

TASK ORDER 3-22 SWR

ENGINEERING DESIGN, PERMITTING, and BID PHASE SERVICES FOR REHABILITATION of WASTEWATER PUMP STATION "G"

This TASK ORDER 3-22 SWR is issued under the terms and conditions of the MASTER AGREEMENT TO PROVIDE GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M Hill Engineers, Inc. ("CONSULTANT") executed on November 03, 2017, amended on April 19, 2021, which are incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services which the CONSULTANT agrees to furnish are summarized on the "Scope of Services". This Task Order, when executed, shall be incorporated in and shall become an integral part of the AGREEMENT.

B. TIME OF COMPLETION

Start date for this project will be no later than ten days after execution of this authorization. The duration of TO 3-22 SWR is estimated in twenty-seven weeks.

C. COMPENSATION

Compensation for labor portion of Tasks A of TASK ORDER 3-22 STM, will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. The estimated compensation is shown as Attachment A.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 3-22 SWR, and authorize the CONSULTANT to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES."

For CH2M HILL Engineers, Inc.

By:  8/19/2022

Sirpa H. Hall
Sr. Business Vice President

Javier Colignon
Senior Project Manager



For CITY OF KEY WEST

By: _____

Patti McLauchlin
City Manager

Dated the ____ day of _____, 2022

ATTEST: _____

TASK ORDER 3-22 SWR

ENGINEERING DESIGN, PERMITTING, and BID PHASE SERVICES FOR REHABILITATION of WASTEWATER PUMP STATION “G”

SCOPE OF SERVICES – Rev 1

Background

The City of Key West (CKW) owns and operates twenty-five wastewater pump stations responsible for conveying wastewater flows to the Richard A. Heyman Environmental Protection Facility. In 2015, CH2M HILL (now Jacobs) inspected these pump stations and provided a condition assessment report. The report identified pump station components that need rehabilitation or replacement, provided budget-level cost estimates, and prioritized pump stations requiring rehabilitation.

The proposed scope of work is based on the City of Key West Wastewater Pump Stations Condition Report for Pump Station “G”, the site visit held on March 16th, 2022, with the CKW Staff.

This scope of work includes the design of the following components:

1. Replace the gate valves, pumps, piping supports, hatches, stoplogs, and pump rails in the wet wells
2. Rehabilitate the wet well and electrical conduits.
3. Replace the site lighting.
4. Provide stainless steel pump floor plates
5. Reroute the force main as it leaves the wet wells and provide a new meter vault with mag meter.
6. Replace the main control panel, main disconnect, main power feed, and temporary generator connection.
7. Replace the site fencing (if needed).
8. Replace the RTU (Remote Terminal Unit) with a TCU (Telemetry Control Unit).
9. Install a new liner for the influent manhole.
10. Perform constructability assessment for proposed improvements.
11. Develop and a feasibility assessment for the temporary bypass to the station during construction
12. Safety assessment.
13. Odor control assessment.
14. Generator evaluation.
15. Review approaches for providing hardening protection against hurricane wind, debris impact and flood protection.

Task A – Design Documents

Subtask A.1 –Intermediate Design Documents Preparation (60%)

The CONSULTANT team will conduct a virtual kickoff meeting with CKW and initiate the collection of relevant information, such as as-built drawings, pump O&M manuals, pump model and manufacturer name (nameplate), average and peak flows, maintenance log, electrical consumption, and review the overall scope of improvements to the PS.

Based on historical flows, the CONSULTANT will select the new pumps from CKW’s approved manufacturers.

The CONSULTANT will propose mitigation measures to protect PS “G” against hurricane winds and debris impacts. Approaches might include walls to protect panels and/or placement of critical equipment inside of buildings/shelters.

The electrical engineer will spend one day at the CKW to evaluate the generator and electric components and provide recommendations. These recommendations could include leaving it as it is, replacing or rehabilitating it. It is understood the control panel has reached its useful life, and major rehabilitation or replacement could be required. If any, the design of improvements for the generator is out of the scope and could be funded with the additional services.

This scope does anticipate topographic surveys and subsurface utility engineering. Attachment B includes the proposal for Topographic Survey.

Based on the comments received in kickoff meeting, the data provided by the CKW, topographic surveys and the site visits, the CONSULTANT will prepare the 60 percent design documents. Drawings will be presented based on modelling to prevent utilities conflicts.

To maintain an expedited schedule, it is assumed that written comments from the CKW reviewers to the CONSULTANT will be provided within two weeks from the submission. A two-hours virtual design review call will be held with CKW staff to discuss comments. Accepted CKW’s comments will be incorporated in the next design phase.

Deliverables (issued electronically in .pdf format)

1. A Request for Information (RFI) to gather the pump Operation and Maintenance manual, historical flows, and electric consumption, among other elements discussed during the kickoff meeting.
2. Electrical Assessment Report.
3. Plan and profile of proposed improvements to the PS “G.”
4. Draft list of proposed technical specifications.
5. Class 3 AACE International construction cost estimate.
6. Updated schedule within two weeks from the NTP.

7. Meeting agenda and minutes including the 60 percent comments.

Subtask A.2 –Full Design (90%)

The CONSULTANT will progress the design to 90 percent and incorporate the comments received on the 60 percent design. Work as part of this includes preparation of required technical specifications along with draft front-end documents. The CONSULTANT will coordinate and conduct a virtual 90 percent Design workshop with the CKW to discuss updated drawings, estimated construction costs, and specs. The comments received from this meeting will be incorporated into the Bid Documents. Attachment C depicts the preliminary list of drawings to include in the bid package.

After submitting the 90 percent design documents, the CONSULTANT will prepare a Class I Cost Estimate.

Deliverables – Submitted electronically - PDF:

1. A package with the 90 percent Design drawings in PDF in format 11" x 17"
2. Class 1 AACE International construction cost estimate.
3. Updated schedule in electronic format (PDF) and one hard copy.
4. Technical specifications.
5. Front end documents.
6. Design workshop meeting minutes.

Subtask A.3 – Permitting

CONSULTANT will prepare a letter for FDEP stating the proposed improvements to PS "G" and request confirmation that a permit is not required. The CONSULTANT will submit a draft of the proposed letter to the CKW for review and comments. No permitting applications are included in this scope of work.

Deliverables (electronically in PDF format)

An electronic copy of the FDEP letter.

Task B – Bid Phase Services

Bidding services are based on a Bid Period of 30 days. The CONSULTANT will provide the following services to the CKW:

1. CONSULTANT will prepare bid ready (100 percent) plans and the specifications based on the 90 percent review meeting comments. Only minor comments from the 90 percent design are anticipated.
2. Provide CKW with contract documents, in PDF format, for uploading to DemandStar.

3. All communications with bidders on technical aspects of the design will be forwarded by the CKW, and reviewed by the CONSULTANT, for inclusion in ADDENDA, if required.
4. Coordinate and conduct one pre-bid meeting to familiarize bidders with the scope of work and to answer questions that may arise. Three CONSULTANT's staff will remotely attend the meeting.
5. Issue up to two ADDENDA.
6. Bids will be received, opened, and read aloud by the CKW at the designated time and location.
7. Review and evaluate bids for compliance and completeness. The CONSULTANT will prepare an award letter for the CKW selected successful bidder.
8. Prepare conformed contract documents for use by CKW, CONSULTANT, and Contractor during construction. Including one set of electronically signed and sealed documents for submission by the contractor to the City of Key West Building Department (if required).

Bid services will be considered complete upon the CONSULTANT's review and forwarding of the Contractors executed documents to the CKW, and submittal of conformed documents.

Deliverables – (electronically in PDF format):

- Six hard copies of Conformed Contract Documents. Two of these copies are for OMI (Operations Management International, Inc.), one full size set of drawings and one CD containing specifications and drawings in PDF format for successful bid.
- Pre-bid meeting minutes and attendant list.
- Addenda.
- Recommendation of award letter.
- Three copies of Contract Documents for execution for the successful bidder. (Hard copies).

CKW's Responsibilities

To assist meeting schedule and budget estimates contained in this proposal, the CKW will provide the following:

1. Prompt review and comment on all deliverables (within ten working days of document reception).
2. Facilitate access to required facilities.
3. Attendance of key personnel at meetings and workshops as requested.
4. Contract and manage the construction contract with selected contractor.

Compensation

The estimated compensation for TASK ORDER 03-22 SWR is \$160,382.37. It includes labor, expenses, and survey services. Attachment “A” presents costs by task, subtask, and per diem code. This proposal estimates one travel to cover the Electrical assessment.

These expenses will be fully reimbursed according to the Master Service Agreement (MSA) directives. MSA is included in Attachment D

Completion Dates

The design Phase may begin within ten days from the NTP. Periods of performance shown below are assumed to run consecutively, with the Kick-off meeting occurring within two weeks of receiving NTP.

Task Name	Task Start (wk)	Task End (wk)	Task Duration (wk)
Task A – Design Documents			
Kickoff Meeting	1	2	2
Subtask A.1 – Intermediate Design 60%	2	10	8
Subtask A.1 – Reviewal period	10	12	2
Subtask A.2 – Full Design 90%	12	16	4
Subtask A.2 – Reviewal period	16	18	2
Subtask A.3 – Permitting (after 60% Design)	10	11	1
Task B – Bid Phase Services			
Bid Documents	18	19	1
Procurement process	19	27	8

The estimated project duration is twenty-seven weeks.

Assumptions

The following assumptions were used in the development of this Task order

1. This Task Order will be completed by 12/2023.

2. The design will be based on the federal, state, and local codes and standards in effect at the start of the project. Any changes in these codes may necessitate a change to scope.
3. Existing utilities have been constructed in accordance with provided record documentation. Design of existing structures complied with governing codes at time of original design, not necessarily the current ones.
4. The design documents will be prepared for a single construction contract.
5. The CONSULTANT master specifications will be used as the basis for all technical sections in Divisions 1 through 49. The CONSULTANTS master specifications incorporating CKW requirements will be used for General Conditions, Supplemental Conditions, and other front-end documents.
6. Legal, easement, or plat surveys are not included in the scope of work. If additional property is required, it shall be the responsibility of the CKW to obtain it.
7. This Task Order assumes that no FDEP permit is required, and it does not include any Building Department permit application. If permits are required, negotiated, and agreed, the CONSULTANT will not be responsible for delays associated with regulatory agencies unless caused by CONSULTANT.
8. The construction contract will be awarded after the first bidding process. Re-bidding will be considered as an Additional Service.
9. This proposal anticipates that submittal review comments that can significantly impact the design plans and technical specifications shall be provided during the 60 and 90 percent review stages. Due to this, significant revision or addition requests received after the approval of the 60 and 90 percent submittals will require a negotiation to compensate for the additional effort not included in the economic proposal.
10. CKW will assist the CONSULTANT with any available survey data, record drawings, and historical information. CAD native files of survey and record drawings, include updated site plan, including recent improvements, spot elevations, main utilities.
11. Demolition plans will be prepared based on available record drawings provided by CKW.
12. CKW will provide CONSULTANT with consolidated written review comments following receipt of deliverables (design review workshops, reports, permit applications) and completion of the submittal review within 10 working days.
13. No Architectural, Hydraulic, or Landscaping disciplines are included in this scope. If these services are required, the additional scope of work will be negotiated.
14. CONSULTANT will provide detailed minutes of meetings to all attendees within five working days of meetings. After allowing five working days with no comments, the CONSULTANT will assume the minutes as final.
15. BIM modeling is not included in this Scope of Work.

16. Ground modification techniques, deep foundations or specialized foundation systems are not included in this Scope of Work. If those services are deemed necessary after the geotechnical analysis is finalized, renegotiation of this scope of work will be necessary.
17. This Scope of Work does not include environmental site assessments or environmental mitigation services.
18. CONSULTANT standard specifications will be used for this project. Technical specifications will be prepared in .doc format and follow the Construction Specifications Institute numbering system (Divisions 1- 49). CKW will provide the Division 0.
19. Estimates will be prepared in accordance with the American Association for Cost Engineering.
20. CKW will reproduce and distribute the contract bidding documents and addenda, maintain the plan holders list, tabulate bids, and make award recommendations.
21. The design and implementation of flow bypass is a contractor responsibility. CONSULTANT services are limited to evaluating the temporary flow bypass's feasibility and estimating its construction costs.

Exclusions

- 1) A basis of design report (BODR) is not included in this Scope of Work. If the permitting agencies require a BODR as part of the permitting process, the CONSULTANT will request CKW to renegotiate the scope of work.
- 2) Corrosion analysis or infrastructure condition assessments are not included in this Scope of Work.
- 3) CONSULTANT understands there is no CBE participation requirements, therefore they are no included in this proposal.
- 4) CONSULTANT shall at no time take title, risk of loss or ownership of the hazardous substances. CKW recognizes that CONSULTANT assumes no risk and/or liability for hazardous substances encountered while performing any services associated with such hazardous substances.
- 5) In providing opinions of cost, financial analyses, economic feasibility projections, for the project, CONSULTANT has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, CONSULTANT makes no warranty that Client's actual project costs, financial aspects, economic feasibility, will not vary from CONSULTANT opinions, analyses, projections, or estimates and CONSULTANT's shall have no liability for such variances.
- 6) If any, the presence or duties of CONSULTANT personnel at a construction site, whether as onsite representatives or otherwise, do not make CONSULTANT or CONSULTANT personnel in any way responsible for those duties that belong to Client and/or the construction contractor or other entities, and do not relieve the construction contractor or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences,

and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction Contract Documents and any health or safety precautions required by such construction work.

- 7) Record drawings will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the project was finally constructed. CONSULTANT is not responsible for any errors or omissions in the information from others that is incorporated into the record drawings.
- 8) The design will be based on the federal, state, and local codes and standards in effect on the effective date of the authorization. Any changes in these codes or standards may necessitate a change in scope, to include an equitable adjustment.
- 9) In no case shall CKW be entitled to contingent or consequential or other indirect damages including, without limitation, damages for loss of use, revenue, profit or product, operating costs, plant downtime, financing, and interest costs, and business interruption.

CONSULTANT will reasonably rely upon the accuracy, timeliness, and completeness of the information/data provided by the CKW or other third parties without independent verification. Additional effort by CONSULTANT due to invalid data or information provided by the CKW or other third-parties, may entitle CONSULTANT to additional Compensation.

- 10) No service during construction.

Additional Services

As directed, the CONSULTANT will provide additional services related to the project but not Included within this Scope of Services. These and other services can be provided, if desired by the CKW, as an amendment to the Task Order. Work will begin for the Additional Services after receiving of a written notice to proceed from the CKW. Additional services may include, but are not limited to, the following:

- 1) Detailed Design of additional rehabilitation to the wastewater pump stations not already identified above.
- 2) Re-bidding any or all portions of this project.
- 3) Review of Contractor pay applications.
- 4) Application for a Building Permit (If necessary). Permitting for the Florida Department of Environmental Protection (FDEP) if required.
- 5) Additional site visits.
- 6) Service during construction.

Attachment A: COMPENSATION

City of Key West Improvements to PS "G"																			
	PM	Design Manager	HH	Mechanical	Electrical	Structural	Environmental	Civil	Spec. Processor	CAD	DDL	Permitting	QC	Cost Estimator	Project Controls	Project Assistant - Document Control	HSE Manager	Total Hours	Fee
	Eng 7	Eng 7	Eng 8	Eng. 4	Eng 3	Planner 1	Tech 6	Eng 5	Eng 1	Tech 5	Tech 6	Tech 6	Eng 8	Eng 3	Clerical/ Office Support	Clerical/ Office Support	Tech 6		
Tasks \ Rates	243.88	243.88	264.09	151.62	151.62	112.47	141.52	204.71	112.47	82.15	141.52	141.52	264.09	151.62	80.87	80.87	141.52		
Task A – Design Documents																		-	\$ -
Subtask A.1 – Intermediate Design 60%	24	28	6	120	84	40	4	21	12	144	30	-	32	25	8	8	2	588	\$ 85,803.75
Subtask A.2 – Full Design 90%	16	18	4	50	48	24	-	5	24	100	20	-	30	20	10	4	-	373	\$ 53,761.83
Subtask A.3 – Permitting	4	2	-	-	-	-	4	-	-	2	-	8	-	-	-	-	-	20	\$ 3,325.82
Task B – Bid Phase Services	8	8	-	4	4	4	-	2	1	8	-	-	-	-	8	-	-	47	\$ 7,390.97
																		-	\$ -
Total Hours	52	56	10	174	136	68	8	28	37	254	50	8	62	45	26	12	2	1,028	
Total Lump Sum Labor	\$ 12,682	\$ 13,657	\$ 2,641	\$ 26,382	\$ 20,620	\$ 7,648	\$ 1,132	\$ 5,732	\$ 4,161	\$ 20,866	\$ 7,076	\$ 1,132	\$ 16,374	\$ 6,823	\$ 2,103	\$ 970	\$ 283		\$ 150,282.37
																		Total Labor	\$ 150,282.37
																		Reimbursables expenses:	\$ 1,220.00
																		Subconsultant - Topographic Survey:	\$ 8,880.00
																		Total Fee	\$ 160,382.37

Attachment B: Topographic Survey – Scope and Fee

STATEMENT OF WORK

SURVEYING SERVICES for
Pump Station E Rehabilitation
Key West, FL
September 30, 2018

1.1 INTRODUCTION AND BACKGROUND

- A. Provide a design of the rehabilitation of wastewater pump station E.

1.2 SUMMARY OF WORK

- A. Identification of licensed land surveyor in the State of Florida as the responsible party and Surveyor of Record for the work to be performed, based the requirement of the statement of work.
- B. Control Surveys: Recover and confirm existing control suitable for the Work described herein. Establish control onsite to complete the Work specified herein. Known survey control is shown and described in Attachment 1
- C. Provide Surveyor Report, mapping, and electronic data.
- D. Proposed schedule.
- E. Topographic and planimetric Surveys: Survey topographic and planimetric features in the areas depicted in Attachment 1.

1.3 GENERAL PROVISIONS

- A. Follow all local and state regulations for accessing public and private property, and restore Site to condition existing prior to Surveyors' entry or as agreed upon with the property owner.
- B. Coordinate permissions for access to property with the CLIENT as required. Contact landowners and negotiate access as necessary. Client is to provide the contact information for site access.
- C. Complete the work under direction of a Professional Land Surveyor, hereafter called SURVEYOR, licensed/registered in the state of Florida.
 - 1. Conduct work using equipment, personnel, and procedures that will ensure compliance with the accuracy standards as defined herein.
 - 2. It is the responsibility of the SURVEYOR to ensure the Work under this agreement complies with state, local and Federal regulations and professional standards and the requirements of this Scope of Work.
 - 3. Documents submitted shall bear the Surveyor's seal, signature, and certification that Work was done under the Surveyor's supervision and that information contained in the document is true and accurately shown.

- D. Surveyor is responsible for the quality control of the survey work which includes but is not limited to: field work checks, equipment calibration, office calculations, drawings, and a final peer review of all deliverables. Provide documentation of quality control procedures in the survey report.
- E. Data and deliverables prepared for this survey are the property of the Owner and JACOBS.
 - 1. Surveyor also understands and agrees that Owner and JACOBS may reproduce the drawings and use the information provided on the drawings.
 - 2. Prepare reports in connection with the investigative work for this Site without incurring obligation for additional compensation to Surveyor.
 - 3. Original drawings, copies of field notes, and required survey reports are the property of the Owner and JACOBS.
 - 4. Submit required documents and copies of field notes to JACOBS upon completion of the Work or upon request.

1.4 STANDARDS

- A. Survey Accuracy Standard: FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C), and Facility Management.
- B. Utility Location: ASCE 38-02, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data.
- C. Map Accuracy Standards: ASPRS 2014 Map Accuracy Standards.
- D. CAD Standards: National CAD Standards (NCS), as published for the National Institute of Building Sciences.

1.5 TECHNICAL SPECIFICATIONS

- A. Datums:
 - 1. Surveyor shall research, recover, and confirm existing horizontal and vertical control networks found on or near Site. Provide documentation in the surveyor's report to include monuments to be used as a basis of survey. Coordinate selection of monuments with JACOBS before beginning work.
 - a. Surveyor shall confirm horizontal and vertical coordinate system and datums are consistent with coordinate system and datums currently in use onsite.
 - b. In the event that variations are found between datums listed, Surveyor shall report values in both systems.
 - 2. Horizontal:
 - a. Data shall be reported as North American Datum of 1983 (NAD 83), current adjustment, Florida State Plane Coordinate System, East Zone.
 - b. Surveyor shall notify JACOBS Project Manager if an alternative to specified datum is recommended to be used. JACOBS must approve use of alternative datum prior to conducting any work.
 - 3. Vertical:
 - a. Data shall be reported as North American Vertical Datum of 1988 (NAVD 88) current adjustment.

- b. Surveyor shall notify JACOBS Project Manager if an alternative to specified datum is to be used. JACOBS must approve the use of alternative datum prior to conducting any work.
4. Values shall be delivered in US Survey Feet, as defined or as legally adopted by the state or municipality in which the Work is being delivered.

B. Accuracy:

1. Control:

- a. Horizontal control work shall comply with Third Order Class II (1:5,000) or better, as outlined in the FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C), and Facility Management. If GPS is used (only if acceptable for the type of survey required), relative horizontal accuracy shall conform to the FGDC Geospatial Positioning Accuracy Standards, Part 2: National Standard for Spatial Data Accuracy.
- b. Vertical Control work shall be Third Order (0.050√m) or better, as outlined in the FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C) and Facility Management.

2. Other Features:

- a. All other surveys (other than control surveys if required), shall comply with FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C), and Facility Management with accuracy tolerances of plus or minus 0.10 feet for the horizontal and plus or minus 0.03 feet for the vertical, if applicable, on all other hard surfaces and plus or minus 0.10 feet for the vertical on soft or natural ground surfaces (if applicable).
- b. Surveyor shall report all control coordinates X, Y & Z of points to four decimal places. All other coordinates shall be reported to three decimal places.
- c. When higher vertical/elevation accuracy tolerance is required, RTK GPS cannot be used.

1.6 MAP PRODUCTS MINIMUM CONTENT REQUIREMENTS

- A. Scale: 1-inch equals 10 feet.
- B. Contour Interval: one-foot CI.
- C. Spot Elevations: 25 feet Grid (nominal).

Minimum Content Requirements		
Title Block	North Arrow	Scale (Bar) Contour Interval
Date of Survey	Legend w/ Symbols & Abbreviations	Datum: Horizontal and Vertical
Grid Ticks	Grid Values	Survey Control Points Found and Set
Surveyors Certificate	Surveyors Seal & Signature	For Boundary Plat - State and Local Requirements

1.7 SURVEY ITEMS

A. Control survey

1. Perform control survey to establish control for all survey activities for the project area and establish control monuments for future work.
2. Provide report documenting the control point survey and compliance with closure requirements.
3. Surveys shall include at least 2 control points around perimeter of proposed Site
 - a. Primary control points shall be set by driving an iron pin, 2 feet or longer, 5/8-inch diameter, flush with the ground just outside the limits of the topographic survey or equivalent marker set in pavement or concrete. These points shall be:
 - 1) Marked with a 4-foot lath displaying point number.
 - 2) Part of the main traverse or network adjustment for Site.
 - 3) Tied to datum system and specifications as outlined for control points in the next section with X, Y, and Z coordinates listed to the nearest 0.01 foot.
 - b. Include control points in the base map deliverables, both hardcopy and electronic.
 - c. Set secondary control points with hub and tack, nails, scribes in concrete, or similar, in locations least likely to be disturbed by activities and to maximize line of sight visibility with other control points.

B. Topographic and Planimetric Survey:

1. Perform topographic survey for the project area, as shown in Attachment 1.
2. Locate three-dimensional features, including, but not limited to:
 - a. Abrupt changes in slope (breaklines), edges of structures, road crowns, top and flow line of curbs, edges and bottoms of streams and ditches.
 - b. Include void area break lines where DTM data was not captured and a boundary edge breakline to confine the limits of the DTM surface and subsequent contours generated by the DTM surface.
 - c. Top of grates, manhole lids, and pipe inverts at all structures and other surface features.
3. Include spot elevation points with X, Y, and Z coordinates at grid spacing specified above.
4. Include all surface features, manmade and natural, within the subject area including, but not limited to the following items:
 - a. Fire hydrants, manholes, gas line markers, edge of road, structures, valves and valve stems, above ground pipe, crossings, and associated structures, debris/rock/fill areas, power poles, transformers, and cabinets, light poles, fences and gates, guard rails, culverts, trees 6" and larger, and other at grade or above ground features.
5. Include utility locate marks and utilities that can be located by the use of existing plans and visual field inspection. Services provided shall be Quality Level C, of ASCE 38-02.
 - a. ~~Arrange for utility location/mark-out services.~~ (Not applicable)
 - b. Comply with all state, and local procedures and regulations related to utility location/mark-out services.
 - c. Report utility research activities including records found and reviewed, One-Call notification requests and procedures followed, and correspondence with utility purveyors. We shall initiate a Locate Ticket with Sunshine 811.
 - d. Locate and map utilities found within the Survey limits
 - 1) Include utilities found in record documents in addition to that field located. Utility shall be compiled on separate CAD layers.

1.8 DELIVERABLES

- A. Provide preliminary copies of all deliverables listed below for review. Upon receiving comments from JACOBS, provide final copies with revisions. Provide one signed and sealed hard copies and one electronic copy of the final drawings in PDF and CADD format.
- B. Preliminary schedule for completion of the activities listed herein.
- C. Surveyor's Report:
 - 1. Provide Surveyor's Report which defines horizontal and vertical datums, control monuments recovered, and control set used as basis for survey.
 - 2. Describe equipment and methodology used to perform the Work.
 - 3. Describe results of survey and accuracies obtained.
 - 4. Provide one paper copy and one electronic copy of the technical memorandum in Microsoft Word TM format.
 - a. Paper copy of report shall contain coordinate printout of locations surveyed and shall be stamped, dated, and signed by Surveyor-in-responsible-charge and certify the Work was completed in compliance with the specification stated herein.
 - 5. Horizontal and Vertical Control Assessment: Provide data/recover sheets for existing and new control stations used for Project.
- D. Field Notes:
 - 1. Provide copy of field notes and electronically collected notes of X, Y coordinates and ground surface elevations.
 - 2. Notes shall include names of field crew members, survey control, datum used as specified, and daily weather conditions including temperature and barometric pressure.
 - 3. Field notes, electronic output and scans of hardcopy notes, shall be available the day following each day's work, or upon request.
 - 4. Copies of field notes shall be made available within 24 hours.
- E. Coordinate Report:
 - 1. Provide coordinates of requested information, as listed in description of Work, in Excel format with X, Y coordinates listed to the nearest 0.01 foot for hard surfaces and ground surface elevation to the nearest 0.10 foot.
 - 2. List the coordinate identifier or name and a description along with the horizontal and vertical coordinate information.
- F. A copy of information collected and created in the course of completing the Work described herein.
- G. CADD files on CD-ROM, USB flash drive, or Portable Hard Drive.
 - 1. DTM or TIN surface model with 3D graphic triangles, 3D contour lines and features.
 - 2. A 10-scale, 1-foot contour interval topographic/planimetric map.

1.9 REQUIRED FORMATS

- A. CADD Format:
 - 1. Provide survey information in a MicroStation or AutoCAD electronic drawing.
 - 2. Drawing shall show information established and provided to mapping consultant where applicable.

3. Electronic drawing symbology shall conform to the National CAD Standards (NCS), as published for the National Institute of Building Sciences.
4. If a 3-D file is provided, all information shall be at the correct elevation for all elements of the file.
5. Provide DTM/TIN surface model with 3D graphic triangles, 3D contour lines and features compatible with InRoads.

1.10 DATA DELIVERY FORMAT

A. Survey Points in Coordinate Geometry Format:

1. Provide comma-delimited ASCII file of survey shots/points shall be collected in the following format:
 - a. Point number, northing, easting, elevation, field code, point description.
 - b. Northings and Eastings should be reported to four decimal places, unless otherwise agreed upon.
 - c. Elevations should be reported to three decimal places, unless otherwise agreed upon.
 - d. Field-collected data shall have unique point numbers assigned and point numbers shall not be re-used in subsequent field surveys for the Project.
 - e. Provide copies of supporting field notes and sketches.

B. Terrain Data:

1. Provide the following point types:
 - a. Random points or spot elevations.
 - b. Breaklines (faults) including normal, proximity, and wall breaklines.
 - c. Boundaries, both perimeter/tin as well as any hidden (void) boundaries used.
2. Provide in CAD Files. File specifications are listed below:
 - a. Layer or level separate the data by point types (random/spot, breaklines, perimeter/tin, voids).
 - b. Breaklines should be layer separated by feature code
 - c. Layer names should be logically named or match the feature code.
 - d. Breakline, boundary and void data should be 3-D line strings or polylines.
 - e. Spot elevations or random points should be MicroStation 3-D lines of zero length. Text nodes, cells and blocks are not permitted.
3. Provide digital Terrain Model Data in CADD format with the following items:
 - a. CAD file with Triangulated Irregular Network (3D faces) displayed on a unique layer/level.
 - b. CAD file with contours displayed from TIN on a unique layer/level. Contour Interval to be agreed upon prior to delivery.
 - c. Note settings used by surveyor of record for Stroking, curve and linear, as well as Triangle Side Length. Embed notes in the CAD file.
 - d. Note or color code any "switched" or "flip-flopped" triangles used in DTM development.

Attachment C: LIST OF DRAWINGS

Preliminary Drawing List	
Drawing #	Description
1	Location & Index
2	Abbreviations
3	General Notes & legends
4	General Notes
5	Electric legends
6	Electric legends
7	Site plan
8	Demolition
9	Plan & sections
10	Repairs
11	Rehab plans & sections
12	Site Plan
13	Proposed site plan
14	One-line diagram
15	Standard details
16	Standard details
17	Standard details
18	Standard details
19	Standard details
20	Standard details
21	Standard details
22	Standard details
23	Standard details
24	Standard details
25	Standard details
26	Standard details
27	Standard details

Attachment D: Master Service Agreement

AGREEMENT

between

CITY OF KEY WEST

and

CH2M HILL ENGINEERS, INC.

for

GENERAL ENGINEERING SERVICES

KEY WEST, FLORIDA

This is an Agreement between: CITY OF KEY WEST, its successors and assigns, hereinafter referred to as "CITY," and _____ CH2M HILL ENGINEERS, INC. _____, a corporation organized under the laws of the State of DELAWARE, its successors and assigns, hereinafter referred to as "CONSULTANT".

WITNESSETH, in consideration of the mutual terms and conditions, promises, covenants and payments hereinafter set forth, CITY and CONSULTANT agree as follows:

ARTICLE 1

DEFINITIONS AND IDENTIFICATIONS

For the purposes of this Agreement and the various covenants, conditions, terms and provisions which follow, the definitions and identifications set forth below are assumed to be true and correct and are agreed upon by the parties.

- 1.1. Agreement:** This document, Articles 1 through 7, inclusive. Other terms and conditions are included in the CITY's RFQ 17-002 General Engineering Services, CONSULTANT's Response to RFQ dated ___April 19, 2017___, exhibits, Task Orders, and supplemental documents that are by this provision expressly incorporated herein by reference.
- 1.2. Commissioners:** Members of the City Commission with all legislative powers of the CITY vested therein.
- 1.3. CONSULTANT:** The engineering firm selected to perform the services pursuant to this Agreement.
- 1.4. Contract Administrator:** The ranking managerial employee of the CITY or some other employee expressly designated as Contract Administrator by the City Manager, who is the representative of the CITY. In the administration of this Agreement, as contrasted with matters of policy, all parties may rely upon instructions or determinations made by the Contract Administrator; provided, however, that such instructions and determinations do not change the Scope of Services.
- 1.5. Contractor:** The person, firm, corporation or other entity that enters into an agreement with CITY to perform the construction work for the Task Order.
- 1.6. CITY:** City of Key West.
- 1.7. Task Order:** A detailed description of a particular service or services to be performed by CONSULTANT under this Agreement.

ARTICLE 2

PREAMBLE

In order to establish the background, context and frame of reference for this Agreement and generally to express the objectives and intentions of the respective parties hereto, the following statements, representations and explanations shall be accepted as predicates for the undertakings and commitments included within the provisions which follow and may be relied upon by the parties as essential elements of the mutual considerations upon which this Agreement is based.

- 2.1. The CONSULTANT is not entitled to receive, and the CITY is not obligated to pay, any fees or expenses in excess of the amount budgeted for Task Orders authorized under this Agreement in each fiscal year (October 1-September 30) by CITY. The budgeted amount may only be modified per City Ordinance(s).
- 2.2. The CITY has met the requirements of the Consultants' Competitive Negotiation Act, as set forth in Section 287.055, Florida Statutes, and has selected CONSULTANT to perform the services hereunder based on the Request for Qualifications 17-002 incorporated by reference and made a part hereof and the Response to the Request for Qualifications from Consultant dated April 19, 2017 incorporated by reference and made part of.
- 2.3. Negotiations pertaining to the services to be performed by CONSULTANT were undertaken between CONSULTANT and staff selected by the Commission, and this Agreement incorporates the results of such negotiations.

ARTICLE 3

SCOPE OF SERVICES AND STANDARD OF CARE

- 3.1. CONSULTANT's services may include but are not limited to the following in regard to the Agreement:
 - 3.1.1. Civil Engineering Services
 - 3.1.2. Utility Engineering Services
 - 3.1.3. Solid Waste Engineering Services
 - 3.1.4. Coastal Engineering Services
 - 3.1.5. Structural Engineering Services
 - 3.1.6. Marine Engineering Services
- 3.2. CONSULTANT's services shall include comprehensive full-scale engineering, design, surveying, permit preparation, preparing contract specifications, preparing bid and proposal documents and assisting the City with technical review and ranking of the same to attain qualified contractors for work, environmental assessments, construction

administration and owner project representation services relating to operation, new construction, permit modification, construction improvements, rehabilitation and or retrofits, and any other lawful professional Engineering services that the CONSULTANT is qualified to provide and that the CITY authorizes the CONSULTANT to undertake in connection with this Agreement. CONSULTANT shall provide all necessary, incidental and related activities and services as required.

- 3.3. CONSULTANT and CITY acknowledge that the Scope of Services does not delineate every detail and minor work task required to be performed by CONSULTANT to complete any particular task order. If, during the course of the performance of the services included in this Agreement, CONSULTANT determines that work should be performed to complete the Task Order which is, in the CONSULTANT's opinion, outside the level of effort originally anticipated, whether or not the Scope of Services identifies the work items, CONSULTANT shall notify Contract Administrator in writing in a timely manner before proceeding with the work. If CONSULTANT proceeds with such work without notifying the Contract Administrator, the work shall be deemed to be within the original level of effort, whether or not specifically addressed in the Scope of Services. Notice to Contract Administrator does not constitute authorization or approval by CITY to perform the work. Performance of work by CONSULTANT outside the originally anticipated level of effort without prior written CITY approval or modification of Task Order is at CONSULTANT's sole risk.
- 3.4. The specific services to be provided by the CONSULTANT and the compensation for such services shall be as mutually agreed to in separate Task Orders to this AGREEMENT. Each Task Order when fully executed shall become a supplement to and a part of this AGREEMENT.
- 3.4.1. Each Task Order shall be supported by appropriate cost and pricing data and such other documentation as required by the CITY.
- 3.4.2. Task Orders shall be numbered consecutively as specified by CITY. Each Task Order shall include a description of the scope of services and specified deliverables, time of completion, total estimated costs of services, and method of compensation. Additional information shall be provided to the CITY if required. Amended Task Orders shall include substantially the same information and be submitted to the CITY for approval.
- 3.4.3. The CITY may make or approve changes within the general Scope of Services in any Task Order. If such changes affect the CONSULTANT's cost of or time required for performance of the services, an equitable adjustment shall be made through an amendment to the Task Order.
- 3.4.4. A Task Order may be terminated at any time, with or without cause, by the CITY upon written notice to CONSULTANT. CONSULTANT shall perform no further work upon receipt of this notice unless specifically authorized by the City Manager of the City of Key West. On termination, the CONSULTANT shall be paid for all authorized services performed up to the termination date plus, if terminated for the convenience of the CITY, reasonable expenses incurred during the close-out of the Task Order. The CITY shall not pay for anticipatory profits. The termination of this Agreement pursuant to Paragraph 7.2, hereof, shall constitute the termination of any and all outstanding Task Orders.

- 3.4.5. The CONSULTANT shall begin services under any Task Order when authorized by a Purchase Order issued by the CITY and delivered to CONSULTANT.
- 3.5. The CITY and CONSULTANT may negotiate additional scopes of services, compensation, time of performance and other related matters for each Task Order as allowed by this Agreement. If CITY and CONSULTANT cannot contractually agree, CITY shall have the right to immediately terminate negotiations at no cost to CITY and procure services from another source.
- 3.6. CONSULTANT shall perform the professional services under this Agreement at the level customary for competent and prudent professionals in CONSULTANT'S field performing such services at the time and place where the services are provided. In the event CONSULTANT does not comply with this standard, and omissions or errors are made by CONSULTANT, CONSULTANT will correct such work that contains errors or omissions and reimburse CITY through compensation for damages.
- 3.7. CONSULTANT is required to perform the Task Orders consistent with current applicable Federal, State and City laws, codes and regulations that pertain to the Task Order. In all Task Orders, where changes to any laws, codes or regulations affecting the Task Order have a Task Ordered effective date or are anticipated to be effective at a future date, or if knowledge of anticipated changes is available to CONSULTANT or any sub-consultant, CONSULTANT shall present options for their use or implementation.
- 3.8. Construction Responsibility - Notwithstanding anything in this Agreement, CONSULTANT shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety measures, precautions and programs including enforcement of Federal and State safety requirements, in connection with construction work performed by CITY's construction contractors.
- 3.9. Estimates - Since CONSULTANT has no control over local conditions, the cost of labor, materials, equipment or services furnished by others, or over competitive bidding or market conditions, CONSULTANT does not guarantee the accuracy of any opinions of probable construction cost as compared to construction contractor's bids or the actual cost to the CITY.

ARTICLE 4

TERM OF AGREEMENT; TIME FOR PERFORMANCE; CONTRACTOR DAMAGES:

The term of this Agreement shall be for a period of three (3) years from the effective date of the Agreement with the option of one (1) two (2) year renewal. The Agreement will be in effect upon execution by both parties. The Agreement may be renewed at the discretion of the CITY.

- 4.1. CONSULTANT shall perform the services described in each Task Order within the time periods specified. Each such time period shall commence from the date of the purchase order issued for such services.

- 4.2. CONSULTANT must receive written approval from the Contract Administrator prior to beginning the performance of services in any subsequent Task Order. Prior to granting approval for CONSULTANT to proceed to a subsequent Task Order, the Contract Administrator may, at his or her sole option, require CONSULTANT to submit any deliverables/documents for the Contract Administrator's review.
- 4.3. In the event CONSULTANT is unable to complete the above services because of delays resulting from untimely review by CITY or other governmental authorities having jurisdiction over the Task Order, and such delays are not the fault of CONSULTANT, or because of delays which were caused by factors outside the control of CONSULTANT, CITY shall grant a reasonable extension of time for completion of the services and shall provide reasonable compensation, if appropriate. It shall be the responsibility of CONSULTANT to notify CITY within 10 days in writing whenever a delay in approval by a governmental agency, including CITY, is anticipated or experienced, and to inform the Contract Administrator of all facts and details related to the delay.
- 4.4. In the event the Contractor fails to substantially complete the Task Order on or before the substantial completion date specified in its agreement with CITY or if Contractor is granted an extension of time beyond said substantial completion date, and CONSULTANT's services are extended beyond the substantial completion date, through no fault of CONSULTANT, CONSULTANT shall be compensated in accordance with Article 5 for all services rendered by CONSULTANT beyond the substantial completion date.
- 4.5. In the event Contractor fails to substantially complete the Task Order on or before the substantial completion date specified in its agreement with CITY, and the failure to substantially complete is caused in whole or in part by a negligent act, error or omission of CONSULTANT, then CONSULTANT shall pay to CITY its proportional share of any claim or damages to Contractor or CITY arising out of the delay. This provision shall not affect the rights and obligations of either party as set forth in Paragraph 7.8, INDEMNIFICATION OF CITY.

ARTICLE 5

COMPENSATION AND METHOD OF PAYMENT

5.1. AMOUNT AND METHOD OF COMPENSATION

The types of compensation methods, which shall be used to pay for the CONSULTANT's services, are limited to the following:

- 5.1.1. Lump sum payment/Not-to-Exceed, which includes compensation for all the CONSULTANT'S salaries, general overhead costs, direct expenses, and profit.

- 5.1.1.1. If the TASK ORDER timing deviates from the assumed schedule for causes beyond CONSULTANT's control, CONSULTANT and/or the CITY reserves the right to request renegotiation of those portions of the lump sum affected by the time change. During construction contract administration, if tasked, it is agreed by both parties that whether construction is completed earlier or later, that a proportional part of the compensation will be adjusted and either given to CONSULTANT for additional work or deleted from the amount owed CONSULTANT for less time required.
 - 5.1.1.2. In the event of a change of scope, CITY shall authorize in writing an appropriate decrease or increase in compensation.
 - 5.1.1.3. Monthly invoicing will be based on an estimate of the percent of work completed at the end of the preceding month.
 - 5.1.1.4. The CONSULTANT shall submit wage rates and other actual unit costs supporting the compensation. The CONSULTANT shall submit a Truth in Negotiation Certificate stating that all data supporting the compensation is accurate, complete, and current at the time of contracting.
- 5.1.2. Cost Reimbursable-Per Diem (Time and Expenses)
- 5.1.2.1. Per diem rates are those hourly or daily rates charged for work performed on the TASK ORDER by CONSULTANT's employees of the indicated classifications and include all salaries, overheads, and profit, but do not include allowances for Direct Expenses. These rates are subject to annual adjustments based on the Consumer Price Index Urban U.S. City Average All Items U.S. Department of Labor Bureau of Labor Statistics.
 - 5.1.2.2. Hourly rates for the first year of the contract (CONSULTANT AND Sub-consultants): See attached Exhibit A
 - 5.1.2.3. CONSULTANT and Sub-consultants allowed annual wage adjustment shall not exceed the Data Resource Institute (DRI) forecast of wage and price escalation (the U.S. Bureau of Labor Statistics [BLS] Employment Cost Index [ECI] for Private Industry)
 - 5.1.2.4. A budgetary amount will be established for each Task Order. This budgetary amount shall not be exceeded unless prior written approval is provided by the CITY. CONSULTANT shall make reasonable efforts to complete the work within the budget and will keep CITY informed of progress toward that end so that the budget or work effort can be adjusted if found necessary.
 - 5.1.2.5. CONSULTANT is not obligated to incur costs beyond the indicated budgets, as may be adjusted, nor is CITY obligated to pay CONSULTANT beyond these limits.
 - 5.1.2.6. When any budget has been increased, CONSULTANT's excess costs expended prior to such increase will be allowable to the same extent as if such costs had been incurred after the approved increase.

5.2. REIMBURSABLE EXPENSES

- 5.2.1.1. Direct non-salary expenses, entitled Reimbursable Expenses, directly attributable to the Task Order shall be charged at actual cost, and shall be limited to the following:
- 5.2.1.2. Identifiable transportation expenses in connection with the Task Order, subject to the limitations of Section 112.061, Florida Statutes. There shall be no mileage reimbursement for travel within the City of Key West. Transportation expenses to locations outside the City area or from locations outside the City will not be reimbursed unless specifically pre-authorized in writing by the Contract Administrator.
- 5.2.1.3. Identifiable per diem, meals and lodgings, taxi fares, automobile rental, and miscellaneous travel-connected expenses for CONSULTANT's personnel subject to the limitations of Section 112.061 Florida Statutes. Meals for class C travel inside the City of Key West will not be reimbursed. Lodging will be reimbursed only for room rates equivalent to Holiday Inn, Hampton Inn, or Best Western located within the City of Key West city limits.
- 5.2.1.4. Identifiable communication expenses approved by Contract Administrator, long distance telephone, courier and express mail utilized to render the services required by this Agreement.
- 5.2.1.5. Cost of printing, reproduction or photography that is required by or of CONSULTANT to deliver services set forth in this Agreement. Unit costs must be specified on the Task Order.
- 5.2.1.6. Identifiable testing costs approved by Contract Administrator. Unit costs must be specified on the Task Order.
- 5.2.1.7. All permit fees paid to regulatory agencies for approvals directly attributable to the Task Order. These permit fees do not include those permits required for the Contractor.
- 5.2.2. It is acknowledged and agreed to by CONSULTANT that the dollar limitation set forth in Paragraphs 5.2.1.1 through 5.2.1.7 is a limitation upon, and describes the maximum extent of, CITY's obligation to reimburse CONSULTANT for direct, non-salary expenses. If CITY or Contract Administrator requests CONSULTANT to incur expenses not contemplated in the amount for Reimbursable Expenses, CONSULTANT shall notify Contract Administrator in writing before incurring such expenses. Any such expenses shall be reviewed and approved by CITY prior to incurring such expenses.
- 5.2.3. All sub-consultants' hourly rates shall be billed in the actual amount paid by CONSULTANT. These amounts shall not increase each fiscal year to the CITY by more than the Consumer Price Index Urban U.S. City Average All Items U.S. Department of Labor Bureau of Labor Statistics. Sub-consultant Reimbursable Expenses are limited to the items in Paragraphs 5.2.1.1 through 5.2.1.7 described above when the sub-consultant's agreement provides for reimbursable expenses.

5.3. METHOD OF BILLING

5.3.1. Lump Sum Compensation

CONSULTANT shall submit billings that are identified by the specific Task Order number if applicable on a monthly basis in a timely manner. These billings shall identify the nature of the work performed and the estimated percent of work accomplished. The statement shall show a summary of fees with accrual of the total and credits for portions paid previously. When requested, CONSULTANT shall provide backup for past and current invoices that record hours, personnel, and expense costs on a task basis, so that total hours and costs by task may be determined.

5.3.2. Cost Reimbursable-Per Diem (Time and Expenses) Compensation

CONSULTANT shall submit billings that are identified by the specific Task Order number on a monthly basis in a timely manner for all personnel hours and reimbursable expenses attributable to the Task Order. These billings shall identify the nature of the work performed, the total hours of work performed and the employee category and name of the individuals performing same. Billings shall itemize and summarize reimbursable expenses by category and identify same as to the personnel incurring the expense and the nature of the work with which such expense was associated. Where prior written approval by Contract Administrator is required for reimbursable expenses, a copy of the approval shall accompany the billing for such reimbursable. The statement shall show a summary of salary costs and reimbursable expenses with accrual of the total and credits for portions paid previously. External reimbursable expenses and sub-consultant fees must be documented by copies of invoices or receipts that describe the nature of the expenses and contain a Task Order number or other identifier that clearly indicates the expense is identifiable to the Task Order. Subsequent addition of the identifier to the invoice or receipt by the CONSULTANT is not acceptable except for meals and travel expenses. Appropriate CONSULTANT's cost accounting forms with a summary of charges must document internal expenses by category. When requested, CONSULTANT shall provide backup for past and current invoices that records hours and rates by employee category, reimbursable expenses by category, and subcontractor fees on a task basis, so that total hours and costs by task may be determined.

- 5.3.3. If requested, CONSULTANT shall provide copies of past paid invoices to any subcontractor or sub-consultant prior to receiving payment. CITY reserves the right to pay any subcontractor or sub-consultant, if CONSULTANT has not paid them timely and the services of the subcontractor or sub-consultant are necessary to complete the TASK ORDER or any Task Order.

5.4. METHOD OF PAYMENT

- 5.4.1. CITY shall pay CONSULTANT within forty-five (45) calendar days from receipt of CONSULTANT's proper invoice with documentation as provided above.
- 5.4.2. In the event CONSULTANT has utilized a Sub-consultant in order to perform the Task Order, CONSULTANT will be required to provide documentation that Sub-consultant and Sub-consultants of Sub-consultants have been paid prior to payment being made to CONSULTANT.

5.4.3. Payment will be made to CONSULTANT at:

Address: CH2M HILL ENGINEERS, INC.
PO Box 201869
DALLAS, TX. 75320-1869

ARTICLE 6

CITY'S RESPONSIBILITIES

- 6.1. CITY shall assist CONSULTANT by placing at CONSULTANT's disposal all information CITY has available pertinent to the Task Order including previous reports and any other data relative to design or construction of the Task Order.
- 6.2. CITY shall arrange for access to, and make all provisions for, CONSULTANT to enter upon public and private property as required for CONSULTANT to perform its services.
- 6.3. CITY shall review the CONSULTANT's itemized deliverables/documents identified in the Task Orders and respond in writing with any comment within the time set forth in the Task Order or within a reasonable time.
- 6.4. CITY shall give prompt written notice to CONSULTANT whenever CITY observes or otherwise becomes aware of any development that affects the scope or timing of CONSULTANT's services or any defect in the work of any Contractor.

ARTICLE 7

MISCELLANEOUS

7.1. OWNERSHIP OF DOCUMENTS

All finished or unfinished documents, data, data matrices and calculations generated and used to evaluate and compute the construction or material requirements for the Task Order, studies, surveys, drawings, maps, models, photographs and reports prepared or provided by CONSULTANT in connection with this Agreement, whether in hard copy or electronic form, shall become the property of CITY, whether the Task Order for which they are made is completed or not. If applicable, CITY may withhold any payments then due to CONSULTANT until CONSULTANT complies with the provisions of this Article. CONSULTANT is not responsible for damages caused by the unauthorized re-use by others of any of the materials for another Task Order.

7.2. TERMINATION

- 7.2.1. This Agreement may be terminated with or without cause by CITY at any time.
- 7.2.2. Notice of termination shall be provided in accordance with paragraph 7.12 NOTICES of this Agreement.
- 7.2.3. In the event this Agreement is terminated, CONSULTANT shall be paid for any services performed to the date the Agreement is terminated. Compensation shall be withheld until all documents specified in Section 7.1 of this Agreement are provided to the CITY. Upon being notified of CITY's election to terminate, CONSULTANT shall refrain from performing further services or incurring additional expenses under the terms of this Agreement. Under no circumstances shall CITY make payment of profit for services that have not been performed.

7.3. AUDIT RIGHT AND RETENTION OF RECORDS

- 7.3.1. CITY shall have the right to audit the books, records, and accounts of CONSULTANT that are related to any Task Order. CONSULTANT shall keep such books, records, and accounts as may be necessary in order to record complete and correct entries related to the Task Order.
- 7.3.2. CONSULTANT shall preserve and make available, at reasonable times for examination and audit by CITY, all financial records, supporting documents, statistical records, and any other documents pertinent to this Agreement for the required retention period of the Florida Public Records Act (Chapter 119, Fla. Stat.), if applicable, or, if the Florida Public Records Act is not applicable, for a minimum period of three (3) years after termination of this Agreement. If any audit has been initiated and audit findings have not been resolved at the end of the retention period or three (3) years, whichever is longer, the books, records, and accounts shall be retained until resolution of the audit findings. If the Florida Public Records Act is determined by CITY to be applicable to CONSULTANT's records, CONSULTANT shall comply with all requirements thereof; however, CONSULTANT shall violate no confidentiality or non-disclosure requirement of either federal or state law. Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for CITY's disallowance and recovery of any payment upon such entry.

7.4. NONDISCRIMINATION, EQUAL EMPLOYMENT OPPORTUNITY, AMERICANS WITH DISABILITIES ACT, AND EQUAL BENEFITS FOR DOMESTIC PARTNERS

- 7.4.1. CONSULTANT shall not unlawfully discriminate against any person in its operations and activities in its use or expenditure of the funds or any portion of the funds provided by this Agreement and shall affirmatively comply with all applicable provisions of the Americans with Disabilities Act (ADA) in the course of providing any services funded in whole or in part by CITY, including Titles I

and II of the ADA (regarding nondiscrimination on the basis of disability), and all applicable regulations, guidelines, and standards.

- 7.4.2. CONSULTANT's decisions regarding the delivery of services under this Agreement shall be made without regard to or consideration of race, age, religion, color, gender, sexual orientation, gender identity or expression, national origin, marital status, physical or mental disability, political affiliation, or any other factor that can not be lawfully or appropriately used as a basis for service delivery. CONSULTANT shall comply with Title I of the Americans with Disabilities Act regarding nondiscrimination on the basis of disability in employment and further shall not discriminate against any employee or applicant for employment because of race, age, religion, color, gender, sexual orientation, national origin, gender identity or expression, marital status, political affiliation, or physical or mental disability. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, termination, rates of pay, other forms of compensation, terms and conditions of employment, training (including apprenticeship), and accessibility.
- 7.4.3. Consultant shall comply with City Ordinance Sec. 2-799 Requirements for City Contractors to Provide Equal Benefits for Domestic Partners

7.5. PUBLIC ENTITY CRIMES ACT

- 7.5.1. CONSULTANT represents that the execution of this Agreement shall not violate the Public Entity Crimes Act (Section 287.133, Florida Statutes), which essentially provides that a person or affiliate who is a contractor, consultant or other provider and who has been placed on the convicted vendor list following a conviction for a Public Entity Crime may not submit a bid on a contract to provide any goods or services to CITY, may not submit a bid on a contract with CITY for the construction or repair of a public building or public work, may not submit bids on leases of real property to CITY, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with CITY, and may not transact any business with CITY in excess of the threshold amount provided in Section 287.017, Florida Statutes, for category two purchases for a period of 36 months from the date of being placed on the convicted vendor list. Violation of this section shall result in termination of this Agreement and recovery of all monies paid hereto, and may result in being barred from CITY's competitive procurement activities.
- 7.5.2. In addition to the foregoing, CONSULTANT further represents that there has been no determination, based on an audit, that it or any sub-consultant, has committed an act defined by Section 287.133, Florida Statutes, as a "public entity crime" and that it has not been formally charged with committing an act defined as a "public entity crime" regardless of the amount of money involved or whether CONSULTANT has been placed on the convicted vendor list.

7.5.3. CONSULTANT shall promptly notify CITY if it or any subcontractor or sub-consultant is formally charged with an act defined as a "public entity crime" or has been placed on the convicted vendor list.

7.6. SUB-CONSULTANTS

CONSULTANT may use the sub-consultants identified in the proposal that was a material part of the selection of CONSULTANT to provide the services under this Agreement. The CITY reserves the right to accept the use of a sub-consultant or to reject the selection of a particular sub-consultant and to inspect all facilities of any sub-consultants in order to make determination as to the capability of the sub-consultant to perform properly under this Contract. The CITY's acceptance of a sub-consultant shall not be unreasonably withheld. CONSULTANT shall obtain written approval of Contract Administrator prior to changing or adding to the list of sub-consultants. The list of sub-consultants submitted and currently approved is as follows:

- a. AVIROM & ASSOCIATES, INC.
- b. NUTTING ENGINEERS OF FLORIDA, INC.
- c. ~~_____~~
- d. ~~_____~~
- e. ~~_____~~
- f. ~~_____~~

Hourly rates for such said Sub-consultants are as on attached Exhibit A.

7.7. ASSIGNMENT AND PERFORMANCE

7.7.1. Neither this Agreement nor any interest herein shall be assigned, transferred, or encumbered by either party and CONSULTANT shall not subcontract any portion of the work required by this Agreement except as authorized pursuant to Section 7.6.

7.7.2. CONSULTANT represents that all persons delivering the services required by this Agreement have the knowledge and skills, either by training, experience, education, or a combination thereof, to adequately and competently perform the duties, obligations, and services set forth in the Scope of Services and to provide and perform such services to CITY's satisfaction for the agreed compensation.

7.7.3. CONSULTANT shall perform its duties, obligations, and services under this Agreement in a skillful and respectable manner. The quality of CONSULTANT's performance and all interim and final product(s) provided to or on behalf of CITY shall be in accordance with the standard of care set forth in Paragraph 3.6.

7.7.4. CONSULTANT shall not change or replace overall project manager identified in the CONSULTANT's response to the RFQ without the Contract Administrator's prior written approval.

7.8. INDEMNIFICATION OF CITY

7.8.1. To the fullest extent permitted by law, the CONSULTANT expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the "indemnities") from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONSULTANT, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnities for indemnification shall be limited to the amount of CONSULTANT's insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.

7.8.2. The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULTANT under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONSULTANT or of any third party to whom CONSULTANT may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the Work.

7.9. INSURANCE

7.9.1. CONSULTANT is to secure, pay for, and file with the City of Key West, prior to commencing any work under the Contract, all certificates for workers' compensation, public liability, and property damage liability insurance, and such other insurance coverages as may be required by specifications and addenda thereto, in at least the following minimum amounts with specification amounts to prevail if greater than minimum amounts indicated. Notwithstanding any other provision of the Contract, the CONSULTANT shall provide the minimum limits of liability insurance coverage as follows:

Auto Liability	\$1,000,000	Combined Single Limit
General Liability	\$2,000,000	Aggregate (Per Project)
	\$2,000,000	Products Aggregate
	\$1,000,000	Any One Occurrence
	\$1,000,000	Personal Injury
	\$ 300,000	Fire Damage/Legal
Professional Liability	\$2,000,000	Per Claim / Aggregate
Additional Umbrella Liability	\$2,000,000	Occurrence / Aggregate

7.9.2. CONSULTANT shall furnish an original Certificate of Insurance indicating, and such policy providing coverage to, City of Key West named as an additional insured on all policies— excepting Professional Liability—on a PRIMARY and NON CONTRIBUTORY basis utilizing an ISO standard endorsement at least as broad as

CG 2010 (11/85) or its equivalent, (combination of CG 20 10 07 04 and CG 20 37 07 04, providing coverage for completed operations, is acceptable) including a waiver of subrogation clause in favor of City of Key West on all policies. CONSULTANT will maintain the Professional Liability, General Liability, and Umbrella Liability insurance coverages summarized above with coverage continuing in full force including the additional insured endorsement until at least 3 years beyond completion and delivery of the work contracted herein.

- 7.9.3. Notwithstanding any other provision of the Contract, the CONSULTANT shall maintain complete workers compensation coverage for each and every employee, principal, officer, representative, or agent of the CONSULTANT who is performing any labor, services, or material under the Contract. Further, CONSULTANT shall additionally maintain the following minimum limits of coverage:

Bodily Injury Each Accident	\$1,000,000
Bodily Injury by Disease Each Employee	\$1,000,000
Bodily Injury by Disease Policy Limit	\$1,000,000

- 7.9.4. If the work is being done on or near a navigable waterway, CONSULTANT's workers compensation policy shall be endorsed to provide USL&H Act (WC 00 01 06 A) and Jones Act (WC 00 02 01 A) coverage if specified by the City of Key West. CONSULTANT shall provide the City of Key West with a Certificate of Insurance verifying compliance with the workers' compensation coverage as set forth herein and shall provide as often as required by the City of Key West such certification which shall also show the insurance company, policy number, effective and expiration date, and the limits of workers compensation coverage under each policy.
- 7.9.5. CONSULTANT's insurance policies shall be endorsed to give 30 days written notice to the City of Key West in the event of cancellation or material change, using form CG 02 24 or its equivalent.
- 7.9.6. Certificates of Insurance submitted to the City of Key West will not be accepted without copies of the endorsements being requested. This includes additional insured endorsements, cancellation/material change notice endorsements, and waivers of subrogation. Copies of USL&H Act and Jones Act endorsements will also be required if necessary. PLEASE ADVISE YOUR INSURANCE AGENT ACCORDINGLY.
- 7.9.7. CONSULTANT will comply with any and all safety regulations required by any agency or regulatory body including but not limited to OSHA. CONSULTANT will notify City of Key West immediately by telephone at (305) 809-3964 any accident or injury to anyone that occurs on the jobsite and is related to any of the work being performed by the CONSULTANT.
- 7.9.8. It shall be the responsibility of the Consultant to ensure that all sub-consultants/subcontractors comply with the same insurance requirements as is required of Consultant.

7.9.9. In addition, it is understood if at any time any of the policies required by the City shall become unsatisfactory to the City as to form or substance, or if a company issuing any such policy shall become unsatisfactory to the City, the Consultant shall obtain a new policy, submit the same to the City for approval and submit a certificate of insurance as which may be required by the contract. It is understood that upon failure of the Consultant to furnish, deliver and maintain such insurance as required above, the contract at the election of the City may be declared suspended, discontinued or terminated. Further, failure of the Consultant to take out and/or maintain any required insurance shall not relieve the Consultant from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligations of the Consultant concerning indemnification.

7.10. REPRESENTATIVE OF CITY AND CONSULTANT

7.10.1. The parties recognize that questions in the day-to-day conduct of the Task Order will arise. The Contract Administrator, upon CONSULTANT's request, shall advise CONSULTANT in writing of one (1) or more CITY employees to whom all communications pertaining to the day-to-day conduct of the Task Order shall be addressed.

7.10.2. CONSULTANT shall inform the Contract Administrator in writing of CONSULTANT's representative to whom matters involving the conduct of the Task Order shall be addressed.

7.11. ALL PRIOR AGREEMENTS SUPERSEDED

7.11.1. This document incorporates and includes all prior negotiations, correspondence, conversations, agreements or understandings applicable to the matters contained herein; and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document and the exhibits attached. Accordingly, the parties agree that no deviation from the terms hereof shall be predicated upon any prior representations or agreements whether oral or written.

7.11.2. It is further agreed that no modification, amendment or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.

7.12. NOTICES

Whenever either party desires to give notice unto the other, such notice must be in writing, sent by certified United States mail, return receipt requested, addressed to the party for whom it is intended at the place last specified; and the place for giving of notice shall remain such until it shall have been changed by written notice in compliance with the provisions of this paragraph. For the present, the parties designate the following as the respective places for giving of notice:

FOR CITY OF KEY WEST:

City of Key West
1300 White Street
Key West, FL 33040

FOR CONSULTANT:

Contact Name: Sean M. Coy
Address: 23069 BONITO LN.
CUDTOE KEY, FL.
33042

7.13. TRUTH-IN-NEGOTIATION CERTIFICATE

Signature of this Agreement by CONSULTANT shall act as the execution of a truth-in negotiation certificate stating that wage rates and other factual unit costs supporting the compensation of this Agreement are accurate, complete, and current at the time of contracting. The original contract price for any Task Order and any additions thereto shall be adjusted to exclude any significant sums, by which CITY determines the contract price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such contract adjustments shall be made within one (1) year following the end of this Agreement.

7.14. INTERPRETATION

The language of this Agreement has been agreed to by both parties to express their mutual intent and no rule of strict construction shall be applied against either party hereto. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include the other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as "herein," "hereof," "hereunder," and "hereinafter" refer to this Agreement as a whole and not to any particular sentence or paragraph where they appear, unless the context otherwise requires. Whenever reference is made to a Paragraph or Article of this Agreement, such reference is to the Paragraph or Article as a whole, including all of the subsections of such Paragraph, unless the reference is made to a particular subsection or subparagraph of such Paragraph or Article.

7.15. CONSULTANT'S STAFF

7.15.1. CONSULTANT shall provide the key staff identified in their proposal for Task Order as long as such key staffs are in CONSULTANT's employment.

7.15.2. CONSULTANT shall obtain prior written approval of Contract Administrator to change key staff. CONSULTANT shall provide Contract Administrator with such

information as necessary to determine the suitability of proposed new key staff. Contract Administrator shall be reasonable in evaluating key staff qualifications.

7.15.3. If Contract Administrator desires to request removal of any of CONSULTANT's staff, Contract Administrator shall first meet with CONSULTANT and provide reasonable justification for said removal.

7.15.4. The CITY reserves the right to approve the members of the Consulting Team and the roles they will undertake in the assignment. The CITY's acceptance of a team member shall not be unreasonably withheld.

7.15.5. Each assignment issued under this Agreement by the CITY to the Consultant, the Consultant will at the CITY's request, disclose the role, qualifications and hourly rate of each individual working on the assignment.

7.15.6. The CITY reserves the right to require replacement of any of the members of the Consulting Team. Any proposed addition or change of members of the Consulting Team initiated by the Consultant must obtain the CITY Representative's prior written approval.

7.15.7. In the event of the death, incapacity or termination of employment of any member of the Consulting Team before Completion of the Services, the Consultant shall at its own expense and as soon as reasonably practicable arrange to substitute or replace the individual member concerned.

7.15.8. The Consultant shall ensure that the substitute or replacement is no less qualified in terms of relevant experience and qualifications than the outgoing individual and is available at the relevant time to act as such replacement or substitute. The Consultant shall without delay forward curriculum vitae of the proposed substitute or replacement to the CITY. The deployment of such substitute or replacement shall be subject to the CITY's consent.

7.15.9. The Consultant shall solely be responsible for all direct, indirect and consequential costs or losses that may arise from the substitution or replacement of members of the Consulting Team.

7.16. INDEPENDENT CONTRACTOR

CONSULTANT is an independent contractor under this Agreement. Services provided by CONSULTANT shall be subject to the supervision of CONSULTANT. In providing the services, CONSULTANT or its agents shall not be acting and shall not be deemed as acting as officers, employees, or agents of the CITY, nor shall they accrue any of the rights or benefits of a CITY employee. The parties expressly acknowledge that it is not their intent to create any rights or obligations in any third person or entity under this Agreement.

7.17. THIRD PARTY BENEFICIARIES

Neither CONSULTANT nor CITY intend directly or substantially to benefit a third party by this Agreement. Therefore, the parties agree that there are no third party beneficiaries to this Agreement and that no third party shall be entitled to assert a claim against either of them based upon this Agreement. No subcontractor or sub-consultant, whether named or unnamed, shall be a third party beneficiary of this Agreement.

7.18. CONFLICTS

7.18.1. Neither CONSULTANT nor its employees shall have or hold any continuing or frequently recurring employment or contractual relationship that is substantially antagonistic or incompatible with CONSULTANT's loyal and conscientious exercise of judgment related to its performance under this Agreement.

7.18.2. CONSULTANT agrees that none of its officers or employees shall, during the term of this Agreement, serve as an expert witness against CITY in any legal or administrative proceeding in which he or she is not a party, unless compelled by court process, nor shall such persons give sworn testimony or issue a report or writing, as an expression of his or her expert opinion, which is adverse or prejudicial to the interests of CITY or in connection with any such pending or threatened legal or administrative proceeding. The limitations of this section shall not preclude such persons from representing themselves in any action or in any administrative or legal proceeding.

7.18.3. In the event CONSULTANT is permitted to use sub-consultants to perform any services required by this Agreement, CONSULTANT agrees to prohibit such sub-consultants from having any conflicts as within the meaning of this section, and shall so notify them in writing.

7.19. CONTINGENCY FEE

CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for CONSULTANT, to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for CONSULTANT, any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. For a breach or violation of this provision, CITY shall have the right to terminate this Agreement without liability at its discretion, or to deduct from the Agreement price or otherwise recover the full amount of such fee, commission, percentage, gift, or consideration.

7.20. WAIVER OF BREACH AND MATERIALITY

7.20.1. Failure by CITY to enforce any provision of this Agreement shall not be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach of a provision of this Agreement shall not be deemed a waiver of any subsequent breach

and shall not be construed to be a modification of the terms of this Agreement.

7.20.2. CITY and CONSULTANT agree that each requirement, duty, and obligation set forth herein is substantial and important to the formation of this Agreement and, therefore, is a material term hereof.

7.21. COMPLIANCE WITH LAWS

CONSULTANT shall comply with federal, state, and local laws, codes, ordinances, rules, and regulations in performing its duties, responsibilities, and obligations related to this Agreement applicable at the time the scope of services was drafted for this agreement. In addition, at the time each Task Order is executed, any revisions to applicable federal state, and local laws, codes, ordinances, rules and regulations shall apply.

7.22. SEVERABILITY

In the event this Agreement or a portion of this Agreement is found by a court of competent jurisdiction to be invalid, the remaining provisions shall continue to be effective unless CITY or CONSULTANT elects to terminate this Agreement.

7.23. JOINT PREPARATION

Preparation of this Agreement has been a joint effort of CITY and CONSULTANT and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than any other.

7.24. PRIORITY OF PROVISIONS

If there is a conflict or inconsistency between any term, statement, requirement, or provision of any exhibit attached hereto, any document or events referred to herein, or any document incorporated into this Agreement by reference and a term, statement, requirement, or provision of this Agreement, the term, statement, requirement, or provision contained in Articles 1 through 7 of this Agreement shall prevail and be given effect.

7.25. APPLICABLE LAW AND VENUE

The laws of the State of Florida govern the validity of this Agreement, its interpretation and performance, and any claims related to it. The venue for mediation, arbitration or any other legal proceeding shall be Monroe County, Florida.

7.26. INCORPORATION BY REFERENCE

The attached exhibits are incorporated into and made a part of this Agreement:


Exhibit A – CONSULTANT/Sub-consultants' Hourly Rates

7.27. COUNTERPARTS

This Agreement may be executed in three (3) counterparts, each of which shall be deemed to be an original.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature.

By: CITY OF KEY WEST


James Scholl, City Manager

3rd day of NOVEMBER, 2017

By: CONSULTANT

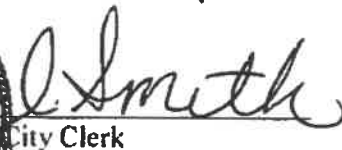

(Signature)

Sirpa H Hall

(Print Name and Title)


25th day of October, 2017




Paul Smith, City Clerk

3 day of Nov, 2017

Attest:


(Signature)

Sean McCoy Project Manager

(Print Name and Title)

25 day of October, 2017



EXHIBIT "A"

**Per Diem Rates (\$/hr) for Master Agreement to Furnish Engineering Services to
The City of Key West**

Employer Category	FY18	FY19	FY20	FY21	FY22
Professionals					
Engineers, Architects, Planners, Economists, Scientists, Hydrologists, Hydrogeologists, Geologists					
Engineer 8	\$234.64	\$241.68	\$248.93	\$256.40	\$264.09
Engineer 7	\$216.68	\$223.18	\$229.88	\$236.78	\$243.88
Engineer 6	\$198.72	\$204.68	\$210.82	\$217.14	\$223.66
Engineer 5	\$181.88	\$187.34	\$192.96	\$198.75	\$204.71
Engineer 4	\$157.18	\$161.90	\$166.76	\$171.76	\$176.92
Engineer 3	\$134.72	\$138.76	\$142.92	\$147.21	\$151.62
Engineer 2	\$117.88	\$121.42	\$125.06	\$128.81	\$132.68
Engineer 1	\$99.92	\$102.92	\$106.01	\$109.19	\$112.47
Planner 1	\$81.96	\$84.42	\$86.95	\$89.56	\$92.25
Technicians					
Drafters, Graphic Artists, Computer, Surveyors, Cartographics, Construction					
Technician 6	\$125.74	\$129.51	\$133.40	\$137.40	\$141.52
Technician 5	\$114.52	\$117.96	\$121.50	\$125.15	\$128.90
Technician 4	\$102.17	\$105.24	\$108.40	\$111.65	\$115.00
Technician 3	\$88.69	\$91.35	\$94.09	\$96.91	\$99.82
Technician 2	\$72.98	\$75.17	\$77.43	\$79.75	\$82.15
Technician 1	\$62.87	\$64.76	\$66.70	\$68.70	\$70.76
Office Support					
Specification Processor	\$79.71	\$82.10	\$84.56	\$87.10	\$89.71
Clerical/ Office Support	\$71.85	\$74.01	\$76.23	\$78.52	\$80.87
*Labor rates escalation at 3% per year					
Note (1): Rates applicable October 1 through September 30 for each year	10/1/17-9/30/18	10/1/18-9/30/19	10/1/19-9/30/20	10/1/20-9/30/21	10/1/21-9/30/22