WORK ASSIGNMENT NO. 9 PURSUANT TO

THE JULY 13, 2010 AGREEMENT BETWEEN THE

CITY OF VENICE, FLORIDA AND

STANTEC CONSULTING SERVICES, INC.

WHEREAS, on July 13, 2010 the parties entered into an Agreement whereby the CONSULTANT would perform professional services for the OWNER pursuant to an executed Work Assignment; and

WHEREAS, the OWNER wishes to authorize the CONSULTANT to perform professional services concerning **GIS Utility Mapping Services** as more particularly described in the Scope of Services contained herein; and

WHEREAS, the CONSULTANT wishes to perform such professional services.

NOW THEREFORE, in consideration of the premises and mutual covenants contained in the July 13, 2010 Agreement and in this Work Assignment, the parties agree as follows:

1. General description of the project. The work shall generally include the linking of video to features within a GIS and data collection to enhance the accuracy of the GIS.
2. Scope of services to be performed. CONSULTANT shall perform the services described in the Scope of Services attached as Attachment "A".
3. Compensation to be paid. OWNER shall pay the CONSULTANT an amount not to exceed $108,984 as defined in Attachment "A".
4. Time for completion. CONSULTANT shall complete the services specified in this work assignment within 24 weeks of approval of this work assignment in accordance with the schedule in Attachment "A".

IN WITNESS WHEREOF, the parties have executed this work assignment on the ____ day of _____, 2014.

CONSULTANT

James Hale, GIS Manager

Tim Durham, Principal

CITY OF VENICE, FLORIDA

By:_____

Mayor

ATTEST:

_____

City Clerk

Attachment "A" - Scope of Services

GIS Utility Mapping Services

OVERVIEW

UIT (contractor) was selected by the Utilities Department of the City of Venice (Owner) to clean, inspect and video approximately 2,560 gravity line segments. At the end of the job, video files were submitted in two video formats originating from two separate vehicles. Approximately 4,122 videos, 2,400 manholes feature points 2,560 gravity line features were submitted as deliverables.

The owner has identified the need to link videos of the gravity mains to the gravity main database contained within their GIS geodatabase. The owner has identified desired enhancements to their existing GIS geodatabase that need to be performed prior to the linking of the videos. These enhancements involve field data collection, data scrubbing, QA/AC, database structuring and data projection.

Stantec Consulting Services, Inc. (Stantec) has been requested by the owner to provide GPS field data collection and GIS database support services.

SCOPE OF SERVICES

2.1 GPS Field Data Collection and Snap in GIS

Collect horizontal locations on up to 2,100 manholes using sub meter accuracy. Stantec will utilize a Trimble GPS with flood light technology and will utilize area base stations for differential corrections in post processing. Data will be collected in the HARN projection and a minimum of 10 positions will be collected in the field for each feature collected. Up to three attributes will be collected in the field with an additional seven attributes populated in the office. Attributes to be populated in the field will include:

- Location description
- Cover text
- Lid Size

Attributes to be populated in the office will include:

- Facility ID
- GPS date
- Ownership
- Managed by
- Last update
- Last editor
- Data source

Snap existing gravity mains to the newly collected manhole data and ensure the facility IDs of the gravity mains match the respective facility IDs in the manholes. Overwrite the inaccurate existing manhole locations.

2.2 Geodatabase Modification

Identify manholes that were assigned a unique ID by the contractor. Assign these same IDs to the respective manholes within the existing GIS.
Create a related table within the owner's GIS that will house the links to the videos.
Create one to many relationships enabling access to multiple videos for individual gravity main features within an ArcMap session.
Work with owner to eliminate and/or move data to newly created related tables within the sewer and water geodatabases.
Stantec will project the owner's water and sewer geodatabases data from NAD 83 to HARN 83.

2.3 Review and Edit Gravity Video Links

Evaluate approximately 2,560 gravity main line feature segments with approximately 4,122 associated videos and attach the videos to the respective line segments in GIS. Evaluation of the videos is to make the association of the video name and the correct manhole in the GIS. Duplication of manhole ids will be resolved. The evaluation will match the video id with the manhole id and make adjustments where necessary.

This task will enable these videos to be accessed in an ArcMap session.

Connect video points as collected by the contractor to the more accurate gravity main locations produced as a result of GPS work performed by Stantec in 2013.

Create sewer service taps and provide as point features. These service points will be snapped to the respective main. This will enable spatial connectivity with the mains allowing for flow analysis. These will be mapped based on the contractor's data.

Create a point feature class within the sewer feature dataset. This will be populated with the gravity main conditional assessment data points supplied by the contractor. Conditional assessment point features will be snapped to the respective gravity mains to enable spatial associations. These will be a snapshot in time and can be updated with future rehabilitation efforts. Videos that have been assessed by the contractor can be accessed through the gravity main feature class.

2.4 Project Coordination

Stantec will conduct a kick-off meeting with the owner's staff to set project timelines and define the geographic sequence of areas to be mapped. The attributes to be collected and data delivery logistics will be established.

Stantec will conduct a progress submittal meeting following the completion of 15% of the data collection and editing.

Stantec will conduct a progress submittal meeting following the completion of 15% of the GIS data development.

Stantec will conduct a final project deliverable and closeout meeting.

Deliverables

Stantec will provide to the owner a complete sewer geodatabase that contains:

- The sewer network dataset with connectivity in place
- Sub-Meter accurate GPS manhole feature points
- Gravity mains snapped to the appropriate manhole features and the appropriate sewer feature ID
- Gravity mains with attached videos
- Manholes with the corrected facility IDs as prescribed by the sewer contractor and rectified in cases where they differ from the owner's data
- Point features with attributes representing the sewer contractor's data collected from inspections
- Sewer service points extracted from the sewer contractor's data collected from the inspections

Fees

TASK	SCOPE OF SERVICE	FEE TYPE	FEE AMOUNT
2.1	GPS Field Data Collection and Snap in GIS	T/M	$33,600
2.2	Geodatabase Modification	T/M	$13,984
2.3	Review and Edit Gravity Video Links	T/M	$55,776
2.4	Project Coordination	T/M	$5,624
	TOTAL	$108,984	

The total compensation for Tasks 2.1, 2.2, 2.3 and 2.4 outlined herein shall be a on a Time and Materials basis in the amount of $108,984.00. Fees for these tasks shall be billed monthly.

Schedule

Consultant services shall commence upon approval of this work assignment by the owner, which will constitute Notice to Proceed (NTP). The project will be completed within 24 weeks of the approval of this work assignment and the NTP.

Kick-Off Meeting - NTP + 1 week

Begin Data Collection - NTP + 2 weeks

Progress Meeting - NTP + 6 weeks

Final Project Meeting - NTP + 24 weeks

Attachment "A" - Scope of Services

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Final Project Meeting - NTP + 18 weeks