



AGENDA MEMORANDUM

Future Item for the City Council Meeting of December 13, 2016
Action Item for the City Council Meeting of December 20, 2016

DATE: December 5, 2016

TO: Margie C. Rose, City Manager

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Engineering Construction & Design Amendment Contracts

O.N. Stevens Water Treatment Plant
Intermediate Sludge Removal Phase I
(Capital Improvement Program)

CAPTION:

Motion authorizing the City Manager or designee to execute Amendment No. 1 to the engineering design contract with LNV, Inc. of Corpus Christi, Texas in the amount of \$91,480 for a total restated fee of \$186,947 for the O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase I for design, bid and construction phase services. The motion also authorizes execution of a construction contract with American Process Group, Inc. of Tacoma, Washington in the amount of \$3,750,000 for the Base Year with an additional \$3,750,000 Option Year for a total not to exceed amount of \$7,500,000 for the O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase I. (Capital Improvement Program)

PURPOSE:

The purpose of this agenda item is to obtain authority to execute a unit price construction contract and execute an engineering contract amendment needed for the O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase I.

CIP Description: O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase 1

The design of the North and South Sludge Lagoons Infrastructure was deemed necessary for the construction of a sludge line extension and sludge lagoon access roads. This project provides an interim solution for pumping sludge to the East and West Pollywogs ponds and will eventually construct a permanent transfer line conveying sludge from the North/South Lagoons to the new Solids Handling and Disposal Facilities. This project also addresses the sludge lagoon access roads which are heavily deteriorated and are in need of rehabilitation to accommodate heavy equipment during maintenance and dredging operations. The implementation of this project will remove sludge from the North/South Lagoons by installing and utilizing the FLUMP equipment and constructing a new transfer line that will convey sludge to Lagoon No. 7. This project also includes cleaning the sludge deposit in Lagoon No. 7 and a feasibility study for Lagoon No. 8 to meet operational needs at the O.N. Stevens Water Treatment Plant.

BACKGROUND AND FINDINGS:

Potable water treatment removes suspended solids from the raw water supply by chemical and physical separation. Alum sludge is a by-product of the water clarification process. That sludge is accumulated at the O.N. Stevens Water Treatment Plant (ONSWTP) site in various ponds or basins. The last major dredging project to remove accumulated solids was completed in 2000. The sludge accumulation at O.N. Stevens is approaching levels where it can soon begin to interfere with the ability to properly treat water.

On May 24, 2016, City Council awarded an engineering services contract to LNV to implement a short-term sludge removal process from Lagoon 7 using geo-tubes. During the design process, staff concluded that this method would not achieve the intended results. An alternative solution to dredge, dry and haul away sludge for disposal was therefore recommended. This action is intended to address the current sludge accumulation in Lagoon 7. At the same time a longer range sludge management plan is being developed as described in the adopted Capital Improvement Plan.

This item provides the award of the construction contract that includes dredging Lagoon 7, dewatering the solids and hauling the dewatered sludge material to the Cefé Venezuela Landfill. This item also provides for the engineering services with bid phase support for the dredging project. The construction project was developed as a multi-year award, unit priced contract with an annual cost ceiling due to budgetary constraints. This procurement strategy allowed the City to obtain very competitive pricing and will allow us to maximize the amount of sludge removal that can be achieved within the available budget. All payments will be based on actual quantities measured by weight at the Cefé Valenzuela Landfill. The contract will be awarded as a base year plus one optional year at the same unit prices. Staff will award the second year based on the contractor's performance during the base year period. The optional year will be administratively authorized by the City Manager or designee within the available funding.

The construction project was originally conceived as a unit priced contract with a budget and award up to \$4,000,000 for each one-year performance period. This allows the City to achieve the maximum sludge removal within the available funds. The bid quantities included for the bid documents were the minimum levels required to ensure continued plant operations while a more permanent sludge management solution is implemented. The lower unit bid prices will allow the project to achieve greater volumes of dredging and to restore greater capacity in the lagoons within the available funding. Staff is recommending award at \$3,750,000 rather than \$4,000,000 to allow for other supporting site and electrical work that is required by this effort. That supporting work will be accomplished by separate contracts.

On November 30, 2016, the City received proposals from six (6) bidders. One bid was determined non-responsive due to incomplete submittal of required documents. The remaining 5 bids were deemed responsive bids and presented in the following table:

CONTRACTOR	TOTAL BASE BID
American Process Group, Inc. Tacoma, Washington	\$2,310,117.36
Denali Water Solutions LLC Russellville, Arkansas	\$2,382,409.00
Merrell Bros., Inc. Kokomo, Indiana	\$2,847,400.00
Synagro of Texas – CDR, Inc. Baltimore, Maryland	\$3,139,000.00
Dredgit Environmental Corporation Houston, Texas	\$3,717,000.00
Veolia (NON-RESPONSIVE) La Porte, Texas	\$4,000,000.00
Engineer's Opinion of Probable Construction Cost-Base Year	\$4,000,000.00
* Note: The unit quantities outlined in the bid documents were for evaluation purposes.	

The evaluation of the apparent three (3) low bidders noted that all three did not fully comply with past experience of five similar projects within five years. However, the City's consultant and staff were able to determine each of the three (3) bidders had other relevant experience to demonstrate successful experience and capacity to perform the work. Therefore, American Process Group Inc. was determined as the lowest responsive and responsible bid and qualified for this project.

ALTERNATIVES:

1. Authorize the execution of the engineering design contract. (Recommended)
2. Do not authorize the execution of the engineering design contract. (Not Recommended)

OTHER CONSIDERATIONS:

None

CONFORMITY TO CITY POLICY:

Conforms to City Fiscal Policy

EMERGENCY / NON-EMERGENCY:

Non-Emergency

DEPARTMENTAL CLEARANCES:

Utilities Department

FINANCIAL IMPACT:

☐ Operating
 ☐ Revenue
 ☒ Capital
 ☐ Not applicable

Fiscal Year 2016-2017	Project to Date Expenditures	Current Year	Future Years	TOTALS
Line Item Budget		5,586,500		5,586,500
Encumbered / Expended Amount		95,467		95,467
This Item (American Process Group)		3,750,000		3,750,000
This Item (LNV, Inc.)		91,480		91,480
Future Anticipated Expenditures This Project		887,785		887,785
BALANCE		761,768		761,768

Fund(s): Water CIP No. 8

Comments: This project requires approximately 365 calendar days with anticipated completion in January 2018. The construction contract will result in the expenditure of an amount not to exceed \$3,750,000.

RECOMMENDATION:

City Staff recommends approval of Amendment No. 1 to the engineering design contract with LNV, Inc. of Corpus Christi, Texas in the amount of \$91,480 for a total restated fee of \$186,947 for the O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase I for design, bid and construction phase services and to execute a construction contract with American Process Group, Inc. of Tacoma, Washington in the amount of \$3,750,000 for the O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase I for the total base bid. The construction contract is a one-year base contract with one optional renewal year. The optional year will be administratively authorized by the City Manager or designee based on need and available funding. (Capital Improvement Program)

LIST OF SUPPORTING DOCUMENTS:

Project Budget
 Location Map
 Contract
 Presentation
 Form 1295