
EXHIBIT A – SCOPE OF SERVICES

Martin County Utilities Western Corridor Water and Sewer Main Extension

Martin County Utilities (County) was approached by potential customers located inside County's service area generally located along State Road 714 between Florida's Turnpike and Interstate 95 regarding obtaining water and sewer service. These proposed costumers include:

- Martingale Commons
- Seven J's Industrial Complex
- Martin County Sheriff's Firearms Range
- Martin County Utilities Solid Waste Transfer Facility

County performed preliminary hydraulic analysis and evaluations. The conclusions of the hydraulic analysis determined that County would need to design and construct approximately 27,500 linear feet (LF) of 16-inch water main, 2,300 LF of 8-inch water main, 20,000 LF of 8-inch force main, 16,600 LF of 6-inch force main, and upgrades to existing Lift Station No. 540 to repump wastewater flow from the Western Corridor Extension to the Martin Downs Inline Booster Pump Station. The future customers and the preliminary water and wastewater pipeline routes are depicted on the attached figure.

County has requested the services of Holtz Consulting Engineers, Inc. (Consultant) to provide professional engineering services required to design and permit approximately 29,800 LF of water and 36,600 LF of wastewater mains and design the necessary modifications to Lift Station No. 540. Consultant shall perform final design services including preparation of drawings and technical specifications, obtaining permits from the appropriate local and state entities, and assisting County with contractor procurement.

The following is a detailed description of the engineering services to be provided.

SECTION 1 – SCOPE OF SERVICES

A. Preliminary Engineering Services

Consultant shall finalize the pipeline routes and methods of construction. Consultant shall meet with County along the proposed route to review the preferred and cost-effective installation methods. Consultant shall hold one (1) meeting with the Martin County Public Works/Engineering Department to obtain their concurrence on the open-cut and horizontal directional drill areas of construction. A pipe routing figure will be developed depicting pipe

diameters and where open-cut vs. horizontal directional drilling construction methods will be proposed. A Technical Memorandum (TM) will be developed summarizing customers to be served, average and peak flows, fire flow demand requirements, and the figure described above. The TM will be used as supplemental information to accompany the project's permit applications. Any final hydraulic modeling and analysis required to determine the water main and force main piping sizes and the pump improvements to Lift Station No. 540 required will be performed under separate agreements.

B. Final Design Services

Consultant shall prepare drawings and technical specifications depicting the construction of the new water mains, force mains, and modifications to Lift Station No. 540 based on the TM developed in Task A.

The pipes will be installed via a combination of horizontal directional drill (HDD) and open-cut methods. The mains will be installed with the open-cut method to the fullest extent possible. Roadway crossings, drainage canal and structure crossings, and areas that will require extensive dewatering will be constructed with the horizontal directional drill method. The design of the new mains will be coordinated with the proposed roadway widening and utility relocations occurring at the intersection of State Road 714 and Citrus Boulevard and the intersection improvements at SW 84th Avenue and State Road 714.

The design of the work at Lift Station No. 540 will include the following improvements and modifications to allow it to repump the wastewater flows from the Western Extension in addition to the flows generated at the Sands Commerce Center:

- Larger submersible pumps
- Replacement of discharge piping
- Replacement of the gravity piping between the terminal manhole and wetwell
- Rehabilitation/replacement of the interior coatings of the wet well and terminal manhole
- Replacement of the backflow preventer, hose bibb and water service
- Addition of a dry-prime back-up pump with integral engine and fuel system
- Electrical improvements including a new electrical control panel, RTU equipment, main disconnect, and coordination with FPL

The drawings will be depicted on the topographic survey provided by County, except for the pipelines along SW Poma Drive, which will be depicted on drawings provided by County. Consultant shall visit the site to verify the completeness of the survey and drawings provided. Any supplemental survey work required for completeness of the survey and drawings will be

provided by County. The drawings will depict the pipe work in plan view on a 1"=30' horizontal scale. Profiles will be developed only for critical horizontal directional drills beneath existing roadways and drainage canals/structures. Technical specifications will be developed based on County's design standards. It is estimated that approximately 66 drawings will be developed including the following:

- G-1 Cover
- G-2 General Notes and Sheet Index
- G-3 Legend and Abbreviations
- G-4 Key Sheet
- C-1 – C45 Plan and Profile Sheets
- D-1 Pipe Details
- D-2 Pipe Details
- D-3 Pipe Details
- D-4 Pipe Conflict Details
- D-5 Pipe Conflict Details
- M-1 Lift Station No. 540 Existing and Demolition Plan Views
- M-2 Lift Station No. 540 Proposed Plan
- M-3 Lift Station No. 540 Profile/Sections
- M-4 Lift Station Details
- E-1 Electrical Notes and Legend
- E-2 Electrical Site Demolition Plan
- E-3 Electrical Site Proposed Plan
- E-4 Electrical Oneline and Riser Diagrams
- E-5 Control Panel Details
- E-6 Dry-Prime Back-Up Pump Details
- E-7 Electrical Details
- E-8 Electrical Details

Consultant shall prepare and submit a preliminary site plan, 90-percent and final drawings for the lift station portion of the project for County review. Consultant shall prepare and submit 90-percent and final drawings and specifications for the water main and force main portions of the project for County review. Consultant will meet with County to review and address County's comments on each design submittal and make appropriate changes. Consultant shall prepare cost estimates with the 90-percent and final design phase submittals.

No geotechnical exploration and analysis is required for the design of the project will not be performed as part of this agreement. Geotechnical work may be obtained at a later date by the contractor for use by their horizontal directional drilling subcontractor or by County for inclusion as additional information made available to bidders.

C. Permitting Services

Consultant shall prepare applications for permits to construct the improvements to the following agencies:

- Florida Department of Transportation (FDOT) Utility Right-of-Way Permit for the work performed in the State Road 714 right-of-way. The permit and supporting documentation will be submitted via the FDOT's electronic "One Stop Permitting" process.
- Florida Department of Environmental Protection (FDEP) "Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs", DEP Form 62-555.900(7) Alternate for the water mains.
- Florida Department of Environmental Protection "Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System", DEP Form 62-604.300(8)(a) for the force mains and improvements to Lift Station No. 540.
- The project will also require a Martin County Public Works/Engineering Right-of-Way Use Permit. This permit will be obtained by the selected contractor.

Consultant shall attend pre-application meetings with the FDOT.

Consultant shall respond to requests for additional information (RAIs) from each of the permitting agencies. Permit fees will be paid by County.

Consultant shall provide signed-and-sealed drawings to the selected contractor as required to be submitted in order to obtain right-of-way and building permits.

It is assumed that all improvements will be constructed in public rights-of-way or existing utility easements, and no wetland or environmental permitting will be required.

D. Contractor Procurement Services

Copies of the plans and specifications will be provided to Martin County Purchasing for distribution via Demandstar. Consultant will answer ALL potential bidder's requests for information using County's standard addendum template, review the bids received from the contractors, and make a recommendation of award for the lowest responsive and responsible bidder to perform the work based on the bids received. A final Engineer's Opinion of the Estimated Cost of Construction will be provided prior to opening the bids.

SECTION 2 – OBLIGATION OF COUNTY

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

1. Complete topographic survey of the proposed piping routes and Lift Station No. 540, including any additional information required after the site visits, in AutoCAD format.
2. Access to the piping route and Lift Station No. 540.
3. Lift Station No. 540 existing flow and pressure information.
4. Record drawings of existing utilities.
5. Prompt review and comment on deliverables.
6. Attendance of key personnel at meetings.
7. All permit application fees.

SECTION 3 - DELIVERABLES

The following deliverables will be provided to County:

1. Technical Memorandum in PDF and paper formats.
2. Preliminary site plan depicting the work at Lift Station No. 540.
3. 90-percent and final plans and technical specifications as well as the bid form and bid item descriptions. Paper copies and digital copies in PDF, Microsoft Word and AutoCAD Version 2017 will be submitted.
4. Copies of Permit Applications and RAI responses.
5. Cost estimates with the 90-percent and final design documents.
6. Copies of addendums.
7. Letter of recommendation of award.

SECTION 4 – COMPENSATION

Professional fees for Agreement between County and Consultant to provide professional services shall be paid in accordance to the following schedule and are on a lump sum basis. Monthly progress payments shall be based on the percentage of work completed.

COMPENSATION FOR PROFESSIONAL SERVICES

TASK	TOTAL COST
Task A – Preliminary Engineering Services	\$10,238
Task B – Final Design Services	\$332,221
Task C – Permitting Services	\$11,213
Task D – Contractor Procurement Services	\$6,068
TOTAL	\$359,740

SECTION 5 – SCHEDULE

Time periods to perform the professional services are estimated as follows:

SCHEDULE FOR PROFESSIONAL SERVICES

TASK	DURATION	Time from NTP
Task A – Preliminary Engineering Services		
Technical Memorandum	4 Weeks	4 Weeks
Task C – Final Design Services		
Lift Station Design Layout Submittal	8 Weeks from TM	12 Weeks
90-Percent Design Submittal	20 Weeks from TM	24 Weeks
Final Design Submittal	4 Weeks	29 Weeks
Task D – Permitting Services (Submit at the 90-Percent Stage)	4 Weeks	29 Weeks
Task E – Contractor Procurement Services	5 Weeks	34 Weeks

**This schedule assumes a one-week review time by County of all deliverables*

EXHIBIT B

SCHEDULE OF HOURLY BILLING RATES

The rates and charges outlined below are used for billing of services on time and expenses projects and are used to develop compensation amounts of lump sum projects. These rates are effective for one year from the date of the Agreement and shall be adjusted annually.

1. HCE Rates

Principal / Associate	\$ 180
Senior Engineer / Manager	\$ 160
Project Engineer / Manager (PE)	\$ 120
Construction Manager	\$ 120
Project Engineer (EI)	\$ 105
Designer/AutoCAD	\$ 95
Administrative Assistant	\$ 55

A. Subconsultants will be billed at cost plus 10%.

B. Mileage for authorized travel shall be invoiced at the current IRS rate.

Reimbursable expenses including mileage shall be pre-approved by the County.

Western Utility Extension Water and Sewer Main Layout



Martin County
Landfill

Seven J's Subdivision

Sheriff Shooting Range
Substation

6" FM

8" WM

SW Poma Dr

SW Busch St

16" WM

6" FM

84th Ave

16" WM

Martingale Commons

16" WM

SW Martin Hwy

6" FM

8" FM

Connect to Existing
12" PVC Water Main

8" FM

Proposed Replacement
of Existing 4" FM with
Proposed 6" FM

Connect FM to Sands
Commerce Center (LS-540)
Wet Well

Florida's Turnpike

SW Citrus Blvd

SW Citrus Blvd

Legend

- Existing Lift Station
- WUE Water Main Layout
- WUE Force Main Layout
- Existing Force Main
- Western Utility Extension Customers

Martin County Utilities
MCU Western Corridor Water and Sewer Main Extension
Summary of Estimated Hours and Cost by Task

TASKS	HCE Hours and Cost by Task													Subconsultants	Sub Mark up (10%)	Total
	Principal	Rate	Senior Engineer (PE)	Rate	Construction Inspector	Rate	Project Engineer (EI)	Rate	Designer	Rate	Administrative Assistant	Rate	Total Labor			
Design, Permitting, and Contractor Procurement																
A. Preliminary Engineering																
Water Main Routing Analysis	0	\$180	0	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$0	\$1,867	\$0	\$1,867
Wastewater Main Routing Analysis	0	\$180	4	\$160	0	\$120	8	\$105	8	\$95	0	\$55	\$2,240	\$0	\$0	\$2,240
Attend Meetings with Martin County Public Works/Engineering	2	\$180	2	\$160	0	\$120	2	\$105	0	\$95	0	\$55	\$890	\$941	\$0	\$1,831
Prepare Technical Memorandum	2	\$180	4	\$160	0	\$120	8	\$105	8	\$95	0	\$55	\$2,600	\$1,700	\$0	\$4,300
Subtotal Task A	4	\$180	10	\$160	0	\$120	18	\$105	16	\$95	0	\$55	\$5,730	\$4,508	\$0	\$10,238
B. Final Design Services																
Survey Field-Truth and Site Visits	0	\$180	16	\$160	0	\$120	32	\$105	16	\$95	0	\$55	\$7,440	\$0	\$0	\$7,440
Coordination with Proposed Roadway Widening and Utility Relocates	0	\$180	4	\$160	0	\$120	8	\$105	8	\$95	0	\$55	\$2,240	\$0	\$0	\$2,240
Develop Base Drawings	0	\$180	4	\$160	0	\$120	8	\$105	140	\$95	0	\$55	\$14,780	\$0	\$0	\$14,780
50% Mechanical Drawings	4	\$180	24	\$160	0	\$120	48	\$105	48	\$95	0	\$55	\$14,160	\$0	\$0	\$14,160
90% General Drawings	1	\$180	16	\$160	0	\$120	4	\$105	24	\$95	0	\$55	\$5,440	\$0	\$0	\$5,440
90% Wastewater Civil Drawings	12	\$180	96	\$160	0	\$120	192	\$105	400	\$95	0	\$55	\$75,680	\$0	\$0	\$75,680
90% Water Civil Drawings	0	\$180	0	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$0	\$75,963	\$0	\$75,963
90% Mechanical Drawings	4	\$180	16	\$160	0	\$120	32	\$105	32	\$95	0	\$55	\$9,680	\$0	\$0	\$9,680
90% Detail Drawings	1	\$180	1	\$160	0	\$120	4	\$105	16	\$95	0	\$55	\$2,280	\$0	\$0	\$2,280
90% Specifications	2	\$180	8	\$160	0	\$120	20	\$105	0	\$95	0	\$55	\$3,740	\$5,071	\$0	\$8,811
90% Cost Estimates	1	\$180	2	\$160	0	\$120	16	\$105	0	\$95	0	\$55	\$2,180	\$3,159	\$0	\$5,339
90% QA/QC	16	\$180	40	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$9,280	\$5,920	\$0	\$15,200
90% Design Review Meeting	2	\$180	4	\$160	0	\$120	4	\$105	0	\$95	0	\$55	\$1,420	\$3,190	\$0	\$4,610
100% General Drawings	0	\$180	0	\$160	0	\$120	4	\$105	8	\$95	0	\$55	\$1,180	\$0	\$0	\$1,180
100% Wastewater Civil Drawings	8	\$180	48	\$160	0	\$120	80	\$105	144	\$95	0	\$55	\$31,200	\$0	\$0	\$31,200
100% Water Civil Drawings	0	\$180	0	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$0	\$21,148	\$0	\$21,148
100% Mechanical Drawings	2	\$180	8	\$160	0	\$120	16	\$105	16	\$95	0	\$55	\$4,840	\$0	\$0	\$4,840
100% Detail Drawings	0	\$180	1	\$160	0	\$120	4	\$105	8	\$95	0	\$55	\$1,340	\$0	\$0	\$1,340
100% Specifications	2	\$180	4	\$160	0	\$120	4	\$105	0	\$95	0	\$55	\$1,420	\$3,345	\$0	\$4,765
100% Cost Estimates	1	\$180	2	\$160	0	\$120	8	\$105	0	\$95	0	\$55	\$1,340	\$2,395	\$0	\$3,735
100% QA/QC	16	\$180	40	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$9,280	\$0	\$0	\$9,280
Electrical Engineering Subconsultant (C&W Engineering)	0	\$180	0	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$0	\$8,500	\$850	\$9,350
Coordination with Subconsultants	2	\$180	16	\$160	0	\$120	8	\$105	0	\$95	0	\$55	\$3,760	\$0	\$0	\$3,760
Subtotal Task B	74	\$180	350	\$160	0	\$120	492	\$105	860	\$95	0	\$55	\$202,680	\$128,691	\$850	\$332,221
C. Permitting Services																
FDEP Wastewater Permit Application	1	\$180	2	\$160	0	\$120	4	\$105	0	\$95	2	\$55	\$1,030	\$0	\$0	\$1,030
FDOT Permit Application	1	\$180	2	\$160	0	\$120	4	\$105	0	\$95	2	\$55	\$1,030	\$931	\$0	\$1,961
FDEP Water Permit Application	0	\$180	0	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$0	\$1,402	\$0	\$1,402
Pre-Application Meeting with FDOT	2	\$180	4	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$1,000	\$1,177	\$0	\$2,177
Response to RAI (4)	1	\$180	3	\$160	0	\$120	6	\$105	3	\$95	0	\$55	\$1,575	\$837	\$0	\$2,412
Prepare Signed-and-Sealed Drawings for Contractor Procured Permits	0	\$180	2	\$160	0	\$120	0	\$105	0	\$95	2	\$55	\$430	\$701	\$0	\$1,131
Electrical Engineering Subconsultant (C&W Engineering)	0	\$180	0	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$0	\$1,000	\$100	\$1,100
Subtotal Task C	5	\$180	13	\$160	0	\$120	14	\$105	3	\$95	6	\$55	\$5,065	\$6,048	\$100	\$11,213
D. Contractor Procurement Services																
Respond to RFIs/Issue Addendum	1	\$180	4	\$160	0	\$120	4	\$105	0	\$95	0	\$55	\$1,240	\$1,009	\$0	\$2,249
Review Bids/Recommend Award	1	\$180	1	\$160	0	\$120	2	\$105	0	\$95	0	\$55	\$550	\$0	\$0	\$550
Prepare/Provide Conformed Construction Documents	0	\$180	2	\$160	0	\$120	4	\$105	8	\$95	4	\$55	\$1,720	\$999	\$0	\$2,719
Electrical Engineering Subconsultant (C&W Engineering)	0	\$180	0	\$160	0	\$120	0	\$105	0	\$95	0	\$55	\$0	\$500	\$50	\$550
Subtotal Task D	2	\$180	7	\$160	0	\$120	10	\$105	8	\$95	4	\$55	\$3,510	\$2,508	\$50	\$6,068
TOTAL	85	\$180	380	\$160	0	\$120	534	\$105	887	\$95	10	\$55	\$216,985	\$141,755	\$1,000	\$359,740