

# 2024 Financial Assurance Estimate Form (with pre-plat construction)

Updated: 10/2023

PROJECT INFORMATION			
Grandview Reserve Dual Force Main	6/12/2024		
Project Name	Date	PCD File No.	PPR2421

Ensure all work is included from each set of CDs

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)		
						% Complete	Remaining	
<b>SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)</b>								
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		CY	\$ 2.00	=	\$ -		\$ -	
Permanent Erosion Control Blanket		SY	\$ 9.00	=	\$ -		\$ -	
Permanent Seeding (inc. noxious weed mgmnt.) & Mulching	27.93	AC	\$ 2,018.00	=	\$ 56,362.74		\$ 56,362.74	
Permanent Pond/BMP (provide engineer's estimate)		EA		=	\$ -		\$ -	
Concrete Washout Basin		EA	\$ 1,172.00	=	\$ -		\$ -	
Inlet Protection	13	EA	\$ 217.00	=	\$ 2,821.00		\$ 2,821.00	
Rock Check Dam	2	EA	\$ 651.00	=	\$ 1,302.00		\$ 1,302.00	
Safety Fence		LF	\$ 3.00	=	\$ -		\$ -	
Sediment Basin		EA	\$ 2,294.00	=	\$ -		\$ -	
Sediment Trap		EA	\$ 538.00	=	\$ -		\$ -	
Silt Fence	1661	LF	\$ 3.00	=	\$ 4,982.10		\$ 4,982.10	
Slope Drain		LF	\$ 43.00	=	\$ -		\$ -	
Straw Bale		EA	\$ 33.00	=	\$ -		\$ -	
Straw Wattle/Rock Sock		LF	\$ 8.00	=	\$ -		\$ -	
Surface Roughening		AC	\$ 269.00	=	\$ -		\$ -	
Temporary Erosion Control Blanket		SY	\$ 3.00	=	\$ -		\$ -	
Temporary Seeding and Mulching		AC	\$ 1,793.00	=	\$ -		\$ -	
Vehicle Tracking Control	13	EA	\$ 3,085.00	=	\$ 40,105.00		\$ 40,105.00	
[insert items not listed but part of construction plans]				=	\$ -		\$ -	
<b>MAINTENANCE (35% of Construction BMPs)</b>					=	\$ 17,223.54		\$ 17,223.54
<b>Section 1 Subtotal</b>					=	<b>\$ 122,796.38</b>		<b>\$ 122,796.38</b>

\* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

## SECTION 2 - PUBLIC IMPROVEMENTS \*

ROADWAY IMPROVEMENTS							
Construction Traffic Control							
Aggregate Base Course (135 lbs/cf)		Tons	\$ 37.00	=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)	409	CY	\$ 66.00	=	\$ 26,971.01		\$ 26,971.01
Asphalt Pavement (3" thick)		SY	\$ 18.00	=	\$ -		\$ -
Asphalt Pavement (4" thick)	2452	SY	\$ 25.00	=	\$ 61,297.75		\$ 61,297.75
Asphalt Pavement (6" thick)		SY	\$ 38.00	=	\$ -		\$ -
Asphalt Pavement (147 lbs/cf) ___" thick		Tons	\$ 114.00	=	\$ -		\$ -
Raised Median, F		SF	\$ 11.00	=	\$ -		\$ -
Regulatory Sign/ Guide/Street Nar		EA	\$ 392.00	=	\$ -		\$ -
Epoxy Pavement		EA		=	\$ -		\$ -
Thermoplastic P		SF	\$ 17.00	=	\$ -		\$ -
Barricade - Type 3		SF	\$ 30.00	=	\$ -		\$ -
Barricade - Type 3		EA	\$ 259.00	=	\$ -		\$ -
Delineator - Type I		EA	\$ 31.00	=	\$ -		\$ -
Curb and Gutter, Type A (6" Vertical)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type B (Median)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type C (Ramp)		LF	\$ 38.00	=	\$ -		\$ -
4" Sidewalk (common areas only)		SY	\$ 62.00	=	\$ -		\$ -
5" Sidewalk		SY	\$ 77.00	=	\$ -		\$ -
6" Sidewalk		SY	\$ 94.00	=	\$ -		\$ -
8" Sidewalk		SY	\$ 125.00	=	\$ -		\$ -
Pedestrian Ramp		EA	\$ 1,496.00	=	\$ -		\$ -
Cross Pan, local (8" thick, 6' wide to include return)		LF	\$ 79.00	=	\$ -		\$ -
Cross Pan, collector (9" thick, 8' wide to include return)		LF	\$ 119.00	=	\$ -		\$ -
Curb Opening with Drainage Chase		EA	\$ 1,926.00	=	\$ -		\$ -
Guardrail Type 3 (W-Beam)		LF	\$ 65.00	=	\$ -		\$ -
Guardrail Type 7 (Concrete)		LF	\$ 94.00	=	\$ -		\$ -
Guardrail End Anchorage		EA	\$ 2,731.00	=	\$ -		\$ -
Guardrail Impact Attenuator		EA	\$ 4,902.00	=	\$ -		\$ -
Sound Barrier Fence (CMU block, 6' high)		LF	\$ 102.00	=	\$ -		\$ -
Sound Barrier Fence (panels, 6' high)		LF	\$ 104.00	=	\$ -		\$ -
Electrical Conduit, Size =		LF	\$ 22.00	=	\$ -		\$ -
Traffic Signal, (provide engineer's estimate)		EA		=	\$ -		\$ -

This value seems low based on work from all CDs provided

**PROJECT INFORMATION**

**Grandview Reserve Dual Force Main**  
Project Name

**6/12/2024**  
Date

PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
[insert items not listed but part of construction plans]				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
<b>STORM DRAIN IMPROVEMENTS</b>							
Concrete Box Culvert (M Standard), Size ( W x H )		LF		=	\$ -		\$ -
18" Reinforced Concrete Pipe	32	LF	\$ 82.00	=	\$ 2,624.00		\$ 2,624.00
24" Reinforced Concrete Pipe	16	LF	\$ 98.00	=	\$ 1,568.00		\$ 1,568.00
30" Reinforced Concrete Pipe		LF	\$ 123.00	=	\$ -		\$ -
36" Reinforced Concrete Pipe		LF	\$ 151.00	=	\$ -		\$ -
42" Reinforced Concrete Pipe		LF	\$ 201.00	=	\$ -		\$ -
48" Reinforced Concrete Pipe		LF	\$ 245.00	=	\$ -		\$ -
54" Reinforced Concrete Pipe		LF	\$ 320.00	=	\$ -		\$ -
60" Reinforced Concrete Pipe		LF	\$ 374.00	=	\$ -		\$ -
66" Reinforced Concrete Pipe		LF	\$ 433.00	=	\$ -		\$ -
72" Reinforced Concrete Pipe		LF	\$ 495.00	=	\$ -		\$ -
18" Corrugated Steel Pipe		LF	\$ 125.00	=	\$ -		\$ -
24" Corrugated Steel Pipe		LF	\$ 125.00	=	\$ -		\$ -
30" Corrugated Steel Pipe		LF	\$ 125.00	=	\$ -		\$ -
36" Co		LF	\$ 125.00	=	\$ -		\$ -
42" Co		LF	\$ 212.00	=	\$ -		\$ -
48" Co		LF	\$ 223.00	=	\$ -		\$ -
54" Co		LF	\$ 327.00	=	\$ -		\$ -
60" Co		LF	\$ 353.00	=	\$ -		\$ -
66" Corrugated Steel Pipe		LF	\$ 427.00	=	\$ -		\$ -
72" Corrugated Steel Pipe		LF	\$ 502.00	=	\$ -		\$ -
78" Corrugated Steel Pipe		LF	\$ 578.00	=	\$ -		\$ -
84" Corrugated Steel Pipe		LF	\$ 691.00	=	\$ -		\$ -
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)							
End Treatment- Headwall		EA		=	\$ -		\$ -
End Treatment- Wingwall		EA		=	\$ -		\$ -
End Treatment - Cutoff Wall		EA		=	\$ -		\$ -
Curb Inlet (Type R) L=5', Depth < 5'		EA	\$ 7,212.00	=	\$ -		\$ -
Curb Inlet (Type R) L=5', 5' ≤ Depth < 10'		EA	\$ 9,377.00	=	\$ -		\$ -
Curb Inlet (Type R) L =5', 10' ≤ Depth < 15'		EA	\$ 10,859.00	=	\$ -		\$ -
Curb Inlet (Type R) L =10', Depth < 5'		EA	\$ 9,925.00	=	\$ -		\$ -
Curb Inlet (Type R) L =10', 5' ≤ Depth < 10'		EA	\$ 10,230.00	=	\$ -		\$ -
Curb Inlet (Type R) L =10', 10' ≤ Depth < 15'		EA	\$ 12,805.00	=	\$ -		\$ -
Curb Inlet (Type R) L =15', Depth < 5'		EA	\$ 12,907.00	=	\$ -		\$ -
Curb Inlet (Type R) L =15', 5' ≤ Depth < 10'		EA	\$ 13,835.00	=	\$ -		\$ -
Curb Inlet (Type R) L =15', 10' ≤ Depth < 15'		EA	\$ 15,130.00	=	\$ -		\$ -
Curb Inlet (Type R) L =20', Depth < 5'		EA	\$ 13,755.00	=	\$ -		\$ -
Curb Inlet (Type R) L =20', 5' ≤ Depth < 10'		EA	\$ 15,181.00	=	\$ -		\$ -
Grated Inlet (Type C), Depth < 5'		EA	\$ 6,037.00	=	\$ -		\$ -
Grated Inlet (Type D), Depth < 5'		EA	\$ 7,458.00	=	\$ -		\$ -
Storm Sewer Manhole, Box Base		EA	\$ 15,130.00	=	\$ -		\$ -
Storm Sewer Manhole, Slab Base		EA	\$ 8,322.00	=	\$ -		\$ -
Geotextile (Erosion Control)		SY	\$ 9.00	=	\$ -		\$ -
Rip Rap, d50 size from 6" to 24"		Tons	\$ 104.00	=	\$ -		\$ -
Rip Rap, Grouted		Tons	\$ 124.00	=	\$ -		\$ -
Drainage Channel Construction, Size ( W x H )		LF		=	\$ -		\$ -
Drainage Channel Lining, Concrete		CY	\$ 741.00	=	\$ -		\$ -
Drainage Channel Lining, Rip Rap		CY	\$ 145.00	=	\$ -		\$ -
Drainage Channel Lining, Grass		AC	\$ 1,911.00	=	\$ -		\$ -
Drainage Channel Lining, Other Stabilization				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
<b>Section 2 Subtotal</b>				=	<b>\$ 92,460.80</b>		<b>\$ 92,460.76</b>

\* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

**PROJECT INFORMATION**

<b>Grandview Reserve Dual Force Main</b>	<b>6/12/2024</b>	
<b>Project Name</b>	<b>Date</b>	<b>PCD File No.</b>

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
<b>SECTION 3 - COMMON DEVELOPMENT IMPROVEMENTS (Private or District and NOT Maintained by EPC)**</b>							
<b>ROADWAY IMPROVEMENTS</b>							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
<b>STORM DRAIN IMPROVEMENTS (Exception: Permanent Pond/BMP shall be itemized under Section 1)</b>							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
<b>WATER SYSTEM IMPROVEMENTS</b>							
Water Main Pipe (PVC), Size 8"		LF	\$ 84.00	=	\$ -		\$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 98.00	=	\$ -		\$ -
Gate Valves, 8"		EA	\$ 2,418.00	=	\$ -		\$ -
Fire Hydrant Assembly, w/ all valves		EA	\$ 8,584.00	=	\$ -		\$ -
Water Service Line Installation, inc. tap and valves		EA	\$ 1,723.00	=	\$ -		\$ -
Fire Cistern Installation, complete		EA		=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
<i>[insert items not listed but part of construction plans]</i>							
				=	\$ -		\$ -
<b>SANITARY SEWER IMPROVEMENTS</b>							
Sewer Main Pipe (PVC), Size 8"	17481	LF	\$ 84.00	=	\$ 1,468,404.00		\$ 1,468,404.00
Sanitary Sewer Manhole, Depth < 15 feet	1	EA	\$ 5,708.00	=	\$ 5,708.00		\$ 5,708.00
Sanitary Service Line Installation, complete		EA	\$ 1,825.00	=	\$ -		\$ -
Sanitary Sewer Lift Station, complete		EA		=	\$ -		\$ -
Sewer Main Pipe (PVC), Size 14"	17481	LF	\$ 123.00	=	\$ 2,150,163.00		\$ 2,150,163.00
				=	\$ -		\$ -
				=	\$ -		\$ -
<i>[insert items not listed but part of construction plans]</i>							
				=	\$ -		\$ -
<b>LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)</b>							
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
<b>Section 3 Subtotal</b>					<b>=</b>	<b>\$ 3,624,275.00</b>	<b>\$ 3,624,275.00</b>

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

Include all casing pipes needed with appropriate plan sets.

**PROJECT INFORMATION**

<b>Grandview Reserve Dual Force Main</b>	<b>6/12/2024</b>	
<b>Project Name</b>	<b>Date</b>	<b>PCD File No.</b>

Description	Quantity	Units	Unit Cost	Total	(with Pre-Plat Construction)	
					% Complete	Remaining
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)				= \$ -		\$ -
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS		= \$ -		\$ -
<b>Total Construction Financial Assurance</b>						<b>\$ 3,839,532.18</b>
(Sum of all section subtotals plus as-builts and pond/BMP certification)						
<b>Total Remaining Construction Financial Assurance (with Pre-Plat Construction)</b>						<b>\$ 3,839,532.14</b>
(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)						
<b>Total Defect Warranty Financial Assurance</b>						<b>\$ 29,764.71</b>
(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.

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Engineer (P.E. Seal Required)

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Approved by Owner / Applicant Date

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Approved by El Paso County Engineer / ECM Administrator Date

## Financial Assurance – Assumptions

### Dual Force Mains

*The following assumptions were made to estimate the cost of specific materials for the financial assurance form:*

- According to the MHFD Bid pricing data, a 15” sanitary sewer pipe was \$110/LF for a project in 2017, the following assumptions were made:
  - 14” PVC Sanitary Sewer Pipe at \$123/LF (Decreased to account for smaller pipe size and then increased to account for inflation)
- Asphalt Pavement and Aggregate Base Course:
  - Pavement thickness was assumed to be 4” thick
  - Base Course was assumed to be 6” thick based on minimum standards in El Paso County Criteria

# 2024 Financial Assurance Estimate Form (with pre-plat construction)

Updated: 10/2023

PROJECT INFORMATION		
Grandview Reserve Interceptor Sewer	6/12/2024	
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
<b>SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)</b>							
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		CY	\$ 2.00	=	\$ -		\$ -
Permanent Erosion Control Blanket		SY	\$ 9.00	=	\$ -		\$ -
Permanent Seeding (inc. noxious weed mgmnt.) & Mulching	18.92	AC	\$ 2,018.00	=	\$ 38,180.56		\$ 38,180.56
Permanent Pond/BMP (provide engineer's estimate)		EA		=	\$ -		\$ -
Concrete Washout Basin		EA	\$ 1,172.00	=	\$ -		\$ -
Inlet Protection		EA	\$ 217.00	=	\$ -		\$ -
Rock Check Dam		EA	\$ 651.00	=	\$ -		\$ -
Safety Fence		LF	\$ 3.00	=	\$ -		\$ -
Sediment Basin		EA	\$ 2,294.00	=	\$ -		\$ -
Sediment Trap		EA	\$ 538.00	=	\$ -		\$ -
Silt Fence	629	LF	\$ 3.00	=	\$ 1,887.19		\$ 1,887.19
Slope Drain		LF	\$ 43.00	=	\$ -		\$ -
Straw Bale		EA	\$ 33.00	=	\$ -		\$ -
Straw Wattle/Rock Sock		LF	\$ 8.00	=	\$ -		\$ -
Surface Roughening		AC	\$ 269.00	=	\$ -		\$ -
Temporary Erosion Control Blanket		SY	\$ 3.00	=	\$ -		\$ -
Temporary Seeding and Mulching		AC	\$ 1,793.00	=	\$ -		\$ -
Vehicle Tracking Control	4	EA	\$ 3,085.00	=	\$ 12,340.00		\$ 12,340.00
[insert items not listed but part of construction plans]				=	\$ -		\$ -
<b>MAINTENANCE (35% of Construction BMPs)</b>					\$ 4,979.52		\$ 4,979.52
<b>Section 1 Subtotal</b>					<b>\$ 57,387.27</b>		<b>\$ 57,387.27</b>

\* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

## SECTION 2 - PUBLIC IMPROVEMENTS \*

ROADWAY IMPROVEMENTS							
Construction Traffic Control							
Aggregate Base Course (135 lbs/cf)		Tons	\$ 37.00	=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)	243	CY	\$ 66.00	=	\$ 16,010.94		\$ 16,010.94
Asphalt Pavement (3" thick)		SY	\$ 18.00	=	\$ -		\$ -
Asphalt Pavement (4" thick)	1456	SY	\$ 25.00	=	\$ 36,388.50		\$ 36,388.50
Asphalt Pavement (6" thick)		SY	\$ 38.00	=	\$ -		\$ -
Asphalt Pavement (147 lbs/cf) ___" thick		Tons	\$ 114.00	=	\$ -		\$ -
Raised Median, Paved		SF	\$ 11.00	=	\$ -		\$ -
Regulatory Sign/Advisory Sign		EA	\$ 392.00	=	\$ -		\$ -
Guide/Street Name Sign		EA		=	\$ -		\$ -
Epoxy Pavement Marking		SF	\$ 17.00	=	\$ -		\$ -
Thermoplastic Pavement Marking		SF	\$ 30.00	=	\$ -		\$ -
Barricade - Type 3		EA	\$ 259.00	=	\$ -		\$ -
Delineator - Type I		EA	\$ 31.00	=	\$ -		\$ -
Curb and Gutter, Type A (6" Vertical)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type B (Median)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type C (Ramp)		LF	\$ 38.00	=	\$ -		\$ -
4" Sidewalk (common areas only)		SY	\$ 62.00	=	\$ -		\$ -
5" Sidewalk		SY	\$ 77.00	=	\$ -		\$ -
6" Sidewalk		SY	\$ 94.00	=	\$ -		\$ -
8" Sidewalk		SY	\$ 125.00	=	\$ -		\$ -
Pedestrian Ramp		EA	\$ 1,496.00	=	\$ -		\$ -
Cross Pan, local (8" thick, 6' wide to include return)		LF	\$ 79.00	=	\$ -		\$ -
Cross Pan, collector (9" thick, 8' wide to include return)		LF	\$ 119.00	=	\$ -		\$ -
Curb Opening with Drainage Chase		EA	\$ 1,926.00	=	\$ -		\$ -
Guardrail Type 3 (W-Beam)		LF	\$ 65.00	=	\$ -		\$ -
Guardrail Type 7 (Concrete)		LF	\$ 94.00	=	\$ -		\$ -
Guardrail End Anchorage		EA	\$ 2,731.00	=	\$ -		\$ -
Guardrail Impact Attenuator		EA	\$ 4,902.00	=	\$ -		\$ -
Sound Barrier Fence (CMU block, 6' high)		LF	\$ 102.00	=	\$ -		\$ -
Sound Barrier Fence (panels, 6' high)		LF	\$ 104.00	=	\$ -		\$ -
Electrical Conduit, Size =		LF	\$ 22.00	=	\$ -		\$ -
Traffic Signal, (provide engineer's estimate)		EA		=	\$ -		\$ -

**PROJECT INFORMATION**

**Grandview Reserve Interceptor Sewer**

**6/12/2024**

**Project Name**

**Date**

**PCD File No.**

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)		
						% Complete	Remaining	
				=	\$ -		\$ -	
<i>[insert items not listed but part of construction plans]</i>				=	\$ -		\$ -	
<b>STORM DRAIN IMPROVEMENTS</b>								
Concrete Box Culvert (M Standard), Size ( W x H )		LF		=	\$ -		\$ -	
18" Reinforced Concrete Pipe		LF	\$ 82.00	=	\$ -		\$ -	
24" Reinforced Concrete Pipe		LF	\$ 98.00	=	\$ -		\$ -	
30" Reinforced Concrete Pipe		LF	\$ 123.00	=	\$ -		\$ -	
36" Reinforced Concrete Pipe		LF	\$ 151.00	=	\$ -		\$ -	
42" Reinforced Concrete Pipe		LF	\$ 201.00	=	\$ -		\$ -	
48" Reinforced Concrete Pipe		LF	\$ 245.00	=	\$ -		\$ -	
54" Reinforced Concrete Pipe		LF	\$ 320.00	=	\$ -		\$ -	
60" Reinforced Concrete Pipe		LF	\$ 374.00	=	\$ -		\$ -	
66" Reinforced Concrete Pipe		LF	\$ 433.00	=	\$ -		\$ -	
72" Reinforced Concrete Pipe		LF	\$ 495.00	=	\$ -		\$ -	
18" Corrugated Steel Pipe		LF	\$ 105.00	=	\$ -		\$ -	
24" Corrugated Steel Pipe		LF	\$ 121.00	=	\$ -		\$ -	
30" Corrugated Steel Pipe		LF	\$ 154.00	=	\$ -		\$ -	
36" Corrugated Steel Pipe		LF	\$ 184.00	=	\$ -		\$ -	
42" Corrugated Steel Pipe		LF	\$ 212.00	=	\$ -		\$ -	
48" Corrugated Steel Pipe		LF	\$ 223.00	=	\$ -		\$ -	
54" Corrugated Steel Pipe		LF	\$ 327.00	=	\$ -		\$ -	
60" Corrugated Steel Pipe		LF	\$ 353.00	=	\$ -		\$ -	
66" Corrugated Steel Pipe		LF	\$ 427.00	=	\$ -		\$ -	
72" Corrugated Steel Pipe		LF	\$ 502.00	=	\$ -		\$ -	
78" Corrugated Steel Pipe		LF	\$ 578.00	=	\$ -		\$ -	
84" Corrugated Steel Pipe		LF	\$ 691.00	=	\$ -		\$ -	
Flared End Section (FES) RCP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$ -		\$ -	
Flared End Section (FES) CSP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$ -		\$ -	
End Treatment- Headwall		EA		=	\$ -		\$ -	
End Treatment- Wingwall		EA		=	\$ -		\$ -	
End Treatment - Cutoff Wall		EA		=	\$ -		\$ -	
Curb Inlet (Type R) L=5', Depth < 5'		EA	\$ 7,212.00	=	\$ -		\$ -	
Curb Inlet (Type R) L=5', 5' ≤ Depth < 10'		EA	\$ 9,377.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =5', 10' ≤ Depth < 15'		EA	\$ 10,859.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =10', Depth < 5'		EA	\$ 9,925.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =10', 5' ≤ Depth < 10'		EA	\$ 10,230.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =10', 10' ≤ Depth < 15'		EA	\$ 12,805.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =15', Depth < 5'		EA	\$ 12,907.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =15', 5' ≤ Depth < 10'		EA	\$ 13,835.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =15', 10' ≤ Depth < 15'		EA	\$ 15,130.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =20', Depth < 5'		EA	\$ 13,755.00	=	\$ -		\$ -	
Curb Inlet (Type R) L =20', 5' ≤ Depth < 10'		EA	\$ 15,181.00	=	\$ -		\$ -	
Grated Inlet (Type C), Depth < 5'		EA	\$ 6,037.00	=	\$ -		\$ -	
Grated Inlet (Type D), Depth < 5'		EA	\$ 7,458.00	=	\$ -		\$ -	
Storm Sewer Manhole, Box Base		EA	\$ 15,130.00	=	\$ -		\$ -	
Storm Sewer Manhole, Slab Base		EA	\$ 8,322.00	=	\$ -		\$ -	
Geotextile (Erosion Control)		SY	\$ 9.00	=	\$ -		\$ -	
Rip Rap, d50 size from 6" to 24"		Tons	\$ 104.00	=	\$ -		\$ -	
Rip Rap, Grouted		Tons	\$ 124.00	=	\$ -		\$ -	
Drainage Channel Construction, Size ( W x H )		LF		=	\$ -		\$ -	
Drainage Channel Lining, Concrete		CY	\$ 741.00	=	\$ -		\$ -	
Drainage Channel Lining, Rip Rap		CY	\$ 145.00	=	\$ -		\$ -	
Drainage Channel Lining, Grass		AC	\$ 1,911.00	=	\$ -		\$ -	
Drainage Channel Lining, Other Stabilization				=	\$ -		\$ -	
				=	\$ -		\$ -	
<i>[insert items not listed but part of construction plans]</i>				=	\$ -		\$ -	
<b>Section 2 Subtotal</b>					<b>=</b>	<b>\$ 52,399.40</b>		<b>\$ 52,399.44</b>

\* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

**PROJECT INFORMATION**

<b>Grandview Reserve Interceptor Sewer</b>	<b>6/12/2024</b>	
<b>Project Name</b>	<b>Date</b>	<b>PCD File No.</b>

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
<b>SECTION 3 - COMMON DEVELOPMENT IMPROVEMENTS (Private or District and NOT Maintained by EPC)**</b>							
<b>ROADWAY IMPROVEMENTS</b>							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
<b>STORM DRAIN IMPROVEMENTS (Exception: Permanent Pond/BMP shall be itemized under Section 1)</b>							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
<b>WATER SYSTEM IMPROVEMENTS</b>							
Water Main Pipe (PVC), Size 8"		LF	\$ 84.00	=	\$ -		\$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 98.00	=	\$ -		\$ -
Gate Valves, 8"		EA	\$ 2,418.00	=	\$ -		\$ -
Fire Hydrant Assembly, w/ all valves		EA	\$ 8,584.00	=	\$ -		\$ -
Water Service Line Installation, inc. tap and valves		EA	\$ 1,723.00	=	\$ -		\$ -
Fire Cistern Installation, complete		EA		=	\$ -		\$ -
<i>[insert items not listed but part of construction plans]</i>				=	\$ -		\$ -
<b>SANITARY SEWER IMPROVEMENTS</b>							
Sewer Main Pipe (PVC), Size 8"	40	LF	\$ 84.00	=	\$ 3,360.00		\$ 3,360.00
Sanitary Sewer Manhole, Depth < 15 feet	17	EA	\$ 5,708.00	=	\$ 97,036.00		\$ 97,036.00
Sanitary Service Line Installation, complete		EA	\$ 1,825.00	=	\$ -		\$ -
Sanitary Sewer Manhole, Depth 15 to 25 feet	5		\$ 24,000.00	=	\$ 120,000.00		\$ 120,000.00
Sanitary Sewer Manhole, Depth 25 to 35 feet	4	EA	\$ 35,000.00	=	\$ 140,000.00		\$ 140,000.00
18" PVC SDR 26	8208	LF	\$ 150.00	=	\$ 1,231,200.00		\$ 1,231,200.00
Sewer Main Pipe (PVC), Size 15"	40	LF	\$ 132.00	=	\$ 5,280.00		\$ 5,280.00
30" PVC Steel Casing Pipe W/ cathodic Protection	150	LF	\$ 256.80	=	\$ 38,520.00		\$ 38,520.00
<b>LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)</b>							
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -



**PROJECT INFORMATION**

<b>Grandview Reserve Interceptor Sewer</b>	<b>6/12/2024</b>	
<b>Project Name</b>	<b>Date</b>	<b>PCD File No.</b>

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
		EA		=	\$ -		\$ -
<b>** - Section 3 is not subject to defect warranty requirements</b>							
<b>Section 3 Subtotal</b>				<b>=</b>	<b>\$ 1,635,396.00</b>		<b>\$ 1,635,396.00</b>
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)				=	\$ -		\$ -
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS		=	\$ -		\$ -
<b>Total Construction Financial Assurance</b>						<b>\$</b>	<b>1,745,182.67</b>
(Sum of all section subtotals plus as-builts and pond/BMP certification)							
<b>Total Remaining Construction Financial Assurance (with Pre-Plat Construction)</b>						<b>\$</b>	<b>1,745,182.71</b>
(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)							
<b>Total Defect Warranty Financial Assurance</b>						<b>\$</b>	<b>18,115.99</b>
(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

# Financial Assurance – Assumptions

## Interceptor Sewer

*The following assumptions were made to estimate the cost of specific materials for the financial assurance form:*

- According to the MHFD Bid pricing data, a 15” sanitary sewer pipe was \$110/LF for a project in 2017, the following assumptions were made:
  - 15” PVC Sanitary Sewer Pipe at \$132/LF (Increased by 20% to account for inflation)
  - 18” PVC Sanitary Sewer Pipe at \$150/LF (Increased to account for larger pipe size and inflation)
- According to the MHFD Bid pricing data, a “Sanitary Sewer Manhole, Depth 25 feet” in 2019 for \$20,000/EACH the following assumption was made:
  - “Sanitary Sewer Manhole, Depth 15 - 25 feet” is \$24,000/EACH (Increased by 20% to consider inflation)
  - “Sanitary Sewer Manhole, Depth 25 - 35 feet” is \$35,000/EACH (Increased to account for larger depth factor and inflation)
- According to the MHFD Bid pricing data, a “30” Steel Casing Per Detail A (PD003)” in 2017 for \$214/LF the following assumption was made:
  - 30” PVC Steel Casing Pipe with Cathodic Protection at \$256.80/LF (Increased by 20% to consider inflation)
- Asphalt Pavement and Aggregate Base Course:
  - Pavement thickness was assumed to be 4” thick
  - Base Course was assumed to be 6” thick based on minimum standards in El Paso County Criteria

2024 Financial Assurance Estimate Form  
(with pre-plat construction)

PBMP mentioned in PBMP App Form. Provide an estimate for it.

Updated: 10/2023 **PPR2421**

PROJECT INFORMATION		
Grandview Reserve Lift Station	6/12/2024	
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
<b>SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)</b>							
Earthwork							
less than 1,000; \$5,300 min		CY	\$ 8.00	=	\$ -		\$ -
1,000-5,000; \$8,000 min	4187	CY	\$ 6.00	=	\$ 25,122.00		\$ 25,122.00
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		SY	\$ 9.00	=	\$ -		\$ -
Permanent Seeding (inc. noxious weed mgmnt.) & Mulching	2.4	AC	\$ 2,018.00	=	\$ 4,843.20		\$ 4,843.20
Permanent Pond/BMP (provide engineer's estimate)		EA		=	\$ -		\$ -
Concrete Washout Basin	1	EA	\$ 1,172.00	=	\$ 1,172.00		\$ 1,172.00
Inlet Protection		EA	\$ 217.00	=	\$ -		\$ -
Rock Check Dam		EA	\$ 651.00	=	\$ -		\$ -
Safety Fence		LF	\$ 3.00	=	\$ -		\$ -
Sediment Basin		EA	\$ 2,294.00	=	\$ -		\$ -
Sediment Trap		EA	\$ 538.00	=	\$ -		\$ -
Silt Fence	1127	LF	\$ 3.00	=	\$ 3,381.00		\$ 3,381.00
Slope Drain		LF	\$ 43.00	=	\$ -		\$ -
Straw Bale		EA	\$ 33.00	=	\$ -		\$ -
Straw Wattle/Rock Sock		LF	\$ 8.00	=	\$ -		\$ -
Surface Roughening		AC	\$ 269.00	=	\$ -		\$ -
Temporary Erosion Control Blanket		SY	\$ 3.00	=	\$ -		\$ -
Temporary Seeding and Mulching		AC	\$ 1,793.00	=	\$ -		\$ -
Vehicle Tracking Control	1	EA	\$ 3,085.00	=	\$ 3,085.00		\$ 3,085.00
[insert items not listed but part of construction plans]				=	\$ -		\$ -
<b>MAINTENANCE (35% of Construction BMPs)</b>					=	\$ 2,263.10	\$ 2,263.10
<b>Section 1 Subtotal</b>					=	<b>\$ 39,866.30</b>	<b>\$ 39,866.30</b>

**SECTION 2 - PUBLIC IMPROVEMENTS \***

ROADWAY IMPROVEMENTS							
Construction Traffic Control		LS		=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)		Tons	\$ 37.00	=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)		CY	\$ 66.00	=	\$ -		\$ -
Asphalt Pavement (3" thick)		SY	\$ 18.00	=	\$ -		\$ -
Asphalt Pavement (4" thick)		SY	\$ 25.00	=	\$ -		\$ -
Asphalt Pavement (6" thick)		SY	\$ 38.00	=	\$ -		\$ -
Asphalt Pavement (147 lbs/cf) ___" thick		Tons	\$ 114.00	=	\$ -		\$ -
Raised Median, Paved		SF	\$ 11.00	=	\$ -		\$ -
Regulatory Sign/Advisory Sign		EA	\$ 392.00	=	\$ -		\$ -
Guide/Street Name Sign		EA		=	\$ -		\$ -
Epoxy Pavement Marking		SF	\$ 17.00	=	\$ -		\$ -
Thermoplastic Pavement Marking		SF	\$ 30.00	=	\$ -		\$ -
Barricade - Type 3		EA	\$ 259.00	=	\$ -		\$ -
Delineator - Type I		EA	\$ 31.00	=	\$ -		\$ -
Curb and Gutter, Type A (6" Vertical)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type B (Median)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type C (Ramp)		LF	\$ 38.00	=	\$ -		\$ -
4" Sidewalk (common areas only)		SY	\$ 62.00	=	\$ -		\$ -
5" Sidewalk		SY	\$ 77.00	=	\$ -		\$ -
6" Sidewalk		SY	\$ 94.00	=	\$ -		\$ -
8" Sidewalk		SY	\$ 125.00	=	\$ -		\$ -
Pedestrian Ramp		EA	\$ 1,496.00	=	\$ -		\$ -
Cross Pan, local (8" thick, 6' wide to include return)		LF	\$ 79.00	=	\$ -		\$ -
Cross Pan, collector (9" thick, 8' wide to include return)		LF	\$ 119.00	=	\$ -		\$ -
Curb Opening with Drainage Chase		EA	\$ 1,926.00	=	\$ -		\$ -
Guardrail Type 3 (W-Beam)		LF	\$ 65.00	=	\$ -		\$ -
Guardrail Type 7 (Concrete)		LF	\$ 94.00	=	\$ -		\$ -
Guardrail End Anchorage		EA	\$ 2,731.00	=	\$ -		\$ -
Guardrail Impact Attenuator		EA	\$ 4,902.00	=	\$ -		\$ -
Sound Barrier Fence (CMU block, 6' high)		LF	\$ 102.00	=	\$ -		\$ -
Sound Barrier Fence (panels, 6' high)		LF	\$ 104.00	=	\$ -		\$ -
Electrical Conduit, Size =		LF	\$ 22.00	=	\$ -		\$ -
Traffic Signal, (provide engineer's estimate)		EA		=	\$ -		\$ -

**PROJECT INFORMATION**

**Grandview Reserve Lift Station**

**6/12/2024**

**Project Name**

**Date**

**PCD File No.**

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
[insert items not listed but part of construction plans]				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
<b>STORM DRAIN IMPROVEMENTS</b>							
Concrete Box Culvert (M Standard), Size ( W x H )		LF		=	\$ -		\$ -
18" Reinforced Concrete Pipe		LF	\$ 82.00	=	\$ -		\$ -
24" Reinforced Concrete Pipe		LF	\$ 98.00	=	\$ -		\$ -
30" Reinforced Concrete Pipe		LF	\$ 123.00	=	\$ -		\$ -
36" Reinforced Concrete Pipe		LF	\$ 151.00	=	\$ -		\$ -
42" Reinforced Concrete Pipe		LF	\$ 201.00	=	\$ -		\$ -
48" Reinforced Concrete Pipe		LF	\$ 245.00	=	\$ -		\$ -
54" Reinforced Concrete Pipe		LF	\$ 320.00	=	\$ -		\$ -
60" Reinforced Concrete Pipe		LF	\$ 374.00	=	\$ -		\$ -
66" Reinforced Concrete Pipe		LF	\$ 433.00	=	\$ -		\$ -
72" Reinforced Concrete Pipe		LF	\$ 495.00	=	\$ -		\$ -
18" Corrugated Steel Pipe		LF	\$ 105.00	=	\$ -		\$ -
24" Corrugated Steel Pipe		LF	\$ 121.00	=	\$ -		\$ -
30" Corrugated Steel Pipe		LF	\$ 154.00	=	\$ -		\$ -
36" Corrugated Steel Pipe		LF	\$ 184.00	=	\$ -		\$ -
42" Corrugated Steel Pipe		LF	\$ 212.00	=	\$ -		\$ -
48" Corrugated Steel Pipe		LF	\$ 223.00	=	\$ -		\$ -
54" Corrugated Steel Pipe		LF	\$ 327.00	=	\$ -		\$ -
60" Corrugated Steel Pipe		LF	\$ 353.00	=	\$ -		\$ -
66" Corrugated Steel Pipe		LF	\$ 427.00	=	\$ -		\$ -
72" Corrugated Steel Pipe		LF	\$ 502.00	=	\$ -		\$ -
78" Corrugated Steel Pipe		LF	\$ 578.00	=	\$ -		\$ -
84" Corrugated Steel Pipe		LF	\$ 691.00	=	\$ -		\$ -
Flared End Section (FES) RCP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$ -		\$ -
Flared End Section (FES) CSP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$ -		\$ -
End Treatment- Headwall		EA		=	\$ -		\$ -
End Treatment- Wingwall		EA		=	\$ -		\$ -
End Treatment - Cutoff Wall		EA		=	\$ -		\$ -
Curb Inlet (Type R) L=5', Depth < 5'		EA	\$ 7,212.00	=	\$ -		\$ -
Curb Inlet (Type R) L=5', 5' ≤ Depth < 10'		EA	\$ 9,377.00	=	\$ -		\$ -
Curb Inlet (Type R) L=5', 10' ≤ Depth < 15'		EA	\$ 10,859.00	=	\$ -		\$ -
Curb Inlet (Type R) L=10', Depth < 5'		EA	\$ 9,925.00	=	\$ -		\$ -
Curb Inlet (Type R) L=10', 5' ≤ Depth < 10'		EA	\$ 10,230.00	=	\$ -		\$ -
Curb Inlet (Type R) L=10', 10' ≤ Depth < 15'		EA	\$ 12,805.00	=	\$ -		\$ -
Curb Inlet (Type R) L=15', Depth < 5'		EA	\$ 12,907.00	=	\$ -		\$ -
Curb Inlet (Type R) L=15', 5' ≤ Depth < 10'		EA	\$ 13,835.00	=	\$ -		\$ -
Curb Inlet (Type R) L=15', 10' ≤ Depth < 15'		EA	\$ 15,130.00	=	\$ -		\$ -
Curb Inlet (Type R) L=20', Depth < 5'		EA	\$ 13,755.00	=	\$ -		\$ -
Curb Inlet (Type R) L=20', 5' ≤ Depth < 10'		EA	\$ 15,181.00	=	\$ -		\$ -
Grated Inlet (Type C), Depth < 5'		EA	\$ 6,037.00	=	\$ -		\$ -
Grated Inlet (Type D), Depth < 5'		EA	\$ 7,458.00	=	\$ -		\$ -
Storm Sewer Manhole, Box Base		EA	\$ 15,130.00	=	\$ -		\$ -
Storm Sewer Manhole, Slab Base		EA	\$ 8,322.00	=	\$ -		\$ -
Geotextile (Erosion Control)		SY	\$ 9.00	=	\$ -		\$ -
Rip Rap, d50 size from 6" to 24"		Tons	\$ 104.00	=	\$ -		\$ -
Rip Rap, Grouted		Tons	\$ 124.00	=	\$ -		\$ -
Drainage Channel Construction, Size ( W x H )		LF		=	\$ -		\$ -
Drainage Channel Lining, Concrete		CY	\$ 741.00	=	\$ -		\$ -
Drainage Channel Lining, Rip Rap		CY	\$ 145.00	=	\$ -		\$ -
Drainage Channel Lining, Grass		AC	\$ 1,911.00	=	\$ -		\$ -
Drainage Channel Lining, Other Stabilization				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
<b>Section 2 Subtotal</b>				<b>=</b>	<b>\$ -</b>		<b>\$ -</b>

\* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 60% COMPLETE ALLOWED)

PROJECT INFORMATION							
Grandview Reserve Lift Station	6/12/2024			PCD File No.			
Project Name	Date			PCD File No.			
Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
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)							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
WATER SYSTEM IMPROVEMENTS							
Water Main Pipe (PVC), Size 8"		LF	\$ 84.00	=	\$ -		\$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 98.00	=	\$ -		\$ -
Gate Valves, 8"		EA	\$ 2,418.00	=	\$ -		\$ -
Fire Hydrant Assembly, w/ all valves		EA	\$ 8,584.00	=	\$ -		\$ -
Water Service Line Installation, inc. tap and valves		EA	\$ 1,723.00	=	\$ -		\$ -
Fire Cistern Installation, complete		EA		=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
SANITARY SEWER IMPROVEMENTS							
Sewer Main Pipe (PVC), Size 8"	221	LF	\$ 84.00	=	\$ 18,555.60		\$ 18,555.60
Sanitary Sewer Manhole, Depth < 15 feet	3	EA	\$ 5,708.00	=	\$ 17,124.00		\$ 17,124.00
Sanitary Service Line Installation, complete		EA	\$ 1,825.00	=	\$ -		\$ -
Sanitary Sewer Lift Station, complete	1	EA	\$ 7,465,000.00	=	\$ 7,465,000.00		\$ 7,465,000.00
Sewer Main Pipe (PVC), Size 18"	288	LF	\$ 150.00	=	\$ 43,260.00		\$ 43,260.00
Sewer Main Pipe (PVC), Size 14"	215	LF	\$ 123.00	=	\$ 26,445.00		\$ 26,445.00
				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)							
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
<b>Section 3 Subtotal</b>					<b>=</b>	<b>\$ 7,570,384.60</b>	<b>\$ 7,570,384.60</b>

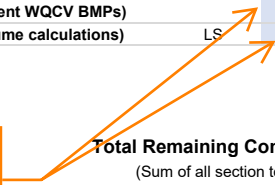
\*\* - Section 3 is not subject to defect warranty requirements

**PROJECT INFORMATION**

<b>Grandview Reserve Lift Station</b>	<b>6/12/2024</b>	
<b>Project Name</b>	<b>Date</b>	<b>PCD File No.</b>

Description	Quantity	Units	Unit Cost	Total	(with Pre-Plat Construction)	
					% Complete	Remaining
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)				= \$ -		\$ -
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS		= \$ -		\$ -
<b>Total Construction Financial Assurance</b>						<b>\$ 7,610,250.90</b>
(Sum of all section subtotals plus as-builts and pond/BMP certification)						
<b>Total Remaining Construction Financial Assurance (with Pre-Plat Construction)</b>						<b>\$ 7,610,250.90</b>
(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)						
<b>Total Defect Warranty Financial Assurance</b>						<b>\$ 5,993.04</b>
(20% of all items identified as (*). To be collateralized at time of preliminary acceptance)						

Will need values for these two if it's decided that PBMP is required.



**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

## Financial Assurance – Assumptions

### Sanitary Lift Station

*The following assumptions were made to estimate the cost of specific materials for the financial assurance form:*

- According to the MHFD Bid pricing data, a 15” sanitary sewer pipe was \$110/LF for a project in 2017, the following assumptions were made:
  - 14” PVC Sanitary Sewer Pipe at \$123/LF (Decreased to account for smaller pipe size and then increased to account for inflation)
  - 18” PVC Sanitary Sewer Pipe at \$150/LF (Increased to account for larger pipe size and inflation)
- Lift Station cost was estimated based on JHL Constructors budget estimates

# 2024 Financial Assurance Estimate Form (with pre-plat construction)

Updated: 10/2023

PROJECT INFORMATION		
Grandview Reserve Onsite Sanitary Sewer	6/12/2024	
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)		
						% Complete	Remaining	
<b>SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)</b>								
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		CY	\$ 2.00	=	\$ -		\$ -	
Permanent Erosion Control Blanket		SY	\$ 9.00	=	\$ -		\$ -	
Permanent Seeding (inc. noxious weed mgmnt.) & Mulching	8.90	AC	\$ 2,018.00	=	\$ 17,958.18		\$ 17,958.18	
Permanent Pond/BMP (provide engineer's estimate)		EA		=	\$ -		\$ -	
Concrete Washout Basin		EA	\$ 1,172.00	=	\$ -		\$ -	
Inlet Protection		EA	\$ 217.00	=	\$ -		\$ -	
Rock Check Dam	2	EA	\$ 651.00	=	\$ 1,302.00		\$ 1,302.00	
Safety Fence		LF	\$ 3.00	=	\$ -		\$ -	
Sediment Basin		EA	\$ 2,294.00	=	\$ -		\$ -	
Sediment Trap		EA	\$ 538.00	=	\$ -		\$ -	
Silt Fence	883	LF	\$ 3.00	=	\$ 2,647.98		\$ 2,647.98	
Slope Drain		LF	\$ 43.00	=	\$ -		\$ -	
Straw Bale		EA	\$ 33.00	=	\$ -		\$ -	
Straw Wattle/Rock Sock		LF	\$ 8.00	=	\$ -		\$ -	
Surface Roughening		AC	\$ 269.00	=	\$ -		\$ -	
Temporary Erosion Control Blanket		SY	\$ 3.00	=	\$ -		\$ -	
Temporary Seeding and Mulching		AC	\$ 1,793.00	=	\$ -		\$ -	
Vehicle Tracking Control	1	EA	\$ 3,085.00	=	\$ 3,085.00		\$ 3,085.00	
[insert items not listed but part of construction plans]				=	\$ -		\$ -	
<b>MAINTENANCE (35% of Construction BMPs)</b>					=	\$ 2,462.24		\$ 2,462.24
<b>Section 1 Subtotal</b>					=	<b>\$ 27,455.40</b>		<b>\$ 27,455.40</b>

\* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

## SECTION 2 - PUBLIC IMPROVEMENTS \*

ROADWAY IMPROVEMENTS							
Construction Traffic Control		LS		=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)		Tons	\$ 37.00	=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)		CY	\$ 66.00	=	\$ -		\$ -
Asphalt Pavement (3" thick)		SY	\$ 18.00	=	\$ -		\$ -
Asphalt Pavement (4" thick)		SY	\$ 25.00	=	\$ -		\$ -
Asphalt Pavement (6" thick)		SY	\$ 38.00	=	\$ -		\$ -
Asphalt Pavement (147 lbs/cf) ___" thick		Tons	\$ 114.00	=	\$ -		\$ -
Raised Median, Paved		SF	\$ 11.00	=	\$ -		\$ -
Regulatory Sign/Advisory Sign		EA	\$ 392.00	=	\$ -		\$ -
Guide/Street Name Sign		EA		=	\$ -		\$ -
Epoxy Pavement Marking		SF	\$ 17.00	=	\$ -		\$ -
Thermoplastic Pavement Marking		SF	\$ 30.00	=	\$ -		\$ -
Barricade - Type 3		EA	\$ 259.00	=	\$ -		\$ -
Delineator - Type I		EA	\$ 31.00	=	\$ -		\$ -
Curb and Gutter, Type A (6" Vertical)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type B (Median)		LF	\$ 38.00	=	\$ -		\$ -
Curb and Gutter, Type C (Ramp)		LF	\$ 38.00	=	\$ -		\$ -
4" Sidewalk (common areas only)		SY	\$ 62.00	=	\$ -		\$ -
5" Sidewalk		SY	\$ 77.00	=	\$ -		\$ -
6" Sidewalk		SY	\$ 94.00	=	\$ -		\$ -
8" Sidewalk		SY	\$ 125.00	=	\$ -		\$ -
Pedestrian Ramp		EA	\$ 1,496.00	=	\$ -		\$ -
Cross Pan, local (8" thick, 6' wide to include return)		LF	\$ 79.00	=	\$ -		\$ -
Cross Pan, collector (9" thick, 8' wide to include return)		LF	\$ 119.00	=	\$ -		\$ -
Curb Opening with Drainage Chase		EA	\$ 1,926.00	=	\$ -		\$ -
Guardrail Type 3 (W-Beam)		LF	\$ 65.00	=	\$ -		\$ -
Guardrail Type 7 (Concrete)		LF	\$ 94.00	=	\$ -		\$ -
Guardrail End Anchorage		EA	\$ 2,731.00	=	\$ -		\$ -
Guardrail Impact Attenuator		EA	\$ 4,902.00	=	\$ -		\$ -
Sound Barrier Fence (CMU block, 6' high)		LF	\$ 102.00	=	\$ -		\$ -
Sound Barrier Fence (panels, 6' high)		LF	\$ 104.00	=	\$ -		\$ -
Electrical Conduit, Size =		LF	\$ 22.00	=	\$ -		\$ -
Traffic Signal, (provide engineer's estimate)		EA		=	\$ -		\$ -



**PROJECT INFORMATION**

**Grandview Reserve Onsite Sanitary Sewer**

**6/12/2024**

**Project Name**

**Date**

**PCD File No.**

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
				=	\$ -		\$ -
<i>[insert items not listed but part of construction plans]</i>				=	\$ -		\$ -
<b>STORM DRAIN IMPROVEMENTS</b>							
Concrete Box Culvert (M Standard), Size ( W x H )		LF		=	\$ -		\$ -
18" Reinforced Concrete Pipe		LF	\$ 82.00	=	\$ -		\$ -
24" Reinforced Concrete Pipe		LF	\$ 98.00	=	\$ -		\$ -
30" Reinforced Concrete Pipe		LF	\$ 123.00	=	\$ -		\$ -
36" Reinforced Concrete Pipe		LF	\$ 151.00	=	\$ -		\$ -
42" Reinforced Concrete Pipe		LF	\$ 201.00	=	\$ -		\$ -
48" Reinforced Concrete Pipe		LF	\$ 245.00	=	\$ -		\$ -
54" Reinforced Concrete Pipe		LF	\$ 320.00	=	\$ -		\$ -
60" Reinforced Concrete Pipe		LF	\$ 374.00	=	\$ -		\$ -
66" Reinforced Concrete Pipe		LF	\$ 433.00	=	\$ -		\$ -
72" Reinforced Concrete Pipe		LF	\$ 495.00	=	\$ -		\$ -
18" Corrugated Steel Pipe		LF	\$ 105.00	=	\$ -		\$ -
24" Corrugated Steel Pipe		LF	\$ 121.00	=	\$ -		\$ -
30" Corrugated Steel Pipe		LF	\$ 154.00	=	\$ -		\$ -
36" Corrugated Steel Pipe		LF	\$ 184.00	=	\$ -		\$ -
42" Corrugated Steel Pipe		LF	\$ 212.00	=	\$ -		\$ -
48" Corrugated Steel Pipe		LF	\$ 223.00	=	\$ -		\$ -
54" Corrugated Steel Pipe		LF	\$ 327.00	=	\$ -		\$ -
60" Corrugated Steel Pipe		LF	\$ 353.00	=	\$ -		\$ -
66" Corrugated Steel Pipe		LF	\$ 427.00	=	\$ -		\$ -
72" Corrugated Steel Pipe		LF	\$ 502.00	=	\$ -		\$ -
78" Corrugated Steel Pipe		LF	\$ 578.00	=	\$ -		\$ -
84" Corrugated Steel Pipe		LF	\$ 691.00	=	\$ -		\$ -
Flared End Section (FES) RCP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$ -		\$ -
Flared End Section (FES) CSP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$ -		\$ -
End Treatment- Headwall		EA		=	\$ -		\$ -
End Treatment- Wingwall		EA		=	\$ -		\$ -
End Treatment - Cutoff Wall		EA		=	\$ -		\$ -
Curb Inlet (Type R) L=5', Depth < 5'		EA	\$ 7,212.00	=	\$ -		\$ -
Curb Inlet (Type R) L=5', 5' ≤ Depth < 10'		EA	\$ 9,377.00	=	\$ -		\$ -
Curb Inlet (Type R) L =5', 10' ≤ Depth < 15'		EA	\$ 10,859.00	=	\$ -		\$ -
Curb Inlet (Type R) L =10', Depth < 5'		EA	\$ 9,925.00	=	\$ -		\$ -
Curb Inlet (Type R) L =10', 5' ≤ Depth < 10'		EA	\$ 10,230.00	=	\$ -		\$ -
Curb Inlet (Type R) L =10', 10' ≤ Depth < 15'		EA	\$ 12,805.00	=	\$ -		\$ -
Curb Inlet (Type R) L =15', Depth < 5'		EA	\$ 12,907.00	=	\$ -		\$ -
Curb Inlet (Type R) L =15', 5' ≤ Depth < 10'		EA	\$ 13,835.00	=	\$ -		\$ -
Curb Inlet (Type R) L =15', 10' ≤ Depth < 15'		EA	\$ 15,130.00	=	\$ -		\$ -
Curb Inlet (Type R) L =20', Depth < 5'		EA	\$ 13,755.00	=	\$ -		\$ -
Curb Inlet (Type R) L =20', 5' ≤ Depth < 10'		EA	\$ 15,181.00	=	\$ -		\$ -
Grated Inlet (Type C), Depth < 5'		EA	\$ 6,037.00	=	\$ -		\$ -
Grated Inlet (Type D), Depth < 5'		EA	\$ 7,458.00	=	\$ -		\$ -
Storm Sewer Manhole, Box Base		EA	\$ 15,130.00	=	\$ -		\$ -
Storm Sewer Manhole, Slab Base		EA	\$ 8,322.00	=	\$ -		\$ -
Geotextile (Erosion Control)		SY	\$ 9.00	=	\$ -		\$ -
Rip Rap, d50 size from 6" to 24"		Tons	\$ 104.00	=	\$ -		\$ -
Rip Rap, Grouted		Tons	\$ 124.00	=	\$ -		\$ -
Drainage Channel Construction, Size ( W x H )		LF		=	\$ -		\$ -
Drainage Channel Lining, Concrete		CY	\$ 741.00	=	\$ -		\$ -
Drainage Channel Lining, Rip Rap		CY	\$ 145.00	=	\$ -		\$ -
Drainage Channel Lining, Grass		AC	\$ 1,911.00	=	\$ -		\$ -
Drainage Channel Lining, Other Stabilization				=	\$ -		\$ -
				=	\$ -		\$ -
<i>[insert items not listed but part of construction plans]</i>				=	\$ -		\$ -
				<b>Section 2 Subtotal</b>	<b>= \$ -</b>		<b>\$ -</b>

\* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

**PROJECT INFORMATION**

Grandview Reserve Onsite Sanitary Sewer  
Project Name

6/12/2024  
Date

PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
<b>SECTION 3 - COMMON DEVELOPMENT IMPROVEMENTS (Private or District and NOT Maintained by EPC)**</b>							
<b>ROADWAY IMPROVEMENTS</b>							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
<b>STORM DRAIN IMPROVEMENTS</b> (Exception: Permanent Pond/BMP shall be itemized under Section 1)							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
<b>WATER SYSTEM IMPROVEMENTS</b>							
Water Main Pipe (PVC), Size 8"		LF	\$ 84.00	=	\$ -		\$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 98.00	=	\$ -		\$ -
Gate Valves, 8"		EA	\$ 2,418.00	=	\$ -		\$ -
Fire Hydrant Assembly, w/ all valves		EA	\$ 8,584.00	=	\$ -		\$ -
Water Service Line Installation, inc. tap and valves		EA	\$ 1,723.00	=	\$ -		\$ -
Fire Cistern Installation, complete		EA		=	\$ -		\$ -
<i>[insert items not listed but part of construction plans]</i>				=	\$ -		\$ -
<b>SANITARY SEWER IMPROVEMENTS</b>							
Sewer Main Pipe (PVC), Size 8"	1744	LF	\$ 84.00	=	\$ 146,454.00		\$ 146,454.00
Sanitary Sewer Manhole, Depth < 15 feet	11	EA	\$ 5,708.00	=	\$ 62,788.00		\$ 62,788.00
Sanitary Service Line Installation, complete		EA	\$ 1,825.00	=	\$ -		\$ -
Sewer Main Pipe (PVC), Size 12"	1901	LF	\$ 106.00	=	\$ 201,548.40		\$ 201,548.40
Sanitary Sewer Manhole, Depth 15 to 25 feet	6	EA	\$ 24,000.00	=	\$ 144,000.00		\$ 144,000.00
Sanitary Sewer Manhole, Depth 25 to 35 feet		EA	\$ 35,000.00	=	\$ -		\$ -
Sewer Main Pipe (PVC), Size 10"	1727	LF	\$ 90.00	=	\$ 155,385.00		\$ 155,385.00
<b>LANDSCAPING IMPROVEMENTS</b> (For subdivision specific condition of approval, or PUD)							
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -

**PROJECT INFORMATION**

<b>Grandview Reserve Onsite Sanitary Sewer</b>	<b>6/12/2024</b>	
<b>Project Name</b>	<b>Date</b>	<b>PCD File No.</b>

Description	Quantity	Units	Unit Cost	Total	(with Pre-Plat Construction)		
					% Complete	Remaining	
** - Section 3 is not subject to defect warranty requirements				<b>Section 3 Subtotal</b>	<b>=</b>	<b>\$ 710,175.40</b>	<b>\$ 710,175.40</b>
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)				= \$ -		\$ -	
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS		= \$ -		\$ -	
<b>Total Construction Financial Assurance</b>						<b>\$ 737,630.80</b>	
(Sum of all section subtotals plus as-builts and pond/BMP certification)							
<b>Total Remaining Construction Financial Assurance (with Pre-Plat Construction)</b>						<b>\$ 737,630.80</b>	
(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)							
<b>Total Defect Warranty Financial Assurance</b>						<b>\$ 3,591.64</b>	
(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

## Financial Assurance – Assumptions

### Onsite Sanitary

*The following assumptions were made to estimate the cost of specific materials for the financial assurance form:*

- According to the MHFD Bid pricing data, a 15” sanitary sewer pipe was \$110/LF for a project in 2017, the following assumptions were made:
  - 10” PVC Sanitary Sewer Pipe at \$90/LF (Decreased to account for smaller pipe size and then increased to account for inflation)
  - 12” PVC Sanitary Sewer Pipe at \$106/LF (Decreased to account for smaller pipe size and then increased to account for inflation)
- According to the MHFD Bid pricing data, a “Sanitary Sewer Manhole, Depth 25 feet” in 2019 for \$20,000/EACH the following assumption was made:
  - “Sanitary Sewer Manhole, Depth 15 - 25 feet” is \$24,000/EACH (Increased by 20% to consider inflation)