La Vista Park Council Infrastructure Committee - Project Update



La Vista Park Site Plan

Site Plan - 2/28/2018

Current Site Plan



Site Plan Approved 2/28/2018



Council Infrastructure Committee - Project Update

Park Renderings



Earthforms + Science Garden



Playground + Slides La Vista Park - Hayward, CA





Play Field

Park Programming

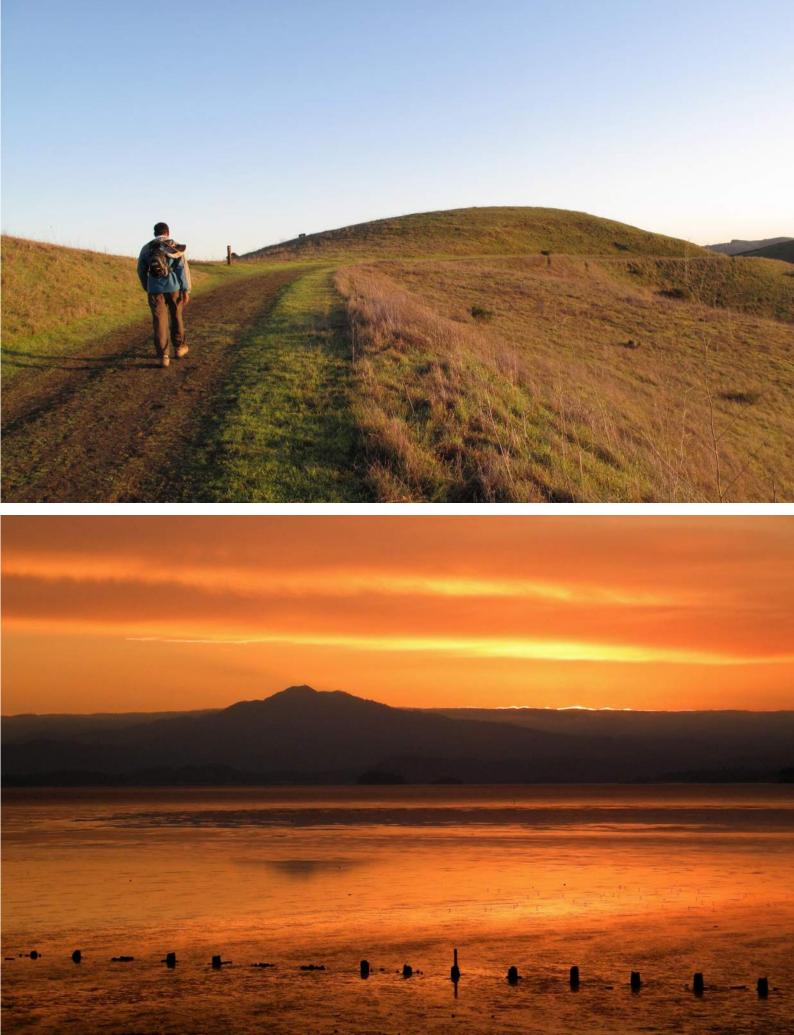


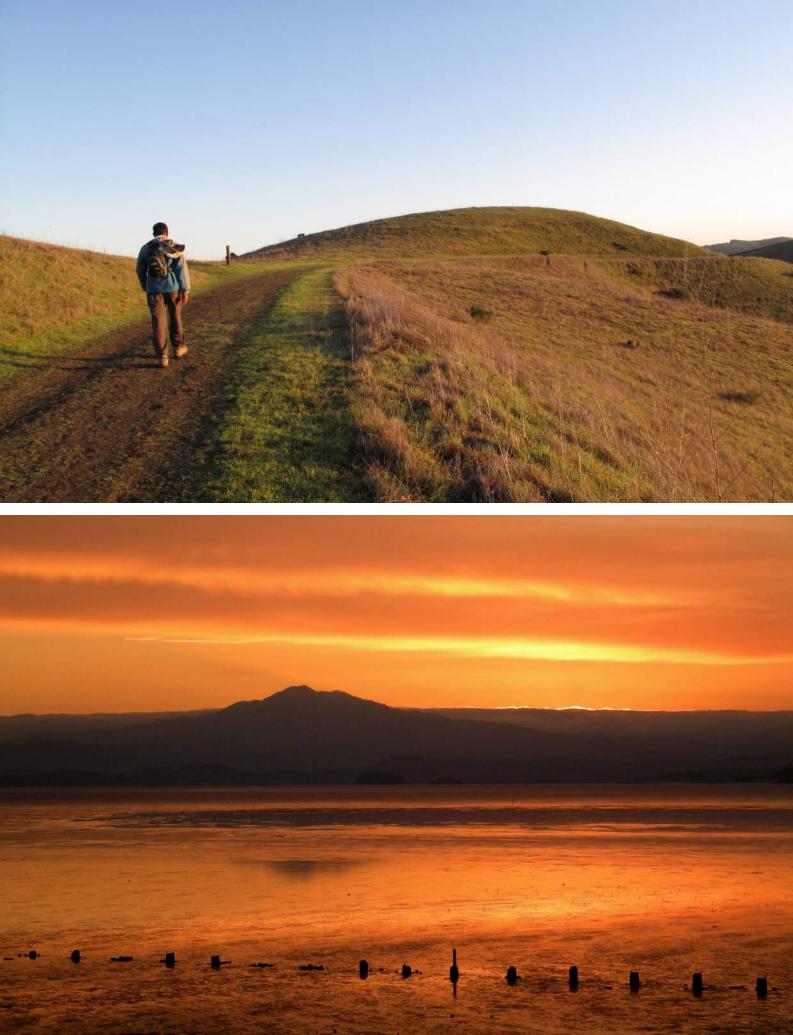
*Entire Park Universally Accessible

Precedent Imagery













Existing Site



An Inc

<image>



Stoken har light

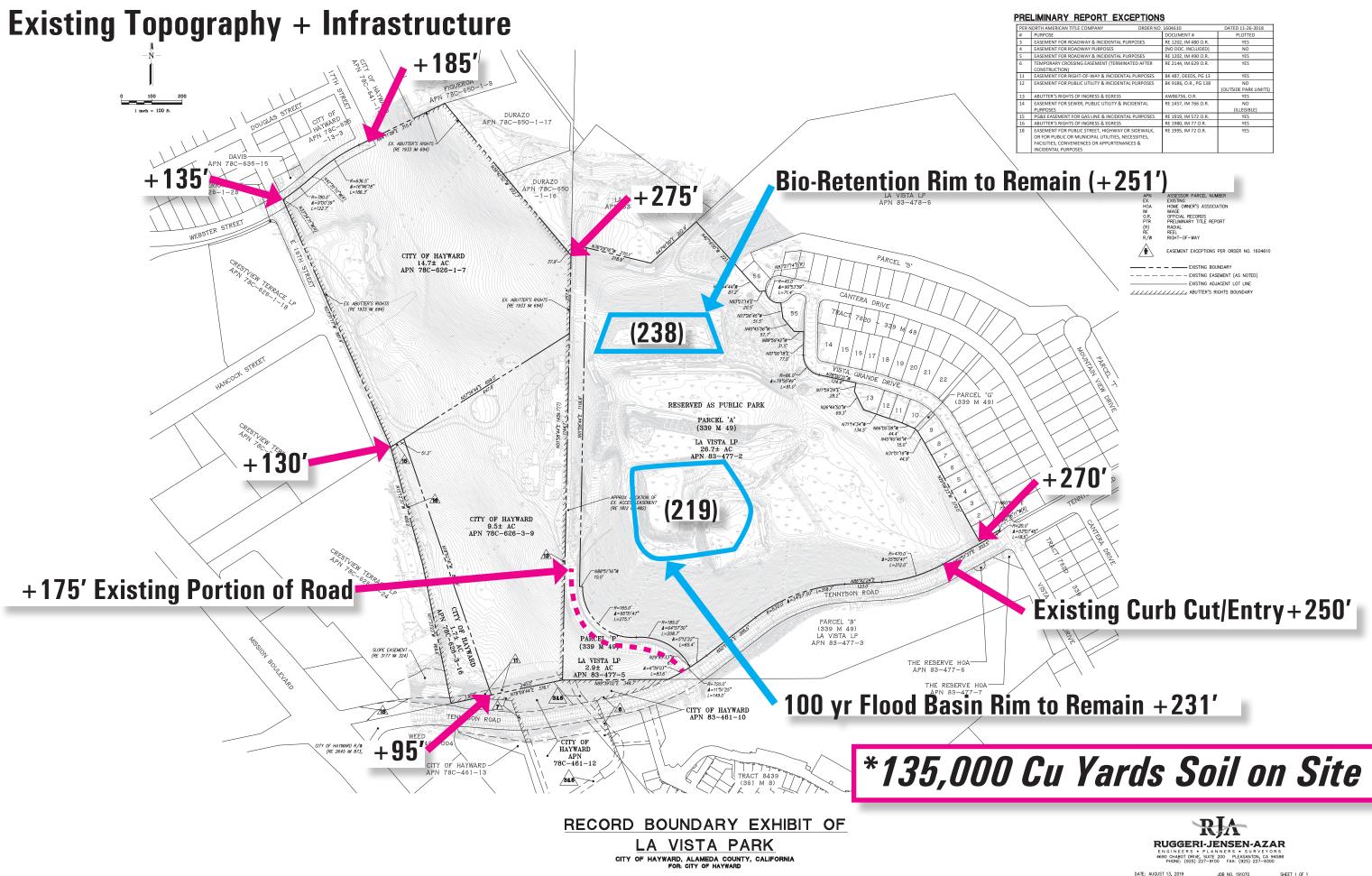


titled Map

Existing Site



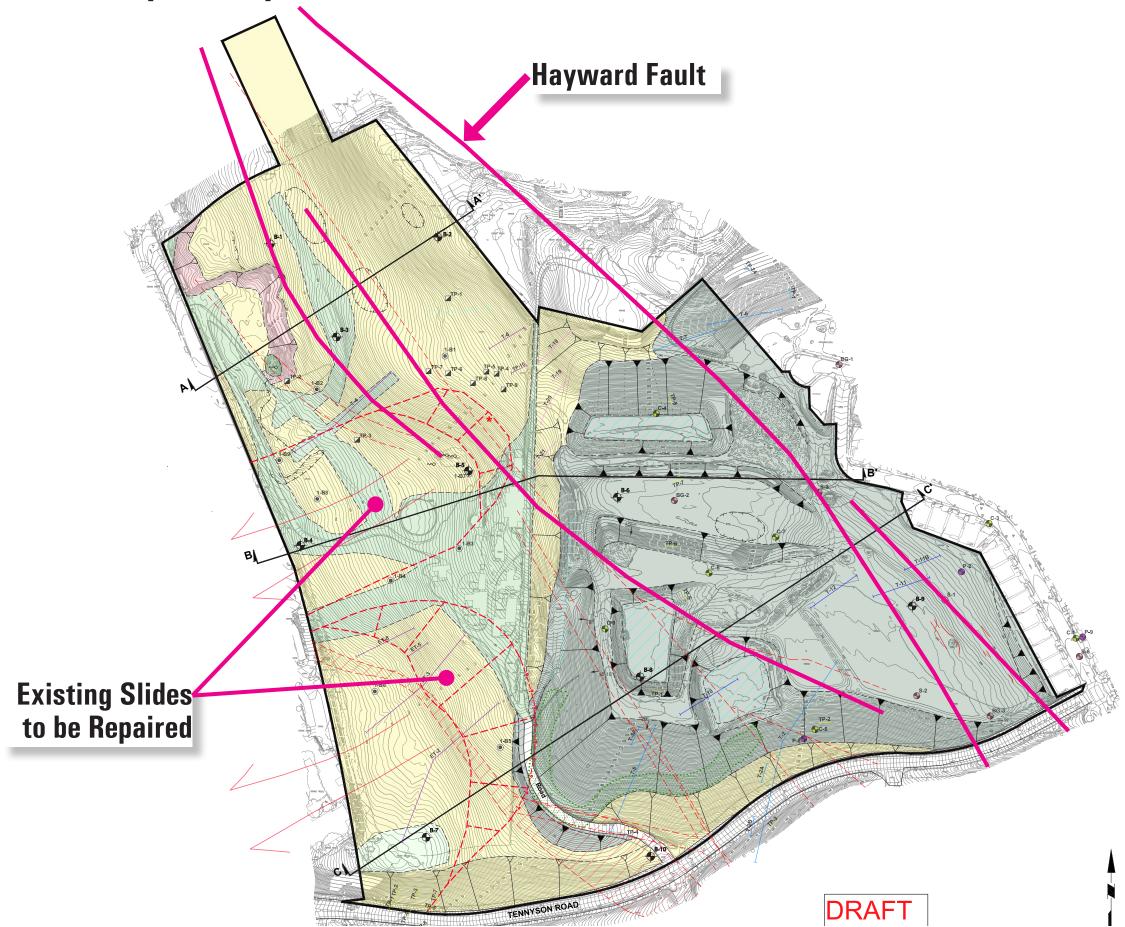
Site Constraints + Challenges



AMERICAN TITLE COMPANY ORDER NO	DATED 11-26-2018	
POSE	DOCUMENT #	PLOTTED
MENT FOR ROADWAY & INCIDENTAL PURPOSES	RE 1202, IM 480 O.R.	YES
MENT FOR ROADWAY PURPOSES	(NO DOC. INCLUDED)	NO
MENT FOR ROADWAY & INCIDENTAL PURPOSES	RE 1202, IM 490 O.R.	YES
PORARY CROSSING EASEMENT (TERMINATED AFTER STRUCTION)	RE 2144, IM 629 O.R.	YES
MENT FOR RIGHT-OF-WAY & INCIDENTAL PURPOSES	BK 487, DEEDS, PG 13	YES
MENT FOR PUBLIC UTILITY & INCIDENTAL PURPOSES	BK 9186, O.R., PG 138	NO (OUTSIDE PARK LIMITS)
TTER'S RIGHTS OF INGRESS & EGRESS	AW86756, O.R.	YES
MENT FOR SEWER, PUBLIC UTILITY & INCIDENTAL POSES	RE 1457, IM 766 O.R.	NO (ILLEGIBLE)
E EASEMENT FOR GAS LINE & INCIDENTAL PURPOSES	RE 1919, IM 572 O.R.	YES
TTER'S RIGHTS OF INGRESS & EGRESS	RE 1980, IM 77 O.R.	YES
MENT FOR PUBLIC STREET, HIGHWAY OR SIDEWALK, OR PUBLIC OR MUNICIPAL UTILITIES, NECESSITIES, LITIES, CONVENIENCES OR APPURTENANCES & DENTAL PURPOSES	RE 1995, IM 72 O.R.	YES







→ ¹⁸⁻¹	EXPLANATION Approximate lacation of Langan boring, 2019
AL_A	Idealized geologic cross section
	Site Boundary
1000	Keyway
~~0	GEOLOGIC Seep
ΤT	Fill slope, approximately located
ŢŢ	Cut slope, approximately located
Ĵ	Depression
	Geologic contact, approximately located
	Drainage
	Hayward Fault, USGS Fault and Fold Database
	Linear Cracks
6 🛰	Slope inclination as measured in field with angle in degrees
	Retention Pond (Dry)
	Af, Residual Grading Fill
	Af, Agricultural Fill
	Af, Thin artificial fill
	Qc, Colluvium
N	Qols, Old Landslide Deposit (dashed where inferred, queried where uncertain)
	KJkc, Knoxville Formation
	PREVIOUS INVESTIGATIONS
6 ^{C-3}	Test Boring (BGC, 1997)
S ⁻²	³ Test Boring (BGC, 2004a)
● ^{P-2}	Test Boring (BGC, 2004c)
1-B7	Exploratory Boring (ENGEO, 2016)
i	Trench (BGC, 2000b)
i	Trench (BGC, 2001a)
— —	Trench (BGC, 2005)
	Trench (ENGEO, 2016)
	Test Pit (BGC, 1999a)
	Test Pit (BGC, 1996)
	Test Pit (BGC, 2000a)
TP-9	Exploratory Test Pit/Trench (Engeo, 2016)
_	Approximate locations of faults from previous explorations (BGC, 2005;
	ENGEO, 2016)
ZZ3	Wide fault zone with serpentinitic gouge (ENGEO, 2016)

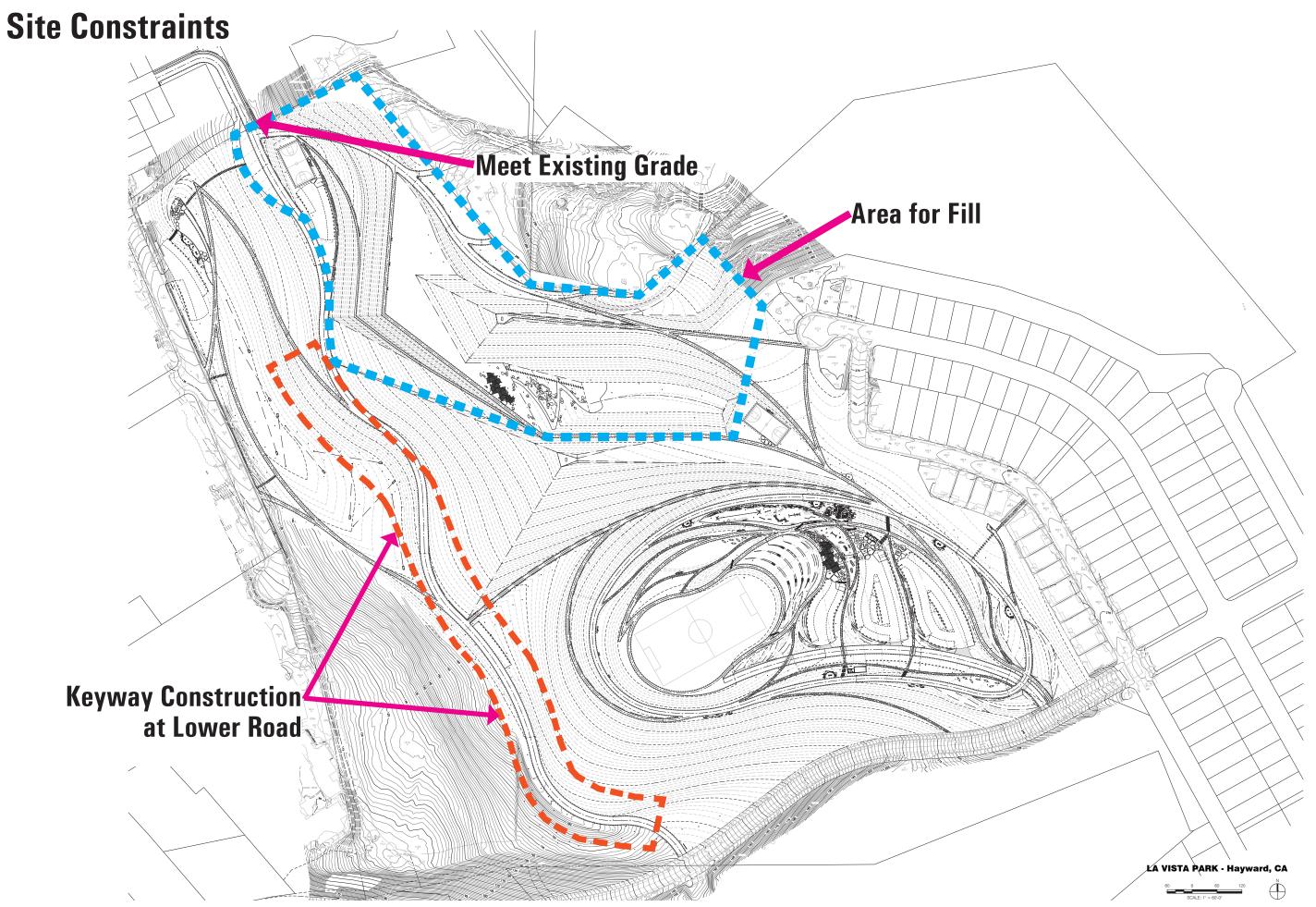
★ Similar Landslide mapped by ENGEO in 2016



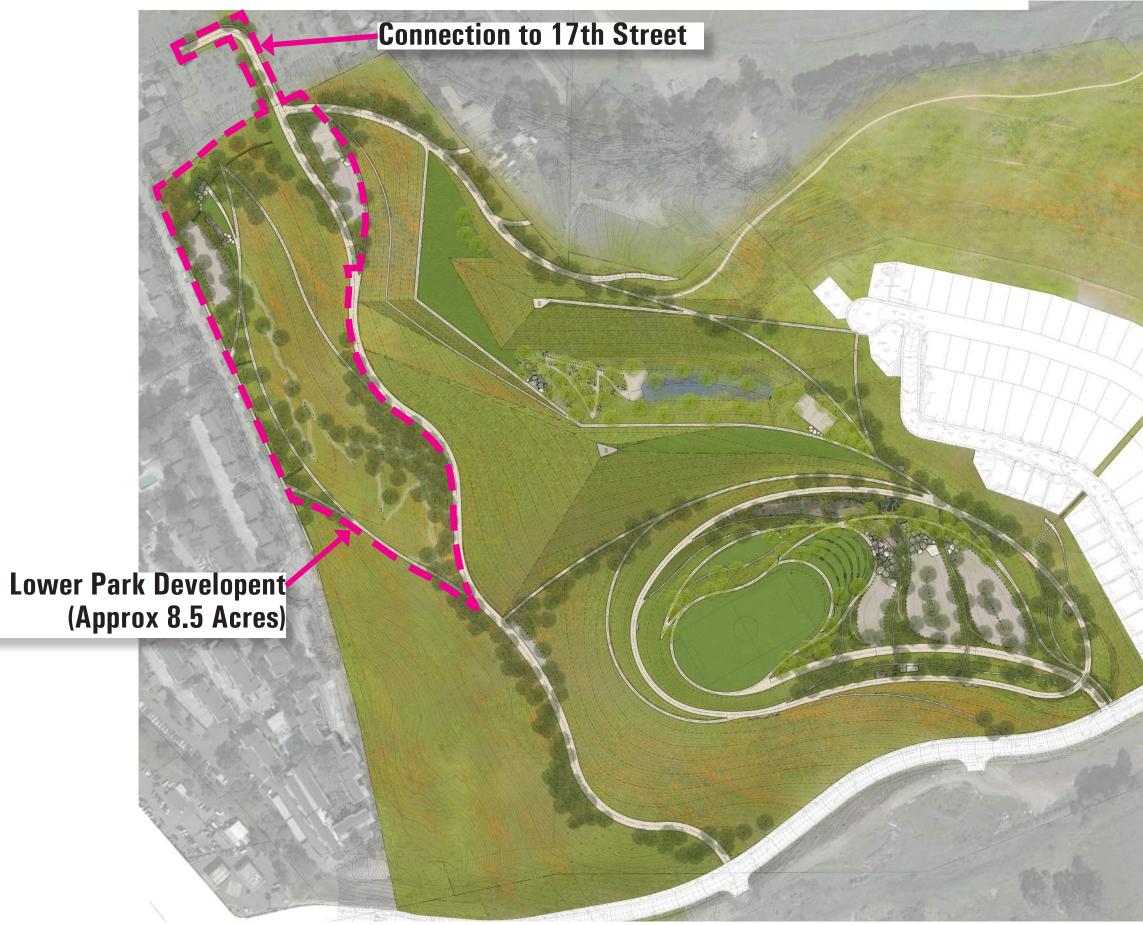
Geotech Recommendations



Balancing Cut + Fill on Site



Northern Park Area + Road Connection





Council Infrastructure Committee - Project Update

Design Update + Grading Strategy



La Vista Park - Hayward, CA



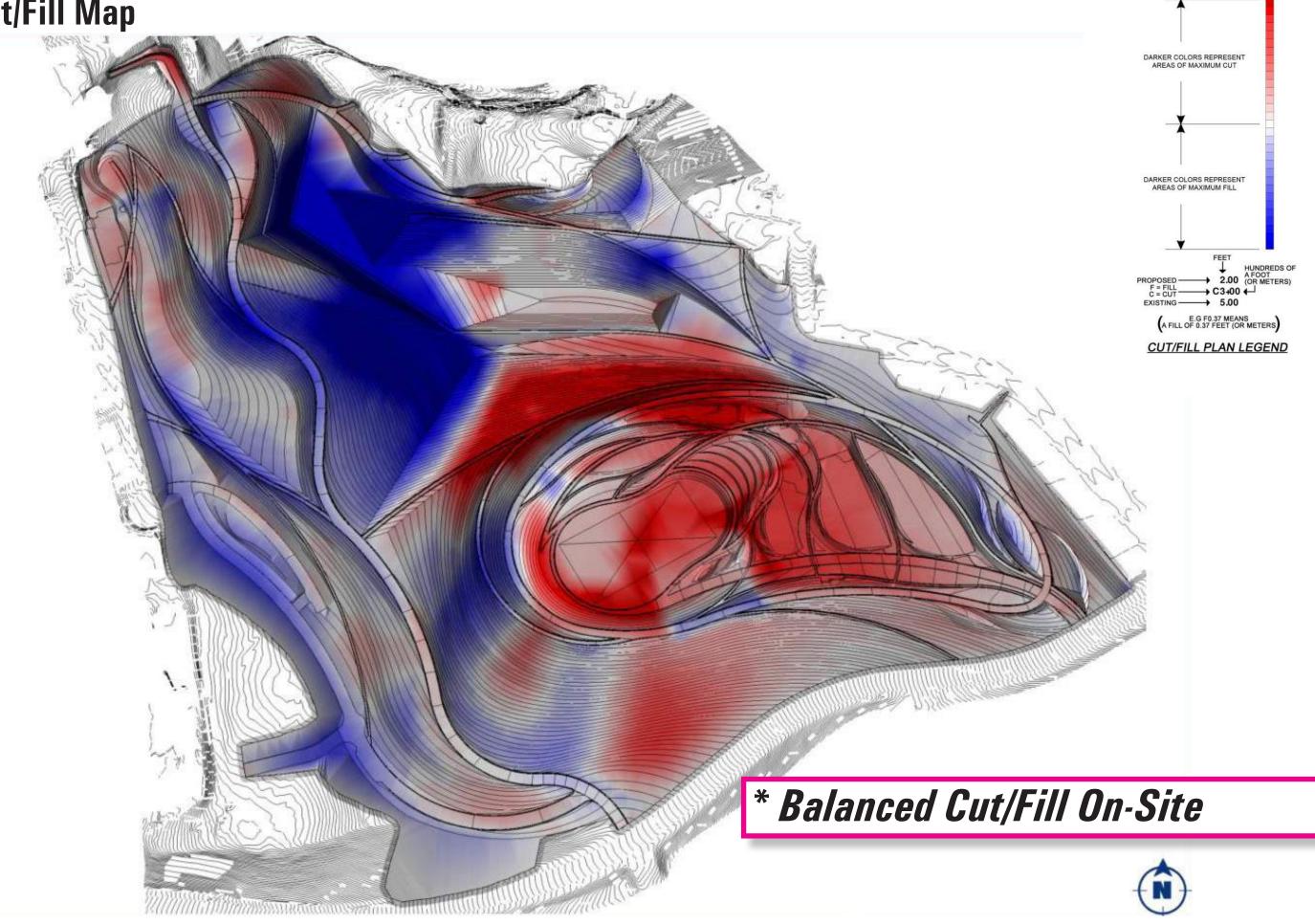
Full Basketball Court

Circulation



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Current Cut/Fill Map



Current Site Plan



Council Infrastructure Committee - Project Update

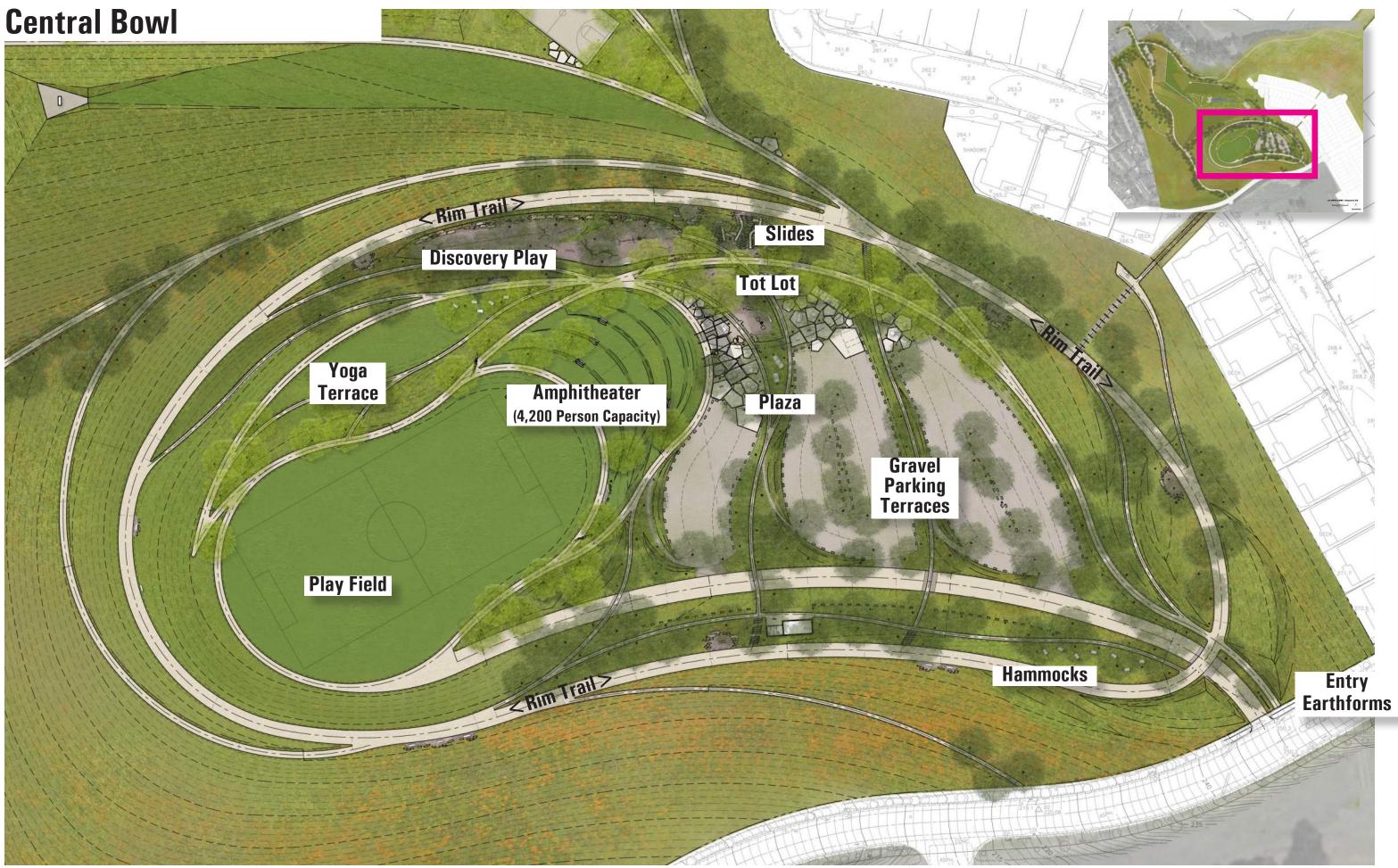
Progam + Park Development

Earthforms + Science Garden / Bio-Retention



La Vista Park - Hayward, CA

Council Infrastructure Committee - Project Update



La Vista Park - Hayward, CA

Council Infrastructure Committee - Project Update

Discovery Playground





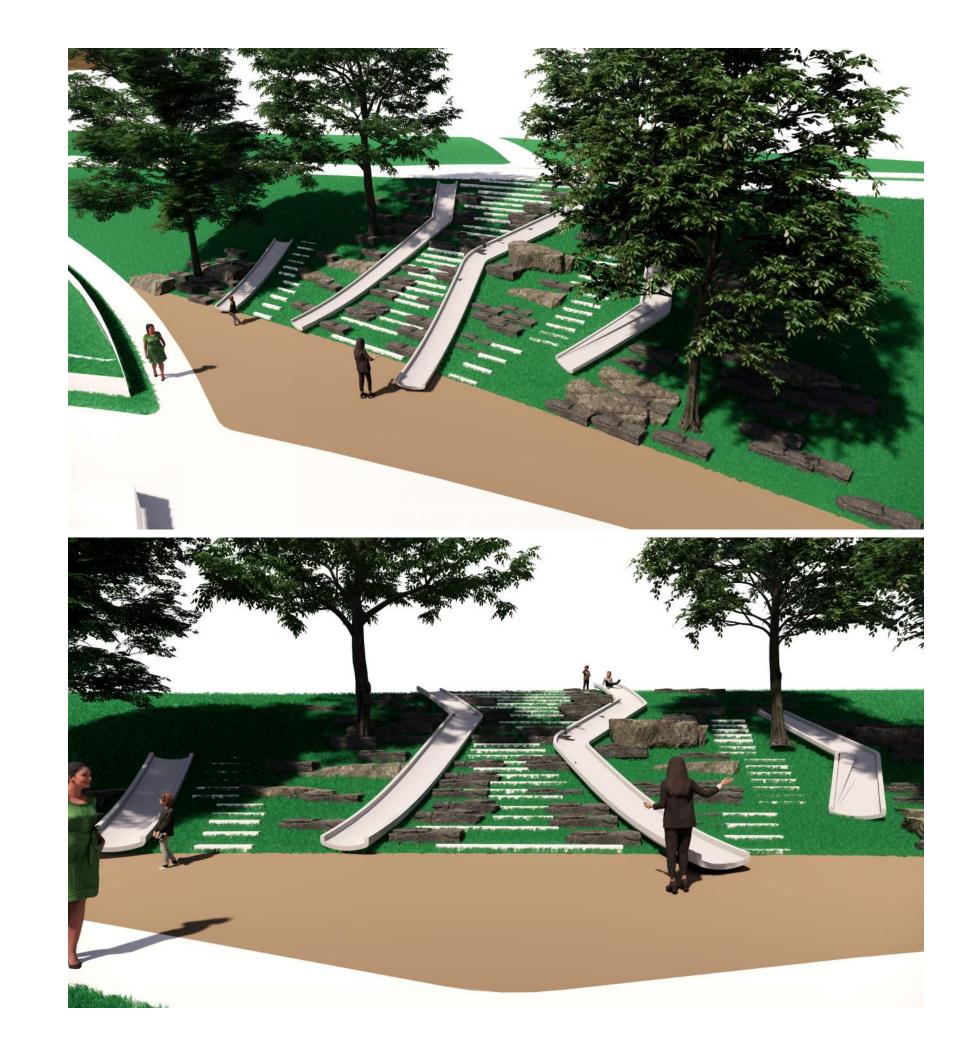
Tot Lot



La Vista Park - Hayward, CA

Council Infrastructure Committee - Project Update

Slides







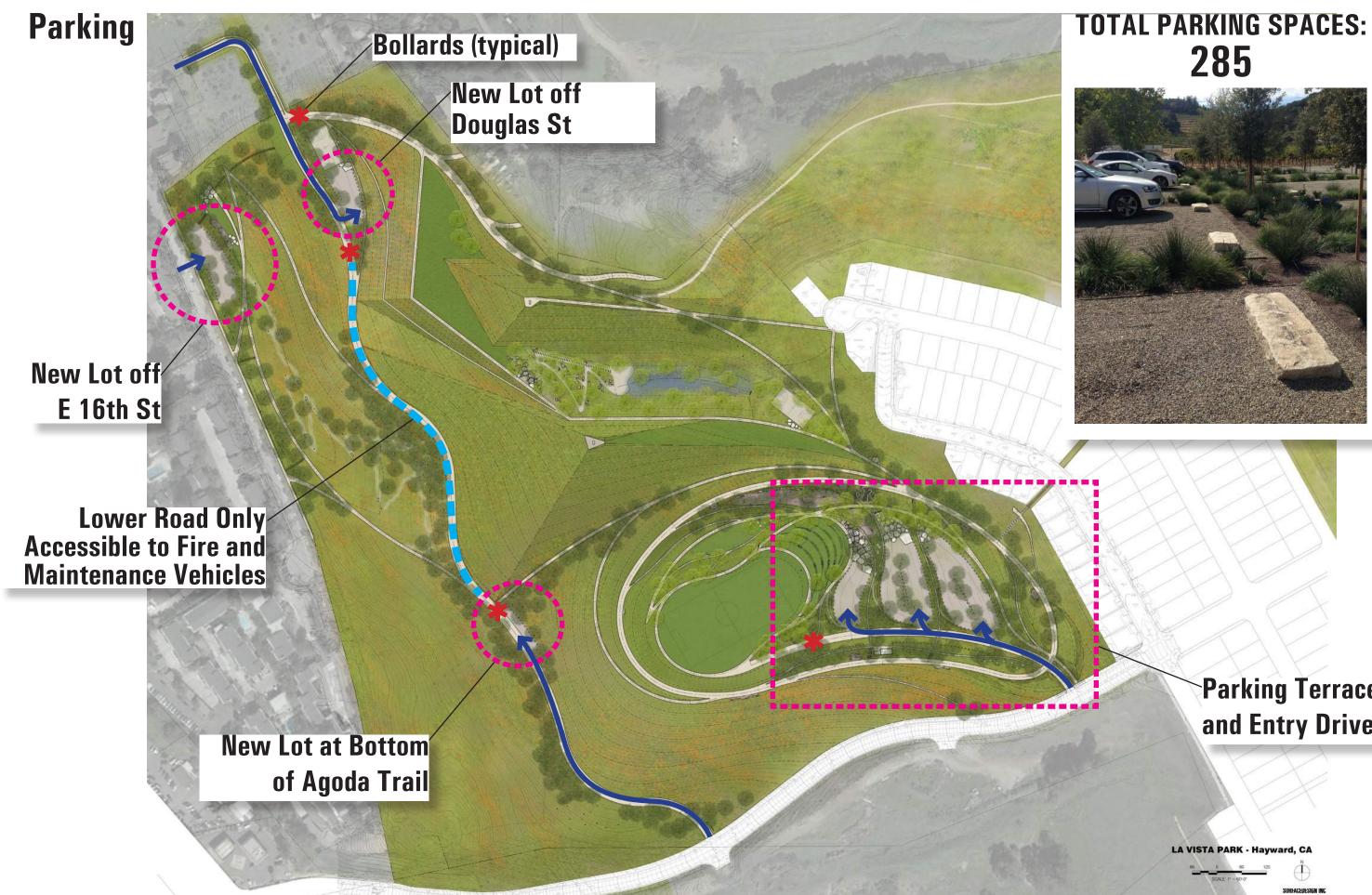
Trellis Study + Boulders







Council Infrastructure Committee - Project Update



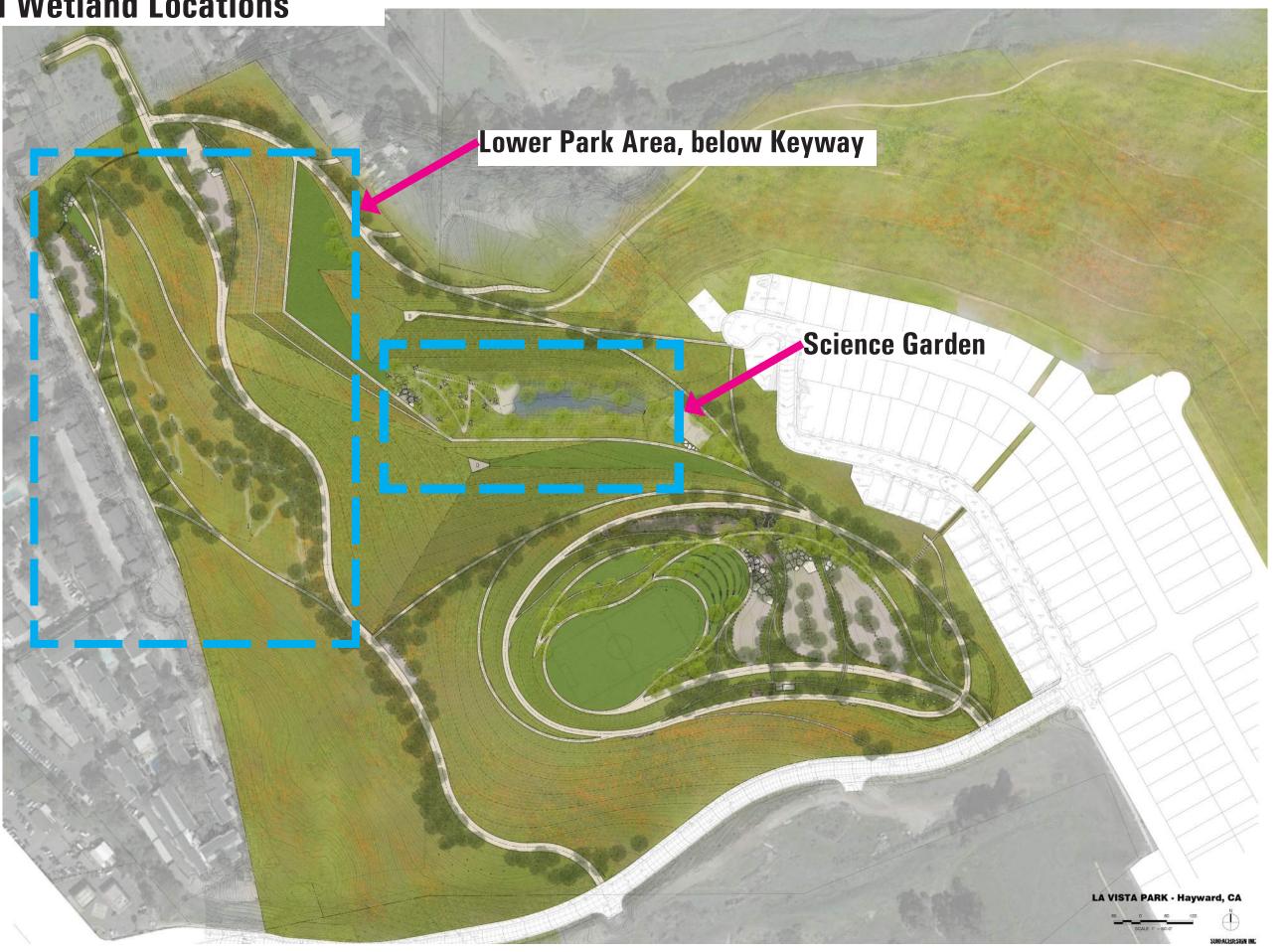
Parking Terraces and Entry Drive

Parcel 3 Engagement





Potential Wetland Locations



Construction Costs + Budget

Additional Cost

Engineer's Opinion of Probable Construction Costs La Vista Park 35% Improvement Plans City of Hayward, California

Date: June 17, 2020

Engineer's Opinion of Probable Construction Costs La Vista Park 35% Improvement Plans City of Hayward, California

ltem	Description	Quantity	Unit	Cost	Total Cost
Α.	KEYWAY CONSTRUCTION				
1	Keyway Mobilization	1	LS	\$10,000.00	\$10,00
2		1	LS	\$5,000.00	\$5,00
Va	y Approx \$1.3M More	1	LS	\$5,000.00	\$5,00
4	neyway Excavation	183,200	CY	\$4.00	\$732,80
5	Keyway Cement Treated Backfill	183,200	CY	\$10.00	\$1,832,00
6	Keyway Geogrid Placement	181,250	SF	\$4.00	\$725,00
7	Keyway Backdrain	1,450	LF	\$85.00	\$123,25
0	Keyway Export	9,500	υr	\$15.00	\$142,50
				SUBTOTAL=	\$3,575,55
<u>D.</u>	OITE WORK				
1	Mobilization	1	LS	\$10,000.00	\$10,00
2	Clear and Grub	1	LS	\$15,000.00	\$15,00
3	Traffic Control	1	LS	\$10,000.00	\$10,00
4	Construction Staking	1	LS	\$120,000.00	\$120,00
5	Temporary Construction Fencing	5,200	LF	\$8.00	\$41,60
6	Remove and Offhaul Existing Storm Drain Pipe	1,200	LF	\$50.00	\$60,00
7	Cut Ex SD and Plug End with Brick and Mortar	3	EA	\$500.00	\$1,50
8	Remove and Offhaul Existing 48" Storm Drain Pipe	370	LF	\$55.00	\$20,35
9	Remove and Offhaul Existing SDMH	1	EA	\$1,500.00	\$1,50
10	Remove and Offhaul Existing 8" SS Pipe	490	LF	\$35.00	\$17,15
11	Rough Grading	290,000	CY	\$3.00	\$870,00
12	Export	24,700	CY	\$18.00	\$444,60
13	Erosion and Sediment Control and SWPPP Implementation	1	LS	\$25,000.00	\$25,00
14	Remove and Offhaul Existing Trees (Allowance)	1	LS	\$5,000.00	\$5,00
				SUBTOTAL=	\$1,641,70

17th Street Connection

		320,000	SF	\$0.35	\$112,000
2	Asphalt Paving with "StreetBond" Color Compound and Hardener	4,390	TON	\$200.00	\$878,000
3	Class 2 Aggregate Base	6,440	CY	\$80.00	\$515,200
				SUBTOTAL=	\$1,505,200
D.	CONCRETE				
1	Remove and Replace 6" Curb and Gutter on East 16th Street	1,000	LF	\$85.00	\$85,000
2	Remove and Replace 0" Ourb and Outlor on Tennyson Road	20		\$05.00	\$1,700
3	Sawcut Existing AC Pavement on Tennyson & Replace with 1' AC Plug	20	LF	\$50.00	\$1,000
1	Remove and Replace Existing Sidewalk on Tennyson Read	190	СГ	¢20.00	\$0,000
5	City Standard SD-8 Sidewalk along East 16th Street	3,400	SF	\$12.00	\$40,800
Ū	4 Cast in Place Concrete Paving	15,500	ъг	\$15.00	\$232,500
7	1.5' Wide Concrete Ditch	16,300	LF	\$25.00	\$407,500
8	Water Barrier along upslope of Lower Road, Entry Drive, and Trails	16,300	LF	\$3.00	\$48,900
9	Curb Ramp	4	FA	\$5,000,00	\$20,000
10	24' Driveway on East 16th Street	1	EA	\$3,500.00	\$3,500
				SUDTOTAL-	\$044,500
Ε.	SANITARY SEWER				
1	6" SDR-26 PVC Sanitary Sewer	300	LF	\$150.00	\$45,000
2	8" SDR-26 PVC Sanitary Sewer	410	LF	\$175.00	\$71,750
3	Adjust Sanitary Sewer Manhole to Finished Grade	7	EA	\$1,000.00	\$7,000
	4" Sanitary Sewer Lateral	5	EA	\$600.00	\$3,000
4					, ,
4 5	Sanitary Sewer Cleanout	6	EA	\$500.00	\$3,000
-		6	EA EA	\$500.00 \$12,000.00	
5	Sanitary Sewer Cleanout	6 1 3		· · ·	\$3,000 \$12,000 \$7,500

	<u>F.</u>	STORM DRAIN							
	1	8" SDR-35 PVC Storm Drain Pipe	1,000	LF	\$150.00	\$150,000			
	2	12" SDR-35 PVC Storm Drain Pipe	2,500	LF	\$175.00	\$437,500			
	3	18" SDR-35 PVC Storm Drain Pipe	2,015	LF	\$200.00	\$403,000			
	4	48" RCP Storm Drain Pipe	400	LF	\$250.00	\$100,000			
	5	12"x12" Drop Inlet with Side Opening	6	EA	\$5,000.00	\$30.000			
	6	18"x18" Drop Inlet with Side Opening	Ra	isi	n Line	Annr	ΠΧ	SR	IUK
	7	24"x24" Drop Inlet with Side Opening					UA	TUU	
	8	Adjust Existing Storm Drain Manhole to Finished Grade	7	EA	\$1,000.00	\$7,000			
	9	Adjust Existing Drop Inlet to Finished Grade	5	EA	\$1,000.00	\$5,000			
	10	48" Storm Drain Headwall	2	ΕA	\$25,000.00	\$50,000			
	11	City Standard Storm Drain Manhole	2	EA	\$12,000.00	\$24,000			
Г	12		10	EA	\$2,300.00	\$32,500			
L	13	Soccer Field Liner with 4" Perforated Subdrain and Drain Rock	200,000		\$4.00	\$800,000			
L	14	C3 Stormwater Treatment (Allowance)	1	15	\$300 000 00	\$300.000			
					SUBTOTAL=	\$2,569,500			
	<u>G.</u>	WATER LINE							
	1	3" Schedule 40 PVC Water Service	1,200	LF	\$75.00	\$90,000			
	2	Gate Valve	7	EA	\$2,500.00	\$17,500			
	3	Check Valve	4	EA	\$3,500.00	\$14,000			
	4	2" Potable Water Service and Meter	1	EA	\$5,500.00	\$5,500			
	5	2" Irrigation Water Service and Meter	1	EA	\$5,500.00	\$5,500			
	6	2" Reduced Pressure Backflow Preventer	2	EA	\$6,500.00	\$13,000			
	7	Connect to Existing Water Line	2	EA	\$5,000.00	\$10,000			
					SUBTOTAL=	\$155,500			
	<u>H.</u>	MISCELLANEOUS							
	1	4" Thick Decomposed Granite	60,000	SF	\$3.50	\$210,000			
	2	Cobble Paving - Vehicular	1,894	SF	\$12.00	\$22,730			
	3	Cobble Paving - Pedestrian	462	SF	\$8.00	\$3,700			
	4	4" Thick, 3/8" Pea Gravel Paving	66,000		\$3.00	\$198,000			
	5	Turf Cell Paving	14,800		\$18.00	\$266,400			
	6	Removable Bollards on Tennyson Road	3	EA	\$750.00	\$2,250			
	7	Class 2 Aggregate Base	1,160	CY	\$80.00	\$92,800			
					SUBTOTAL=	\$795,880			

Notes:

1. It is assumed for this probable construction costs that high strength flexible storm drain pipes are not required across the fault zone.

- 2. This engineer's opinion does not include any undergrounding of the existing overhead poles.
- 3. This engineer's opinion does not include perforated subdrain pipes for keyway in fill slope grading areas.
- 4. This engineer's opinion does not include any striping or signage.
- 5. It is assumed for this probable construction costs select fill with on site soil will be used under trails, Entry Drive or Lower Roads. No imported material or lime treatment is included in this probable construction costs.
- 6. Quantities for asphalt pavement sections are based on: a. with vehicular traffic - 3"AC / 10"AB b. without vehicular traffic - 3"AC / 8"AB

Date: June 17, 2020

Total Estimated Construction Cost \$11,237,080

Construction Cost Estimate Summary



Estimated Earthworks + Keyway: \$11,237,080

Total Planting + Equipment: \$5,748,753

Total Before Contingency: \$16,748,614

