AVIROM & ASSOCIATES, INC.
SURVEYING & MAPPING

May 28, 2013

VIA E-mail: KOlson@keywestcity.com

Ms. Karen M Olson
Special Projects Designer
City of Key West Engineering Services
3140 Flagler Ave
Key West, FL 33040

RE: Virginia Street, City of Key West
Establish Right-of-Way and Topographic Surveying Services

Dear Karen:

In accord with your request, the following proposal for the above referenced project is submitted for your consideration:

Limits:

The route shall be along the full right-of-way width of Virginia Street from the intersection of Verela Street, proceeding northeasterly to the intersection of Jose Marti Drive. The bandwidth shall extend 1 foot beyond the right-of-way of Virginia Street and extend 50 feet beyond the centerline in all directions at all street intersections.

Scope:

Topographic Route-Of-Line Survey

1. Obtain data along the above described route with full bandwidth sections taken every 25 feet, increasing to every 5 feet at all quadrants of street intersections for a total distance of 30 feet.
2. Establish a minimum of twelve (12) National Geodetic Vertical Datum of 1929 (NGVD 29) benchmarks along the route, referenced to the National Geodetic Survey published Benchmark Network. The benchmarks shall also be referenced horizontally to the North American Datum of 1983 (NAD 83), current adjustment and tied to the National Geodetic Survey Geodetic Control Network. The vertical and horizontal controls (nail & disk) set shall be placed along the physical constructed centerline of paving, including the approximate centerline intersection of each road intersection. The controls shall be referenced on the drawing, together with its corresponding horizontal and vertical values.

3. We shall locate all above ground improvements including, but not limited to pavement, ramps, driveways, steps, doors, fences, gates, top of curb, bottom of curb, flow line, edge of pavement, bottom of gutter, front of walk, back of walk and above ground evidence of utility. We will obtain rim elevations of utility structures; however no inverts are required as part of this project. Utility locations will include fire hydrants, water valves, meter boxes, vaults and electrical outlets. We will locate 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.

4. We shall locate all trees including palms with a caliper diameter of 4 inches or greater at breast height, all specially protected trees (e.g. lignum vitae) and delineate shrub masses including perimeter hedges. *(The species of trees will be identified to the best of knowledge and ability of the surveyor, without the benefit of an arborist or biologist*.)

Boundary Retracement of the Road Right-of-Way

1. We shall obtain all recorded plats and right-of-way maps to establish the boundary lines of the road right-of-way of Virginia Street. The work would consist of gathering boundary control evidence in the field (existing monumentation); analyzing the recovered evidence; and combined with the materials obtained during research we will make a determination of the location of the right-of-way corridors. The right-of-way will be monumented at the block corners after a determination has been made as to its location. We will produce a signed and sealed certified drawing delineating the evidence recovered and positions of the monumentation of the blocks. We shall also include a Surveyor's Report stating the methodology and analysis of the determination of the right-of-way corridors.
2. We shall establish stationing every 100 feet along the centerline of the right-of-way with a nail and tin tab.
3. All existing private improvements located within the right-of-way shall be labeled (encroachments) and a corresponding distance shown relative to the right-of-way line.

Deliverables:

Four (4) signed and sealed hard copies of the survey and survey report shall be furnished to the client, together with an AutoCAD (2008 or lower) digital drawing file created in Autodesk Land Development Desktop.

The drawing scale shall be at 1"=20'.

Timeframe:

Topographic Route-Of-Line Survey

We can mobilize within 48 hours after receipt of a Notice to Proceed. It is anticipated that it would take approximately one week to complete the topographic survey in the field. After the

fieldwork has been completed the drawing will be delivered within one week.

Boundary Retracement of the Road Right-of-Way

Recovery of the boundary evidence will take approximately four days in the field. After the fieldwork has been completed, boundary analysis and calculations will be performed on the evidence gathered and a determination will be made as to the spatial position of the right-of-way based on the evidence gathered. This segment of work is anticipated to take approximately one week, including boundary analysis, calculations and establishing the right-of-way in the field, together with the centerline reference monumentation.

Cost:

Topographic Route-Of-Line Survey

- Sections taken every 25 feet $12, 600.00
- Sections taken every 50 feet (OPTION) ..... $ 9,620.00

Boundary Retracement of the Road Right-of-Way

Recover boundary evidence, analysis, calculations, survey report and monumentation of the right-of-way, including the centerline every 100 foot $12,192.00

GENERAL

All work shall be completed under the direction of a Professional Land Surveyor registered in the state of Florida. All work shall be conducted using equipment, personnel, and procedures that will insure compliance with the accuracy standards as defined by State of Florida Minimum Technical Standards in 5J-17, FAC. All documents submitted shall bear the Surveyor's seal, signature, and a certificate that all work was done under the Surveyor's supervision and that all information contained in the document is true and is accurately shown. The Surveyor is responsible for quality assurance for the survey work performed on this project.

All survey information shall be recorded in hard bound field books or in electronic data collector files. A map shall be provided by the Surveyor in AutoCAD, Version 2008 (or earlier version) suitable to serve as the base file for the design of the proposed improvements.

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.
Director of Special Projects