Via Electronic Mail

2/22/2024

Guerrier and Halnon 333 West Street P.O. Box 235 Milford, MA 01757-0235

RE: Request for Proposal/Quotation – Survey Services for Cohasset Resiliency Project

Dear Guerrier and Halnon,

We request a proposal for Survey services for the electrical and sewer coastal resiliency improvements at the Cohasset Wastewater Plant, 43R Elm Ct, Cohasset, MA 02025. The proposed survey location for the project is outlined on the attached Limits of Survey Plan.

## BACKGROUND

The goal of this project is to complete the coastal resilience design for the Town of Cohasset's critical electrical equipment at the WWTP and the sewer collection system upstream of the WWTP. This work will include electrical work raising existing utilities above flood elevations outlined in a past study completed by the Woods Hole Group.

## **SCOPE OF SERVICES**

Survey criteria shall include, but is not limited to:

- 1. Provide ground survey of the project area in Figure 1.
- Provide permanent horizontal and permanent vertical benchmarks (T.B.M.'s) at appropriate locations, including inside the wastewater treatment building.
- Compile detailed field survey of all physical features and structures walks, back of sidewalk, mailboxes, utility castings, utility markings, walls, fences, vegetation including individual trees (6-inches or greater in diameter at breast height) and treelines, abutments and signs.
- 4. Spot elevations shall be provided at 50 foot intervals and at key points, such as significant topographic break points, utility structures, driveway openings, centerline grades at drives, doorway entrances including steps or ramps, top and bottom of curb. Plan shall be at a scale of 1 inch equals 40 feet horizontal. For topographic mapping, contours shall be mapped at 1-foot interval throughout the project area.





- 5. Property lines from GIS (including street right-of-way, sidelines and property monumentation). Survey all visible property monumentation and adjust property lines to match.
- 6. Right-of-way survey shall include the placement of all easements and other encumbrances and deed restrictions onto the Plans, as recorded at the Registry of Deeds, as well as identifying all encroachments within the right-of-way, and all existing monumentation identified during survey. Surveyor shall be responsible for all appropriate record research necessary to complete requested work.
- 7. Edge of pavement for streets, highways, roads, and driveways (differentiating between paved, concrete, and gravel); compile Right-of-Way Information.
- 8. Curbing and sidewalks (differentiating between concrete and other).
- 9. Landscaped areas (differentiating between features).
- 10. Note: Wetland flagging survey to be completed by others.
- 11. Front faces of all houses, buildings, and other structures; compile and provide property street numbers, map & lot number, structure description and parcel lines.
- 12. Collect complete underground utilities information including but not limited to water, sewer drainage, gas, high pressure gas, electric, and telecommunications. Surveyor shall make all necessary accommodations for researching underground utilities and coordinating with and/or contracting with field marking/utility locating companies.
- 13. Manholes (including manhole structure diameter, all pipe invert elevations, pipe size, pipe material, sump depth), hand holes, valves, shut-offs and other utility structures pertaining to mains and services of water, sanitary sewer, storm sewer, natural gas pipelines, cable lines, telephone lines, electric lines, and fiber optic cables, and any other public or private utilities.
- 14. Utility poles with local utility company enumeration.
- 15. Provide detail survey at all culvert crossings, top bottom, width invert, material of construction. Exit/Entrance locations upstream and downstream.
- 16. Establish horizontal control for the project area in Massachusetts State Plane Coordinates. Survey will be tied into layout/property monuments (where these are visible). Vertical Control will be based on the North American Vertical Datum of 1988 (NAVD88).
- 17. Boring location.

Surveyor shall be responsible for providing and coordinating Police Detail necessary based on local requirements to ensure safety of survey field crews and for traffic control purposes. Police details to be paid directly by Owner.

## Deliverables



- Download, analyze, and process the data. Prepare a base plan of the project area at a scale of 1-inch equals 40 feet in conformance with W&C's specified layering, symbology and line type requirements and in Civil3D format as previously furnished.
- 2. Survey will be generated at one-foot intervals and electronic drawings and the AutoCAD TIN used to create the completed base plan shall be provided electronically.
- 3. Digital plan stamped and signed by a Massachusetts Registered Professional Land Surveyor.
- 4. Provide a copy of the ground survey as soon as compiled showing physical features, property lines, dwellings and elevations for use by W&C for planning purposes.
- 5. Copies of all applicable deeds and easements researched.

## SCHEDULE

- Complete survey data collection within three (3) weeks of written authorization to proceed.
- Submit a draft Survey within five (5) weeks of written authorization to proceed.
- Submit a final Survey within five (6) weeks of written authorization to proceed.
- Providing working survey once ground survey is obtained.
- Provide final survey once subcontractor verifies survey all QA/QC is completed.