

BOARD OF DIRECTORS, FLORIDA KEYS AQUEDUCT AUTHORITY

AGENDA ITEM SUMMARY

AGENDA ITEM: DOCP-03

CONSENT: REGULAR:

MEETING DATE: September 28, 2021

DEPARTMENT: Capital Projects

AGENDA TITLE:

Consideration to approve amendment to Carollo Engineer's Contract for Project #1150-17A "Kermit H Lewin Reverse Osmosis Facility" to include Phase V Construction Phase services in the amount of \$2,295,523

ITEM BACKGROUND:

Carollo Engineers was selected as the highest ranked firm from FKAAs RFQ-0004-19 Stock Island Reverse Osmosis Facility dated April 8, 2019. The current engineering contract has provisions for Phase V - Construction Phase services, but the original scope and fee only included design and bidding services. The fee for construction phase services is 5.48% of the construction cost.

PREVIOUS RELEVANT ACTION BY FKAAs BOARD OF DIRECTORS:

On October 28, 2020, the Board approved contract for final design, bidding, and limited inspection services for Project #1150-17, The New Kermit H. Lewin Reverse Osmosis Facility, with Carollo Engineers in the amount not-to-exceed of \$1,849,515. (30% design through bidding)

STAFF RECOMMENDATION (MOTION):

Approve amendment to Carollo Engineer's Contract for Project #1150-17A "Kermit H Lewin Reverse Osmosis Facility" to include Phase V Construction Phase services in the amount of \$2,295,523

SUPPLEMENTAL INFORMATION:

See attached proposal, which will be amended to existing contract (attached).

DOCUMENTATION: Included: To-Follow: Not Required:
 Cost to FKAAs: \$ 2,295,523
 Cost to Others: \$ _____
 Total Cost: \$ 2,295,523

BUDGETED: Yes No

Department: Capital Projects
 Executive _____
 Director Approval: _____
 Internal Auditor: _____

Department Director Approval: DJH
 Deputy Executive Director Approval: _____
 General Counsel: RTF

BOARD ACTION:

Approved: Tabled: Disapproved: Recommendation Revised:

Comments: _____

Date: September 28, 2021

Recording Clerk: Penelope Aley

EXHIBIT A

Scope of Services Florida Keys Aqueduct Authority

New Kermit H Lewin Reverse Osmosis Water Treatment Plant Engineering During Construction Services

FKAA PROJECT NUMBER 1150-17A

The existing Stock Island Reverse Osmosis Water Treatment Plant (WTP) provides potable water to the lower Keys on an emergency basis when the flow from the Florida City J. Robert Dean WTP has been discontinued for any reason. This existing facility located on Stock Island has reached the end of its useful life and requires replacement.

In early 2020, the Florida Keys Aqueduct Authority (FKAA) resumed efforts to plan, design, and construct the "New Kermit H Lewin Reverse Osmosis Water Treatment Plant". These efforts included a detailed planning update, conceptual/preliminary design, and final facility design for construction.

The design for construction was completed in the second quarter of 2021 and subsequently advertised to procure a qualified construction contractor to build the facility. Competitive construction bids were received on August 31, 2021.

It is anticipated that initial construction activities will begin early in the fourth quarter of 2021. Engineering during construction services (EDC) are necessary to facilitate the construction, provide necessary compliance inspections, start-up, and commissioning of the facility. The detailed EDC services to be provided as part of this agreement by the CONSULTANT include the following:

SCOPE OF SERVICES:

Task 1: Engineering During Construction and Contract Administration Services

The CONSULTANT shall perform the following activities in support of the construction, start-up, and commissioning of the new WTP. These services consist of the following:

- Prepare conformed Construction Documents for use by FKAA and its team members.
- General Contract Administration & Document Handling & Processing. CONSULTANT shall perform document handling, processing, documentation, and distribution, as is required to facilitate project construction activities for FKAA. Responsibilities include maintaining and updating project information in the e-Builder system.
- Project Management & Representation of FKAA. CONSULTANT shall perform general administrative duties associated with the project including project set-up, progress monitoring and reporting, team coordination and manpower planning, general correspondence review/issuance, invoicing, eBuilder monitoring, and meeting

attendance. In addition, the CONSULTANT shall prepare and present project status updates, and other project related matters to internal and external project stakeholders as requested by FKAA. The CONSULTANT shall represent the FKAA during the construction phase which shall commence with the award of the Contract for Construction. Instructions and other appropriate communications from the FKAA to the Contractor shall be communicated through the CONSULTANT unless the FKAA directs otherwise. The CONSULTANT shall act on behalf of the FKAA only to the extent provided in the Consultant Standard Contract and in the Contract for Construction. The CONSULTANT shall have and perform the duties, obligations and responsibilities of the CONSULTANT as set forth in the Contract for Construction to be executed by and between the FKAA and a General Contractor.

- Construction Meetings. The CONSULTANT shall schedule and attend a pre-construction meeting which shall generally include the CONSULTANT, the FKAA, the Contractor, and the major Subcontractors. The pre-construction meeting shall review and discuss any applicable procedures for contract administration as well as any other items deemed appropriate by the CONSULTANT or the FKAA. During construction, the CONSULTANT shall schedule additional meetings with the FKAA, the Contractor, and others, to review the progress of the Project or as otherwise necessary to protect the interest of the FKAA. The CONSULTANT shall prepare, distribute, and maintain detailed minutes of the pre-construction meeting and all other meetings relating to the construction of the Project.
- Receive & Process Requests for Information & Clarifications. At any time during the Construction phase, the CONSULTANT shall notify the FKAA in writing within five (5) working days of any necessary interpretations and clarifications of the Contract Documents. The written notification shall include any impacts to quality, operations, schedule, or cost. The CONSULTANT shall prepare and issue any necessary interpretations and clarifications of the Contract Documents. If appropriate, the CONSULTANT shall prepare work directives and proposed Change Orders
- Examination of Construction Schedules & Schedule Updates. The CONSULTANT shall examine and review construction schedules, and updates thereof, submitted by any Contractor or supplier in connection with the construction of the Project. The CONSULTANT shall advise the FKAA in writing with respect to the adequacy and accuracy of any such schedules or updates.
- Construction Observation & Inspections. The CONSULTANT shall inspect the Work of the Contractor as appropriate including any final inspection or testing required by the Contract Documents. The purpose of such inspections shall be to determine the quality, quantity, and progress of the Work in comparison with the requirements of the Contract Documents. In making such inspections, the CONSULTANT shall identify any defects or deficiencies that are apparent in the Work, notify FKAA of any potential unexcused delays in the Schedule and of any request for overpayment by the Contractor. Following each inspection, the CONSULTANT shall submit a written report of such inspection, together with any appropriate comments or recommendations, to the FKAA. Furthermore, the CONSULTANT shall require and review test reports required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents and shall report in writing to the FKAA the results thereof.
- Examination of Schedule of Values & Approval of Request for Payment. Upon receipt of the Schedule of Values, the CONSULTANT shall review and examine the Contractor's Schedule of Values, together with any supporting documentation or data which the FKAA or the CONSULTANT may require from the Contractor. The purpose of such

review and examination will be to notify the FKAA of an unbalanced Schedule of Values which allocates greater value to certain elements of the Work than is indicated by such supporting documentation or data, or than is reasonable under the circumstances. If the Schedule of Values is not found to be appropriate, or if the supporting documentation or data is deemed to be inadequate, and unless the FKAA directs the CONSULTANT to the contrary in writing, the Schedule of Values shall be returned to the Contractor for revision or supporting documentation or data. After making such examination, if the Schedule of Values is found to be appropriate as submitted, or if necessary, as revised, the CONSULTANT shall sign the Schedule of Values thereby indicating its informed belief that the Schedule of Values constitutes a reasonable, balanced basis for payment of the Contract price to the Contractor. The CONSULTANT shall not sign such Schedule of Values in the absence of such belief unless directed to do so, in writing, by the FKAA.

Working in association with the e-Builder system and the FKAA daily inspection staff, the CONSULTANT shall review each Contractor pay requests and shall, with each pay request, recommend amounts due to the Contractor under the Contract for Construction predicated upon: inspections of the Work, evaluation of the Contractor's rate of progress in light of the remaining Contract time and upon evaluation of the Contractor's Request for Payment; and shall issue recommended approvals for Payment to the FKAA in such amounts. The issuance of a recommended Approval for Payment shall constitute a representation by the CONSULTANT to the FKAA that the CONSULTANT has consulted with the FKAA inspection representative and discussed the Work progress indicated in the Payment request, that the quality of the Work meets the requirements of the Contract for Construction, and that, to the best of the knowledge, information and informed belief of the CONSULTANT, the Contractor is entitled to payment of the amount recommended for approval. The FKAA shall be the final interpreter of the amount of payment.

- Shop Drawings & Submittal Reviews. The CONSULTANT shall review, approve, or take other necessary action upon, the Contractor's Shop Drawings, product data, samples, and other submittals. Approval by the CONSULTANT of the Contractor's submittal shall constitute the CONSULTANT's representation to the FKAA that such submittal is in conformance with the Contract for Construction. Such action shall be taken within the timeframes established in the Contract Documents.
- Product & Equipment Substitution Evaluation. Product and equipment substitutions shall be evaluated by the CONSULTANT to determine suitability and compliance with the project design and the Contract for Construction. CONSULTANT shall provide FKAA a summary of the evaluation details and recommend to FKAA whether the requested substitution should be accepted or rejected. In addition to substitution requests, CONSULTANT shall review and analyze contractor submitted value engineering proposals for compliance with contract documents.
- Change Order & Field Order Processing. The CONSULTANT shall review and advise the FKAA concerning proposals and requests for Change Orders from the Contractor. The CONSULTANT shall prepare Change Orders for the FKAA's approval and execution in accordance with the Contract for Construction and shall have authority to order, by Field Order, minor changes in the Work not involving an adjustment in the Contract Price or quality or an extension of the Contract Time.
- Critical Work Sequencing. The CONSULTANT, working with the FKAA staff, shall identify potential impacts to the existing Stock Island Reverse Osmosis Treatment Plant systems, as well as the FKAA distribution system, that may/will be impacted by the

construction of the New Kermit H. Lewin Reverse Osmosis WTP or its start-up and commissioning. The CONSULTANT shall work with the FKAA, Construction Contractor, and major Subcontractors to develop an execution schedule and Construction sequence that will minimize, mitigate, or otherwise eliminate the identified potential negative impacts.

- Membrane System Start-up & Commissioning. Working closely with FKAA's operational staff and the Contractor's reverse osmosis membrane system supplier (ROMSS), the CONSULTANT shall participate in, monitor, and assist with the documentation of the membrane system start-up and commissioning. These activities include reviewing reports from factory testing of a complete reverse osmosis skid at the manufacturing facility. In addition, field, installation, functional, and clean water testing will be witnessed and monitored. Testing will include individual equipment components, component systems, membrane train, and complete membrane system testing activities. CONSULTANT will review, analyze, and confirm start-up and commissioning report generated by the ROMSS, General Contractor, and key subcontractors associated with the membrane treatment system to document compliance with the Contract Documents.
- Facility Start-up & Commissioning. The CONSULTANT shall assist the Construction Contractor and the FKAA with the process of planning, testing, and process start-up of the installation for compliance with contract requirements and demonstrating, through documented verification, that the project has successfully met the Contractual requirements. It includes assisting with the training of the FKAA's staff to operate the facility.
- Substantial & Final Completion Inspections & Processing. The CONSULTANT, based upon one or more inspections of the Project, shall determine and recommend in writing to the FKAA the date of Substantial Completion of the Project and the date of Final Completion of the Project. The CONSULTANT shall verify that all contractual requirements for substantial completion are met prior to issuing the recommendation to the FKAA. The CONSULTANT shall issue a recommendation for Approval for final Payment. The CONSULTANT shall also receive, review for adequacy, compile in an organized, bound, and neat format, and forward to the CITY any and all written warranties, guarantees, bonds, certificates of inspection, tests, required approvals, and any other related documents required by the Contract for Construction prior to issuing a recommendation for substantial completion.
- Operations & Maintenance Manual Handling & Processing. The CONSULTANT shall review, approve or take other necessary action upon the Contractor's submittal of Operation and Maintenance Manuals. Approved Operation and Maintenance Manuals shall be maintained in hardcopy and other acceptable electronic format as required by the construction contract.
- Production of Facility Record Drawings. The CONSULTANT shall review any Record Drawings furnished by the Contractor and shall incorporate as-built information on electronic drawings and submit to the FKAA that said drawings are up to date and complete based on information as provided by the Contractor.
- Project Closeout & Certification. The CONSULTANT shall assist the FKAA to compile closeout documents, project record documents, evidence of compliance with requirements of governing authorities, compilation of warranties and bonds, and delivery of electronic copies of project paperwork. In addition, the CONSULTANT will submit to the FDEP, and other agencies as appropriate, the applicable facility certification paperwork.

- Existing SIRO WTP Renewal & Replacement Chemical System Design & Permitting. The existing Stock Island Reverse Osmosis facility needs to replace its carbon dioxide feed system with a sulfuric acid feed system, install a new/replacement ammonia feed system, and add an alkalinity addition system. These system renewals and replacements will be procured through the FKAA Procurement Department working directly with chemical system suppliers. No independent construction contractor will be utilized. The scope of this work includes designing the acid, ammonia, and alkalinity feed systems, preparing a Florida Department of Environmental Protection (FDEP) permit application, and reviewing chemical feed system shop drawings once a system supplier has been chosen by FKAA.

Task 2: Inspection Services

Inspection services shall include the following:

The CONSULTANT shall provide the services of a part time project INSPECTOR. This INSPECTOR shall be the CONSULTANT's agent at the Project site during key construction activities. The key construction activities will be identified by the FKAA's daily on-site INSPECTOR, and CONSULTANT as appropriate. It shall be the FKAA's INSPECTOR'S responsibility to contact the CONSULTANT'S INSPECTOR when the CONSULTANT INSPECTOR'S services are required at the construction site.

The FKAA'S INSPECTOR shall inspect the work and shall keep the CONSULTANT fully informed of the progress and quality of the work. The INSPECTOR shall review the Contractor's schedule for performance of the work (and any updates thereof), the schedule of shop drawings and submittals (and any updates thereof), and the schedule of values prepared by the Contractor. The FKAA'S INSPECTOR shall attend all preconstruction and other meetings pertaining to construction of the Project and shall review and approve the minutes of same which have been produced by the CONSULTANT. The FKAA'S INSPECTOR shall serve as the CONSULTANT's liaison with the Contractor but shall not, absent written approval from the Contractor, communicate with the Contractor's subcontractors. The FKAA'S INSPECTOR shall provide immediate written notification to the CONSULTANT and the Contractor in the event the Contractor commences any work without necessary shop drawings, submittals or samples having first been submitted to the CONSULTANT. The FKAA'S INSPECTOR shall record in writing, and immediately report to the CONSULTANT, any defective, deficient, faulty or unsatisfactory work performed by the Contractor. The FKAA'S INSPECTOR shall witness and verify all tests required by the Contract Documents as well as the operation of all equipment and systems installed by the Contractor. The FKAA INSPECTOR shall maintain detailed records relating to any such tests. The FKAA'S INSPECTOR shall immediately notify the CONSULTANT in writing in the event any clarifications or interpretations of the Contract Documents are required or requested by the Contractor. The FKAA'S INSPECTOR shall maintain at the Project site a complete set of Contract Documents including change orders, modifications, supplemental drawings, field orders, and directives. The FKAA INSPECTOR shall maintain detailed records of the progress of the work, any problems encountered by the Contractor or subcontractors, weather conditions, daily activities, site visitors, decisions, observations in general, specific observations, manpower on the Project, and such other items as may be relevant to the progress and quality of the construction. The FKAA INSPECTOR shall also maintain names, addresses and telephone numbers of all contractors, subcontractors, and major suppliers of material and equipment for the Project. The FKAA INSPECTOR shall assist the CONSULTANT with the

production of the monthly construction progress report. The FCAA INSPECTOR shall provide daily reports, information associated with the Contractor's compliance with the Contract Documents. The FCAA INSPECTOR shall advise the CONSULTANT in advance of any scheduled test, inspection or start-up of equipment as well as commencement of any significant phase of the Work. The FCAA INSPECTOR shall assist with any final inspection of the Work and shall inspect the Work to determine that all requirements for final inspection have been completed. Any exceptions noted shall be submitted to the CONSULTANT in writing prior to final payment to the Contractor.

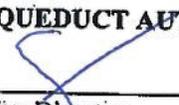
- **DELIVERABLES:** Deliverables shall include the following:
 - Meeting Minutes;
 - Submittal review documentation;
 - RFI/REC review documentation;
 - Copies of construction correspondence;
 - Change order review information and copies of correspondence;
 - Start-up and commissioning plan review comments;
 - Punch list information;
 - Project closeout documentation;
 - Project certification paperwork.

- **SCHEDULE:** CONSULTANT shall perform services as dictated by project construction schedule. Construction contract duration is 940 days.

METHOD AND AMOUNT OF COMPENSATION: ENGINEER agrees to accept as full compensation for design, and cost estimating services the lump sum amount of \$2,295,523. Lump sum amount will be invoiced monthly based on mutually agreed upon percent complete of project.

SUBCONSULTANT: ADS

FLORIDA KEYS AQUEDUCT AUTHORITY


Kerry Shelby, Executive Director

Date 5-10-2022


David Hackworth, P.E., Director of Capital Projects

Date 5/10/2022

Carollo Engineers, Inc.,

Digitally signed by Lyle D. Munce
Contact Info: Carollo Engineers, Inc.
Date: 2021.08.08 10:25:14-05'

Digitally signed by Laura B. Baumberger
Contact Info: Carollo Engineers, Inc.
Date: 2021.08.08 10:11:04-05'

Lyle Munce, P.E., Senior SVP; Laura Baumberger, P.E., VP

Date 9/08/2021

**SCHEDULE OF HOURLY RATES
EXHIBIT B**

SEE ATTACHED EXHIBIT B

**EXHIBIT C
SAMPLE INVOICE
COST NOT TO EXCEED FORMAT**

Florida Keys Aqueduct Authority

Project No. _____
Purchase Order No. _____
Project No. _____

Date _____
FKAA Ref. No. _____
Invoice No. _____

Description of services under Project No.

Period ending:

LABOR

<u>Class</u>	<u>Employee</u>	<u>Rate</u>	<u>Hours</u>	<u>Amount</u>
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Subtotal				\$
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EXPENSES

Auto Rental
Postage/Freight
Air Transportation
Print/Reprographics
Supplies

Subtotal Expenses

TOTAL AMOUNT DUE THIS INVOICE	\$
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COST SUMMARY

Contract Amount	\$
Amount Earned This Period	\$
Amount Previously Earned	\$
Amount Remaining	\$

EXHIBIT C (Continued)
SAMPLE INVOICE
LUMP SUM FORMAT

INVOICE

Florida Keys Aqueduct Authority

Project No. _____
Purchase Order No. _____
Project No. _____

Date _____
FKAA Ref. No. _____
Invoice No. _____

Description of services under Project No. _____

Period ending: _____

Total Fee \$

_____ % Complete \$
Less Previous Billings

Total Earned This Period \$

TOTAL AMOUNT DUE THIS INVOICE

CONTRACT
FKAA PROJECT NO.

New Kermit H. Lewin Reverse Osmosis Facility -- Final Design Services

THIS AGREEMENT, made and entered into this 16th day of October 2020, by and between the Florida Keys Aqueduct Authority, hereinafter "FKAA", Carollo Engineers, Inc., hereinafter referred to as "CONSULTANT".

WHEREAS, the FKAA has provided notice of the desired professional services and carried out the proper selection process pursuant to and in accordance with CONSULTANT's Competitive Negotiation Act, and;

WHEREAS, the FKAA represents that it is a Utility, organized under the State of Florida with the authority to engage CONSULTANT and accept the obligation for payment for the services desired, and;

WHEREAS, the FKAA desires to engage CONSULTANT to perform certain professional services pertinent to such work in accordance with this AGREEMENT, and;

WHEREAS, CONSULTANT shall provide such professional services in accordance with this AGREEMENT.

NOW, THEREFORE, in consideration of the premises and the mutual benefits which will accrue to the parties hereto in carrying out the terms of this AGREEMENT, it is mutually understood and agreed as follows:

- I. DEFINITIONS; GENERAL CONDITIONS
- A. THE SCOPE OF SERVICES is to be implemented as set forth by this AGREEMENT and by Exhibit A, Project Documentation as attached to this agreement that are made part hereof.
- B. CONSTRUCTION COSTS shall be the total estimated cost to the FKAA of all elements of the project designed or specified by CONSULTANT. Construction costs shall include the cost at current market rates of labor and materials furnished by the Contractor and equipment designed, specified, selected or specially provided for by CONSULTANT, plus a reasonable allowance for the contractor's overhead and profit. In addition, a reasonable allowance for contingencies shall be included for market conditions at the time of bidding and for changes in the work during construction. Construction costs does not include the compensation of CONSULTANT or CONSULTANTS subconsultants, the cost of the land, rights-of-way, financing or other costs which are the responsibility of the FKAA. CONSULTANT shall use its best judgment as a design professional familiar with the construction industry in estimating the construction cost. FKAA acknowledges that construction cost estimates, financial analyses and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. FKAA acknowledges that such influences may not be precisely forecasted and are beyond the control of CONSULTANT and that actual costs incurred may vary substantially from the estimates prepared by CONSULTANT. CONSULTANT does not warrant or guarantee the accuracy of construction or development cost estimates.
- C. PHASES: A phased approach may be utilized. The FKAA and CONSULTANT shall have the right to negotiate the terms of each phase. In the event the parties cannot agree, the FKAA may select another CONSULTANT or go out for additional proposals in order to complete the

subsequent phase(s) of the project. This phased approach shall not waive the FKAA's right to terminate this AGREEMENT during any phase of the project.

II. GENERAL DUTIES OF CONSULTANT

- A. The relationship of CONSULTANT to the FKAA will be that of a professional CONSULTANT, and CONSULTANT will provide the professional and technical services required under this AGREEMENT in accordance with acceptable practices and ethical standards which may include, but are not limited to professional engineering services as identified in the attached Exhibit A, Project Documentation. No employer/employee relationships shall be deemed to be established and CONSULTANT, its agents, subcontractors, and employee shall be independent contractors at all times.
- B. Professional and Technical Services: It shall be the responsibility of CONSULTANT to work with the FKAA and appraise it of solutions to problems and the approach or technique to be used towards accomplishment of the FKAA's objectives as set forth in this AGREEMENT upon execution by both parties.
- C. Exhibit B establishes a budget for the project. CONSULTANT shall be responsible for providing, at no additional cost to the FKAA, completed designs, drawings, specifications, reports and other applicable services if the budget for the entire project is exceeded during and up to completion of the final design phase of the project; however, nothing contained herein shall require CONSULTANT to bear additional costs if the additional costs are a result of a change in the scope of services directed by the FKAA.
- D. CONSULTANT shall be responsible for the professional quality, technical accuracy, timely completion, compliance with regulations and rules, and the coordination with all appropriate agencies of all drawings, specifications, reports and other services furnished by CONSULTANT. CONSULTANT shall perform its services in accordance with generally accepted standards and practices customarily utilized by competent engineering firms in effect at the time CONSULTANT's services are rendered. CONSULTANT shall, without additional compensation, correct or revise said error or omissions to the satisfaction of the FKAA.
- E. Approval by the FKAA of drawings, designs, specifications, reports and incidental professional services or materials furnished hereunder shall not in any way relieve CONSULTANT of responsibility for the technical adequacy of its work. The FKAA's review, approval or acceptance of, or payment for, any of the services shall not be construed to operate as a waiver of any rights under this AGREEMENT or of any cause of action arising out of the performance of this AGREEMENT.
- F. CONSULTANT designates Lyle Muncie, P.E., as its representative to act as liaison with the FKAA. The representative shall manage and coordinate FKAA projects and is hereby authorized to act on behalf of CONSULTANT to act on related matters with respect to performance of services for the FKAA in accordance with the AGREEMENT. Any change to name other person shall be requested in writing to the FKAA, and shall be approved by the FKAA.
- G. CONSULTANT shall attend all meetings, as specified or as defined where the project is discussed, unless the FKAA's representative declares such attendance and participation is not necessary. In addition, CONSULTANT shall attend all additional meetings as may be required to facilitate the project.

III. DUTIES OF CONSULTANTS: STUDY AND REPORT PHASE THROUGH CONSTRUCTION PHASE AND RESIDENT PROJECT REPRESENTATIVE SERVICES PHASE - The following Duties of CONSULTANT are separated into phases of the project that shall be performed by CONSULTANT. The FKAA may require additional requirements applicable to the project that will be specified in attached Exhibits. The FKAA must authorize the commencement of each phase of the work unless otherwise agreed upon.

A. Phase I - Study and Report Phase

If the Study and Report Phase is authorized, the following requirements shall apply.

1. CONSULTANT shall consult with the FKAA to clarify and define the FKAA's requirements for the Project and review available data.
2. CONSULTANT shall advise the FKAA as to the necessity of the FKAA's providing or obtaining from others, data or services.
3. CONSULTANT shall identify and analyze permit and approval requirements of all governmental authorities having jurisdiction to approve the design of the Project and participate in consultations with such authorities.
4. CONSULTANT shall provide analyses of the FKAA's needs, planning surveys, site evaluations and comparative studies of prospective sites and solutions.
5. CONSULTANT shall provide a general economic analysis of Owner's requirements applicable to variable alternatives.
6. CONSULTANT shall prepare a Report containing schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate clearly the considerations involved (including applicable requirements of governmental authorities having jurisdictions as aforesaid) and the alternative solutions available to the FKAA, and setting forth CONSULTANT'S findings and recommendations. This Report will be accompanied by CONSULTANT'S pre-design opinion of probable costs for the Project, including, but not limited to the following which will be separately itemized: Construction Cost, allowance for engineering costs and contingencies allowances for such other items, such as charges of all other professionals and consultants, for the cost of land and rights-of-way, for compensation for or damages to properties, and for permit, review and/or approval fees by other governmental agencies, if required. CONSULTANT shall also provide a preliminary evaluation of the FKAA's Project Schedule. The FKAA's Project Schedule and probable construction costs shall be evaluated and updated throughout subsequent phases of the work.
7. CONSULTANT shall furnish the number of copies of the Study and Report documents as provided in this AGREEMENT and review them with the FKAA.

B. Phase II - Preliminary Design Phase

If the Preliminary Design Phase is authorized, the following requirements will apply:

1. CONSULTANT, in consultation with the FKAA shall determine the general scope, extent and character of the Project.
2. Prepare Preliminary Design documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project.

3. Advise the FKAA if additional data or services are necessary and assist the FKAA in obtaining such data and services.
 4. Furnish the specified number of copies of the above Preliminary Design documents as contained within the Project Documentation and present and review them with the FKAA.
 5. CONSULTANT shall submit to the FKAA a preliminary estimate of construction costs based on current area, volume or other unit costs, which shall be updated throughout the design development phase.
 6. CONSULTANT shall prepare a development schedule, which shall include, but shall not be limited to, the review and approval times by all governmental agencies as may be required.
 7. CONSULTANT shall make available all design calculations and associated Data, and participate in meetings in which Value Engineering Analysis of the project takes place, at such times and places as shall be determined by the FKAA.
- C. Phase III - Final Design Phase

If the Final Design Phase is authorized, the following requirements shall apply:

1. CONSULTANT shall prepare construction documents which shall include but not be limited to drawings and technical specifications, general and supplementary conditions, bid forms, invitations to bid, instructions to bidders, with technical criteria, descriptions and design data necessary for permitting by governmental authorities, and shall include any further adjustments in the scope or quality of the project or in the construction budget authorized by the FKAA.
2. CONSULTANT shall in the preparation of construction documents, technical criteria, written descriptions and design data, take into account all currently prevailing codes and regulations governing construction in the Florida Keys and shall meet the requirements of all other agencies or governmental authorities having jurisdiction over the project.
3. CONSULTANT shall prepare a detailed opinion of probable cost that shall be reviewed by the FKAA prior to going out for bids.
4. CONSULTANT shall provide the required documents and attend meetings as necessary, for the approval of governmental boards, agencies or authorities having jurisdiction over the project.
5. CONSULTANT shall use front end bid documents provided by the FKAA including bidding forms, conditions of the contract, and form of AGREEMENT between the FKAA and CONTRACTOR.
6. CONSULTANT shall prepare all documents including design and plan revisions required for the approval of governmental authorities having jurisdiction over the project. Said approvals are required prior to the public notice for the Invitation to Bid and submission of application and therefore are the responsibility of CONSULTANT.
 - a. CONSULTANT shall provide the FKAA the number of copies of contract documents as specified in this AGREEMENT.

D. Phase IV - Bidding/Negotiation Phase

If the bidding phase is authorized, the following requirements shall apply

1. CONSULTANT shall assist the FKAA in obtaining bids or negotiated proposals, assist in awarding and preparing contracts for construction, attend pre-bid conferences, prepare addenda, provide written recommendation of award, assist in the compilation/preparation of contract documents, and after the award assist the FKAA in securing the required bonds and certificates of insurance, and in the review of the contract documents for completeness.
2. CONSULTANT shall attend the bid opening, prepare bid tabulation sheets and assist the FKAA in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment and services.
3. CONSULTANT shall issue addenda as appropriate to interpret, clarify or expand the Bidding Documents.
4. CONSULTANT shall consult with and advise the FKAA as to the acceptability of subcontractors, suppliers and other persons and organizations proposed by the prime contractor(s) (herein called CONTRACTOR(S)) for those portions of the work as to which such acceptability is required by the Bidding Documents.
5. Consult with the FKAA concerning and determine the acceptability of substitute materials and equipment proposed by CONTRACTOR(S) when substitution prior to the award of contracts is allowed by the Bidding Documents.

E. Phase V - Construction Phase

If Contract Administration is authorized, the following requirements shall apply:

1. CONSULTANT shall provide administration of the contract for construction as set forth herein and as contained with the general conditions of the contract for construction.
2. CONSULTANT shall be a representation of and shall advise and consult with the FKAA during construction and until final payment to the contractor is due. CONSULTANT shall have authority to act on behalf of the FKAA only to the extent provided in this AGREEMENT and as provided in the contract for construction unless otherwise modified by written instrument.
3. CONSULTANT shall visit the site at regular intervals appropriate to the stage of construction or as otherwise agreed to by the FKAA and CONSULTANT, in writing, to become generally familiar with the progress and quality of the work completed and shall determine in general if the work is being performed in a manner indicating that the work when completed will be in accordance with the contract documents. CONSULTANT shall keep the FKAA informed of the progress and quality of the work and shall provide certification to the FKAA of satisfactory completion of all phases of the work in compliance with the plans, specifications, and/or approved changes or modifications thereto.
4. CONSULTANT shall not have control over or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures of construction or for safety precautions and programs in connection with the work, since these are solely the CONTRACTOR'S responsibility under the contract for construction. CONSULTANT shall make every reasonable effort to ensure that the CONTRACTOR completes the work in

accordance with the current approved schedule and carries out the work in accordance with the contract documents. CONSULTANT makes no warranty or guarantee with respect to the performance of a CONTRACTOR.

5. CONSULTANT based on observations and evaluations of CONTRACTOR'S applications for payment, shall review and certify the amounts due the CONTRACTOR within seven (7) days of receipt.
6. CONSULTANT'S certification for payment shall constitute a representation to the FCAA, based on CONSULTANT'S observations at the site as provided herein and on the data comprising the CONTRACTOR'S application for payment, that the work has progressed to the point indicated and that, to the best of CONSULTANT'S knowledge, information, and belief, the quality and quantity of work is in accordance with the contract documents. The foregoing representations are subject to an evaluation of the work for conformance with the contract documents, correctable prior to completion and to specific qualifications expressed by CONSULTANT. The issuance of the certificate of payment shall further constitute a representation that CONSULTANT has made observations to review the quality or quantity of the work.
7. CONSULTANT shall recommend disapproval or rejection of CONTRACTOR'S WORK to the FCAA which does not conform to the contract documents. CONSULTANT will have authority to require additional inspection or testing of the work in accordance with the provisions of the contract documents, whether or not such work is fabricated, installed or completed.
8. CONSULTANT shall review and approve or take other appropriate action upon CONTRACTOR'S submittals such as shop drawings, product data, and samples for the purpose of checking for conformance with information given and the design concept expressed in the contract documents. CONSULTANT shall evaluate and determine the acceptability of substitute materials and equipment proposed by CONTRACTORS.
9. CONSULTANT shall prepare change orders and construction change directives with supporting documentation and data if deemed necessary by CONSULTANT, for the FCAA's approval and execution in accordance with the contract documents, and may authorize minor changes in the work not involving an adjustment in the contract sum or an extension of the contract time which is consistent with the intent of the contract documents.
10. CONSULTANT shall conduct inspections to determine the date or dates of substantial completion and the date of final completion, shall receive and forward to the FCAA for the FCAA's review and records, written warranties and related documents required by the contract documents and assembled by the CONTRACTOR and shall issue a final certificate for payment upon compliance with the requirements of the contract documents.
11. CONSULTANT shall interpret matters concerning performance of the FCAA and CONTRACTOR under the requirements of the contract documents on written request of either the FCAA or CONTRACTOR. CONSULTANT'S response to such requests shall be made with reasonable promptness and within any time limits agreed upon.
12. Interpretations of CONSULTANT shall be consistent with the intent of and reasonably inferable from the contract documents and shall be in writing or in the form of drawings. When making such interpretations, CONSULTANT shall endeavor to secure faithful performance by both the FCAA and the CONTRACTOR.

13. The FKAA shall be the final arbiter on matters relating to aesthetics.
14. CONSULTANT shall render written interpretations within a reasonable time on all internal disputes between the FKAA and CONTRACTOR relating to the execution of the progress of the work as provided in the contract documents. CONSULTANT'S interpretations on internal disputes are not binding on the FKAA and the FKAA may result to remedies afforded by this contract to resolve the issue.
15. CONSULTANT shall provide the number of sets of the construction documents to the CONTRACTOR as specified in this AGREEMENT.
16. Upon completion of construction CONSULTANT shall provide to the FKAA, three sets of record drawings, signed and sealed, plus one electronic set incorporating record conditions and other data furnished by CONTRACTOR(S) to CONSULTANT.
17. In company with the FKAA, CONSULTANT shall visit the Project to observe any apparent defects in the complete construction, assist the FKAA in consultations and discussions with CONTRACTOR(S) concerning correction of such deficiencies, and make recommendations as to replacement or correction of defective work.
18. The presence or duties of CONSULTANT's personnel at a construction site, whether as onsite representatives or otherwise, do not make CONSULTANT or CONSULTANT's personnel in any way responsible for those duties that belong to FKAA and/or the construction contractors or other entities, and do not relieve the construction contractors 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.
19. CONSULTANT and CONSULTANT's personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions and have no duty for inspecting, noting, observing, correcting, or reporting on health or safety deficiencies of the construction contractor(s) or other entity or any other persons at the site except CONSULTANT's own personnel.
20. The presence of CONSULTANT's personnel at a construction site is for the purpose of providing to FKAA a greater degree of confidence that the completed construction work will conform generally to the construction documents and that the integrity of the design concept as reflected in the construction documents has been implemented and preserved by the construction contractor(s). CONSULTANT neither guarantees the performance of the construction contractor(s) nor assumes responsibility for construction contractor's failure to perform work in accordance with the construction documents.

F. Phase VI - Resident Project Representative Services Phase

If the Resident Project Representative Services Phase is authorized the following requirements shall apply:

- I. Resident Project Representative will be assigned to assist CONSULTANT in carrying out his

responsibilities to FKAA at the site. Resident Project Representative is CONSULTANT'S agent at site, will act as directed by and under the supervision of CONSULTANT, and will confer with CONSULTANT regarding Resident Representative's actions. Resident Representative's dealing in matters pertaining to the on-site work shall in general be with CONSULTANT and CONTRACTOR keeping the FKAA advised as necessary. Resident Project Representative's dealings with subcontractors shall only be through or with the full knowledge and approval of CONTRACTOR. Resident Project Representative shall generally communicate with the FKAA with the knowledge of and under the direction of CONSULTANT.

2. Resident Project Representative shall where applicable:
 - a. Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by CONTRACTOR and consult with CONSULTANT concerning its general acceptability.
 - b. Attend meetings with CONTRACTOR, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
 - c. Working principally through CONTRACTOR'S superintendent, assist CONSULTANT in serving as the FKAA's liaison with CONTRACTOR, when CONTRACTOR'S operations affect the FKAA's on-site operations.
 - d. Assist in obtaining from the FKAA additional details or information, when required for proper execution of the Work.
 - e. Record date of receipt of Shop Drawings and samples.
 - f. Receive samples which are furnished at the site by CONTRACTOR, and notify CONSULTANT of availability of samples for examination.
 - g. Advise CONSULTANT and CONTRACTOR for the commencement of any Work requiring a Shop Drawing if the submittal has not been approved by CONSULTANT.
 - h. Conduct on-site observations of the Work in progress to assist CONSULTANT in determining if the Work is, in general, proceeding in accordance with the Contract Documents. CONSULTANT makes no warranty or guarantee with respect to the performance of a CONTRACTOR.
 - i. Report to CONSULTANT whenever Residential Project Representative believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise CONSULTANT of Work that Resident Project Representative believes should be uncovered for observation, or requires special testing, inspection or approval. Nothing herein shall relieve the CONTRACTOR or CONSULTANT from the duties imposed by the contract.
 - j. Verify that tests, equipment and systems start-up, and operating and maintenance training are conducted in the presence of appropriate personnel, and that CONTRACTOR maintains adequate records, thereof, and observe, record and report to CONSULTANT appropriate details relative to the test procedures and start-ups.

- k. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to CONSULTANT.
- l. Report to CONSULTANT when clarifications and interpretations of the Contract Documents are needed and transmit to CONTRACTOR clarifications and interpretations as issued by CONSULTANT.
- m. Consider and evaluate CONTRACTOR'S suggestions for modifications in Drawings or Specifications and report with Resident Project Representative's recommendations to CONSULTANT. Transmit to CONTRACTOR decisions as issued by CONSULTANT.
- n. Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, CONSULTANT'S clarifications and interpretations of the Contract Documents, progress reports, and other Project-related documents.
- o. Keep a diary or log book, recording CONTRACTOR hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to CONSULTANT.
- p. Record all names, addresses and telephone numbers of the CONTRACTOR, all subcontractors and major suppliers of material and equipment.
- q. Furnish CONSULTANT periodic reports as required of progress of the Work of the CONTRACTOR'S compliance with the progress schedule and schedule of Shop drawing and sample submittals.
- r. Consult with CONSULTANT in advance of schedule major tests, inspections or start of important phases of the Work.
- s. Draft proposed Change Orders and work Directive Changes, obtaining backup material from CONTRACTOR and recommend to CONSULTANT, Change Orders, Work Directive changes, and Field Orders.
- t. Report immediately to CONSULTANT and the FCAA upon the occurrence of any accident.
- u. Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with recommendations to CONSULTANT, noting particularly the relationship of the payment requested to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.
- v. During the course of the work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents; and have this material delivered to CONSULTANT for review and forwarding to FCAA prior to final payment for the work.

- w. Before CONSULTANT issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring completion or correction.
 - x. Conduct final inspection in the company of CONSULTANT, the FKAA and the CONTRACTOR and prepare a final list of items to be completed or corrected.
 - y. Observe that all items on final list have been completed or corrected and make recommendations to CONSULTANT concerning acceptance.
3. The Resident Project Representative shall not:
- a) Authorize any deviation from the Contract Documents or substitution of materials or equipment.
 - b) Exceed limitations of CONSULTANT'S authority as set forth in the Contract Documents.
 - c) Undertake any of the responsibilities of CONTRACTOR, subcontractors, or CONTRACTOR'S superintendent.
 - d) Advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
 - e) Advise on, issue directions regarding or assume control over safety precautions and programs in connection with the work.
 - f) Accept Shop Drawing or sample submittals from anyone other than CONTRACTOR.
 - g) Authorize the FKAA to occupy the Project in whole or in part.
 - h) Participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by CONSULTANT.

IV. DATA AND SERVICES TO BE PROVIDED BY THE FKAA

The FKAA shall provide the following:

- A. Furnish or cause to be furnished such reports, studies, instruments, documents, and other information as CONSULTANT and FKAA mutually deem necessary and which are under control of the FKAA.
- B. Pay for all legal advertisements incidental to obtaining bids or proposals from contractors.
- C. The Executive Director or his designee shall act as the FKAA's representative with respect to the work to be performed under this AGREEMENT. The Executive Director or his designee shall have the authority to the extent authorized by the FKAA Board of Directors to exercise the rights and responsibilities of the FKAA provided in this contract. Said authority may include but is not limited to: transmit instructions, stop work, receive information, interpret FKAA's policies and decisions with respect to materials, equipment, elements, and systems pertinent to the services covered by this AGREEMENT.

D. Pay all permit application filing fees.

E. Provide access to FKAA facilities.

V. TIME OF PERFORMANCE

A. CONSULTANT will begin work promptly after issuance of a notice to proceed.

B. CONSULTANT'S services called for under the AGREEMENT shall be completed in accordance with the schedule contained in the Project Documentation. If CONSULTANT'S services are unreasonably delayed by the FKAA in excess of 180 days, the time of performance and compensation shall be renegotiated, provided, however, CONSULTANT as a condition precedent to renegotiation shall notify the FKAA within fifteen (15) calendar days from the end of the delay of CONSULTANT'S proposed additional costs incurred by reason of said delay.

VI. AGREEMENT PERIOD

The period of service is from the date of execution of this AGREEMENT. This AGREEMENT will terminate at such time as the engineering services required by this AGREEMENT have been completed.

VII. COMPENSATION

A. The FKAA will compensate CONSULTANT for the services in accordance with a negotiated lump sum, or a not to exceed budgeted amount based on time charges which are based upon hourly rates, plus reimbursable expenses if compensation is based on Method II and other related costs as are specified in this AGREEMENT.

1. METHOD I - LUMP SUM

Wherever possible, the scope of services for Services, Projects or Programs shall be thoroughly defined and outlined prior to its authorization. The FKAA and CONSULTANT shall mutually agree to a lump sum amount for services to be rendered and a detailed scope of services. Should the FKAA deem that a change in the scope of services is appropriate, then a decrease or increase in compensation shall be authorized in writing. In lump sum contracts, CONSULTANT shall submit the estimated man hours, wage rates and other actual unit costs supporting the compensation. 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.

2. METHOD II - TIME/CHARGES NOT TO EXCEED BUDGETED AMOUNT

When a service is to be compensated for a time charge/not to exceed basis, CONSULTANT will submit a not to exceed budget cost to the FKAA for prior approval based on actual time charges which shall not exceed established hourly rates as shown in Exhibit B attached hereto, plus reimbursable expenses and other related costs. The FKAA shall not be obligated to reimburse CONSULTANT for costs incurred in excess of the not to exceed cost amount.

a. The FKAA agrees to pay CONSULTANT compensation for services rendered based upon the established raw hourly salary rates as shown in Exhibit B for services rendered on FKAA projects multiplied by an overhead factor containing a ten percent (10%) profit, which shall not exceed 3.0. The overhead factor may be subject to audit. The schedule of hourly rates as set forth in Exhibit B is attached hereto and made a part hereof. The rates listed in Exhibit B may be adjusted upon AGREEMENT of the parties.

- b. In addition, the FKAA shall pay for reimbursable expenses invoiced at the actual cost of expenditures incurred by CONSULTANT if provided in this AGREEMENT as follows:
1. Transportation and subsistence when traveling in connection with the work required of this AGREEMENT shall be reimbursed in accordance with the FKAA Travel and Business Reimbursement Policy and Florida Statute, FS 112.061. The method of transportation shall be by the most efficient and economical means of travel (considering time of the traveler, cost of transportation and per diem or subsistence required). Lodging of CONSULTANT'S while on official FKAA business in Monroe County should be arranged and paid for directly by CONSULTANT. FKAA will reimburse lodging for hotels in comparable value to Hampton Inn, Holiday Inn, Fairfield Inn, etc. Mileage and per diem will be reimbursed in accordance with the FKAA Travel and Business Reimbursement Policy and F.S. 112.061.
 2. Actual expense of reproductions of documents in excess of that stipulated in the Project Documentation.
 3. Actual expenses of testing, laboratory services, and field equipment, postage, supplies incurred directly for the project, and CONSULTANT'S standard project charges for special health and safety requirements of OSHA.
 4. Actual expenses of overtime work requiring higher than regular rates, when authorized by the FKAA.
 5. Express courier services shall only be utilized with the approval of the Director of Environmental Services or Director of Engineering.
 6. Travel expenses for CONSULTANT'S employees traveling to and from CONSULTANT'S offices shall not be reimbursable unless the travel is required for meetings with FKAA personnel, or as otherwise approved by the Director of Environmental Services or Director of Engineering.
- B. Subcontractual service shall be invoiced at the actual fees paid by CONSULTANT, plus an additional ten-percent (10%) of the cost of these services to compensate CONSULTANT for the procuring and management of the subconsultant, and for the other financial and administrative costs. Subcontractual services shall be approved by the FKAA in writing prior to performance of the Subcontractual work.
- C. Total Compensation (including, but not limited to compensation for subconsultants) for all services and expenses shall not exceed the budget cost listed in this AGREEMENT, without written approval.
- D. If the FKAA determines that any price for services, however calculated, provided by CONSULTANT, including profit, negotiated in connection with this AGREEMENT or any cost reimbursable under this AGREEMENT was increased by any significant sums because CONSULTANT or any subcontractor furnished incomplete or inaccurate costs or pricing data, then such price or cost of profit shall be reduced accordingly and the AGREEMENT shall be reduced accordingly and the AGREEMENT shall be modified in writing to reflect such reduction.

VIII. PAYMENT

The FKAA agrees that it will use its best effort to pay CONSULTANT within thirty (30) calendar days from presentation of CONSULTANT'S itemized report and invoice and approval of the FKAA's representative, unless additional time for processing is required for payments for basic services, Subcontractual services, and reimbursable expenses as defined in Section VII. CONSULTANT shall submit monthly invoices, as required in this AGREEMENT, which shall include a report of work completed during the respective invoice period. Invoices shall be in a format consistent with those shown in Exhibit C. The report shall be adequate in detail to describe work progress (% completed for each task) and written summaries of work completed. No payment request shall exceed the value of work and services performed by CONSULTANT under this AGREEMENT.

IX. MISCELLANEOUS PROVISIONS

A. Ownership of Documents

A set of reproducible mylar drawings and electronic documents in a format compatible with AutoCadd, Latest Edition, FKAA's computer system, shall be given to the FKAA. Details, design calculations, and all other documents and plans that result from CONSULTANT'S SERVICES under this AGREEMENT shall become and remain the property of the FKAA, including patent and copyright rights, whether the project is completed or not, and will be delivered to the FKAA upon demand. CONSULTANT reserves the right to retain a copy of all such documents for record purposes. Where such documents are required to be filed with governmental agencies, CONSULTANT will furnish copies to the FKAA upon request. The contract work is represented by hard copy documentation; software is provided to the FKAA for convenience only.

B. Copies of Documents

CONSULTANT shall prepare sufficient copies of all documents necessary to obtain approval through the FKAA's processes, as well as other governmental authorities. See also Section III for additional requirements. The FKAA acknowledges that the materials cited in Paragraph IX and other data provided in connection with this AGREEMENT which are provided by CONSULTANT are not intended for use in connection with any project other than the project for which such materials are prepared. Any use by the FKAA of such materials in connection with a project other than that for which such materials were prepared without prior written consent and adaptation by CONSULTANT shall be at the FKAA's sole risk, and CONSULTANT shall have no responsibility or liability therefore.

C. Insurance

Without limiting any of the other obligations or liabilities of CONSULTANT, CONSULTANT shall, at his own expense provide and maintain in force, until all of its services to be performed under this AGREEMENT have been completed and accepted by the FKAA (or for such duration as it otherwise specified hereinafter), the following insurance coverage:

1. Worker's Compensation Insurance to apply to all of CONSULTANT'S employees in compliance with the "Worker's Compensation Law" of the State of Florida and all applicable Federal Laws.
 - a. Employer's Liability with limits of \$100,000 per person, \$500,000 per occurrence and \$100,000 per each disease.
2. Comprehensive General Liability with minimum limits of \$1,000,000 per occurrence.

combined single limit for Bodily Injury Liability and Property Damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability policy, without restrictive endorsements other than ISO Endorsement GL 21 06 (Engineers, Architects, or Surveyors Professional Liability exclusion), as Filed by the Insurance Services Office and must include:

- a. Premises and/or Operations
 - b. Independent Contractors
 - c. Products and Complete Operations - CONSULTANTS shall maintain in force until at least three years after completion of all services required under this AGREEMENT, coverage for Products and Completed Operations, including Broad Form Property Damage.
 - d. Broad Form Property Damage
 - e. Contractual Coverage applicable to this specific AGREEMENT.
 - f. Personal Injury Coverage with minimum limits of coverage equal to those required for Bodily Injury Liability.
 - g. Business Automobile Liability with minimum limits of \$1,000,000 per occurrence combined single limit for Bodily Injury Liability and Property damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability policy, without restrictive endorsements, as filed by the Insurance Services Office and must include:
 - i. Owned Vehicles
 - ii. Hired and Non-Owned Vehicles
 - iii. Employer's Non-Ownership
3. Professional Liability Insurance with minimum limits of \$1,000,000 per claim. Coverage shall be afforded on a form acceptable to the FCAA. CONSULTANT shall maintain such professional liability insurance until at least one year after a Certificate of Occupancy is issued.
4. Prior to commencement of services, CONSULTANT shall provide to the FCAA Certificates of Insurance evidencing the insurance coverage specified in the foregoing Paragraphs. All policies covered within subparagraphs of section C shall be endorsed to provide the FCAA with thirty (30) days notice of cancellation and/or restriction (ten (10) days notice for cancellation due to non-payment of premium). The FCAA shall be named as an additional insured as to CONSULTANTS liability on policies referenced except Workers Compensation and Professional liability.
5. If the initial insurance policies required by this AGREEMENT expire prior to the completion of the services, renewal Certificates of Insurance of policies shall be furnished thirty (30) days prior to the date of their expiration. For Notice of Cancellation and/or Restriction; the policies must be endorsed to provide the FCAA with thirty (30) days notice of cancellation and/or restriction (ten (10) days notice for cancellation due to non-payment of premium).
6. CONSULTANT'S insurance, including that applicable to the FCAA as an additional insured, shall apply on a primary basis.

D. Litigation Services

It is understood and agreed that CONSULTANT'S services include reasonable participation in litigation or dispute resolution arising from this AGREEMENT. CONSULTANT'S participation shall include up to 20 hours of services related to litigation or dispute resolution. Any such services in excess of 20 hours shall be an additional service.

E. Authority to Contract

The FKAA represents that it is an Agency of the State of Florida with the authority to engage CONSULTANT for professional services and to accept the obligation for payment for the services described in this Agreement.

F. Assignment

The FKAA and CONSULTANT each binds itself and its successors, legal representatives, and assigns to the other party to this AGREEMENT and to the partners, successors, legal representatives, and assigns of such other party, in respect to all covenants of this AGREEMENT subject to budget considerations and requirements of law; and, neither the FKAA nor CONSULTANT will assign or transfer their interest in this AGREEMENT without the written consent of the other.

G. Confidential Information

During all times that CONSULTANT is employed on behalf of the FKAA and at all times subsequent to the date of this contract, all discussions between the FKAA and CONSULTANT and all information developed or work products produced by CONSULTANT during its employment and all matters relevant to the business of the FKAA not otherwise being a matter of public record shall be deemed to be confidential. All such information and work product shall be protected by CONSULTANT and shall not be revealed to other persons without the express written permission of the FKAA, unless mandated by order of the court.

H. Non-Exclusive Contract

The FKAA reserves the right to award projects to other firms pursuant to the Florida Statutes Consultant's Competitive Negotiations Act during the period of service of CONSULTANT. CONSULTANT agrees to cooperate with the FKAA and other firms in accomplishing work that may require joint efforts to accomplish the FKAA's goals. This cooperation, when requested by the FKAA, will include but not be limited to:

1. Sharing technical information developed under contract with the FKAA.
2. Joint meeting for project coordination.
3. Establish lines of communication.

I. Subconsultants

In the event CONSULTANT, during the course of the work under this AGREEMENT requires the services of any subcontractors or other professional associates in connection with services covered by this AGREEMENT, CONSULTANT must secure the prior written approval of the FKAA.

J. Notices

Whenever either party desires to give notice unto the other, it must be given by written notice, sent by registered United States mail, with return receipt requested, addressed to the party for whom it is intended at the place last written, as the place for giving of notice in compliance with the provisions of this paragraph. For the present, the parties designate the following as the representative places of giving notice to with:

Florida Keys Aqueduct Authority
1100 Kennedy Drive
Key West, Florida 33040.

CONSULTANT

Carollo Engineers, Inc.
2056 Vista Parkway, Suite 400
West Palm Beach, FL 33411.

K. Attachments

Request for Qualifications is hereby incorporated within and made an integral part of this AGREEMENT.

L. Truth-In-Negotiation Certificate.

Signature of the 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. The original contract price and any additions thereto shall be adjusted to exclude any significant sums by which the FKAA determines the contract price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs.

M. Records

Records of all expenses relative to project shall be kept on a general recognized accounting basis and shall be available to the FKAA or its authorized representative at mutually convenient times.

N. Personnel

CONSULTANT represents that it has or will secure at its own expense, qualified personnel required in performing the services under this AGREEMENT. All work shall be performed under the direction of a professional, registered under the State of Florida in the field for which he is responsible for performing such services. The project manager shall be approved by the FKAA. Key personnel will be identified for each project and expected to perform the work assignment as can reasonably be expected, and as approved by the FKAA.

O. Equal Opportunity Employment; Non-Discrimination

CONSULTANT agrees that it will not discriminate against employees or applications for

employment because of race, creed, color, religion, sex, age, handicapped status or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; lay-off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth this non-discrimination clause. This provision applies to all CONSULTANT'S subcontractors and it is the responsibility of CONSULTANT to ensure subcontractor's compliance.

P. Prohibition Against Contingent Fees

CONSULTANT warrants that he has not employed or retained any company or person, other than a bonafide employee working solely for CONSULTANT, to solicit or secure this AGREEMENT, and that he has not paid or agreed to pay any persons, company, corporation, individual or firm, other than a bonafide employee working solely for CONSULTANT any fee, commission, percentage, gift, or any other consideration, contingent upon or resulting from the award or making of this AGREEMENT.

Q. Termination

This AGREEMENT may be terminated by either party by seven (7) calendar days prior written notice, in the event of substantial failure to perform in accordance with the terms hereof by the other party through no fault of the terminating party. CONSULTANT and the FKAA shall also have a right to terminate this AGREEMENT for convenience at any time by thirty (30) calendar days written notice to either one or the other. In the event the project described in this AGREEMENT, or the services of CONSULTANT called for under this AGREEMENT, is or are suspended, canceled, or abandoned by the FKAA, CONSULTANT shall be given five days prior written notice of such action and shall be compensated for the professional services provided and reimbursable expenses incurred up to the date of suspension, cancellation or abandonment. CONSULTANT agrees to provide all documents to the FKAA (specifically those referenced within). Further, prior to CONSULTANT'S destruction of any of the above referenced documents, the FKAA shall be notified and allowed a reasonable period of time to gain access to and make copies of any such documents. Upon any termination of this AGREEMENT, CONSULTANT agrees that it shall use its best efforts to work harmoniously with any successor who enters an AGREEMENT to provide services for the FKAA in order to provide for a smooth transition period.

R. Indemnification

CONSULTANT will at all times indemnify, save and hold harmless and defend the FKAA, its officers, agents (the term agents shall not include the CONTRACTOR(s), any subcontractors, any materialman or others who have been retained by the FKAA or CONTRACTOR, or materialman to supply goods or services to the project) and employees, from and against liability, claim, demand, damage, loss, expense or cause of action and costs (including attorney's fees at trial or appellate levels) to the proportionate extent arising out of negligent action of CONSULTANT, its agents, servants or employees in the performance of services under this AGREEMENT. The indemnifications contained herein shall survive the expiration or earlier termination of this AGREEMENT.

Nothing in this AGREEMENT shall be deemed to affect the rights, privileges and immunities of the FKAA as set forth in Florida Statutes 768.28.

S. Interest of CONSULTANT

CONSULTANT covenants that it presently has no interest and shall not acquire any interest, direct or indirect, in any Project to which this AGREEMENT pertains or any other interest which would conflict in any manner or degree with the performance of its service hereunder. CONSULTANT further covenants that in the performance of this AGREEMENT, no person having such interest shall be employed.

T. Prohibited Practices

CONSULTANT during the period of this AGREEMENT shall not hire, retain, or utilize for compensation any member, officer, or employee of FKAA or any person who, to the knowledge of CONSULTANT, has a conflict of interest.

U. Compliance With Laws

1. CONSULTANT shall comply with the applicable requirements of State, Federal and applicable County laws and all Codes of Ordinances of the local municipality as amended from time to time, and that exist at the time of building permit issuance.
2. For Projects involving work under Federal or State Grantors or Approving Agencies, the FKAA and CONSULTANT shall review and approve the applicable required provisions or any other supplemental provisions as may be included.

V. Jurisdiction; Venue.

CONSULTANT hereby covenants, consents and yields to the jurisdiction of the State Courts of the 16th Judicial Circuit, in and for Monroe County, Florida. Any dispute between CONSULTANT and the FKAA shall be governed by the laws of Florida with venue in the State Courts of the 16th Judicial Circuit, in and for Monroe County, Florida.

W. Attorney's Fees

In the event a suit is filed in court arising out of this AGREEMENT, the prevailing party shall be entitled to recover from the other party all costs incurred, including reasonable attorney's fees and costs on appeal.

X. Internal Dispute Between FKAA and Consultant

The Executive Director shall be the final decision maker regarding internal disputes between FKAA and CONSULTANT.

Y. Project Scheduling

CONSULTANT shall provide scheduling to FKAA, within ten (10) days of the date of commencement as contained within this AGREEMENT. During the course of the work, CONSULTANT shall provide monthly updates with a written description of any changes in the schedule.

Z. Extent of Agreement

This AGREEMENT represents the entire integrated AGREEMENT between the FKAA and CONSULTANT and supersedes all prior negotiations, representations or AGREEMENTS, written or oral. This AGREEMENT may not be amended, changed, modified, or otherwise altered in any

way, at any time after the execution hereof, except by approval of the FCAA Board of Directors and CONSULTANT.

AA. Audit and/or Access to Records.

1. At all times during the period that the CONTRACT is in force and for a period of not less than three (3) years thereafter, the CONTRACTOR shall provide all authorized representatives of the FCAA with full access/audit to all its financial records that pertain to services performed and determination of amounts payable under the CONTRACT including access to appropriate individuals with knowledge of financial records and full access to all additional records that pertain to services performed and determination of amounts payable under the CONTRACT, permitting such representatives to examine, audit and copy such records at the site at which they are located. Such access/audit shall include both announced and unannounced inspections and on-site audits.
2. Audits conducted under this provision shall be in accordance with generally accepted auditing standards and within established procedures and guidelines of the reviewing or auditing agency.
3. This right to access/audit clause applies to financial records pertaining to all contracts, all contract change orders, and all contract amendments. In addition, this right to access applies to all records pertaining to all contracts, additional work clause items and contract amendments.
4. To the extent the records pertain directly to contract performance. If there is any indication that fraud, gross abuse or corrupt practices may be involved; or if the CONTRACT is terminated for default or for convenience.
5. If an audit, litigation, or other action involving the records is started before the end of the three (3) year period, the records must be retained until all issues arising out of the action are resolved or until the end of the three (3) year period, whichever is later.

IN WITNESS WHEREOF, the FCAA has caused these presents to be executed in its name by its Executive Director, and attested and its official Seal to be hereunto affixed by its Records Clerk, and CONSULTANT has hereunto set its hand and Seal the day and year first written above:

FLORIDA KEYS AQUEDUCT AUTHORITY

Henry Helby

Thomas G. Walker, P.E. Executive Director

Date 9/28/2021

Paul T. Julian

Reviewed by: Legal Counsel

Date 9/28/2021

Carollo Engineers, Inc.,

Lyle Munce

Lyle Munce, P.E., Senior Vice President

Witness: EdUARDO S. TORRES

Chad T. Reilly

Christopher Reinbold, P.E., Vice President

Witness: Michael Benz

BOARD APPROVAL DATE 9/28/2021

**CORPORATE ACKNOWLEDGMENT
STATE OF FLORIDA
COUNTY OF MONROE**

The foregoing instrument was acknowledged before me this 16th day of October, 2020, by Eyle Munce, Senior Vice President of Carollo Engineers, Inc., a Delaware corporation, on behalf of the corporation. He is personally known to me.

Michael Boaz

Signature of Person Taking Acknowledgment

Michael Boaz

Name of Acknowledger - Typed Printed or Stamped

BOARD APPROVAL DATE _____ (Required if under \$10,000.00)

EXHIBIT A

Scope of Services Florida Keys Aqueduct Authority

New Kermit H Lewin Reverse Osmosis Water Treatment Plant Final Design

FKAA PROJECT NUMBER _____

The existing Kermit H Lewin Reverse Osmosis Water Treatment Plant (WTP) provides potable water to the lower Keys on an emergency basis when the flow from the Florida City Robert Dean WTP has been discontinued for any reason. This existing facility located on Stock Island has reached the end of its useful life and requires replacement.

In early 2020 the Florida Keys Aqueduct Authority (FKAA) resumed efforts to plan, design, and construct a "New Kermit H Lewin Reverse Osmosis Water Treatment Plant". These initial efforts included a detailed planning update which identified facility sizing parameters meeting the emergency potable water needs in the lower Keys, as well as project fiscal constraints, and conceptual construction pricing. In addition to these planning efforts, a conceptual/preliminary design was developed and utilized to apply for, and secure, a Florida Department of Environmental Protection (FDEP) construction permit for the proposed new facility.

Subsequent to the planning, conceptual design, and permitting phase, the "Initial Design Services" were commenced to develop tangible and distinct project features that would refine the project definition while providing for a level of detail allowing a firm construction cost (+/- 10%) to be developed. This effort also advanced the foundation design of the proposed facility to completion so that initial facility construction activities could begin at the earliest direction of FKAA.

The last phase prior to commencing complete facility construction is the Final Design which is proposed within this scope of work. The final design will progress the design developed as part of the Initial Design Services to completion, concluding with construction contractor procurement (bidding services). The detailed Final Design services include the following:

SCOPE OF SERVICES:

Assumptions

1. ENGINEER will prepare Drawings and Specifications in the following format:
 - a. Specifications:
 - i. Technical Specifications: CSI MasterFormat™ 50
 - ii. Software: MS Word 2013
 - b. Drawings:
 - i. Format:
 1. Equipment Tagging Conventions: As agreed upon with OWNER
 2. Full-Size print format: 22" x 34"; Half-Size print format: 11" x 17"

3. Boarder: Carollo Standard

- ii. Deliverables: limited to Adobe *.PDF output, with CADD as requested. -TW
2. Design services will be limited to the "emergency facility" described in Preliminary Design Report that was completed. The facility shall have a buildout capacity of 4 MGD and provisions for future facilities that will accommodate more regular operation.
 3. Process area designations referenced in this scope of services match the process area numbering referenced in the Preliminary Design Report used for drawing numbering. Areas not included in this scope work services, other than for points of electrical, communications, or piping interface include: ground water wells, future calcite contactor, generator building/system, existing injection well, and existing KHLSDP RO building.
 4. ENGINEER's design will include provisions to connect power and communications to the standby power facility design by others.
 5. OWNER will not pursue building permits with Monroe County. Design will be based upon current adopted code requirements. ENGINEER will design site drainage to comply with minimum County Standards. Landscaping is not included in this scope of services.
 6. ENGINEER will prepare the design to accommodate the addition of treatment equipment in increments of 2, 3 and 4 MGD.
 7. ENGINEER's design efforts assume that control descriptions and instrumentation control design must be developed to a level of detail sufficient for the OWNER's in-house assigned programmer to complete the programming work and to provide adequate record documentation.
 8. Design and specifications for furnishings, fixtures and equipment (FF&E) that are movable and not connected to the structure are outside the scope of services presented herein. ENGINEER assumes that furnishings, including furniture and office equipment will be selected and purchased by the Owner. No representations of such FF&E will be included on the final drawings or specifications.
 9. No profile drawings are required for pressurized yard piping or duct banks.
 10. Electrical conduit and cable tray routing will be excluded from the 3D design modeling work, but included in 2D construction drawings.
 11. ENGINEER assumes that process area floor drains that may contain seawater will be directed to a new collection sump that will treat the drain water for sediment, oil and grease removal and then pump these wastes to the existing Class V injection well. Chemical room drain wastes will be collected and stored separately in a containment tank that will need to be pumped out and hauled off-site for disposal. All other sanitary wastes and non-process/chemical area drains will be directed to an existing wastewater treatment facility (WWTF) located at 6630 Front Street via the lift/grinder station that receives sanitary wastewater flows from the existing KHLSDP building, which ENGINEER assumes can accommodate new sanitary loads from the SIRO WTP.
 12. OWNER will coordinate with local fire officials to (1) determine if additional hydrants are required. If required, they will be furnished and installed separately from this project by OWNER; (2) determine fire riser requirements. Fire riser details will be provided to the ENGINEER for inclusion in the project plans.
 13. ENGINEER will develop a performance specification for the fire suppression system (i.e., encompassing all piping, instrumentation and controls after the fire riser). The construction contractor shall retain the services of a specialty contractor to design and build the fire suppression system based on the requirements of ENGINEER's specifications.
 14. ENGINEER's permitting services assume that one permit for constructing the treatment facilities and equipping the new groundwater supply wells is all that is necessary, which was obtained in a previous effort. The existing injection well will be reused. No permitting

- services for changing the flow rate to the existing injection or to construct a new well are included in this scope of services.
15. ENGINEER's permitting services assume that an air permit waiver is the acceptable effort required for the degasifiers. Air permitting services for the standby power facility, if required, will be provided by others.
 16. Modification of the Class V Injection Well Permit or attaining a new industrial pre-treatment permit for discharge of (neutralized) chemical waste to the sanitary sewer system (e.g., membrane preservation / clean-in-place or other chemical area floor drains) is not included.
 17. Site security coordination and design services are not included as part of this scope of services.

Task 1: 60% Completion Level Design

The 60% design activity will advance the Initial Design Services work product to the 60% design completion level in a manner that allows the OWNER to continue to collaborate on anticipated project cost, materials, construction methods, and other design/construction aspects. ENGINEER will prepare and submit to the OWNER a 60% design submittal that consists of the following:

- 2D Design Drawings: Refer to Attachment 1 for a list of anticipated drawings included in the Final Design submittals. The 60% drawings will have limited annotation and tagging.
- 60% Control Descriptions: ENGINEER will prepare a written narrative of process control elements to review with OWNER's staff. These control strategies will be based upon the concepts discussed during the Initial Design Services.
- Construction Cost Estimate Update: ENGINEER shall evaluate changes in the design documents, and construction cost information, produced during the preceding design phase and shall update the estimate of probable construction cost by incorporating additions, deletions, or modifications, as appropriate. The base construction cost information that will be utilized for all estimates is the Guaranteed Maximum Cost developed by the previous Stock Island RO Design Build project.

Not more than two (2) weeks following the delivery of the 60% Design Submittal to the OWNER, the ENGINEER will hold a workshop to solicit feedback from the OWNER's staff. ENGINEER will distribute a meeting agenda, which will be distributed with the 60% Design Submittal. ENGINEER's project manager will subsequently produce draft and final meeting minutes that document the feedback and decisions received during the workshop.

60% Design Deliverables:

1. 60% Design Drawings (2 hard copies (11" x 17"), and bookmarked Adobe *.PDF format)
2. 60% Technical Specifications
3. 60% Control Descriptions
4. 60% Design Review Workshop Agenda
5. Draft 60% Design Review Workshop Meeting Minutes
6. Final 60% Design Review Workshop Meeting Minutes

Task 2: 90% Completion Level Design

ENGINEER will prepare and submit draft final design documents (i.e., 90% Design Submittal) that consist of the following elements:

Civil: Site plan, yard piping plan, grading and paving plan, drainage plan, typical detail sheets 90% complete.

Architectural: Plan, building data (code analysis), door and window schedules, exterior elevations, special details and typical details.

Structural: Plan, sections, special details and typical detail sheets 90% complete.

Process: Treatment process plans, sections, and special details and typical details sheets 90% complete.

Mechanical: HVAC and plumbing plans and typical details 90% complete.

Electrical: Electrical one-lines, plans and typical detail sheets 90% complete.

I&C: Process flow and instrumentation diagrams, and typical detail sheets 100% complete.

Specifications: 90% complete specifications.

Control Descriptions: The control descriptions (90% complete) will not be included in the specification package, but will be memorialized as a separate deliverable and provided to OWNER.

Construction Cost Estimate Update: ENGINEER shall evaluate changes in the design documents, and construction cost information, produced during the preceding design phase and shall update the estimate of probable construction cost by incorporating additions, deletions, or modifications, as appropriate. The base construction cost information that will be utilized for all estimates is the Guaranteed Maximum Cost developed by the previous Stock Island RO Design Build project.

Front-end/Contract Documents: The OWNER will develop the Front-end/Contract Documents.

Not more than two (2) weeks following the delivery of the 90% Design Submittal to the OWNER, ENGINEER will hold a workshop to solicit feedback from the OWNER's staff. ENGINEER will distribute a meeting agenda, which will be distributed with the 90% Design Submittal. ENGINEER's project manager will subsequently produce draft and final meeting minutes that document the feedback and decisions received during the workshop.

90% Design Deliverables:

1. 90% Design Drawings (2 hard copies (11" x 17") and bookmarked Adobe *.PDF format)
2. 90% Contract and Technical Specifications (2 hard copies and bookmarked Adobe *.PDF format)
3. 90% Control Descriptions (2 hard copies and bookmarked Adobe PDF format)
4. 90% Design Review Workshop Agenda
5. Draft 90% Design Review Workshop Meeting Minutes
6. Final 90% Design Review Workshop Meeting Minutes

Task 3: 100% Completion Level Design

Following the feedback provided by the OWNER during the 90% Design Review Meeting, ENGINEER will finalize the design and submit to the OWNER 100% design drawings and specifications, which represent the Contract Documents suitable for advertising for bids for construction.

100% Design Deliverables:

1. Design Drawings (2 hard copies (11" x 17") and bookmarked Adobe *.PDF, formatted for printing on full-size 22x34)
2. Contract and Technical Specifications (2 hard copies and bookmarked Adobe *.PDF format)
3. Digitally certified by the Engineers of Record Design Drawings and Specifications to be posted to FKAA's e-Builder site.

Task 4: Project Management

ENGINEER's Project Manager will provide project management services to complete the Project. These services will include effective project controls and reporting, preparation of invoices, progress reports, and directing ENGINEER's staff and internal resources in a manner so that project milestones are met and deliverables are produced as scheduled.

Meetings and Project Coordination

ENGINEER's Project Manager will hold progress meeting with the OWNER, the ENGINEER's primary design staff, and as needed, various discipline engineers and sub-consultants to review project status and pending decisions and actions that will affect the project's schedule, scope and cost. ENGINEER's Project Manager will prepare an agenda and distribute back meeting minutes summarizing the meeting discussion.

Project Management Deliverables

1. Meeting Agenda
2. Meeting Minutes

Project Planning and Control

To plan and control the work, ENGINEER's Project Manager will prepare a Project Plan and Monthly Project Summary Reports.

The Project Plan will include the following elements:

- Project communication procedures
- Document management plan
- Project standards
- Quality management plan
- Staffing and project delivery plan
- Project schedule
- Schedule of deliverables

The Monthly Project Summary Reports will be included with the ENGINEER's monthly invoices and will contain the following elements:

- Progress associated with each of the major tasks
- Schedule performance: planned versus actual
- Cost performance: planned versus actual

- Summary overview of all activities scheduled for the upcoming month.
- Outstanding project issued and identification of any items that will affect performance under this contract.

Project Planning and Control Deliverables

1. Monthly Invoices
2. Monthly Project Summary Reports

Task 5: Other Services

Bidding Services

The ENGINEER shall assist the OWNER in obtaining bids for the construction of the facility. It is understood that two construction bid packages will be developed for advertisement to prospective bidders. Bidding services shall include:

- Addenda. The ENGINEER shall prepare for OWNER approval written addenda as appropriate to interpret, clarify, or expand the bidding documents. The ENGINEER shall coordinate with the OWNER during the bidding process and be available to assist the OWNER in addressing bidders' questions and comments at any time during the bidding process.
- Evaluation of Contractors and Suppliers. The ENGINEER shall investigate, analyze, and advise the OWNER as to the acceptability and qualifications of prospective contractors, suppliers, and others proposed by the bidder and shall assist in evaluation of all bids received for determination of compliance with the bidding requirements and determination of the lowest responsive and responsible bidder.
- Substitution of Materials and Equipment. The ENGINEER will investigate, study, and analyze proposed substitutions of materials or equipment at the OWNERS request and shall advise the OWNER with respect to same.
- Bid Opening. The ENGINEER shall attend the pre-bid meeting, which will be at a location as specified by the OWNER. The ENGINEER shall assist the OWNER in evaluating bids and in assembling and awarding contracts for construction.
- Bid Review. The ENGINEER shall review the bids and prepare an opinion of bid acceptability.

Limited Construction Services

The ENGINEER shall provide limited construction phase services for the construction of the Stock Island wellfield piping and well pads. It is anticipated that the level of services shall be such that the ENGINEER will be able to certify the completion of the construction with respect to FDEP permitting requirements. These services shall be limited to:

- Attending construction meetings.
- Interpreting the contract construction documents.
- Reviewing shop drawings.

- Construction completion inspection.
- Engineer of record services.

Limited Construction Services Deliverables:

1. Documentation associated with submittal reviews and contract interpretations.
2. Copies of Engineer of Record Certification

Task 5: Permitting Services

No permitting services are provided. FDEP construction permit was previously obtained.

SCHEDULE: ENGINEER shall perform the services as follows:

- Task 1 shall be completed 75 days of notice to proceed (NTP)
- Task 2 shall be completed within 60 days of receipt of FKAA comments on the 60% submittal
- Task 3 shall be completed within 30 days of receipt of FKAA comments on the 90% submittal
- Task 4 services shall be provided in accordance with schedule established by FKAA.
- Task 5 NA.

METHOD AND AMOUNT OF COMPENSATION: ENGINEER agrees to accept as full compensation for design, and cost estimating services the lump sum amount of \$1,795,663. Lump sum amount will be invoiced monthly based on mutually agreed upon percent complete of project.

For Other Services (bidding & limited construction services) ENGINEER agrees to accept on an hourly bases (time and materials) a not to exceed amount without further authorization of \$53,852.

SUBCONSULTANT: ADS, K2M, V&A Consulting Engineers

FLORIDA KEYS AQUEDUCT AUTHORITY

Thomas G. Walker, P.E., Executive Director

Date: _____

Jolynn Reynolds, P.E., Engineering Manager

Date: _____

Carollo Engineers, Inc.,

Lyle Mince, P.E. Senior VP; Chris Reinbold, P.E., VP

Date: 10/13/2020

**ATTACHMENT 1
DRAWING LIST**

Sheet No.	GENERAL	60% DESIGN SUBMITTAL	90% & 100% DESIGN SUBMITTAL
1	00G00 COVER, LOCATION, VICINITY MAP		
2	00G01 LIST OF DRAWINGS - 1 OF 2		
3	00G02 LIST OF DRAWINGS - 2 OF 2	1	1
4	00G03 ABBREVIATIONS - DRAWING CROSS REFERENCE DETAIL	1	1
5	00G04 SYMBOLS	1	1
6	00G05 PIPING SCHEDULE AND GENERAL NOTES	1	1
7	00G06 PROCESS FLOWSCHMATIC	1	1
8	00G07 HYDRAULIC PROFILE - FEED TO PERMEATE	1	1
9	00G08 HYDRAULIC PROFILE - FEED TO BRINE	1	1
CIVIL			
10	00G01 GENERAL CIVIL NOTES		
11	00G02 SURVEY NOTES AND HORIZONTAL CONTROL	1	1
12	00C01 CIVIL KEY PLAN	1	1
13	00C02 EXISTING SITE PLAN/DEMOLITION PLAN - OVERALL	1	1
14	00C03 PROPOSED SITE PLAN - OVERALL	1	1
15	00C04 PARTIAL PROPOSED SITE PLAN - 1	1	1
16	00C05 PARTIAL PROPOSED SITE PLAN - 2	1	1
17	00C06 PARTIAL YARD PIPING PLAN - 1	1	1
18	00C07 PARTIAL YARD PIPING PLAN - 2	1	1
19	00C08 YARD SPRING PLAN - HIGH SERVICE PUMP STATION	1	1
20	00C09 PLANT DRAIN SEDIMENT TRAP/OIL WATER SEPARATOR LIFT STATION - PLAN AND SECTION	1	1
ARCHITECTURAL			
21	00A01 CODE INFORMATION, DRAWING INDEX AND PROJECT INFORMATION		
22	00A02 ACCESSIBILITY GUIDELINES - 1	1	1
23	00A03 ACCESSIBILITY GUIDELINES - 2	1	1
24	00A04 ACCESSIBILITY GUIDELINES - 3	1	1
25	00A05 UL DETAIL - 1	1	1
26	00A06 UL DETAIL - 2	1	1
27	00A07 UL DETAIL - 3	1	1
28	00A08 LIFE SAFETY PLANS	1	1
29	02A01 RO BUILDING - ARCHITECTURAL SITE PLAN	1	1
30	02A02 RO BUILDING - GROUND FLOOR PLAN	1	1
31	02A03 RO BUILDING - 1ST FLOOR PLAN	1	1
32	02A04 RO BUILDING - 2ND FLOOR PLAN	1	1
33	02A05 RO BUILDING - CEILING PLAN (GROUND FLOOR)	1	1
34	02A06 RO BUILDING - CEILING PLAN (1ST FLOOR)	1	1
35	02A07 RO BUILDING - CEILING PLAN (2ND FLOOR)	1	1
36	02A08 RO BUILDING - ROOF PLAN	1	1
37	02A09 RO BUILDING - EXTERIOR ELEVATIONS 1	1	1
38	02A10 RO BUILDING - EXTERIOR ELEVATIONS 2	1	1
39	02A11 RO BUILDING - SECTIONS 1	1	1
40	02A12 RO BUILDING - SECTIONS 2	1	1
41	02A13 RO BUILDING - WALL SECTIONS 1	1	1
42	02A14 RO BUILDING - WALL SECTIONS 2	1	1
43	02A15 RO BUILDING - WALL SECTIONS 3	1	1
44	02A16 RO BUILDING - ENLARGED FLOOR TOILET ROOM PANS AND ACCESSORIES	1	1
45	02A17 RO BUILDING - INTERIOR TOILET ROOM ELEVATIONS	1	1
46	02A18 RO BUILDING - DOOR AND WINDOW TYPES AND SCHEDULES	1	1
47	02A19 RO BUILDING - WINDOW, DOOR AND LOUVER DETAILS	1	1
48	02A20 RO BUILDING - FINISH PLANS AND FINISH SCHEDULE	1	1
49	02A21 RO BUILDING - STAIR PLANS	1	1
50	02A22 RO BUILDING - STAIR SECTIONS AND DETAILS	1	1
51	02A23 RO BUILDING - ROOFING DETAILS	1	1
52	02A24 RO BUILDING - EXTERIOR DETAILS	1	1
STRUCTURAL			
53	00S01 GENERAL STRUCTURAL NOTES 1 OF 2		
54	00S02 GENERAL STRUCTURAL NOTES 2 OF 2		
55	00S03 GENERAL STRUCTURAL - SPECIAL INSPECTIONS	1	1
56	00S04 STRUCTURAL DETAILS 1	1	1
57	00S05 STRUCTURAL DETAILS 2	1	1
58	00S06 STRUCTURAL DETAILS 3	1	1
59	00S07 STRUCTURAL DETAILS 4	1	1
60	02S01 RO BUILDING - FOUNDATION PLAN & SLAB ON GRADE	1	1
61	02S02 RO BUILDING - 1ST FLOOR FRAMING PLAN	1	1
62	02S03 RO BUILDING - 2ND FLOOR FRAMING PLAN	1	1
63	02S04 RO BUILDING - ROOF FRAMING PLAN	1	1
64	02S05 RO BUILDING - FOUNDATION SECTIONS AND DETAILS 1	1	1
65	02S06 RO BUILDING - FOUNDATION SECTIONS AND DETAILS 2	1	1
66	02S07 RO BUILDING - FLOOR AND ROOF FRAMING SECTIONS AND DETAILS 1	1	1
67	02S08 RO BUILDING - FLOOR AND ROOF FRAMING SECTIONS AND DETAILS 2	1	1
68	02S09 RO BUILDING - FLOOR AND ROOF FRAMING SECTIONS AND DETAILS 3	1	1
69	02S10 RO BUILDING - FLOOR AND ROOF FRAMING SECTIONS AND DETAILS 4	1	1
70	02S11 RO BUILDING - SHEER WALL ELEVATIONS AND DETAILS 1	1	1
71	02S12 RO BUILDING - SHEER WALL ELEVATIONS AND DETAILS 2	1	1
72	03S01 CLEARWELL - PLANS	1	1
73	03S02 CLEARWELL - SECTIONS	1	1

74	03502	DRAWBACK TANK AND FLUSH PUMPS - FOUNDATION PLAN AND SECTIONS		
75	04501	CARBON DIOXIDE STORAGE - PLANS	1	1
76	04502	CARBON DIOXIDE STORAGE - SECTIONS AND DETAILS	1	1
PROCESS MECHANICAL				
77	006M01	TYPICAL DETAILS 1		1
78	006M02	TYPICAL DETAILS 2		1
79	006M03	TYPICAL DETAILS 3		1
80	006M04	TYPICAL DETAILS 4		1
81	006M05	TYPICAL DETAILS 5		1
82	006M06	TYPICAL DETAILS 6		1
83	006M07	TYPICAL DETAILS 7		1
84	006M08	TYPICAL DETAILS 8		1
85	006M09	TYPICAL DETAILS 9		1
86	006M10	TYPICAL DETAILS 10		1
87	006M11	TYPICAL DETAILS 11		1
88	01M01	GROUNDWATER WELL 1 & 2 - PLAN AND DETAILS		1
89	01M02	GROUNDWATER WELL 1 & 2 - SECTION AND DETAILS		1
90	02M01	RO BUILDING - PROCESS MECHANICAL KEY PLAN (GROUND FLOOR)	1	1
91	02M02	RO BUILDING - PROCESS MECHANICAL KEY PLAN (1ST FLOOR)	1	1
92	02M03	RO BUILDING - CARTRIDGE FILTER AND CHEMICAL DELIVERY AREA PLAN	1	1
93	02M04	RO BUILDING - CARTRIDGE FILTER AND CHEMICAL DELIVERY AREA SECTIONS AND DETAILS	1	1
94	02M05	RO BUILDING - RO TRAIN AND RO PUMP AREA PLAN	1	1
95	02M06	RO BUILDING - RO TRAIN SECTIONS	1	1
96	02M07	RO BUILDING - RO PUMPS SECTIONS AND DETAILS	1	1
97	02M08	RO BUILDING - SAC AREA PLAN AND SECTIONS	1	1
98	02M09	RO BUILDING - CP AREA PLAN AND DETAILS	1	1
99	02M10	RO BUILDING - CP AREA SECTIONS	1	1
100	02M11	RO BUILDING - SCALE INHIBITOR AND CORROSION INHIBITOR AREA PLAN AND SECTIONS	1	1
101	02M12	RO BUILDING - SODIUM HYPOCHLORITE AND CAUSTIC SODA AREA PLAN	1	1
102	02M13	RO BUILDING - SODIUM HYPOCHLORITE AND CAUSTIC SODA AREA SECTIONS	1	1
103	02M14	RO BUILDING - AMMONIUM SULFATE AREA PLAN AND SECTIONS	1	1
104	02M15	RO BUILDING - RO TRAIN SAMPLE PANEL	1	1
105	02M16	RO BUILDING - RO FEED INSTRUMENT PANEL	1	1
106	02M17	RO BUILDING - FINISHED WATER INSTRUMENT PANEL	1	1
107	03M01	CLEARWELL - AREA PLAN		1
108	03M02	CLEARWELL - DRAWBACK TANK AND FLUSH PUMPS SECTIONS AND DETAILS	1	1
109	03M03	CLEARWELL - DEGASIFIER SECTIONS AND DETAILS	1	1
110	03M04	CLEARWELL - TRANSFER PUMP SECTIONS AND DETAILS	1	1
111	03M05	CLEARWELL - CHEMICAL INJECTION DETAILS	1	1
112	04M01	CARBON DIOXIDE STORAGE TANK - PLAN & SECTIONS	1	1
113	04M02	CARBON DIOXIDE STORAGE TANK - DETAILS	1	1
114	04M03	GROUND STORAGE TANK PIPING PLAN AND SECTION	1	1
115	05M01	INJECTION WELL 1 - PIPING PLAN AND SECTION	1	1
PLUMBING				
116	006P01	PLUMBING SCHEDULES, NOTES AND SYMBOLS		1
117	006P02	PLUMBING - TYPICAL DETAILS	1	1
118	02P01	RO BUILDING - PLUMBING (GROUND FLOOR) - SANITARY PLAN		1
119	02P02	RO BUILDING - PLUMBING (1ST FLOOR) - SANITARY PLAN	1	1
120	02P03	RO BUILDING - PLUMBING (2ND FLOOR) - SANITARY PLAN	1	1
121	02P04	RO BUILDING - PLUMBING (GROUND FLOOR) - DOMESTIC WATER PLAN	1	1
122	02P05	RO BUILDING - PLUMBING (1ST FLOOR) - DOMESTIC WATER PLAN	1	1
123	02P06	RO BUILDING - PLUMBING (2ND FLOOR) - DOMESTIC WATER PLAN	1	1
124	02P07	RO BUILDING - WASTE AND VENT ISOMETRICS	1	1
125	02P08	RO BUILDING - POTABLE WATER ISOMETRICS	1	1
MECHANICAL				
126	006H01	HVAC LEGEND, ABBREVIATIONS, NOTES AND SCHEDULES		1
127	006H02	HVAC - TYPICAL DETAILS		1
128	006H03	HVAC - TYPICAL DETAILS		1
129	006H04	HVAC SCHEDULES 1 OF 2		1
130	006H05	HVAC SCHEDULES 2 OF 2		1
131	02H01	RO BUILDING - HVAC 1ST FLOOR PLAN		1
132	02H02	RO BUILDING - HVAC 2ND FLOOR PLAN		1
133	02H03	RO BUILDING - HVAC/MECHANICAL ROOM PLAN AND SECTIONS		1
134	02H04	HVAC CONTROL DIAGRAMS 1 OF 5		1
135	02H05	HVAC CONTROL DIAGRAMS 2 OF 5		1
136	02H06	HVAC CONTROL DIAGRAMS 3 OF 5		1
137	02H07	HVAC CONTROL DIAGRAMS 4 OF 5		1
138	02H08	HVAC CONTROL DIAGRAMS 5 OF 5		1
ELECTRICAL				
139	006E01	ELECTRICAL LEGEND		1
140	006E02	ELECTRICAL ABBREVIATIONS	1	1
141	006E03	ELECTRICAL NOTES	1	1
142	006E04	OVERALL ELECTRICAL SITE PLAN	1	1
143	006E05	ELECTRICAL SITE PLAN AREA 2	1	1
144	006E06	ELECTRICAL SITE PLAN AREA 3	1	1
145	006E07	ELECTRICAL SITE PLAN AREA 4	1	1
146	006E08	ONE LINE DIAGRAMS - SWITCHGEAR 1	1	1
147	006E09	ONE LINE DIAGRAMS - SWITCHGEAR 2	1	1
148	006E10	ONE LINE DIAGRAMS - MCC 1	1	1
149	006E11	ONE LINE DIAGRAMS - MCC 2	1	1
150	006E12	ONE LINE DIAGRAMS - MCC 3	1	1
151	006E13	ONE LINE DIAGRAMS - MCC 4	1	1
152	006E14	ONE LINE DIAGRAMS - MCC 5	1	1

153	00GE15	POWER RISER DIAGRAMS - SHEET 1		
154	00GE16	POWER RISER DIAGRAMS - SHEET 2		
155	00GE17	POWER RISER DIAGRAMS - SHEET 3	1	1
156	00GE18	POWER RISER DIAGRAMS - SHEET 4	1	1
157	00GE19	POWER RISER DIAGRAMS - SHEET 5	1	1
158	00GE20	POWER RISER DIAGRAMS - SHEET 6	1	1
159	00GE21	CONTROL RISER DIAGRAMS - SHEET 1	1	1
160	00GE22	CONTROL RISER DIAGRAMS - SHEET 2	1	1
161	00GE23	CONTROL RISER DIAGRAMS - SHEET 3	1	1
162	00GE24	CONTROL RISER DIAGRAMS - SHEET 4	1	1
163	00GE25	CONTROL RISER DIAGRAMS - SHEET 5	1	1
164	00GE26	CONTROL RISER DIAGRAMS - SHEET 6	1	1
165	00GE27	SCHEMATICS - SHEET 1	1	1
166	00GE28	SCHEMATICS - SHEET 2	1	1
167	00GE29	SCHEMATICS - SHEET 3	1	1
168	00GE30	SCHEMATICS - SHEET 4	1	1
169	00GE31	SCHEMATICS - SHEET 5	1	1
170	00GE32	SCHEMATICS - SHEET 6	1	1
171	00GE33	PANEL SCHEDULES - SHEET 1	1	1
172	00GE34	PANEL SCHEDULES - SHEET 2	1	1
173	00GE35	PANEL SCHEDULES - SHEET 3	1	1
174	00GE36	PANEL SCHEDULES - SHEET 4	1	1
175	00GE37	YARD CONDUIT SCHEDULES - SHEET 1	1	1
176	00GE38	YARD CONDUIT SCHEDULES - SHEET 2	1	1
177	00GE39	SCHEDULES - SHEET 1 (LUMINAIRE SCHEDULE, MANHOLE SCHEDULE)	1	1
178	00GE40	SCHEDULES - SHEET 2 (PULL BOX SCHEDULE, MISC. SCHEDULES)	1	1
179	00GE41	DUCT BANK SECTIONS - SHEET 1	1	1
180	00GE42	DUCT BANK SECTIONS - SHEET 2	1	1
181	00GE43	DUCT BANK SECTIONS - SHEET 3	1	1
182	00GE44	FIRE ALARM - RISER	1	1
183	00GE45	FIRE ALARM - RO BUILDING 1ST FLOOR	1	1
184	00GE46	FIRE ALARM - RO BUILDING 2ND FLOOR	1	1
185	00GE47	TYPICAL DETAILS 1	1	1
186	00GE48	TYPICAL DETAILS 2	1	1
187	00GE49	TYPICAL DETAILS 3	1	1
188	00GE50	TYPICAL DETAILS 4	1	1
189	00GE51	TYPICAL DETAILS 5	1	1
190	00GE52	TYPICAL DETAILS 6	1	1
191	00GE53	TYPICAL DETAILS 7	1	1
192	01E01	GROUNDWATER WELL POWER PLAN	1	1
193	01E02	GROUNDWATER WELL GROUNDING PLAN	1	1
194	02E05	GROUNDWATER WELLS ONE LINE DIAGRAM, RISER DIAGRAM	1	1
195	01E06	GROUNDWATER WELLS SCHEMATICS, SCHEDULES	1	1
196	02E08	GROUNDWATER WELLS DETAILS	1	1
197	02E09	RO BUILDING - ELECTRICAL KEY PLAN (GROUND FLOOR)	1	1
198	02E07	RO BUILDING - ELECTRICAL KEY PLAN (1ST FLOOR)	1	1
199	02E08	RO BUILDING - OVERALL LIGHTING AND GROUNDING PLAN (GROUND FLOOR)	1	1
200	02E04	RO BUILDING - OVERALL LIGHTING AND GROUNDING PLAN (1ST FLOOR)	1	1
201	02E05	RO BUILDING - EQUIPMENT AND LIGHTING (GROUND FLOOR) LAYOUT 1	1	1
202	02E06	RO BUILDING - EQUIPMENT AND LIGHTING (GROUND FLOOR) LAYOUT 2	1	1
203	02E07	RO BUILDING - EQUIPMENT AND LIGHTING (1ST FLOOR) LAYOUT 1	1	1
204	02E08	RO BUILDING - EQUIPMENT AND LIGHTING (1ST FLOOR) LAYOUT 2	1	1
205	02E09	RO BUILDING - EQUIPMENT AND LIGHTING (2ND FLOOR) LAYOUT 1	1	1
206	02E10	RO BUILDING - EQUIPMENT AND LIGHTING (2ND FLOOR) LAYOUT 2	1	1
207	02E11	RO BUILDING - CARTRIDGE FILTER AND CHEMICAL DELIVERY AREA POWER PLAN 1	1	1
208	02E12	RO BUILDING - CARTRIDGE FILTER AND CHEMICAL DELIVERY AREA POWER PLAN 2	1	1
209	02E13	RO BUILDING - RO TRAIN AND RO PUMP AREA POWER PLAN 1	1	1
210	02E14	RO BUILDING - RO TRAIN AND RO PUMP AREA POWER PLAN 2	1	1
211	02E15	RO BUILDING - RO TRAIN AND RO PUMP AREA POWER PLAN 3	1	1
212	02E16	RO BUILDING - RO TRAIN AND PUMP AREA LIGHTING PLAN	1	1
213	02E17	RO BUILDING - CIP AREA POWER PLAN	1	1
214	02E18	RO BUILDING - CIP AREA LIGHTING PLAN	1	1
215	02E19	RO BUILDING - GAC AREA POWER PLAN	1	1
216	02E20	RO BUILDING - GAC AREA LIGHTING PLAN	1	1
217	02E21	RO BUILDING - SCALP INHIBITOR AND CORROSION INHIBITOR AREA POWER PLAN	1	1
218	02E22	RO BUILDING - SODIUM HYPOCHLORITE AND CAUSTIC SODA AREA POWER PLAN	1	1
219	02E23	RO BUILDING - AMMONIUM SULFATE AREA POWER PLAN	1	1
220	02E24	RO BUILDING - CHEMICAL AREAS POWER PLAN	1	1
221	02E25	RO BUILDING - CHEMICAL AREAS LIGHTING PLAN	1	1
222	03E01	CLEARWELL - POWER AND CONTROL PLAN 1	1	1
223	03E02	CLEARWELL - POWER AND CONTROL PLAN 2	1	1
224	03E03	CLEARWELL - LIGHTING AND GROUNDING PLAN	1	1
225	04E01	CO2 STORAGE TANK POWER AND CONTROL PLAN	1	1
226	04E02	CO2 FEED SYSTEM POWER AND CONTROL PLAN	1	1
227	04E03	CO2 AREA LIGHTING AND GROUNDING PLAN	1	1
228	07E01	EXISTING HIGH SERVICE PUMP STATION DEMO ELEVATIONS	1	1
229	07E02	EXISTING HIGH SERVICE PUMP STATION DEMO ONE-LINE DIAGRAMS	1	1
230	07E03	EXISTING HIGH SERVICE PUMP STATION REVISED ELEVATIONS	1	1
231	07E04	EXISTING HIGH SERVICE PUMP STATION REVISED ONE-LINE DIAGRAMS	1	1
232	07E05	EXISTING HIGH SERVICE PUMP STATION ELECTRICAL ROOM PLAN	1	1
INSTRUMENTATION CONVENTION				
233	M-1	INSTRUMENTATION ABBREVIATIONS AND SYMBOLS - 1	1	1
234	M-2	INSTRUMENTATION ABBREVIATIONS AND SYMBOLS - 2	1	1

235	N-3	INSTRUMENTATION ABBREVIATIONS AND SYMBOLS - 3		
236	N-4	INSTRUMENTATION ABBREVIATIONS AND SYMBOLS - 4		
237	N-5	SCADA AND NETWORK BLOCK DIAGRAM - SHEET 1	1	1
238	N-6	SCADA AND NETWORK BLOCK DIAGRAM - SHEET 2	1	1
239	N-7	SCADA AND NETWORK BLOCK DIAGRAM - SHEET 3	1	1
240	N-8	SCADA AND NETWORK BLOCK DIAGRAM - SHEET 4	1	1
241	N-9	SCADA AND NETWORK BLOCK DIAGRAM - SHEET 5	1	1
242	N-10	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - GROUNDWATER WELL 1	1	1
243	N-11	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - GROUNDWATER WELL 2	1	1
244	N-12	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SEAWATER SUPPLY	1	1
245	N-13	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CARTRIDGE FILTRATION	1	1
246	N-14	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - RAW WATER TREATMENT	1	1
247	N-15	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - RO TRAIN 1,2,3,4 (TYP) - FEED PUMP 1 & 2	1	1
248	N-16	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - RO TRAIN 1,2,3,4 (TYP) - MEMBRANES	1	1
249	N-17	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - RO TRAIN 1,2,3,4 (TYP) - ENERGY RECOVERY PUMP 1, 2, 3, 4	1	1
250	N-18	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - RO TRAIN 1,2,3,4 (TYP) - PERMEATE	1	1
251	N-19	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - RO TRAIN 1,2,3,4 (TYP) - BRINE	1	1
252	N-20	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - DRAWBACK TANK AND FLUSH PUMPS	1	1
253	N-21	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - GAS SYSTEM	1	1
254	N-22	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - PERMEATE FLUSH PUMP 1 & 2	1	1
255	N-23	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SOFT CARBON WATER PUMPS 1 & 2	1	1
256	N-24	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CLEARWELL - DEGASIFIERS	1	1
257	N-25	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CLEARWELL - CHEMICAL INJECTION AND LEVEL	1	1
258	N-26	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CLEARWELL - TRANSFER PUMP 1, 2, 3, 4	1	1
259	N-27	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SCALE INHIBITOR - STORAGE	1	1
260	N-28	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SCALE INHIBITOR - FEED AND METERING	1	1
261	N-29	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CARBON DIOXIDE - STORAGE	1	1
262	N-30	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CARBON DIOXIDE - FEED AND METERING	1	1
263	N-31	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SODIUM HYPOCHLORITE - BULK STORAGE, TRANSFER PUMP & DAY STORAGE	1	1
264	N-32	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SODIUM HYPOCHLORITE - FEED AND METERING	1	1
265	N-33	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CAUSTIC SODA - BULK STORAGE, TRANSFER PUMP & DAY STORAGE	1	1
266	N-34	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CAUSTIC SODA - FEED AND METERING	1	1
267	N-35	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CORROSION INHIBITOR - BULK STORAGE, TRANSFER PUMP & DAY STORAGE	1	1
268	N-36	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CORROSION INHIBITOR - FEED AND METERING	1	1
269	N-37	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - AMMONIUM SULFATE - BULK STORAGE, TRANSFER PUMP & DAY STORAGE	1	1
270	N-38	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - AMMONIUM SULFATE - FEED AND METERING	1	1
271	N-39	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CLEAN IN PLACE SYSTEM 1	1	1
272	N-40	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - CLEAN IN PLACE SYSTEM 2	1	1
273	N-41	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - UTILITY WATER	1	1
274	N-42	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - POTABLE WATER	1	1
275	N-43	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SOFT UTILITY WATER	1	1
276	N-44	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - PLANT AIR SYSTEM	1	1
277	N-45	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SLURRY PUMPS - AREA 1	1	1
278	N-46	PROCESS FLOW AND INSTRUMENTATION DIAGRAM - SLURRY PUMPS - AREA 2	1	1
279	N-47	INSTRUMENTATION LOOPS - GROUNDWATER WELLS SHEET 1	1	1
280	N-48	INSTRUMENTATION LOOPS - GROUNDWATER WELLS SHEET 2	1	1
281	N-49	INSTRUMENTATION LOOPS - DEEP INJECTION WELL SHEET 1	1	1
282	N-50	INSTRUMENTATION LOOPS - SHEET 1	1	1
283	N-51	INSTRUMENTATION LOOPS - SHEET 2	1	1
284	N-52	INSTRUMENTATION LOOPS - SHEET 3	1	1
285	N-53	INSTRUMENTATION LOOPS - SHEET 4	1	1
286	N-54	INSTRUMENTATION LOOPS - SHEET 5	1	1
287	N-55	INSTRUMENTATION LOOPS - SHEET 6	1	1
288	N-56	INSTRUMENTATION LOOPS - SHEET 7	1	1
289	N-57	INSTRUMENTATION LOOPS - SHEET 8	1	1
290	N-58	INSTRUMENTATION LOOPS - SHEET 9	1	1
291	N-59	INSTRUMENTATION LOOPS - SHEET 10	1	1
292	N-60	INSTRUMENTATION LOOPS - SHEET 11	1	1
293	N-61	INSTRUMENTATION LOOPS - SHEET 12	1	1
294	N-62	INSTRUMENTATION LOOPS - SHEET 13	1	1
295	N-63	INSTRUMENTATION LOOPS - SHEET 14	1	1
296	N-64	INSTRUMENTATION LOOPS - SHEET 15	1	1
297	N-65	INSTRUMENTATION LOOPS - SHEET 16	1	1
298	N-66	INSTRUMENTATION LOOPS - SHEET 17	1	1
299	N-67	INSTRUMENTATION LOOPS - SHEET 18	1	1
300	N-68	INSTRUMENTATION LOOPS - SHEET 19	1	1
301	N-69	INSTRUMENTATION LOOPS - SHEET 20	1	1
302	N-70	INSTRUMENTATION LOOPS - SHEET 21	1	1
303	N-71	INSTRUMENTATION LOOPS - SHEET 22	1	1
304	N-72	INSTRUMENTATION LOOPS - SHEET 23	1	1
305	N-73	INSTRUMENTATION LOOPS - SHEET 24	1	1
306	N-74	INSTRUMENTATION LOOPS - SHEET 25	1	1
307	N-75	INSTRUMENTATION LOOPS - SHEET 26	1	1
308	N-76	INSTRUMENTATION LOOPS - SHEET 27	1	1
309	N-77	INSTRUMENTATION LOOPS - SHEET 28	1	1
310	N-78	INSTRUMENTATION LOOPS - SHEET 29	1	1
311	N-79	INSTRUMENTATION LOOPS - SHEET 30	1	1
312	N-80	INSTRUMENTATION LOOPS - SHEET 31	1	1
313	N-81	INSTRUMENTATION LOOPS - SHEET 32	1	1
314	N-82	INSTRUMENTATION LOOPS - SHEET 33	1	1
315	N-83	INSTRUMENTATION LOOPS - SHEET 34	1	1
316	N-84	INSTRUMENTATION LOOPS - SHEET 35	1	1
317	N-85	INSTRUMENTATION LOOPS - SHEET 36	1	1
		INSTRUMENTATION LOOPS - SHEET 37	1	1

318	N-86	INSTRUMENTATION LOOPS - SHEET 38.		
319	N-87	INSTRUMENTATION LOOPS - SHEET 39.		
320	N-88	INSTRUMENTATION LOOPS - SHEET 40.	1	1
321	N-89	TYPICAL DETAILS 1	1	1
322	N-90	TYPICAL DETAILS 2	1	1
323	N-91	TYPICAL DETAILS 3	1	1
324	N-92	TYPICAL DETAILS 4	1	1
325	N-93	TYPICAL DETAILS 5	1	1
326	N-94	TYPICAL DETAILS 6	1	1

**EXHIBIT B
FINAL DESIGN FEE SCHEDULE
SUMMARY**

FINAL DESIGN SERVICES		TOTAL
TASK 1 - 60% DESIGN	\$	859,327
TASK 2 - 90% DESIGN	\$	579,954
TASK 3 - 100% DESIGN	\$	313,498
TASK 4 - PROJECT MANAGEMENT		
- MEETINGS & COORDINATION	\$	27,391
- PROJECT PLANNING & CONTROL	\$	15,493
TASK 5 - OTHER SERVICES (T&M)		
- BIDDING SERVICES	\$	40,718
- LIMITED WELLFIELD CONSTRUCTION SERVICES	\$	13,134
TOTAL FEE	\$	1,849,515

*See Attachment 2 for additional detail.

