

**IFB 6503**

## **DEC Phase 2 Water and Sewer Improvements**



## **City Council Presentation**

**Chris Lutrick/Brent Heath – Denton Municipal Electric**

**Oct. 17, 2017**

# Presentation Outline:

- ▶ Public Improvement Requirements for DEC
- ▶ Phase 1 Waterline Summary
- ▶ Phase 2 Water and Sewer Project Map
- ▶ Bid Summary
- ▶ Questions



## Public Improvement Requirements for DEC:

- ▶ Looped City water main to feed plant fire loop
  - ▶ Eliminated need for large diesel fired fire pump
- ▶ City water main tap for plant raw water
  - ▶ Potable water supply, wash down water, cooling water
- ▶ Connection to City sanitary sewer system
  - ▶ Provides sewer service for the plant as well as future developments to the south

# Phase 1 Waterline Summary:

- ▶ Vertical construction of the DEC building required the fire loop to be pressurized and tested. To maintain project schedule it had to be completed by 5.1.2017
- ▶ Water main loop was divided into 2 phases
- ▶ Phase 1 was shorter and less complex
- ▶ An RFP for Phase 1 was released and awarded to Wilson Contractors. Construction was completed by 5.1.2017
- ▶ Vertical construction commenced on schedule

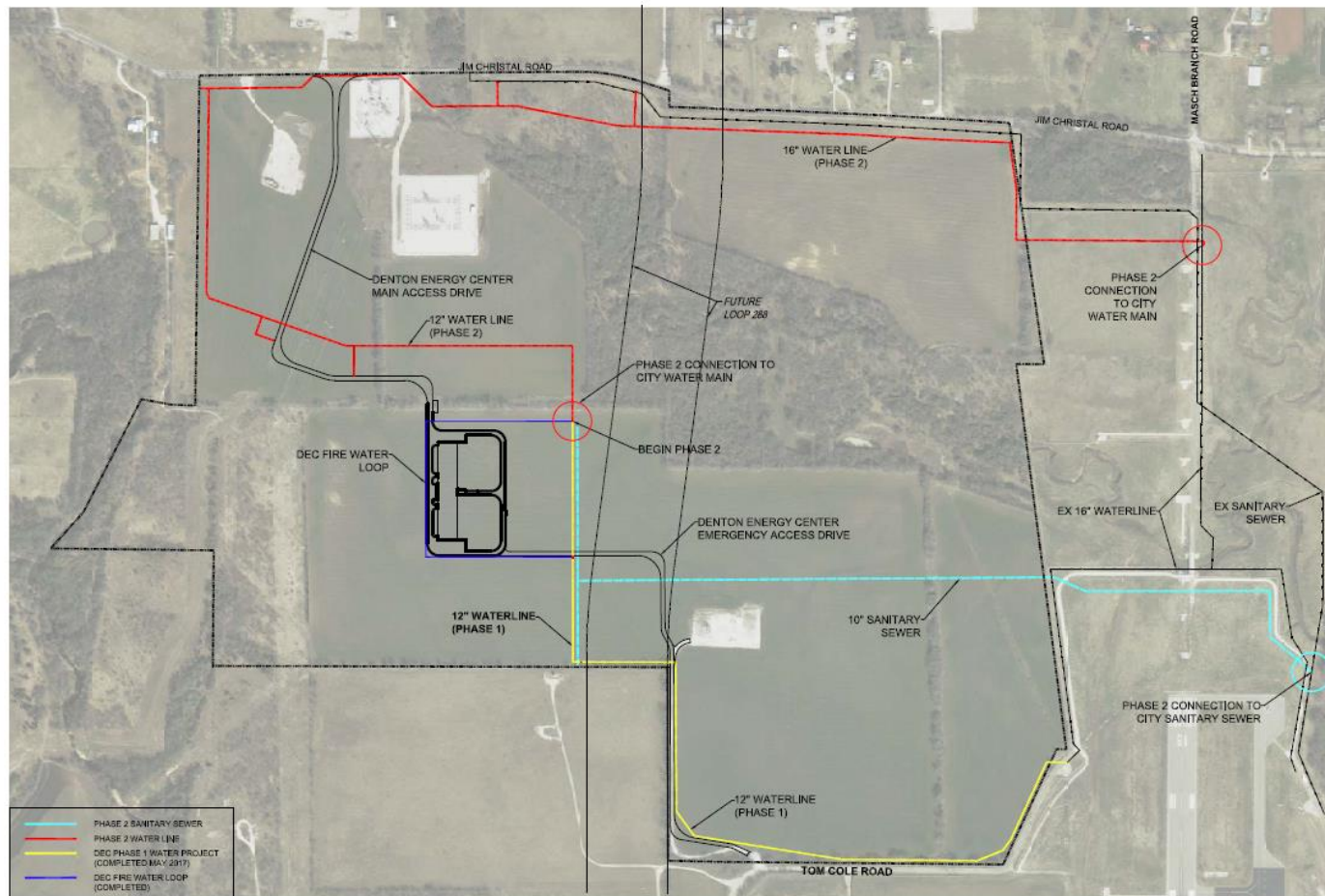


EXHIBIT 4  
IFB 6503 DENTON ENERGY CENTER PHASE 2 WATER AND  
SEWER IMPROVEMENTS

# Summary of Bids:

- ▶ Purchasing method used was Invitation For Bid
- ▶ 10 bids were received and publicly opened
- ▶ The bids ranged from \$1,925,345 to \$4,039,846
- ▶ The average bid was \$2,704,696
- ▶ The Engineer's estimate was \$3,219,000
- ▶ Quality Excavation's bid of \$1,925,345 was determined to meet all minimum requirements



**Exhibit 3**  
**Summary of Quality Excavation Bid**  
**Denton Energy Center Phase 2 Water & Sanitary Sewer Construction Services**  
**PUB - October 9, 2017**

		Proposer's Name:		Quality Excavation, Ltd.	
		Principal Place of Business:		Aubrey, Texas	
Item	Type of Service Requested	Quantity	Unit	Unit Price	Extended Price
<b>ALTERNATE BID (FOR AWARD)</b>					
<b>GENERAL</b>					
1	Mobilization/ Demobilization	1	LS	\$ 3,000.00	\$ 3,000.00
2	Payment and Performance Bonds	1	LS	\$ 52,500.00	\$ 52,500.00
3	General Site Preparation	1	LS	\$ 5,000.00	\$ 5,000.00
4	Traffic Control, Barricades, Barriers, and Warning Signs	1	LS	\$ 3,250.00	\$ 3,250.00
5	Temporary Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
<b>GENERAL TOTAL</b>					<b>\$ 68,750.00</b>
<b>WATER</b>					
5	6" C900 DR 14 PVC Water	478	LF	\$ 28.00	\$ 13,384.00
6	12" C900 DR 14 PVC Water	3509	LF	\$ 45.00	\$ 157,905.00
7	12" R.J.D.I. Water Carrier Pipe	233	LF	\$ 80.00	\$ 18,640.00
8	16" C151 DIP CL 52	5014	LF	\$ 80.00	\$ 401,120.00
9	16" R.J.D.I. Water	30	LF	\$ 260.00	\$ 7,800.00
10	16" R.J.D.I. Water Carrier Pipe	780	LF	\$ 95.00	\$ 74,100.00
11	24" Steel Casing By Bore	229	LF	\$ 489.00	\$ 111,981.00
12	30" Steel Casing By Bore	425	LF	\$ 514.00	\$ 218,450.00
13	30" Steel Casing By Open Trench	295	LF	\$ 216.00	\$ 63,720.00
14	12" Gate Valve	9	EA	\$ 2,300.00	\$ 20,700.00
15	16" Gate Valve	7	EA	\$ 7,000.00	\$ 49,000.00
16	Fire Hydrant Assembly	15	EA	\$ 5,000.00	\$ 75,000.00
17	Connection to Existing 12" Water Line	1	EA	\$ 3,500.00	\$ 3,500.00
18	Connection to Existing 16" Water Line	1	EA	\$ 25,000.00	\$ 25,000.00
19	4" Service Connection	1	EA	\$ 4,700.00	\$ 4,700.00
20	Flush and Disinfect Existing Water Service Line	1	LS	\$ 3,000.00	\$ 3,000.00
21	Trench Safety	9390	LF	\$ 0.90	\$ 8,451.00
22	Rock Excavation	3600	CY	\$ 8.25	\$ 29,700.00
23	Hydro-mulch Restoration	40000	SY	\$ 0.90	\$ 36,000.00
24	Gravel Restoration	1300	SY	\$ 7.00	\$ 9,100.00
25	Asphalt Restoration	700	SY	\$ 40.00	\$ 28,000.00
<b>WATERLINE TOTAL</b>					<b>\$ 1,359,251.00</b>
<b>SEWER</b>					
26	8" SDR 26 PVC Sanitary Sewer	1219	LF	\$ 46.00	\$ 56,074.00
27	10" SDR 26 PVC Sanitary Sewer	3614	LF	\$ 57.00	\$ 205,998.00
28	10" R.J.D.I. Sanitary Sewer Carrier Pipe	455	LF	\$ 90.00	\$ 40,950.00
29	4' Dia Standard Manhole	1	EA	\$ 4,500.00	\$ 4,500.00
30	5' Dia Standard Manhole	14	EA	\$ 5,500.00	\$ 77,000.00
31	6" Sanitary Sewer Service	1	EA	\$ 1,500.00	\$ 1,500.00
32	18" Steel Casing By Open Trench	423	LF	\$ 75.00	\$ 31,725.00
33	Trench Safety	5331	LF	\$ 0.90	\$ 4,797.90
34	Rock Excavation	3600	CY	\$ 8.25	\$ 29,700.00
35	Hydro-mulch Restoration	24000	SY	\$ 0.90	\$ 21,600.00
36	Gravel Restoration	500	SY	\$ 7.00	\$ 3,500.00
37	Asphalt Restoration	500	SY	\$ 40.00	\$ 20,000.00
<b>SEWER TOTAL</b>					<b>\$ 497,344.90</b>
<b>TOTAL BID</b>					<b>\$ 1,925,345.90</b>

## Remaining Project Estimated Expenditures:

- ▶ Civil (early spring 2018)
  - ▶ Paving of access drive, security wall, site cleanup, and landscaping
- ▶ IT and Security Equip. (late 2017)
  - ▶ Computers, network hardware, SCADA equipment, cameras, security devices
- ▶ Engine Fluids (Early Spring 2018)
  - ▶ Lube oil, glycol, rust inhibitors, ammonia
- ▶ Potential Change Orders (ongoing)
  - ▶ BMcD and Wartsila – extra labor (hurricane delays), plant modifications, storm shelters, construction closeout.
  - ▶ Change orders to date are approximately 0.59% of contract amounts



# Questions:



**Chris Lutrick & Brent Heath**