6 Estimated Vibration Levels at Representative Receptors

Distance[a]	554 feet	30 feet[b]	118 feet	128 feet
Station ID	1	2	3	4
Receiver ID	Receptor 1 (School)	N/A	Receptor 2 (Residence)	Receptor 3 (Residence)
Construction Equipment	Approximate PPVx (in./sec.)			
Large Dozer	0.0009	0.0677	0.0087	0.0077
Loaded Trucks	0.0007	0.0578	0.0074	0.0066
Jackhammer	0.0003	0.0266	0.0034	0.0030
Small Dozer	0.0000	0.0023	0.0003	0.0003

See Appendix D of Noise Study (Appendix F of this document) for vibration worksheets

[a] Linear distance from receptor to nearest project boundary

[b] No structures at this location; for comparison purposes only

Source: HANA II, Table 13.

As shown in Table Noise-6, ground-borne vibration from typical construction equipment would not exceed the applicable thresholds of 1.0 in./sec. PPV (transient sources) and 0.5 in./sec. PPV (continuous/frequent intermittent sources) for new residential structures or 0.5 in./sec. PPV (transient sources) and 0.3 in./sec. PPV (continuous/frequent intermittent sources) for older residential structures

surrounding the project site. Moreover, ground borne vibration would not exceed the threshold of 0.24 in./sec. PPV (transient sources) and the 0.035 in./sec. PPV (continuous/frequent intermittent sources) for human annoyance at the modeled distances. Accordingly, construction vibration impacts would be less than significant. Finally, the proposed project would not generate significant stationary sources of vibration, and vibration causes by PVDN traffic would return to existing levels after construction ceases. Operational vibration impacts are also expected to be less than significant.

c) **No Impact.** As noted in Section IX(e) above, the Torrance Municipal Airport (Zamperini Field) is located approximately 1.5 miles north of the project site and is part of the Los Angeles County Airport Land Use Plan. However, the intersection-improvement project would not introduce new habitable structures or sensitive receptors that would be susceptible to airport noise. As discussed above, construction workers would be temporarily exposed to airport noise, but they would also be exposed to equipment noise, which would most likely mask ambient airport noise; moreover, construction companies must comply with Cal-OSHA regulations for workers' hearing protection. Accordingly, no impacts associated with airport noise are anticipated.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Discussion:

a) **No Impact.** The proposed project would not induce unplanned population growth because it would not construct housing and is designed to accommodate existing traffic volumes. Moreover, as discussed in the Project Description above, the intersection improvements are a required mitigation measure for a planned development.

b) **No Impact.** The proposed project would not displace any people or housing since all work is confined to the existing roadway and embankments. No housing would be taken to accomplish the project.

XV. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☒	☐	☐

Impact Discussion:

a) **Less Than Significant With Mitigation Incorporated.** The proposed project would not result in adverse physical impacts associated with the above listed public facilities, as it would not require new construction. Impacts associated with the proposed project (other public facilities) are evaluated throughout this document with mitigation incorporated as needed to reduce impacts to less than significant levels.

XVI. RECREATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Impact Discussion:

a) **No Impact.** The proposed project would not change the use of existing parks since it is limited to intersection improvements at PVDN and London Lane. Use of the equestrian trail within the project area would be temporarily restricted during construction; however, the project would restore the trail with a modified alignment corresponding to the widened intersection.

b) **Less Than Significant Impact.** The proposed project includes re-aligning the equestrian trail that follows the northern edge of the project area. Impacts resulting from the trail re-construction are incorporated into the generalized project construction impact discussion, particularly as associated with aesthetics, biology, geology, and hydrology (respectively, Parts I, IV, VII, X) of this document.

XVII. TRANSPORTATION

Note: Except as provided in CEQA Guidelines § 15064.3(b)(2) (regarding roadway capacity projects), a project's effect on automobile delay shall not constitute a significant environmental impact. See 14 CCR § 15064.3.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) *(Criteria for Analyzing Transportation Impacts)*?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

Impact Discussion:

a) **No Impact.** The proposed project is consistent with mitigation required for the Peninsula Village Overlay District as discussed in the Project Description above. Moreover, the project would augment alternative transportation facilities by re-aligning a community equestrian trail and upgrading ADA access ramps.

b) **No Impact.** The proposed project does not conflict with the CEQA criteria for analyzing transportation impacts, because it would not generate new vehicle miles traveled, and as noted above, is itself a mitigation measure to relieve traffic congestion anticipated by the Peninsula Village Overlay District.

c) **No Impact.** The proposed project would not introduce safety hazards, simply because it is designed to improve the intersection configuration, to relieve existing congestion, and to increase turning-movement safety.

d) **Less Than Significant Impact.** The proposed project would not result in inadequate emergency access once completed; rather, establishing through-lanes in the project area would alleviate congestion and improve emergency vehicle travel along PVDN. As discussed in Part IX above, in the event of a region-wide emergency, such as an earthquake or wildfire, construction work would stop to facilitate emergency access. Moreover, PVDN would remain open during construction, in part so that emergency vehicles are not obstructed.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Background and Regulatory Setting

CEQA Section 21073 defines "California Native American Tribe" as "a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004." Additionally, CEQA Section 21074 defines "tribal cultural resources" as either of:

> (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
>
> (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
>
> (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
>
> (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.
>
> In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Arising from Assembly Bill 52 (AB 52, Gatto, 2014), CEQA Section 21080.3.1(b) requires that "prior to releasing a negative declaration, mitigated negative declaration or environmental impact report, public agencies must consult with California Native American Indian tribes that are traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American

tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation." Section 21080.3.1(d) further requires that agencies formally notify designated representatives of California Native American tribes who have requested such notification about projects that the agency plans to undertake (such as road construction) or about entitlement applications the agency is considering. This notification must take place within 15 days of a determination to proceed with the public project or upon determining that a private development application is "complete" per the requirements of the Permit Streamlining Act. The interested California Native American tribe must tell the agency within 30 days of receiving the notification that it desires a formal "consultation," and the lead agency in turn must begin the consultation process within 30 days of receiving a tribe's request.

The statute does not set forth procedures for CEQA documents that tier from an earlier-adopted document, such as supplements to EIRs or Negative Declarations, addenda or subsequent documents per CEQA Guidelines Section 15160 et seq.

Impact Discussion:

a) **No Impact.** The proposed project would not affect any properties listed or eligible for listing in any register of historical resources, because as discussed in Section V, Cultural Resources, above, no such properties exist in the project area. As discussed in the Cultural Resources report prepared for the project, the California Historic Resource Inventory System (CHRIS) records search and the pedestrian survey did not locate any known cultural resources within the project boundary. Widening of the road would be accomplished by grading into slopes along the northwest and southwest stretches that had already been cut for the original roadway and no longer represent native surface soil.

Widening of the road to the northeast and western edge to the southeast would consist of fill in a ravine and thus would not affect any potential remaining native soil surface. As evidenced in the present cuts adjacent to the road, bedrock consisting of Altamira Shale lies just a few feet below an overlay of soil. These are locations at the edges of slopes that would not have been suitable locations for prehistoric habitations, camps or features, and their original surfaces would have been either removed or filled with overburden during the original construction of Palos Verdes Drive North.

Moreover, there is no evidence of prehistoric cultural resources within the project boundary and the nearest known site is approximately 0.50 mile to the north-northeast. (HANA I, p. 24). No records within the project area and a 0.5-mile buffer around the project area appear in the Native American Sacred Lands File (HANA I, p. 22).

b) **Less Than Significant With Mitigation Incorporated.** The proposed project would not be expected to disturb resources important to any affiliated California Native American Tribe, simply because the excavation associated with the project would either affect existing fill soil or would extend into bedrock beneath the fill, and as noted in (a) above, the terrain would not have been suitable for human habitation, and the comprehensive records search revealed no evidence of Native American sites in the project vicinity.

The cultural resource study's findings were relayed to eight tribal contacts representing seven local tribes during the City's AB 52 tribal notification process (detailed in HANA I, p. 22). Of the contacts, Chairperson Anthony Morales of the Gabrieleno/Tongva San Gabriel Band of Mission Indians requested that considering the known presence of Tongva village sites throughout the Palos Verdes peninsula, deeply-buried cultural resources could exist within the project boundaries. He further requested to be contacted if any cultural material was discovered during excavation. Accordingly, Mitigation Measures TCR 1-3 will apply to reduce potential impacts to less than significant levels.

Mitigation Measures

TCR-1: If suspect resources with any potential cultural value to a California Native American Tribe are found during ground-disturbing activities into native soils, the City shall contact and retain a Native American monitor, procured by the Gabrieleno/Tongva San Gabriel Band of Mission Indians or consulting Tribe under AB52. During excavation, the Native American monitor shall have the authority to halt any activities adversely impacting tribal resources. If human remains are uncovered, the Los Angeles County Coroner, Native American Heritage Commission, local Native American representatives, and archaeological monitor shall determine the nature of further studies, as warranted in accordance with Public Resource Code 5097.98.

TCR-2: The Lead Agency shall, in good faith, consult with the Gabrieleno/Tongva San Gabriel Band of Mission Indians on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact Discussion:

a) **Less Than Significant With Mitigation Incorporated.** The project would not require new or expanded water, wastewater treatment, stormwater drainage, electric or natural gas facilities, or telecommunication facilities. The project would require relocation and replacement of utility poles, but as described previously, most project construction would take place on already-disturbed fill soils. Other environmental impacts that could occur with grading and excavation for utility pole placement are discussed in Sections 1-XVIII above and mitigated as needed. Mitigation Measures AES-1, AQ-1, BIO 1-3, CULT 1-3, GEO-1, and TCR 1-2 would serve to reduce these impacts to less than significant levels.

b) **Less Than Significant Impact.** The proposed project would be expected to have sufficient water supply to provide for new plantings' irrigation requirements, particularly since as discussed in Part X above, construction activities (concrete mixing, water application for dust control, etc.) would use limited amounts of water; the proposed landscaping associated with the project would both replace existing landscaping and add new plant material; all new plants would be varieties selected to require minimal irrigation at maturity. The irrigation system would be capable of delivering approximately 39,751 gallons of water annually, although the actual plants' water requirements would likely be lower. During droughts, the City would be able to scale irrigation volume according to water conservation requirements. Impacts with respect to water supply would accordingly be less than significant.

c) **No Impact**. The proposed intersection-improvement project would not generate wastewater.

d) **Less Than Significant Impact.** Project construction will generate excess concrete and asphalt material during the demolition of portions of the existing roadway. Debris would be recycled or transported to the regional sanitary landfill and used as inert cover. The volume of debris generated during project construction is not expected to significantly impact landfill capacities. Project operation will not generate solid waste.

e) **Less Than Significant Impact.** Disposal of waste materials generated during construction will comply with all local, state, and federal requirements for integrated waste management (e.g., recycling, green waste) and solid waste disposal. As stated above, construction of the project is not anticipated to exceed the standards or capacity of local disposal facilities.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Impact Discussion:

a) **Less Than Significant Impact.** The proposed intersection improvement project would not be expected to impair emergency response or evacuation plans, because as discussed in Section IX, Hazards and Hazardous Materials above, PVDN would remain open during construction, and construction work would stop in the event of an earthquake or wildfire affecting the project area.

b) **No Impact.** The proposed project would not expose current residents or students and staff of Dapplegray Elementary School to wildfire risks greater than exist now, because project construction is limited to intersection improvements (paving, landscaping, replacement of bus shelters, relocation of utility poles, etc.) and would not increase the population density of the area by building housing or commercial space.

c) **No Impact.** The proposed project is itself an intersection improvement that would alleviate an existing bottleneck created by merging lanes and vehicles stopped waiting to turn into London Lane from PVDN. Risks associated with wildfire would not change, as the surrounding landscape would not be changed by the project and no new land uses would be introduced. Again, as noted previously, the intersection improvements are a mitigation requirement of the Peninsula Village Overlay District and as noted in Section XIX(a) above, mitigation measures throughout this document are intended to reduce environmental impacts to less than significant levels.

d) **No Impact.** The proposed project would not increase the existing human exposure to post-wildfire risks, because it would not change the overall topography of the area around the intersection. Retaining walls would be designed to preclude instability after a fire, particularly because backfill would be stabilized by engineered fill materials, and wall foundations would be designed to resist collapse or overturning. The overall drainage configuration would not change, as the primary drainage culvert underneath the roadway lies at an approximate 30’ depth below the roadway surface and excavation would not extend to that depth.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? *("Cumulatively considerable" means that the incremental effects of a 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.)*	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion:

a) **Less than Significant Impact with Mitigation Incorporated.** The proposed project could incrementally degrade the quality of the project area's biological and cultural environment by emitting objectionable odors, removing existing ornamental tree species, excavating for retaining walls, and generating construction noise and vibration. However, as discussed in the respective sections above, Mitigation Measures AQ-1, BIO-1 through 3, CULT-1 through 3, GEO-1, TRC-1 and TRC 2 as applied to the project would reduce impacts to less than significant levels.

b) **Less than Significant Impact.** The proposed project's impacts are not expected to be cumulatively considerable because the project is limited in scope to the area around the intersection of PVDN and London Lane. Moreover, the project is required mitigation for the Peninsula Village Overlay District as discussed in the Project Description above.

c) **Less than Significant with Mitigation Incorporated.** The proposed project could generate objectionable odors resulting from asphalt application as well as excessive noise during construction. However, Mitigation Measure AQ-1 would reduce odor impacts to less than significant levels, and compliance with the City's Noise Ordinance would minimize community noise exposure.