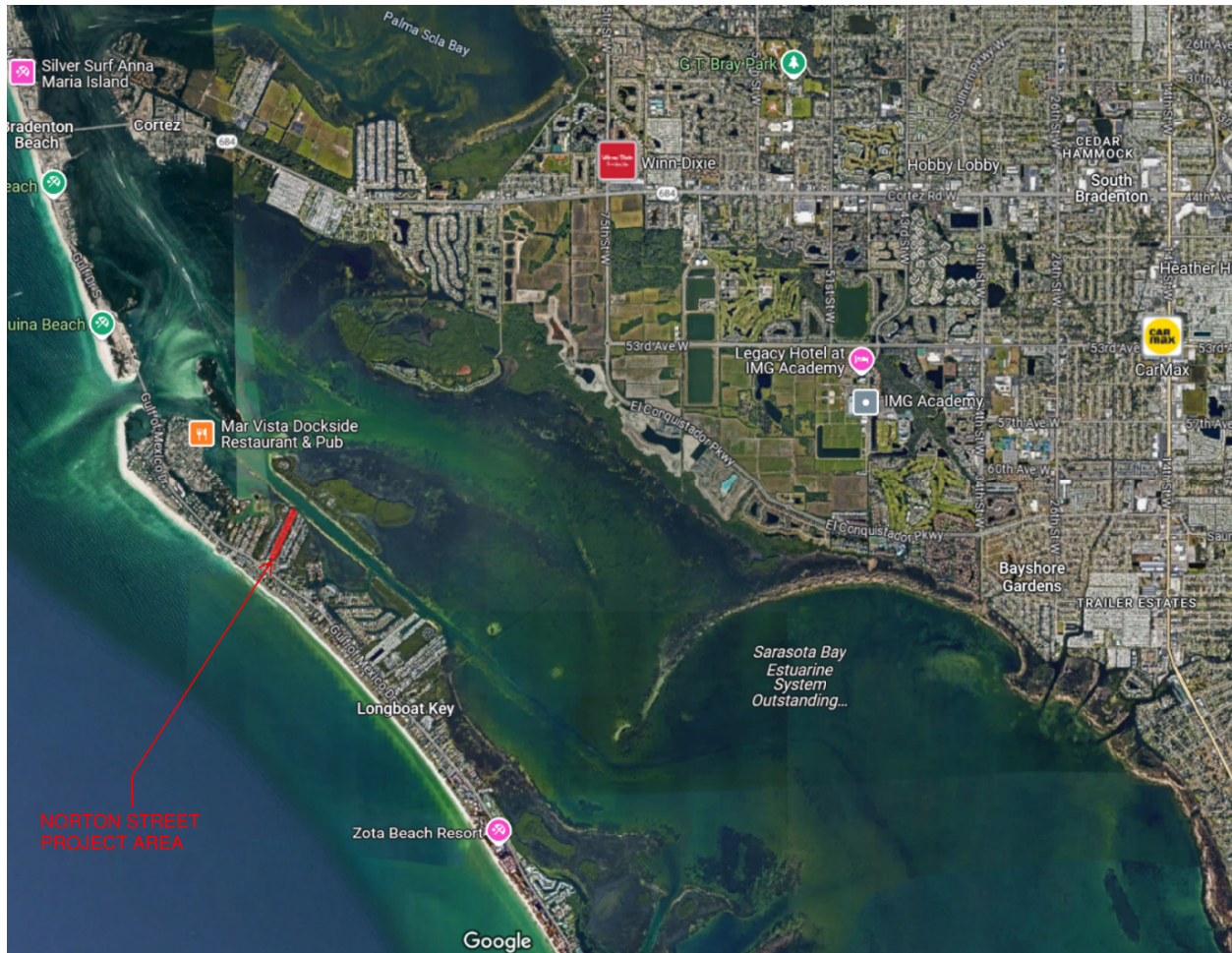


REPORT OF SURVEY SUBSURFACE UTILITY ENGINEERING (SUE) SURVEY

NORTON STREET IMPROVEMENTS
NORTON STREET FROM GENERAL HARRIS STREET TO END OF NORTON STREET
SECTION 23, TOWNSHIP 35 SOUTH, RANGE 16 EAST
MANATEE COUNTY, FLORIDA



Prepared By:

Element Engineering Group

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CERTIFICATE OF AUTHORIZATION No. LB 7831

TABLE OF CONTENTS

- CoverPage 1
- Table of ContentsPage 2
- Type of SurveyPage 3
- MethodologyPages 3 & 4
- Project ControlPage 4
- SourcesPage 4
- General NotesPage 4
- Files List/Project DeliverablesPage 5
- Surveyor's Certificate.....Page 5

Type of Survey

This Survey is a Topographic Survey, Florida Administrative Code (FAC) 5J-17.050(10k).

Scoped items

Perform a topographic survey to collect Subsurface Utility Engineering (SUE) Designating and Locating, consistent with American Society of Civil Engineers (ASCE) standard 28-22, Standard Guideline for the Investigating and Depicting Existing Utilities. All SUE data was collected by ELEMENT Engineering Group professional subsurface utility and surveying staff, using industry recognized procedures and equipment.

Methodology

Field Survey

Horizontal and vertical control points were provided by Hyatt Survey Services, Inc. in an AutoCAD file named "Norton.dwg" provided via e-mail on July 23, 2024. Control coordinate values were extracted from the provided drawing file.

Topographic data was collected by utilizing a Trimble S5 robotic total station paired with Trimble Access data collection software.

Data Processing

Topographic data located with Trimble S5 robotic total station was downloaded and imported into TBC version 2023.11 for analysis and adjustment.

Project Control

Horizontal & Vertical Datums

This survey was performed using US Survey Feet on the following Horizontal and Vertical Datums:

Horizontal Datum: The coordinates for this project are based on the Florida State Plane Coordinate System, Transverse Mercator Projection, West Zone (0902), North American Datum of 1983, Adjustment of 2011 (NAD83/2011).

Vertical Datum: North American Vertical Datum of 1988 (NAVD 88).

General Notes

1. Type of Survey: Topographic Survey, Florida Administrative Code (FAC) 5J-17.050(10k).
2. This survey report or the copies thereof are not valid without the digital signature and seal of a Florida licensed surveyor and mapper.
3. Last date of Field Survey: December 3, 2024.
4. This report is not valid unless accompanied by "Norton SUE 2024 12 13.dwg.dwg".
5. The Topographic Survey file "Norton SUE 2024 12 13.dwg.dwg" is intended to be plotted or displayed at a scale of 1-inch equals 40 feet (1" = 40").

Files List/Project Deliverables

The following items are delivered to the County on electronic media with this report. Neither the report nor the items listed below are complete without the other.

Digital copy of design survey files (AutoDesk Civil 3D DWG format)

1. Norton SUE 2024 12 13.dwg.dwg (3D survey file)
2. File "Norton SUE Survey Report.pdf"

Surveyor's Certificate

Certified to: Kimley Horn & Town of Longboat Key

I hereby certify that this survey and all files herein, are a true and accurate representation of a field survey made under my responsible charge, and that to the best of my knowledge meets the Standards of Practice as set forth by the Board of Professional Surveyors and Mappers in Rule Chapter 5J-17 of the Florida Administrative Code.

Element Engineering Group, LLC
Licensed Business No. 7831



Edward P. Connolly, PSM
Florida Professional Surveyor & Mapper No. 6911

Date