

# **Travis County Commissioners Court Agenda Request**

Meeting Date: December 16, 2014

Prepared By/Phone Number: Jason G. Walker/44562; Marvin Brice,

CPPB, Assistant Purchasing Agent

Elected/Appointed Official/Dept. Head: Cyd Grimes

Commissioners Court Sponsor: Judge Biscoe

Agenda Language: Approve Modification No. 1 to Contract No. 4400002145, Wiss, Janney, Elstner Associates, Inc, for Jakes Hill Bridge Failure.

➤ Purchasing Recommendation and Comments: Purchasing concurs with department and recommends approval of requested action. This procurement action meets the compliance requirements as outlined by the statutes.

- ➤ Jakes Hill Road bridge is a single-span structure that carries two (2) traffic lanes of Jakes Hill Road over the Walbarger Creek Tributary, near Pflugerville. Currently, there are seven (7) precast, rigid-frame crown span sections on spread footings, where each identical section spans approximately twenty-two (22) feet. This bridge was built by a private developer in 2009, and then turned over to the County for maintenance.
- ➤ In late May 2014, the bridge suffered a partial collapse and the County closed the roadway. In order to determine the cause of the failure and identify a remediation plan, a forensic investigation of the bridge structure is necessary. Wiss, Janney, Elstner Associates, Inc. has an exceptional national reputation for their forensic engineering services, as they have performed many failure and disaster analyses on bridge structures having failed due to extreme weather events, fatigue, accidents, etc.
- ➤ This modification number one (1) is for Additional Basic Services for geotechnical investigations and review of hydrological conditions of the site. This modification will increase the contract amount by \$21,300.00,

from \$30,000.00 to \$51,300.00, and the aggregate modification amount results in a 71% increase of the original contract amount.

➤ Contract Expenditures: Within the last <u>3</u> months \$0.00 has been spent against this contract/requirement.

Contract-Related Information
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Award Amount: \$30,000.00

Contract Type: A/E

Contract Period: Through completion

## Contract Modification Information:

Modification Amount: \$21,300.70

Modification Type: A/E Modification Period:

## Solicitation-Related Information: N/A

Solicitations Sent: Responses Received: HUB Information: % HUB Subcontractor:

# Special Contract Considerations: N/A

Award has been protested; interested parties have been notified.	led.
☐ Award is not to the lowest bidder; interested parties have bee	n
notified.	
☐ Comments:	

# > Funding Information:

$\boxtimes$	Shopping Cart(s)/Funds Reservation in SAP: 300001557
$\boxtimes$	Fund Center(s): 1490200145

☐ Comments:

#### TRANSPORTATION AND NATURAL RESOURCES

STEVEN M. MANILLA, P.E., COUNTY EXECUTIVE

700 Lavaca Street-5<sup>th</sup> Floor Travis County Administration Building PO Box 1748 Austin, Texas 78767

Phone: (512) 854-9383 Fax: (512) 854-4697

November 10, 2014

### **MEMORANDUM**

**TO:** Marvin Brice, Assistant Purchasing Agent

**FROM:** Morgan Cotten, Public Works Director

**THROUGH:** Steve Manilla, County Executive – TNR

**SUBJECT:** Contract 4400002145-Wiss, Janney, Elstner Associates, Inc.

Modification No. 1-Jakes Hill Road Bridge Failure

TNR is requesting approval of Modification No. 1 for the above referenced subject project. This modification will increase the contract total amount by \$21,300.00 from \$30,000 to \$51,300.00 This change order is for additional soils exploration and hydraulic analysis needed for the replacement foundation and reconstruction of the bridge.

TNR staff recommends approval for the change order. Wiss, Janney, Elstner Associates, Inc. contract modification is attached for your reference. Funds for this request are reserved under the following financial document:

Funds Reservation Document No.	300001557
Fund	0145
Fund Center	1490200145
G/L Account	51190
Amount	\$21,300.00

For questions regarding this modification, please contact Morgan Cotten at extension 49434, for financial inquiries; contact Isabelle Lopez at extension 47675.

MC:SMM:il

xc: Morgan Cotton, TNR Public Works

Isabelle Lopez, Tawana Gardner, TNR Financial Services



# Funds Reservation 300001557

General Data

Document type NE Document type 030

Company code 1000 Document date 11/10/2014

FM area 1000 Posting date 11/10/2014

Controlling area 1000 Currency USD/ 1.00000

Statistics

Entered by LOPEZI Created on 11/10/2014

Last changed by Last changed

More Data

Text Jake's Hill Road Bridge Failure-Mod.#1

Reference

Overall Amount 21,300.00 USD

Document item 001

Text Jake's Hill Rd Bridge Failure-Mod#1-Wiss, Janney,

 Commitment item
 511900
 Funds center
 1490200145

 Fund
 0145
 G/L account
 511900

Cost center 1490200145 Due on Vendor Customer

Amount 21,300.00 USD

MODIFICATION OF CONTRACT NUMBER: 4400002145, Jake's Hill Bridge Failure PAGE 1 OF 2 PAGES					
ISSUED BY: PURCHASING OFFICE P.O. BOX 1748 AUSTIN, TX 78767	PURCHASING AGENT ASST: <b>Jason G. Walker</b> TEL. NO: (512) 854-9700 FAX NO: (512) 854-9185	DATE PREPARED: November 24, 2014			
ISSUED TO: Wiss, Janney, Elstner Associates, Inc. 9511 North Lake Creek Parkway Austin, TX 78717	MODIFICATION NO.:	EXECUTED DATE OF ORIGINAL CONTRACT: September 3, 2014			
ORIGINAL CONTRACT TERM DATES: 9/3/14 - 1	hrough project completion CURRENT CONTRACT TERM DA	ATES: 9/3/14 - through project completion			
FOR TRAVIS COUNTY INTERNAL USE ONLY Original Contract Amount: \$30,000.00	Current Modified Amount <u>\$30,000.00</u> .	ALTERNATION OF THE PARTY OF THE			
DESCRIPTION OF CHANGES:					
A. The additional Basic Services, Work Product (Task) 5 - Geotechnical Investigation and Work Product (Task) 6 - Hydrological Condition Review, as outlined in Consultant's Supplemental Agreement, attached hereto and made a part hereof are hereby added to the contract. As a result of these additional Basic Services, Work Product (Task) 5 - Geotechnical Investigation and Work Product (Task) 6 - Hydrological Condition Review, contract Basic Services pricing is adjusted as follows:					
1. Reference EXHIBIT 1, SECTION 1 - C	COMPENSATION FOR BASIC SERVICES:				
<ul> <li>a. Paragraph 1.1: The stated fee for the performance of basic services is modified from \$28,640.00 to \$49,940.00, an increase of \$21,300.00.</li> <li>b. Paragraph 1.1.1: Work Product (Task) 5 - Geotechnical Investigation is added in the amount of \$8,800.00.</li> <li>c. Paragraph 1.1.1: Work Product (Task) 6 - Hydrological Condition Review is added in the amount of \$12,500.00.</li> <li>d. The BASIC SERVICES TOTAL is changed from \$28,640.00 to \$49,940.00, an increase of \$21,300.00.</li> <li>B. Reference EXHIBIT 1, SECTION 5 - TOTAL AGREEMENT SUM. The TOTAL AGREEMENT SUM is changed from an NTE amount of \$30,000.00 (\$28,640.00 Basic Services and NTE amount of \$1,360.00 Reimbursable Expenses) to an NTE amount of \$51,300.00 (\$49,940.00 Basic Services, and NTE amount of \$1,360.00 Reimbursable Expenses) an increase of \$21,300.00.</li> <li>C. The Contract Scope of Services is modified to include the performance by Engineer of the additional Basic Services as outlined in Consultant's Supplemental Agreement (Attachment A).</li> </ul>					
Except as provided herein, all terms, conditions, and provisions of the document referenced above as heretofore modified, remain unchanged and in full force and effect.					
Note to Vendor:   X   Complete and execute (sign) your portion of the property	ne signature block section below for all copies and return all signed ( . Retain for your records.	copies to Travis County.			
LEGAL BUSINESS NAME: Wiss, Janney, Elstr	ner Associates, Inc.	□ DBA			
BY: SIGNATURE		□ OTHER			
BY: Aaron Sterns PRINT NAME		DATE:			
TTTLE: Senior Associate  ITS DULY AUTHORIZED AGENT	276-7-10-10-10-10-10-10-10-10-10-10-10-10-10-	November 25, 2014			
TRAVIS COUNTY, TEXAS		DATE:			
BY: 416 CYD . GRIMES, C.P.M., CPPO, TRAVIS COU	NTY PURCHASING AGENT				
TRAVIS COUNTY, TEXAS  BY:  SAMUEL T. BISCOE, TRAVIS CO	FT	DATE:			

#### Attachment A

#### Additional Basic Services

#### Task 5 - Geotechnical Investigation

During the design of the original structure, the geotechnical engineer for the developer obtained borings to a depth of 10 feet below grade. During construction, the geotechnical engineer observed wet, weak soils in the channel bed and recommended replacing the existing soils with engineered fill and a filter fabric liner. As stated in our draft Investigation Report, dated October 22, 2014, WJE observed no evidence of such subgrade improvements. Based on our work experience and discussions with the Texas Department of Transportation (TxDOT), we have found that the use of spread footings to support three-sided bridge/culvert structures places the structure at an undue risk of collapse due to footing scour; therefore, we recommended the use of drilled shaft foundations to mitigate the risk of future scour. As such, WJE will coordinate for soil testing by obtaining borings up to a depth of 70 feet below grade along each bank of the channel to provide necessary soil properties for deep-foundation design.

### Task 6 - Hydrological Condition Review

During our site investigation, WJE observed that concentration of the outflow from an upstream storm water detention area, combined with the absence of scour mitigation and channel protection measures, likely contributed to the scour and undermining of the original structure. At this time, we have not observed any documentation for a scour analysis to guide the use of such scour mitigation and channel protection measures. We understand that Travis County wishes to consider the use of a discrete-block-on-grade system to protect the inlet and outlet of the rehabilitated channel. As such, WJE will arrange for a subconsultant to review the current hydrological condition of the site in order to recommend and design the protective measures necessary to prevent recurrence of scour and undermining of the new culvert.