DRAFT Strand Associates, Inc.®

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Task Order No. 22-02
Racine Water Utility (OWNER)
and Strand Associates, Inc.® (ENGINEER)
Pursuant to Agreement for Technical Services dated December 4, 2019

Project Information

ASSOCIATES*

Excellence in Engineering
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Services Name: Water System Asset Management Plan-Phase 1

Services Description: Prepare an asset management plan (AMP) of the water system in accordance with the standards of the Wisconsin Department of Natural Resources (WDNR) Safe Drinking Water Loan program submittal.

Scope of Services

ENGINEER will provide the following services to OWNER:

- 1. Review OWNER-provided existing data, including the following:
 - a. The current water distribution model to be viewed using or converted to either Bentely WaterGEMS or Innovyze InfoWater software.
 - b. Geographic information systems (GIS) data including water mains with material, diameter, and installation year; hydrants; isolation valve locations; booster stations; elevated storage; ground storage; water treatment plants; two-foot contour elevations; work order histories and main breaks; and pressure zone delineations.
 - c. As-built drawings and facility manuals of water system vertical assets including booster stations, elevated and ground storage, and water treatment plants. Provide summaries of equipment capacities, manufacture, material, and year installed or replaced.
 - d. Water storage facility tank inspection reports from the last 15 years.
 - Water treatment facility and booster pumping station operation reports from the last ten years.
- Attend a virtual kickoff meeting to exchange data with OWNER and review project scope, project milestones, and deliverables.
- Conduct up to two monthly virtual progress meetings with OWNER during Phase 1 to discuss project progress, budget, and schedule; and to review comments with draft project deliverables.
- Prepare a GIS water main pipeline inventory and condition assessment.
 - a. Conduct a gap analysis on OWNER-provided GIS database. Review pipeline inventory and associated missing pipeline data. Provide up to 12 hours to assist OWNER with the data gaps.

OWNER REVIEW

Racine Water Utility Task Order No. 22-02 Page 2 July 8, 2022

DRAFT

- b. Prepare a basic criteria matrix to assist in evaluating the condition rating of pipelines using age and material.
- Prepare a GIS shapefile of the basic conditions ratings for pipelines and provide for OWNER's use.
- d. Prepare a condition rating table of all system pipelines that summarize general characteristics of each pipeline in accordance with the standards of the WDNR AMP.
- 5. Prepare a water facility and equipment inventory and condition assessment for up to 25 facilities.
 - a. Prepare facility and equipment asset inventory tables that summarize general characteristics of each facility and provide to OWNER for additional assets and for a preliminary condition rating.
 - b. Attend a meeting with OWNER to review and update the tables.
 - c. Prepare a condition rating table of facility and major equipment assets in accordance with the standards of the WDNR AMP.
- 6. Update distribution service area and treatment plant schematics and asset location maps to summarize the water system. Provide two copies of the public water system maps to the WDNR in accordance with Wisconsin State Code, Chapter NR 810.26 (2), and four copies to OWNER.
- 7. Develop a Phase 1 draft letter report. Meet virtually with OWNER to discuss the draft report.
- Incorporate OWNER's review comments, as appropriate. Prepare a final letter report and submit to OWNER.

Compensation

OWNER shall compensate ENGINEER for Services under this Task Order on an hourly rate basis plus expenses an estimated fee of \$32,500.

Schedule

Services will begin upon execution of this Task Order, which is anticipated the week of July 25, 2022. Services are scheduled for completion on December 30, 2022.

TASK ORDER AUTHORIZATION AND ACCEPTANCE:

ENGINEER:

OWNER:

STRAND ASSOCIATES, INC.®

RACINE WATER UTILITY

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Date

Mike Gitter, P.E.
Interim General Manager

Date

Joseph M. Bunker Corporate Secretary