



Implementing the Second Stage Short-Term Drought Response Strategy GMP No. 3 Garney Companies and Pepper Lawson

June 25, 2015

DROUGHT IS REAL...

- **Lake Fort Phantom Hill**
 - ✓ Was 47% capacity in May, 2013
 - ✓ Now 43% capacity as of June 11, 2015
- **Hubbard Creek Reservoir**
 - ✓ Was 26% capacity in May, 2013
 - ✓ Now 30% capacity as of June 11, 2015
- **OH Ivie Reservoir**
 - ✓ Was 19% capacity in May, 2013
 - ✓ Now 15% capacity as of June 11, 2015

...AND ABILENE IS READY!

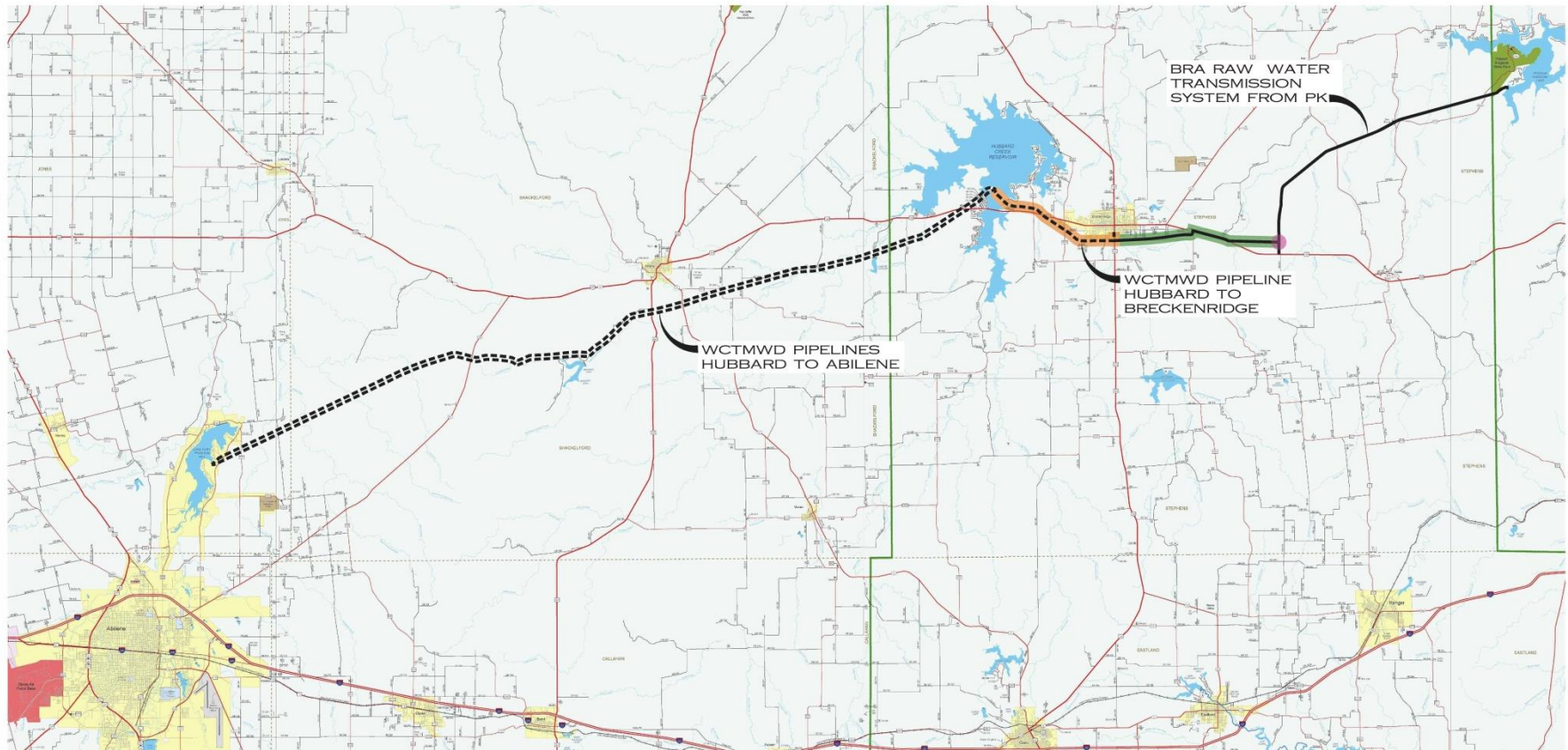
Initial Short-Term Strategies

- **Reuse Options**
 - Pumping water from Kirby into Cedar Creek (1 MGD)
✓ **Completed**
 - Directing advanced treated wastewater into Fort Phantom Hill (7 MGD)
✓ **Discharge to Phantom started on January 7, 2015**
- **Improvements to Hargesheimer WTP**
✓ **Completed**
- **Improvements to Water Distribution System**
✓ **Under construction**

Recommended Second Stage Short-Term Strategy

- **Purchase Water from BRA (PK supply)**
 - ✓ Contract 4 to 14 MGD of raw water from BRA and Others (PK supply)
 - ✓ Construct 4 to 14 MGD WTP to treat PK water (provides 3 to 11 MGD potable water)
 - ✓ Construct improvements to existing BRA transmission pipeline from PK to Breckenridge
 - ✓ Construct parallel pipeline from Breckenridge to WCTMWD transmission system
- **Expand Hargesheimer WTP** (12 MGD potable water capacity)
- **Proceed in Three Phases - Total Estimated Cost for all Three Phases - \$111 million**

SECOND STAGE SHORT-TERM DROUGHT STRATEGY



SCALE IN MILES
0 1 2

ENPROTEC/HIBBS & TODD, INC.
ENVIRONMENTAL AND CIVIL ENGINEERING
405 South Street
355-6810000
RPLS Firm Registration Nos. 10011600 & 10011601

PHASE I: ON-LINE JULY 2015 (4 MGD)

- UPGRADE BRA POSSUM KINGDOM TRANSMISSION SYSTEM
- CONSTRUCT 4 MGD WTP FOR PK WATER
- EXPAND HARGESHEIMER WTP TO 12 MGD
- ESTIMATED COST: \$70M

PHASE II: ON-LINE AUGUST 2015 (10 MGD)

- CONSTRUCT PARALLEL PIPELINE FROM BRECKENRIDGE TO HUBBARD
- EXPAND PHASE I PK WTP TO 10 MGD
- ESTIMATED COST: \$35M

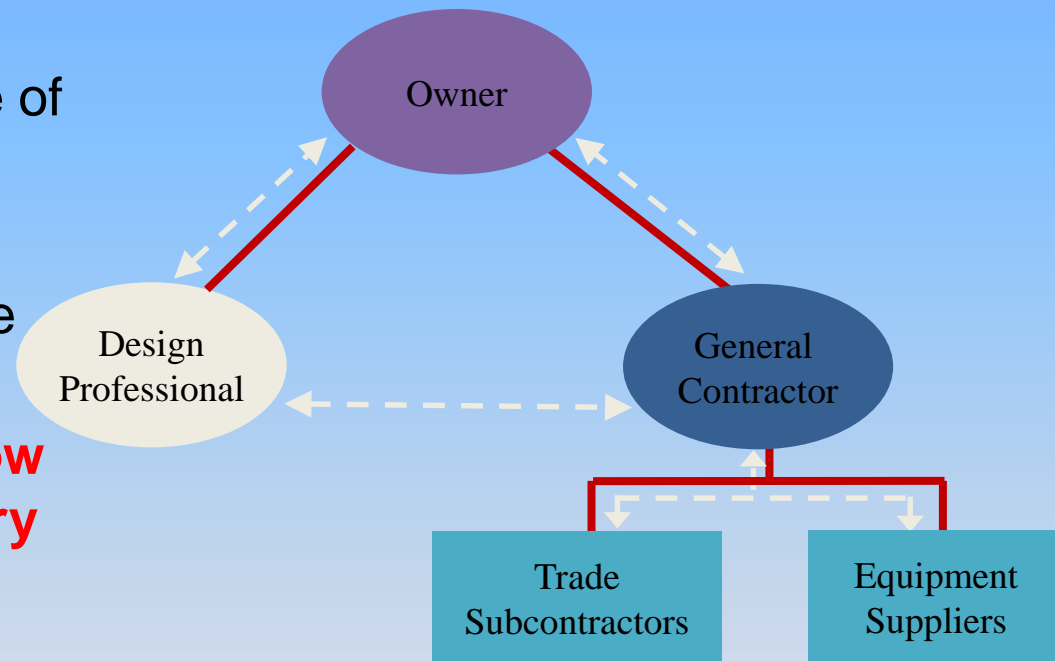
PHASE III: ON-LINE NOVEMBER 2015 (14 MGD)

- CONSTRUCT PUMP STATION ON B.R.A. POSSUM KINGDOM TRANSMISSION SYSTEM
- EXPAND PHASE II PK WTP TO 14 MGD
- ESTIMATED COST: \$6M

Traditional Delivery: Design-Bid-Build

Best Applications

- Owner is pleased with results of past DBB projects
- Owner desires high degree of involvement in design
- **Schedule is not a priority**
- Project is complex or scope is uncertain
- **Enabling laws do not allow alternative project delivery**



Enabling Texas Legislation for Alternative Project Delivery

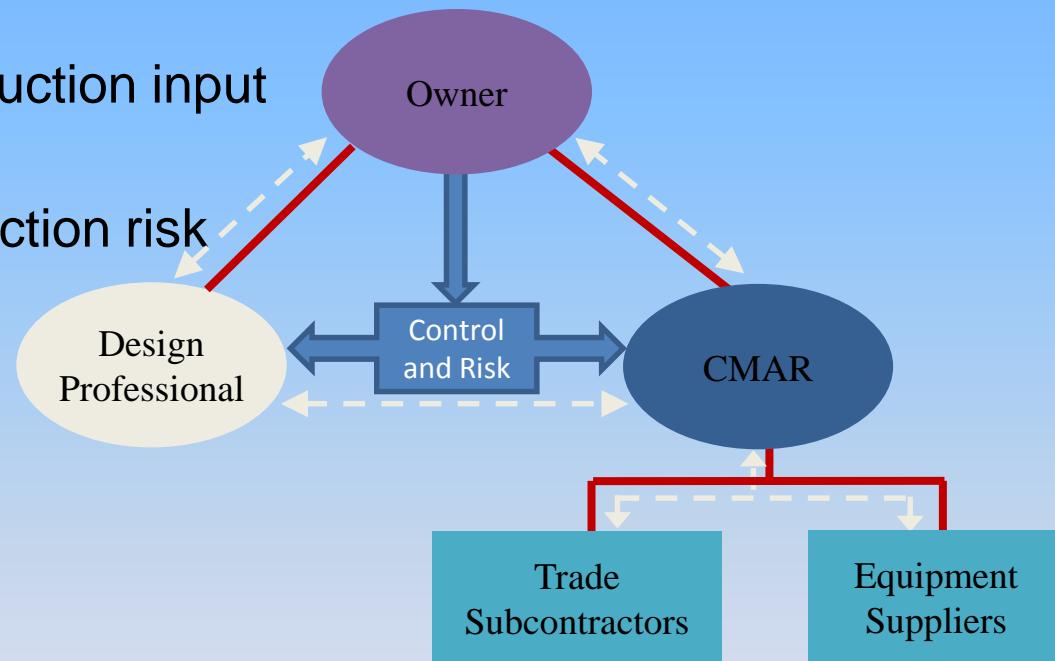
- Government Code Chapter 2267 allows the use of alternative procurement methods:
 - Construction Manager at Risk (CMAR)
 - Design-Build

Alternative Delivery: CMAR

Best Applications

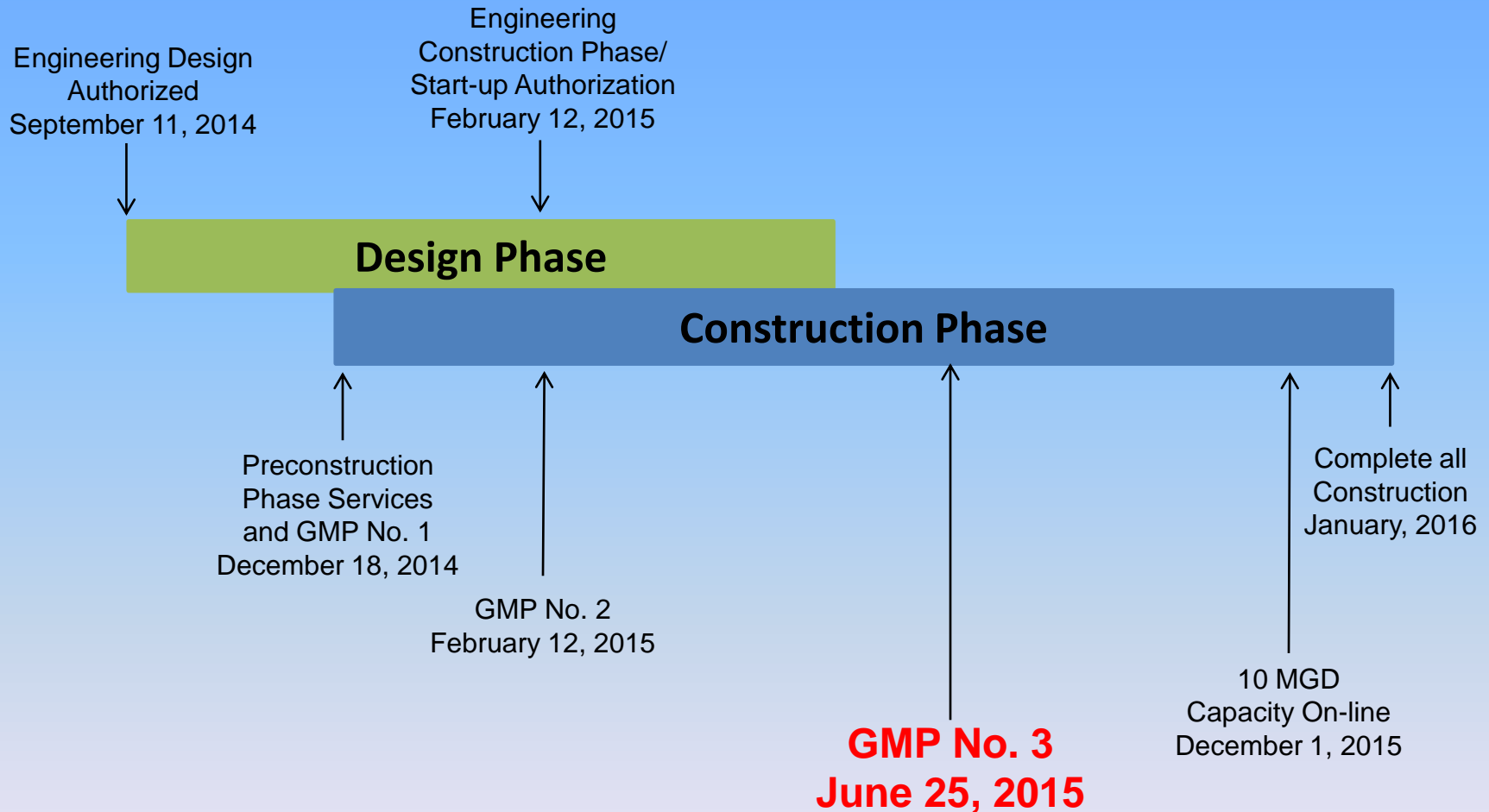
(Approved October 23, 2014)

- Owner desires high degree of involvement and control
- Owner desires more construction input into design
- Owner desires less construction risk
- **Schedule is a priority**
- **Project is complex or scope is uncertain**
- Ensures maximum local subcontractor participation
- **Best value for the City**



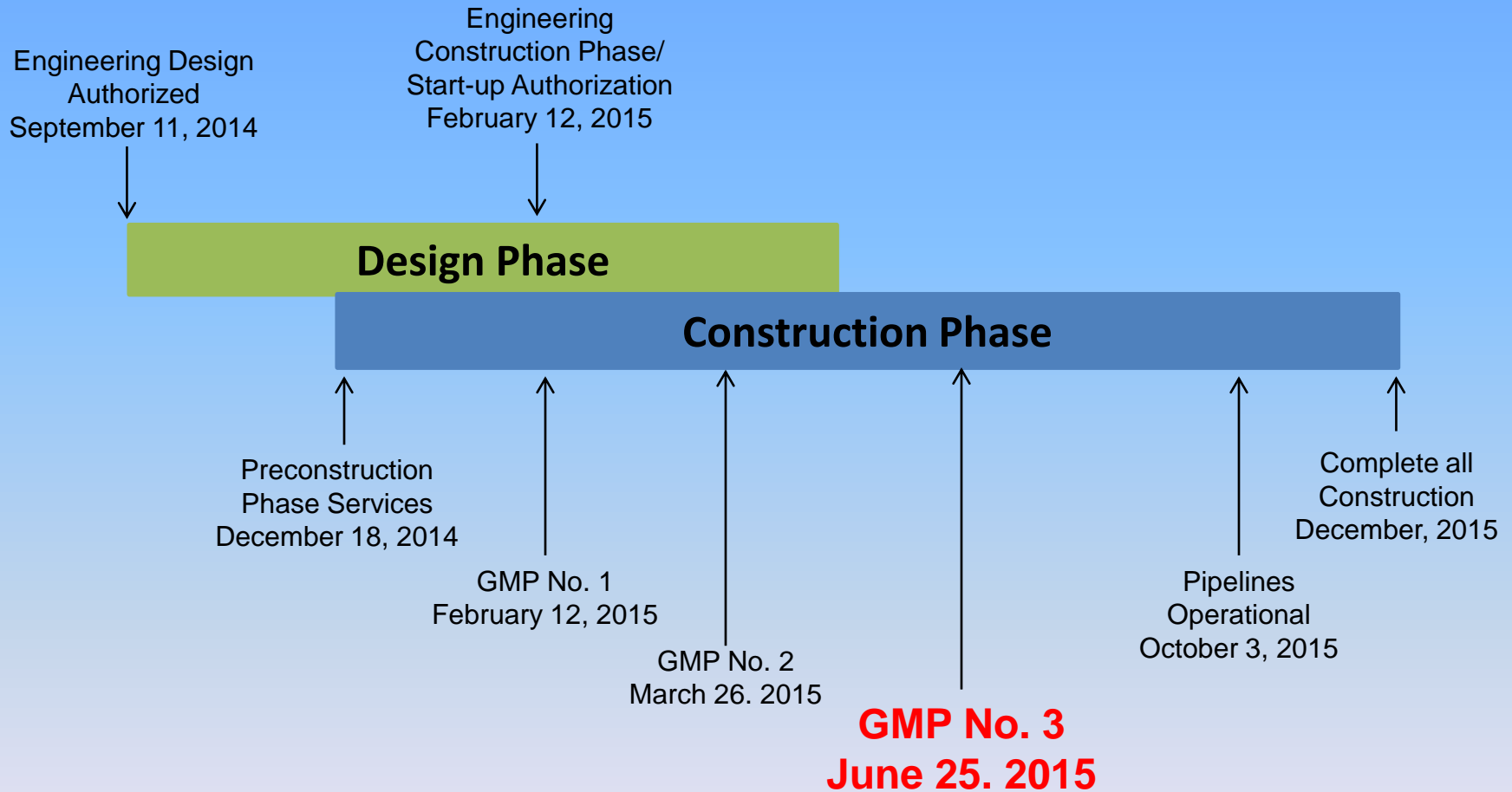
Pepper Lawson

CMAR for PK Roughing Facility



Garney Companies

CMAR for PK Pipelines



Pepper Lawson GMP Proposal No. 3

PK Roughing Facility

| | <u>GMP No. 1</u> | <u>GMP No. 2</u> | <u>GMP No. 3</u> | <u>Total</u> |
|---------------------------------|------------------|------------------|--------------------|--------------|
| CMAR Fee | | \$1,020,000 | \$378,870 | \$1,398,870 |
| Project General Conditions | | \$4,260,000 | | \$4,260,000 |
| Mechanical Piping Packages | | \$1,900,000 | \$1,597,140 | \$3,497,140 |
| Equipment Packages | \$15,000,000 | (\$5,550,000) | | \$9,450,000 |
| Site Civil Packages | | \$585,000 | \$1,094,950 | \$1,679,950 |
| Structural Concrete Packages | | \$2,425,000 | \$410,000 | \$2,835,000 |
| Buildings and Finishes Packages | | \$2,330,000 | \$3,582,620 | \$5,912,620 |
| Electrical Packages | | \$6,530,000 | \$1,788,550 | \$8,318,550 |
| Contingency | | | \$1,000,000 | \$1,000,000 |
| TOTAL | \$15,000,000 | \$13,500,000 | \$9,852,130 | \$38,352,130 |

- Final GMP will establish the CMAR's maximum contract price (final GMP plus \$375,000 Preconstruction Phase Services) for the Project. The CMAR is “at risk” for Project costs exceeding the maximum contract price.

Garney Companies GMP Proposal No. 3

PK Pipelines

| | <u>GMP No. 1</u> | <u>GMP No. 2</u> | <u>GMP No. 3</u> | <u>Total</u> |
|--------------------------------|---------------------|---------------------|--------------------|---------------------|
| CMAR Fee | \$1,071,600 | \$616,800 | \$518,160 | \$2,206,560 |
| Project General Conditions | \$2,310,000 | | | \$2,310,000 |
| Piping, Valves and Accessories | \$9,950,000 | \$343,000 | \$446,000 | \$10,739,000 |
| Clearing/Construction Staking | \$1,000,000 | (\$127,000) | \$168,000 | \$1,041,000 |
| Permanent Fencing | | \$233,000 | | \$233,000 |
| Directional Drilling/Boring | \$2,000,000 | \$4,361,000 | \$2,390,000 | \$8,751,000 |
| 12" Pipeline Installation | \$730,000 | \$4,124,000 | (\$27,000) | \$4,827,000 |
| 36" Pipeline Installation | \$1,870,000 | \$1,346,000 | \$4,724,000 | \$7,940,000 |
| Surface Restoration | | | \$935,000 | \$935,000 |
| TOTAL | \$18,931,600 | \$10,896,800 | \$9,154,160 | \$38,982,560 |

- Final GMP will establish the CMAR's maximum contract price (final GMP plus \$250,000 Preconstruction Phase Services) for the Project. The CMAR is "at risk" for Project costs exceeding the maximum contract price.

Questions