

Strand Associates, Inc.º
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Task Order No. 16-01
City of Manitowoc, Wisconsin (CITY)
and Strand Associates, Inc.® (ENGINEER)
Pursuant to Technical Services Agreement dated April 11, 2013,
and Amendment No. 1 dated June 16, 2015

Project Information

Services Name: 2016 Collection System Infiltration/Inflow (I/I) Program Assistance

WHEREAS CITY recently completed a collection system capacity analysis, and that evaluation noted high levels of I/I during wet weather events; and,

WHEREAS, CITY desires to develop and implement a more aggressive I/I identification and removal program; and,

WHEREAS, ENGINEER is knowledgeable in said engineering services and has available and offers to provide personnel and facilities necessary to accomplish the services within the required time limits of CITY.

NOW, THEREFORE, CITY and ENGINEER agree as follows:

Scope of Services

ENGINEER will provide the following services to CITY:

- 1. Assist CITY with the development of a flow metering program which will include a recommendation as to the number and placement of flow meters within the collection system.
- 2. Assist CITY with the installation of flow meters.
- 3. Provide weekly preliminary data analysis from CITY-provided downloads after CITY performs weekly meter checks.
- 4. Review data and provide CITY with comments regarding flow meter performance. CITY shall be responsible for any field adjustments required to restore proper flow meter operation.
- 5. Perform final data analysis on flow metering data received from CITY. Analysis will address collection system flow characteristics for dry and wet weather operational conditions.
- 6. Prepare a list of recommended I/I identification and removal activities for CITY to implement.
- 7. Prepare a draft report documenting the flow metering results and the I/I recommendations. Provide CITY one copy of the draft report in a portable document format (PDF) file and five hard copies for review.
- 8. Meet with CITY to present the draft report and obtain input.

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9. Incorporate CITY's review comments as appropriate into the final report. Provide CITY with one copy of the final report in a PDF file and ten hard copies.

Service Elements Not Included

In addition to those listed in the associated Technical Services Agreement, the following services are not included in this Task Order. If such services are required, they will be provided as noted.

Traffic Control: All traffic control-related services for the project shall be provided by CITY.

Compensation

CITY shall compensate ENGINEER for Services under this Task Order on an hourly rate basis plus expenses an estimated fee of \$22,800.

Schedule

Services will begin upon execution of this Task Order, which is anticipated on February 15, 2016. Services are scheduled for completion on December 31, 2016.

IN WITNESS WHEREOF the parties hereto have made and executed this Task Order.

STRAND ASSOCIATES, INC.®	CITY OF MANITOWOC
By: Matthew S. Richards Corporate Secretary Date: //27/14	By: Name: Title:
	By: Name: Title:
	Date: