

City of Fayetteville Staff Review Form

2019-0422

Legistar File ID

8/6/2019

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Tim Nyander

7/11/2019

WASTEWATER TREATMENT (730)

Submitted By

Submitted Date

Division / Department

Action Recommendation:

Staff recommends the replacement of four (4) damaged electrical junction boxes and the repair of electrical conduit for the biological treatment units located at the West Side Wastewater Treatment Facility by Fleming Electric, Inc. in the amount of \$18,704.00 plus applicable taxes, and approval of a budget adjustment.

Budget Impact:

5400.730.5800-5414.00

Water and Sewer

Account Number

Fund

02069.1

Plant Pumps and Equipment - WWTP

Project Number

Project Title

Budgeted Item? Yes

Current Budget \$ 1,060,718.00

Funds Obligated \$ 1,060,715.61

Current Balance \$ 2.39

Does item have a cost? Yes

Item Cost \$ 20,527.64

Budget Adjustment Attached? Yes

Budget Adjustment \$ 20,528.00

Remaining Budget \$ 2.75

V20180321

Purchase Order Number:

Previous Ordinance or Resolution #

Change Order Number:

Approval Date:

Original Contract Number:

Comments: Taxes are estimated at \$1,823.64 for a total cost of \$20,527.64.



MEETING OF AUGUST 6, 2019

TO: Mayor and City Council

THRU: Don Marr, Chief of Staff
Water & Sewer Committee
Tim Nyander, Utilities Director

FROM: Greg Weeks, Wastewater Treatment

DATE: July 11, 2019

SUBJECT: **Electrical Junction Box and Conduit Repairs at the West Side Wastewater Treatment Facility**

RECOMMENDATION:

Staff recommends the replacement of four (4) damaged electrical junction boxes and the repair of electrical conduit for the biological treatment units located at the West Side Wastewater Treatment Facility by Fleming Electric, Inc. in the amount of \$18,704.00 plus applicable taxes, and approval of a budget adjustment.

BACKGROUND:

The West Side Treatment Facility utilizes a series of four biological nutrient removal reactors (bio-units) to treat an average of 7.2 million gallons of wastewater per day (2017, Annual AVG). Since the facility's start-up in 2008, gradual settling of some asphalt and concrete surfaces have slowly occurred next to the bio-units. Four junction boxes near these areas have been damaged as a result and need to be replaced, and repairs are also needed for nearby electrical conduits that were damaged by the settling.

DISCUSSION:

Adjacent to the facility's biological treatment units, there are several areas where asphalt or concrete surfaces show signs of approximately 1-3 inches of sub-grade settling. Above the concrete or asphalt surfaces are electrical junction boxes attached to the bio-unit's exterior walls. As the impervious surfaces have slowly shifted in elevation, a downward pressure has been exerted on nearby electrical conduits resulting in both damaged conduit and junction boxes. Staff believes the shifting asphalt and concrete surfaces are the result of a very gradual settling of the subgrade-backfill going back to the facility's initial construction over ten years ago. Staff have not observed evidence suggesting the settling rate is increasing or the result of a suddenly recent occurrence. Also, area evidence points to the shifting surfaces being that of the concrete and asphalt (next to the biological basins) rather than settling of the basins themselves. It is our expectation the next 10 years will not repeat the same extent of subgrade settling. However, this repair proposal does include expansion fittings that will protect against the possibility of future damage.

Recently, written quotes were requested from three local vendors with Fleming Electric, Inc. having the lowest bid. Below are the three bid amounts that were received:

| | |
|-----------------------------|-------------|
| Fleming Electric, Inc. | \$18,704.00 |
| Crossland Heavy Contractors | \$25,571.00 |
| King Electric | \$35,930.00 |

Staff recommends completion of the proposed repairs by Fleming Electric, Inc. in the amount of \$18,704.00. Taxes are estimated to be \$1,823.64 for a total project cost of \$20,527.64.

BUDGET/STAFF IMPACT:

Budgeted funds will be moved from the Sanitary Sewer Rehabilitation account to the Plant Pumps and Equipment account to cover the repair costs for the damaged electrical junction boxes and electrical conduit. Funds being moved are budgeted funds for sewer rehabilitation/replacement and maintenance.

Attachments:

Three Repair Quotes
Budget Adjustment



Fleming Electric, Inc.

Your Total Solution Provider

3311 Southwest I Street Bentonville, AR 72712

(479) 715-6099 Fax: (479) 715-6855

email: dispatch@fleminc.com

QUOTE

NWAQ7440-01

Date

Jun 14, 2019

Expires

Jul 13, 2019

Quoted To:

Jacobs

Jeremy LaCoe/Tim Marr
1400 N. Fort Hunter Road
Fayetteville, AR 72701

Phone 479-443-3292

Email Jeremy.LaCoe@Jacobs.com/Tim.Marr@J

Contractors License # 0023160416

Project # Conduit and box
repairs

Plan # AAE#90254

Tips/Taps#

MC # 11732

Submitted By:

Tim Edens

Estimator:

Shay Hardin

| Description | Unit Price | Qty | Ext. Price |
|---|-------------|-----|-------------|
| Provide and install 4 new nema 4x boxes Provide and install expatiation joints on all conduits coming out of ground Provide 3 guy for 10 days to pull all wires back to install boxes All labor quoted for week days no over time included No wires to be spliced unless existing Terminal blocks will be installed to accommodate all existing spliced wires in south box Jeremy laCoe & Tim Marr will coordinate the shut down if needed Excluding new wiring due to unseen damage | \$18,704.00 | 1 | \$18,704.00 |

Tim Edens V.P. FLEMING ELE
6-25-19

Subtotal

\$18,704.00

Sales Tax

\$0.00

Grand Total**

\$18,704.00

I accept the terms and conditions of this quotation.

Signed: _____ Date: _____

Name: _____ Title: _____

Terms: 30 Day Draws. Balance Due Upon Completion/Delivery.

APPLICABLE SHIPPING CHARGES AND SALES TAX, IF ANY, WILL BE CHARGED AT TIME OF BILLING

Exclusions: 1) Cutting, Patching & Painting 2) Concrete 3) Asphalt Cutting & Patching 4) Trash Removal & Dumpster 5) Core Drilling 6) Power Company Charges 7) Roof Penetration 8) Engineering Fees 9) No welding or fabrication 10) No programming or commissioning, unless specifically included in above quote.

Note: If any case of solid rock is encountered, a rock clause will be in effect. The rock clause states there will be a minimum charge of \$1,000.00 per cubic foot removal fee. We exclude all engineering fees.

CROSSLAND

HEAVY CONTRACTORS

Fayetteville West Side WWTP – Fayetteville, AR
501 S. East Ave, P.O. Box 350
Columbus, KS 66725
Tel: 620.429.1410
Fax: 620.429.2977

June 14, 2019

Mr. Jeremy LaCoe
Maintenance Supervisor
1400 N Foxhunter Rd.
Fayetteville, AR. 72701

Reference: Electrical Component Removal & Replacement

Mr. LaCoe,

Crossland Heavy Contractors is pleased to provide to you a quotation to complete the replacement of the specified electrical components at the Fayetteville West WWTP. Below is a brief outline of the work as proposed.

Crossland Heavy Contractors will contract with Harvey Preston Electric Co. Inc, to replace the specified electrical boxes & damaged conduit that were observed on 6/04/2019. Crossland Heavy Contractors will replace all asphalt and sod areas disrupted during the repair. Attached is the scope of work for Harvey Preston for this project.

A breakdown of the cost of work is below:

- CHC Materials – \$1,041.00
 - Asphaltic Cold Patch
 - Bermuda Square Sod
 - Class 7 Baserock
- Labor - \$1,676.00
 - Foreman
 - Skilled Operator
 - Skilled Laborer
- Equipment - \$650.00
 - CAT 256 Wheeled Skid Steer
 - Light Duty Truck(s)
- Subcontractors - \$21,103.00
 - Harvey Preston Electric Co. Inc.
- Contractor Bond & Insurance - \$1,101.00

Cont..

The total cost of construction to remove and replace the specified electrical components as well as restore the disturbed areas at the working sites back to acceptable condition:

- Complete Total Cost - \$25,571.00
- Total Working Days Required – 5 Days

If there are any questions or concerns regarding this matter please feel free to give me a call.

Respectfully,

A handwritten signature in black ink, appearing to read "Garrett Street", with a stylized flourish at the end.

Garrett Street
620-202-1834
Project Manager
Crossland Heavy Contractors

HARVEY-PRESTON ELECTRIC CO. INC.

12110 Old Hwy 71 South
Fort Smith, AR. 72916

email <bjohson@harveyprestonelectric.com>

Phone 479-646-0433

Fax 479-646-2245

www.harveyprestonelectric.com

6-14-19

PROPOSAL

page 1 of 1

Fayetteville, AR
West side wastewater treatment plant

Ref: Junction box replacement

Harvey-Preston Electric Company, Inc., will furnish all tools, material and labor to repair stainless junction boxes.

Included

(south J-Boxes)

- Remove asphalt over south junction box conduits
- Demo (2) 14x14x6 NEMA 4X junction boxes
- Demo existing vertical conduits all the way back to PVC
- Determine all conductors.
- Tap on to existing underground PVC conduit to install new ROBROY conduit and 90's
- Replace J-boxes with new SS NEMA 4x hinged cover junction boxes.
- All box and conduit support to be in stainless steel.
- Re terminate all existing conductors. (control conductors to be in terminal's)

(north J-boxes)

- Excavate down to existing underground PVC conduits.
- Pull out all existing conductors
- Tap on to existing underground PVC conduit to install new ROBROY conduit and 90's
- Replace all existing junction boxes with new stainless steel NEMA 4X hinged cover J-boxes.
- All box and conduit support to be in stainless steel.
- Re terminate all existing conductors. (no terminals on controls)

Excluded

- Asphalt repair.
- Excavation spoil disposal.
- City of Fayetteville Permit.

Note

- Owner will be responsible for start up testing Harvey Preston will aid if needed.

Bonding if required at an additional cost of \$15.00 per \$1000.00.


All work to be performed during normal working hours.

KING ELECTRICAL CONTRACTORS, INC.

2145 WEST MOORE LANE
FAYETTEVILLE, AR 72704

479-443-0006 FAX 479-443-2594
Email: gordon@ckingelectric.net

PROPOSAL

| | | | | | |
|---|---|--|--|--|--|
| TO: Jacobs 1400 North Fox Hunter Road Fayetteville, AR 72701 Attn: Tim Marr | PHONE | DATE April 10, 2019 | | | |
| JOB DESCRIPTION See attached scope sheet We have seen zero (0) addendum(s) or revision(s) or clarification(s) Contractor's License #0063870419 Westside Unit 1 junction box repair \$16,700.00 Westside Unit 2 junction box repair \$19,230.00 Westside Aerator VFD change out \$4,300.00 each Lift Station 7 Hamstring VFD change out \$5,100.00 each Lift Station 12 400 KW generator change out \$9,200.00 | JOB NAME Westside WWTP Lift Station 7 Lift Station 12 | | | | |
| | PROPOSAL GOOD FOR 30 DAYS | DOLLARS: \$ SEE ABOVE | | | |
| TERMS: PAYMENT DUE UPON RECEIPT OF INVOICE A FINANCE CHARGE WILL BE CHARGED ON ALL PAST DUE ACCOUNTS OF .0833% PER MONTH. ALL ATTORNEY FEES WILL BE COLLECTED ON PAST DUE ACCOUNTS. | AUTHORIZED SIGNATURE  Gordon Ray Project Manager / Estimator | | | | |
| THE ABOVE PRICES SPECIFICATIONS AND CONDITIONS ARE SATISFACTORY AND ARE HEREBY ACCEPTED. YOU ARE AUTHORIZED TO DO WORK AS SPECIFIED. PAYMENT WILL BE MADE AS OUTLINED ABOVE. | ACCEPTANCE SIGNATURE | | | | |

KING ELECTRICAL CONTRACTORS

Scope Sheet

General Inclusions & Exclusions

Inclusions

1. Wiring per site visits 3/29/2019 Division 26 electrical. All estimates are based upon our contract rates with the City of Fayetteville.
2. Permit and inspection fees if applicable.
3. Division 26 excavation.
4. Trenches backfilled with existing dirt and tamped.
5. Taxes.
6. Equipment rental.
7. Demolition/debris or trash removal as directed on site.
8. Division 26 excavations dirt or spoils removal from site.
9. Owner is responsible for de-energizing equipment, controls and communication for our lock out and tag out.

Exclusions

1. Payment, Bid or Performance Bond.
2. Engineering services, stamps or plans.
3. Overtime labor.
4. Furnishing or installing wiring and equipment for Fire Alarm, Phone, VOIP, POS, CATV, Data, Fiber Optic, CCTV, Security, Access control, SCADA, Audio, and Video systems.
5. Allowances.
6. Electrical System coordination and/or Arc Flash investigation, studies, calculations or reports.
7. Access panels for electrical equipment.
8. Cutting, painting, penetrations, backing or repair & patching of concrete, asphalt, walls, ceiling, roof or floors for electrical conduit & equipment.
9. Cutting or patching parking lot for electrical equipment.
10. Ditch compaction testing.
11. Back filling Division 26 excavations with classified rock.
12. Any type of rock excavation.
13. Landscaping or repair due to Division 26 excavation.
14. Directional Boring.
15. Formed or finished concrete.
16. Asbestos or hazardous material abatement.

KING ELECTRICAL CONTRACTORS
Scope Sheet
Westside WWTP Unit 1 & Unit 2 Junction Box Repair

Inclusions

1. Saw cut and demo approximately 4 foot by 8 eight section of asphalt in front of unit 1 junction boxes.
2. Excavate dirt in front of unit 2 junction boxes.
3. We are assuming the existing conduits are not concrete encased.
4. Excavate down to existing conduits and attempt to raise to original height.
5. Pour concrete around conduit to stabilize.
6. Replace two 12x12 Nema 4x stainless steel junction boxes at unit 1.
7. Replace two 12x12 Nema 4x stainless steel junction boxes and replace one 24x24 junction box at unit 2.
8. Replace unistrut for junction boxes and conduit strapping.
9. Repair and replace above ground sections of plastic coated GRC conduit.
10. Install plastic coated GRC conduit expansion fittings.
11. Replace plastic coated GRC conduit myers hubs.
12. Install terminal strips for existing wire retermination.
13. Estimated repair time for each location 4 days.

Exclusions

1. Repulling existing wire. To lengthen we will mark, cut and install on terminal blocks.
2. Repulling existing wire. To lengthen we will mark, cut and crimp butt splice and heat shrink for large conductors.
3. Asphalt replacement.
4. Engineering services, stamps or plans.
5. Furnishing or installing wiring and equipment for Fire Alarm, Phone, VOIP, POS, CATV, Data, Fiber Optic, CCTV, Security, Access control, SCADA, Audio, and Video systems.
6. Allowances or unit prices.
7. Electrical System coordination and/or Arc Flash investigation, studies, calculations or reports.
8. Access panels for electrical equipment.
9. Cutting, painting, penetrations, backing or repair & patching of concrete, asphalt, walls, ceiling, roof or floors for electrical conduit & equipment.
10. Ditch compaction testing.
11. Back filling Division 26 excavations with classified rock.
12. Any type of rock excavation.
13. Landscaping or repair due to Division 26 excavation.
14. Directional Boring.
15. Formed or finished concrete.
16. Asbestos or hazardous material abatement.

KING ELECTRICAL CONTRACTORS
Scope Sheet
Westside WWTP Aerator VFD Replacement

Inclusions

1. Remove existing Altivar VFD and components and place on pallets for removal or disposal by owner.
2. Install new Altivar VFD, display and components relays, contactors, SPD and fuses furnished by owner.
3. Electrician present for factory start-up and commissioning.
4. Wire, lugs and miscellaneous material for interconnections and terminations.

Exclusions

1. Repulling existing wire. To lengthen we will mark, cut and install on terminal blocks or butt splice and heat shrink large conductors.
2. New VFD programming, start-up and commissioning fees.
3. Engineering services, stamps or plans.
4. Furnishing or installing wiring and equipment for Fire Alarm, Phone, VOIP, POS, CATV, Data, Fiber Optic, CCTV, Security, Access control, SCADA, Audio, and Video systems.
5. Allowances.
6. Electrical System coordination and/or Arc Flash investigation, studies, calculations or reports.
7. Access panels for electrical equipment.
8. Cutting, painting, penetrations, backing or repair & patching of concrete, asphalt, walls, ceiling, roof or floors for electrical conduit & equipment.
9. Asbestos or hazardous material abatement.

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KING ELECTRICAL CONTRACTORS
Scope Sheet
Lift Station 12 Hamstring VFD Replacement

Inclusions

1. Remove existing Eaton VFD and components and place on pallets for removal or disposal by owner.
2. Install new Altivar VFD, display and components including relays, contactors, SPD, power factor correction and fuses furnished by owner.
3. Electrician present for factory start-up and commissioning.
4. Wire, lugs and miscellaneous material for interconnections and terminations.

JK

Exclusions

1. Repulling existing wire. To lengthen we will mark, cut and install on terminal blocks or butt splice and heat shrink large conductors.
2. New VFD programming, start-up and commissioning fees.
3. Engineering services, stamps or plans.
4. Furnishing or installing wiring and equipment for Fire Alarm, Phone, VOIP, POS, CATV, Data, Fiber Optic, CCTV, Security, Access control, SCADA, Audio, and Video systems.
5. Allowances.
6. Electrical System coordination and/or Arc Flash investigation, studies, calculations or reports.
7. Access panels for electrical equipment.
8. Cutting, painting, penetrations, backing or repair & patching of concrete, asphalt, walls, ceiling, roof or floors for electrical conduit & equipment.
9. Asbestos or hazardous material abatement.

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KING ELECTRICAL CONTRACTORS Scope Sheet **Lift Station 2 400 KW Generator Replacement**

Inclusions

1. Disconnect and remove existing 400 KW diesel generator.
2. Install and connect new 400 KW diesel generator furnished by owner.
3. Load and transport new 400 KW generator from the Noland WWTP to Lift Station 2.
4. Load and transport old 400 KW generator from Lift Station 2 to the Noland WWTP.
5. Electrician present for start-up and commissioning.
6. Crane rental.
7. Transport truck and trailer.

DT

Exclusions

1. Any work to existing automatic transfer switch.
2. Removal of diesel for existing generator.
3. Furnishing diesel for new generator.
4. New generator and automatic transfer switch programming, start-up and commissioning fees.
5. Repulling existing wire. To lengthen we will mark, cut and install on terminal blocks or butt splice and heat shrink large conductors.
6. Unloading new generator when delivered.

7. Owner is responsible that existing battery charger and block heater circuits are adequate for new generator.
8. Owner is responsible that new generator will fit in existing location for conduit entry, required safe clearances and maintenance door opening clearance.
9. Engineering services, stamps or plans.
10. Furnishing or installing wiring and equipment for Fire Alarm, Phone, VOIP, POS, CATV, Data, Fiber Optic, CCTV, Security, Access control, SCADA, Audio, and Video systems.
11. Allowances.
12. Electrical System coordination and/or Arc Flash investigation, studies, calculations or reports.
13. Access panels for electrical equipment.
14. Cutting, painting, penetrations, backing or repair & patching of concrete, asphalt, walls, ceiling, roof or floors for electrical conduit & equipment.
15. Asbestos or hazardous material abatement.
16. Landscaping or repair due to Division 26 work.

