Engineer's Opinion of Estimated Costs for Public/Private Improvements
Hillside at Castle Rock CD22-00__ Phase 4

All Costs Include Labor and Materials.

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
	PUBLIC IMPROVEMENTS TO BE INSPECTED				
	Transportation				
x	Mobilizaton	1	LS	5000.00	$5,000.00
	Paving - 5" Asphalt (Wolfensberger)	0	SY	21.65	$0
	Subgrade Prep (Wolfensberger)	0	SY	2.80	$0
	Sidewalks - 10' wide (Wolfensberger)	0	LF	42.00	$0
x	Paving -5" Asphalt	1961	SY	21.65	$42,456
x	Subgrade Prep	1961	SY	2.80	$5,491
x	Curb Gutter - Mountable	1261	LF	33.20	$41,865
	Curb Gutter - 2.5' Vert.	0	LF	14.00	$0
	Cross Pans	0	SF	7.65	$0
x	Sidewalks - 5' wide	1261	LF	22.80	$28,751
	Sidewalk Chase Drain (Detention access road)	0	EA	1390.00	$0
	Corner ADA Handicap Ramps	0	EA	1550.00	$0
x	Mid Block ADA Ramps	4	EA	1460.00	$5,840
	Street Repair for utility cuts	0	LF	121.00	$0
	3' wide Rock Mitigation and Drainage Channel	0	LF	33.00	$0
	1' wide Drainage Trickle Channel	0	LF	14.00	$0
	Utility Conduits in Right-of-Way (4" PVC)	0	LF	3.73	$0
x	Trails/maintenance access (off street, public)	606	SY	9.06	$5,490
	Striping	0	LS	8000.00	$0
	Signage	0	LS	8000.00	$0
x	Public Street Lighting	2	EA	7500.00	$15,000
	Water				
x	Water Mains 8 inch PVC	608	LF	35.00	$21,280
	Water Mains 12 inch PVC	0	LF	76.64	$0
x	Connect to Existing 8" WL	2	EA	3024.00	$6,048
	Connect to Existing 16" WL (Wolfensberger)	0	EA	3024.00	$0
	Saw Cut & Pavement Replacement (Coachline)	0	LS	5721.00	$0
	Saw Cut & Pavement Replacement (Wolfensberger)	0	LS	11731.00	$0
	Water Main Lowerings (12" PVC Lowering at Storm Pipe)	0	EA	4500.00	$0
	Tees 16"X12"	0	EA	2015.00	$0
	Tees 12"X8"	0	EA	800.00	$0
	Tees 8"X8"	0	EA	551.00	$0
	12" x 8" reducer	0	EA	445.00	$0
x	Horizontal Bends 8" PVC	3	EA	352.00	$1,056
	Vertical Bends 8" PVC	0	EA	450.00	$0
	Butterfly Valve and Vault 16"	0	EA	34378.00	$0
	8" Air Release Valve and Vault	0	EA	1900.00	$0
	Valves 12"	0	EA	2920.00	$0
x	Valves 8"	2	EA	1490.00	$2,980
	Temporary Blow-Offs	0	EA	1810.00	$0
x	Fire Hydrants Assembly (Tee, Valve, & DIP)	2	EA	6497.53	$12,995
x	Domestic Service Lines 3/4" Copper	31	EA	1660.00	$51,460
x	Water Meters 3/4"	31	EA	700.00	$21,700
	Irrigation Meters 1-1/2"	0	EA	800.00	$0

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
	Irrigation Service Lines 2"	0	LS	5218.00	$0
	Sampling Station	0	EA	2585.00	$0
	Sanitary Sewer				
	Sanitary Mains 8" PVC (Wolfensberger)	0	LF	41.00	$0
	Manholes 4' DIA 9' - 15' depth (Wolfensberger)	0	EA	3350.00	$0
x	Sanitary Mains 8" PVC	611	LF	41.00	$25,051
	Manholes 4' DIA 9' - 15' depth	3	EA	3350.00	$10,050
x	Connections to Existing San Sewer Man Hole	2	EA	1790.00	$3,580
	Saw Cut & Pavement Replacement	0	LS	11644.00	$0
x	WYE connections for service lines 4"	29	EA	1268.00	$36,772
	Drainage				
	Storm Sewer Pipes - 36" RCP	0	LF	129.00	$0
	Storm Sewer Pipes - 30" RCP	0	LF	95.00	$0
	Storm Sewer Pipes - 24" RCP	0	LF	85.00	$0
	Storm Sewer Pipes - 24" CMP	0	LF	72.25	$0
	Storm Sewer Pipes - 18" RCP	0	LF	63.32	$0
	18" RCP Plug	0	EA	305.00	$0
	30" RCP Cap	0	EA	371.00	$0
	Manholes 5' DIA	0	EA	3680.00	$0
	Inlet - Triple Type 16 Combo	0	EA	5703.15	$0
	Detention Maintenance Access Road	0	EA	9.06	$0
	Inlet - Type C	0	EA	3629.35	$0
	RCP FES 36"	0	EA	1565.00	$0
	CMP FES 24"	0	EA	360.00	$0
	Trickle Channel - 1' Wide w/ subgrade prep	0	LF	16.50	$0
x	Rock Mitigation & Drainage Channel - 3' Wide w/ subgrade prep	586	LF	35.50	$20,803
	Emergency Spillway	0	EA	23604.00	$0
	Forebay with Hand Rail	0	EA	18158.00	$0
	Micropool	0	EA	12600.00	$0
	6" Conc Working Bench	0	LS	8112.00	$0
	Trickle Channel - 2' Wide (Detention Pond)	0	LF	57.74	$0
	Outlets Structure	0	EA	30988.00	$0
	Rip-Rap - Type H	0	CYS	80.00	$0
	Rip-Rap - Type VI	0	CYS	60.00	$0
					$363,667.87
	10% Contingency				$36,366.79
	Total Public Improvements				**$400,034.66**
	PRIVATE IMPROVEMENTS TO BE INSPECTED				
x	3' Retaining Walls	378	LF	0.00	$0
x	4' Retaining Walls	816	LF	0.00	$0
x	8' Retaining Walls	1150	LF	0.00	$0
x	Misc. Rear Lot Retaining Walls	210	LF	0.00	$0
	Water				$0
	Backflow Prevention Assemblies (list sizes)				$0

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
	Fire Service Line (list types and sizes)				$0
	Abandon/remove water service lines				$0
	Irrigation backflow prevention assemblies (list sizes)				$0
	Sanitary Sewer				$0
	Abandon/remove sanitary sewer service lines				$0
	Drainage				$0
	Storm Sewer Pipe				$0
	Manholes				$0
	Inlets				$0
	Clean Outs				$0
	FES's				$0
					$0
	10% Contingency				$0.0
	Total Private Improvements To Be Inspected				$0.0

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
	PRIVATE IMPROVEMENTS NOT TO BE INSPECTED				
	Transportation				
	Paving				$0
	Curb/Gutter				$0
	Cross Pans				$0
	Parking Areas				$0
	Sidewalks				$0
	Handicapped Ramps				$0
	Water				
	FDC & fire lines to FDC (list types & sizes) (Inspected by Fire, not Public Works)				$0
	Domestic Service Lines (from curb stop to building) (list types & sizes) (Inspected by the Building Division)				$0
	Irrigation Lines (past meter)				$0
	Sanitary Sewer				$0
	Service Lines (list types and sizes)				$0
	Clean-Outs (list sizes)				$0
					$0
	10% Contingency				$0.0
	Total Private Improvements Not To Be Inspected				$0.0
	Grand Total				**$400,034.66**

1. Surety is calculated based on Public Improvement Costs.
2. Inspection Fees are calculated from Public Improvements and Private Improvements to be inspected.
3. Use Tax is calculated from the Grand Total of all Improvements minus Earthwork.
4. All Costs Shall Include Labor and Material.