EPC STORMWATER REVIEW COMMENTS IN ORANGE BOXES WITH BLACK TEXT

switch - there's 1 pond. The CDs show the cost to be $250,250 - update this estimate cost

Pond Estimate has been updated.

2023 Financial Assurance Estimate Form (with pre-plat construction)

Updated: 12/8/2022

PROJECT INFORMATION

HAY CREEK VALLEY	9/19/2023	SF2324 SF XX-XXX
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction) % Complete	Remaining	
SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)								
Earthwork								*
less than 1,000; $5,300 min		CY	$ 8.00	=	$ -		$ -	*
1,000-5,000; $8,000 min	3,100	CY	$ 6.00	=	$ 18,600.00		$ 18,600.00	*
5,001-20,000; $30,000 min		CY	$ 5.00	=	$ -		$ -	*
20,001-50,000; $100,000 min		CY	$ 3.50	=	$ -		$ -	*
50,001-200,000; $175,000 min		CY	$ 2.50	=	$ -		$ -	*
greater than 200,000; $500,000 min		CY	$ 2.00	=	$ -		$ -	*
Permanent Erosion Control Blanket	41,140.0	SY	$ 8.00	=	$ 329,120.00		$ 329,120.00	*
Permanent Seeding (inc. noxious weed mgmnt.) & Mulching		AC	$ 1,875.00	=	$ -		$ -	*
Permanent Pond/BMP (provide engineer's estimate)	20,000	EA	$ 1.00	=	$ 20,000.00		$ 20,000.00	*
Concrete Washout Basin	2	EA	$ 1,089.00	=	$ 2,178.00		$ 2,178.00	
Inlet Protection	9	EA	$ 202.00	=	$ 1,818.00		$ 1,818.00	
Rock Check Dam	126	EA	$ 605.00	=	$ 76,230.00		$ 76,230.00	
Safety Fence		LF	$ 3.00	=	$ -		$ -	
Sediment Basin	1	EA	$ 2,132.00	=	$ 2,132.00		$ 2,132.00	
Sediment Trap		EA	$ 500.00	=	$ -		$ -	
Silt Fence	2,625	LF	$ 3.00	=	$ 7,875.00		$ 7,875.00	
Slope Drain		LF	$ 40.00		$ -		$ -	
Straw Bale		EA	$ 31.00	=	$ -		$ -	
Straw Wattle/Rock Sock		LF	$ 7.00	=	$ -		$ -	
Surface Roughening		AC	$ 250.00		$ -		$ -	
Temporary Erosion Control Blanket		SY	$ 3.00	=	$ -		$ -	
Temporary Seeding and Mulching		AC	$ 1,666.00	=	$ -		$ -	
Vehicle Tracking Control	1	EA	$ 2,867.00	=	$ 2,867.00		$ 2,867.00	
OUTLET PROTECTION	8	EA	$ 202.00	=	$ 1,616.00		$ 1,616.00	
[insert items not listed but part of construction plans]				=	$ -		$ -	
MAINTENANCE (35% of Construction BMPs)				=	$ 32,388.30		$ 32,388.30	
* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)		**Section 1 Subtotal**		**=**	**$ 494,824.30**		**$ 494,824.30**	
SECTION 2 - PUBLIC IMPROVEMENTS *								
ROADWAY IMPROVEMENTS								*
Construction Traffic Control		LS		=	$			*
Aggregate Base Course (135 lbs/cf)		Tons	$ 34.00	=	$			*
Aggregate Base Course (135 lbs/cf)		CY	$ 61.00		$			*
Asphalt Pavement (3" thick)		SY	$ 17.00		$			*
Asphalt Pavement (4" thick)		SY	$					*
Asphalt Pavement (6" thick)		SY	$					*
Asphalt Pavement (147 lbs/cf) _" thick		Tons	$					*
Raised Median, Paved		S						*
Regulatory Sign/Advisory Sign		E						*
Guide/Street Name Sign								*
Epoxy Pavement Marking					-			*
Thermoplastic Pavement Marking					-			*
Barricade - Type 3					-			*
Delineator - Type I					-			*
Curb and Gutter, Type A (6" Vertical)					-			*
Curb and Gutter, Type B (Median)					-		$ -	*
Curb and Gutter, Type C (Ramp)					-		$ -	*
4" Sidewalk (common areas only)					-		$ -	*
5" Sidewalk		S			-		$ -	*
6" Sidewalk		S			-		$ -	*
8" Sidewalk		S			-		$ -	*
Pedestrian Ramp		E			-		$ -	*
Cross Pan, local (8" thick, 6' wide to include return)		L			-		$ -	*
Cross Pan, collector (9" thick, 8' wide to include return)		LF	$ 111.00		$ -		$ -	*
Curb Opening with Drainage Chase		EA	$ 1,790.00	=	$ -		$ -	*
Guardrail Type 3 (W-Beam)		LF	$ 60.00	=	$ -		$ -	*
Guardrail Type 7 (Concrete)		LF	$ 87.00	=	$ -		$ -	*
Guardrail End Anchorage		EA	$ 2,538.00	=	$ -		$ -	*
Guardrail Impact Attenuator		EA	$ 4,556.00	=	$ -		$ -	*
Sound Barrier Fence (CMU block, 6' high)		LF	$ 95.00		$ -		$ -	*
Sound Barrier Fence (panels, 6' high)		LF	$ 97.00	=	$ -		$ -	*
Electrical Conduit, Size =		LF	$ 20.00	=	$ -		$ -	*
Traffic Signal, (provide engineer's estimate)		EA		=	$ -		$ -	*
				=	$ -		$ -	
[insert items not listed but part of construction plans]				=	$ -		$ -	*

Provide permanent seeding quantity and cost

Seeding and Mulching has been included.

Add missing for work at new entrance
Work in ROW permit will be required.
A driveway access permit will also be required.

Add missing for entrance

Paving has been added.

Include all private road signs, stop signs, speed limit signs and ensure they depicted on CDs.

Traffic control has been added.

All signs have been included.

PROJECT INFORMATION		
HAY CREEK VALLEY	9/19/2023	SF XX-XXX
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction) % Complete	(with Pre-Plat Construction) Remaining	
STORM DRAIN IMPROVEMENTS								
Concrete Box Culvert (M Standard), Size (48" x 48")		LF		=	$ -		$ -	*
18" Reinforced Concrete Pipe		LF	$ 76.00	=	$ -		$ -	*
24" Reinforced Concrete Pipe		LF	$ 91.00	=	$ -		$ -	*
30" Reinforced Concrete Pipe		LF	$ 114.00	=	$ -		$ -	*
36" Reinforced Concrete Pipe		LF	$ 140.00	=	$ -		$ -	*
42" Reinforced Concrete Pipe		LF	$ 187.00	=	$ -		$ -	*
48" Reinforced Concrete Pipe		LF	$ 228.00	=	$ -		$ -	*
54" Reinforced Concrete Pipe		LF	$ 297.00	=	$ -		$ -	*
60" Reinforced Concrete Pipe		LF	$ 348.00	=	$ -		$ -	*
66" Reinforced Concrete Pipe		LF	$ 402.00	=	$ -		$ -	*
72" Reinforced Concrete Pipe		LF	$ 460.00	=	$ -		$ -	*
18" Corrugated Steel Pipe		LF	$ 98.00	=	$ -		$ -	*
24" Corrugated Steel Pipe		LF	$ 112.00	=	$ -		$ -	*
30" Corrugated Steel Pipe		LF	$ 143.00	=	$ -		$ -	*
36" Corrugated Steel Pipe		LF	$ 171.00	=	$ -		$ -	*
42" Corrugated Steel Pipe		LF	$ 197.00	=	$ -		$ -	*
48" Corrugated Steel Pipe		LF	$ 207.00	=	$ -		$ -	*
54" Corrugated Steel Pipe		LF	$ 304.00	=	$ -		$ -	*
60" Corrugated Steel Pipe		LF	$ 328.00	=	$ -		$ -	*
66" Corrugated Steel Pipe		LF	$ 397.00	=	$ -		$ -	*
72" Corrugated Steel Pipe		LF	$ 467.00	=	$ -		$ -	*
78" Corrugated Steel Pipe		LF	$ 537.00	=	$ -		$ -	*
84" Corrugated Steel Pipe		LF	$ 642.00	=	$ -		$ -	*
Flared End Section (FES) RCP Size = (unit cost = 6x pipe unit cost)		EA		=	$ -		$ -	*
Flared End Section (FES) CSP Size = (unit cost = 6x pipe unit cost)		EA		=	$ -		$ -	*
Flared End Section (FES) CSP Size = (unit cost = 6x pipe unit cost)		EA		=	$ -		$ -	*
End Treatment- Headwall		EA		=	$ -		$ -	*
End Treatment- Wingwall		EA		=	$ -		$ -	*
End Treatment - Cutoff Wall		EA		=	$ -		$ -	*
Curb Inlet (Type R) L=5', Depth < 5'		EA	$ 6,703.00	=	$ -		$ -	*
Curb Inlet (Type R) L=5', 5'≤ Depth < 10'		EA	$ 8,715.00	=	$ -		$ -	*
Curb Inlet (Type R) L =5', 10'≤ Depth < 15'		EA	$ 10,092.00	=	$ -		$ -	*
Curb Inlet (Type R) L =10', Depth < 5'		EA	$ 9,224.00	=	$ -		$ -	*
Curb Inlet (Type R) L =10', 5'≤ Depth < 10'		EA	$ 9,507.00	=	$ -		$ -	*
Curb Inlet (Type R) L =10', 10'≤ Depth < 15'		EA	$ 11,901.00	=	$ -		$ -	*
Curb Inlet (Type R) L =15', Depth < 5'		EA	$ 11,995.00	=	$ -		$ -	*
Curb Inlet (Type R) L =15', 5'≤ Depth < 10'		EA	$ 12,858.00	=	$ -		$ -	*
Curb Inlet (Type R) L =15', 10'≤ Depth < 15'		EA	$ 14,061.00	=	$ -		$ -	*
Curb Inlet (Type R) L =20', Depth < 5'		EA	$ 12,783.00	=	$ -		$ -	*
Curb Inlet (Type R) L =20', 5'≤ Depth < 10'		EA	$ 14,109.00	=	$ -		$ -	*
Grated Inlet (Type C), Depth < 5'		EA	$ 5,611.00	=	$ -		$ -	*
Grated Inlet (Type D), Depth < 5'		EA	$ 6,931.00	=	$ -		$ -	*
Storm Sewer Manhole, Box Base		EA	$ 14,061.00	=	$ -		$ -	*
Storm Sewer Manhole, Slab Base		EA	$ 7,734.00	=	$ -		$ -	*
Geotextile (Erosion Control)		SY	$ 8.00	=	$ -		$ -	*
Rip Rap, d50 size from 6" to 24"		Tons	$ 97.00	=	$ -		$ -	*
Rip Rap, Grouted		Tons	$ 115.00	=	$ -		$ -	*
Drainage Channel Construction, Size (W x H)		LF	$ -	=	$ -		$ -	*
Drainage Channel Lining, Concrete		CY	$ 689.00	=	$ -		$ -	*
Drainage Channel Lining, Rip Rap		CY	$ 135.00	=	$ -		$ -	
Drainage Channel Lining, Grass		AC	$ 1,776.00	=	$ -		$ -	*
Drainage Channel Lining, Other Stabilization				=	$ -		$ -	
				=	$ -		$ -	
[insert items not listed but part of construction plans]				=	$ -		$ -	
* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)			**Section 2 Subtotal**	**=**	**$ -**		**$ -**	
SECTION 3 - COMMON DEVELOPMENT IMPROVEMENTS (Private or District and NOT Maintained by EPC)**								
Aggregate Base Course (135 lbs/cf)	2,415	CY	$ 61.00	=	$ 147,315.00		$ 147,315.00	
Asphalt Pavement (3" thick)	20,833	SY	$ 17.00	=	$ 354,161.00		$ 354,161.00	
				=	$ -		$ -	
				=	$ -		$ -	
				=	$ -		$ -	

PROJECT INFORMATION		
HAY CREEK VALLEY	9/19/2023	SF XX-XXX
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction) % Complete	Remaining
				=	$ -		$ -
STORM DRAIN IMPROVEMENTS (Exception: Permanent Pond/BMP shall be itemized under Section 1)							
18" RCP FES	3	EA	$ 456.00	=	$ 1,368.00		$ 1,368.00
30" RCP FES	2	EA	$ 684.00	=	$ 1,368.00		$ 1,368.00
36" RCP FES	3	EA	$ 840.00	=	$ 2,520.00		$ 2,520.00
HEADWALL	1	EA	$ 2,000.00	=	$ 2,000.00		$ 2,000.00
Grated Inlet (Type C), Depth < 5'	2	EA	$ 5,611.00	=	$ 11,222.00		$ 11,222.00
Grated Inlet (Type D), Depth < 5'	2	EA	$ 6,931.00		$ 13,862.00		$ 13,862.00
Storm Sewer Manhole, Box Base	2	EA	$ 14,061.00		$ 28,122.00		$ 28,122.00
Rip Rap, d50 size from 6" to 24"	8,490	TONS	$ 97.00		$ 823,530.00		$ 823,530.00
Concrete Box Culvert (M Standard), Size (48" x 48")	49	LF	$ 200.00		$ 9,800.00		$ 9,800.00
18" Reinforced Concrete Pipe	190	LF	$ 76.00		$ 14,440.00		$ 14,440.00
30" Reinforced Concrete Pipe	216	LF	$ 114.00		$ 24,624.00		$ 24,624.00
[illegible] Reinforced Concrete Pipe	342	LF	$ 140.00	=	$ 47,880.00		$ 47,880.00
WATER SYSTEM IMPROVEMENTS							
Water Main Pipe (PVC), Size 8"		LF	$ 78.00	=	$ -		$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	$ 91.00	=	$ -		$ -
Gate Valves, 8"		EA	$ 2,247.00	=	$ -		$ -
Fire Hydrant Assembly, w/ all valves		EA	$ 7,978.00	=	$ -		$ -
Water Service Line Installation, inc. tap and valves		EA	$ 1,601.00	=	$ -		$ -
Fire Cistern Installation, complete		EA		=	$ -		$ -
				=	$ -		$ -
[insert items not listed but part of construction plans]				=	$ -		$ -
SANITARY SEWER IMPROVEMENTS							
Sewer Main Pipe (PVC), Size 8"		LF	$ 78.00	=	$ -		$ -
Sanitary Sewer Manhole, Depth < 15 feet		EA	$ 5,305.00	=	$ -		$ -
Sanitary Service Line Installation, complete		EA	$ 1,696.00	=	$ -		$ -
Sanitary Sewer Lift Station, complete		EA		=	$ -		$ -
				=	$ -		$ -
[insert items not listed but part of construction plans]				=	$ -		$ -
LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)							
		EA		=	$ -		$ -
		EA		=	$ -		$ -
		EA		=	$ -		$ -
		EA		=	$ -		$ -
		EA		=	$ -		$ -
** - Section 3 is not subject to defect warranty requirements		**Section 3 Subtotal**		**=**	**$ 1,482,212.00**		**$ 1,482,212.00**
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)		LS	$ 2,000.00	=	$ 2,000.00		$ 2,000.00
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS	$ 2,000.00	=	$ 2,000.00		$ 2,000.00

Please include the 33,000 gallon cistern

Total Construction Financial Assurance $ 1,981,036.30
(Sum of all section subtotals plus as-builts and pond/BMP certification)

Total Remaining Construction Financial Assurance (with Pre-Plat Construction) $ 1,981,036.30
(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)

Total Defect Warranty Financial Assurance $ 73,544.00
(20% of all items identified as (*). To be collateralized at time of preliminary acceptance)

Approvals

I hereby certify that this is an accurate and complete estimate of costs for the work as shown on the Grading and Erosion Control Plan and Construction Drawings associated with the Project.

Engineer (P.E. Seal Required)

Approved by Owner / Applicant — Date

Approved by El Paso County Engineer / ECM Administrator — Date