

City of Fayetteville Staff Review Form

2017-0535

Legistar File ID

10/17/2017

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

Tim Nyander

9/21/2017

Utilities Director /
Utilities Department

Submitted By

Submitted Date

Division / Department

Action Recommendation:

A RESOLUTION APPROVING A BUDGET ADJUSTMENT IN THE AMOUNT OF \$5,968.00 TO ALLOW CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTIONS FOR THE WATER & SEWER OUTBUILDINGS CONSTRUCTION

Budget Impact:

5400.720.1840-5801.00	Water/Sewer																														
Account Number	Fund																														
15020.1	Water/Sewer Building & Office Improvements																														
Project Number	Project Title																														
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">Budgeted Item?</td> <td style="width: 15%;"><u>Yes</u></td> <td style="width: 30%;">Current Budget</td> <td style="width: 10%;">\$</td> <td style="width: 30%; text-align: right;">408,117.00</td> </tr> <tr> <td></td> <td></td> <td>Funds Obligated</td> <td>\$</td> <td style="text-align: right;">408,117.00</td> </tr> <tr> <td></td> <td></td> <td>Current Balance</td> <td style="border: 1px solid black; text-align: center;">\$</td> <td style="border: 1px solid black; text-align: center;">-</td> </tr> </table>	Budgeted Item?	<u>Yes</u>	Current Budget	\$	408,117.00			Funds Obligated	\$	408,117.00			Current Balance	\$	-	<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 30%;">Item Cost</td> <td style="width: 10%;">\$</td> <td style="width: 30%; text-align: right;">5,967.50</td> </tr> <tr> <td>Does item have a cost?</td> <td><u>Yes</u></td> <td>Budget Adjustment</td> <td>\$</td> <td style="text-align: right;">5,968.00</td> </tr> <tr> <td>Budget Adjustment Attached?</td> <td><u>Yes</u></td> <td>Remaining Budget</td> <td style="border: 1px solid black; text-align: center;">\$</td> <td style="border: 1px solid black; text-align: center;">0.50</td> </tr> </table>			Item Cost	\$	5,967.50	Does item have a cost?	<u>Yes</u>	Budget Adjustment	\$	5,968.00	Budget Adjustment Attached?	<u>Yes</u>	Remaining Budget	\$	0.50
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V20140710

Previous Ordinance or Resolution # _____

Original Contract Number: _____

Approval Date: _____

Comments:



MEETING OF OCTOBER 17, 2017

TO: Mayor and City Council

THRU: Don Marr, Chief of Staff

FROM: Tim Nyander, Utilities Director

DATE: September 20, 2017

SUBJECT: Approval of a Budget Adjustment for Construction Materials Testing and Special Inspections for the Water & Sewer Outbuildings Construction

RECOMMENDATION:

Staff recommends approval of a budget adjustment in the amount of \$5,968.00 for McClelland Consulting Engineers, Inc. to perform construction materials testing and special inspections for the Water & Sewer outbuildings construction.

BACKGROUND:

Upon City Council approval on October 3, 2017, Benchmark Construction of NWA, Inc. will be awarded Bid #17-39, Water & Sewer Outbuildings Construction in the amount of \$366,000.00.

DISCUSSION:

McClelland Consulting Engineers, Inc. has submitted a proposal for the construction materials testing and special inspections for the Water & Sewer Outbuildings Construction in the amount of \$5,425.00. It is required that the building code special inspections be performed by a third party, and not by the owner or contractor.

A budget adjustment is requested in the amount of \$5,968.00 to cover the costs of the construction materials testing and special inspections in the amount of \$5,425.00, plus a contingency of \$542.50.

BUDGET/STAFF IMPACT:

Funds are available in the cost savings from the Regional Park, which will be moved into the Water & Sewer Building & Office Improvements project.

Attachments:

Proposal from McClelland Consulting Engineers, Inc.
Budget Adjustment

August 28, 2017

City of Fayetteville
Engineering Division
125 W. Mountain Street
Fayetteville, Arkansas 72701

ATTN: Mr. Jim Beavers, P.E.

RE: Construction Materials Testing and Special Inspections Proposal
Water Sewer Outbuilding Improvements
Fayetteville, Arkansas

Dear Mr. Beavers,

We are pleased to present our proposal for the construction materials testing and special inspections relevant to the planned Water Sewer Outbuilding Improvements project in Fayetteville, Arkansas. The following information is presented for your consideration and is aimed at assisting in the formation of your construction budget.

- **Proof-Roll/Subgrade Observation:** Subtotal = \$900.00
- **Soil and Base Density Testing:** Subtotal = \$900.00
- **Reinforcing Bar Observation/Bearing Capacity:** Subtotal = \$1,400.00
- **Cast-in-Place Concrete Testing:** Subtotal = \$1,225.00
- **Concrete Cylinder Pick-up:** Subtotal = \$200.00
- **Structural Steel and Welding Inspection:** Subtotal = \$800.00

Based on the assumptions detailed in the forgoing proposal, we can provide construction materials testing and special inspections on this project for a Not-to-Exceed Without Approval fee of **\$5,425.00**.

McClelland Consulting Engineers, Inc. is hereby authorized to proceed in accordance with the foregoing proposal.

Name

Title

Date

The information on the following pages provides further detail regarding the anticipated testing scope on the project which includes number of trips for each service, time spent onsite for each service, and other assumptions which were integral in arriving at the estimated fee amount.

Based on the provided current construction plans and our general understanding of the project, the project scope is to consist of new construction of a material storage building with an approximate footprint of 1,600 square feet and an additional vehicle storage building with an approximate footprint of 500 square feet. The new material storage building and vehicle storage building addition are to be supported on shallow spread and continuous foundations. The construction of each building will consist of cast-in-place concrete slab-on-grade with wood and lightweight steel framing.

Based on our understanding of the project and the provided information, testing is anticipated to consist of proof-roll observations, foundation bearing capacity observations, soil and base density testing, cast-in-place concrete testing, and reinforcing bar observations.

To better your understanding of our associated fees, we presented an estimated per-trip price for the services we anticipate providing on this project. The provided per-trip prices assume the following factors:

- ❖ A geotechnical engineer or engineering technician spending one (1) hour onsite for proof-roll observation of the building areas
- ❖ A certified technician spending thirty (30) minutes onsite for each soil and/or base density testing trip.
 - Three (3) density tests being conducted each trip
- ❖ A geotechnical engineer or engineering technician spending one (1) hour onsite for each trip relevant to reinforcing bar observations/bearing capacity observation
- ❖ A certified technician spending one (1) hour onsite for each cast-in-place concrete testing trip
 - One (1) set of five (5) 4" x 8" cylinders being sampled each trip
 - Additional cylinders and onsite technician time may be required for large monolithic concrete placements exceeding 50 yd³

We have also assumed that the project duration will be approximately three (3) months for each building location. From the assumptions and project details referenced above, we estimated the following per-trip prices and subtotals for each service anticipated being required:

Proof-Roll Observation:

\$225.00 per trip

- ❖ Material Storage Building Pad – 2 trips
- ❖ Vehicle Storage Building Pad – 2 trips

▪ **Subtotal: \$900.00**

Soil and Base Density Testing:

\$150.00 per trip

- ❖ Material Storage Building Pad Select Fill Material – 3 trips
- ❖ Vehicle Storage Building Pad Select Fill Material – 3 trips

▪ **Subtotal: \$900.00**

Cast-in-Place Concrete Testing:

\$175.00 per trip

- ❖ Material Storage Building Slab-on-Grade – 1 trip
- ❖ Vehicle Storage Building Slab-on-Grade – 1 trip
- ❖ Material Storage Building Continuous and Spread Foundations – 2 trips
- ❖ Vehicle Storage Building Continuous and Spread Foundations – 2 trips
- ❖ Stem Walls Relevant to Material Storage Building – 1 trip

▪ **Subtotal: \$1,225.00**

Concrete Cylinder Pick-up:

\$50.00 per trip

- ❖ A charge for concrete cylinder pick-up will only be applied in the event that it is the sole reason for the site visit on days where no other testing is scheduled. We have assumed that this will be required for approximately one-half of the total concrete placements.

▪ **Subtotal: \$200.00**

Reinforcing Bar Observation/Bearing Capacity:

\$200.00 per trip

- ❖ Material Storage Building Slab-on-Grade – 1 trip
- ❖ Vehicle Storage Building Slab-on-Grade – 1 trip
- ❖ Material Storage Building Continuous and Spread Foundations – 2 trips
- ❖ Vehicle Storage Building Continuous and Spread Foundations – 2 trips
- ❖ Stem Walls Relevant to Material Storage Building – 1 trip

• **Subtotal \$1,400.00**

Structural Steel and Welding Inspection:

- ❖ We have assumed that various periodic site visits will be necessary for inspection of structural steel connections relevant to the building addition. The referenced project documents require special inspections per IBC Chapter 17 and relevant AWS standards. Periodic inspections will be required for typical bolted and welded framing and structural building connections.

- **Subtotal: \$800.00**

Our estimated number of trips for each testing service is based on our review of the provided project documents and from experience on projects in the area with similar scope and size. Our fees are directly related to the amount of trips made for each service and time spent onsite. If the project scope varies after submittal of this document and prior to construction, please allow for the review/revision of this document.

We appreciate the opportunity to submit this proposal for construction materials testing relevant to the Water Sewer Outbuilding Improvements Project in Fayetteville, Arkansas. Please contact us with any questions or concerns that you might have regarding the information contained in this proposal.

Sincerely,

Steven J. Head, PE
Geotechnical Engineer


Sam Mahaffey
Construction Materials Testing Supervisor