

ENGINEERING SERVICES WORK ORDER 10

This Work Order Number 10 is entered into as of this ____ day of _____, 2023, pursuant to that certain Continuing Contract Agreement, dated May 2, 2023, ("Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Atkins North America, Inc. ("Consultant").

The COUNTY has selected the Consultant to perform the professional services set forth on Exhibit A (Scope of Work), attached to this Work Order and made part hereof by this reference. The professional services will be performed by the Consultant for the mutually agreed upon lump sum or maximum amount not-to-exceed professional fee. Any additional costs must be approved in writing, and at a rate not to exceed the prices set forth in Exhibit B of the Agreement (Rate Schedule) for RFQ 2023015, made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit A (Time Schedule), attached to this Work Order and made a part hereof by this reference all in accordance with the terms and provisions set forth in the Agreement. Pursuant to paragraph 1.4 of the Agreement, nothing contained in any Work Order shall conflict with the terms of the Agreement and the terms of the Agreement shall be deemed to be incorporated in each individual Work Order as if fully set forth herein.

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

CONSULTANT:

By: _____
Name: _____
Title: _____

**BOARD OF COUNTY COMMISSIONERS OF
INDIAN RIVER COUNTY:**

By: _____
_____, Chairman

BCC Approval Date: _____

By: _____
John A. Titkanich, Jr., County Administrator

Approved as to Form and Legal Sufficiency:

By: _____
Christopher A. Hicks, Assistant County Attorney

Ryan L. Butler, Clerk of Court and Comptroller

Attest: _____
Deputy Clerk

(SEAL)

**INDIAN RIVER COUNTY
DEPARTMENT OF UTILITIES SERVICES
CITY OF SEBASTIAN BUILDOUT OF
SEPTIC TO SEWER CONVERSION
FEASIBILITY STUDY
IRCDUS PID 21.26.502**

OCTOBER 15, 2025

EXHIBIT A – SCOPE OF SERVICES

BACKGROUND

Over the past decade, public awareness of the need to improve the water quality of the Indian River Basin has grown significantly. This has led to increasing regulatory pressure on utilities to reduce pollution and improve the quality of discharges into the Lagoon. One major initiative is the recently established Indian River Lagoon Protection Program (Florida State Statute 373.469). Under this statute, all existing conventional septic systems in the Indian River Lagoon Basin are required to either connect to sewer systems or upgrade to enhanced nutrient-reducing onsite sewage treatment and disposal systems by July 1, 2030.

Fortunately, Indian River County Department of Utilities Services (IRCDUS) has been ahead of the curve in proactively expanding sewer collection systems throughout their service area, including customers currently relying on onsite sewage treatment and disposal (septic) systems. In September 2025, IRCDUS engaged AtkinsRéalis to provide technical services for their current phase of septic to sewer conversions in the City of Sebastian.

Septic to sewer conversions are necessary to limit the amount of nutrients, particularly nitrogen and phosphorus, released into the ground by septic systems, which can contaminate groundwater and nearby water bodies. In areas with porous soil, septic systems often fail to adequately filter these nutrients, leading to environmental issues such as harmful algal blooms and health risks from polluted drinking water. The proposed sewer systems, by contrast, will transport wastewater to a centralized treatment plant that more effectively removes nutrients, protecting ecosystems and public health while offering greater resilience during storms and floods.

To support this effort, a comprehensive study will be conducted to evaluate whether the existing infrastructure including lift stations, gravity sewers, and force mains can accommodate the increased wastewater flow resulting from the transitions.

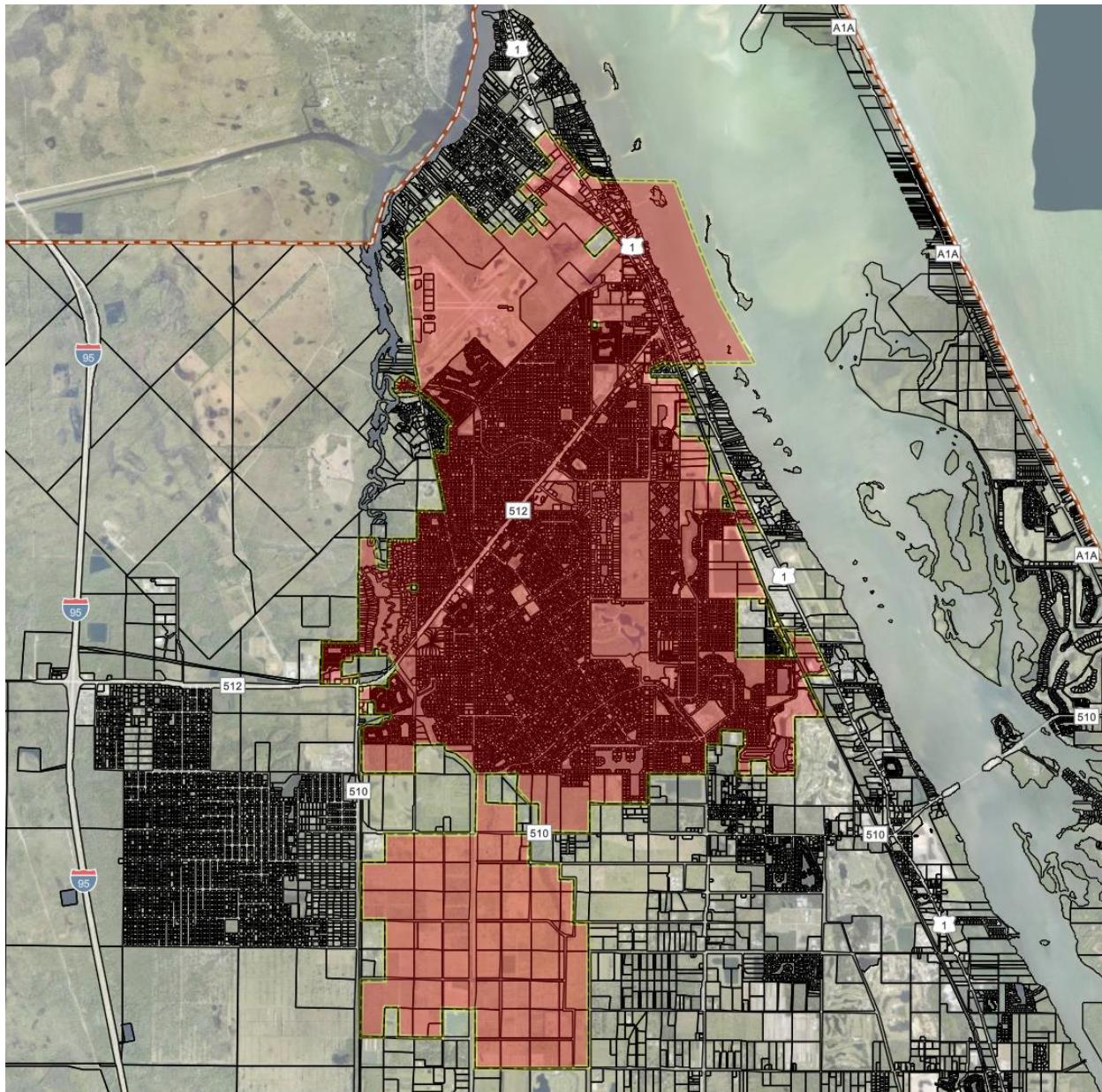


Figure 1: Septic to Sewer Conversion Area within Sebastian City Limits

SCOPE OF SERVICES

The following Scope of Services is for professional services relating to the feasibility study associated with the septic to sewer conversion in the City of Sebastian as shown in Figure 1. Upon Notice to Proceed, AtkinsRéalis will provide professional services to include project management and engineering services as described herein.

TASK 01 Project Management

Task 01 consists of the overall management of the project to completion. This includes contract administration, management of the project action list, schedule, budget, and ensuring that all team members understand their roles and responsibilities. The project manager will facilitate effective communication with City of Sebastian and IRCDUS representatives. Regular monitoring and reporting will be conducted to deliver the project on time, within budget, and to high quality standards.

Project Status Reports will be supplied to IRCDUS with each invoice or upon request and will detail any changes in schedule along with supporting justification for the change.

AtkinsRéalis anticipates to attend four in-person Workshops with IRCDUS Staff to kick off the project, review collected data and proposed conversion areas, review the draft report comments, and review the final report. In addition, the AtkinsRéalis team will facilitate up to eight bi-weekly progress meetings with the County, including scheduling, preparing agendas, and distributing meeting minutes. A site visit will be conducted on the same day as the Project Kickoff Workshop.

Deliverables: Invoices, meeting and workshop coordination, site visit coordination, facilitation of meetings and workshops, meeting agendas and summaries

TASK 02 Data Collection

AtkinsRéalis will perform the following subtasks as part of the Data Collection Task:

- Review as-built information provided by the County or the County Master plan team
- Review of County Standards, local codes, and regulatory requirements
- Coordinate with the County's Hydraulic Modeler to acquire potable water demands
- Coordinate with the City of Sebastian staff for the purpose of acquiring a list of planned annexations, developer projects under review or in progress incorporating the extension of sanitary sewer service, and septic systems that have been converted to advanced type
- Coordinate with IRCDUS to obtain:
 - Existing and proposed distribution and collections systems in GIS format developed by the County Hydraulic Modeler
 - Available as-builts and record drawings (hard copies or GIS format) of utility information not yet incorporated into the finished hydraulic model
 - Subdivision, parcel data, and owner information in GIS
 - Active OSTDS within Sebastian City limits in GIS
 - Planned changes in land use in GIS
 - Flooding and storm surge areas in GIS
 - Proposed developments near Sebastian City limits incorporating sanitary sewer extensions in GIS

AtkinsRéalis will develop a comprehensive geodatabase to include the provided information that will serve as a basis for the feasibility study. The compiled geodatabase will be used to estimate

flows, develop tables, define limits of septic to sewer conversion areas, and develop schematic designs of the collection system.

Deliverables: Compiled geodatabase of relative information, summary of permitting and regulatory requirements

TASK 03 Define Flow Rates

The conversion from septic to centralized sewer systems will increase sanitary flows, creating a need for infrastructure improvements. Proper sizing of the sewer collection system will ensure that the system is adequately sized to handle the projected flows, minimize risks of overflow and inefficiency, and provide for long-term sustainability and regulatory compliance.

This task involves calculating the cumulative flows from each user, overall and by area, and then designing schematic sewer systems to convey those flows to the receiving facilities. Based on the information provided by the County and the Master Plan team AtkinsRéalis will conduct a thorough assessment of the project area, including factors such as zoning, topography, flooding and storm surge that will impact the schematic design. AtkinsRéalis will coordinate with County Staff, including the assigned project manager and GIS Manager, and with the County Hydraulic Modeler in relation to the Wastewater Master Plan under development to ensure the conversion areas and schematic design is consistent with proposed capital improvement projects.

Deliverables: Projected flow rates and preliminary sewer network layout

TASK 04 Hydraulic Modeling Coordination

AtkinsRéalis will coordinate with the County's assigned Hydraulic Modeler to evaluate the proposed schematic designs. This analysis will determine the feasibility of integrating the proposed improvements into the current wastewater system.

AtkinsRéalis will support the County's Hydraulic Modeler in implementation of the septic-to-sewer conversions, and review recommendations for changes in the schematic design. The County's Hydraulic Modeler may determine that improvements are needed in the existing collection system to accept the flows from the proposed septic to sewer conversion. Upon County acceptance, recommendations on improvements to the existing system from the County's Hydraulic Modeler will be incorporated into the schematic design.

Areas will be evaluated for water service requirements where sanitary connections are to be provided. AtkinsRéalis will coordinate with the County's Hydraulic Modeler who will provide water distribution extensions to these areas. The County's Hydraulic Modeler will provide this information in GIS format to be included with the compiled geodatabase and noted in the study.

Deliverables: Summary of hydraulic model results and upgrades to the existing system.

TASK 05 Feasibility Report

Draft Feasibility Report

AtkinsRéalis will prepare a Draft Feasibility Report which will consider key assumptions and design constraints, summarize the customer base, detail projected flow rates, and provide a schematic collection system design by area given with a unique identifier. The collection system design will include:

- Gravity sewer mains and anticipated diameter
- Force mains and anticipated diameter
- Approximate locations of proposed sewer network
- Approximate locations of public lift stations
- Recommended improvements to existing infrastructure provided by the County's assigned Hydraulic Modeler
- Connection points to existing sanitary sewer infrastructure as recommended by the County's Hydraulic Modeler

A general and preliminary Project Schedule will be developed to outline the key areas of the initiative, including development of Construction Documents, Bid Phase, and Construction. This schedule is intended solely for planning purposes and is representative of all conversion areas. As the project progresses, the schedule will require updates to accommodate evolving project requirements, regulatory considerations, and coordination with key stakeholders.

A feasibility level estimate representing the anticipated construction bid amounts will be developed for each conversion area using the most current information available. These cost estimates are intended to provide a preliminary understanding of the financial implications associated with the recommended collection system and serve as a foundational reference for further decision-making and budgeting.

Upon submitting the electronic version of the Draft Feasibility Report, AtkinsRéalis will schedule a workshop with County Staff and their Hydraulic Modeler to review the document and discuss their comments.

Final Feasibility Report

Following the Draft Feasibility Report Workshop, the report will be updated to address review comments. Final deliverables will include an electronic copy and twelve hard copies of the Final Report. An electronic version of the adjudicated review comments will be provided to the County PM for distribution.

Upon submitting the electronic version of the Final Feasibility Report, AtkinsRéalis will schedule a Workshop with County Staff to discuss attendance and presentations to be made with the Board of County Commissioners and City of Sebastian Council.

Deliverables: Draft Feasibility Report, Workshop agenda and notes, Final Feasibility Report with adjudicated review comments.

ASSUMPTIONS AND EXCLUSIONS

The following assumptions have been made in the development of this scope of work, schedule, and fee:

1. Subsurface utility engineering, geotechnical services, environmental assessments, and survey services are not required.
2. Neighborhood and community meetings are not anticipated or included.
3. Permitting is not required for this study.
4. The conceptual design will be based on the federal, state, and local codes and standards in effect at the start of the project.
5. IRCDUS will provide requested information and project reviews in a timely manner.
6. Attendees of the review meetings are designated as decision makers.
7. The County's Hydraulic Modeler will provide potable water demand patterns in the area and collaborate with AtkinsRéalis on the determination of flow rates and proposed options for the anticipated collection system.
8. Any improvements to the existing collection system that are needed for acceptance of the additional flow from the conversion areas that have been or will be developed by the County's Hydraulic Modeler, will be communicated to AtkinsRéalis and IRCDUS by the County's Hydraulic Modeler on completion of Task 03 according to the proposed schedule.
9. The project schedule and feasibility level estimates are intended solely for planning purposes and exclude escalation factors over time intervals.
10. IRCDUS will contract separately with the Hydraulic Modeler.
11. The County PM will verify the availability of County Staff to attend meetings and workshops as well as provide timely requests for rescheduling as needed. Attendees of the review meetings are designated as decision makers.
12. Lift station and treatment facility design calculations are excluded.
13. Laterals to existing and proposed homes and developments will be included as a line item within the feasibility level estimate but excluded in schematic design.
14. Costs, schematic design, and evaluation of annexed areas and developer projects, both current and future are excluded.
15. This scope of work will not include priority phasing of conversion areas.
16. This scope excludes design, costs, and scheduling for water distribution to conversion areas requiring water service. It is assumed that water distribution to conversion areas is being evaluated in the County's Master Plan (in development at the time of this proposal). If available, the County's Hydraulic Modeler will provide this information to AtkinsRéalis for incorporating with the feasibility study.

QUALITY CONTROL

AtkinsRéalis will be responsible for the professional quality of all deliverables. This includes an internal Quality Assurance Plan that, as a minimum, provides review of all deliverables and significant calculations by a qualified professional that was not responsible for project execution.

SCHEDULE

The anticipated schedule shown below is based on the number of weeks after the formal issuance of the signed Work Order and a Notice to Proceed by the County.

Task No.	Task Title	Duration from NTP
01	Kick- Off Workshop	2 weeks
02	Data Collection	6 weeks
03	Define Flow Rates	10 weeks
04	Hydraulic Modeling Coordination	12 weeks
05	Draft Feasibility Report	20 weeks
05	Final Feasibility Report	30 weeks

COMPENSATION

The AtkinsRéalis Team proposes to perform all services within this scope of work on a Lump Sum basis, with budgets between tasks and expenses being interchangeable. All invoices will include a detailed progress report in support of the invoice amount.

The estimated total engineering fee including all labor and expenses associated with the scope of work is not to exceed **\$288,132.00**, as presented below and detailed in **Exhibit B**.

Task No.	Task Title	Fee
01	Project Management	\$ 44,980.00
02	Data Collection	\$ 16,624.00
03	Define Flow Rates	\$ 29,760.00
04	Hydraulic Modeling Coordination	\$ 29,600.00
05	Feasibility Report	\$ 161,168.00
EXP	Expenses	\$ 6,000.00
	Total	\$ 288,132.00

EXHIBIT B

Cost Detail

AtkinsRéalis

City of Sebastian Septic to Sewer Feasibility Study

Indian River County

		Contract Bill Rate	\$ 330.00	\$ 260.00	\$ 290.00	\$ 260.00	\$ 131.00	\$ 125.00	\$ 196.00	\$ 208.00	\$ 95.00				
Task#	Description	Sr. Project Director	Sr. Project Manager	Principal Technical Professional	Sr. Engineer IV - Technical Lead (EOR)	Engineer II	Engineer I	Chief Designer	Sr. Engineer III	Administrative Assistant	Total Hours	Labor	Travel	ODCs	Total Price
01	Project Management	7.0	122.0	24.0	40.0	0.0	128.0	0.0	0.0	42.0	363.0	\$ 44,980.00			\$ 44,980.00
02	Data Collection	3.0	12.0	0.0	24.0	64.0	16.0	0.0	0.0	24.0	143.0	\$ 16,624.00			\$ 16,624.00
03	Define Flow Rates	0.0	19.0	0.0	76.0	80.0	80.0	0.0	0.0	0.0	255.0	\$ 29,760.00			\$ 29,760.00
04	Hydraulic Modeling Coordination	3.0	8.0	16.0	96.0	104.0	0.0	200.0	24.0	0.0	451.0	\$ 29,600.00			\$ 29,600.00
05	Feasibility Report	6.0	70.0	52.0	302.0	412.0	246.0	124.0	41.0	44.0	1,297.0	\$ 161,168.00			\$ 161,168.00
EXP	Reimbursable Expenses											\$2,000.00	\$ 4,000.00	\$ 6,000.00	
	Grand Totals	19.0	231.0	92.0	538.0	660.0	470.0	324.0	65.0	110.0	2,509.0	\$ 282,132.00	\$ 2,000.00	\$ 4,000.00	\$ 288,132.00

EXHIBIT C

Schedule

SCHEDULE

The anticipated schedule shown below is based on the number of weeks after the formal issuance of the signed Work Order and a Notice to Proceed by the County.

Task No.	Task Title	Duration from NTP
01	Kick- Off Workshop	2 weeks
02	Data Collection	6 weeks
03	Define Flow Rates	10 weeks
04	Hydraulic Modeling Coordination	12 weeks
05	Draft Feasibility Report	20 weeks
05	Final Feasibility Report	30 weeks