

2022 Financial Assurance Estimate Form (with pre-plat construction)

Updated to Jan 2023 submittal

Updated: 11/4/2021

PROJECT INFORMATION						
Sand Creek Channel Improvements		1/25/2023		CDR 204		
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		CY	\$ 6.00	= \$ -		\$ -
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	856,428	CY	\$ 2.00	= \$ 1,712,856.00		\$ 1,712,856.00
* Permanent Seeding (inc. noxious weed mgmnt.)	48	AC	\$ 886.00	= \$ 42,528.00		\$ 42,528.00
* Mulching	48	AC	\$ 831.00	= \$ 39,888.00		\$ 39,888.00
* Permanent Erosion Control Blanket		SY	\$ 7.00	= \$ -		\$ -
* Permanent Pond/BMP Construction		CY	\$ 22.00	= \$ -		\$ -
* Permanent Pond/BMP (provide engineer's estimate)		EA		= \$ -		\$ -
Safety Fence		EA		= \$ -		\$ -
Temporary Erosion Control Blanket		LF	\$ 3.00	= \$ -		\$ -
Vehicle Tracking Control	4	EA	\$ 2,625.00	= \$ 10,500.00		\$ 10,500.00
Silt Fence	21,000	LF	\$ 3.00	= \$ 63,000.00		\$ 63,000.00
Temporary Seeding		AC	\$ 695.00	= \$ -		\$ -
Temporary Mulch		AC	\$ 831.00	= \$ -		\$ -
Erosion Bales		EA	\$ 28.00	= \$ -		\$ -
Erosion Logs/Straw Wattles	2,000	LF	\$ 6.00	= \$ 12,000.00		\$ 12,000.00
Rock Check Dams	20	EA	\$ 1,000.00	= \$ 20,000.00		\$ 20,000.00
Inlet Protection		EA	\$ 185.00	= \$ -		\$ -
Sediment Basin	2	EA	\$ 1,952.00	= \$ 3,904.00		\$ 3,904.00
Concrete Washout Basin	3	EA	\$ 997.00	= \$ 2,991.00		\$ 2,991.00
[insert items not listed but part of construction plans]						
MAINTENANCE (35% of Construction BMPs)				= \$ 39,338.25		\$ 39,338.25
Section 1 Subtotal				= \$ 1,947,005.25		\$ 1,947,005.25
SECTION 2 - PUBLIC IMPROVEMENTS *						
ROADWAY IMPROVEMENTS						
Construction Traffic Control		LS	\$ 5,000.00	= \$ -		\$ -
Aggregate Base Course (135 lbs/cf)		Tons	\$ 31.00	= \$ -		\$ -
Aggregate Base Course (135 lbs/cf)		CY	\$ 56.00	= \$ -		\$ -
Raised Median, Paved		SF	\$ 9.00	= \$ -		\$ -
Barricade - Type 3		EA	\$ 221.00	= \$ -		\$ -
Delineator - Type I		EA	\$ 27.00	= \$ -		\$ -
Curb and Gutter, Type A (6" Vertical)		LF	\$ 32.00	= \$ -		\$ -
Curb and Gutter, Type B (Median)		LF	\$ 32.00	= \$ -		\$ -
Curb and Gutter, Type C (Ramp)		LF	\$ 32.00	= \$ -		\$ -
4" Sidewalk (common areas only)		SY	\$ 53.00	= \$ -		\$ -
5" Sidewalk		SY	\$ 66.00	= \$ -		\$ -
6" Sidewalk		SY	\$ 80.00	= \$ -		\$ -
8" Sidewalk		SY	\$ 106.00	= \$ -		\$ -
[insert items not listed but part of construction plans]						
STORM DRAIN IMPROVEMENTS						
36" Reinforced Concrete Pipe		LF	\$ 128.00	= \$ -		\$ -
42" Reinforced Concrete Pipe		LF	\$ 171.00	= \$ -		\$ -
Flared End Section (FES) RCP Size =		EA		= \$ -		\$ -
(unit cost = 6x pipe unit cost)				= \$ -		\$ -
Flared End Section (FES) CSP Size =		EA		= \$ -		\$ -
(unit cost = 6x pipe unit cost)				= \$ -		\$ -
Grated Inlet (Type C), Depth < 5'		EA	\$ 5,138.00	= \$ -		\$ -
Grated Inlet (Type D), Depth < 5'		EA	\$ 6,347.00	= \$ -		\$ -
Storm Sewer Manhole, Box Base		EA	\$ 12,876.00	= \$ -		\$ -
Geotextile (Erosion Control)		SY	\$ 7.00	= \$ -		\$ -
Rip Rap, d50 size from 6" to 24"		Tons	\$ 89.00	= \$ -		\$ -
Rip Rap, Grouted		Tons	\$ 105.00	= \$ -		\$ -
Drainage Channel Construction, Size (W x H)		LF	\$ -	= \$ -		\$ -
Drainage Channel Lining, Concrete		CY	\$ 631.00	= \$ -		\$ -
Drainage Channel Lining, Rip Rap		CY	\$ 124.00	= \$ -		\$ -
Drainage Channel Lining, Grass		AC	\$ 1,626.00	= \$ -		\$ -
Drainage Channel Lining, Other Stabilization				= \$ -		\$ -
[insert items not listed but part of construction plans]						
Section 2 Subtotal				= \$ -		\$ -

Outfall pipe extensions?

Call out bank stabilization areas

Call out soil riprap and void-filled riprap that is separate from riffles and drop structures

SECTION 3 - COMMON DEVELOPMENT IMPROVEMENTS (Private or District and NOT Maintained by EPC)**

ROADWAY IMPROVEMENTS							
				=	\$	-	\$ -
				=	\$	-	\$ -
STORM DRAIN IMPROVEMENTS (Exception: Permanent Pond/BMP shall be itemized under Section 1)							
Low Flow Channel Pool Section	3,800	LF	\$ 105	=	\$	399,000.00	\$ 399,000.00
Low Flow Channel Riffle Section	4,800	LF	\$ 85	=	\$	408,000.00	\$ 408,000.00
GSB Drop Structures	6	EA	\$ 450,000	=	\$	2,700,000.00	\$ 2,700,000.00
Existing Pond 2 Rip Rap Rundown	1	EA	\$ 200,000	=	\$	200,000.00	\$ 200,000.00
Concrete Box Culvert (M Standard), Size (12'W x 10' H)	135	LF	\$ 2,000	=	\$	270,000.00	\$ 270,000.00
Concrete Box Culvert (M Standard), Size (10'W x 10' H)	87	LF	\$ 1,800	=	\$	156,600.00	\$ 156,600.00
Concrete Box Culvert (M Standard), Size (13'W x 4' H)	186	LF	\$ 1,300	=	\$	241,800.00	\$ 241,800.00
Concrete Box Culvert (M Standard), Size (13'W x 2' H)	93	LF	\$ 900	=	\$	83,700.00	\$ 83,700.00
End Treatment- Headwall W-3, Pond 1 & 2	25	CY	\$ 850	=	\$	21,250.00	\$ 21,250.00
End Treatment- Wingwall W-3, Pond 1 & 2	40	CY	\$ 850	=	\$	34,000.00	\$ 34,000.00
End Treatment - Cutoff WallW-3, Pond 1 & 2	35	CY	\$ 850	=	\$	29,750.00	\$ 29,750.00
Storm Sewer Manhole, Slab Base, 25x25'	2	EA	\$ 50,000	=	\$	100,000.00	\$ 100,000.00
Geotextile (Erosion Control)	35,000	SY	\$ 7.00	=	\$	245,000.00	\$ 245,000.00
Overflow spillway structure, W-3, Pond 1 & 2	3	EA	\$ 150,000.00	=	\$	450,000.00	\$ 450,000.00
Plie Cutoff Walls	7	EA	\$ 75,000.00	=	\$	525,000.00	\$ 525,000.00
Maint. Access Rds/Trails and Turnarounds, 6" Class 2	270,000	SF	\$ 2.00	=	\$	540,000.00	\$ 540,000.00
				=	\$	-	\$ -
				=	\$	-	\$ -
WATER SYSTEM IMPROVEMENTS							
Water Main Pipe (PVC), Size 8"		LF	\$ 71	=	\$	-	\$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 83	=	\$	-	\$ -
Gate Valves, 8"		EA	\$ 2,058	=	\$	-	\$ -
Fire Hydrant Assembly, w/ all valves		EA	\$ 7,306	=	\$	-	\$ -
Water Service Line Installation, inc. tap and valves		EA	\$ 1,466	=	\$	-	\$ -
Fire Cistern Installation, complete		EA		=	\$	-	\$ -
<i>[insert items not listed but part of construction plans]</i>				=	\$	-	\$ -
SANITARY SEWER IMPROVEMENTS							
Sewer Main Pipe (PVC), Size 8"		LF	\$ 71	=	\$	-	\$ -
Sanitary Sewer Manhole, Depth < 15 feet		EA	\$ 4,858	=	\$	-	\$ -
Sanitary Service Line Installation, complete		EA	\$ 1,553	=	\$	-	\$ -
Sanitary Sewer Lift Station, complete		EA		=	\$	-	\$ -
<i>[insert items not listed but part of construction plans]</i>				=	\$	-	\$ -
LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)							
Wetland Mitigation Plantings / Stabilization	6	EA	\$ 75,000.00	=	\$	447,000.00	\$ 447,000.00
		EA		=	\$	-	\$ -
		EA		=	\$	-	\$ -
		EA		=	\$	-	\$ -
Section 3 Subtotal				=	\$	6,851,100.00	\$ 6,851,100.00

** - Section 3 is not subject to defect warranty requirements

AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)	LS	\$ 20,000.00	=	\$	20,000.00	\$ 20,000.00
POND/BMP CERTIFICATION (inc. elevations and volume calculations)	LS	\$ 10,000.00	=	\$	10,000.00	\$ 10,000.00

Add retaining walls

Add Agridrain items

Add concrete trail and reinforced sections

Total Construction Financial Assurance \$ 8,828,105.25

(Sum of all section subtotals plus as-builts and pond/BMP certification)

Contingency (3%) \$ 192,123.00

(Accounting for current status of plans, only applied to Section 3 Storm Drain Improvements)

Total Construction Financial Assurance \$ 9,020,228.25

(Sum of all section subtotals plus as-builts and pond/BMP certification)

Total Defect Warranty Financial Assurance \$ 359,054.40

(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

Approved FAE and Bonded

2022 Financial Assurance Estimate Form
(with pre-plat construction)

Updated: 11/4/2021

PROJECT INFORMATION							
Sand Creek Channel Improvements		7/4/2022		CDR 264			
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)							
<i>* Earthwork</i>							
less than 1,000; \$5,300 min		CY	\$ 8.00				
1,000-5,000; \$8,000 min		CY	\$ 8.00				
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	856,428	CY	\$ 2.00	1,712,856.00			1,712,856.00
* Permanent Seeding (inc. noxious weed mgmt.)	15	AC	\$ 886.00	13,290.00			13,290.00
* Mulching	15	AC	\$ 831.00	12,465.00			12,465.00
* Permanent Erosion Control Blanket		SY	\$ 7.00				
* Permanent Pond/BMP Construction		CY	\$ 22.00				
* Permanent Pond/BMP (provide engineer's estimate)		EA					
Safety Fence		LF	\$ 3.00				
Temporary Erosion Control Blanket		SY	\$ 3.00				
Vehicle Tracking Control	4	EA	\$ 2,625.00	10,500.00			10,500.00
Silt Fence	10,500	LF	\$ 3.00	31,500.00			31,500.00
Temporary Seeding		AC	\$ 895.00				
Temporary Mulch		AC	\$ 831.00				
Erosion Bales		EA	\$ 28.00				
Erosion Logs/Straw Wattles	2,000	LF	\$ 6.00	12,000.00			12,000.00
Rock Check Dams	20	EA	\$ 1,000.00	20,000.00			20,000.00
Inlet Protection		EA	\$ 185.00				
Sediment Basin		EA	\$ 1,952.00				
Concrete Washout Basin	2	EA	\$ 997.00	1,994.00			1,994.00
<i>[insert items not listed but part of construction plans]</i>							
MAINTENANCE (35% of Construction BMPs)					\$ 26,597.90		\$ 26,597.90
* Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)							
Section 1 Subtotal					\$ 1,841,202.90		\$ 1,841,202.90
SECTION 2 - PUBLIC IMPROVEMENTS *							
ROADWAY IMPROVEMENTS							
Construction Traffic Control		LS	\$ 5,000.00				
Aggregate Base Course (135 lbs/cf)		Tons	\$ 31.00				
Aggregate Base Course (135 lbs/cf)		CY	\$ 58.00				
Raised Median, Paved		SF	\$ 9.00				
Barricade - Type 3		EA	\$ 221.00				
Delinicator - Type 1		EA	\$ 27.00				
Curb and Gutter, Type A (8" Vertical)		LF	\$ 32.00				
Curb and Gutter, Type B (Median)		LF	\$ 32.00				
Curb and Gutter, Type C (Ramp)		LF	\$ 32.00				
4" Sidewalk (common areas only)		SY	\$ 53.00				
5" Sidewalk		SY	\$ 66.00				
6" Sidewalk		SY	\$ 80.00				
8" Sidewalk		SY	\$ 106.00				
<i>[insert items not listed but part of construction plans]</i>							
STORM DRAIN IMPROVEMENTS							
36" Reinforced Concrete Pipe		LF	\$ 128.00				
42" Reinforced Concrete Pipe		LF	\$ 171.00				
Flared End Section (FES) RCP Size =		EA					
(unit cost = 6' pipe unit cost)							
Flared End Section (FES) CSP Size =		EA					
(unit cost = 6' pipe unit cost)							
Grated Inlet (Type C), Depth < 5'		EA	\$ 5,138.00				
Grated Inlet (Type D), Depth < 5'		EA	\$ 8,347.00				
Storm Sewer Manhole, Box Base		EA	\$ 12,878.00				
Geotextile (Erosion Control)		SY	\$ 7.00				
Rip Rap, #50 size from 6" to 24"		Tons	\$ 89.00				
Rip Rap, Grouted		Tons	\$ 105.00				
Drainage Channel Construction, Size (W x H)		LF					
Drainage Channel Lining, Concrete		CY	\$ 631.00				
Drainage Channel Lining, Rip Rap		CY	\$ 124.00				
Drainage Channel Lining, Grass		AC	\$ 1,828.00				
Drainage Channel Lining, Other Stabilization							
<i>[insert items not listed but part of construction plans]</i>							
* 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)**

ROADWAY IMPROVEMENTS							
STORM DRAIN IMPROVEMENTS (Exception Permanent Pond/BMP shall be itemized under Section 1)							
Low Flow Channel Pool Section	3,800	LF	\$ 105	=	\$	399,000.00	\$ 399,000.00
Low Flow Channel Riffle Section	4,800	LF	\$ 85	=	\$	408,000.00	\$ 408,000.00
GSB Drop Structures	5	EA	\$ 450,000	=	\$	2,250,000.00	\$ 2,250,000.00
Existing Pond 2 Rip Rap Rundown	1	EA	\$ 200,000	=	\$	200,000.00	\$ 200,000.00
Concrete Box Culvert (M Standard), Size (12W x 10' H)	135	LF	\$ 2,000	=	\$	270,000.00	\$ 270,000.00
Concrete Box Culvert (M Standard), Size (10W x 10' H)	87	LF	\$ 1,800	=	\$	156,600.00	\$ 156,600.00
Concrete Box Culvert (M Standard), Size (13W x 4' H)	186	LF	\$ 1,300	=	\$	241,800.00	\$ 241,800.00
Concrete Box Culvert (M Standard), Size (13W x 2' H)	93	LF	\$ 900	=	\$	83,700.00	\$ 83,700.00
End Treatment- Headwall W-3, Pond 1 & 2	25	CY	\$ 850	=	\$	21,250.00	\$ 21,250.00
End Treatment- Wingwall W-3, Pond 1 & 2	40	CY	\$ 850	=	\$	34,000.00	\$ 34,000.00
End Treatment - Cutoff Wall/W-3, Pond 1 & 2	35	CY	\$ 850	=	\$	29,750.00	\$ 29,750.00
Storm Sewer Manhole, Slab Base, 25x25'	2	EA	\$ 50,000	=	\$	100,000.00	\$ 100,000.00
Geotextile (Erosion Control)	35,000	SY	\$ 7.00	=	\$	245,000.00	\$ 245,000.00
Overflow spillway structure, W-3, Pond 1 & 2	3	EA	\$ 150,000.00	=	\$	450,000.00	\$ 450,000.00
Maint. Access Rds/Trails and Turnarounds, 6" Class 2	270,000	SF	\$ 2.00	=	\$	540,000.00	\$ 540,000.00
WATER SYSTEM IMPROVEMENTS							
Water Main Pipe (PVC), Size 8"		LF	\$ 71	=	\$	-	\$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 83	=	\$	-	\$ -
Gate Valves, 8"		EA	\$ 2,058	=	\$	-	\$ -
Fire Hydrant Assembly w/ all valves		EA	\$ 7,306	=	\$	-	\$ -
Water Service Line Installation, inc. tap and valves		EA	\$ 1,466	=	\$	-	\$ -
Fire Cistem Installation, complete		EA		=	\$	-	\$ -
<i>(insert items not listed but part of construction plans)</i>							
SANITARY SEWER IMPROVEMENTS							
Sewer Main Pipe (PVC), Size 8"		LF	\$ 71	=	\$	-	\$ -
Sanitary Sewer Manhole, Depth < 15 feet		EA	\$ 4,858	=	\$	-	\$ -
Sanitary Service Line Installation, complete		EA	\$ 1,553	=	\$	-	\$ -
Sanitary Sewer Lift Station, complete		EA		=	\$	-	\$ -
<i>(insert items not listed but part of construction plans)</i>							
LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)							
Wetland Mitigation Plantings / Stabilization	6	EA	\$ 75,000.00	=	\$	447,000.00	\$ 447,000.00
		EA		=	\$	-	\$ -
		EA		=	\$	-	\$ -
		EA		=	\$	-	\$ -
Section 3 Subtotal				=	\$	5,876,100.00	\$ 5,876,100.00

** - Section 3 is not subject to defect warranty requirements

AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)	LS	\$ 20,000.00	=	\$	20,000.00	\$ 20,000.00
POND/BMP CERTIFICATION (inc. elevations and volume calculations)	LS	\$ 10,000.00	=	\$	10,000.00	\$ 10,000.00

Total Construction Financial Assurance \$ 7,747,302.90
 (Sum of all section subtotals plus as-builts and pond/BMP certification)

Contingency (3%) \$ 162,873.00
 (Accounting for current status of plans, only applied to Section 3 Storm Drain Improvements)

Total Construction Financial Assurance \$ 7,910,175.90
 (Sum of all section subtotals plus as-builts and pond/BMP certification)

Professional Warranty Financial Assurance \$ 347,722.20
 (20% of all items identified as "To be certified for warranty 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.

Michael Bergloff
 Engineer (P.E. Seal Required)

[Signature]
 Approved by Owner / Applicant

7/6/2022
 Date

APPROVED
 Engineering Department



07/21/2022 9:43:58 AM
 dsdnijkamp
 EPC Planning & Community
 Development Department