

## **AGREEMENT FOR PROFESSIONAL SERVICES**

THIS AGREEMENT for PROFESSIONAL SERVICES ("Agreement"), entered into as of this \_\_\_\_\_ day of \_\_\_\_\_, 2017 by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida, whose address is 1801 27<sup>th</sup> Street, Vero Beach FL 32960 ("COUNTY"), and ARCADIS, whose address is 3109 West Drive. Martin Luther King Jr., Boulevard, Suite 350, Tampa, FL 33607 ("Consultant"):

### BACKGROUND RECITALS:

A. In accordance with the Consultants' Competitive Negotiations Act, Section 287.055, Florida Statutes, the COUNTY solicited Requests for Statements of Qualification #2017029 for Asset Management Services for Indian River County Department of Utility Services ("Project") attached as Exhibit A to this Agreement and made a part by reference

B. As a result of its response, the County has selected Consultant to provide certain professional services relating to Asset Management, ("Services") as more fully set forth in in the Scope of Services Section contained in the Scope of Services attached as Exhibit B to this Agreement and made a part by reference.

C. Consultant has submitted a Scope of Services and Fee Proposal attached as Exhibit B to this Agreement and made a part by reference.

D. The Consultant is willing and able to perform the Services for the COUNTY on the terms and conditions set forth below; and

E. The COUNTY and the Consultant wish to enter into this Agreement for the Consultant's Services for the Project.

NOW THEREFORE, in accordance with the mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

### 1. GENERAL.

1.1 All professional services provided by the Consultant for the COUNTY shall be identified in Exhibits A, and B (collectively, the "Exhibits") and performed in a timely, efficient, cost effective manner, and in accordance with the current professional standards of the applicable discipline. The Exhibits include a description of services to be performed; a statement of fees; a schedule of deliverables; proposed schedule for compensation; a budget establishing the amount of compensation to be paid with sufficient detail so as to identify all of the various elements of costs; a projected schedule for completion of the work to be performed by the Consultant; and any other additional instructions or provisions relating to the specific Services authorized that does not conflict with the terms of this Agreement.

1.3 Additional services not contained in the Exhibits which would increase, decrease or which are otherwise outside the scope of Services or level of effort contemplated by the Exhibits shall be Services for which the Consultant must obtain the prior written approval of the COUNTY as provided by this Agreement. All terms for the performance of such Services must be agreed upon in a written document prior to any deviation from the terms of the Agreement, and when properly authorized and executed by both the Consultant and the COUNTY shall become an amendment to the Agreement.

1.4 The Background Recitals are true and correct and form a material part of this Agreement.

## 2. **COUNTY OBLIGATIONS.**

2.1 The COUNTY will provide the Consultant with a copy of any preliminary data or reports available as required in connection with the work to be performed under this Agreement, together with all available drawings, As-built surveys, GIS maps, and other documents in the possession of the COUNTY pertinent to the Project. The Consultant shall satisfy itself as to accuracy of any data provided. The Consultant is responsible for bringing to the COUNTY's attention, for the COUNTY's resolution, material inconsistencies or errors in such data that come to the Consultant's attention.

2.2 The COUNTY shall arrange for access to, and make provisions for the Consultant to enter upon, public and private property (where required) as necessary for the Consultant to perform its Services, upon the timely written request of Consultant to COUNTY.

2.3 The COUNTY shall examine any and all studies, reports, sketches, drawings, specifications, proposals and other documents presented by the Consultant, and render, in writing, decisions pertaining thereto within a reasonable time.

2.4 Approval by the COUNTY of any of the Consultant's work, including but not limited to drawings, design specifications, written reports, or any work products of any nature whatsoever furnished hereunder, shall not in any way relieve the Consultant of responsibility for the technical accuracy and adequacy of the work. Neither the COUNTY's review, approval or acceptance of, or payment for, any of the Services furnished under this Agreement shall 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. The Consultant shall be and remain liable in accordance with all applicable laws for all damages to the COUNTY caused by the negligent performance by the Consultant of any of the Services furnished under this Agreement.

2.5 The COUNTY reserves the right to appoint one or more Project Managers for the specific Services in connection with this Agreement. The Project Manager shall: (a) act as the COUNTY's agent with respect to the Services rendered hereunder; (b) transmit instructions to and receive information from the Consultant; (c) communicate the

COUNTY's policies and decisions to the Consultant regarding the Services; and (d) determine, initially, whether the Consultant is fulfilling its duties, responsibilities, and obligations hereunder.

2.6 The COUNTY shall give prompt written notice to the Consultant whenever the COUNTY observes or otherwise becomes aware of any development that affects the timing or delivery of the Consultant's Services. If the Consultant has been delayed in completing its Services through no fault or negligence of either the Consultant or any sub-consultant, and, as a result, will be unable to perform fully and satisfactorily under the provisions of this Agreement, then the Consultant shall promptly notify the Project Manager. In the COUNTY's sole discretion, and upon the submission to the COUNTY of evidence of the causes of the delay, this Agreement shall be modified in writing, subject to the COUNTY'S rights to change, terminate, or stop any or all of the Services at any time in accordance with this Agreement.

2.7 The Consultant shall not be considered in default for a failure to perform if such failure arises out of causes reasonably beyond the Consultant's control and through no fault or negligence of the Consultant. The parties acknowledge that adverse weather conditions, acts of God, or other unforeseen circumstances of a similar nature, may necessitate modifications to this Agreement. If such conditions and circumstances do in fact occur, then the COUNTY and Consultant shall mutually agree, in writing, to the modifications to be made to this Agreement.

### 3. **RESPONSIBILITIES OF THE CONSULTANT.**

3.1 The Consultant agrees to perform all necessary professional engineering consulting services to assist the department with the development and implementation of a comprehensive Asset Management Program, and other Services in connection with the assigned Project(s) as set forth in this Agreement.

3.2 The Consultant will endeavor not to duplicate any previous work done on any Project. Before beginning work, the Consultant shall consult with the COUNTY to clarify and define the COUNTY's requirements for the Project.

3.3 The Consultant agrees to complete the Project within the time frame specified in the Work Order.

3.4 The Consultant will maintain an adequate staff of qualified personnel.

3.5 The Consultant will comply with all present and future federal, state, and local laws, rules, regulations, policies, codes, and guidelines applicable to the Services performed under this Agreement.

3.6 The Consultant, as a part of the consideration hereof, does hereby covenant and agree that: (1) in connection with the furnishing of Services to the COUNTY hereunder, no person shall be excluded from participation in, denied the benefits of, or

otherwise subjected to discrimination in regard to the services to be performed by Consultant under this Agreement on the grounds of such person's race, color, creed, national origin, religion, physical disability, age or sex; and (2) the Consultant shall comply with all existing requirements concerning discrimination imposed by any and all applicable local, state, and federal rules, regulations, or guidelines, as such rules, regulations, or guidelines may be from time to time amended.

3.7 The Consultant shall, during the entire term of this Agreement, procure and keep in full force, effect, and good standing any and all necessary licenses, registrations, certificates, permits, and any and all other authorizations as are required by local, state, or federal law, in order for the Consultant to render its Services as described in this Agreement. The Consultant shall also require all sub-consultants to comply by contract with the provisions of this section.

3.8 The Consultant will cooperate fully with the COUNTY in order that all phases of the work may be properly scheduled and coordinated.

3.9 The Consultant will cooperate and coordinate with other COUNTY consultants, as directed by the COUNTY.

3.10 The Consultant shall report the status of the Services under this Agreement to the County Project Manager upon request and hold all drawings, documents and related work open to the inspection of the County Project Manager or his authorized agent at any time, upon reasonable request.

3.11 All documents, reports, tracings, software, specifications, field books, survey notes and information, maps, and other data developed by the Consultant for the purpose of this Agreement, are and shall remain the property of the COUNTY. The foregoing items will be created, maintained, updated, and provided in the format specified by the County. When all work contemplated under this Agreement is complete, all of the above data shall be delivered to the County Project Manager.

3.12 The Consultant will confer with the COUNTY during the further development of improvements for which the Consultant has provided design or other services, and the Consultant will interpret plans and other documents; correct errors and omissions; and prepare any necessary plan revisions not involving a change in the scope of the work required, at no additional cost to the COUNTY, within thirty (30) calendar days of notice by the COUNTY, or upon a determination of the Consultant of the existence of such errors or omissions, whichever event shall first occur. The foregoing is not intended to include construction management services provided by the Consultant.

3.13 The Consultant agrees to maintain complete and accurate books and records ("Books"), in accordance with sound accounting principles and standards for all Services, costs, and expenditures under this Agreement. The Books shall identify the Services rendered during each month of the Agreement and the date and type of each Project-related expense. The COUNTY shall have the right, at any reasonable time and

through any of its designated agents or representatives, to inspect and audit the Books for the purpose of verifying the accuracy of any invoice. The CONSULTANT shall retain the Books, and make them available to the COUNTY as specified above, until the later of three (3) years after the date of termination of this Agreement, or such longer time if required by any federal, state, or other governmental law, regulation, or grant requirement.

3.14 The Consultant shall not assign or transfer any work under this Agreement without the prior written consent of the COUNTY. When applicable and upon receipt of such consent from the COUNTY, the Consultant shall cause the names of the engineering and surveying firms responsible for the major portions of each separate specialty of the work to be inserted on the reports or other data.

3.15 All documents, including but not limited to drawings and specifications, prepared by the Consultant pursuant to this Agreement are related exclusively to the Services described herein and are not intended or represented to be suitable for reuse by the COUNTY or others on any other project. Reuse of any document or drawing shall be at the COUNTY's own risk. The Consultant shall not be held liable for any modifications made to the documents by others.

4. **TERM; TIME FOR COMPLETION.**

4.1 The time for completion of the Project shall be defined in the Exhibits.

5. **COMPENSATION.**

5.1 The COUNTY shall pay to the Consultant the mutually agreed professional fee of \$448,888.00 for Services rendered for the Project, to be paid in monthly installments or on a deliverable basis, as set forth in the Exhibits. Duly certified invoices, in triplicate, phased as per the Exhibits, shall be submitted to the County Project Manager, in detail sufficient for proper prepayment and post payment audit. Upon submittal of a proper invoice the County Project Manager will determine if the tasks or portions thereof have been satisfactorily completed. Upon a determination of satisfactory completion, the County Project Manager will authorize payment to be made. All payments for services shall be made to the Consultant by the COUNTY in accordance with the Local Government Prompt Payment Act, as may be amended from time to time (Section 218.70, Florida Statutes, et seq.).

5.2 The COUNTY may at any time notify the Consultant of requested changes to the Services under an existing Work Order, and thereupon the COUNTY and the Consultant shall execute a mutually agreeable amended Work Order or a new Work Order.

5.3 The COUNTY shall have the sole right to reduce or eliminate, in whole or in part, any portion of the Services under the Exhibits at any time and for any reason, upon written notice to the Consultant specifying the nature and extent of the reduction. In such

event, the Consultant shall be paid for the Services already performed and also for the Services remaining to be done and not reduced or eliminated, upon submission of invoices as set forth in this Agreement.

5.4 The COUNTY may, at any time and for any reason, direct the Consultant to suspend Services, in whole or in part under this Agreement. Such direction shall be in writing, and shall specify the period during which Services shall be stopped. The Consultant shall resume its Services upon the date specified, or upon such other date as the COUNTY may thereafter specify in writing. Where the COUNTY has suspended the services under this Agreement for a period in excess of six (6) months, the compensation of Consultant for such suspended Services may be subject to modification. The period during which the Services are stopped by the COUNTY shall be added to the time of performance of this Agreement.

6. **ADDITIONAL WORK.**

6.1 If services in addition to the Services provided hereunder are required or desired by the County in connection with the Project, the COUNTY may, at the sole option of the COUNTY: separately obtain same outside of this Agreement; or request the Consultant to provide, either directly by the Consultant or by a sub-consultant, such additional services by a new Work Order or by a written amendment to a specific Work Order.

7. **INSURANCE AND INDEMNIFICATION.**

7.1 The Consultant shall not commence work on this Agreement until it has obtained all insurance required under this Agreement and such insurance has been approved by the County's Risk Manager.

7.2 Consultant's insurance coverage shall be primary.

7.3 All required insurance policies shall be placed with insurers licensed to do business in Florida and with a Best's rating of A VII or better.

7.4 The insurance policies procured shall be occurrence forms, not claims made policies with the exception of professional liability.

7.5 A certificate of insurance shall be provided to the County's Risk Manager for review and approval, ten (10) days prior to commencement of any work under this Agreement. The COUNTY shall be named as an additional insured on all policies except workers' compensation and professional liability.

7.6 The insurance companies selected shall send written verification to the County Risk Manager that they will provide 30 days prior written notice to the County Risk Manager of its intent to cancel or modify any required policies of insurance.

7.7 Consultant shall include all sub-consultants as insured under its policies or shall furnish separate certificates and endorsements for each sub-consultant. All coverages for sub-consultants shall be subject to all of the requirements stated herein.

7.8 The COUNTY, by and through its Risk Manager, reserves the right periodically to review any and all policies of insurance and reasonably to adjust the limits of coverage required hereunder, from time to time throughout the term of this Agreement. In such event, the COUNTY shall provide the Consultant with separate written notice of such adjusted limits and Consultant shall comply within thirty (30) days of receipt thereof. The failure by Consultant to provide such additional coverage shall constitute a default by Consultant and shall be grounds for termination of this Agreement by the COUNTY.

7.9 The Consultant shall indemnify and hold harmless the COUNTY, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Consultant and other persons employed or utilized by the Consultant in the performance of this Agreement.

## 8. **TERMINATION.**

8.1 This Agreement may be terminated: (a) by the COUNTY, for any reason, upon thirty (30) days' prior written notice to the Consultant; or (b) by the Consultant, for any reason, upon thirty (30) days' prior written notice to the COUNTY; or (c) by the mutual Agreement of the parties; or d) as may otherwise be provided below. In the event of the termination of this Agreement, any liability of one party to the other arising out of any Services rendered, or for any act or event occurring prior to the termination, shall not be terminated or released.

8.2 In the event of termination by the COUNTY, the COUNTY's sole obligation to the Consultant shall be payment for those portions of satisfactorily completed work previously authorized by approved Work Order. Such payment shall be determined on the basis of the hours of work performed by the Consultant, or the percentage of work complete as estimated by the Consultant and agreed upon by the COUNTY up to the time of termination. In the event of such termination, the COUNTY may, without penalty or other obligation to the Consultant, elect to employ other persons to perform the same or similar services.

8.3 The obligation to provide services under this Agreement may be terminated by either party upon seven (7) days prior written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement through no fault of the terminating party.

8.4 In the event that the Consultant merges with another company, becomes a subsidiary of, or makes any other substantial change in structure, the COUNTY reserves the right to terminate this Agreement in accordance with its terms.

8.5 In the event of termination of this Agreement, the Consultant agrees to surrender any and all documents prepared by the Consultant for the COUNTY in connection with this Agreement.

8.6 The COUNTY may terminate this Agreement for refusal by the Consultant to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119 Florida Statutes and made or received by the Consultant in conjunction with this Agreement.

8.7 The COUNTY may terminate this Agreement in whole or in part if the Consultant submits a false invoice to the COUNTY.

**9. TRUTH-IN-NEGOTIATION CERTIFICATE; CONTINGENCY FEES.**

9.1 Execution of this Agreement by the Consultant shall act as the execution of a truth-in-negotiation certificate certifying that the wage rates and costs used to determine the compensation provided for in this Agreement are accurate, complete and current as of the date of the Agreement. The wage rates and costs shall be adjusted to exclude any significant sums should the COUNTY determine that the wage rates and costs were increased due to inaccurate, incomplete or noncurrent wage rates or due to inaccurate representations of fees paid to outside consultants. The COUNTY shall exercise its rights under this "Certificate" within one (1) year following final payment. COUNTY has the authority and right to audit Consultant's records under this provision. The COUNTY does not hereby waive any other right it may have pursuant to Section 287.055, Florida Statutes, as it may be from time-to-time amended.

9.2 Pursuant to the Consultants' Competitive Negotiations Act, F. S. section 287.055, the Consultant warrants that it has not employed or retained any company or person other than a bona fide employee working solely for the Consultant to solicit or secure this Agreement and that it has not paid or agreed to pay any company or person other than a bona fide employee working solely for the Consultant any fee, commission, percentage fee, gifts or any other considerations, contingent upon or resulting from the award or making of this contract. For breach of violation of this provision, the COUNTY shall have the right to terminate this Agreement without liability and, at its discretion, to deduct from the contract price, or otherwise recover, the full amount of such fee, commission, percentage, gift, or consideration.

**10. MISCELLANEOUS PROVISIONS.**

10.1 Independent Contractor. It is specifically understood and acknowledged by the parties hereto that the Consultant or employees or subconsultants of the Consultant are in no way to be considered employees of the COUNTY, but are independent contractors performing solely under the terms of the Agreement and not otherwise.



10.2 Merger; Modification. This Agreement incorporates and includes all prior and contemporaneous negotiations, correspondence, conversations, agreements or understandings applicable to the matters contained herein and the parties agree that there are no commitments, agreements, or understandings of any nature whatsoever concerning the subject matter of the Agreement that are not contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior or contemporaneous representations or agreements, whether oral or written. No alteration, change, or modification of the terms of this Agreement shall be valid unless made in writing and signed by the Consultant and the COUNTY.

10.3 Governing Law; Venue. This Agreement, including all attachments hereto, shall be construed according to the laws of the State of Florida. Venue for any lawsuit brought by either party against the other party or otherwise arising out of this Agreement shall be in Indian River County, Florida, or, in the event of federal jurisdiction, in the United States District Court for the Southern District of Florida.

10.4 Remedies; No Waiver. All remedies provided in this Agreement shall be deemed cumulative and additional, and not in lieu or exclusive of each other or of any other remedy available to either party, at law or in equity. Each right, power and remedy of the parties provided for in this Agreement shall be cumulative and concurrent and shall be in addition to every other right, power or remedy provided for in this Agreement or now or hereafter existing at law or in equity or by statute or otherwise. The failure of either party to insist upon compliance by the other party with any obligation, or exercise any remedy, does not waive the right to so in the event of a continuing or subsequent delinquency or default. A party's waiver of one or more defaults does not constitute a waiver of any other delinquency or default. If any legal action or other proceeding is brought for the enforcement of this Agreement or because of an alleged dispute, breach, default or misrepresentation in connection with any provisions of this Agreement, each party shall bear its own costs.

10.5 Severability. If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be held invalid or unenforceable for the remainder of this Agreement, then the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

10.6 Availability of Funds. The obligations of the COUNTY under this Agreement are subject to the availability of funds lawfully appropriated for its purpose by the Board of County Commissioners of Indian River County.

10.7 No Pledge of Credit. The Consultant shall not pledge the COUNTY's credit or make it a guarantor of payment or surety for any contract, debt, obligation, judgment, lien or any form of indebtedness.

10.8 Public Records. The Consultant shall comply with the provisions of Chapter 119, Florida Statutes (Public Records Law) in connection with this Agreement.

10.9 Notices: Any notice, request, demand, consent, approval, or other communication required or permitted by this Agreement shall be given or made in writing and shall be served, as elected by the party giving such notice, by any of the following methods: (a) Hand delivery to the other party; (b) Delivery by commercial overnight courier service; or (c) Mailed by registered or certified mail (postage prepaid), return receipt requested at the addresses of the parties shown below:

County: Indian River County  
Attn: Vincent Burke, P.E.  
1801 27<sup>th</sup> Street  
Vero Beach, FL 32960-3365  
Email: [vburke@ircgov.com](mailto:vburke@ircgov.com)

Consultant: Arcadis  
Attn: Celine A. Hyer  
3109 West Dr. Martin Luther King Jr., Blvd  
Suite 350  
Tampa, FL 33607  
Email: [Celine.Hyer@arcadis.com](mailto:Celine.Hyer@arcadis.com)

Notices shall be effective when received at the address as specified above. Facsimile transmission is acceptable notice effective when received, provided, however, that facsimile transmissions received (i.e., printed) after 5:00 p.m. or on weekends or holidays, will be deemed received on the next day that is not a weekend day or a holiday. The original of the notice must additionally be mailed. Either party may change its address, for the purposes of this section, by written notice to the other party given in accordance with the provisions of this section.

10.10 Survival. Except as otherwise expressly provided herein, each obligation in this Agreement to be performed by Consultant shall survive the termination or expiration of this Agreement.

10.11 Construction. The headings of the sections of this Agreement are for the purpose of convenience only, and shall not be deemed to expand, limit, or modify the provisions contained in such Sections. All pronouns and any variations thereof shall be deemed to refer to the masculine, feminine or neuter, singular or plural, as the identity of the party or parties may require. The parties hereby acknowledge and agree that each was properly represented by counsel and this Agreement was negotiated and drafted at arm's-length so that the judicial rule of construction to the effect that a legal document shall be construed against the draftsperson shall be inapplicable to this Agreement

10.12 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original copy and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the date first written above.

ARCADIS, U.S., Inc.

INDIAN RIVER COUNTY  
By its Board of County Commissioners

By   
Edward R. Balchon, Executive Vice President

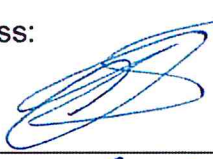
By \_\_\_\_\_  
Joseph E. Flescher, Chairman

Date October 4, 2017

Date Approved by BCC: \_\_\_\_\_

Witness:

Attest: Jeffrey R. Smith, Clerk of Court  
And Comptroller

By   
Printed Name CARLSON SERRETTE

By \_\_\_\_\_  
Deputy Clerk

Approved:

\_\_\_\_\_  
Jason E. Brown  
County Administrator

Approved as to form and legal  
sufficiency:

\_\_\_\_\_  
William K. DeBraal  
Deputy County Attorney

## EXHIBIT A

### ASSET MANAGEMENT PROGRAM SERVICES

#### 1) PROJECT UNDERSTANDING

Indian River County Department of Utility Services (IRCDUS) owns and operates both water and wastewater utility infrastructure and serves approximately 50,000 accounts. This infrastructure consists of water production facilities, water wells, potable water distribution networks, wastewater treatment facilities, wastewater collection systems, and reclaimed water distribution networks. This infrastructure is comprised of a considerable number of assets in the form of equipment, buildings, property, pipelines, manholes, supply wells, a storage well, and a variety of other components used in operating the systems. These assets require preventative and corrective maintenance with a limited service life requiring eventual replacement. In addition, the systems will expand over time as new customers connect to the system, adding additional assets to the infrastructure.

IRCDUS desires enhancements to its existing asset management practices including defining organizational goals, objectives and performance measures, improving processes and practices, and understanding staffing needs to strengthen and formalize a comprehensive asset management (AM) Program. As a result, IRCDUS has identified a need to develop an overall AMP Program to manage its assets with the goal of minimizing catastrophic failures, maintaining service levels, and maximizing renewal investment decisions. The development of the Program will occur over several phases. This scope of work will initiate the Program by performing a gap analysis, developing the AM strategy, and performing a pilot condition and risk assessment which includes:

- Identifying AM best practices and providing industry standard information and training
- Chartering and forming IRCDUS steering and work teams that will support the implementation efforts and receive knowledge transfer from Arcadis (CONSULTANT) AM Experts
- Performing a gap analysis of current IRCDUS AM practices compared to best practices including the evaluation of the existing IT support tools
- Determining the IRCDUS vision, mission and objectives for the AM Program
- Performing a Pilot Condition, Consequence of Failure and Risk Assessment to create a formalized SOP to support additional assessments

Detailed scope of work follows.

#### 2) SCOPE OF SERVICES

Upon authorization to proceed from IRCDUS, the CONSULTANT will provide the following identified services.

## **Task 1 – PROJECT MANAGEMENT AND KICKOFF MEETING**

This task consists of overall management of the project including budget management, invoicing, monthly status reports, project scheduling, and coordination with IRCDUS.

- 1.1 **Project Management.** Services provided will include project staffing, budget, schedule management, monthly invoicing, status reports, quality assurance, and deliverable review over the anticipated life of this project. Project Management will be ongoing for the duration of the project.
- 1.2 **Project Kickoff Meeting.** The meeting will include an overview of the project intent, the scope of services, the effort and schedule for project work, the potential pilot area, and a request for information regarding existing AM documentation that will be needed for the gap analysis and strategy development.

### **Task 1 Deliverables:**

- Kick-off Meeting minutes and Request for Information
- Monthly invoicing including a summary of work completed

## **Task 2 - BEST PRACTICES TRAINING AND TEAM CHARTERING**

This task includes AM best practices training and the formation of the IRCDUS steering committee and the necessary asset management work teams which are critical to support the AM Program improvement efforts.

- 2.1 **Training and Chartering.** The CONSULTANT will facilitate one full day workshop to present AM best practices to IRCDUS staff based upon Water Environment Research Foundation (WERF) and ISO 55000 Frameworks including other Utility case studies. Once all participants are aware of what the elements are for a best practice AM Program, the CONSULTANT will also present and discuss the formation of the IRCDUS Steering Committee and work teams that will be responsible for directing and supporting the implementation. Specific teams, number of participants, participant duties and the proposed Team Charter Document that will be used to formalize the Committee and teams will be also be reviewed and discussed. It is anticipated that several follow up conference calls will take place to complete the drafting and finalization of the Charter documents. This task will prepare IRCDUS to successfully move forward with AM implementation in an organized and streamlined fashion to maximize the use of CONSULTANT and IRCDUS staff time.

### **Task 2 Deliverables:**

- Materials and facilitation of the AM Training and Chartering Workshop

- Completed AM Charter Documents for each of the work teams formed in draft and final format

### **Task 3 – GAP ANALYSIS**

This task includes performing a gap analysis of IRCDUS's current AM Program against best practices. The team will utilize the WERF Strategic Asset Management (SAM GAP) analysis tool which includes relevant questions across all asset management topics. This tool provides a baseline for IRCDUS as well as a comparison to other utilities across the country who have implemented comprehensive AM Programs and completed the SAM GAP. In addition, the findings of the SAM GAP will be mapped to the ISO 55000 gap analysis tool to make sure the improvements identified to fill the gaps will also allow for ISO 55000 certification in the future, if desired by IRCDUS. ISO 55000 certification in asset management can support IRCDUS with achieving better bond ratings, receiving priority consideration for SRF loans, and meeting any future State AM certification programs currently being proposed, such as Senate Bill 244.

The gap analysis will also review the existing GIS and CMMS systems with respect to their role in supporting the overall AM Program including functional and technical fitness. To facilitate the Gap analysis, the CONSULTANT will review all existing AM Program documentation and conduct staff interviews over a two-day period to better understand the current strategies and issues across IRCDUS. Specific scope items under this task include:

3.1 **Interviews:** The CONSULTANT will review all materials provided from the Request for Information prior to conducting up to 8 one-to-two-hour interviews with IRCDUS staff over a two-day period. To conduct the interviews, we will use our existing practice interview guides that were developed based on best practices and our experience with other utilities in addition to the SAM gap questionnaires. Management and staff interviews will encompass the following key areas:

- **Asset Management Strategy.** This would encompass asset management strategic planning, system service level and reliability, performance measurement/management, infrastructure Consequence of Failure (CoF) and condition assessment (Probability of Failure – PoF) for both above and below ground assets, risk assessment, and life-cycle cost strategies. Capital planning (CIP), project prioritization, and long term financial planning will also be addressed.
- **Operations and Maintenance Strategy.** This would encompass overall operations and maintenance policies and standards for all asset classes (i.e. treatment plants, pumping stations, lift stations, collection and distribution piping systems) including preventive/predictive maintenance programs, reliability centered maintenance, asset inspections, and work order tracking and reporting.

- Information Systems and Data Strategy. This would encompass all major information systems that support asset management including: GIS and CMMS. Issues to be discussed include: data management and integration, system configurations, asset hierarchy, data reporting and analysis, mobile applications, hosted versus in-house solutions etc.
- 3.2 **IT Systems Analysis:** The CONSULTANT will review the GIS and CMMS systems for functional and technical fitness to support a comprehensive AM Program. Read Only access to the system and/or an export of the databases will facilitate a comprehensive review. The CONSULTANTs Data Profiler Tool will be used to evaluate the population of asset data from a quantity, consistency and quality perspective as part of the overall assessment. Recommendations will consider hosted versus in-house solutions, staffing requirements, and appropriateness for the size and complexity of IRCDUS.
- 3.3 **Review Workshop:** The CONSULTANT will facilitate a half day review workshop to go over the findings of the Gap Analysis and discuss the proposed actions to fill the gaps, and receive feedback for the Technical Memorandum.
- 3.4 **Gap Analysis Technical Memorandum:** The Consultant will prepare a draft and final Technical Memorandum showing the outcomes from the SAM GAP and ISO55000 Gap Analysis tools as well as the IT systems assessment and recommended action items to fill the gaps.

#### **Task 3 Deliverables:**

- Interview materials and meeting facilitation
- Materials and facilitation of the Review Workshop
- Draft and Final Gap Analysis Technical Memorandum

#### **Task 4 – ASSET MANAGEMENT STRATEGY**

Once the Gaps have been identified, the overall strategy to fill and prioritize the gaps will be defined through this task answering the question of “what specifically do we want to achieve through asset management?”. This task includes the development of the draft and final AM Policy for IRCDUS through workshops and meetings. The Policy is intended to define the business objectives, strategies, and other major initiatives to which the Asset Management Program will be aligned.

- 4.1 **Asset Management Policy Workshop:** The CONSULTANT will facilitate a full-day workshop to perform the following:
- Perform a SWOT (strengths, weaknesses, opportunities and threats analysis) of the existing AM Program and the future desired Program
  - Draft a vision and mission for the AM Program that will resonate with all staff levels



- Identify specific short- term goals and objectives for the AM Program
  - Identify existing performance measures that may be used to support AM Program continuous improvements
- 4.2 **Asset Management Policy:** The CONSULTANT will create a draft and final Policy document based on the outcomes of the workshop in task 4.1. The final policy document will be completed once the Final Implementation Roadmap is completed in Task 5. The Roadmap will be incorporated as part of the Policy to document how the vision and mission will be achieved.

**Task 4 Deliverables:**

- Workshop materials and facilitation of the Asset Management Policy Workshop
- Draft and Final Asset Management Policy document

**Task 5 – IMPLEMENTATION ROADMAP**

This task will combine the information from the gap analysis and strategy sessions to define a roadmap forward for implementation answering the question of “how will we achieve our AM goals and objectives”. This includes an informal implementation planning session with the IRCDUS AM Steering Committee to review the recommendations from the Gap Analysis Technical Memorandum, understand ongoing AM efforts and build consensus and prioritization long-term implementation action items.

- 5.1 **Implementation Planning Work Session:** The CONSULTANT will facilitate a half day informal, interactive working session to review and discuss the overall findings and recommendations based on previous interviews and workshops. The CONSULTANT will discuss recommended implementation activities, including potential action plan items. The workshop will include an informal discussion of the recommended initiatives and proposed order of priority with IRCDUS to agree on high-priority implementation tasks and initiatives for the AM Program. Discussions will supplement the content of Policy Document developed in Task 4.2.
- 5.2 **Develop Implementation Roadmap:** Based on the outcome of Task 4.1 and previous tasks, the CONSULTANT will prepare a summary outlining recommendations for future implementation and enhancement of the AM Program at IRCDUS. The summary will include the prioritized and phased list of improvement initiatives as well as a high-level estimate of schedule and the resources required. This information will be combined into the Policy Document developed in Task 4.2

**Task 5 Deliverables:**

- Materials and facilitation of the Implementation Planning Work Session

- Implementation Roadmap Summary with recommended future initiatives including a schedule, and resource requirements for each item. The Roadmap Summary will be incorporated into the AM Policy Document.

## **Task 6– CONDITION ASSESSMENT AND RISK METHODOLOGY DEVELOPMENT**

To jump start the AM Program implementation, risk based decision making for aboveground assets will be implemented immediately, since it is an obvious gap that exists today. This task consists of workshops to determine the methodologies for condition and risk assessment for aboveground assets. The CONSULTANT will present the basic concepts behind assessment and guide the discussion related to scoring for each component of a condition and risk assessment. Examples from other local utilities will be introduced and the group will come to consensus. The resulting methods and draft SOP will be used for the Pilot area to provide proof of concept. Once the Pilot is completed the SOP will be revised for application to all future condition and risk assessments at above-ground facilities ensuring that all assets can be equally compared in the capital improvement replacement selection process.

- 6.1 **Workshop 1 – Asset hierarchy and definitions:** The CONSULTANT will conduct a full day workshop to create an effective asset hierarchy for above ground assets that can support finding assets to write work orders, reporting of information and support defining what is the lowest level in the hierarchy, or the asset definition. Asset definition and hierarchy examples from other organizations will be introduced.
- 6.2 **Workshop 2 – Asset Attributes:** The CONSULTANT will conduct a half day workshop to establish the minimum set of attributes that should be collected for all aboveground assets to facilitate condition and risk assessment and support capital planning. Examples will be provided for similar asset types from other utilities and the existing level of data available in the IRCDUS CMMS or other IT systems will be discussed in terms of prioritizing efforts to collect missing data.
- 6.3 **Workshop 3 – Condition Assessment:** The CONSULTANT will conduct a full day workshop to establish the methodology and scoring definitions for physical condition and performance condition of aboveground assets based on industry best practices. The methodology will involve visual and desktop assessments to assess each of the potential failure modes of mortality, level of service, and efficiency failures. Examples from other utilities will be provided for discussion.
- 6.4 **Useful Life and Replacement Costs:** The CONSULTANT will hold informal meetings with the appropriate work teams to establish an effective useful life table covering the asset types for the aboveground assets owned by IRCDUS. An example table from Florida utilities will be presented as a starting point.

- 6.5 **Workshop 4 – Consequence of Failure and Risk:** The CONSULTANT will conduct a full day workshop to establish the methodology and scoring definitions for Consequence of Failure and Risk for aboveground assets based on industry best practices. The methodology will involve a triple bottom line approach to scoring the Consequence of Failure and incorporate the concept of redundancy. Examples of Consequence of Failure and Risk calculations will be introduced from other utilities. The concept of using Risk scores to prioritize assets for enhanced maintenance or capital replacements will also be discussed.
- 6.6 **Condition and Risk Assessment Draft SOP:** All methodologies established in Task 5 will be documented in a Standard Operating Procedures Document to form the basis for completing the aboveground asset pilot assessment and to support future assessment activities in a consistent and standardized way.

#### **Task 6 Deliverables:**

- Workshop materials and meeting facilitation for 4 Workshops
- Draft SOP for aboveground condition and risk assessment methodology

#### **Task 7 - PILOT ASSET CONDITION AND RISK ASSESSMENT**

This task consists of applying the draft Condition and Risk Assessment SOP created in task 6.6 to validate the SOP meets the needs of IRCDUS. Approximately 4 days of field physical condition assessment will be conducted at select facilities in addition to desktop evaluations to complete the inventory and calculate a risk score for each asset as well as a remaining life estimate.

- 7.1 **Asset Inventory and Supporting Data:** The CONSULTANT will use the exports from the existing maintenance management software to populate the initial inventory database and request data for review related to the consequence of failure and performance criteria established. All information including facility as built drawings will be reviewed by the assessment team leader prior to field work.
- 7.2 **Field Physical Condition Assessment:** The CONSULTANT will assemble an assessment team consisting of a mechanical, electrical, and structural engineer to visually assess assets for up to 4 days. The team will utilize the CONSULTANT's Asset Hound tablet based data collection system to update and validate the inventory and collect the appropriate physical attributes and condition scoring.
- 7.3 **Desktop Assessment and Risk Scoring:** The CONSULTANT will hold a half day workshop directly following the field condition assessment with IRCDUS operations and maintenance staff to score the other asset failure modes, consequence of failure and redundancy as defined in the draft SOP. This will facilitate an overall risk score for each asset as well as a remaining life estimate. Planning level replacement cost estimates will be calculated by the CONSULTANT for each asset based upon the methodology established in task 6.4. Useful Life estimates based upon task 6.4 will also be applied to facilitate long term funding needs projections.

**7.4 Results Review Workshop and Final SOP:**

The CONSULTANT will conduct a half day workshop to review the outcomes of the pilot, discuss lessons learned and take any comments for revisions to the draft SOP. Recommendations will be presented regarding asset replacements needed in the 5-year CIP, the 30-year funding needs and any enhanced maintenance program needs.

**Task 7 Deliverables:**

- Materials and facilitation of the Results Review Workshop
- Excel or Access database containing pilot area inventory condition and risk calculations, including 5- year CIP needs for asset replacement and 30- year funding projections
- Final SOP for aboveground condition and risk assessment methodology

**3) SCHEDULE**

<b>Task</b>	<b>Start Date</b>	<b>End Date</b>
<b>1 – Project Management</b>	10/9/17	10/9/18
<b>2 - Best Practices and Chartering</b>	10/24/17	11/7/17
<b>3 – Gap Analysis</b>	11/8/17	12/31/17
<b>4 – Asset Management Strategy</b>	1/8/18	3/9/18
<b>5 – Implementation Roadmap</b>	2/9/18	3/9/18
<b>6 – Condition and Risk Assessment Methodology Development</b>	3/10/18	8/10/18
<b>7 – Pilot Asset Condition and Risk Assessment</b>	8/11/18	10/9/18

**EXHIBIT B**

**4) FEE ESTIMATE**

Task No.	Task Description	Project Manager	Sr. Professional Asset Mgmt	Sr. Professional IT/GIS	Lead Project Professional	Project Professional	Assistant Project Professional	Sr Admin	Admin	Total Hours	Total Billable	Other Reimbursable expenses (at cost)
		Hyer	Osthues/ Azagra	Heltzel	Ware/Lehman							
1	Project Management											
1.1	Project Management	24			60			24		108	\$19,440	
1.2	Project Kick Off Meeting	16	16		24		8			64	\$13,960	
2	Best Practices Training and Team Chartering											
2.1	Training and Chartering	16	24		40		40		2	122	\$23,800	
3	Gap Analysis											
3.1	Interviews	24	24	24	40		16			128	\$27,800	
3.2	IT Systems Analysis	4	8	24	32		16			84	\$11,668	
3.3	Review Workshop	24	32	32	32		16			136	\$30,120	
3.4	Gap Analysis Tech Memo	4	24	24	24		40		8	124	\$23,580	
4	Asset Management Strategy											
4.1	Asset Management Policy Workshop	24	32		24		16			96	\$21,240	
4.2	Asset Management Policy Document	12	24				32		2	70	\$13,980	
5	Implementation Roadmap											
5.1	Implementation Planning Work Session	16	16	8	24		16			80	\$16,960	
5.2	Develop Implementation Roadmap	4	16	8	24		16		4	72	\$14,100	
6	Condition Assessment and Risk Methodology Development											
6.1	Workshop 1 - Asset Hierarchy and Definitions	8	40		16		8			72	\$16,320	
6.2	Workshop 2 - Asset Attributes	8	32	16	16		8			80	\$18,000	
6.3	Workshop 3 - Condition Assessment	16	40		16		16			88	\$19,600	
6.4	Useful Life and Replacement Costs	2	8		16		8			34	\$6,730	
6.5	Workshop 4 - Consequence of Failure and Risk	16	40		24		16			96	\$21,120	
6.6	Condition and Risk Assessment Draft SOP	8	16		16		40		4	84	\$15,280	
7	Pilot Asset Condition and Risk Assessment											
7.1	Asset Inventory and Supporting Data	8	16		16	16	24			80	\$15,440	
7.2	Field Physical Condition Assessment	8	32		56	80	24			200	\$38,240	
7.3	Desktop Assessment and Risk Scoring	8	24	24	40	8	40			144	\$28,440	
7.4	Results Review Workshop and Final SOP	24	24		40		40		4	132	\$18,670	
	<b>Total Hours</b>	<b>274</b>	<b>488</b>	<b>160</b>	<b>580</b>	<b>104</b>	<b>440</b>	<b>24</b>	<b>24</b>	<b>2094</b>	<b>\$414,488</b>	Not too exceed \$34,000
	<b>Estimated Billing Rate</b>	<b>\$265.00</b>	<b>\$250.00</b>	<b>\$230.00</b>	<b>\$190.00</b>	<b>\$175.00</b>	<b>\$145.00</b>	<b>\$70.00</b>	<b>\$80.00</b>			
	<b>Estimated Total Billable</b>	<b>\$72,610</b>	<b>\$122,000</b>	<b>\$36,800</b>	<b>\$110,200</b>	<b>\$18,200</b>	<b>\$63,800</b>	<b>\$1,680</b>	<b>\$1,920</b>			
<b>Total Estimated Fee</b>											<b>\$448,888</b>	