

2015 Financial Assurance
Estimate Form

8/6/2015

Project Information	
Lorson Ranch East- Lorson Boulevard Bridge	3/30/2018
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

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 = \$ -		\$ - *

CDR 18-002

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 select 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	=	\$		\$	-	*

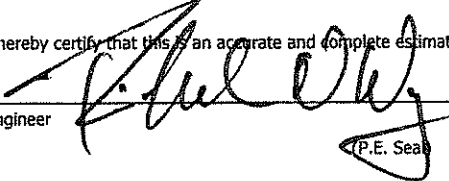
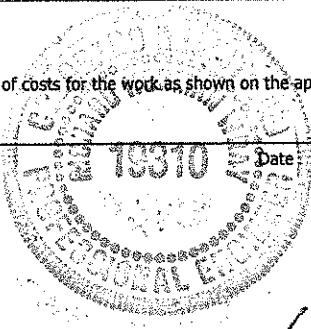
Storm Sewer Manhole, Slab Base, Depth < 15 feet	EA	@	\$	\$4,575	=	\$	\$	-	*
Geotextile (Erosion Control)	SY	@	\$	\$5	=	\$	\$	-	*
Rip Rap, d50 Size from 6" to 24"	CY	@	\$	\$98	=	\$	\$	-	*
Rip Rap, Grouted	CY	@	\$	\$215	=	\$	\$	-	*
Drainage Channel Construction, Size (W x H)	LF	@	\$		=	\$	\$	-	*
Channel 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 **

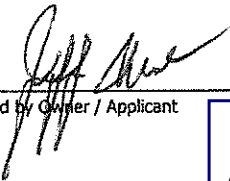
Section 3 - Common Development Improvements (Private or District)***	Quantity	Units	Price	% Complete	Remaining
- Roadway Improvements					
(Include any applicable items from above Public Improvements list, that are to be private and NOT maintained by El Paso County)		@	\$	=	\$ -
		@	\$	=	\$ -
		@	\$	=	\$ -
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
		@	\$	=	\$ -
		@	\$	=	\$ -
- 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 Cistem 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.



3/30/18
 Engineer Date


4/10/18
 Approved by Owner / Applicant Date

Approved
 by Elizabeth Nijkamp
 El Paso County Planning and Community Development
 on behalf of Jennifer Irvine, County Engineer, ECM Administrator
 05/08/2018 2:07:25 PM



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

30-Mar-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