2015 Financial Assurance Estimate Form

8/6/2015

Project Information

Lorson Ranch East- Lorson Boulevard Bridge — **2/26/2018**

Project Name

Section 1 - Grading and Erosion Control BMPs	Quantity	Units		Price			% Complete	Remaining	
Earthwork-	7,500.00	CY	@	$ $5	=	$ 37,500.00		$ 37,500.00	*
Permanent Seeding*	1.00	AC	@	$ $582	=	$ 582.00		$ 582.00	*
Mulching*	1.00	AC	@	$ $507	=	$ 507.00		$ 507.00	*
Permanent Erosion Control Blanket*		SY	@	$ $6	=	$		$ -	*
Temporary Erosion Control Blanket		SY	@	$ $3		$		$ -	
Vehicle Tracking Control	1.00	EA	@	$ $1,625	=	$ 1,625.00		$ 1,625.00	
Safety Fence	1,900.00	LF	@	$ $3	=	$ 5,700.00		$ 5,700.00	
Silt Fence	360.00	LF	@	$ $4	=	$ 1,440.00		$ 1,440.00	
Temporary Seeding	2.40	AC	@	$ $485	=	$ 1,164.00		$ 1,164.00	
Temporary Mulch	2.40	AC	@	$ $507	=	$ 1,216.80		$ 1,216.80	
Erosion Bales		EA	@	$ $21	=	$		$ -	
Erosion Logs		LF	@	$ $6	=	$		$ -	
Rock Ditch Checks		EA	@	$	=	$		$ -	
Inlet Protection		EA	@	$ $153	=	$		$ -	
Sediment Basin		EA	@	$ $1,625	=	$		$ -	
Concrete Washout Basin	1.00	EA	@	$ $776	=	$ 776.00		$ 776.00	
Stabilized stockpile and staging area	1.00	EA	@	$ $1,000	=	$ 1,000.00		$ 1,000.00	
* specified items subject to defect warranty financial assurance. A minimum of 20% to be retained up to preliminary acceptance process.				Section 1 Subtotal	=	$ 51,510.80		$ 51,510.80	

Section 2 - Public Improvements**	Quantity	Units		Price			% Complete	Remaining	
- Roadway Improvements									
Construction Traffic Control		LS	@	$	=	$		$ -	*
Aggregate Base Course		Tons	@	$ $18	=	$		$ -	*
Asphalt Pavement		Tons	@	$ $65	=	$		$ -	*
Raised Median, Paved		SF	@	$ $7	=	$		$ -	*
Electrical Conduit, Size =		LF	@	$ $14	=	$		$ -	*
Traffic Signal, complete intersection		EA	@	$ $250,000	=	$		$ -	*
Regulatory Sign		EA	@	$ $100	=	$		$ -	*
Advisory Sign		EA	@	$ $100	=	$		$ -	*
Guide/Street Name Sign		EA	@	$ $50		$		$ -	*
Epoxy Pavement Marking		SF	@	$ $12	=	$		$ -	*
Thermoplastic Pavement Marking		SF	@	$ $22	=	$		$ -	*
Barricade - Type 3		EA	@	$ $115	=	$		$ -	*
Delineator (Type I)		EA	@	$ $21	=	$		$ -	*
Curb and Gutter, Type C (Ramp)		LF	@	$ $21	=	$		$ -	*
Curb and Gutter, Type A (6" Vertical)		LF	@	$ $16	=	$		$ -	*
Curb and Gutter, Type B (Median)		LF	@	$ $13	=	$		$ -	*
Pedestrian Ramp		SY	@	$ $108	=	$		$ -	*
Concrete Sidewalk		SY	@	$ $38	=	$		$ -	*

Cross Pan		SY	@	$	$53	=	$		$	- *
Curb Chase		EA	@	$	$1,300	=	$		$	- *
Guardrail Type 3 (W-Beam)	395.00	LF	@	$	$18	=	$	7,110.00	$	7,110.00 *
Guardrail Type 7 (Concrete)		LF	@	$	$67	=	$		$	- *
Guardrail End Anchorage	4.00	EA	@	$	$1,978	=	$	7,912.00	$	7,912.00 *
Guardrail Impact Attenuator		EA	@	$	$3,564	=	$		$	- *
Sound Barrier Fence		LF	@	$	$100	=	$		$	- *
- Storm Drain Improvements										
48-foot clear span precast arch bridge; precast bridge pieces, CIP wingwalls, precast headwalls, guard rails, hand rails, structure excavation and backfill and sellect backfill. See attachment A.	1.00	ea	@	$	$1,055,420	=	$	1,055,420.00	$	1,055,420.00 *
Reinforced Concrete Pipe (RCP) Size		LF	@	$		=	$		$	- *
18" Reinforced Concrete Pipe		LF	@	$	$69	=	$		$	- *
24" Reinforced Concrete Pipe		LF	@	$	$84	=	$		$	- *
30" Reinforced Concrete Pipe		LF	@	$	$94	=	$		$	- *
36" Reinforced Concrete Pipe		LF	@	$	$124	=	$		$	- *
42" Reinforced Concrete Pipe		LF	@	$	$134	=	$		$	- *
48" Reinforced Concrete Pipe		LF	@	$	$178	=	$		$	- *
54" Reinforced Concrete Pipe		LF	@	$	$182	=	$		$	- *
60" Reinforced Concrete Pipe		LF	@	$	$216	=	$		$	- *
66" Reinforced Concrete Pipe		LF	@	$	$263	=	$		$	- *
72" Reinforced Concrete Pipe		LF	@	$	$283	=	$		$	- *
43"x68"Horiz. Ell. Reinforced Concrete Pipe		LF	@	$	$190	=	$		$	- *
Corrugated Steel Pipe (CSP) Size		LF	@	$		=	$		$	- *
18" Corrugated Steel Pipe		LF	@	$	$66	=	$		$	- *
24" Corrugated Steel Pipe		LF	@	$	$96	=	$		$	- *
30" Corrugated Steel Pipe		LF	@	$	$101	=	$		$	- *
36" Corrugated Steel Pipe		LF	@	$	$136	=	$		$	- *
42" Corrugated Steel Pipe		LF	@	$	$147	=	$		$	- *
48" Corrugated Steel Pipe		LF	@	$	$169	=	$		$	- *
54" Corrugated Steel Pipe		LF	@	$	$193	=	$		$	- *
60" Corrugated Steel Pipe		LF	@	$	$227	=	$		$	- *
66" Corrugated Steel Pipe		LF	@	$	$278	=	$		$	- *
72" Corrugated Steel Pipe		LF	@	$	$330	=	$		$	- *
78" Corrugated Steel Pipe		LF	@	$	$381	=	$		$	- *
84" Corrugated Steel Pipe		LF	@	$	$432	=	$		$	- *
Flared End Section (FES) RCP 24"		EA	@	$	$900	=	$		$	- *
Flared End Section (FES) RCP 30"		EA	@	$	$1,000	=	$		$	- *
Flared End Section (FES) RCP 42"		EA	@	$	$1,200	=	$		$	- *
Flared End Section (FES) 54-INCH		EA	@	$	$1,500	=	$		$	- *
End Treatment- Headwall		EA	@	$		=	$		$	- *
End Treatment- Wingwall		EA	@	$		=	$		$	- *
End Treatment - Cutoff Wall		EA	@	$		=	$		$	- *
Curb Inlet (Type R) L=5', Depth < 5 feet		EA	@	$	$3,791	=	$		$	- *
Curb Inlet (Type R) L=5', 5'-10' Depth		EA	@	$	$5,044		$		$	- *
Curb Inlet (Type R) L =5' , 10'-15' Depth		EA	@	$	$6,027	=	$		$	- *
Curb Inlet (Type R) L =10', Depth < 5 feet		EA	@	$	$5,528	=	$		$	- *
Curb Inlet (Type R) L =10' , 5'-10' Depth		EA	@	$	$6,694	=	$		$	- *
Curb Inlet (Type R) L =10' , 10'-15' Depth		EA	@	$	$7,500	=	$		$	- *
Curb Inlet (Type R) L =15' , Depth < 5 feet		EA	@	$	$7,923	=	$		$	- *
Curb Inlet (Type R) L =15' , 5'-10' Depth		EA	@	$	$8,000	=	$		$	- *
Curb Inlet (Type R) L =15' , 10'-15' Depth		EA	@	$	$8,800	=	$		$	- *
Curb Inlet (Type R) L =20' , Depth < 5 feet		EA	@	$	$8,000	=	$		$	- *
Curb Inlet (Type R) L =20' , 5'-10' Depth		EA	@	$	$8,830	=	$		$	- *
Curb Inlet (Type R) L =25', <5' Depth		EA	@	$	$9,000	=	$		$	- *
Curb Inlet (Type R) L =25', 5' - 10' Depth		EA	@	$	$10,000	=	$		$	- *
Curb Inlet (Type R Modified) L =25', 5' - 10' Depth		EA	@	$	$13,500	=	$		$	- *
Grated Inlet (Type C), < 5' deep		EA	@	$	$3,270	=	$		$	- *
Grated Inlet (Type D), < 5' deep		EA	@	$	$3,908	=	$		$	- *
Storm Sewer Manhole, Box Base, Depth < 15 feet		EA	@	$	$8,592	=	$		$	- *

Storm Sewer Manhole, Slab Base, Depth < 15 feet		EA	@	$	$4,575	=	$		$ - *
Geotextile (Erosion Control)		SY	@	$	$5	=	$		$ - *
Rip Rap, d50 Size from 6" to 24"		CY	@	$	$98	=	$		$ - *
Rip Rap, Grouted		CY	@	$	$215	=	$		$ - *
Drainage Channel Construction, Size (W x H)		LF	@	$		=	$		$ - *
Channel Lining, Concrete (Trickle Channel)		CY	@	$	$450	=	$		$ - *
Channel Lining, Rip Rap		CY	@	$	$98	=	$		$ - *
Channel Lining, Grass		AC	@	$	$1,287	=	$		$ - *
Concrete Cutoff Wall (30" RCP FES)		EA	@	$	$500	=	$		$ - *
Detention Outlet Structure		EA	@	$	$12,000	=	$		$ - *
Detention Emergency Spillway		EA	@	$	$18,300	=	$		$ - *
Presedimentation Forebay		EA	@	$	$7,000		$		$ -
Gravel Maintenance Access Trail		SY	@	$	$20		$		$ -
Type II Bedding		CY	@	$	$35		$		$ -
Detention Basin Seeding and Mulch		AC	@	$	$520		$		$ -
Permanent Water Quality Facility (Describe)		EA	@	$		=	$		$ - *
		EA		$		=	$		$ -
* specified items subject to defect warranty financial assurance. A minimum of 20% to be retained up to preliminary acceptance process. ┼ For flared end sections, multiply pipe LF cost by 6					**Section 2 Subtotal**	=	1,070,442.00 $		1,070,442.00 **

Section 3 - Common Development Improvements (Private or District)***	Quantity	Units		Price			% Complete	Remaining
- Roadway Improvements								
(Include any applicable items from above Public Improvements list, that are to be private and NOT maintained by El Paso County)			@	$	=	$		$ -
			@	$	=	$		$ -
			@	$	=	$		$ -
Concrete Sidewalk			@	$	=	$		$ -
			@	$	=	$		$ -
			@	$	=	$		$ -
- Storm Drain Improvements								
(Include any applicable items from above Public Improvements list, that are to be private and NOT maintained by El Paso County)			@	$	=	$		$ -
			@	$	=	$		$ -
			@	$	=	$		$ -
Type M soil/riprap bank lining	2,930.00		@	$ 65	=	$ 190,450.00		$ 190,450.00
			@	$	=	$		$ -
			@	$	=	$		$ -
- Water System Improvements								
Water Main Pipe (PVC), Size 6"		LF	@	$ $94	=	$		$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	@	$ $137	=	$		$ -
Water Main Pipe (PVC), Size 12"		LF	@	$ $122	=	$		$ -
Gate Valves, 6"		EA	@	$ $1,852	=	$		$ -
Gate Valves, 12"		EA	@	$ $2,400	=	$		$ -
Fire Hydrant Assembly w/ all valves		EA	@	$ $6,430	=	$		$ -
Water Service Line Installation, including tap and valves		EA	@	$ 1,253	=	$		$ -
Fire Cistern Installation, complete		EA	@	$	=	$		$ -
- Sanitary Sewer Improvements								
Sewer Main Pipe (PVC), Size 8"		LF	@	$ $94	=	$		$ -
Sewer Main Pipe (PVC), Size 12"		LF	@	$ $165	=	$		$ -
Sanitary Sewer Manhole, Depth < 15 feet		EA	@	$ $4,575	=	$		$ -
Sanitary Service Line Installation, complete		EA	@	$ 1,516	=	$		$ -
Sanitary Sewer Lift Station, complete		EA	@	$	=	$		$ -
- Landscaping (If Applicable)								
(List landscaping line items and cost - usually only in case of subdivision specific condition of approval, or PUD)		EA	@	$	=	$		$ -
		EA	@	$	=	$		
		EA	@	$	=	$		$ -
		EA	@	$	=	$		$ -
		EA	@	$	=	$		$ -
***items in this section are not subject to defect warranty financial assurance				**Section 3 Subtotal**	=	$ 190,450.00		190,450.00

Financial Assurance Totals

As-built drawings - (FILL IN IF THERE ARE ANY PUBLICLY-MAINTAINED IMPROVEMENTS)	$	$4,000
Inc. survey to verify detention pond volumes.)	**Total Construction Financial Assurance**	**$1,316,402.80**
	(Sum of all section subtotals)	
	Total Remaining Construction Financial Assurance	**1,316,402.80**
	(Sum of all section totals less credit for items complete)	
	Total Defect Warranty Financial Assurance	**$221,806.20**
	(20% of all items identified as public improvements(*). 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 approved Construction Drawings associated with the Project.

Engineer (P.E. Seal) — Date 2/26/18

Approved by Owner / Applicant — Date 2/26/18

Approved by El Paso County Engineer / ECM Administrator — Date

ENGINEER'S OPINION OF COSTS - FINAL DESIGN
Lorson Boulevard over East Fork Jimmy Camp Creek
Lorson Development
Attachment A: Bridge costs 26-Feb-18

	UNIT COST	UNIT	QUANTITY	Total
Bridge Structure				
Contech O-848 Precast bridge and headwall	$ 4,500.00	lf	84	$ 378,000
Structural concrete and steel reinforcing	$ 650.00	cy	420	$ 273,000
HP 14 x 73 piles	$ 75.00	lf	2,040	$ 153,000
Wingwall and headwall handrails	$ 140.00	lf	276	$ 38,640
Select backfill over precast bridge	$ 40.00	cy	2,685	$ 107,400
Structure excavation	$ 10.00	cy	3,223	$ 32,230
Structure backfill, CDoT Class 1	$ 35.00	cy	2,090	$ 73,150
Sub-total				$ 1,055,420