EXHIBIT "A"

WORK ORDER NO. 1

Indian River County Public Works Department Professional Surveying and Mapping Services Master Agreement for Annual Professional Surveying and Mapping Services - Project No. 1605

CARTER ASSOCIATES, INC.

Consulting Engineers & Surveyors 1708 21st Street Vero Beach, FL 32960 772-562-4191 772-562-7180 Fax

	112-302-1100 Fax	
CLIENT: INDIAN RIVER COUNTY		CAI JOB NO.: 16-603S
BILLING ADDRESS:		PHONE # (772) 226-1386
Surveying and Mapping Department 1801 27th Street Vero Beach, Florida 32960		FAX# CELL#
PROJECT LIMITS		DATE ORDERED:
Topographic Route 2,700 feet +/- Survey of South 16th Manor and North 16th Manor within parts of Westlake Estates Subdivision, Section 1, T.33S., R.38E, Indian River County, Florida		November 22, 2016
		EST. COMPLETION DATE 30 Days from NTP
ORDERED BY: David Schryver, PSM	TAKEN BY: David E. Luethje, PSM	COST: \$ 11,670.00 lump sum
LEGAL DESCRIPTION (Lot, Block	k, S/D/Sec-Twp-Rge):	
Part of The Westlake Estates Florida	Subdivision (PB 10, Page 43), Sec	tion 1-33-38, Indian River County,

PROPERTY STREET ADDRESS:

South 16th Manor and North 16th Manor

SERVICES TO BE PERFORMED:

See Sheet 2 - 3 for Scope, Completion, and Compensation



WORK ORDER NO. 1

Indian River County Public Works Department Professional Surveying and Mapping Services Master Agreement for Annual Professional Surveying and Mapping Services - Project No. 1605

CAI Job. No. 16-603S	
IR County Project No. 1605	
IR County Contract No.	
IR County Work Order No. 1	_

Project Limits:

Approximately 2,700 feet +/- Survey of South 16th Manor and North 16th Manor Right of Ways. Services performed and located within parts of the Westlake Estates Subdivision, Indian River County, Florida.

Topographic Route Survey performed within part of Section 1, Township 33 South, Range 38 East, Indian River County, Florida.

Project Scope:

The SURVEYOR shall provide Professional Land Surveying services to include the following:

- 1.) Establish horizontal control based on Florida State Plane Coordinate System, East Zone, NAD 83/2011 and limited recovery of adjacent parcel corners; and establish vertical control network benchmarks along the subject corridor based on North American Vertical Datum of 1988 not to exceed 600 feet.
- 2.) Field observe and record vertical ground spot elevations within project corridor, 10' outside of approximate right way and all specific points (road pavement, inverts and bottom of structures, swales, etc.) and changes in contour within the subject corridor.
- 3.) Field observe and record all man-made above ground and natural features (over head electrical, valves, mail boxes, drive ways, culverts, utility risers, utility boxes, etc.
- 4.) Observe and record the existing limits of vegetation, if any, within the project limits of the subject corridor.
- 5.) The route survey to be tied into the record plats of the Westlake Estates Subdivision.

Specific Notes:

Method of horizontal and vertical observations by G.P.S., RTK [accuracy: horizontal 8mm+1ppm (RMS), vertical 15mm+1ppm (RMS)], North American Datum of 1983 / Adjustment of 2011, Florida State Plane Coordinates (East Zone-901) and North American Vertical Datum of 1988.

Project Schedule:

Work will commence on the receipt of the notice to proceed or approved work authorization.

Completion and Final Deliverables:

Five (5) paper "hardcopy" signed and sealed Topographic Route Survey Certificates and an AutoCAD drawing file with PDF formats will be provided. Field and office tasks will be completed in approximately thirty (30) days.

O	npen	4	
n	nnnn	COL	IOn.
CUII	IDCI	Sat	IUII.

Payments shall be in accordance with the original Indian River County Public Works Department Professional Surveying and Mapping Services Master Agreement for Annual Professional Surveying and Mapping Services - Project No. 1605.

I.	Field and office tasks: horizontal and vertical control for the IRC Topographic Route Survey Project No; Set vertical control points along the project route survey. Tie subdivision corners and project route to Florida State Plane Coordinate System (NAD 83/2011) and North American Vertical Datum of 1988.
	Surveyor 2 hours @ \$150.00/hr\$ 300.00
	Surveyor I 4 hours @ \$140.00/hr\$ 560.00
	3-Man Survey Crew 12 hours @ \$150.00/hr\$ 1,800.00
	Total I\$ 2,660.00
II.	Field observe and record vertical ground elevations and changes in contour within the subject corridor and 10 feet outside of approximate right of way. Field observe and record existing above ground man-made and natural features within the subject corridor, vegetation and well water point of entry into existing homes.
	Surveyor 2 hours @ \$150.00/hr\$ 300.00
	Surveyor I 4 hours @ \$140.00/hr\$ 560.00
	3-Man Survey Crew 20 hours @ \$150.00/hr\$ 3,000.00
	Total II\$ 3,860.00
III.	Data reduction/drafting of Topographic Route Survey maps in AutoCAD format
	Surveyor 2 hours @ \$150.00/hr\$ 300.00
	Surveyor I 4 hours @ \$140.00/hr \$ 560.00
	CAD/GIS Tech I 40 hours @ \$105.00/hr\$ 4,200.00
	Administrative Staff 2 hours @ \$45.00/hr\$ 90.00
	Total III
	TOTAL I – III\$11,670.00 Lump Sum Fee

WORK ORDER NO. 1

Indian River County Public Works Department Professional Surveying and Mapping Services Master Agreement for Annual Professional Surveying and Mapping Services -Project No. 1605

FEE SCHEDULE

0	F	F	IC	E	:
U				_	

Surveyor (Principal)	\$150.00
Surveyor I	\$140.00
Surveyor II	\$120.00
Surveyor III (SIT)	\$110.00
CAD/GIS Tech I	\$105.00
CAD/GIS Tech II	\$ 90.00
CAD/GIS Tech III	\$ 85.00
CAD/GIS Tech IV	\$ 75.00
Administrative Staff	\$ 45.00
FIELD:	
4 Man Survey Crew	\$175.00
3-Man Survey Crew	\$150.00
2-Man Survey Crew	\$135.00
1-Man Survey Crew	\$110.00

SPECIALIZED EQUIPMENT:

Leica HD P40 Scanner	\$175.00/Hour
Aluminum Boat	\$500.00/Day
All-Terrain Vehicle (ATV)/Trailer	\$250.00/Day
\$1,000,00/Meek	

ANTICIPATED REIMBURSABLE EXPENSES:

Postage, Express Mail, etc.	Cost
Blueprints/Blackline (24" x 36")	\$2.00/Each
Color Prints (24"x36)	\$5.00/Each
Mileage	IRS Standard Rate
Mylar	\$7.00/Each
Photocopies:	
8.5" x 11"	15¢/Each
8.5" x 14"	25¢/Each
11" x 17"	35¢/Each
Concrete Monuments	\$20.00/Each
Rebar	\$ 2.50/Each
Laths	\$ 0.75/Each
Hubs	\$ 1.00/Each
Sub-Consultants	Cost + 10%