



January 28, 2015

## Attachment A

### Scope of Work for Well Field Line Replacement Project

The project is generally described as replacement of existing well field lines parallel to the west side frontage roads of State Highway 6 from water well 12 to the City water plant on N. Texas Avenue. The proposed lines include approximately 4300 LF of 36" DIP (class 150), 4300 LF of 42" DIP (class 150), and 5100 LF 12" C-900 PVC. Based on our correspondence, we understand the scope of work to be as follows. Exhibit 1 provides a visual representation of the project area.

#### Topographic Survey

- Tie to City of Bryan horizontal and vertical control system
- Locate existing utilities as marked by their respective owners
- Obtain surface elevations of area between the edge of pavement and the existing SH 6 ROW except where existing City easements are to be utilized. Surface elevations will be obtained within these easements also. Density of elevations will be sufficient for the development of 1' contour intervals through the project area.
- Determine the west/southwestern Right of Way of SH 6 and FM 2818 in the project area.
- Prepare utility easement across Bert Wheeler tract as shown on Exhibit 1 consisting of a metes and bounds description and survey drawing.

#### Engineering Design

- Prepare construction documents for construction of the aforementioned waterlines, including plan and profile. Drawings will be prepared at 1" = 20'.
- Prepare project details, technical specifications, and contract book
- Coordinate and prepare TxDOT utility permit for waterline construction within SH 6 ROW.
- An existing steel casing is in place beneath FM 2818 and is to be used as the carrier pipe of the proposed 36" DIP waterline. A permit will be prepared if needed for this construction.
- Generate cost estimates for the schematic, preliminary, and final designs

#### Bid Phase Services

- Assist with pre-bid meeting
- Answer prospective bidders' questions
- Assist with addenda if required
- Attend bid opening

**Construction Phase Services (120 working day contract period)**

- Assist with pre-bid meeting
- Review submittals
- Perform daily inspection with field reports and photos
- Perform periodic, critical point inspections with field report and photos by design engineer
- Review monthly pay estimates submitted by contractor
- Coordinate with lab on applicable testing
- Assist with construction close out
- Prepare record drawings of "as-builts" provided by contractor on mylar sheets and .pdf file

Deliverables include Constructions Plans (.pdf), Contract/Technical Specifications Book (.pdf), Engineer's Construction Cost Estimate, and Record Drawings (mylar sheets and .pdf).

We propose to provide the above described services for a lump sum fee of \$219,065. The following is a breakdown of the fee:

Design and Boundary Surveying.....	\$29,480.00
Civil Engineering Design.....	\$157,300.00
Bid Phase.....	\$4,000.00
Construction Phase.....	\$28,285.00
<b>TOTAL.....</b>	<b>\$219,065.00</b>

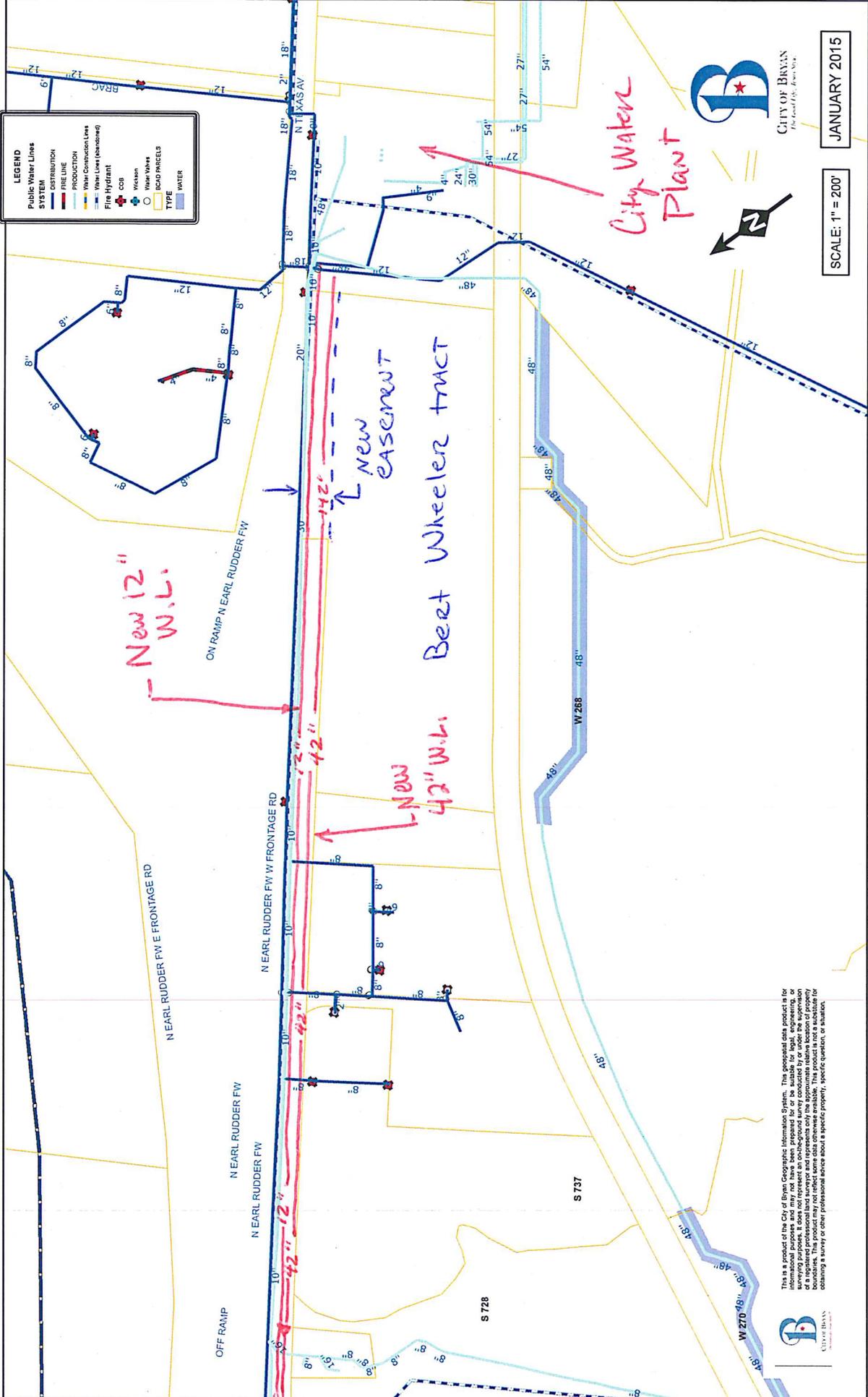


John Rusk, PE  
Regional Manager

Enclosure (2 pages)



LEGEND	
Public Water Lines	
SYSTEM	
DISTRIBUTION	Blue line
FIRE LINE	Red line
PRODUCTION	Yellow line
Water Construction Lines	
Water Hydrant	Red circle with cross
Wicket	Blue circle
Water Valve	Blue circle with cross
COB	Blue circle with dot
SCAD PARCELS	Yellow outline
TYPE	
WATER	Blue shaded area



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SCALE: 1" = 200'  
 JANUARY 2015



Exhibit 1  
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**City of Bryan - Well Field Line Replacement  
Conceptual Cost Estimate**

**January 21, 2015**

Item	Description	QTY	Unit	Unit Price	Total
1	Mobilization	1	LS	\$20,000.00	\$20,000.00
2	42" DIP Class 150	4,300	LF	\$280.00	\$1,204,000.00
3	36" DIP Class 150	4,300	LF	\$250.00	\$1,075,000.00
4	12" C-900 PVC	5,100	LF	\$55.00	\$280,500.00
5	Air Release Valve on 36"	1	EA	\$7,500.00	\$7,500.00
6	Interconnect 36" to water well	1	EA	\$12,000.00	\$12,000.00
7	Interconnect 12" to existing 12"	1	EA	\$5,000.00	\$5,000.00
8	Interconnect 42" at water plant	1	EA	\$14,000.00	\$14,000.00
9	Interconnect 12" at water plant	1	EA	\$5,500.00	\$5,500.00
10	42" Valve	2	EA	\$30,000.00	\$60,000.00
11	36" Valve	2	EA	\$23,000.00	\$46,000.00
12	Concrete pavement repair	1	LS	\$15,000.00	\$15,000.00
13	12" Gate Valve	1	EA	\$5,000.00	\$5,000.00
14	Site Clean-up	1	LS	\$7,500.00	\$7,500.00
15	Hydromulch	1	LS	\$3,500.00	\$3,500.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
<b>Sub-Total.....</b>					<b>\$2,760,500.00</b>

Notes:

- existing 54" steel casing is in place for 42" crossing FM 2818
- Material price for 42" - \$240/LF (per HD Waterworks), Equipment, Labor, Backfill \$40/LF (per Elliot Construction)
- Material price for 36" - \$210/LF (per HD Waterworks), equipment, labor, backfill \$40/LF (per Elliot Construction)
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