



Hazen and Sawyer  
4000 Hollywood Blvd., Suite 750N  
Hollywood, FL 33021 • 954.987.0066

May 11, 2026

Timothy A. Welch, PE  
Utilities Director  
City of Pembroke Pines  
8300 South Palm Drive  
Pembroke Pines, FL 33025

**Re: Pembroke Pines Wastewater Treatment Plant  
Amendment 1 for Task Order 11 – Headworks Preliminary Engineering Report**

Dear Mr. Welch:

As requested by the City, Hazen and Sawyer, D.P.C. (Hazen) is pleased to offer additional engineering services identified below related to the condition assessment of the Pembroke Pines Wastewater Treatment Plant (WWTP) headworks building.

**Background**

The City of Pembroke Pines (City) owns and operates the Pembroke Pines WWTP which provides service to customers west of University Boulevard within the City corporate limits. The WWTP consists of three treatment units in the West Plant and two treatment units in the East Plant, serviced by a common headworks building. The headworks building was originally constructed as part of the WWTP's 1989 expansion.

The corrosive environment and years of service have caused significant deterioration of the screening channels, grit channels, and effluent channels. As a result, the City is evaluating whether to proceed with replacement or rehabilitation of the headworks building. A visual condition assessment is warranted to support this evaluation and provide recommended improvements for rehabilitation. These improvements will consider asset conditions, process efficiency, performance, and resilience. The additional services for this amendment include the tasks described herein.

**Scope of Services**

**Task 1 – Perform Condition Assessment**

Hazen will perform visual structural, mechanical/process, electrical and instrumentation and controls (I&C) condition assessments of the headworks building, inclusive of the west odor control system and Kemira OdoFree ferrous/ferric sulfate chemical dosing system located outside of the building. Prior to the visual condition assessment, Hazen will conduct an interview with WWTP personnel and perform a comprehensive review of all available documentation provided by the City, including the original construction documents, previous inspection reports, and any recommended and implemented repairs or modifications to the headworks building. Upon completion of the document review, Hazen personnel will visit the site and proceed with a visual condition assessment of the headworks building and associated odor control systems. The scope of work for each discipline includes the following:

## Structural:

- The structural condition assessment will focus on identifying signs of deterioration, distress, or damages in concrete, steel, and miscellaneous structural components such as deficiencies in joints, concrete cracking, efflorescence, honeycombing in concrete, popouts, scaling, spalling, delamination, chemical attack, corrosion, exposed reinforcement, and integrity of previous repairs or patches.
- It is assumed that exterior doors, roofing, and louvers will need to be replaced to meet current Code requirements.
- During the assessment, Hazen will photograph damaged areas and use hammer soundings to detect possible discontinuities below the concrete surface. To the extent possible based on the limited condition assessment performed, Hazen will quantify the structural repairs required.

## Mechanical/Process

- The mechanical/process condition assessment will focus on equipment, piping, and valves required for flow measurement, the screening system, grit removal, and odor control processes.
- A review of the existing ventilation system will also be conducted with emphasis on comparing the performance against industry standards.
- The dumpster loading bay will be evaluated and recommended improvements will be documented. The City desires to accommodate a 20 cubic yard dumpster in place of the existing 10 cubic yard dumpster. In addition, the City would like to improve the overall dumpster unloading process. The evaluation will include conceptual level improvements to this process.
- The City recently purchased two Aqua Guard® automatic continuous belt screens manufactured by Parkson. It is the City's preference to reuse the existing screens.

## Electrical

- The electrical condition assessment will evaluate the condition and capacity of power distribution systems, including motor control centers (MCCs), panels, transformers, grounding, lighting systems, raceways, and wirings.
- The Headworks related equipment age, code compliance, redundancy, arc-flash considerations, and overall suitability of the electrical systems to support existing and future loads at the Headworks Building will also be reviewed.
- Visible deficiencies such as corrosion and damaged wires and/or conduits will be documented along with recommendations for repair or replacement.

## Instrumentation and Control

- The I&C assessment will focus on the condition, functionality, and reliability of field instrumentation, control panels, PLCs, HMIs, and communication networks associated with headworks building and odor control systems.

## **Task 2 – Prepare Technical Memorandum**

Hazen will prepare a Technical Memorandum (TM) summarizing the findings and results of the condition assessment, including an opinion of probable construction costs for the recommended improvements. A draft TM in PDF format will be submitted electronically for City review. Following a two-week City review period, a meeting will be conducted with the City to receive review comments. Responses to comments will be incorporated into the final TM.

### **Key Assumptions**

- The City will provide Hazen site access and means of access to elevated areas above the finished floor.
- The City will be responsible for dewatering and washdown of the screening and grit channels for visual inspection. If the channels cannot be taken out of service for this inspection, the condition assessment will be conducted based on visible features.
- All data compilation will be from existing City and Hazen sources. No topographic survey, geotechnical borings, or subsurface utility locations are included as part of this task order.
- Inspections and assessment of belowground or inaccessible infrastructure is not included. Confined space entry is not included.

### **Compensation**

The engineering services for this project will be performed on a Not-to-Exceed basis for the amount of \$90,638.36. For additional details, please refer to the attached fee schedule.

### **Schedule**

The services outlined in this Task Order will be completed within 180 days from date of Notice to Proceed. Engineering services for the project will be performed as part of our Continuing Professional Services Contract dated January 13, 2021. Services provided by Hazen shall be limited to those services specifically identified in this work authorization.

We look forward to your reply. Should you have any questions or require further information, please contact us.

Sincerely,



Jennifer McMahan, PE  
Vice President

Enclosure

c: File 04800-011

City of Pembroke Pines											
Wastewater Treatment Plant											
Task Order No. 11 - Headworks Preliminary Engineering Report - Amendment 1											
Fee Schedule											
May 11, 2026											
Employee Title	Technical Expert / QAQC	Sr. Associate	Associate	Sr. Principal Scientist	Principal Engineer	Assistant Engineer	Lead CAD	Senior Principal CAD	Total H&S Hours	Cost	
Person	McMahon, Joykutty	Silva, McKenna	Page	Jimenez	Andersen	Campos, Collazo	Johnson	Bocas			
Billing Rate	\$290.00	\$260.00	\$215.00	\$185.00	\$165.00	\$130.00	\$200.00	\$120.00			
Task	Description										
<b>LABOR</b>											
<b>Task 1 - Perform Condition Assessment</b>		<b>8</b>	<b>32</b>	<b>36</b>	<b>16</b>	<b>28</b>	<b>38</b>	<b>8</b>	<b>8</b>	<b>174</b>	<b>\$33,460</b>
1.1	Data/Records Compilation and Review		8	8	4	4	8				
1.2	Kickoff Meeting/Staff Interview/Minutes	4	4	4			14				
1.3	Site Visit and Reviews	0	12	12	12	12	12	0			
1.4	Conceptual Design for Improved Dumpster Unloading	4	8	12		12	4	8	8		
<b>Task 2 - Prepare Technical Memorandum</b>		<b>16</b>	<b>22</b>	<b>32</b>	<b>20</b>	<b>16</b>	<b>54</b>	<b>2</b>	<b>14</b>	<b>176</b>	<b>\$32,680</b>
2.1	Draft TM	8	14	20	8	12	24	0	8		
2.2	Draft TM Meeting and Minutes	4	4	4	4		14				
2.3	Final TM	4	4	8	8	4	16	2	6		
<b>SUBTOTAL (LABOR)</b>		<b>24</b>	<b>54</b>	<b>68</b>	<b>36</b>	<b>44</b>	<b>92</b>	<b>10</b>	<b>22</b>	<b>350</b>	<b>\$66,140</b>
<b>DIRECT EXPENSES</b>											
	Hillers Electrical Engineering Inc.										\$24,498.36
	Out-of-Pocket										\$0
<b>SUBTOTAL (EXPENSES)</b>										<b>\$24,498.36</b>	
<b>TOTAL (LABOR AND EXPENSES)</b>										<b>\$90,638.36</b>	
The fee schedule is based upon an estimate of the personnel to work on the project. The actual breakdown of personnel and associated hours may vary based upon availability and area of expertise. It is agreed that the the method of compensation is Not to Exceed which means the CONSULTANT shall perform the services set forth in the Work Authorization for total compensation in the amount of or less than the stated total.											