

DRAFT

Intersection Improvement Projects

No.	Project	Total Project Cost
1	Signalize intersection of San Pablo Avenue & Tsushima Street	\$595,000
4	Intersection Improvements at Willow Avenue & Sycamore Avenue	\$91,000
5	Add 3rd northbound through lane to San Pablo Avenue	\$21,000
6	Install pedestrian-activated signal at Market Hall crosswalk	\$23,000
18	Remove crosswalk at north leg of San Pablo Avenue & Sycamore Avenue	\$16,000

Intersection Improvement Costs:**\$746,000****Roadway, Bicycle, and Pedestrian Improvement Projects**

No.	Project	Total Project Cost
2	Reconfigure Sycamore Avenue cross section from Willow to San Pablo Ave	\$232,000
3	San Pablo Avenue/John Muir Parkway to I-80 Improvements	\$7,167,000
8	Hercules Creekside Trail from Alfred Noble to Sycamore Avenue	\$1,386,000
9	Multiuse path at Market Hall site	\$108,000
10	Pedestrian connection along Palm Ave between Sycamore and Willow Ave	\$284,000
11	Bay Trail gap closure and lighting	\$307,000
12	Expand bicycle network	\$26,000
13	13. Add sidewalk along Willow Avenue to Hercules Transit Center	\$889,000
14	Improve pedestrian connections to Hercules Transit Center - Sycamore Avenue to Willow	\$957,000
15	Extend sidewalk connections to Rodeo	\$635,000
16	Complete bicycle facilities between Mariner's Pointe and HTC	\$29,000
17	Add lighting to Refugio Valley Trail	\$675,000

Roadway, Bicycle, Pedestrian Project Costs:**\$12,695,000****Other Projects/Programs**

7	Upgrade or add ADA Curb Ramps	\$273,000
19	Provide bus shelters along San Pablo Avenue	\$32,000
20	Hercules Rail Station Parking Structure	\$8,500,000
21	Complete transit center/rail station	\$53,600,000

\$62,405,000**DKS****Total \$75,846,000**

1. Signalize Intersection of San Pablo Ave & Tsushima St

Engineer's Estimate

Date: 1/30/2019

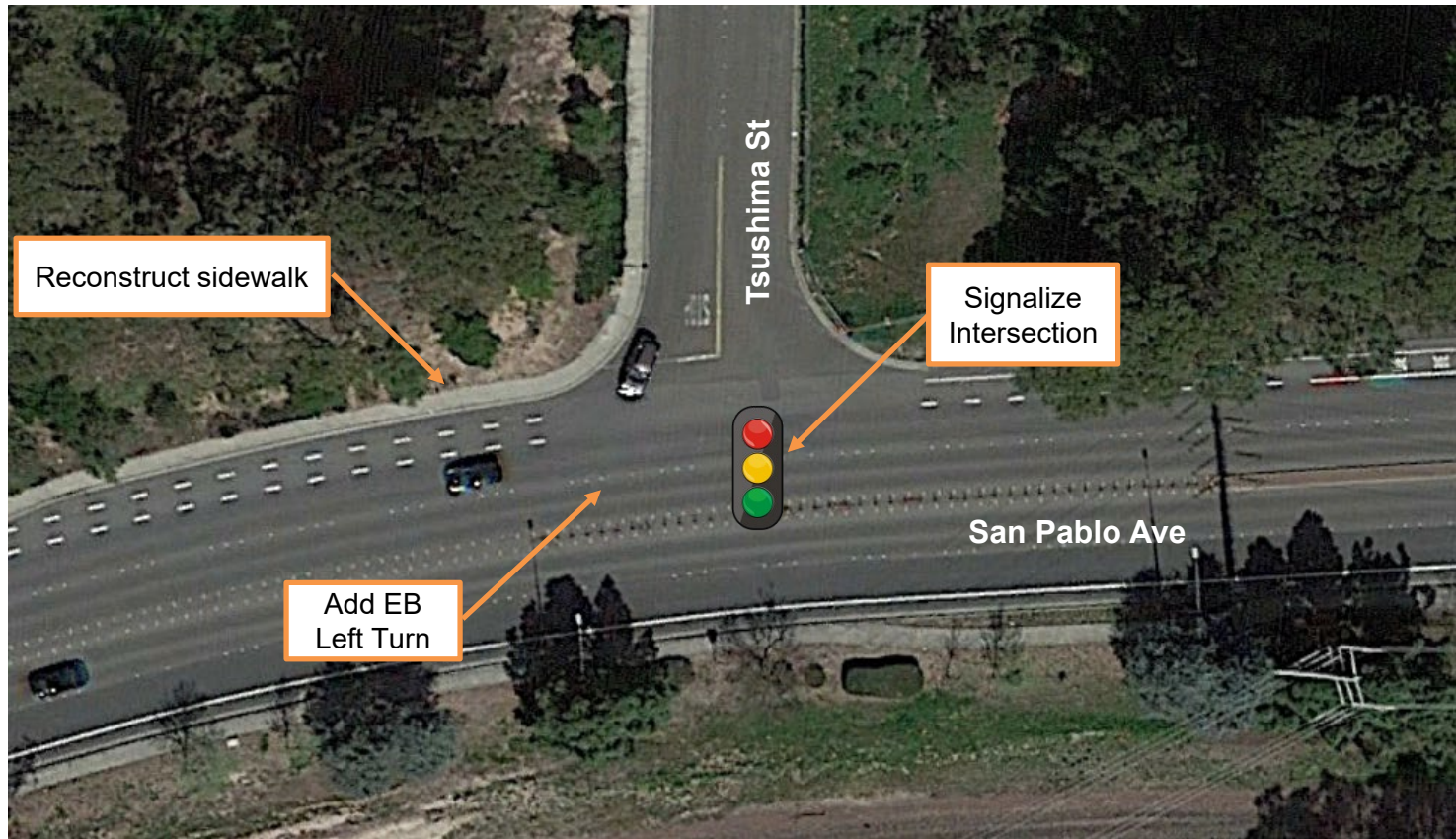


Signalize San Pablo Ave/Tsushima, allowing full access to Tsushima St, provide 150-ft minimum EB left-turn storage pocket

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	111	70.00	7,778
	TOTAL FOR ITEM 1 EARTHWORK				7,778
2	DRAINAGE				
	DRAINAGE	LF	150	155.00	23,250
	TOTAL FOR ITEM 2 DRAINAGE				23,250
3	PAVEMENT				
	ASPHALT CONCRETE	TON	51	150.00	7,650
	AGGREGATE BASE	CY	89	200.00	17,778
	SIDEWALK	SF	750	15.00	11,250
	CURB & GUTTER	LF	150	55.00	8,250
	REMOVE SIDEWALK	SF	750	10.00	7,500
	REMOVE CURB & GUTTER	LF	150	8.00	1,200
	MEDIAN CURB	SF	2000	20.00	40,000
	TOTAL FOR ITEM 3 PAVEMENT				93,628
4	MISCELLANEOUS				
	TRAFFIC SIGNAL (ARTERIAL/COLLECTOR)	INT	1	250,000.00	250,000
	RELOCATE STREET LIGHTS / ELECTROLIERS	EA	1	10,000.00	10,000
	TOTAL FOR ITEM 4 MISCELLANEOUS				260,000
5	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	1%	3,847
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	5%	19,233
	MOBILIZATION	%	of Sec. 1-4	10%	38,466
	UTILITY COORDINATION	%	of Sec. 1-4	3%	11,540
	TOTAL FOR ITEM 5 MINOR ITEMS				73,085
SUBTOTAL					\$457,741
CONTINGENCY (15%)					\$69,000
ROW \$20/SF 3400					\$68,000
GRAND TOTAL					\$594,741
TOTAL BUDGET					\$595,000

DKS

Estimate By:

**Project Description:**

Signalize San Pablo Ave/Tsushima, allowing full access to Tsushima St, provide 200-ft minimum EB left-turn storage pocket. Reconstruct sidewalk to provide sufficient width for EB left turn.

2. Reconfigure Sycamore Avenue Cross Section from Willow to San Pablo Avenue

Engineer's Estimate

Date 1/30/2019



Reconfigure Sycamore Ave cross-section after San Pablo Ave to extend left-turn lane to Willow and add bike sharrows

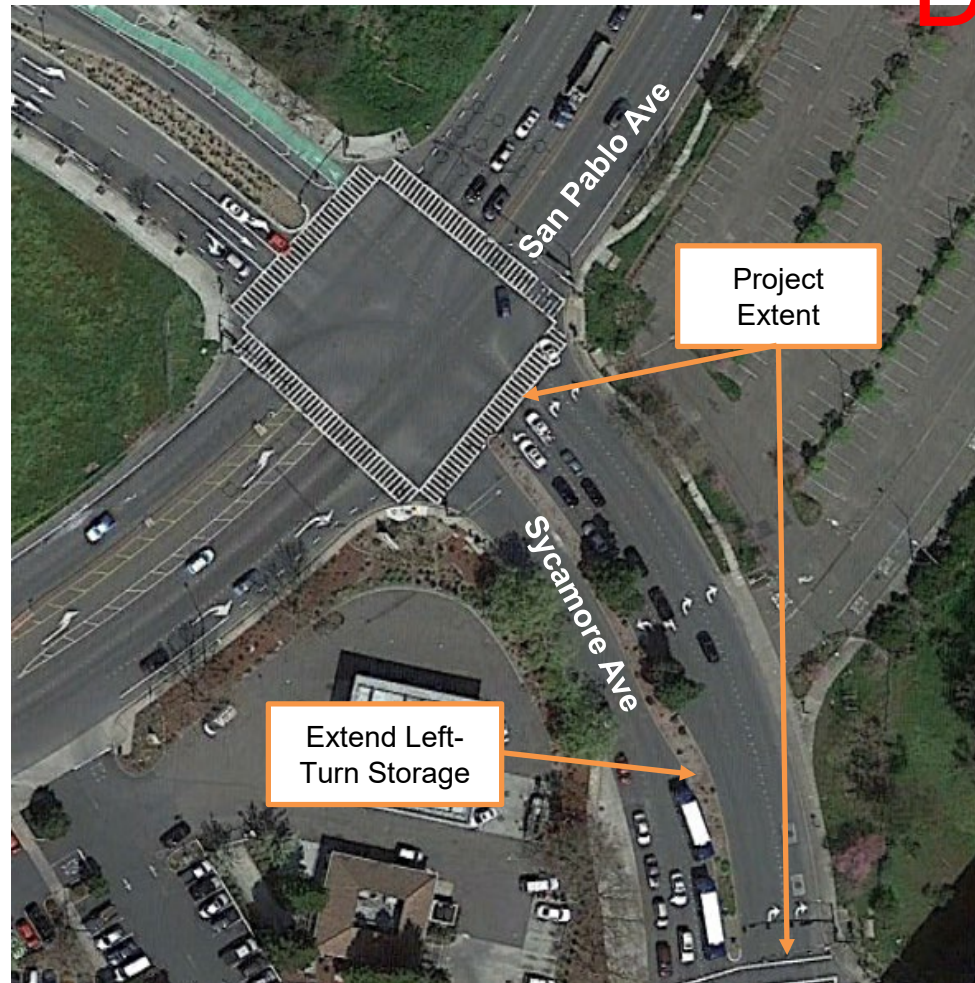
#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	111	70.00	7,778
	TOTAL FOR ITEM 1 EARTHWORK				7,778
2	PAVEMENT				
	ASPHALT CONCRETE	TON	51	150.00	7,650
	AGGREGATE BASE	CY	89	200.00	17,778
	REMOVE MEDIAN CURB & LANDSCAPE STRIP	SF	2700	8.00	21,600
	MEDIAN CURB	SF	1200	20.00	24,000
	STRIPE THERMOPLASTIC LANE LINE	LF	2100	5.00	10,500
	SIDEWALK	SF	1200	15.00	18,000
	CURB & GUTTER	LF	300	55.00	16,500
	TOTAL FOR ITEM 2 PAVEMENT				116,028
3	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	1%	1,238
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	10%	12,381
	MOBILIZATION	%	of Sec. 1-4	15%	18,571
	UTILITY COORDINATION	%	of Sec. 1-4	3%	3,714
	TOTAL FOR ITEM 3 MINOR ITEMS				35,904
SUBTOTAL					\$159,710
CONTINGENCY (15%)					\$24,000
ROW \$20/SF 2400					\$48,000
GRAND TOTAL					\$231,710
TOTAL BUDGET					\$232,000

Estimate By:





Lane Configuration:
Along Sycamore Ave from Willow
Ave to San Pablo Ave



Project Description:

Reconfigure northbound Sycamore Ave cross-section at San Pablo Ave. to extend left turn lane to Willow Ave. and add bike sharrow pavement markings.

3.1 San Pablo Avenue/John Muir Pkwy to I-80 Improvements

Engineer's Estimate



Widen from midblock (cut slope), add NBR, 2 bus stops, sidewalk

1/14/2019

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	1672	80.00	133,778
	TOTAL FOR ITEM 1 EARTHWORK				133,778
2	DRAINAGE				
	DRAINAGE	LF	430	200.00	86,000
	TOTAL FOR ITEM 2 DRAINAGE				86,000
3	PAVEMENT				
	ASPHALT CONCRETE	TON	256	150.00	38,378
	AGGREGATE BASE	CY	446	200.00	89,185
	SIDEWALK	SF	2580	20.00	51,600
	CURB & GUTTER	LF	430	55.00	23,650
	FURNISH & INSTALL ADA CURB RAMP	EA	3	5,000.00	15,000
	REMOVE SIDEWALK	SF	3830	10.00	38,300
	REMOVE CURB & GUTTER	LF	860	8.00	6,880
	CONCRETE BUS BAY	SF	1200	20.00	24,000
	TOTAL FOR ITEM 3 PAVEMENT				286,993
4	MISCELLANEOUS				
	SIGNAL MODIFICATIONS (MAJOR)	INT	2	200,000.00	400,000
	RELOCATE STREET LIGHTS / ELECTROLIERS	EA	2	5,000.00	10,000
	BUS SHELTER	EA	2	12,000.00	24,000
	TREE REMOVAL	LS	1	5,000.00	5,000
	STRIPING	LS	1	30,000.00	30,000
	TOTAL FOR ITEM 4 MISCELLANEOUS				469,000
5	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	5%	48,789
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	12%	117,093
	TOTAL FOR ITEM 5 MINOR ITEMS				165,881
SUBTOTAL					\$1,141,652
MOBILIZATION				10%	\$114,165
UTILITY COORDINATION				3%	\$34,250
ENVIRONMENTAL DOC/MITIGATION				5%	\$57,083
PRELIMINARY ENGINEERING				3%	\$34,250
SURVEYING/TESTING/STAKING				5%	\$57,083
CONSTRUCTION MANAGEMENT				10%	\$114,165
DESIGN/CONSTRUCTION SUPPORT				14%	\$159,831
CONTINGENCY				15%	\$171,248
GRAND TOTAL					\$1,883,726
TOTAL BUDGET					\$1,884,000

Estimate By:



3.2 San Pablo Avenue/John Muir Pkwy to I-80 Improvements

Engineer's Estimate



Widen to diverge to extend second right turn lane, add shoulder, install median

1/14/2019

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EARTHWORK (FILL)	CY	2333	80.00	186,667
	TOTAL FOR ITEM 1 EARTHWORK				186,667
2	DRAINAGE				
	DRAINAGE	LF	420	200.00	84,000
	TOTAL FOR ITEM 2 DRAINAGE				84,000
3	PAVEMENT				
	ASPHALT CONCRETE	TON	357	150.00	53,550
	AGGREGATE BASE	CY	622	200.00	124,444
	CURB & GUTTER	LF	420	55.00	23,100
	REMOVE ASPHALT CURB	LF	420	5.00	2,100
	MEDIAN CURB	SF	10040	20.00	200,800
	TOTAL FOR ITEM 3 PAVEMENT				403,994
4	MISCELLANEOUS				
	RELOCATE STREET LIGHTS / ELECTROLIERS	EA	4	5,000.00	20,000
	TREE REMOVAL	LS	1	5,000.00	5,000
	STRIPING	LS	1	30,000.00	30,000
	TOTAL FOR ITEM 4 MISCELLANEOUS				55,000
5	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	5%	36,483
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	12%	87,559
	TOTAL FOR ITEM 5 MINOR ITEMS				124,042
SUBTOTAL					\$853,703
MOBILIZATION				10%	\$85,370
UTILITY COORDINATION				3%	\$25,611
ENVIRONMENTAL DOC/MITIGATION				5%	\$42,685
PRELIMINARY ENGINEERING				3%	\$25,611
SURVEYING/TESTING/STAKING				5%	\$42,685
CONSTRUCTION MANAGEMENT				10%	\$85,370
DESIGN/CONSTRUCTION SUPPORT				14%	\$119,518
CONTINGENCY				15%	\$128,056
GRAND TOTAL					\$1,408,611
TOTAL BUDGET					\$1,409,000

Estimate By:

DKS

3.3 San Pablo Avenue/John Muir Pkwy to I-80 Improvements

Engineer's Estimate



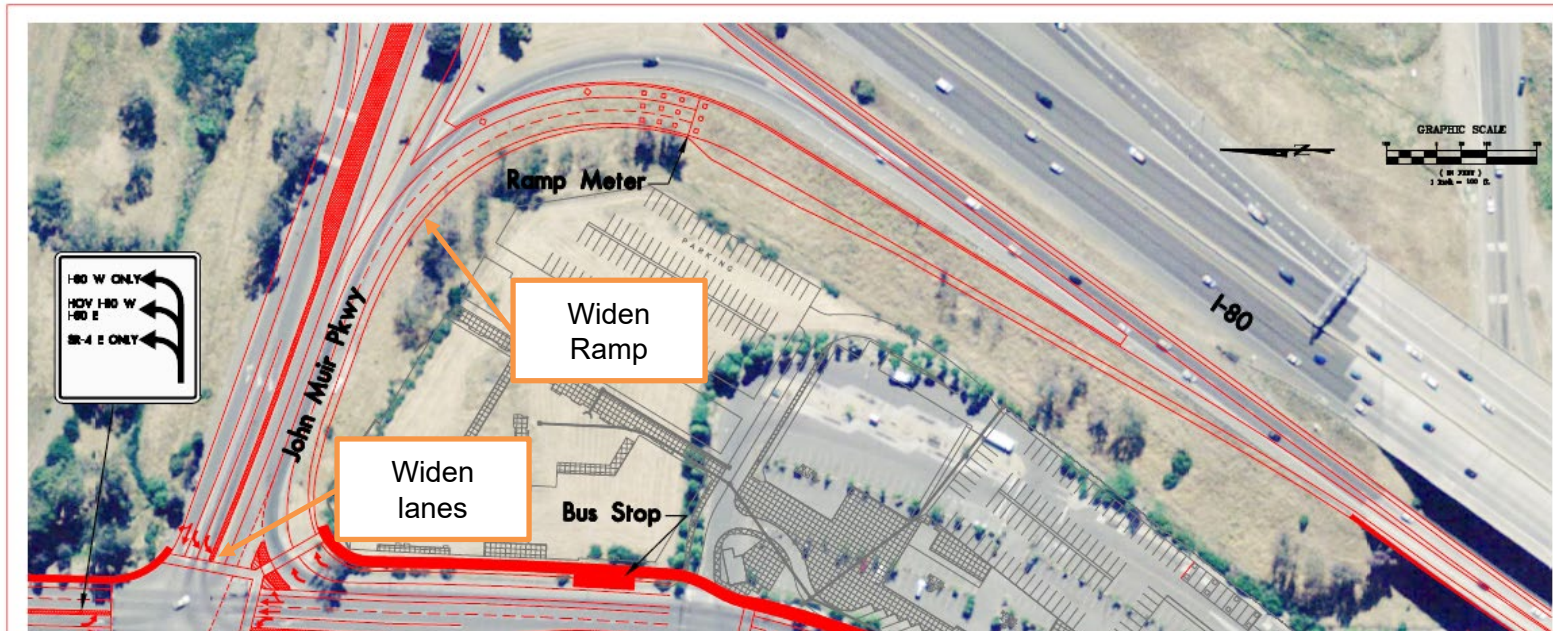
Widen ramp to 3 lanes

1/14/2019

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EARTHWORK (FILL)	CY	17934	80.00	1,434,741
	TOTAL FOR ITEM 1 EARTHWORK				1,434,741
2	DRAINAGE				
	DRAINAGE	LF	1010	200.00	202,000
	TOTAL FOR ITEM 2 DRAINAGE				202,000
3	PAVEMENT				
	ASPHALT CONCRETE	TON	532	150.00	79,815
	AGGREGATE BASE	CY	927	200.00	185,481
	TOTAL FOR ITEM 3 PAVEMENT				265,296
4	MISCELLANEOUS				
	REMOVE GUARDRAIL	LF	440	20.00	8,800
	INSTALL GUARDRAIL	LF	440	150.00	66,000
	STRIPING	LS	1	30,000.00	30,000
	TOTAL FOR ITEM 4 MISCELLANEOUS				104,800
5	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	5%	100,342
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	12%	240,820
	TOTAL FOR ITEM 5 MINOR ITEMS				341,162
SUBTOTAL					\$2,347,999
MOBILIZATION				10%	\$234,800
UTILITY COORDINATION				3%	\$70,440
ENVIRONMENTAL DOC/MITIGATION				5%	\$117,400
PRELIMINARY ENGINEERING				3%	\$70,440
SURVEYING/TESTING/STAKING				5%	\$117,400
CONSTRUCTION MANAGEMENT				10%	\$234,800
DESIGN/CONSTRUCTION SUPPORT				14%	\$328,720
CONTINGENCY				15%	\$352,200
GRAND TOTAL					\$3,874,199
TOTAL BUDGET					\$3,874,000
Project 3 Total (3.1, 3.2, 3.3)					\$7,167,000

Estimate By:

DKS



Project Description:

Accommodate double right turn lanes from northbound San Pablo Avenue to SR-4 and I-80 ramps, provide inline bus stop and widen eastbound John Muir Parkway to 4 lanes from San Pablo Ave to SR-4 and I-80 ramps; widen the I-80 WB on-ramp

4. Intersection Improvements at Willow Ave & Sycamore Ave

Engineer's Estimate

Date: 1/30/2019

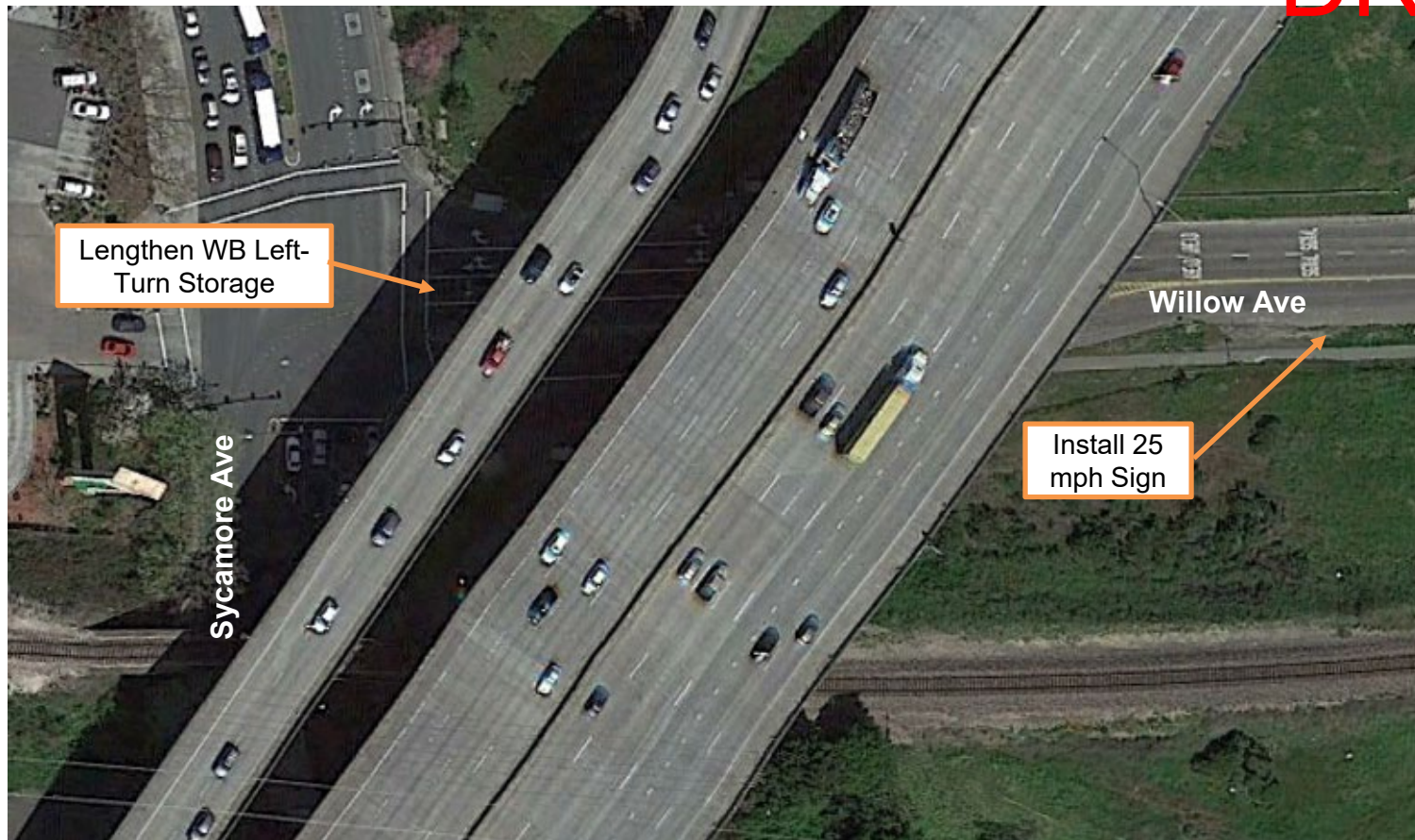


Lengthen Willow Avenue left-turn storage shall be lengthened from 90 to 300 ft, reduce speed limit from 35 to 25 MPH on Willow Ave east of Sycamore Ave; optimize Willow Ave/Sycamore Ave/San Pablo Ave traffic signal system

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	78	70.00	5,444
	TOTAL FOR ITEM 1 EARTHWORK				5,444
2	DRAINAGE				
	DRAINAGE	LF	210	155.00	32,550
	TOTAL FOR ITEM 2 DRAINAGE				32,550
3	PAVEMENT				
	ASPHALT CONCRETE	TON	36	150.00	5,355
	AGGREGATE BASE	CY	62	200.00	12,444
	REMOVE MEDIAN	SF	300	8.00	2,400
	TOTAL FOR ITEM 3 PAVEMENT				20,199
4	MISCELLANEOUS				
	REMOVE & INSTALL 25 MPH SPEED SIGN	EA	1	750.00	750
	SIGNAL RE-TIMING	INT	1	5,000.00	5,000
	TOTAL FOR ITEM 4 MISCELLANEOUS				5,750
5	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-3	1%	639
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-3	10%	6,394
	MOBILIZATION	%	of Sec. 1-3	10%	6,394
	UTILITY COORDINATION	%	of Sec. 1-3	3%	1,918
	TOTAL FOR ITEM 5 MINOR ITEMS				15,346
SUBTOTAL					\$79,289
CONTINGENCY (15%)					\$12,000
GRAND TOTAL					\$91,289
TOTAL BUDGET					\$91,000

Estimate By:

DKS

**Project Description:**

Willow Avenue & Sycamore Avenue intersection improvements: lengthen westbound Willow Avenue left-turn storage to 300 ft, reduce speed limit from 35 to 25 MPH on Willow Ave east

5. Add 3rd NB through lane on San Pablo Ave at Sycamore

Engineer's Estimate

Date: 1/30/2019

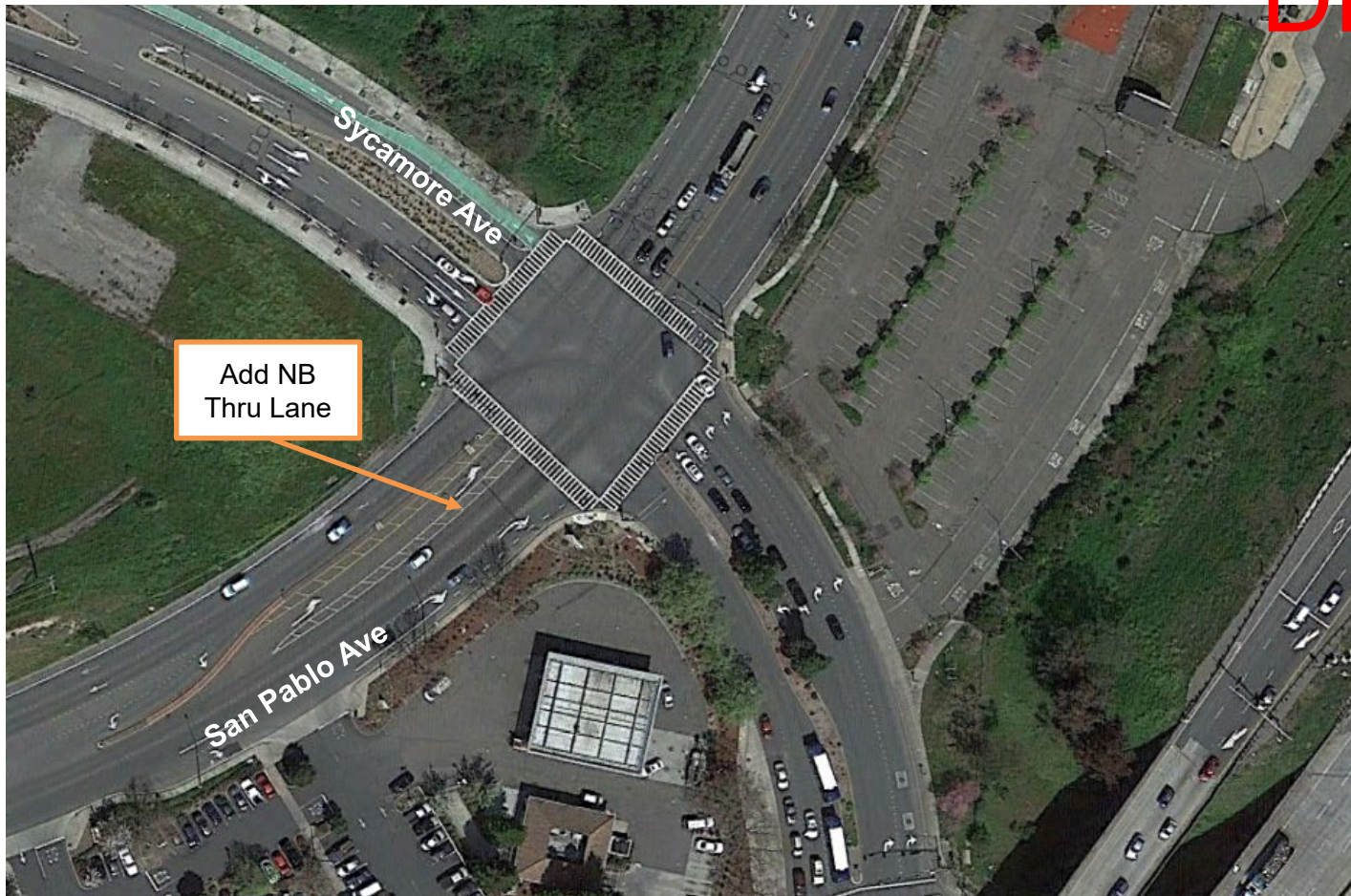


Add third stacking through lane to San Pablo & Sycamore along NB San Pablo Approach

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	PAVEMENT				
	REMOVE STRIPING	SF	1000	3.00	3,000
	TOTAL FOR ITEM 1 PAVEMENT				3,000
2	MISCELLANEOUS				
	STRIPE THERMOPLASTIC LANE LANE	LF	400	5.00	2,000
	CONCRETE PEDESTRIAN REFUGE	SF	40	20.00	800
	SIGNAL RE-TIMING	INT	1	5,000.00	5,000
	TOTAL FOR ITEM 2 MISCELLANEOUS				7,800
3	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	1%	108
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	25%	2,700
	MOBILIZATION	%	of Sec. 1-4	35%	3,780
	UTILITY COORDINATION	%	of Sec. 1-4	3%	324
	TOTAL FOR ITEM 3 MINOR ITEMS				6,912
SUBTOTAL					\$17,712
CONTINGENCY (15%)					\$3,000
GRAND TOTAL					\$20,712
TOTAL BUDGET					\$21,000

Estimate By:

DKS



Project Description:

Add third stacking through lane to San Pablo & Sycamore along NB San Pablo Approach, add pedestrian refuge and restripe lanes

6. Install pedestrian activated signal at Market Hall crosswalk

Engineer's Estimate

Date: 1/30/2019

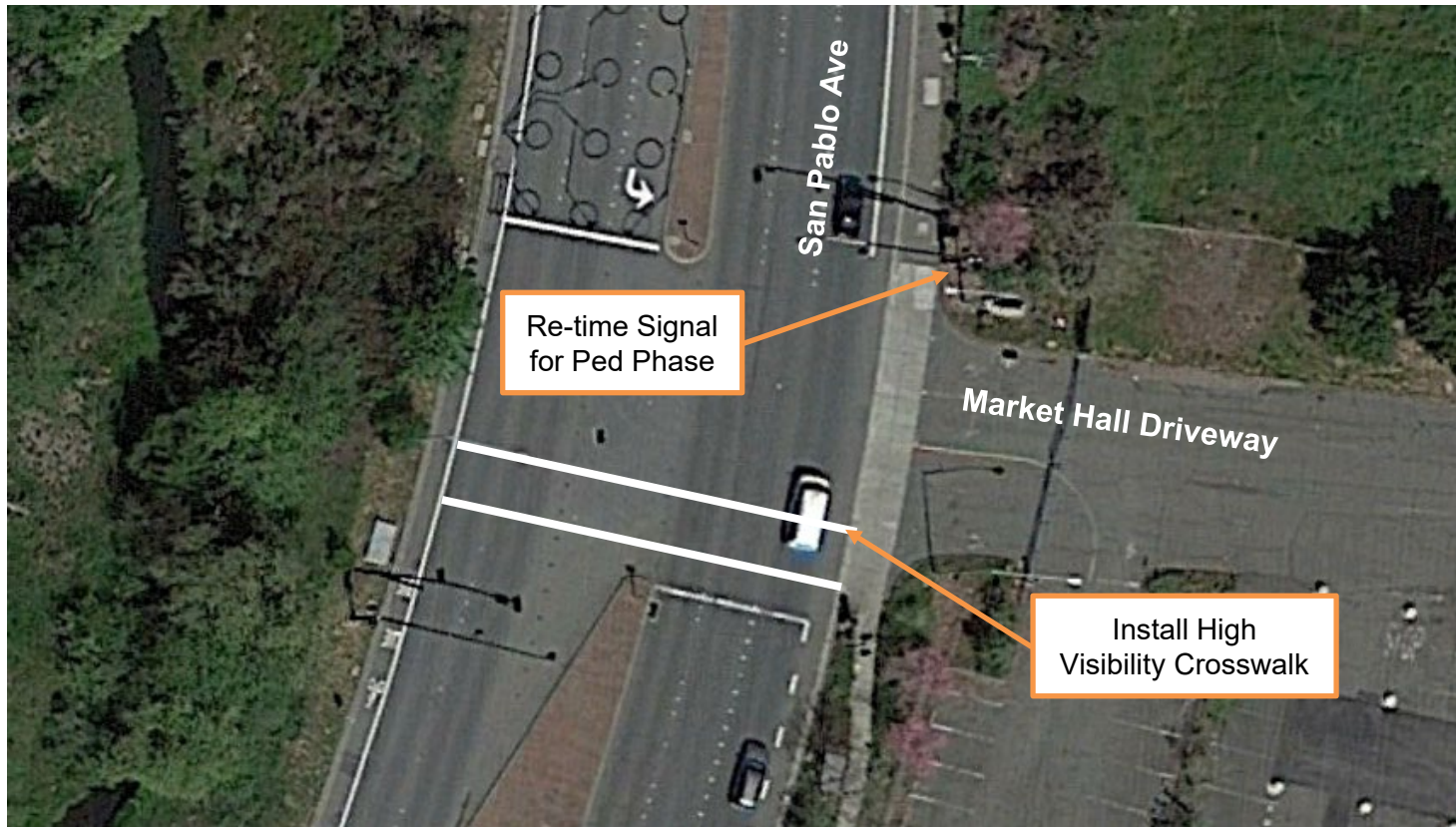


Pedestrian activated signal phase at Market Hall driveway across San Pablo Avenue

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	MISCELLANEOUS				
	SIGNAL RE-TIMING	INT	1	5,000.00	5,000
	STRIPE HIGH-VISIBILITY CROSSWALK	EA	1	1,000.00	1,000
	FURNISH & INSTALL ADA CURB RAMP	EA	2	5,000.00	10,000
	TOTAL FOR ITEM 1 MISCELLANEOUS				16,000
2	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1	5%	800
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1	5%	800
	MOBILIZATION	%	of Sec. 1	10%	1,600
	UTILITY COORDINATION	%	of Sec. 1	5%	800
	TOTAL FOR ITEM 2 MINOR ITEMS				4,000
SUBTOTAL					\$20,000
CONTINGENCY (15%)					\$3,000
GRAND TOTAL					\$23,000
TOTAL BUDGET					\$23,000

Estimate By:

DKS

**Project Description:**

Re-time signal (no HAWK) for pedestrian crossing at Market Hall driveway across San Pablo Avenue and install high visibility crosswalk.

7. Upgrade or add ADA Curb Ramps

Engineer's Estimate

Date: 1/30/2019



Update curb ramps to ADA standards at all marked crosswalks (multiple locations)

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
3	PAVEMENT				
	FURNISH & INSTALL ADA CURB RAMP	EA	23	5,000.00	115,000
	TOTAL FOR ITEM 3 PAVEMENT				115,000
4	MISCELLANEOUS				
	ADA TRUNCATED DOME FOR CURB RAMP	EA	169	500.00	84,500
	TOTAL FOR ITEM 4 MISCELLANEOUS				84,500
5	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	1%	1,995
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	5%	9,975
	MOBILIZATION	%	of Sec. 1-4	10%	19,950
	UTILITY COORDINATION	%	of Sec. 1-4	3%	5,985
	TOTAL FOR ITEM 5 MINOR ITEMS				37,905
SUBTOTAL					\$237,405
CONTINGENCY (15%)					\$36,000
GRAND TOTAL					\$273,405
TOTAL BUDGET					\$273,000

Estimate By:



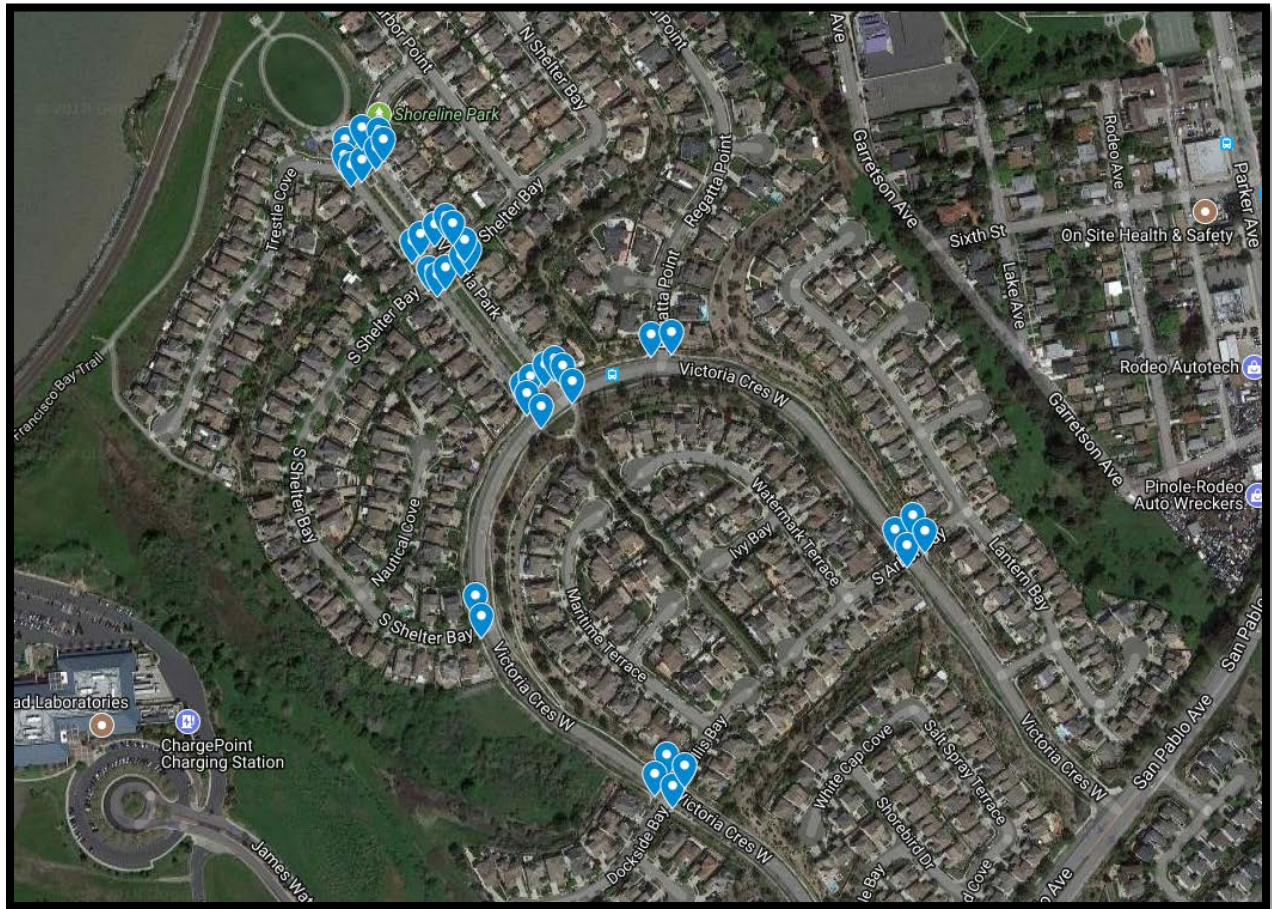
Hercules Ramp Information

- **Pin 1 (magenta)** - NS = Need of Surface; lacks truncated dome surface (**87 Total**)
- **Pin 2 (blue)** - Ramp Redo = Ramp needs to be redone (doesn't meet ADA requirements) (**77 Total**)
- **Pin 3 (orange)** - RN = Ramp needed; currently no ramp exists (**16 Total**)
- **Pin 4 (green)** - "?" = No information. No, Google street view information on Google maps. Information needed from the City of Hercules. (**14 Total**)

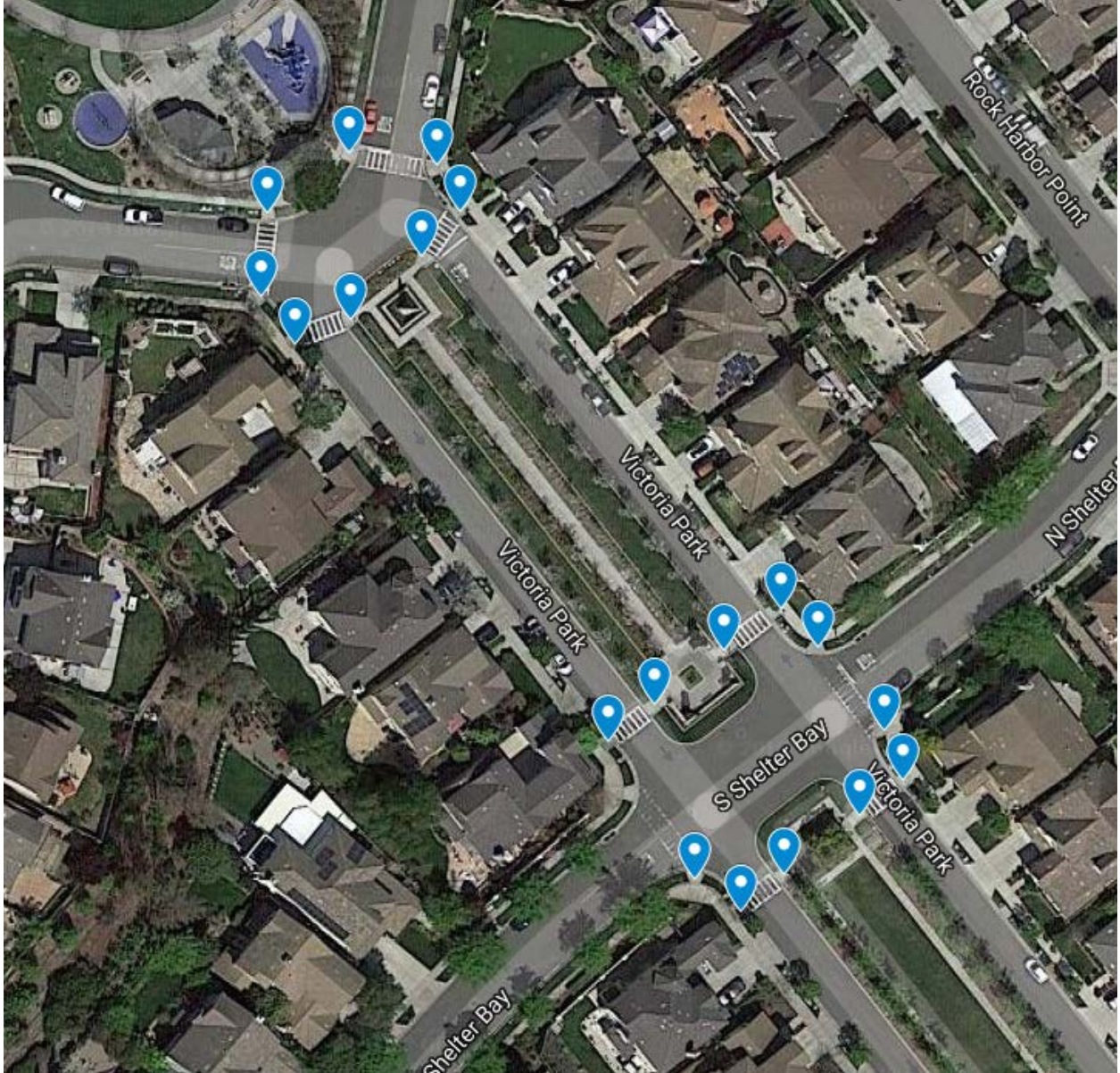


There are a total of 180 locations each with specific ramps needs and recommended modifications (not counting locations lacking information).

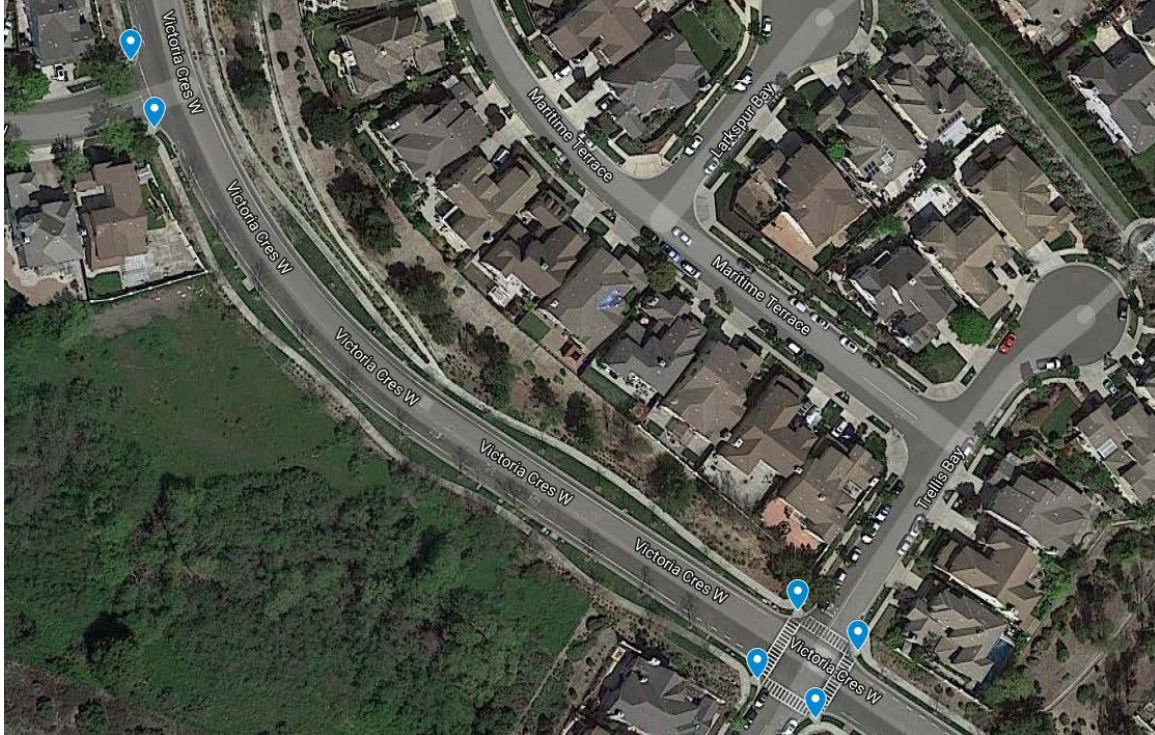
Section 1



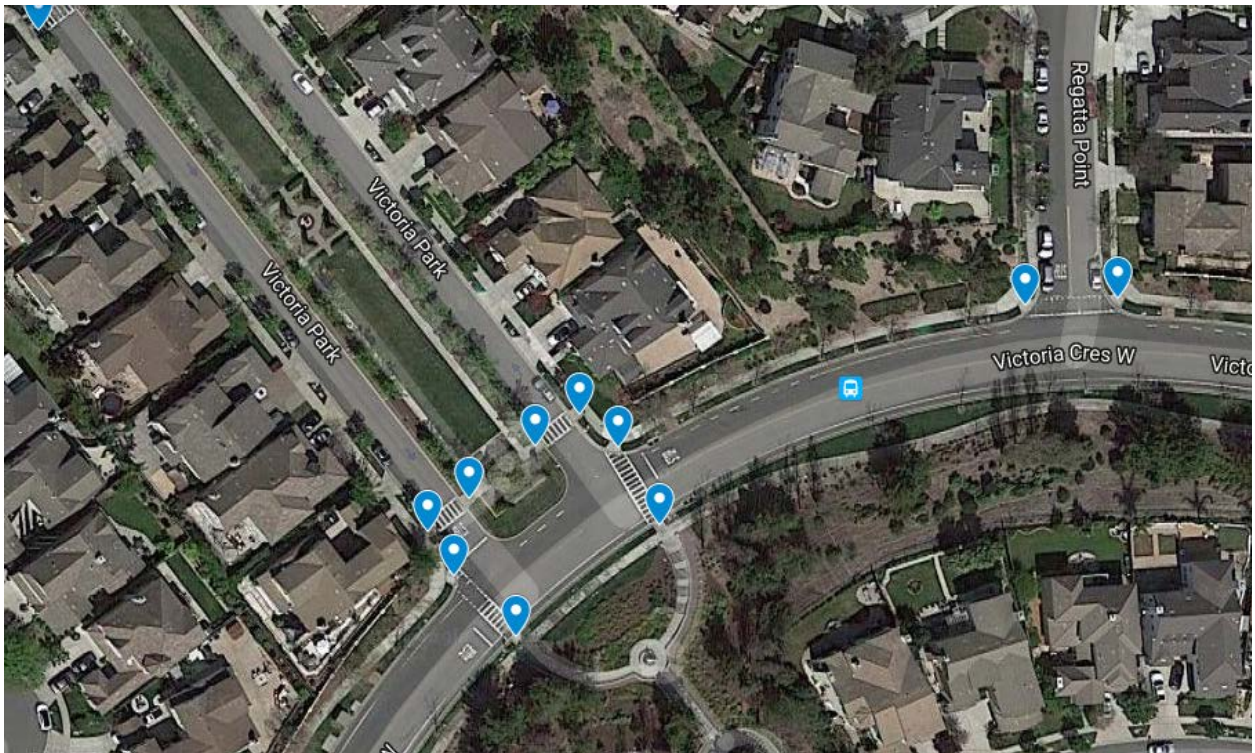
Total = 39 total



Blue Pin (Ramp Redo) = 19



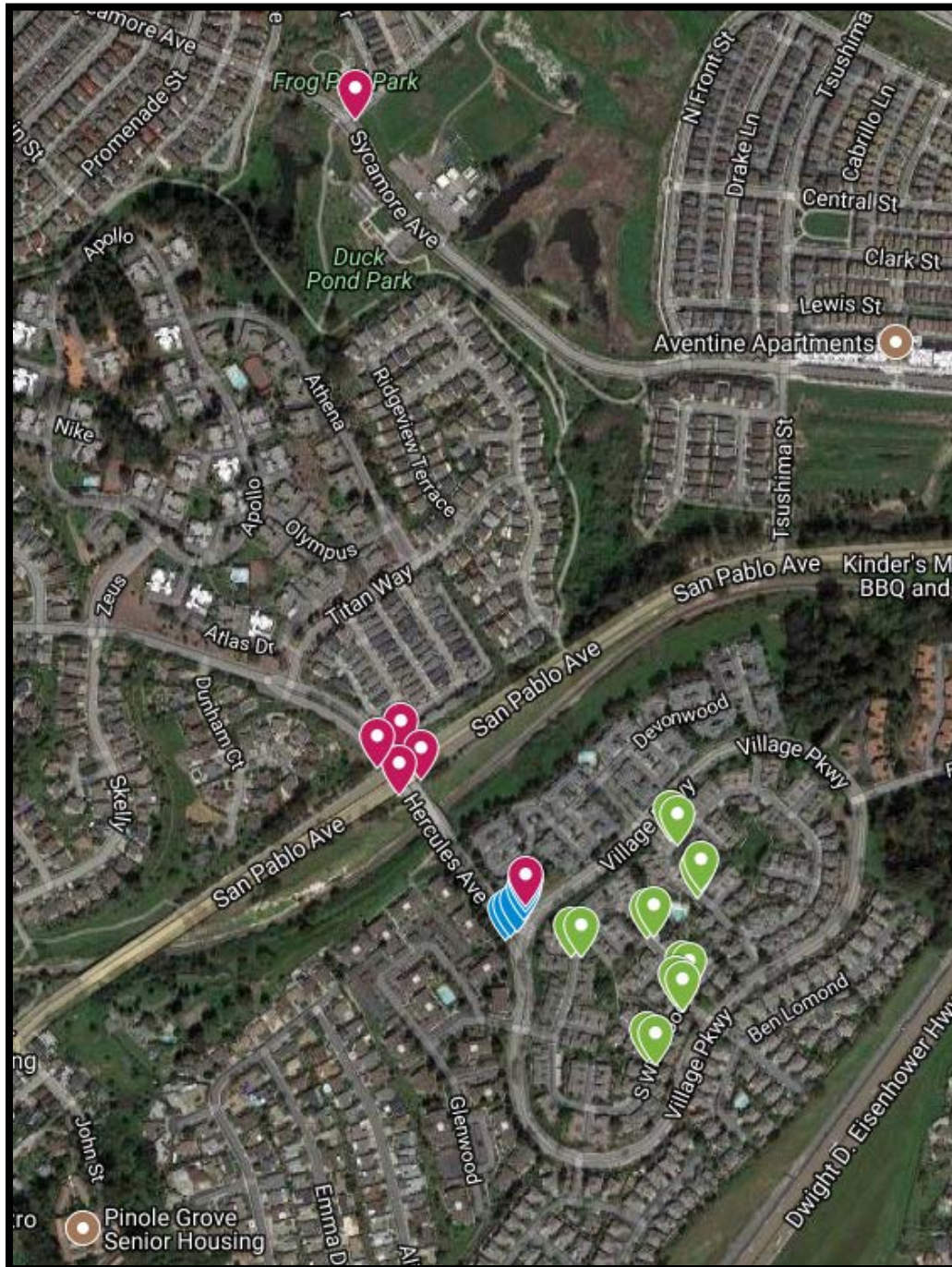
Blue Pin (Ramp Redo) = 6 [above] and 10 [below]



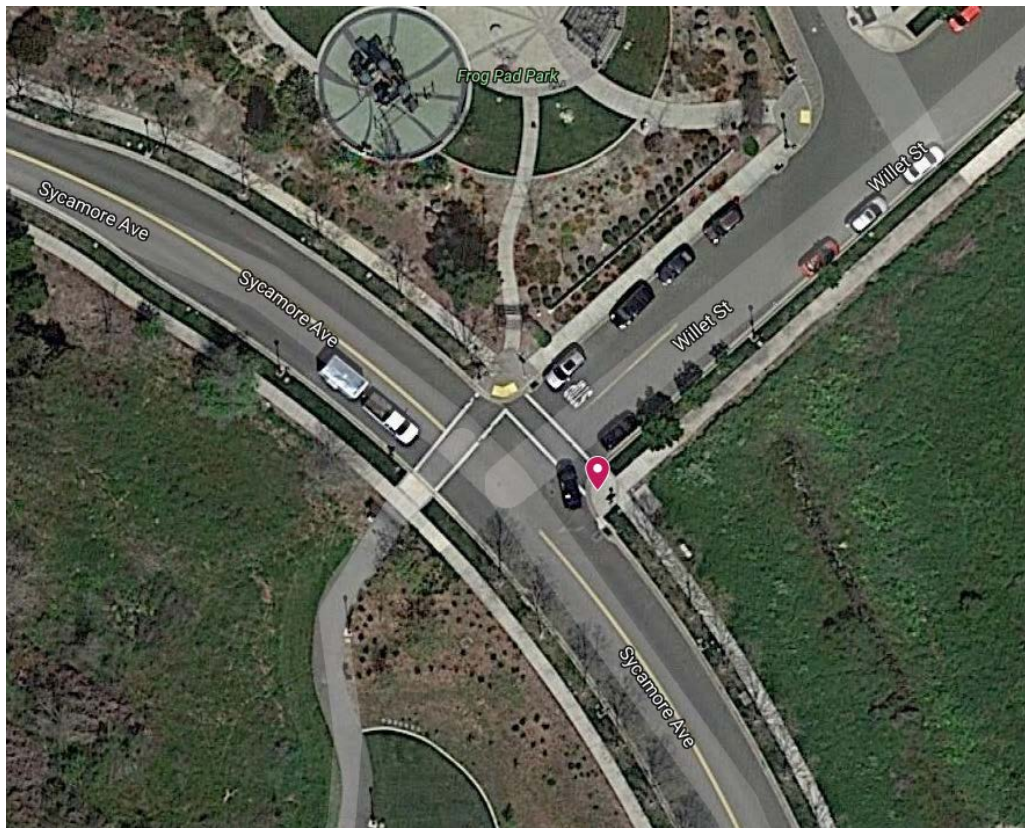


Blue Pin (Ramp Redo) = 4

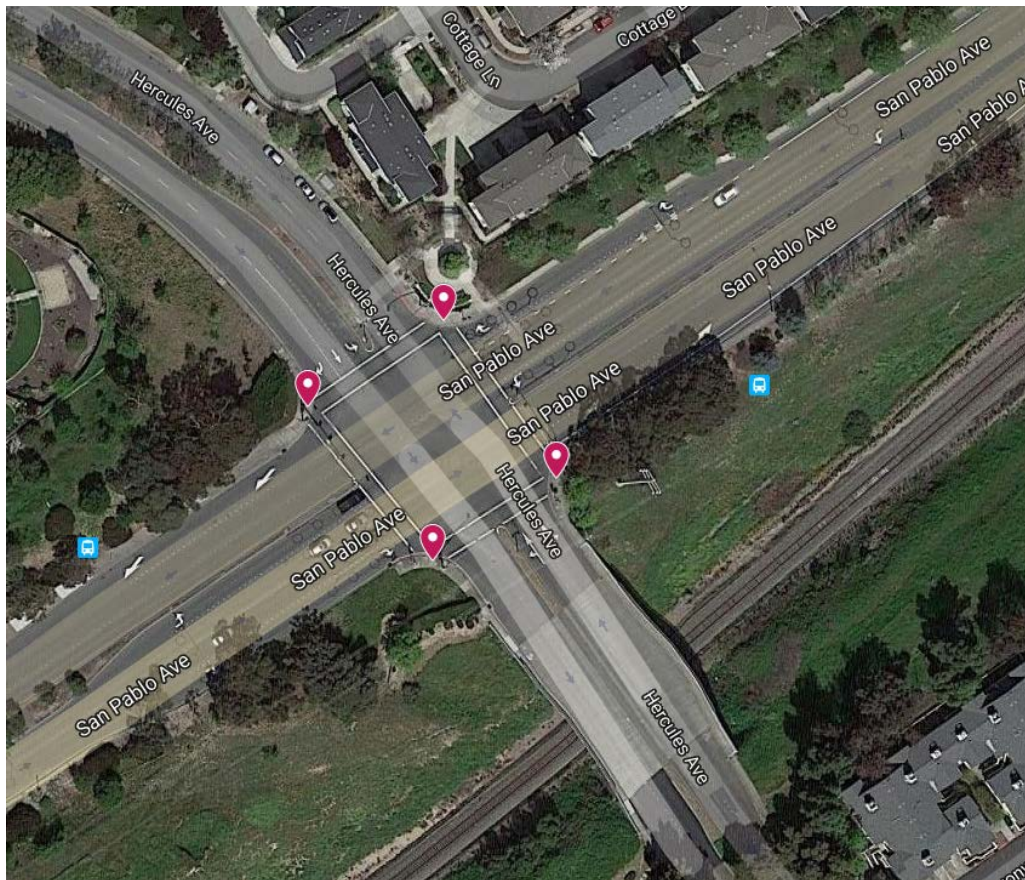
Section 2

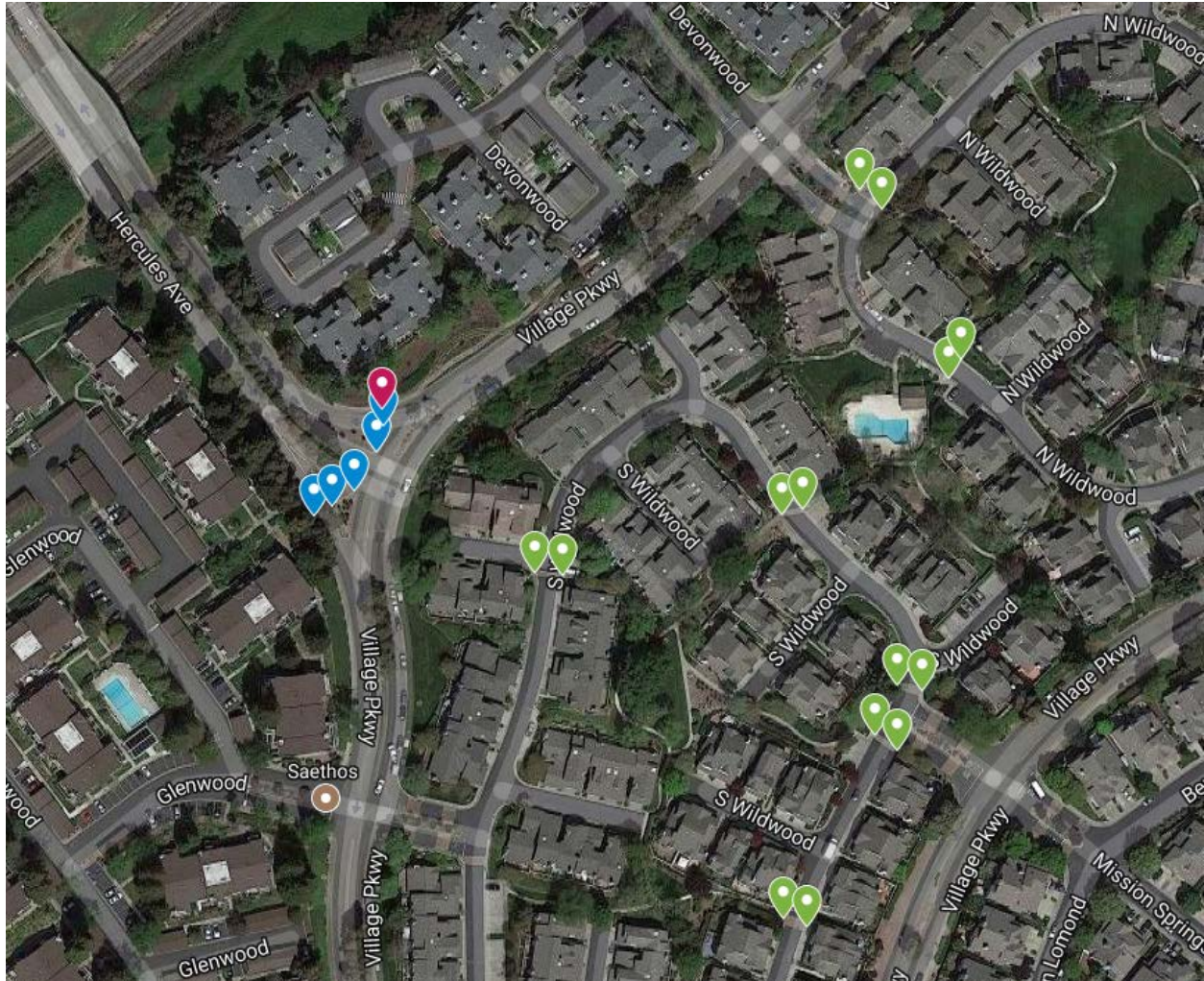


Total = 25



Magenta Pin (NS) = 1 (above) and 4 (below)



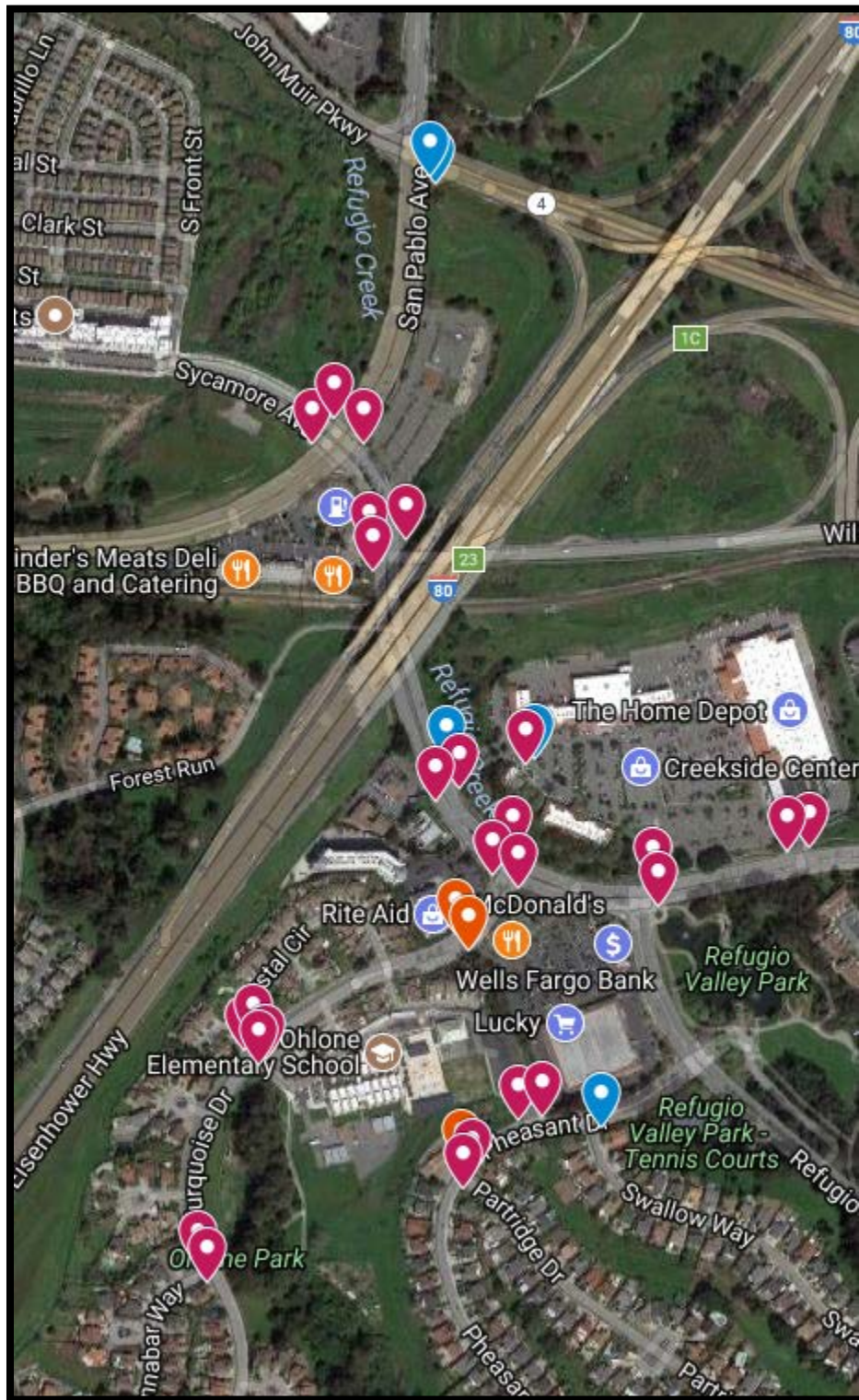


Blue Pin (Ramp Redo) = 5

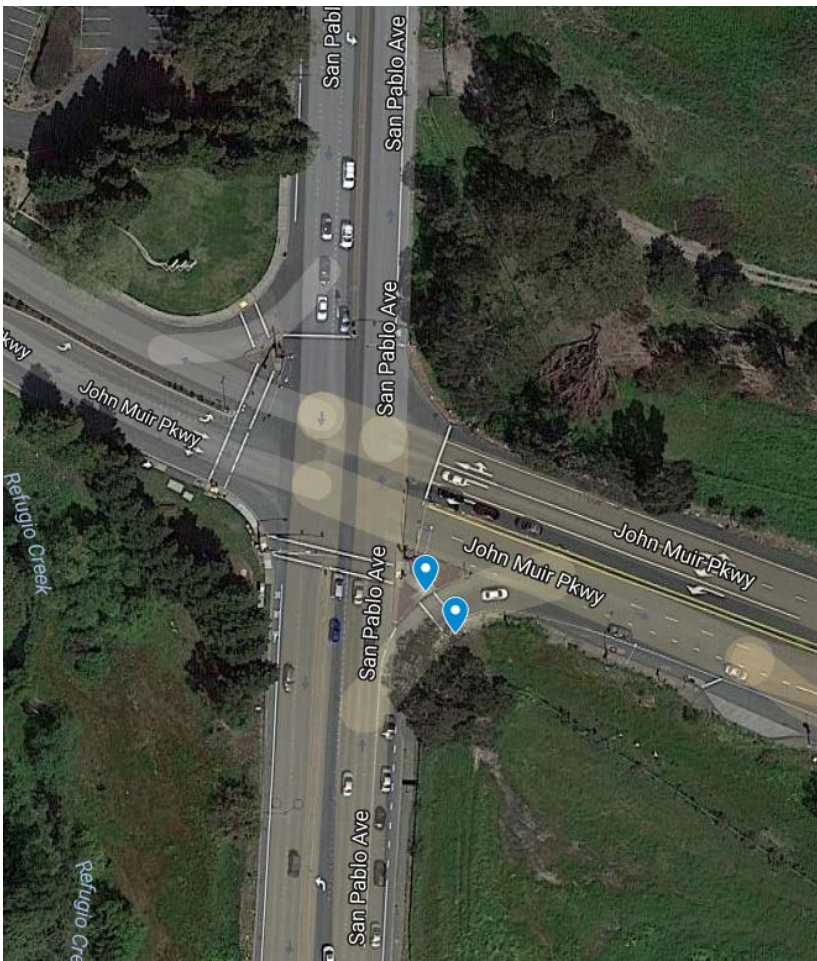
Magenta Pin (NS) = 1

Green Pin 9 (?) = 14

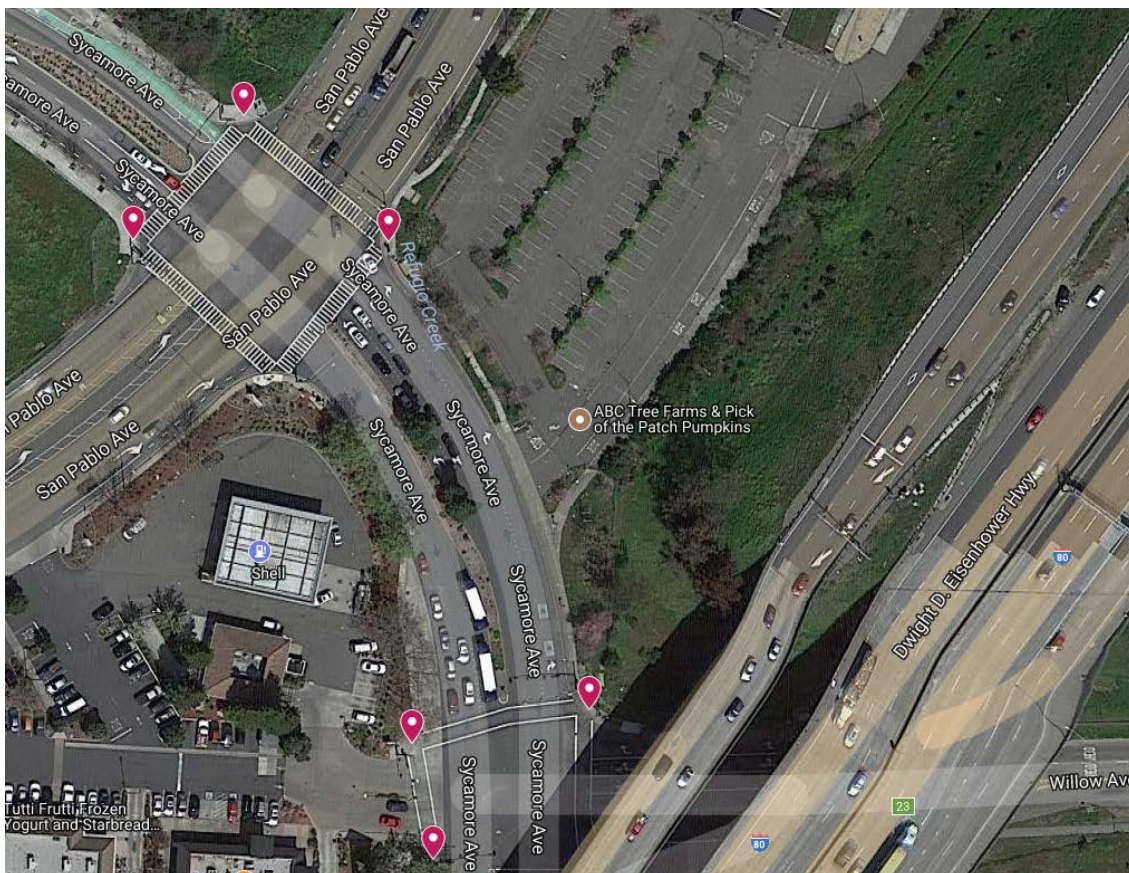
Section 3

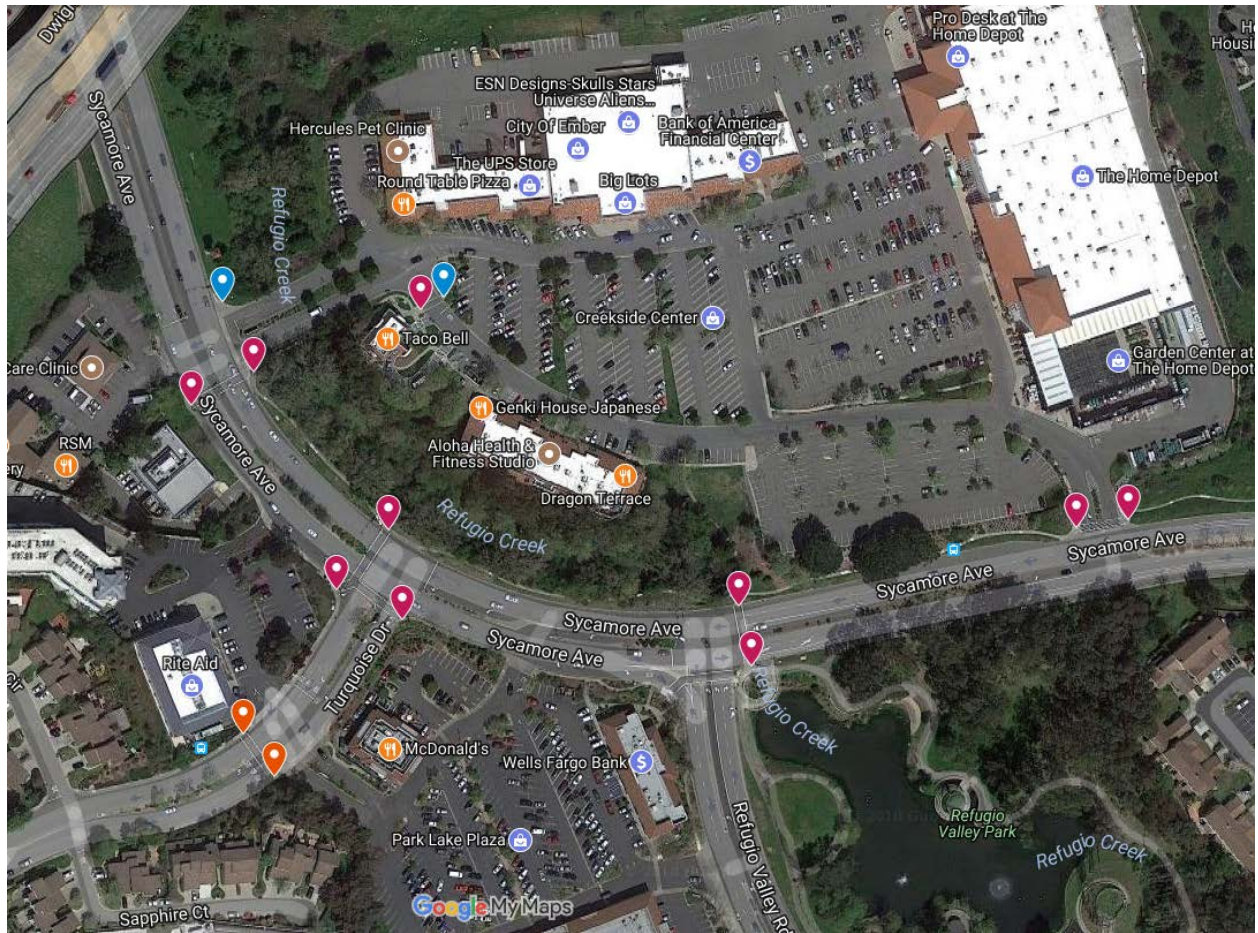


Total = 34

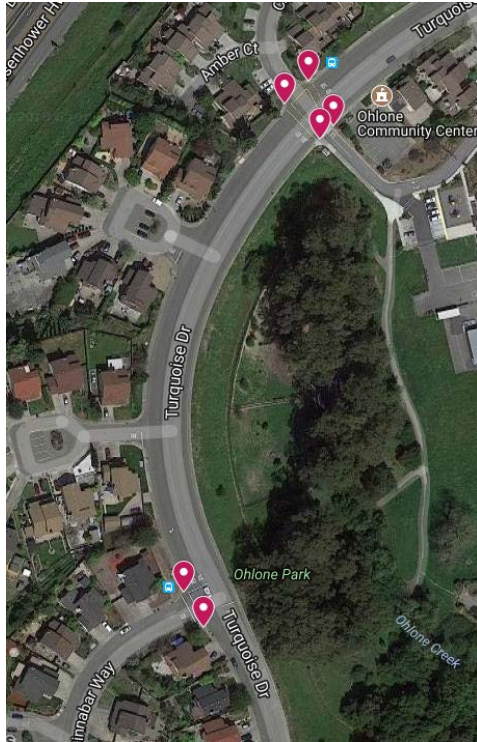


Blue Pin (Ramp Redo) = 2; Magenta Pin (NS) = 6

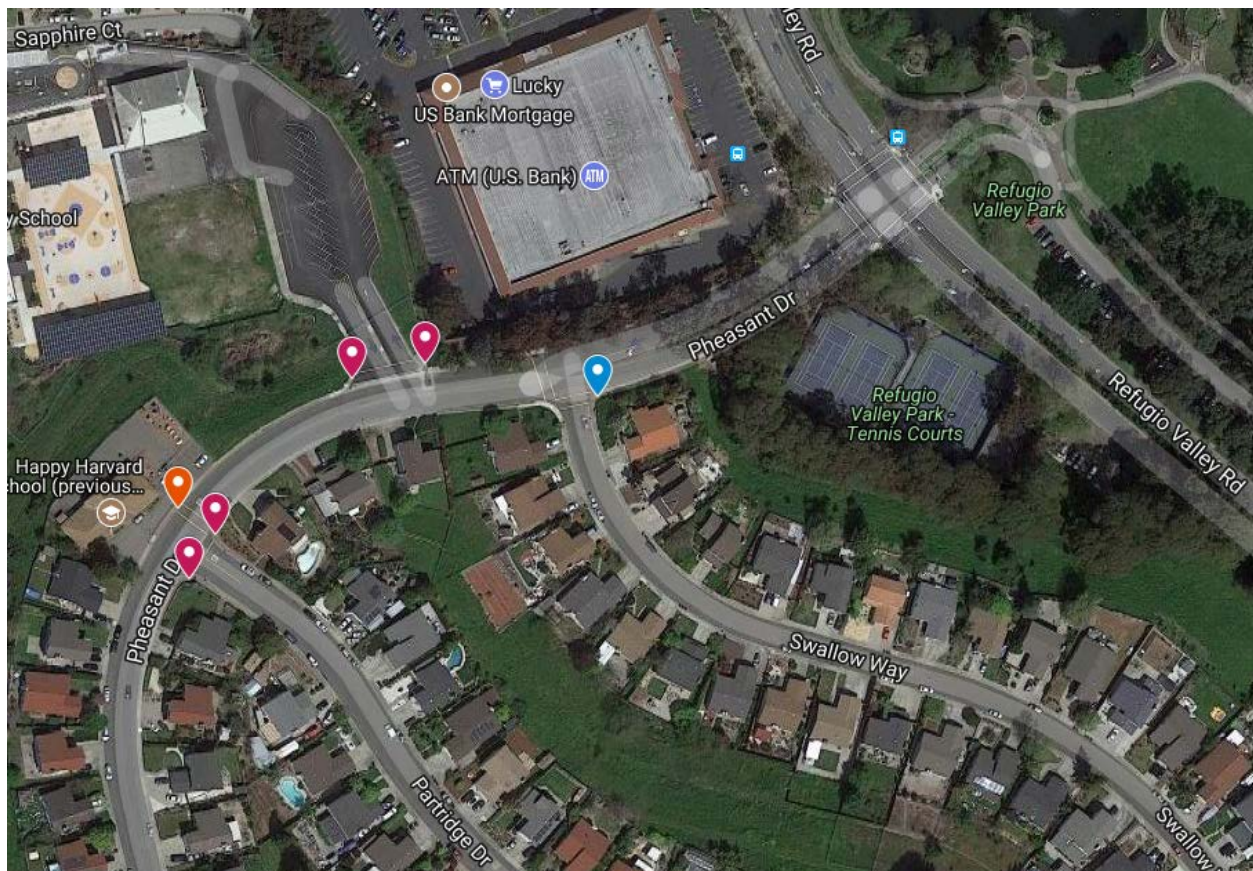




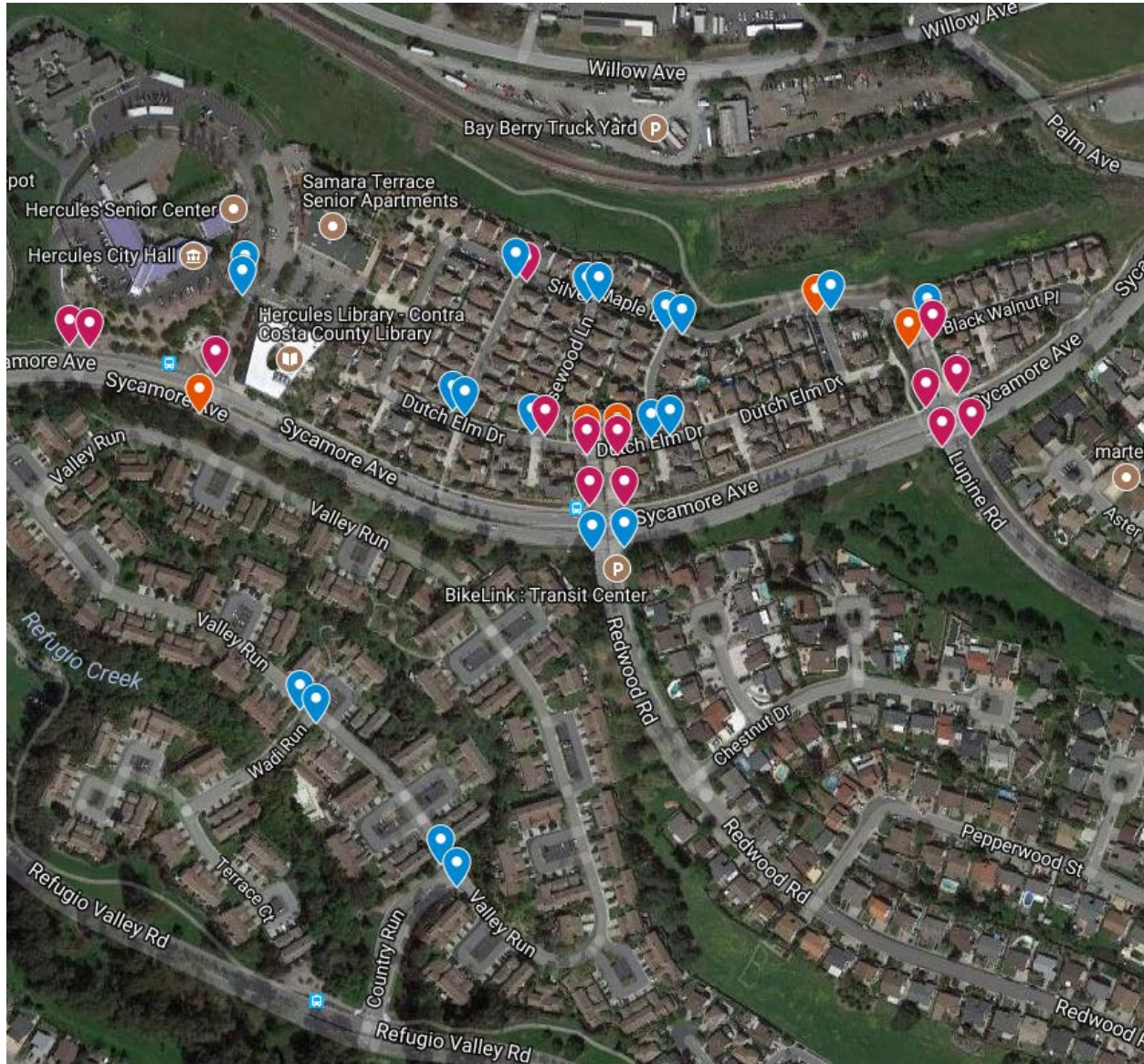
Blue Pin (Ramp Redo) = 2; Magenta Pin (NS) = 10; Orange (RN) = 2



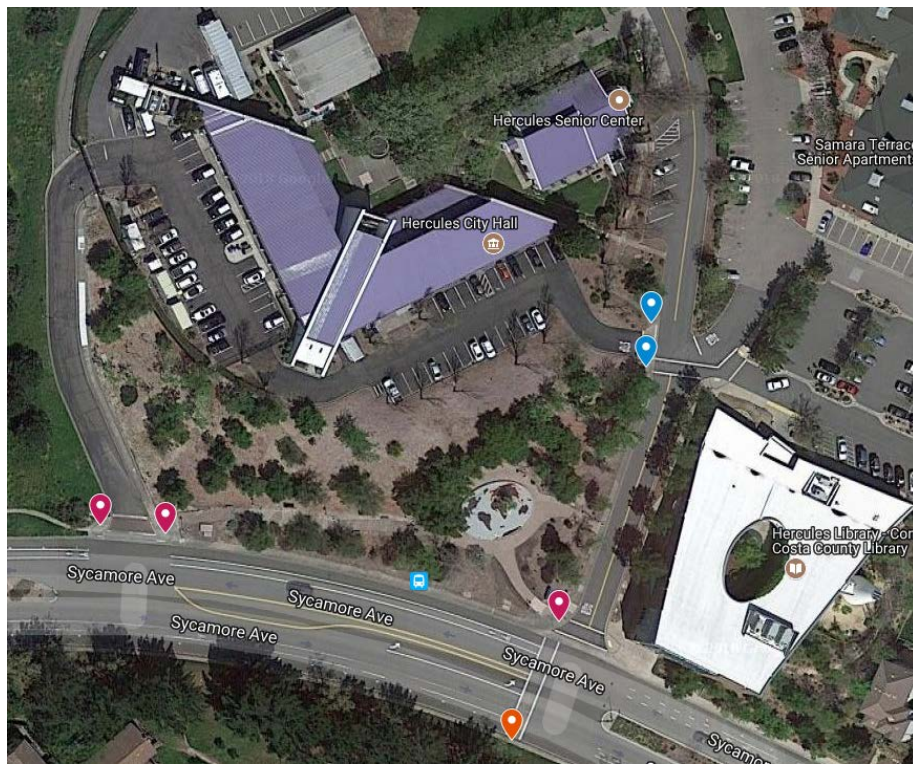
Magenta Pin (NS) = 10; Orange Pin (RN) = 1; Blue Pin (Ramp Redo) = 1



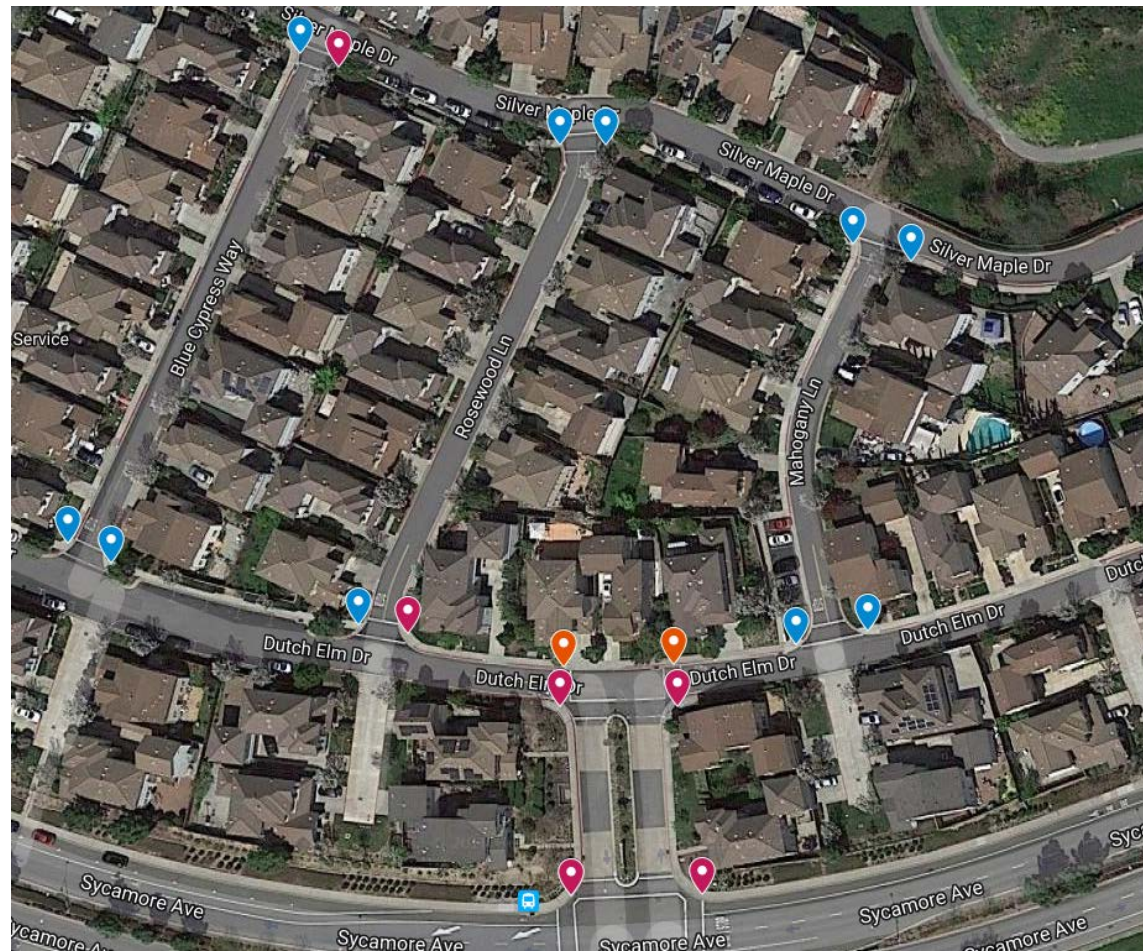
Section 4

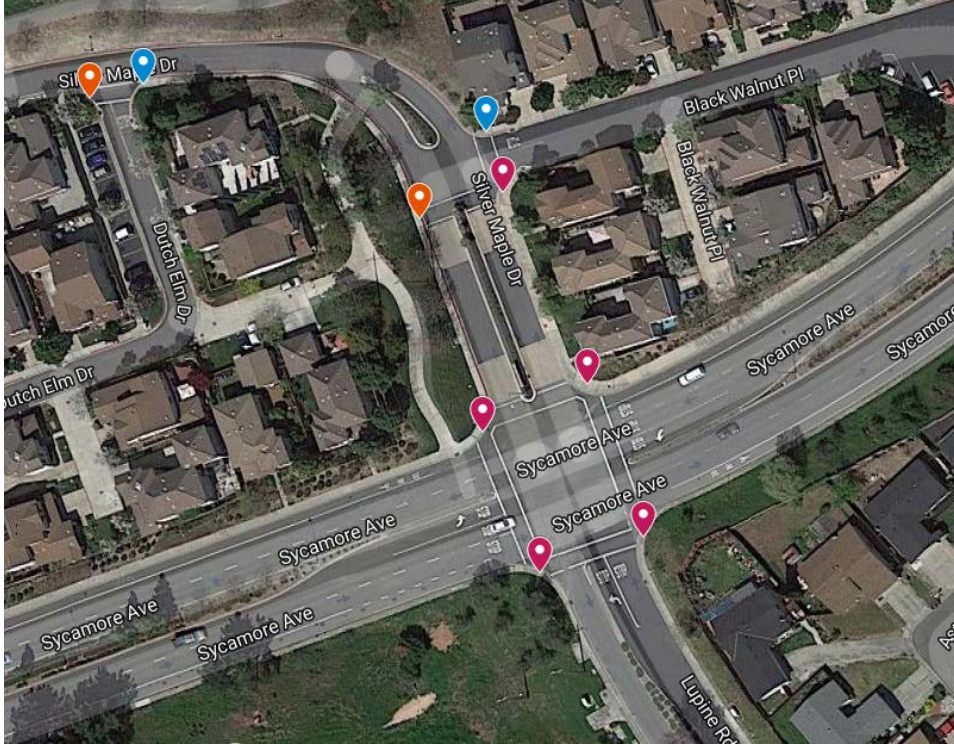


Total = 37

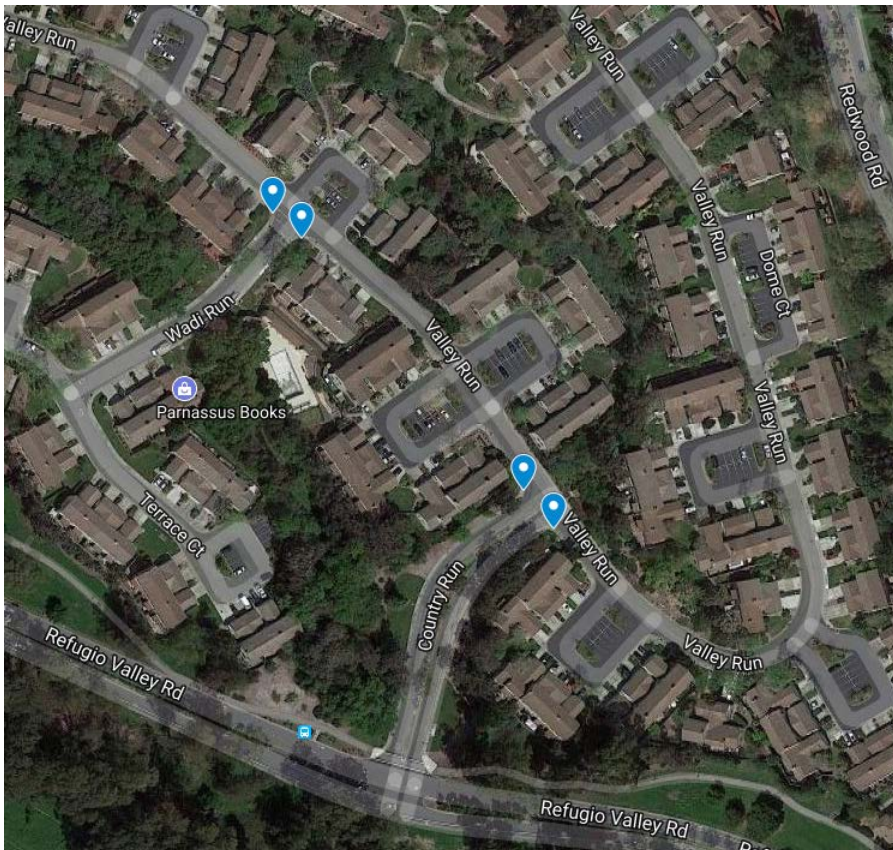


Magenta Pin (NS) = 9; Blue Pin (Ramp Redo) = 12; Orange Pin (RN) = 3

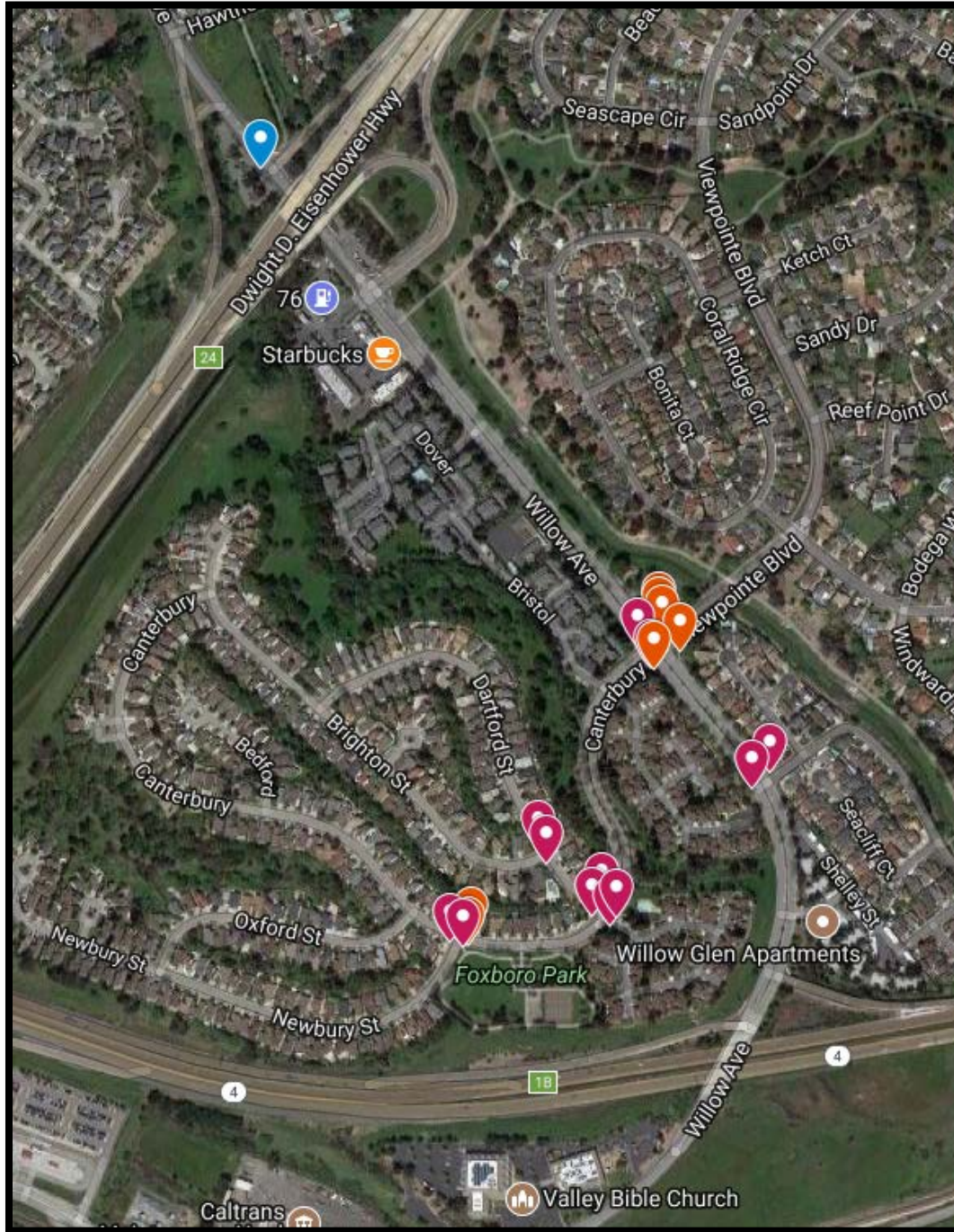




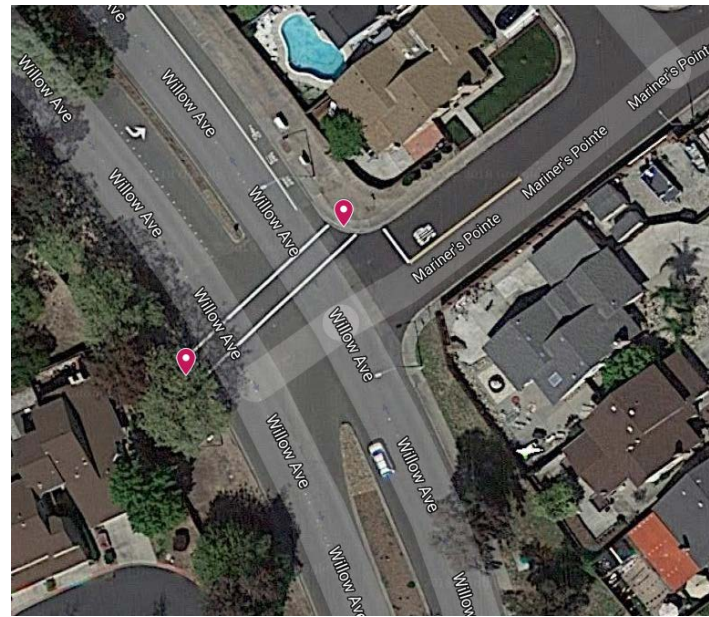
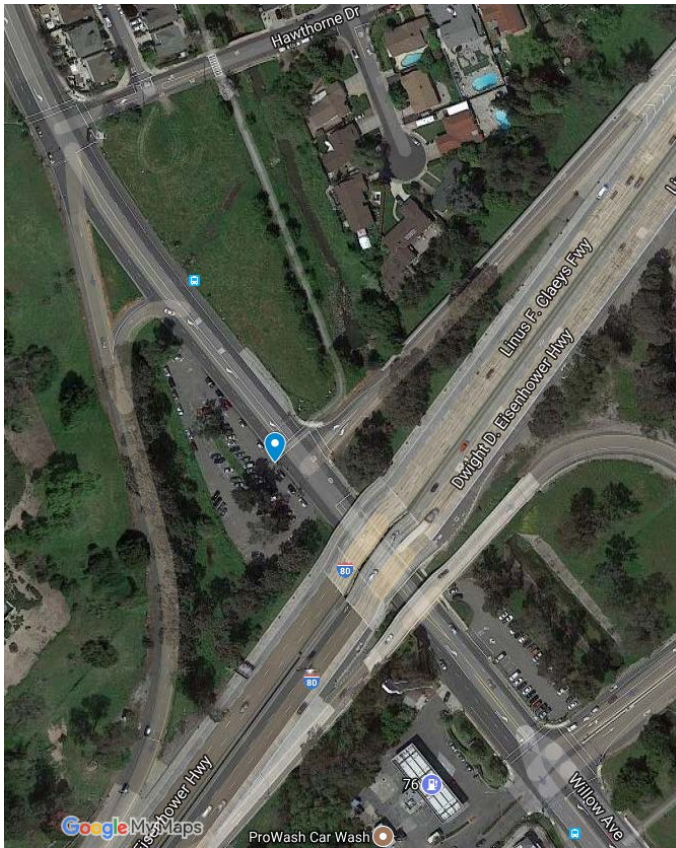
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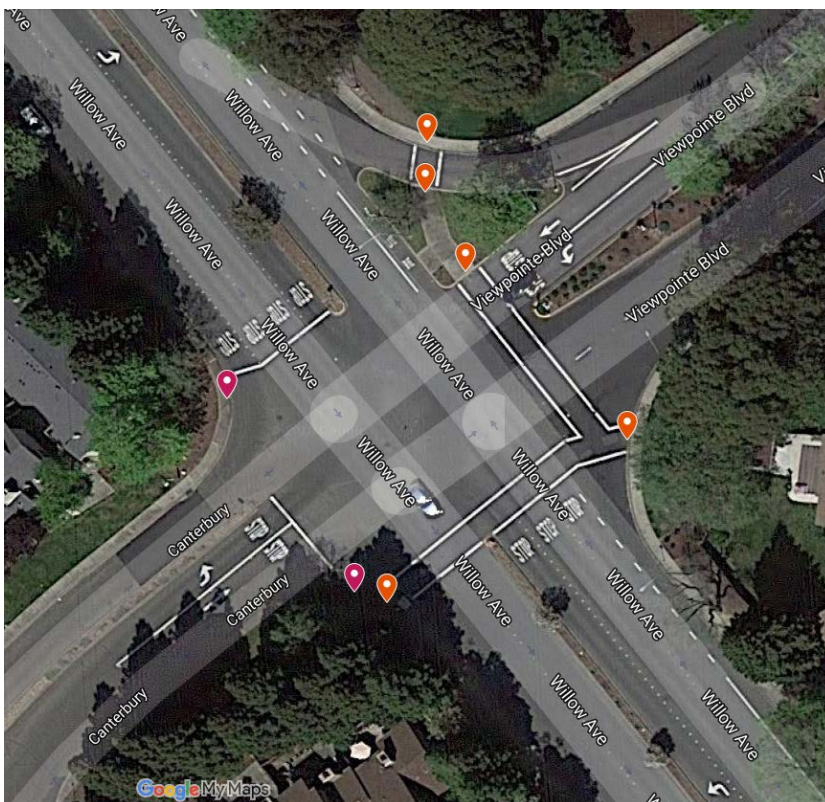
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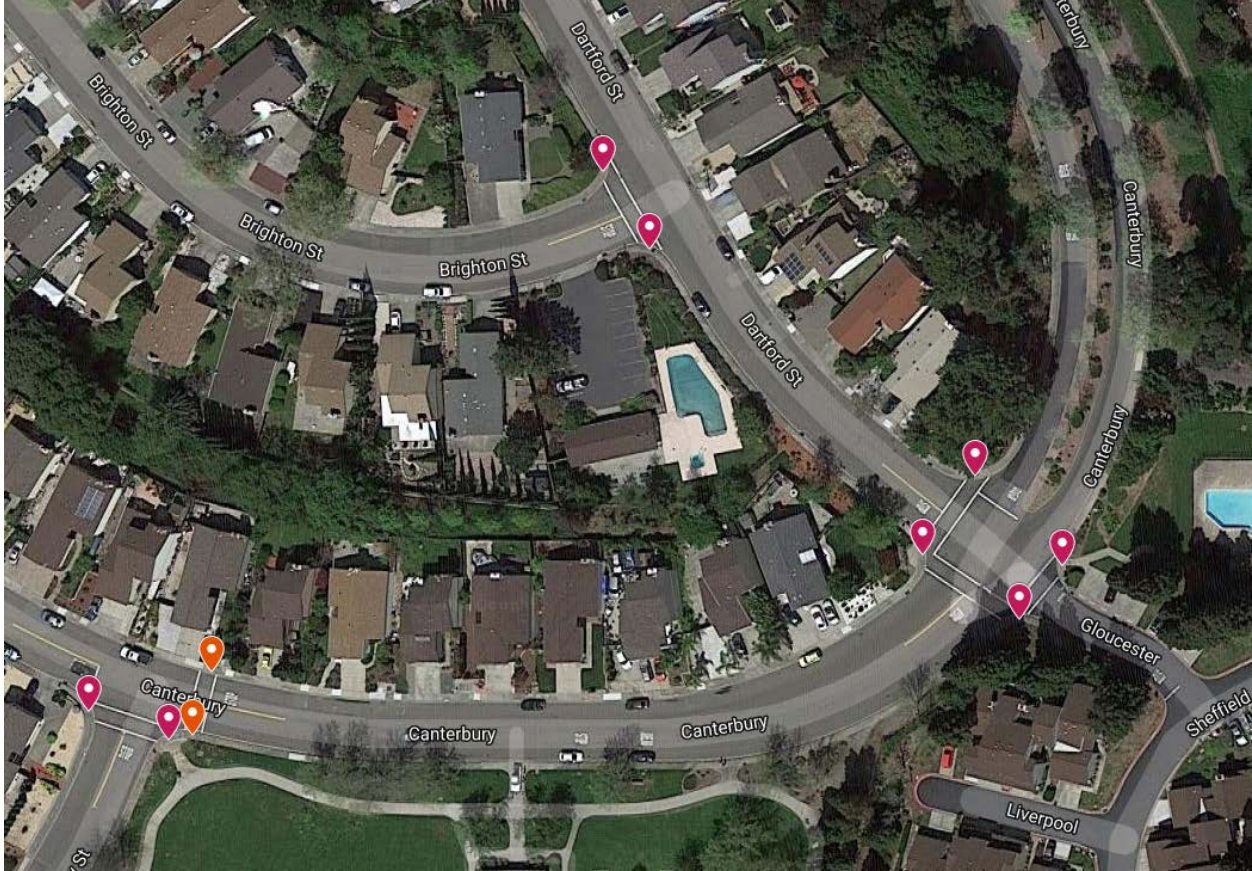


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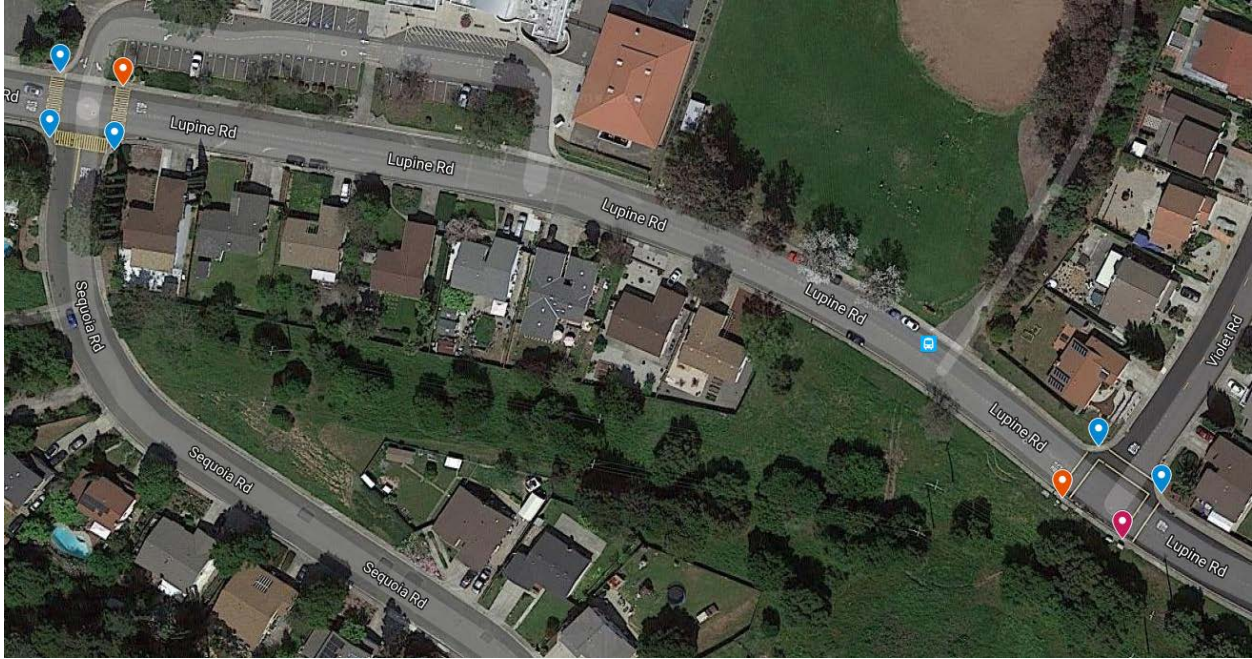


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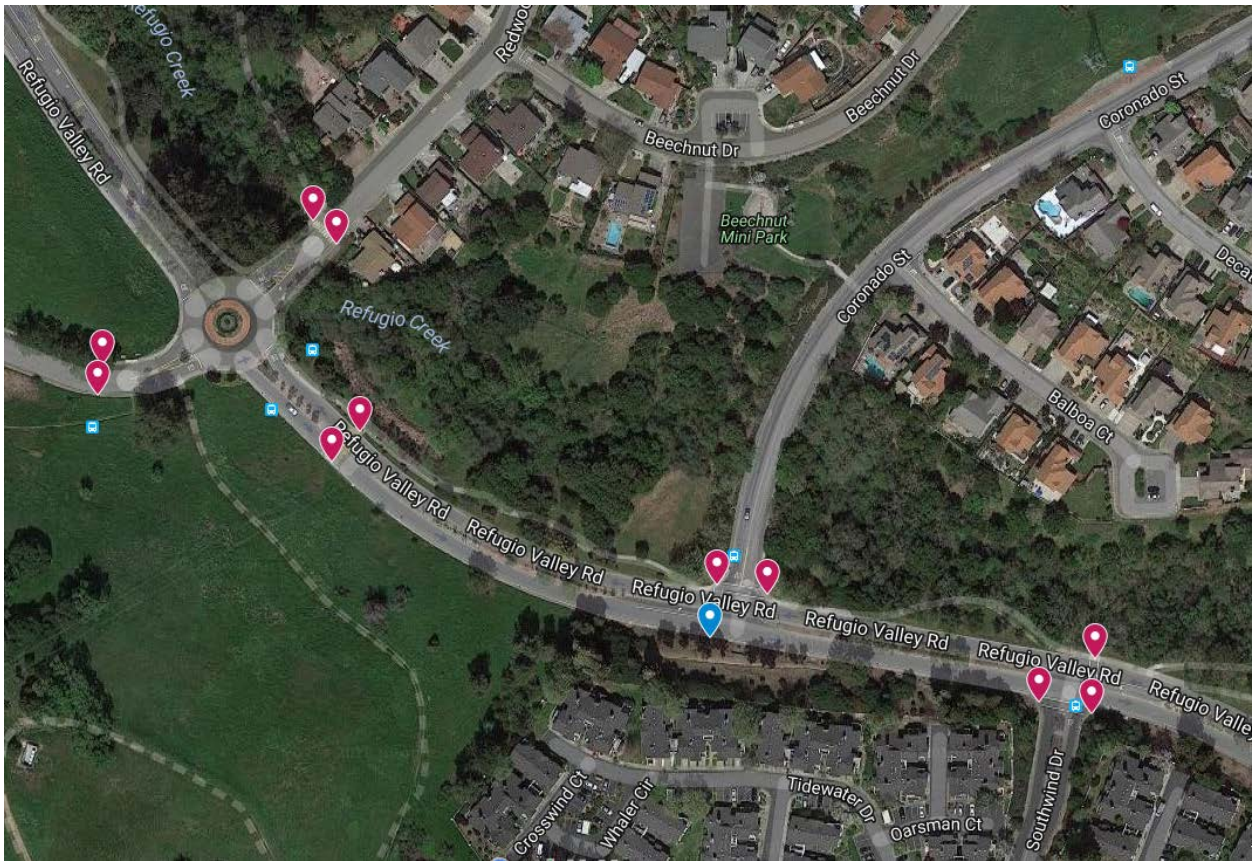




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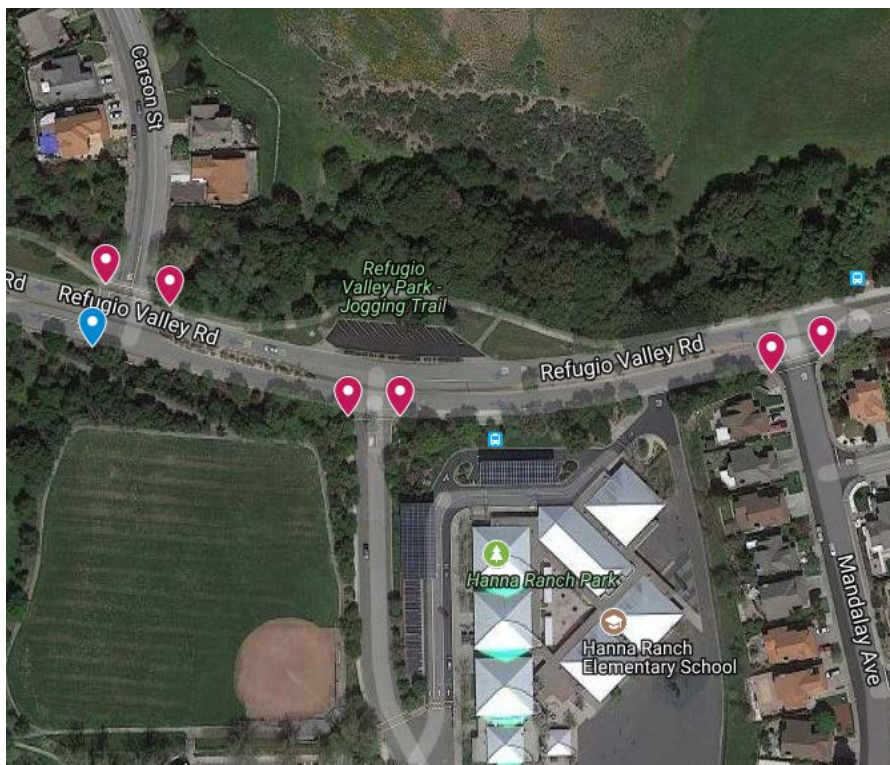


Magenta Pin (NS) = 12; Blue Pin (Ramp Redo) = 6; Orange Pin (RN) = 2





Magenta Pin (NS) = 17; Blue Pin (Ramp Redo) = 1



8. Hercules Creekside Trail from Alfred Noble to Sycamore Avenue

Engineer's Estimate

Date: 1/30/2019



Expand/extend existing sidewalk to 10 ft with shoulders between San Pablo Avenue and Alfred Noble.
Boardwalk: Install 10 ft sidewalk with metal railing and retaining wall along San Pablo Ave between Sycamore Avenue and John Muir Parkway (along inline transit pullout).

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	889	70.00	62,222
	TOTAL FOR ITEM 1 EARTHWORK				62,222
2	PAVEMENT				
	ASPHALT CONCRETE	TON	102	150.00	15,300
	AGGREGATE BASE	CY	230	200.00	45,926
	SIDEWALK	SF	15500	15.00	232,500
	TOTAL FOR ITEM 2 PAVEMENT				278,426
5	STRUCTURES				
	RETAINING WALL	SF	4800	115.00	552,000
	METAL RAILING	LF	800	80.00	64,000
	TOTAL FOR ITEM 5 STRUCTURES				616,000
3	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-2	1%	9,566
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-2	5%	47,832
	MOBILIZATION	%	of Sec. 1-2	10%	95,665
	UTILITY COORDINATION	%	of Sec. 1-2	10%	95,665
	TOTAL FOR ITEM 3 MINOR ITEMS				248,728
SUBTOTAL					\$1,205,376
CONTINGENCY (15%)					\$181,000
GRAND TOTAL					\$1,386,376
TOTAL BUDGET					\$1,386,000

Estimate By:

DKS



Project Description: Expand/extend existing sidewalk to 10 ft with shoulders between San Pablo Avenue and ITC. Install 10 ft sidewalk with metal railing and retaining wall along San Pablo Ave between Sycamore Avenue and John Muir Parkway.

9. Multiuse path at Market Hall site

Engineer's Estimate

Date: 1/30/2019

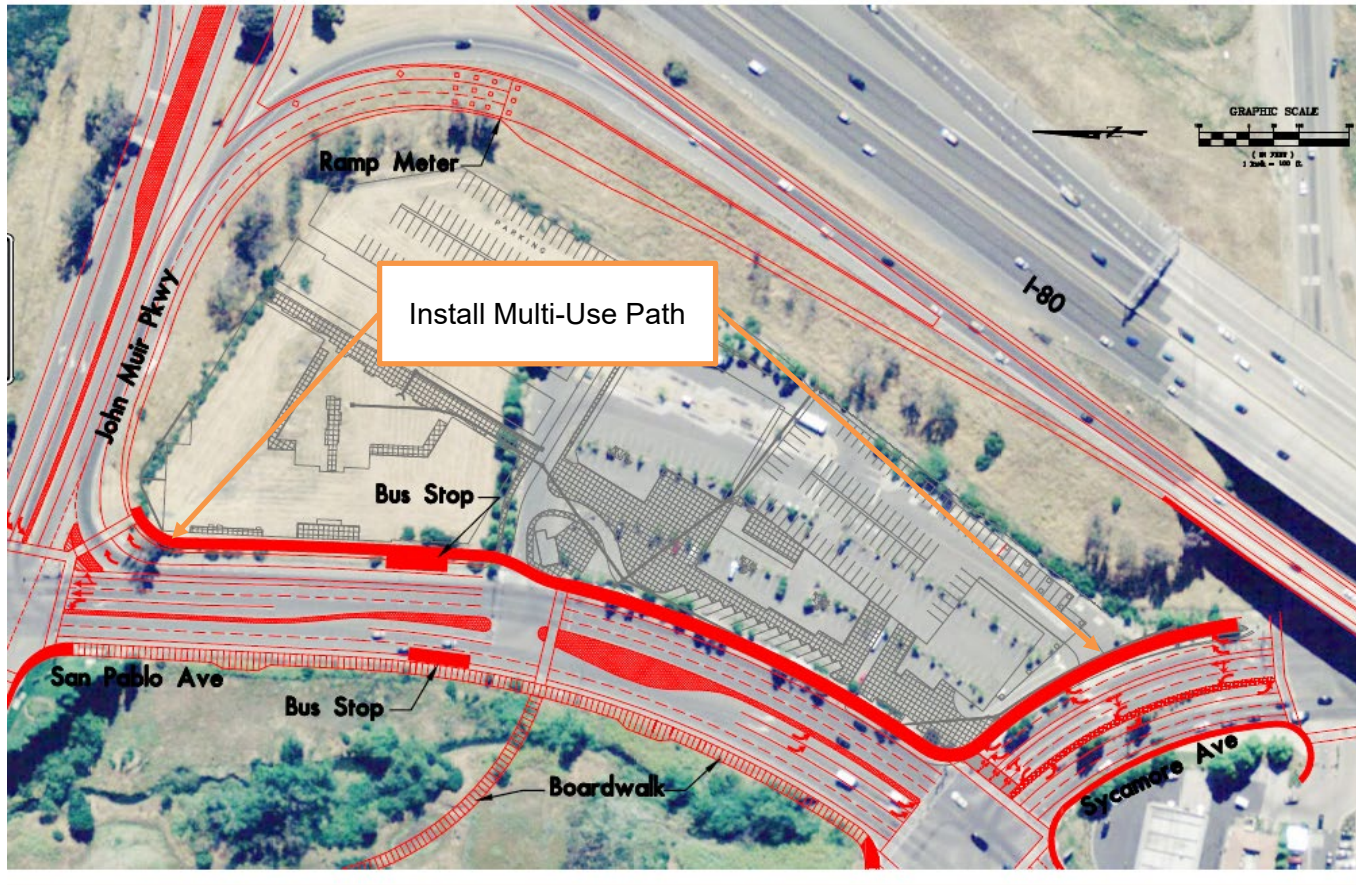


Add Class I multiuse path along San Pablo and Sycamore Avenues at Market Hall site

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	PAVEMENT				
	MULTI-USE CONCRETE PATH	SF	4000	15.00	60,000
	FURNISH & INSTALL ADA CURB RAMP	EA	1	5,000.00	5,000
	REMOVE ASPHALT	SF	2500	5.00	12,500
	REMOVE SIDEWALK	SF	150	10.00	1,500
	TOTAL FOR ITEM 1 PAVEMENT				79,000
2	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1	1%	790
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1	5%	3,950
	MOBILIZATION	%	of Sec. 1	10%	7,900
	UTILITY COORDINATION	%	of Sec. 1	3%	2,370
	TOTAL FOR ITEM 2 MINOR ITEMS				15,010
SUBTOTAL					\$94,010
CONTINGENCY (15%)					\$14,000
GRAND TOTAL					\$108,010
TOTAL BUDGET					\$108,000

DKS

Estimate By:

**Project Description:**

Add multi-use path along San Pablo and Sycamore Avenues at Market Hall site

10. Pedestrian connection along Palm Ave between Sycamore Ave and Willow Ave

Engineer's Estimate

Date: 1/30/2019

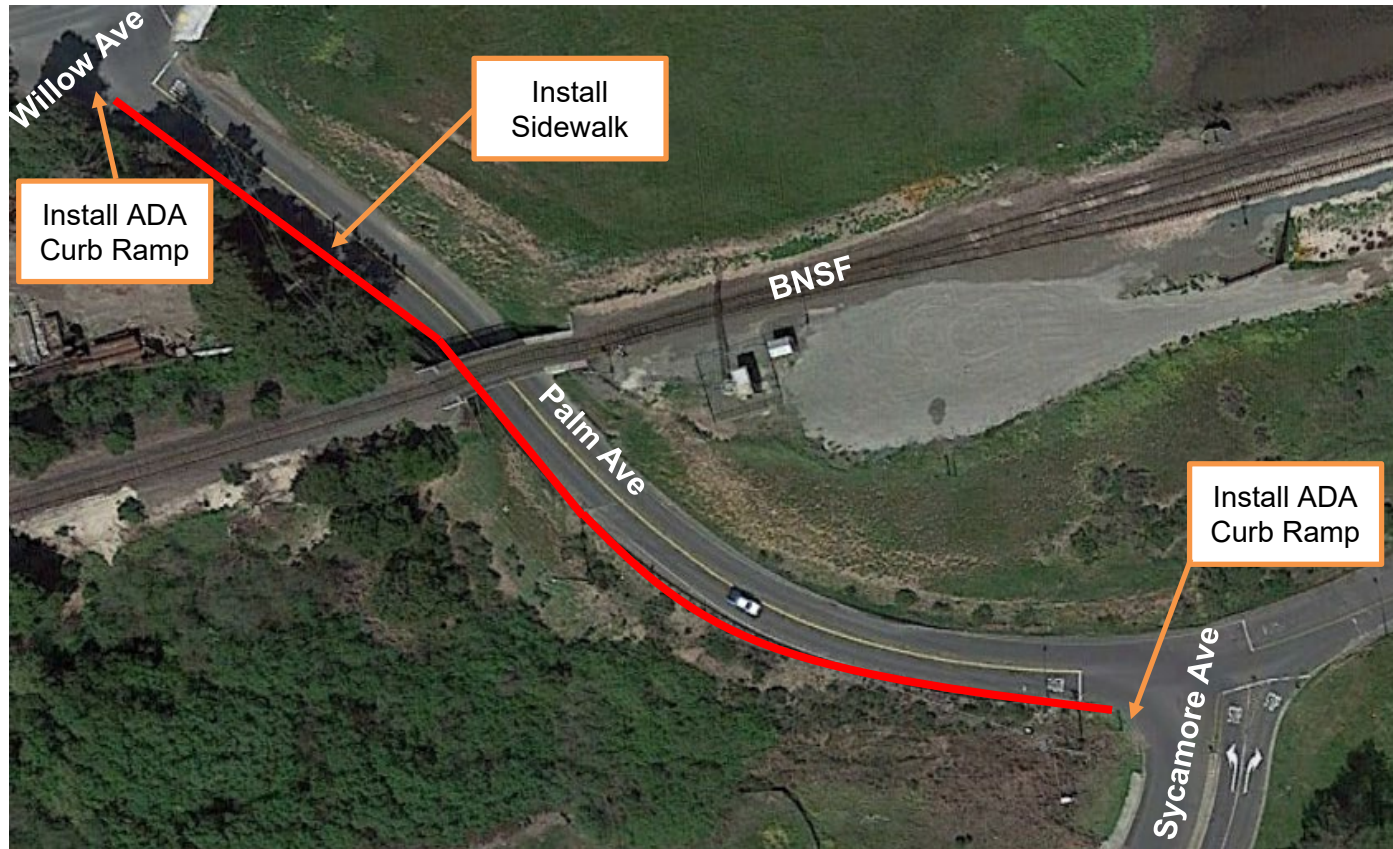


Improve pedestrian and bicycle access across railway via Palm

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	74	70.00	5,185
	TOTAL FOR ITEM 1 EARTHWORK				5,185
2	DRAINAGE				
	DRAINAGE	LF	560	155.00	86,800
	TOTAL FOR ITEM 2 DRAINAGE				86,800
3	PAVEMENT				
	SIDEWALK	SF	2240	15.00	33,600
	FURNISH & INSTALL ADA CURB RAMP	EA	2	5,000.00	10,000
	CURB & GUTTER	LF	560	55.00	30,800
	TOTAL FOR ITEM 3 PAVEMENT				74,400
4	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-3	1%	1,664
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-3	5%	8,319
	MOBILIZATION	%	of Sec. 1-3	10%	16,639
	UTILITY COORDINATION	%	of Sec. 1-3	3%	4,992
	TOTAL FOR ITEM 4 MINOR ITEMS				31,613
SUBTOTAL					\$197,998
CONTINGENCY (15%)					\$30,000
ROW \$20/SF 2800					\$56,000
GRAND TOTAL					\$283,998
TOTAL BUDGET					\$284,000

Estimate By:



**Project Description:**

Improve pedestrian and bicycle access across BNSF railway via Palm

Slope excavation

Sidewalk Distance: 560 ft

11. Bay Trail gap closure and lighting

Engineer's Estimate

Date: 1/30/2019



Complete Bay Trail through Hercules (Waterfront area); add lighting

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	844	70.00	59,111
	TOTAL FOR ITEM 1 EARTHWORK				59,111
2	PAVEMENT				
	ASPHALT CONCRETE	TON	646	150.00	96,900
	TOTAL FOR ITEM 2 PAVEMENT				96,900
3	MISCELLANEOUS				
	STREET LIGHTS / ELECTROLIERS	EA	8	10,000.00	80,000
	TOTAL FOR ITEM 3 MISCELLANEOUS				80,000
4	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-3	1%	2,360
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-3	5%	11,801
	MOBILIZATION	%	of Sec. 1-3	10%	23,601
	UTILITY COORDINATION	%	of Sec. 1-3	3%	7,080
	TOTAL FOR ITEM 3 MINOR ITEMS				30,681
SUBTOTAL					\$266,692
CONTINGENCY (15%)					\$40,000
GRAND TOTAL					\$306,692
TOTAL BUDGET					\$307,000

Estimate By:



**Project Description:**

Complete Bay Trail through Hercules (Waterfront Area).

1900 ft of excavation/asphalt concrete; add lighting

12. Expand Bicycle Network

Engineer's Estimate

Date: 1/30/2019



Expand bicycle network to serve all elementary schools and major employment centers; fill in gaps in bicycle network

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	PAVEMENT				
	STRIPE THERMOPLASTIC BIKE LANE	LF	4980	4.00	19,920
	STRIPE SHARROW PAVEMENT MARKINGS	EA	6	500.00	3,000
	TOTAL FOR ITEM 1 PAVEMENT				19,920
2	MINOR ITEMS				
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1	5%	996
	MOBILIZATION	%	of Sec. 1	10%	1,992
	TOTAL FOR ITEM 2 MINOR ITEMS				2,988
SUBTOTAL					\$22,908
CONTINGENCY (15%)					\$3,000
GRAND TOTAL					\$25,908
TOTAL BUDGET					\$26,000

Estimate By:

DKS

Project Description:

Expand bicycle network to serve all elementary schools and major employment centers; fill in gaps in bicycle network (in both directions).

3800 feet of striping for Lupine Elementary School

1180 feet of striping for Ohlone School
(Sharrow Pavement Markings on Refugio & Turquoise)



13. Add sidewalk along Willow Avenue to Hercules Transit Center

Engineer's Estimate

Date: 1/30/2019



Add/Improve pedestrian facilities on Willow Ave to connect to HTC

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	DRAINAGE				
	DRAINAGE	LF	1650	155.00	255,750
	TOTAL FOR ITEM 1 DRAINAGE				255,750
2	PAVEMENT				
	SIDEWALK	SF	8250	15.00	123,750
	CURB & GUTTER	LF	1650	55.00	90,750
	FURNISH & INSTALL ADA CURB RAMP	EA	11	5,000.00	55,000
	REMOVE ASPHALT	SF	250	5.00	1,250
	TOTAL FOR ITEM 2 PAVEMENT				270,750
3	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-2	1%	5,265
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-2	5%	26,325
	MOBILIZATION	%	of Sec. 1-2	10%	52,650
	UTILITY COORDINATION	%	of Sec. 1-2	10%	52,650
	TOTAL FOR ITEM 3 MINOR ITEMS				136,890
SUBTOTAL					\$663,390
CONTINGENCY (15%)					\$100,000
ROW \$20/SF 6300					\$126,000
GRAND TOTAL					\$889,390
TOTAL BUDGET					\$889,000

Estimate By:



**Project Description:**

Add/Improve pedestrian facilities on Willow Ave to connect to HTC.

Install sidewalk for 1650 ft on north side of Willow Ave.

Install 11 ADA curb ramps along path for driveways.

14. Improve Bike/Pedestrian Connections to Hercules Transit Center
– Sycamore Ave from Creekside to Willow Ave
Engineer's Estimate
Date: 1/30/2019

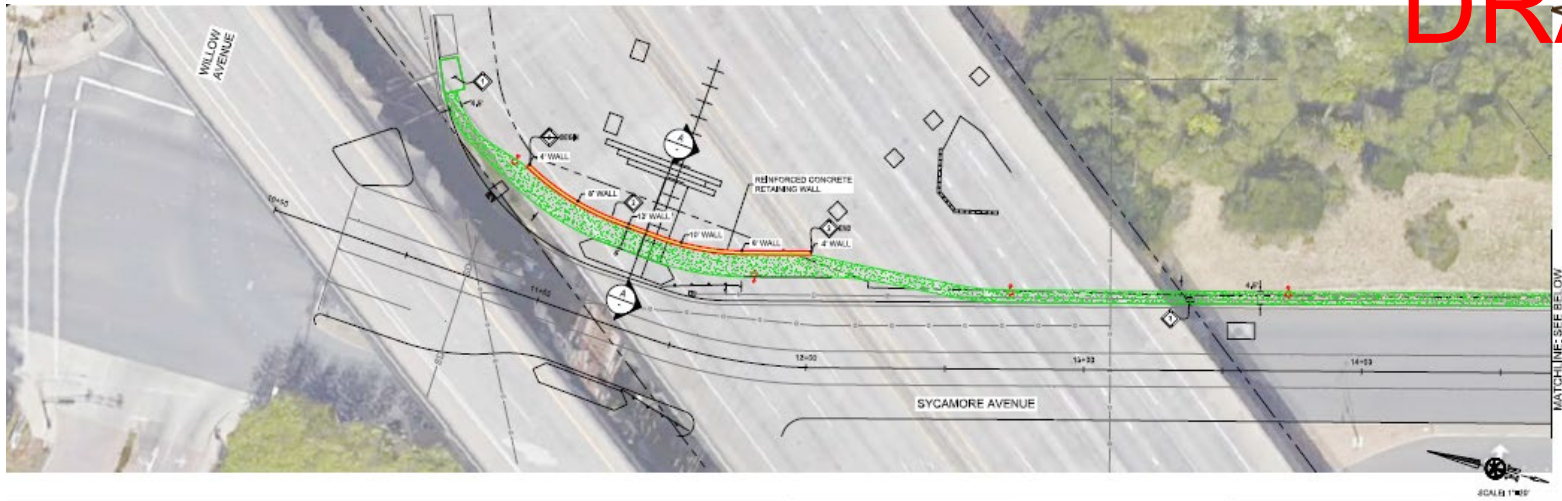


Add bike/pedestrian facilities on Sycamore Ave from Creekside to connect to HTC

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	833	70.00	58,333
	TOTAL FOR ITEM 1 EARTHWORK				58,333
2	DRAINAGE				
	DRAINAGE	LF	1250	155.00	193,750
	TOTAL FOR ITEM 2 DRAINAGE				193,750
3	PAVEMENT				
	SIDEWALK	SF	12500	15.00	187,500
	CURB & GUTTER	LF	2500	55.00	137,500
	FURNISH & INSTALL ADA CURB RAMP	EA	2	5,000.00	10,000
	TOTAL FOR ITEM 3 PAVEMENT				335,000
4	MISCELLANEOUS				
	STREET LIGHTS / ELECTROLIERS	EA	2	10,000.00	20,000
	TOTAL FOR ITEM 4 MISCELLANEOUS				20,000
5	STRUCTURES				
	RETAINING WALL	SF	800	115.00	92,000
	TOTAL FOR ITEM 5 STRUCTURES				92,000
6	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	1%	6,991
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	5%	34,954
	MOBILIZATION	%	of Sec. 1-4	10%	69,908
	UTILITY COORDINATION	%	of Sec. 1-4	3%	20,972
	TOTAL FOR ITEM 5 MINOR ITEMS				132,826
SUBTOTAL					\$831,909
CONTINGENCY (15%)					\$125,000
GRAND TOTAL					\$956,909
TOTAL BUDGET					\$957,000

Estimate By:





CONSTRUCTION NOTES:

- ◆ INSTALL "CASE C" CURB RAMP PER CALTRANS STD PLAN A88A
- ◆ INSTALL REINFORCED CONCRETE RETAINING WALL (HEIGHT VARIES 4' TO 10', SEE SECTION AA THIS SHEET)
- ◆ ADJUST TO GRADE UTILITY BOX
- ◆ RELOCATE SIGN & POST

LEGEND:

- CONCRETE
- LED PED
- APPROACH



Project Description:

Install sidewalk along Sycamore Ave from Creekside to Willow Ave, tie into asphalt path going to HTC.
Install retaining wall under I-80 bridge to accommodate pedestrians and bicyclists.

15. Extend sidewalk connections to Rodeo

Engineer's Estimate

Date: 1/30/2019



Fix incomplete sidewalks connecting to Rodeo

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	EARTHWORK				
	ROADWAY EXCAVATION	CY	340	70.00	23,800
	TOTAL FOR ITEM 1 EARTHWORK				23,800
2	DRAINAGE				
	DRAINAGE	LF	850	155.00	131,750
	TOTAL FOR ITEM 2 DRAINAGE				131,750
3	PAVEMENT				
	SIDEWALK	SF	5100	15.00	76,500
	CURB & GUTTER	LF	850	55.00	46,750
	FURNISH & INSTALL ADA CURB RAMP	EA	1	5,000.00	5,000
	REMOVE ASPHALT CURB	LF	550	3.00	1,650
	TOTAL FOR ITEM 3 PAVEMENT				129,900
4	MISCELLANEOUS				
	RELOCATE STREET LIGHTS / ELECTROLIERS	EA	4	10,000.00	40,000
	TOTAL FOR ITEM 4 MISCELLANEOUS				40,000
5	STRUCTURES				
	RETAINING WALL	SF	1200	115.00	138,000
	TOTAL FOR ITEM 5 STRUCTURES				138,000
6	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-4	1%	4,635
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-4	5%	23,173
	MOBILIZATION	%	of Sec. 1-4	10%	46,345
	UTILITY COORDINATION	%	of Sec. 1-4	3%	13,904
	TOTAL FOR ITEM 5 MINOR ITEMS				88,056
SUBTOTAL					\$551,506
CONTINGENCY (15%)					\$83,000
GRAND TOTAL					\$634,506
TOTAL BUDGET					\$635,000

Estimate By:

DKS

Project Description:

Complete sidewalks connecting to Rodeo

Install 1020 feet of sidewalk

Install ADA Curb Ramp at corner

Install retaining wall along steep slope



16. Complete bicycle facilities between Mariner's Pointe and HTC

Engineer's Estimate

Date: 1/30/2019



Provide Class II or Class III Bicycle facility between Hercules
Transit Center and Mariner's Pointe on Willow Ave

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	PAVEMENT				
	STRIPE THERMOPLASTIC BIKE LANE	LF	5000	4.00	20,000
	STRIPE SHARROW PAVEMENT MARKINGS	EA	8	500.00	4,000
	TOTAL FOR ITEM 1 PAVEMENT				20,000
2	MINOR ITEMS				
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1	10%	2,000
	MOBILIZATION	%	of Sec. 1	15%	3,000
	TOTAL FOR ITEM 2 MINOR ITEMS				5,000
SUBTOTAL					\$25,000
CONTINGENCY (15%)					\$4,000
GRAND TOTAL					\$29,000
TOTAL BUDGET					\$29,000

Estimate By:

**Project Description:**

Complete bicycle facilities on Willow Avenue between Hercules Transit Center and Mariner's Pointe (Class II or Class III)

Install 5000 feet of Class II striping or Sharrow Pavement marking for Class III

17. Add lighting to Refugio Valley Trail

Engineer's Estimate

Date: 1/30/2019



Add lighting as needed for safety along Refugio Valley Trail

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	MISCELLANEOUS				
	STREET LIGHTS / ELECTROLIERS	EA	51	10,000.00	510,000
	TOTAL FOR ITEM 1 MISCELLANEOUS				510,000
2	MINOR ITEMS				
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1	5%	25,500
	MOBILIZATION	%	of Sec. 1	10%	51,000
	UTILITY COORDINATION	%	of Sec. 1	10%	51,000
	TOTAL FOR ITEM 2 MINOR ITEMS				76,500
SUBTOTAL					\$586,500
CONTINGENCY (15%)					\$88,000
GRAND TOTAL					\$674,500
TOTAL BUDGET					\$675,000

Estimate By:

DKS



Project Description:

Add lighting as needed for safety along Refugio Valley Trail and San Francisco Bay Trail.

Install 51 street lights (spacing based on trees and distance from street lighting on Refugio Valley Road).

18. Remove crosswalk at north leg of San Pablo Avenue & Sycamore Avenue

Engineer's Estimate

Date: 1/30/2019

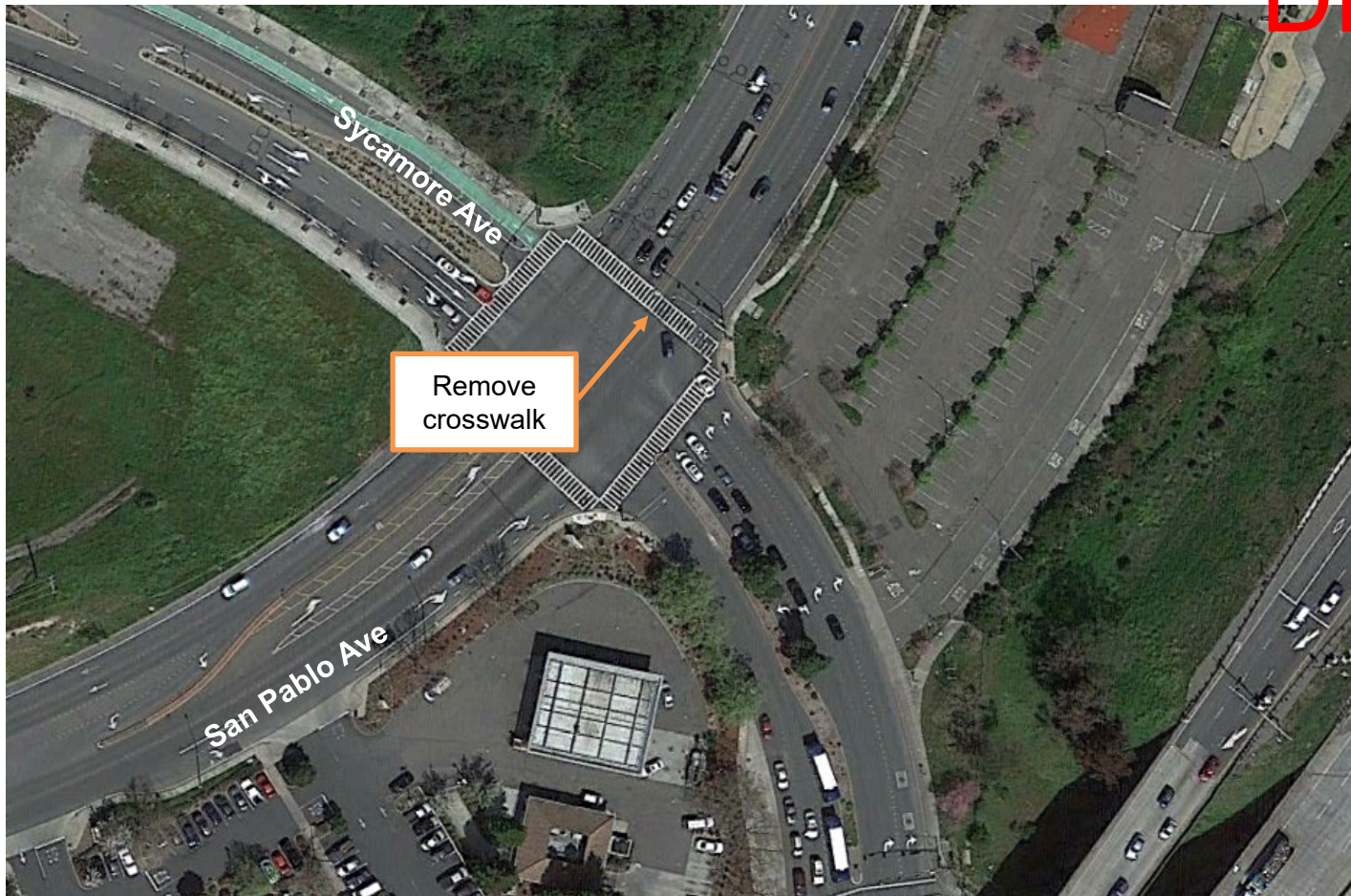


Removal of crosswalk from north approach San Pablo/Sycamore; install signs and crossing barriers

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	PAVEMENT				
	REMOVE STRIPING	SF	1300	5.00	6,500
	TOTAL FOR ITEM 1 PAVEMENT				6,500
2	MISCELLANEOUS				
	NO PED CROSSING BARRIER	EA	2	1,500.00	3,000
	NO PED CROSSING SIGN	EA	2	500.00	1,000
	TOTAL FOR ITEM 2 MISCELLANEOUS				4,000
3	MINOR ITEMS				
	WATER POLLUTION CONTROL	%	of Sec. 1-2	5%	525
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1-2	10%	1,050
	MOBILIZATION	%	of Sec. 1-2	15%	1,575
	TOTAL FOR ITEM 3 MINOR ITEMS				3,150
SUBTOTAL					\$13,650
CONTINGENCY (15%)					\$2,000
GRAND TOTAL					\$15,650
TOTAL BUDGET					\$16,000

DKS

Estimate By:

**Project Description:**

Remove crosswalk over San Pablo Avenue, remove crosswalk striping, install crossing barrier and sign on both ends

19. Provide bus shelters along San Pablo Avenue

Engineer's Estimate

Date: 1/30/2019



Provide shelters along WESTCAT Route J line on San Pablo with real-time arrival signs

#	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	MISCELLANEOUS				
	BUS SHELTER	EA	2	12,000.00	24,000
	REAL-TIME BUS ARRIVAL BOARD	EA	2	5,000.00	10,000
	TOTAL FOR ITEM 1 MISCELLANEOUS				24,000
2	MINOR ITEMS				
	TRAFFIC CONTROL SYSTEM	%	of Sec. 1	5%	1,200
	MOBILIZATION	%	of Sec. 1	10%	2,400
	UTILITY COORDINATION	%	of Sec. 1	5%	1,200
	TOTAL FOR ITEM 2 MINOR ITEMS				3,600
SUBTOTAL					\$27,600
CONTINGENCY (15%)					\$4,000
GRAND TOTAL					\$31,600
TOTAL BUDGET					\$32,000

DKS

Estimate By:

Placeholder for parking garage documentation

Hercules ITC - Estimate Summary

4/20/2018

ITEM	Estimate (2015 YR \$)	Escalation to 2018 FY \$ (3% annual)	Escalation to 2020 FY \$ (4% annual)	Escalation to 2020 FY \$ (4% annual)	Est. Cost Range Constr. Year btwn 2018 to 2020 (\$ Millions)
UTILITY RELOCATION	20,868,000	22,800,000	24,200,000	23,500,000	2.3 to 2.5
Fuel Oil Relocation (phase 1)	6,500,000	7,100,000	7,500,000	7,300,000	
Fuel Oil Relocation (phase 2)	7,200,000	7,900,000	8,400,000	8,100,000	
Fiber Relocation ¹	2,640,000	2,900,000	3,100,000	3,000,000	
Retaining Walls for Utilities	1,050,000	1,100,000	1,200,000	1,200,000	
Design, CM, & Permits (20%)	3,478,000	3,800,000	4,000,000	3,900,000	
TRACK / SIGNAL WORK	22,739,400	24,800,000	26,300,000	25,600,000	24.8 to 27.7
Track & Signals	10,244,000	11,200,000	11,900,000	11,500,000	
Retaining Walls for Track/Station	210,000	200,000	200,000	200,000	
Railroad Bridge	4,590,000	5,000,000	5,300,000	5,200,000	
Extended RR Bridge (2013 \$) ²	1,800,000	2,000,000	2,100,000	2,000,000	
Track Final Design, CM, & Permits (35%) ³	5,895,400	6,400,000	6,800,000	6,600,000	
INITIAL RAIL STATION	7,250,000	7,900,000	8,400,000	8,200,000	7.9 to 8.9
Station Stairs and Ped Overcrossing**	4,400,000	4,800,000	5,100,000	4,900,000	
Civic Plaza Improvements**	3,150,000	3,400,000	3,600,000	3,500,000	
Station Final Design, CM & Permits (30%) ⁴	2,265,000	2,500,000	2,700,000	2,500,000	
SUBTOTAL (TRAIN TO STOP)	48,007,400	52,500,000	55,700,000	54,000,000	52.5 to 58.4
TRAILS, PARKS, PLAZAS	3,768,000	4,100,000	4,300,000	4,200,000	4.1 to 4.5
Bay Trail (RR Plaza to JMP ext.)*	1,000,000	1,100,000	1,200,000	1,100,000	
Pedestrian Bridge (for Bay Trail)**	1,000,000	1,100,000	1,200,000	1,200,000	
Creekside Park (from Transit Loop)*	340,000	400,000	400,000	400,000	
Promenade (for Bay Trail)*	300,000	300,000	300,000	300,000	
Railroad Plaza**	500,000	500,000	500,000	600,000	
TPP Design, CM, & Permits (30%) ⁴	628,000	700,000	700,000	700,000	
GRAND TOTALS	51,775,400	56,600,000	60,000,000	58,200,000	56.6 to 62.9

Notes:

1. Reallocated from Track / Signal Work
2. Additional Cost for Extended RR Bridge per 2013 Technical Memorandum to RWQCB and Permit Conditions of Approval
3. 35% used due to greater coordination required for UPRR facilities and revision to RR Bridge design.
4. 30% used for elements with no design (**) or significant revision to engineering design (*) is required.