

# Proposal to Provide Reuse Improvements Phase 1 Design Work Order No. 22

**Services to be provided by:** Hazen and Sawyer (Hazen)

**Services provided to (“Village”):** Village of Wellington (Village)

**Proposal Date:** February 10, 2020

## Proposal Terms

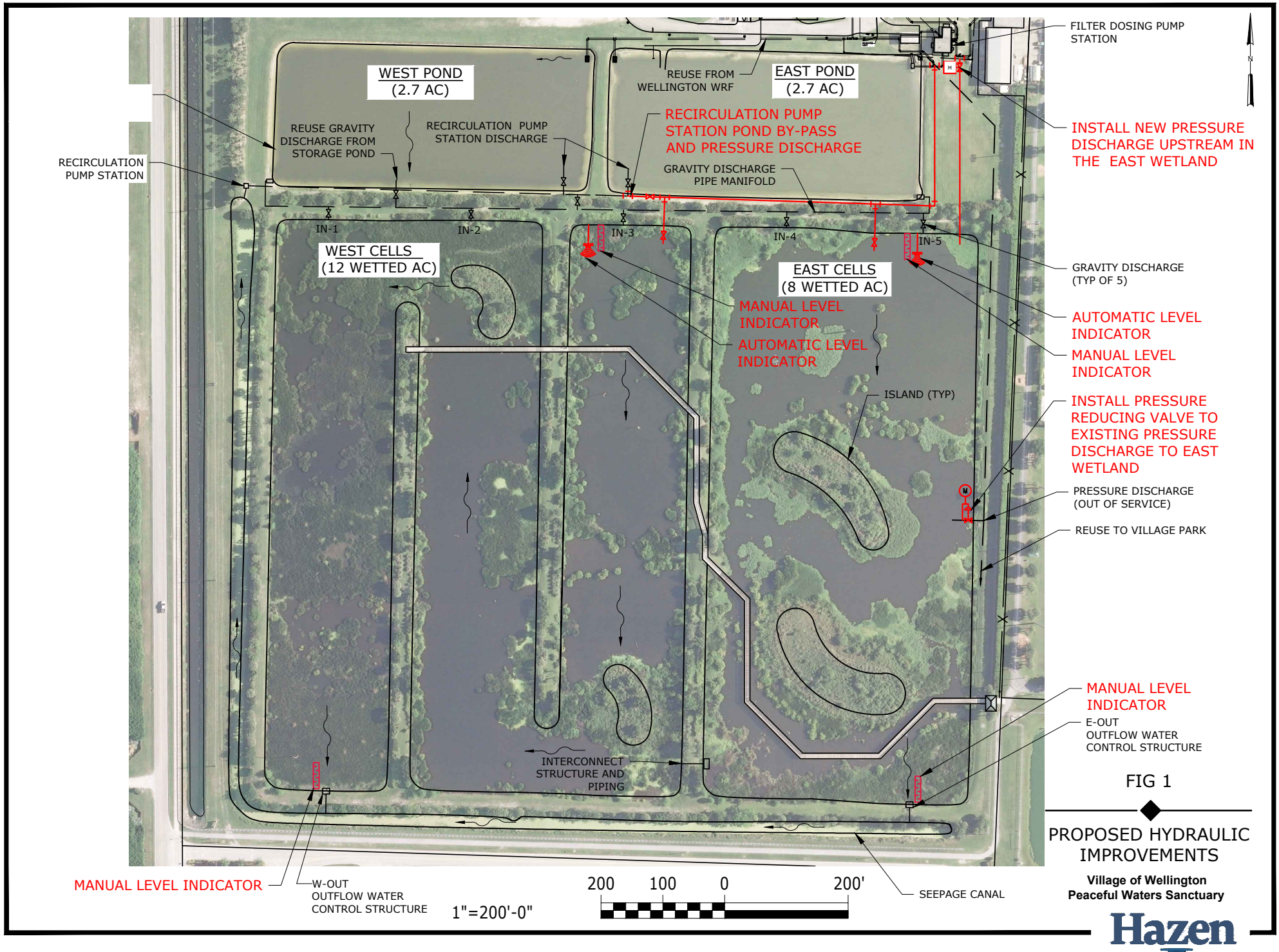
### PROJECT DESCRIPTION

The Peaceful Waters Sanctuary wetland is located within Village of Wellington’s (Village’s) Village Park and is enjoyed by the public. The wetland includes a boardwalk, walking trails, and supports a variety of animals and plant species native to South Florida. The PWS wetland also serves as reclaimed water disposal and backup effluent storage for the Village or Wellington Water Reclamation Facility (Wellington WRF).

The recently completed Peaceful Waters Sanctuary Master Plan proposed improvements to increase the hydraulic loading to the wetland. It was determined that these improvements would benefit the Village’s Consumptive Use Permit (CUP) for potable drinking water withdrawal, improve water conservation measures, and align with the Village’s goals to expand their reuse water distribution. Under this work order, Hazen will provide engineering design services for improvements to the wetlands, including:

- Install Pressure Reducing Valve At Existing Pressure Discharge To East Wetland – The existing 6-inch pressure line will be modified so that it can be used as a primary wetland inflow, and a manual water meter will be installed.
- Install New Pressure Discharge Upstream In the East Wetland –A new pressurized discharge line will be installed further upstream at the north end of the wetland.
- Add Automatic Level Indicators – Automatic level meters will be installed at the influent end of each wetland. Manual staff gauges will also be installed at the influent and effluent ends of each wetland, and level gradations at the effluent control structures will be installed.
- Recirculation Pump Station Pond Bypass And Pressure Discharge – A six-inch diameter, approximately 800 linear foot valved bypass line discharging directly from the recirculation pump station line to the filter dosing pump station will be installed.

A conceptual plan of the proposed improvements are shown in attached **Figure 1**.



## **SCOPE OF SERVICES**

### **Task 1 – Project Initiation and Meetings**

Hazen will hold meetings with the Village during the design of the described improvements. The anticipated meetings are listed below;

- Kickoff meeting to discuss the project details
- Meeting to review 60% design submittal materials
- Meeting to review 100% design submittal materials

Hazen will organize and lead meetings with the Village staff and key members of the project team. During the project initiation kickoff meeting, the overall work plan, project goals, and schedule will be discussed, lines of communication will be established, and data needs will be assessed.

Minutes for each meeting will be prepared and distributed by the Hazen.

#### Deliverable(s):

1.1 – Minutes from project kick-off meeting

1.2 – Minutes for 60% design review meeting

1.3 – Minutes for 100% design review meeting

### **Task 2 – Development of Contract Documents**

Hazen will prepare the drawings and specifications needed for construction. Hazen shall address the following design elements in the construction documents:

- Plans and details associated with installation of a pressure reducing valve assembly at the existing pressure discharge at the East wetland.
- Plans and details associated with installation of a new pressure discharge at the north end of the East wetland, including motor-operated valve (MOV) and flow meter.
- Plans and details associated with installation of automatic level meters at the influent end of each wetland, manual staff gauges at the influent and effluent ends of each wetland, and level gradations at the effluent control structures.
- Plans and details associated with an approximately 800 linear foot recirculation pump station pond bypass line, discharging directly from the recirculation pump station to the filter dosing pump station.

Hazen will engage Smith Engineering Consultants, Inc. (Subconsultant) to perform electrical engineering work associated with the new level meters, flow meter, and MOV.

The preliminary list of drawings anticipated for design are as follows:

Sheet	Drawing	Title
1 to 4	G-01 to G-04	Cover Sheet; List of Drawings; Symbols and Abbreviations; General Notes
5	C1	Key Plan
6	C2	Plan – New Pressure Discharge and Recirculation Pump Station Bypass – Sheet 1
7	C3	Plan – Recirculation Pump Station Bypass – Sheet 2
8	C4	Details – Recirculation Pump Station Bypass
9	C5	Details – Pressure Reducing Valve, Level Indicators
10	C6	Standard Civil Details
11	C7	Standard Civil Details
12	I1	Instrumentation Symbols and Legend
13	I2	Process and Instrumentation Control Diagram
14	I3	Instrumentation Details
15	E1	Electrical Site Plan
16	E2	Electrical Room Plan
17	E3	Electrical Riser Diagram, General Notes, and Details

A 60% complete set of construction drawings and list of specifications will be submitted to the Village for review and comment. Hazen will meet with Village representatives to discuss recommendations and to receive Village comments.

Upon receipt of comments from the Village, Hazen will proceed with the final contract documents. A 100% complete set of construction documents will be submitted to the Village for review and comment. Hazen will meet with Village representatives to discuss recommendations and to receive Village comments.

Hazen will prepare a Class 3 Engineer's Opinion of Probable Construction Cost (OPCC) at the 100% design level as defined by the AACE International in Recommended Practices 18R-97, which is normally expected to be accurate within approximately plus 20 percent to minus 15 percent of the estimated cost.

**Deliverable(s):**

- 2.1 – Preliminary (60%) Construction Documents: Two (2) 22" x 34" hard copy plans, two (2) 11" x 17" hard copy plans, and two (2) hard copies of the List of Specifications will be provided. One (1) electronic version of the plans and List of Specifications will also be provided
- 2.2 – Final (100%) Construction Documents: Two (2) 22" x 34" hard copy plans, two (2) 11" x 17" hard copy plans, and two (2) hard copies of the Technical Specifications will be provided. One (1) electronic version of the plans and Technical Specifications will also be provided, in both .pdf and word .doc format.

2.3 – Class 3 OPCC (100%): Two (2) hard copies and one (1) electronic version of the OPCC will be provided.

### **Task 3 – Permitting Services**

Hazen will apply for and obtain applicable permits required for construction of the proposed improvements and will respond to requests for additional information submitted by the regulatory agencies. The permits to be applied for within the scope of work are as follows:

- Village of Wellington Building Department electrical permit (permit will not be obtained, but review process will be started)
- FDEP Minor Permit Letter Modification to Domestic Wastewater Facility Permit Number FLA042595

#### Deliverable(s):

3.1 – Permit Applications: Hazen shall submit to the Village the permit applications listed above for signature (as required).

3.2 – Responses to Requests for Additional Information (RAIs): Hazen will respond to up to two RAIs from each agency listed above and copy the Village on correspondence.

### **ASSUMPTIONS**

1. Site information including, but not limited to, existing as-built drawings will be provided to Hazen by the Village. Drawings available in .dwg format will be obtained by Village and provided electronically.
2. Permit fees will be the responsibility of the Village.
3. Standard Front End Documents will be prepared/provided by the Village.
4. Topographical survey information required will be provided by the Village.
5. Record drawings will be relied upon for identification and location of underground utilities.
6. It is assumed that the existing electrical room and PLC at the filter dosing pump station have adequate spare capacity to support proposed level meters, flow meter, and MOV.
7. The drawings and specifications shall be prepared assuming that the Village will competitively bid this project in a single bid package and enter into a construction contract with one general contractor to complete the work.
8. Bidding and award services are not included within this scope of work.

## SCHEDULE

Task	Description	Time of Completion from NTP
1	Meeting Minutes	As Applicable
2	60% Drawings and List of Specifications	12 weeks
2	100% Drawings and Specifications, Class 3 OPCC	20 weeks
3	Permit Applications	16 weeks

## COMPENSATION

Compensation for all tasks, unless specifically noted below, will be billed on a lump sum basis based on percent of work complete and total project fees presented in Attachment A.

## AUTHORIZATION

Work described in this proposal will commence upon authorization to proceed and receipt of a signed agreement.

**Hazen and Sawyer, D.P.C.**

Signed: 

Name: Albert Muniz, PE

Title: Vice President

Date: February 10, 2020

**ATTACHMENT A**

### BUDGET SUMMARY - Lump Sum

Task No.	Description	BUDGET SUMMARY for Work Order No. 22							
		Vice President	Senior Associate	Associate	Engineer/ Asst Engr	Principal Designer	Office	Total Labor	Sub-Consultant
1	Meetings	2	6	6	6	0	0	20	
2	Contract Documents	2	30	64	80	48	32	256	\$7,000
3	Permitting	0	4	8	8	18	8	46	
	<b>SUB-TOTAL</b>	<b>4</b>	<b>40</b>	<b>78</b>	<b>94</b>	<b>66</b>	<b>40</b>	<b>322</b>	
	Labor Raw Costs	\$218	\$196	\$165	\$105	\$114	\$73		
	Labor Sub-Total	\$872	\$7,840	\$12,870	\$9,870	\$7,524	\$2,920		
	<b>Labor Total</b>							<b>\$41,896</b>	
	Subconsultant Labor Total								\$7,000
	Subconsultant Multiplier								1.0
	<b>Subconsultant Total</b>								<b>\$7,000</b>
	<b>Reimbursable Expenses</b>								
	<b>Project Total</b>								<b>\$48,896</b>





# Smith Engineering Consultants, Inc.

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October 8, 2019

Mr. Eric A. Stanley, P.E.  
Hazen and Sawyer  
2101 NW Corporate Blvd., Suite 301  
Boca Raton, FL 33431

Re: Village of Wellington- Peaceful Waters Wetlands  
Electrical Engineering Services Proposal

Dear Eric:

Smith Engineering Consultants, Inc. (SEC) is pleased to provide this proposal for the above referenced project. We propose to provide the following scope of services:

Design Phase:

1. Initial site visit.
2. Electrical design, including power and control, for the installation of a new motor operated valve (MOV) with a flow meter, and two (2) level meters to be installed in the wetlands. (Instrumentation design is to be performed by Hazen and Sawyer.)
3. Submit 60% and 100% plans and specifications, and a cost estimate with the 100% submittal.
4. Submit plans for an electrical permit dry run, respond to review comments, and revise the plans accordingly.

SEC will prepare contract documents suitable for bidding, permit, and construction. We propose to furnish AutoCAD drawings using base plan drawings provided by Hazen and Sawyer. Our lump sum fee to provide the Design Phase services described above is \$6,000.

Bid Phase:

5. Respond to requests for information (RFI's), and issue addenda as necessary.

Our lump sum fee to provide the Bid Phase services described above is \$1,000.





Thank you for using Smith Engineering Consultants as the source for these engineering services. We look forward to working with you on this project.

Sincerely,

A handwritten signature in dark ink, appearing to be "L. M. Smith", is written over the word "Sincerely,". The signature is fluid and stylized, with a long horizontal stroke extending to the right.

Larry M. Smith, P. E.  
President