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Public Works

City Transit
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MEMORANDUM

Equipment Maintenance
Roadway Maintenance
Collection & Drainage
Building & Grounds
Engineering

To: Brian Stineman, Public Works Director

CC: Greg Jenkins, Interim City Administrator

FROM: Jim Edmond, City Engineer

DATE: April 07, 2020

RE: Request to Enter into Professional Services Agreement to Design Dual Use Redundant Force main (DURF) Project

INTRODUCTION:

Approximately two years ago the City of Muscatine suffered a failure of the force main pumping sewage from the Papoose Lift Station to the Water & Resource Recovery Facility (WRRF). This failure resulted in an event that was reported to the DNR by the City according to the requirements of DNR.

BACKGROUND:

Due to this event the City of Muscatine is under a DNR deadline to design and construct a redundant sewage force main by 2026. Completion of this redundant line will allow the sewage to be shifted to the new main should there be any problems or damage to the existing line. This will allow repairs to be done without the necessity of by passing the pump station.

RECOMMENDATION/RATIONALE:

Staff recommends that Council approve a purchase order for a Professional Services Agreement with Strand and Associates (SA) for an amount not to exceed \$30,000.00 for design of the DURF Project Phase 1. The entire project is estimated to be between 2.5 and 3 million dollars but this Phase 1 work will provide a more accurate programming cost estimate for use in the next budget process along with locking down the route. Total estimated consultant fees for Phase 2 is \$200,000.00.

Note: Consultant shall not proceed to Phase 2 without the written approval from the City.

BACKUP INFORMATION:

1. Professional Services Agreement and sketch

"I remember Muscatine for its sunsets. I have never seen any on either side of the ocean that equaled them" — Mark Twain



Strand Associates, Inc.[®]
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Task Order No. 20-01
City of Muscatine, Iowa (OWNER)
and Strand Associates, Inc.[®] (ENGINEER)
Pursuant to Agreement for Technical Services dated March 30, 2019

Project Information

Project Name: Redundant Force Main Project

Project Description: Study of the existing force main system, review of a new dual purpose redundant force main, relocation of an effluent outfall to the Mississippi River, and associated valving and appurtenances with these improvements.

Services Description: Provide preliminary engineering services including review of existing conditions, initial agency communication and public involvement, and conceptual design.

Scope of Services

ENGINEER will provide the following services to OWNER:

1. Conduct a kickoff meeting that includes collection of existing information, review of the design schedule, and site visits to the Papoose Pumping Station, Water Resource and Recovery Facility, and force main route areas.
2. Review existing force main and facility information provided by OWNER.
3. Provide conceptual design and evaluation of the following project elements:
 - a. Force main alignment.
 - b. Force main disinfection.
 - c. Future facility operations and maintenance.
 - d. Trenchless construction through Canadian Pacific Railway right-of-way.
 - e. Valving and connections.
 - f. Concept-level construction costs for three force main system alternatives.
4. Prepare a preliminary opinion of probable construction cost for OWNER-selected force main route.

Compensation

OWNER shall compensate ENGINEER for Services under this Task Order on an hourly rate basis plus expenses a not-to-exceed fee of \$30,000.

Schedule

Services will begin upon execution of this Task Order, which is anticipated the week of April 13, 2020. Services are scheduled for completion on May 30, 2020.

TASK ORDER AUTHORIZATION AND ACCEPTANCE:

ENGINEER:

STRAND ASSOCIATES, INC.[®]

OWNER:

CITY OF MUSCATINE

Joseph M. Bunker
Corporate Secretary

Date

Diana Broderson
Mayor

Date

