

Opinion of Probable Construction Cost**Kimley-Horn and Associates, Inc.**

Client:	Google	Date:	7/6/2020
Project:	Manila Avenue Bike/Ped Improvements	Prepared By:	NM
KHA No.:	197058003	Checked By:	AH
Location:	Manila Avenue	Cost Basis:	2018

Base Bid Items

Item No.	Description	Quantity	Unit	Unit Cost	Cost
General					
1	Mobilization, Notification, Construction Layout, Job Site Management, Demobilization And Other Incidentals (Bid Item No. 1) (15.6%)	1	LS	\$46,800	\$46,800
2	Water Pollution Control Plan (2%)	1	LS	\$46,800	\$46,800
3	Traffic Control (10%)	1	LS	\$30,000	\$30,000
General Sub-Total =					\$123,600

Roadway					
4	Clearing and Grubbing	1	LS	\$12,000	\$12,000
5	Demolition of Concrete Sidewalks, Curb and/or Curb and Gutter	1,462	SF	\$10	\$14,620
6	Demolition of Asphalt Concrete	2,974	SF	\$5	\$14,870
7	Remove Tree	0	EA	\$1,500	\$0
8	Aggregate Base (Class 2)	27	CY	\$85	\$2,328
9	Hot Mix Asphalt Concrete	24	TON	\$225	\$5,333
10	Minor Concrete (Sidewalk)	961	SF	\$15	\$14,415
11	Minor Concrete (Colored Sidewalk)	0	SF	\$20	\$0
12	Minor Concrete (Curb and Gutter)	109	LF	\$45	\$4,905
13	Minor Concrete (Modified Curb and Gutter)	0	LF	\$50	\$0
14	Minor Concrete (Curb)	82	LF	\$35	\$2,870
15	Minor Concrete (Retaining Curb)	35	LF	\$85	\$2,975
16	Valley Gutter	0	SF	\$25	\$0
17	Detectable Warning Surface	97	SF	\$35	\$3,395
18	Relocate Bike Locker	0	EA	\$400	\$0
19	2" Mill and Overlay	2,523	SF	\$4	\$10,092
20	Type 1 Pedestrian Barricade (Caltrans Detail ES-7Q)	0	EA	\$1,500	\$0
21	High Volume Traffic Slurry Seal (Type III)	1,518	SY	\$5	\$7,590
22	Preparation for High Volume Traffic Slurry Seal	1,518	SY	\$1	\$1,898
23	Pavement Pothole Repair/Digout (Assume 5% of Area)	684	SF	\$14	\$9,576
24	Crack Seal (Assume Length of Improvement)	283	LF	\$1	\$354
Roadway Sub-Total =					\$107,300

Signing and Striping					
25	Remove Existing Pavement Striping	1,178	LF	\$1	\$589
26	Remove Existing Pavement Marking	478	SF	\$1	\$478
27	Thermoplastic Pavement Marking (White)	950	SF	\$1	\$950
28	Thermoplastic Pavement Marking (Green)	823	SF	\$15	\$12,345
29	6" Yellow Line (Thermoplastic)	0	LF	\$1	\$0
30	Detail 9 Striping	0	LF	\$3	\$0
31	Detail 22 Striping	183	LF	\$3	\$549
32	Detail 39 Striping	566	LF	\$5	\$2,830
33	Detail 29 Striping	0	LF	\$1	\$0
34	Modified Detail 29 Striping	119	LF	\$1	\$119
35	Detail 38 Striping	189	LF	\$5	\$945

36	Detail 39A Striping	411	LF	\$5	\$2,055
37	Detail 41 Striping	101	LF	\$1	\$101
38	Remove Sign and Post	2	EA	\$200	\$400
39	Relocate Sign	0	EA	\$500	\$0
40	Install Sign and Post	4	EA	\$1,500	\$6,000
Signing and Striping Sub-Total =					\$27,400

	Utilities/Drainage				
41	Remove Street Light	0	EA	\$500	\$0
42	Remove Street Light Pullbox	0	EA	\$100	\$0
43	Landscape Area Drain	0	EA	\$500	\$0
44	2" Landscape Drain Pipe	0	LF	\$60	\$0
45	12" RCP Class IV Storm Drain Pipe	0	LF	\$120	\$0
46	18" RCP Class IV Storm Drain Pipe	0	LF	\$240	\$0
47	Sidewalk Underdrain	0	LF	\$20	\$0
48	Remove Storm Drain Catch Basin	0	EA	\$3,000	\$0
49	Manhole (City of Mountain View Type B-1)	0	EA	\$7,000	\$0
50	Manhole (SCC STD Detail C/6)	0	EA	\$7,200	\$0
51	Curb Inlet (City of Mountain View Type B-4)	0	EA	\$7,000	\$0
52	Curb Inlet (City of Sunnyvale Detail 10A)	0	EA	\$7,000	\$0
53	Convert Storm Drain Catch Basin to Junction Box	1	EA	\$4,000	\$4,000
54	Adjust Storm Drain Catch Basin to Grade	1	EA	\$2,000	\$2,000
55	Adjust Manhole to Grade	0	EA	\$2,000	\$0
56	Relocate/Adjust Vault to Grade	0	EA	\$1,000	\$0
57	Relocate/Adjust Vault to Grade (by PG&E)	0	EA	\$0	\$0
58	Relocate/Adjust Pullbox to Grade	2	EA	\$500	\$1,000
59	Relocate/Adjust Pullbox to Grade (by PG&E)	0	EA	\$0	\$0
60	Relocate/Adjust Facility to Grade	0	EA	\$800	\$0
Utilities/Drainage Sub-Total =					\$7,000

	Lighting and Signals				
61	Video Detection Camera System	1	LS	\$45,000	\$45,000
62	No. 6 Pullbox	5	EA	\$2,625	\$13,125
64	Conduit 2"	0	LF	\$47	\$0
65	Conduit 3"	250	LF	\$53	\$13,125
66	Conductor Wire	10,000	LF	\$2	\$16,000
67	Internally Illuminated Street Name Sign	1	EA	\$2,700	\$2,700
68	Mast Arm Sign	1	EA	\$150	\$150
69	Standard Type 18 (20'-30' M.A.)	1	EA	\$9,135	\$9,135
70	1-B Pole	2	EA	\$5,000	\$10,000
72	Signal Head SV/TV-1 (LED)	4	EA	\$2,500	\$10,000
73	Signal Head SV/TV-2 (LED)	1	EA	\$2,888	\$2,888
76	4-Section Signal Head (Additional Cost)	2	EA	\$2,100	\$4,200
77	Ped Push Button (Type B)	4	EA	\$788	\$3,150
78	Luminaire	4	EA	\$630	\$2,520
79	Detector Bicycle Loop (3'x8' Type Q)	0	EA	\$525	\$0
80	Detector Loop (Modified Type D)	0	EA	\$683	\$0
81	Detector Loop (Type A/D/E)	0	EA	\$683	\$0
82	Detector Hand Hole	0	EA	\$525	\$0
83	Adjust Existing Pullbox to Grade	2	EA	\$1,250	\$2,500
86	Relocate Luminaire Pole	0	LS	\$3,500	\$0
Lighting and Signals Sub-Total =					\$158,300

	Landscape				
87	Decomposed Granite	0	SF	\$20	\$0
88	Bench	0	EA	\$7,875	\$0
89	Wood Bark Mulch	0	SF	\$25	\$0
90	Weed Barrier	0	SF	\$1	\$0
91	24" Box Trees	0	EA	\$1,155	\$0
92	36" Box Trees	0	EA	\$1,575	\$0
93	1 Gallon Plants	0	EA	\$37	\$0
94	5 Gallon Plants	0	EA	\$47	\$0
95	Soil Amendments	0	CY	\$37	\$0
96	Plant Establishment Work	0	LS	\$42	\$0
97	Misc. Costs (10%) [Landscape]	0	LS	\$0	\$0
Landscape Sub-Total =					\$0

	Irrigation				
98	Subsurface Dripline	0	SF	\$5	\$0
99	Bubbler	0	EA	\$105	\$0
100	1" Remote Control Valve	0	EA	\$525	\$0
101	1" Drip Remote Control Valve	0	EA	\$630	\$0
102	Drip Air Relief Valve	0	EA	\$210	\$0
103	Drip Flush Valve	0	EA	\$210	\$0
104	Shutoff Valves	0	EA	\$315	\$0
105	Quick Coupler Valve	0	EA	\$263	\$0
106	Master Valve	0	EA	\$1,155	\$0
107	Flow Sensor	0	EA	\$840	\$0
108	Recycler Water Sign	0	EA	\$210	\$0
109	1" Recycled Water Meter	0	EA	\$42,000	\$0
110	1" Wye Strainer	0	EA	\$1,260	\$0
111	1" Check Valve	0	EA	\$1,260	\$0
112	1" Pressure Reducing Valve	0	EA	\$1,050	\$0
113	Test Station	0	EA	\$1,575	\$0
114	Valve Box	0	EA	\$263	\$0
115	Main Line: Sch. 40	0	LF	\$11	\$0
116	Lateral Line: Sch. 40	0	LF	\$11	\$0
117	Crossover Sleeves: Sch. 40	0	LF	\$26	\$0
118	Control and Neutral Conductors	0	LF	\$8	\$0
119	Wire, Conduit and Trenching	0	LF	\$9	\$0
120	Irrigation Controller	0	EA	\$10,500	\$0
121	Electric Meter and Power Connection	0	EA	\$5,250	\$0
122	Relocate Existing Overhead Irrigation	0	SF	\$3	\$0
123	Misc. Costs (10%) [Irrigation]	0	LS	\$0	\$0
Irrigation Sub-Total =					\$0

- ☐ No Design Completed
☐ Preliminary Design
☒ Final Design

Total =	\$423,600
Contingency @ 15% =	\$63,600
TOTAL ESTIMATED COST =	\$487,200

NOTES:

1. This opinion of probable construction cost is based on the 100% submittal.

DISCLAIMER:

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Opinion of Probable Construction Cost**Kimley-Horn and Associates, Inc.**

Client:	Google	Date:	7/6/2020
Project:	W Moffett Park Drive Bike/Ped Improvements	Prepared By:	NM
KHA No.:	197058004	Checked By:	AH
Location:	W Moffett Park Drive	Cost Basis:	2018

Base Bid Items

Item No.	Description	Quantity	Unit	Unit Cost	Cost
	General				
1	Mobilization, Notification, Construction Layout, Job Site Management, Demobilization And Other Incidentals (Bid Item No. 1) (15.6%)	1	LS	\$222,019	\$222,019
2	Water Pollution Control Plan (2%)	1	LS	\$28,464	\$28,464
3	Traffic Control (10%)	1	LS	\$142,320	\$142,320
General Sub-Total =					\$392,900

	Roadway				
4	Clearing and Grubbing	1	LS	\$2,500	\$2,500
5	Demolition of Concrete Sidewalks, Curb and/or Curb and Gutter	3793	SF	\$10	\$37,930
6	Demolition of Asphalt Concrete	33295	SF	\$5	\$166,475
7	Aggregate Base (Class 2)	327	CY	\$85	\$27,810
8	Hot Mix Asphalt Concrete	117	TON	\$225	\$26,325
10	Minor Concrete (Sidewalk)	18556	SF	\$15	\$278,340
11	Minor Concrete (Type II Curb and 12" Gutter)	1535	LF	\$40	\$61,400
12	Minor Concrete (Curb)	67	LF	\$35	\$2,345
13	Detectable Warning Surface	100	SF	\$35	\$3,500
14	6' Chain Link Fence	1253	LF	\$30	\$37,590
15	Crack Seal (Assume Length of Improvement)	1900	LF	\$1	\$2,375
Roadway Sub-Total =					\$691,000

	Signing and Striping				
16	Remove Existing Pavement Striping	9920	LF	\$1	\$4,960
17	Remove Existing Pavement Marking	610	SF	\$1	\$610
18	Thermoplastic Pavement Marking (White)	1279	SF	\$1	\$1,279
19	6" Yellow Line (Thermoplastic)	462	LF	\$1	\$462
20	Detail 8 or 9 Striping	828	LF	\$3	\$2,484
21	Detail 22 Striping	1028	LF	\$3	\$3,084
22	Detail 39 Striping	572	LF	\$5	\$2,860
23	Detail 29 Striping	1115	LF	\$1	\$1,115
24	Detail 38 Striping	1440	LF	\$5	\$7,200
25	Detail 40 Striping	382	LF	\$1	\$382
26	Detail 41 Striping	250	LF	\$1	\$250
27	Remove Sign and Post	13	EA	\$200	\$2,600
28	Relocate Sign	5	EA	\$500	\$2,500
29	Install Sign and Post	7	EA	\$1,500	\$10,500
Signing and Striping Sub-Total =					\$40,300

	Utilities/Drainage				
30	Remove Street Light	0	EA	\$500	\$0
31	Remove Street Light Pullbox	0	EA	\$100	\$0
32	Sidewalk Underdrain	52	LF	\$20	\$1,040
33	Remove Storm Drain Catch Basin	3	EA	\$3,000	\$9,000

34	Curb Inlet (City of Sunnyvale Detail 10A)	EA	0	\$7,000	\$0
35	Convert Storm Drain Catch Basin to Junction Box	EA	4	\$4,000	\$16,000
36	Adjust Manhole to Grade	EA	4	\$2,000	\$8,000
37	Relocate/Adjust Vault to Grade	EA	1	\$1,000	\$1,000
38	Relocate/Adjust Vault to Grade (by PG&E)	EA	0	\$0	\$0
39	Relocate/Adjust Pullbox to Grade	EA	2	\$500	\$1,000
40	Relocate/Adjust Pullbox to Grade (by PG&E)	EA	0	\$0	\$0
41	Relocate/Adjust Facility to Grade	EA	1	\$800	\$800
Utilities/Drainage Sub-Total =					\$36,900

Lighting and Signals					
60	Video Detection Camera System	LS	1	\$45,000	\$45,000
61	No. 6 Pullbox	EA	17	\$3,500	\$59,500
62	Conduit 2"	LF	1735	\$75	\$130,125
63	Conduit 3"	LF	150	\$85	\$12,750
64	Conductor Wire	LF	2000	\$2	\$3,200
65	Internally Illuminated Street Name Sign	EA	2	\$2,500	\$5,000
66	Mast Arm Sign	EA	5	\$250	\$1,250
67	Standard Type 18 (20'-30' M.A.)	EA	2	\$15,000	\$30,000
68	Standard Type 19 (20'-30' M.A.)	EA	2	\$18,000	\$36,000
69	Signal Head SV/TV-1 (LED)	EA	3	\$2,500	\$7,500
70	1B Pole	EA	1	\$6,000	\$6,000
71	4-Section Signal Head (Additional Cost)	EA	0	\$2,100	\$0
72	Ped Push Button (Type B)	EA	6	\$800	\$4,800
73	Luminaire	EA	5	\$2,000	\$10,000
74	Detector Bicycle Loop (3'x8' Type Q)	EA	0	\$525	\$0
75	Detector Loop (Modified Type D)	EA	0	\$700	\$0
76	Detector Loop (Type A/D/E)	EA	6	\$700	\$4,200
77	Detector Hand Hole	EA	0	\$525	\$0
78	Adjust Existing Pullbox to Grade	EA	0	\$1,250	\$0
79	Relocate Luminaire Pole	LS	0	\$3,500	\$0
Lighting and Signals Sub-Total =					\$561,900

Landscape					
70	Wood Bark Mulch	SF	8462	\$10	\$84,620
71	Misc. Costs (10%) [Landscape]	LS	1	\$8,462	\$8,462
Landscape Sub-Total =					\$93,100

☐ No Design Completed
☒ Preliminary Design
☐ Final Design

Total =	\$1,816,100
Contingency @ 15% =	\$272,500
TOTAL ESTIMATED COST =	\$2,088,600

NOTES:

1. This opinion of probable construction cost is based on the 95% submittal.

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