



**AVIROM & ASSOCIATES, INC.**  
SURVEYING & MAPPING  
BOCA RATON / STUART / KEY WEST

Mr. Ryan Stachurski  
Multimodal Transportation Coordinator  
**City Of Key West**  
1300 White Street  
Key West Fl. 33040

*Via E-Mail: [ryan.stachurski@cityofkeywest-fl.gov](mailto:ryan.stachurski@cityofkeywest-fl.gov)*

*Re. Von Phister Street, City of Key West, Florida (Our Job No. 11406)  
Topographic Route Survey*

Dear Ryan:

We shall perform a topographic route survey of existing conditions along Von Phister Street within the area delineated in blue on the attached map, referenced as Exhibit A below.

*Limits of Survey:*

The bandwidth shall be the full right-of-way width of all streets and will extend 50-feet beyond the centerline intersection in all directions.

*1. Topographic Route Survey:*

Obtain sufficient elevations to define the existing topography in detail, including significant grade changes in elevations.

Cross-sections shall be performed to capture centerline grade, edge of pavement grades, sidewalk grades, high/low points with intermediate grades obtained at all grade breaks and driveways.

The elevations shall be referenced to the North American Vertical Datum of 1988 (NAVD 88) and horizontally referenced to the North American Datum of 1983 (NAD 83-2011) Epoch 2010.00 and tied to the National Geodetic Survey benchmark network. Additionally, we shall establish a minimum of sixteen (16) benchmarks within line of sight to utilize for future construction. We shall calculate and place the vertical conversion factor from NAVD 88 to the National Geodetic Vertical Datum of 1929 (NGVD 29) on the face of the map.

We shall locate all above ground improvements including, but not limited to pavement, ramps, driveways, buildings, steps, gates, edge of curb, top of curb, flow line of curb, edge of pavement, centerline of pavement, back of walk, face of walk, parking pay stations and above ground evidence of utility.

We will obtain rim elevations, pipe size, material and inverts of sewer and drainage structures where accessible. Due to the nature of obtaining the data where the structures are in use and the actual inverts may be obscured, the information obtained will be the best approximation of the true measurements. It is the responsibility of the end user to verify the diameter and material utilizing as-built drawings or other resources prior to construction. Utility locations will include fire hydrants, water valves, meter boxes, vaults and electrical outlets, power poles and overhead wires. We will locate wells and main irrigation valves, but will not locate individual sprinkler heads.

There is no provision for the excavation, probing or location of underground utilities structures or improvements. Utilities shall be located to the extent that they are above ground and visible. *This proposal does not include the contracting of an underground utility locating service to locate the subsurface utilities.*

The survey data will be reported to the nearest 0.05 feet for horizontal locations and for the vertical component, 0.1 feet spot elevations on ground shots and 0.03' spot elevations on paving or hard surfaces, with all work performed in accordance with the Standards of Practice as defined in Chapter 5J -17, Florida Administrative Code.

We shall research the Monroe County Property Appraiser's database to delineate the current ownership lines within our survey. We will graphically delineate right-of-way lines and lot lines from information obtained by this firm from recorded plats and/ or right -of-way maps, readily available from the Public Records of Monroe County at the time of the survey. This information will be spatially placed within the digital file of the topographic survey, based on recovered monumentation to depict the lines relative to the topographic locations. This is not a boundary survey and the information should not be relied upon as such.

There is no provision to perform boundary surveys or surveys to resolve conflicts, ownerships or occupation issues relative to the recorded instruments. It is strongly recommended that if the design is contingent on accurate boundary placement and especially prior to construction, a boundary survey should be performed to establish the deeded lines. We will not be responsible for the misuse of the topographic survey for purposes it was not intended.

*Deliverables:*

1. Provide a digitally signed and sealed copy of the survey in PDF format.
2. AutoCAD 2018 or lower format file of the above.
3. ASCII file and a LandXML file of the data points.

*Clarifications:*

- This proposal is based on mobilization by our field crew from our corporate office in Boca Raton to service the project.
- Requirements to the survey requested by governmental agencies that are more stringent than Standards of Practice as set forth in Chapter 5J-17 FAC pursuant to Section 472 Florida Statutes will be an additional expense.

*Timeframe:*

After receipt of an executed contract or P.O. we can mobilize to the site within five working days and have the work completed within forty working days after mobilization. Mobilization is dependent on the availability of accommodations for our field crew.

*Fee:*

The itemized fee to provide the above surveying services shall be a lump sum amount:

1. Establish Vertical Controls (2-person Survey Field Crew @ \$140.00/hr)	\$ 5,600.00
2. Recover R/W Monuments (2-person Survey Crew @ \$140.00/hr) .....	\$ 4,200.00
3. 3D LiDAR Scan (Crew with Scanner @ \$185.00/hr) .....	\$20,350.00
4. LiDAR Data Extraction (Senior CADD @ \$125.00/ hour) .....	\$41,875.00
5. Senior Professional Land Surveyor (5 hours @ \$150.00/ hour) .....	\$ 750.00
	TOTAL .....
	\$72,775.00

Thank you for the opportunity to submit this proposal. Should you have any questions, please contact me accordingly.

Respectfully,



Keith M. Chee-A-Tow, P.L.S.  
Project Surveyor

## EXHIBIT A

