Amendment 1 to Agreement RFQ 2024039 Integrated Water Master Plan

Scope of Services for Wabasso Bridge Reuse Main Condition Assessment

IRCDUS Project ID: 31.24.509

September 3, 2025

Indian River County, Florida (COUNTY) is implementing an Integrated Water Master Plan (IWMP) to prioritize programmatic and capital investments. HDR Engineering, Inc. (CONSULTANT) has been selected to collaborate with the COUNTY in the development of the IWMP. The IWMP will align with the framework outlined in the US Environmental Protection Agency's (USEPA) June 2012 Integrated Municipal Stormwater and Wastewater Planning Approach Framework codified within the Federal Clean Water Act in 2019. The goal of the IWMP is to develop an adaptable and affordable long-term plan for addressing the COUNTY's drinking water, wastewater, and reuse needs. A Professional Services Agreement for the IWMP was executed September 24, 2024.

The COUNTY will provide additional funds under this Amendment for CONSULTANT to evaluate the condition of the 12-inch diameter reclaimed water mains that are suspended along the Wabasso Causeway Bridge. The Wabasso Causeway Bridge consists of four sections along the causeway, each holding two 12-inch diameter reclaimed water mains. These mains provide reclaimed water to customers on the barrier island and are suspended over the Indian River Lagoon, an environmentally sensitive estuary.

In 2017, Carter Associates, Inc. performed a condition assessment of these reuse mains and summarized their findings in the report entitled, "Report of Reuse Water Pipeline Inspections Wabasso Bridge Crossings of the Indian River". In this report, the engineer arrived at the assumption that the pipes are Class 55 or 56. Carter Associates, Inc. took four pipe coupons along Bridges 2 and 4, the results of which showed up to 25% pipe wall thickness loss when a Pipe Class of 56 is assumed. In addition, an FDOT inspection from 2022 showed significant surface corrosion and potential structural concerns of pipe supports suspending the reuse mains.

The COUNTY has requested that CONSULTANT perform a condition assessment of the pipelines along exposed lengths of the reclaimed mains as an amendment to the IWMP agreement. The objectives of this assessment are as follows:

1. Determine pipe class by taking wall thickness measurements along the reuse mains.
2. Measure remaining pipe wall thickness along 2.5-foot segments for each main.
3. Identify need for near-term repairs and rehabilitation of pipe joints, supports, and coating needed to stabilize the reuse mains based on the results of the condition assessment.
4. Provide long-term recommendations for pipe repair, rehabilitation, replacement, or continued monitoring based on overall condition and remaining pipe wall thickness.

The condition assessment will start with visual inspection and wall thickness measurements (Phase I). Visual inspection will be an important first step in evaluating the condition of the pipe, anchors, and joints. A Broadband Electromagnetic (BEM) inspection utilizing Rock Solid BEM will help determine pipe classification and remaining pipe wall thickness. Following the completion of the visual and BEM inspections, the CONSULTANT will report on the condition of the pipe and pipe appurtenances; will provide recommendations for any near-term repairs, rehabilitation, or replacements deemed necessary; and will discuss the overall condition and remaining useful life of the pipe based on observed wall thickness loss, corrosion, and other observed factors.

CONSULTANT will utilize a boom truck within FDOT right-of-way to allow CONSULTANT staff to conduct visual and BEM inspections of the reclaimed water mains. Appropriate maintenance of traffic (MOT) and safety measures will be implemented to complete the work.

Scope of Services

Task 1 Project Management

CONSULTANT will set up, organize, manage, administer, and coordinate CONSULTANT activities for this Project, including:

- Perform project initiation and project closeout tasks.
- Organize, manage, and coordinate staff required to accomplish this scope.
- Monitor scope, schedule, and budget throughout the project.
- Prepare for and submit monthly progress reports, summarizing completed tasks, next steps, information needs, status update of active work with comparison of planned vs. actual schedules, and action items for CONSULTANT and COUNTY staff. Progress reports shall accompany the invoices submitted to the COUNTY each month.
- Develop site-specific safety plan.
- Coordinate SUBCONTRACTOR agreements, safety plans, and quality management plans.
- Manage SUBCONTRACTOR scope, schedule, and budget.

Task 1 Assumptions, Workshops, and Deliverables

Assumptions:

- CONSULTANT will contract directly with SUBCONTRACTOR for rental and operation of heavy equipment and maintenance of traffic (MOT).

Meetings/Workshops:

- Eight (8) 1-hour virtual biweekly progress meetings.

Deliverables:

- Monthly invoices with progress reports

Task 2 – Condition Assessment Sequence of Work Plan

CONSULTANT will develop a Sequence of Work Plan which describes the sequence of work to be performed, equipment to be used, project staffing, key contacts, schedule of bridge segments to be assessed each day, numbering of pipes and pipe appurtenances, and condition assessment forms. CONSULTANT will incorporate relevant COUNTY standards into the Sequence of Work Plan. CONSULTANT will maintain a comment log to record COUNTY comments on Sequence of Work Plan.

Task 2 Assumptions, Workshops, and Deliverables

Assumptions:

- Schedule assumes a review period of one (1) week for Draft Sequence of Work Plan.

Meetings/Workshops:

- One (1) 1-hour virtual Sequence of Work Plan Review meeting with COUNTY, CONSULTANT, and SUBCONTRACTOR.
- Up to two (2) 1-hour virtual coordination meetings with COUNTY to discuss site access, preparation, and as-needed coordination with downstream customers.

Deliverables:

- Draft and Final Sequence of Work Plan
- Review Comment Log

Task 3 – Condition Assessment Permitting

CONSULTANT will apply for the following permits/authorizations:

- FDOT General Use Permit
- FDOT District 4 Lane Closure Submittal Form

CONSULTANT will coordinate with FDOT to confirm that proposed work within FDOT right-of-way is compliant with FDOT standards.

Task 3 Assumptions, Workshops, and Deliverables

Assumptions:

- Schedule assumes 60 days for approval of General Use Permit application. CONSULTANT will not be held responsible for schedule impacts due to FDOT review delays.
- Schedule assumes 15 days for approval of Lane Closure Submittal Form. CONSULTANT will not be held responsible for schedule impacts due to FDOT review delays.
- Permit fees to be reimbursed by COUNTY.
- This permitting does not include permitting for repair, rehabilitation, and/or replacement work in Phase II of this scope.

Meetings/Workshops:

- Up to three (3) 1-hour virtual coordination meetings with COUNTY and/or FDOT to discuss permit application requirements and comments.

Deliverables:

- General Use Permit Application
- Lane Closure Submittal Form

Task 4 – Condition Assessment

From a boom truck on the bridge, CONSULTANT will perform a condition assessment of the 12-inch diameter reuse water mains along the lengths of Bridges 1, 2, 3, and 4 of the Wabasso Bridge. CONSULTANT will observe the condition of pipe coating, joints, anchors, and other appurtenances. CONSULTANT will record observations and photos of the mains and will indicate the bridge, main, and location along the main to which the observations and photos refer. CONSULTANT will also take up to twelve (12) wall thickness measurements up to 2.5 feet each in length along Bridges 1, 2, 3, and 4 with a Broadband Electromagnetic inspection tool to support assessment of pipe classification and pipe wall condition. CONSULTANT will send an email to COUNTY each day following field work to provide an update on progress, noteworthy observations, and next-day's plan.

Field work will be performed in three (3) 1-week mobilizations.

Task 4 Assumptions, Workshops, and Deliverables

Assumptions:

- CONSULTANT will inspect reuse mains along Bridges 1, 2, 3, and 4.
- Two (2) mobilizations and demobilizations are assumed.
- Work will be performed within FDOT District 4's allowed daytime hours for lane closures:
    - Monday through Friday from 9:00 AM to 4:00 PM
- CONSULTANT will perform visual inspection on pipes, supports, and joints to the degree that these are observable with a reasonable effort from the truck bucket. CONSULTANT will note any areas of the pipe or appurtenances that could not be observed.
- Where there are pipe configuration constraints, BEM tool will perform partial scans along the circumference of the pipe. CONSULTANT will note any areas of the pipe that could not be fully scanned.

Meetings/Workshops:

- Fifteen (15) in-person safety and site coordination meetings (i.e., one each morning while field assessment is being performed).

Deliverables:

- Daily email updates including inspection length each day, noteworthy findings, and anticipated next-day's plan.

Task 5 – Condition Assessment Report

CONSULTANT will compile observations and findings into a Draft Condition Assessment Report. Report will highlight components of the mains (e.g., anchors, coating, joints) in need of rehabilitation as well as areas of concern along the lengths of the mains and pipe classification. Observations will be incorporated into an appendix.

CONSULTANT will facilitate one (1) 2-hour virtual meeting to discuss the findings of the visual and electromagnetics inspections, review the Draft Report contents, and discuss recommended adjustments or considerations regarding path forward for pipeline component repair, rehabilitation, and/or replacement. CONSULTANT will develop meeting materials including presentation, agenda, and meeting notes. CONSULTANT will submit a Final Condition Assessment Report.

Task 5 Assumptions, Workshops, and Deliverables

Assumptions:

- Schedule assumes a review period of two (2) weeks for Draft Condition Assessment Report.

Meetings/Workshops:

- One (1) 2-hour virtual Condition Assessment Results Discussion Meeting

Deliverables:

- Draft and Final Condition Assessment Reports
- Condition Assessment Results Discussion Meeting presentation, agenda, and notes

Schedule

Table 1: Project Schedule from Notice to Proceed (NTP).

Task Name	Start (days from NTP)	Duration (days)
1 - Project Management	NTP	130
2 – Condition Assessment Sequence of Work Plan	NTP	30
3 – Condition Assessment Permitting	30	60
4 – Condition Assessment	90	15
5 - Condition Assessment Report	105	30

General Assumptions

- Schedule and budget assume no major weather delays.
- CONSULTANT will identify which pipe supports and joints are in need of repair or replacement and which sections of pipe require recoating in the Condition Assessment Report.
- COUNTY will operate valves needed to remove the reuse mains from service, if needed.
- COUNTY will be responsible for coordination with downstream reuse customers for temporary loss of service, if needed.

Compensation

For Tasks 1 through 5, the COUNTY shall compensate the CONSULTANT for time and materials not to exceed $409,077.72.

Professional services for Tasks 1 through 5 will be invoiced monthly by total hours billed. A progress report summarizing work completed by task will be submitted with each invoice. See Exhibit A for fee breakdown.

Project Team

CONSULTANT's key team members include the following:

- Principal-in-Charge – David O'Connor
- Project Manager – Carlee Fullenkamp
- Pipeline Rehabilitation Specialist – Sonia Oton
- Pipeline Condition Assessment Specialist – Susan Donnally
- Structural Bridge Engineer – Charles Swanson
- Pipe Inspector – Rodger Insignares
- Pipe Support Inspector – Charles Compton

SUBCONTRACTOR:

- Truck Operation/MOT – Sunshine Underbridge
- Non-Destructive Wall Thickness Testing – Rock Solid Group
- Third-Party Inspection Report Review – Freese & Nichols

EXHIBIT A
Indian River County Utilities
Wabasso 12" Reclaim Main Condition Assessment
Estimated Level of Effort and Fee

TASKS		LEVEL OF EFFORT											FEE			
No.	Description	Principal	Project Manager	Pipeline Rehab Specialist	Pipeline CA Specialist / QC	Structural Engineer	Pipeline Inspector	Pipe Support Inspector	Project Engineer	Accountant	Project Coordinator	Total Labor	Labor	Subcontractor	Direct Costs	Total
	Billing Rates	*$381*	*$169*	*$360*	*$375*	*$360*	*$160*	*$150*	*$147*	*$143*	*$116*					
1	Project Management	8	40	20		8				20	20	116	$25,102.22			$25,102.22
2	Condition Assessment Sequence of Work Plan	4	30	20	4	8	10	10	30			116	$25,709.33			$25,709.33
3	Condition Assessment Permitting		40	12								52	$11,097.22		$400.00	$11,497.22
4	Condition Assessment	2	20	60			160	160				402	$75,339.93	$180,000.00	$36,300.00	$291,639.93
5	Condition Assessment Report	4	20	48	8		20	20	100			220	$46,129.02	$9,000.00		$55,129.02

TOTAL, hours	18	150	160	12	16	190	190	130	20	20	906				
TOTAL, dollars	$6,860.04	$25,408.10	$57,622.99	$4,505.46	$5,762.30	$30,406.51	$28,471.32	$19,147.20	$2,863.84	$2,329.95	$183,377.72	$183,377.72	$189,000.00	$36,700.00	$409,077.72
												Total			$409,077.72