

# 2015 Financial Assurance Estimate Form

8/6/2015

## Project Information

Lorson Ranch East

1/23/2018

Project Name

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

| Section 2 - Public Improvements**     | Quantity | Units |   | Price      |      | % Complete | Remaining |
|---------------------------------------|----------|-------|---|------------|------|------------|-----------|
| <b>- Roadway Improvements</b>         |          |       |   |            |      |            |           |
| 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      | = \$ |            | \$ - *    |


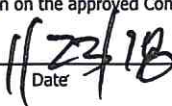




|  |      |    |   |    |             |   |    |              |    |              |   |
|--|------|----|---|----|-------------|---|----|--------------|----|--------------|---|
| Cross Pan  |      | SY | @ | \$ | \$53        | = | \$ |              | \$ | -            | * |
| Curb Chase   |      | EA | @ | \$ | \$1,300     | = | \$ |              | \$ | -            | * |
| Guardrail Type 3 (W-Beam)  |      | LF | @ | \$ | \$18        | = | \$ |              | \$ | -            | * |
| Guardrail Type 7 (Concrete)  |      | LF | @ | \$ | \$67        | = | \$ |              | \$ | -            | * |
| Guardrail End Anchorage  |      | EA | @ | \$ | \$1,978     | = | \$ |              | \$ | -            | * |
| Guardrail Impact Attenuator  |      | EA | @ | \$ | \$3,564     | = | \$ |              | \$ | -            | * |
| 48-foot clear span precast arch bridge inclusive of mobilization, precast bridge pieces, wingwalls, headwalls, guard rails, hand rails, structure excavation and backfill, select backfill, erosion control BMP's and revegetation. (See attachment A) | 1.00 | LF | @ | \$ | \$1,439,998 | = | \$ | 1,439,998.00 | \$ | 1,439,998.00 | * |
| <b>- Storm Drain Improvements</b>  |      |    |   |    |             |   |    |              |    |              |   |
| 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 |  |    |   |                    |          | = |    |              |    |              |    |
|   |  |    |   |                    |          | = | \$ | 1,439,998.00 |    | 1,439,998.00 | ** |
|   |  |    |   | Section 2 Subtotal |          |   | \$ |              |    |              |    |



| Section 3 - Common Development Improvements<br>(Private or District)***   | Quantity | Units | Price      |   | %<br>Complete | Remaining     |
|---|----------|-------|------------|---|---------------|---------------|
| <b>- Roadway Improvements</b>   |          |       |            |   |               |               |
| (Include any applicable items from above Public Improvements list, that are to be private and NOT maintained by El Paso County)   |          | @     | \$         | = | \$            | \$ -          |
|   |          | @     | \$         | = | \$            | \$ -          |
|   |          | @     | \$         | = | \$            | \$ -          |
| Concrete Sidewalk   |          | @     | \$38       | = | \$            | \$ -          |
|   |          | @     | \$         | = | \$            | \$ -          |
|   |          | @     | \$         | = | \$            | \$ -          |
| <b>- Storm Drain Improvements</b>   |          |       |            |   |               |               |
| (Include any applicable items from above Public Improvements list, that are to be private and NOT maintained by El Paso County)   |          | @     | \$         | = | \$            | \$ -          |
|   |          | @     | \$         | = | \$            | \$ -          |
|   |          | @     | \$         | = | \$            | \$ -          |
| efjcc drainageway stabilization and grade inclusive of mobilization, clearing and grubbing, earthwork, erosion control BMP's, soil riprap, concrete cut-off walls, grouted sloping drops and revegetation. (See Attachment A) | 1.00     | @     | \$ 861,691 | = | \$ 861,691.00 | \$ 861,691.00 |
|   |          | @     | \$         | = | \$            | \$ -          |
|   |          | @     | \$         | = | \$            | \$ -          |
| <b>- Water System Improvements</b>  |          |       |            |   |               |               |
| 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 @  | \$         | = | \$            | \$ -          |
| <b>- Sanitary Sewer Improvements</b>  |          |       |            |   |               |               |
| 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 @  | \$         | = | \$            | \$ -          |
| <b>- Landscaping (If Applicable)</b>  |          |       |            |   |               |               |
| (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  |          |       |            | = | \$ 861,691.00 | 861,691.00    |

|   |   |                       |
|---|---|-----------------------|
| <b>Financial Assurance Totals</b>   |   |                       |
| As-built drawings - (FILL IN IF THERE ARE ANY PUBLICLY-MAINTAINED IMPROVEMENTS)                                 | \$  | \$4,000               |
| ( Inc. survey to verify detention pond volumes.)  | <b>Total Construction Financial Assurance</b> | <b>\$2,305,689.00</b> |
| (Sum of all section subtotals)  |   |                       |
|   |   |                       |
| <b>Total Remaining Construction Financial Assurance</b>   |   | <b>2,305,689.00</b>   |
| (Sum of all section totals less credit for items complete)  |   |                       |
|   |   |                       |
| <b>Total Defect Warranty Financial Assurance</b>  |   | <b>\$287,999.60</b>   |
| (20% of all items identified as public improvements(*). To be collateralized at time of preliminary acceptance) |   |                       |
|   |   |                       |

|  |   |
|--|---|
| <b>Approvals</b>   |   |
| 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.  |   |
| <br>Engineer  | <br>Date |
| <br>(P.E. Seal)   |   |
| <br>Approved by Owner / Applicant  | <br>Date |
| <div style="border: 2px solid blue; padding: 5px; display: inline-block;"> <p style="font-size: 24pt; margin: 0;">Approved</p> <p style="margin: 0;">By: Jennifer Irvine, County Engineer</p> <p style="margin: 0;">Date: 02/06/2018</p> </div>  |   |
| Approved by El Paso County Engineer / ECM Administrator  |   |
| El Paso County Department of Public Works  |   |

ATTACHMENT A TO FINANCIAL ASSURANCES FORM  
ENGINEER'S QUANTITY ESTIMATE - FINAL DESIGN  
Fontaine Boulevard over East Fork Jimmy Camp Creek

PCD CDR-16-009

23-Jan-18

|  | UNIT COST    | UNIT | QUANTITY | Total               |
|--|--------------|------|----------|---------------------|
| <b>Bridge and Roadway</b>                  |              |      |          |                     |
| Mobilization                               | \$ 58,955.00 | ls   | 1        | \$ 58,955           |
| Contech O-848 Precast bridge sections      | \$ 23,413.00 | ea   | 21       | \$ 491,673          |
| Contech O-848 Precast headwalls            | \$ 12,500.00 | ea   | 2        | \$ 25,000           |
| Structural concrete and steel reinforcing  | \$ 559.00    | cy   | 585      | \$ 327,015          |
| HP 14 x 73 piles                           | \$ 69.50     | lf   | 2,460    | \$ 170,970          |
| Wingwall and headwall handrails            | \$ 130.00    | lf   | 260      | \$ 33,800           |
| Select backfill over precast bridge        | \$ 35.00     | cy   | 3,500    | \$ 122,500          |
| Structure excavation                       | \$ 8.75      | cy   | 4,100    | \$ 35,875           |
| Structure backfill, CDoT Class 1           | \$ 32.00     | cy   | 4,800    | \$ 153,600          |
| Type 3 guardrail                           | \$ 43.00     | lf   | 270      | \$ 11,610           |
| CDoT std end anchorage                     | \$ 1,500.00  | ea   | 2        | \$ 3,000            |
| CDoT std flared end anchorage, 37'-6"      | \$ 3,000.00  | ea   | 2        | \$ 6,000            |
| <b>Subtotal bridge and roadway</b>         |              |      |          | <b>\$ 1,439,998</b> |
| <b>Drainageway</b>                         |              |      |          |                     |
| Mobilization                               | \$ 35,525.00 | ls   | 1        | \$ 35,525           |
| Low flow channel section A                 | \$ 13.20     | lf   | 1,145    | \$ 15,114           |
| Low flow channel section B                 | \$ 67.00     | lf   | 848      | \$ 56,816           |
| Grouted 24-inch diameter boulders          | \$ 260.00    | cy   | 621      | \$ 161,460          |
| Grouted 36-inch diameter boulders          | \$ 306.00    | cy   | 92       | \$ 28,152           |
| Grouted Type M riprap                      | \$ 150.00    | cy   | 177      | \$ 26,550           |
| Type L soil riprap 9-inch D50 and topsoil  | \$ 47.50     | cy   | 2,370    | \$ 112,575          |
| Type M soil riprap 12-inch D50 and topsoil | \$ 47.10     | cy   | 4,616    | \$ 217,414          |
| Excavation cut to fill                     | \$ 8.30      | cy   | 6,000.0  | \$ 49,800           |
| Excavation- cut to spoil on site           | \$ 6.00      | ac   | 19,000.0 | \$ 114,000          |
| Gravel maintenance trail                   | \$ 25.00     | cy   | 770.0    | \$ 19,250           |
| Pavestone access ramp                      | \$ 6.00      | sf   | 1,600.0  | \$ 9,600            |
| Seeding and mulch                          | \$ 1,050.00  | ac   | 9.7      | \$ 10,185           |
| Stabilized staging area                    | \$ 3,000.00  | ea   | 1.0      | \$ 3,000            |
| Concrete washout                           | \$ 750.00    | ea   | 1.0      | \$ 750              |
| Vehicle tracking                           | \$ 1,500.00  | ea   | 1.0      | \$ 1,500            |
| <b>Sub-total drainageway</b>               |              |      |          | <b>\$ 861,691</b>   |
| <b>Total Project</b>                       |              |      |          | <b>\$ 2,301,689</b> |