



# HAYWARD ROUTE 238 PROPERTIES PARCEL GROUP 5 ENGINEER'S OPINION OF COST

ITEM	DESCRIPTION	UNIT COST	UNIT	PARCEL 5A	
				QTY.	AMOUNT
<b>OFFSITE IMPROVEMENTS</b>					
1	DEMOLITION & CLEAR AND GRUB	\$ 0.50	SF	49,600	\$ 24,800
2	REMOVE TREE	\$ 1,200.00	EA	10	\$ 12,000
3	REMOVE JOINT POLE	\$ 2,000.00	EA	10	\$ 20,000
4	ROADWAY EXCAVATION	\$ 65.00	CY	8,581	\$ 557,796
5	EXPORT	\$ 40.00	CY	474	\$ 18,963
6	ROADWAY (AC PAVEMENT)	\$ 6.00	SF	98,000	\$ 588,000
7	CONCRETE CURB AND GUTTER	\$ 30.00	LF	8,400	\$ 252,000
8	SIDEWALK	\$ 12.00	SF	28,000	\$ 336,000
9	4' RETAINING WALL	\$ 200.00	LF	800	\$ 160,000
10	ACCESSIBLE RAMP	\$ 4,000.00	EA	8	\$ 32,000
11	ROADWAY SIGNING & STRIPING	\$ 20.00	LF	420	\$ 8,400
12	8" PVC WATER LINE	\$ 100.00	LF	3,900	\$ 390,000
13	NEW FIRE HYDRANT ASSEMBLY	\$ 4,000.00	EA	0	\$ -
14	CONNECTION TO EXISTING WATER SYSTEM	\$ 4,000.00	EA	4	\$ 16,000
15	8" PVC SANITARY SEWER LINE	\$ 120.00	LF	3,235	\$ 388,200
16	SANITARY SEWER MANHOLE	\$ 5,000.00	EA	13	\$ 64,700
17	CONNECT TO EXISTING SANITARY SYSTEM	\$ 5,000.00	EA	2	\$ 10,000
18	12" RCP STORM DRAIN PIPE	\$ 150.00	LF	4,000	\$ 600,000
19	18" RCP STORM DRAIN PIPE	\$ 180.00	LF	300	\$ 54,000
20	STORM DRAIN MANHOLE	\$ 5,000.00	EA	17	\$ 86,000
21	CURB INLET	\$ 5,000.00	EA	13	\$ 66,667
22	CONNECT TO EXISTING STORM DRAIN SYSTEM	\$ 5,000.00	EA	2	\$ 10,000
23	C3 BIORETENTION AREA	\$ 60.00	SF	5,040	\$ 302,400
24	DETENTION BASIN	\$ 10.00	CF	0	\$ -
25	JOINT TRENCH	\$ 300.00	LF	4,200	\$ 1,260,000
26	STREET LIGHT POLE AND LUMINAIRE	\$ 4,500.00	EA	11	\$ 47,250
27	TREE - 24" BOX	\$ 700.00	EA	42	\$ 29,400
28	MULTI-USE GRAVEL TRAIL	\$ 8.00	SF	15,100	\$ 120,800

**PARCEL GROUP 5 TOTAL: \$ 5,460,000**

**Notes:**

- 1) Based on Parcel Group 5 - Option 1 Site Development Options by Design Workshop, 12/13/18.
- 2) The following items are **not included** in this opinion of costs:
  - \* Soft Costs for Design, Entitlements, Mapping, or Permitting
  - \* Onsite development, private utility laterals or meters.
  - \* Environmental mitigations, Creek or Riparian protection or improvements
  - \* Geological mitigations for landslides, slope protection, or removal of hazardous soils
  - \* Potential costs associated with acquiring right-of-way for detention basins or stormwater treatment areas
  - \* Cost contingencies
- 3) Soil Export is an estimate based on excess cut required to widen the road and install retaining walls within the right-of-way where required. Roadway Excavation is in addition to this.
- 4) C3 Bioretention Areas are based on 4% of impervious area generated from the roadway and sidewalk

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improvements. It does not consider the residential buildings (roofs) or site hardscape.

5) Stormwater Detention: Assume hydromodification not required for public roadways, and if required, can be included in bioretention basins.

6) Assumptions:

\* Bunker Hill Blvd: Full replacement of 21' wide roadway (1.5' section), 1.5' wide rolled curb (both sides), 4' wide sidewalks (both sides), 4' landscape strip (both sides), and retaining wall where required.

\* Bunker Hill Extension to Carlos Bee: Same section as Bunker Hill Blvd. No intersection improvements at Carlos Bee.

\* Maitland Drive: Full replacement of 28' wide roadway (1.5' section), 1.5' wide rolled curb (both sides), 4' wide sidewalks (one side), 5' landscape strip (one side), and retaining wall where required.

\* Retaining wall is assumed to be required on the uphill side of Bunker Hill and Maitland:

Bunker Hill	500	LF
Maitland	300	LF

\* 1,510' of 10' wide gravel multiuse trail.

\* Electric and communication service will be undergrounded in new JT to include FO conduit.

\* Joint poles to be removed.

\* Bioretention will be required for new public roadway widening, and that it will be located in the downhill side of the roadway. This will interrupt continuous sidewalk or parking lane on downhill side of street.

\*Utility improvements:

Storm Drain: Install 12" and 18" SD in all new / replaced roads

Sewer: Install 8" SS in Bunker Hill and extension; may need pump station in BH Court (not included).

Water: Upsize from 6" to 8", but may not be necessary; use existing FH's

JT: Underground all existing overhead utilities in new JT to include FO conduit

Electric: Underground

Gas: Assume existing 2" is sufficient, and 1 1/4" in Bunker Hill Court.