

## Memorandum

**To:** PPO Subcommittee  
**Re:** Waterloo Levee Design Contract Amendment  
**Date:** August 5, 2009  
**From:** Amanda Grint, Water Resources Engineer

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The Village of Waterloo signed an agreement with the Federal Emergency Management Agency (FEMA) to designate the Waterloo levee as a Provisionally Accredited Levee (PAL). The PAL designation requires that all necessary documentation to support the levee accreditation will be submitted by January 15, 2010. This allows 24 months for the Village to study the existing levee and bring the levee into compliance or FEMA will take steps to remap the area to designate the Village as a flood prone area without levee protection.

In June of 2008, the Board entered in to an interlocal agreement with the Village to cost share (50/50) on the design of the levee improvements in order to certify the levee. JEO Consulting Group was retained by the Village to perform the study and levee design for \$397,000. In their work to complete an updated hydraulic analysis of the Elkhorn River, JEO discovered that a railroad bridge had been modeled incorrectly in the published FEMA flood study. The revised study shows increases in flood elevations of 3-4 feet in some locations, creating a substantial change to the length of levee needing to be raised and impacts to the potential costs. The increase in scope to design for these substantial changes was noted at a project update given to the PPO Subcommittee and Board in February 2009. The contract amendment detailing this additional work is attached for consideration. The scope changes increase the contract amount by \$41,000 for a total of \$438,000. The Village of Waterloo requests that the District continue the equal share of design costs by contributing fifty percent of the contract amendment, \$20,500, making the total District cost share equal to \$219,000.

The scope of services includes:

- Design of an additional 4000 linear feet of levee improvements
- Title work and easements
- Additional interior drainage design
- Additional public meeting and outreach
- Permitting and requested information for Union Pacific Railroad
- Additional project meetings and coordination
- Removal of task to complete Conditional Letter of Map Revision for FEMA

➤ **Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute a revised interlocal agreement with the Village of Waterloo that provides for the equal sharing of the enclosed Contract Amendment from JEO Consulting Group for the Design of Levee Improvements for an increase in the maximum fee to \$219,000 subject to changes deemed necessary by the General Manager and District Counsel.**

**AMENDMENT TO AGREEMENT  
WATERLOO LEVEE IMPROVEMENTS  
JEO PROJECT NO. 613D5  
WATERLOO, NEBRASKA**

**REFERENCE:** Professional Services/Consultant Agreement effective June 9, 2008. This amendment refers to the existing design services agreement. Except as noted below all other terms and conditions remain unchanged.

**AMENDMENT NO. 1:** The additional scope of services described below will be performed for this project.

**AMENDED TASK DESCRIPTIONS:** Tasks as described within the current scope of services will be amended as follows:

**Task 1: Floodplain Study:**

- 1.2 – Additional services have been completed related to analysis of multiple hydraulic scenarios and responses to QC comments by HDR, Inc. This results in a fee increase of \$3,000.00
- 1.6 - QA/QC by HDR, Inc. as noted is deleted due to the Village's separate contract with HDR. This results in a fee decrease of \$7,500.00 for this item.
- The net JEO project fee adjustment to this task is \$-4,500.00.

**Task 2: Geotechnical Evaluation**

- 2.1.5 - QA/QC by HDR, Inc. as noted is deleted due to the Village's separate contract with HDR. This results in a fee decrease of \$5,000.00 for this item.
- 2.2.1 and 2.2.2 - Additional services to be completed by Terracon Consulting Engineers and Scientists for additional borings to be completed to evaluate proposed levee alignment as well as additional plan review and recommendation efforts to be completed in conjunction with the proposed section of flood wall in the northeast corner of the Village. This results in a fee increase of \$5,000.00.
- The net JEO project fee adjustment to this task is \$0.00.

Task 3: Preliminary Design

- 3.4 – Additional design efforts to be completed by JEO Consulting Group, Inc. based on additional levee design length of approximately 4000 linear feet +/- is added based on flood study results, which affects all sub-tasks. This results in a project fee increase of \$27,500.00.
- 3.4.8 – Additional services by JEO Consulting Group, Inc. will be completed to review title search information and reconcile existing easements and property alignments to ensure proper easement descriptions are in place for the improved levee. This includes field work necessary for completion of this task. This results in a project fee increase of \$22,500.00.
- 3.4.10 – QA/QC by HDR, Inc. as noted is deleted due to the Village's separate contract with HDR. This results in a fee decrease of \$7,500.00 for this item.
- The net JEO project fee adjustment to this task is +\$42,500.00

Task 4: Interior Drainage Study

- Item 4.4 – Design is added to this task in order to accommodate additional design tasks necessary based on internal drainage study results. These design tasks include evaluation of ponding area adjustment due to size deficiencies of some existing ponding areas along with evaluation of potential mobile pumping systems for internal drainage management purposes. This results in a fee increase of \$4,000.00.
- Note that these adjustments do not relate to potentially needed study and improvement design for historical internal drainage concerns at Homes at River Road. This item remains excluded from the scope of services.
- The net JEO project fee adjustment to this task is +\$4,000.00

Task 5: CLOMR

- Portions of this task not yet completed are deleted in their entirety. This results in a fee decrease of \$17,910.00.
- The net JEO project fee adjustment to this task is -\$17,910.00

Task 6: Final Plans, Specifications, and Cost Opinion

- 6.1.9 - QA/QC by HDR, Inc. as noted is deleted due to the Village's separate contract with HDR. This results in no fee change for this item as all QA/QC plan review fees were included under task 3.4.10.
- The net project fee adjustment to this task is \$0.00.

Task 8: Public Involvement

- 8.1 – Additional services needed in order to fulfill project public meeting obligations have been performed and are anticipated for the final public meeting. This results in a fee increase of \$8,910.00.
- The net JEO project fee adjustment to this task is +\$8,910.00

Task 10: Permitting

- 10.1 - Additional services needed in order to fulfill more extensive than originally anticipated project stakeholder coordination obligations and associated comment responses. This includes additional flood study analysis requested by the UPRR to accommodate their bridge hydraulics requirements. This results in a fee increase of \$4,500.00.
- The net JEO project fee adjustment to this task is +\$4,500.00

Task 11: Key Design Meetings

- 11.1 - Additional services needed in order to fulfill more extensive than originally anticipated project coordination and design meeting obligations. This results in a fee increase of \$3,500.00.
- The net JEO project fee adjustment to this task is +\$3,500.00



04/23/2009

**AMENDED PROJECT FEE**

JEO will provide the services described according to an hourly rate not to exceed \$41,000.00 of net additional JEO project fees. Updated project task and fee amounts will be as described below; adjusted amounts for each item are underlined as applicable.

<b>FLOODPLAIN STUDY</b>	<b><u>\$56,830.00</u></b>
<b>GEOTECHNICAL EVALUATION</b>	<b><u>\$20,000.00</u></b>
<b>DESIGN (Tasks 3,6,8,9,10, and 11)</b>	<b><u>\$329,220.00</u></b>
<b>CONDITIONAL LETTER OF MAP REVISION</b>	<b><u>\$2,890.00</u></b>
<b>INTERIOR DRAINAGE EVALUATION</b>	<b><u>\$18,640.00</u></b>
<b>CONSTRUCTION BIDDING SERVICES</b>	<b><u>\$10,000.00</u></b>

**TOTAL AMENDED FEE: \$437,580.00**

Owner will be billed monthly for services to date. Invoices are due upon receipt. JEO will provide additional services at your request according to the attached 2009 hourly rate schedule.

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Stanley E. Benke, Jr., Village Board Chair  
Village of Waterloo

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Lalit Jha, PE/CFM  
Vice President of Water  
Resources Engineering  
JEO Consulting Group, Inc.