



PROJECT UNDERSTANDING

The project site is located within the existing tertiary filter building at the WWTP. The majority of the construction work will occur within the clear wells which are considered confined spaces under the filters. Sequencing of construction requires coordination with WWTP operations to take half of the filters offline to isolate one of the clear wells for confined space entry. Construction activities will be performed in one clear well at a time. The construction work being performed by the contractor in and around the Clear Wells includes but is not limited to:

- Demolish existing masonry baffle walls and aeration equipment in the Filter Clear Wells.
- Remove accumulated mud, filter media and similar debris from the Clear Wells.
- Demolish existing steel air headers in the filter gallery.
- Clean and paint existing piping in Clear Wells.
- Patch and repair existing concrete surfaces.
- Furnish and install new fine bubble aeration equipment and dissolved oxygen probes in the Clear Wells.
- Program SCADA system to allow automated control of existing blower based upon DO.

It is understood that the City of Ann Arbor (City) will be funding this project through the City's wastewater enterprise fund and the City's Ordinances shall apply.

SCOPE OF SERVICE

Based on our understanding and recent discussions, we have prepared the following scope of services for construction engineering services. Our scope of work includes geotechnical investigation, bidding, and construction phase services.



A. Geotechnical Investigation

1. OHM engaged FK Engineering Associates (FKE) during final design to perform geotechnical investigation to assess the impact of dewatering the clear wells during construction. FKE performed the following services: review of background and existing information, two soil borings, installed groundwater monitoring wells, slug tests, laboratory analysis, and prepared a written report with recommendations.

B. Bidding Phase Services

1. OHM worked with the City for the Advertisement for bid, reviewed and replied to bidders' questions, and prepared the addendum for the City to distribute through its procurement process.
2. Prepared the PowerPoint presentation for the virtual pre-bid meeting. Attended the virtual pre-bid meeting and prepared notes to be included with the addendum.
3. Attended scheduled site walk-through meetings with potential bidders.
4. Prepare a recommendation of award letter and assist with the Resolution to City Council.

C. Construction Phase Services

1. OHM will assist the City with the execution of the contract documents to the awarded Contractor by preparing up to six sets of project manuals and drawings to be distributed for signatures.
2. Conduct a pre-construction meeting with the selected bidder and prepare and distribution meeting notes.
3. Review and approve awarded Contractor's shop drawing submittals.
4. Receive, review, and respond to awarded contractors' Requests for Interpretations (RFIs). We anticipate up to 10 RFIs.
5. Provide full-time daily construction observation during periods of significant construction work or testing and provide part-time observation during periods of "non-critical" construction activity. Inspection of completed work for compliance with the contract documents will also be a part of the construction observer's regular responsibilities. Observation services may be reduced to part-time during some construction activities or as requested by the City. We have assumed a construction observation level of effort for our work based on a construction period of 36 weeks and 16 hours per week of on-site construction observation.
6. A construction engineer will oversee and supervise construction observation and will be responsible for resolving issues that may arise during the construction process with either the contract documents or the prepared design plans.
7. Contract administration consisting of the timely review of construction pay estimates, review of contractor's construction progress for compliance with the approved project schedule, claim resolution, and the final project punch-list.
8. Conduct progress meetings with the Contractor, subcontractors, and the City's representatives throughout the construction process. It is anticipated that these meetings will either be held on a monthly basis. We currently anticipate up to 9 progress meetings (one per month). These meetings will include meeting minutes following each meeting.
9. Review and process any change order requests submitted by the contractor and provide the City with a response recommendation. We anticipate that up to two Change Orders may be required on this project.
10. System Operational Testing and Startup – OHM will provide up to 24 hours technical assistance to the contractor and the City following substantial completion to evaluate system functions and help identify necessary control refinements.
11. Compile record drawings for the project per field observations and contractor supplied information into the final record drawings upon completion of the construction improvements.



DELIVERABLES

The following items will be provided at the end of the project:

- Pre-Construction and Progress Meetings agendas and notes.
- Electronic copies of approved shop drawings.
- OHM will submit two (2) paper copies and two (2) digital CDs with PDFs of the record drawings to the City for their records.
- Electronic file of the PDF format of the inspection daily reports.

CLARIFICATIONS & ASSUMPTIONS

The proposed fee schedule below is based on the following assumptions:

- We are assuming the construction period will be approximately 36 weeks when developing the construction phase and resident project representative (RPR) engineering budgets. These budgets can be adjusted depending on the level of service required or requested by the City.
- We assume OHM personnel will be able to enter confined spaces under the Contactor's entry procedures. If OHM needs to supply our own entry supervisor and attendant, additional costs will be requested.
- RPR consists of both full-time and part-time observation time depending on the nature of the construction work for a total observation effort of 576 hours.
- Geotechnical services of FK Engineering Associates during construction are not included.
- We are assuming the clear well improvements construction will be completed in two (2) separate phases to rehabilitate the north and south bank of filters, respectively.
- We are assuming that the condition of the slide gates for isolation of the filters are operable and have good seals.
- Development of an O&M manual for the Clear Well aeration system is not included.

Exhibit 1



HM ADVISO 02 HO LY RATE SCHEDULE

Professional Engineer IV / Architect IV / Senior Interior Designer IV	\$183.00
Professional Engineer III / Architect III / Senior Interior Designer III	\$165.00
Professional Engineer II / Architect II / Senior Interior Designer II	\$150.00
Professional Engineer I / Architect I / Senior Interior Designer I	\$140.00
Project Specialist II	\$158.00
Project Specialist I	\$130.00
Graduate Engineer IV	\$145.00
Graduate Engineer III	\$138.00
Graduate Engineer II	\$130.00
Graduate Engineer I	\$123.00
Graduate Architect III / Landscape Architect III / Interior Designer III	\$132.00
Graduate Architect II / Landscape Architect II / Interior Designer II	\$112.00
Graduate Architect I / Landscape Architect I / Interior Designer I	\$100.00
Technician IV	\$140.00
Technician III	\$120.00
Technician II	\$103.00
Technician I	\$83.00
Engineering / Architectural / Interior Design Aide	\$65.00
Professional Surveyor III	\$162.00
Professional Surveyor II	\$150.00
Professional Surveyor I	\$135.00
Graduate Surveyor	\$115.00
Surveyor III	\$117.00
Surveyor II	\$110.00
Surveyor I	\$90.00
Surveyor Aide	\$70.00
Planner IV	\$160.00
Planner III	\$140.00
Planner II	\$118.00
Planner I	\$100.00
Planner Aide	\$65.00
Graphic Designer	\$110.00
Administrative Support	\$70.00
Clerical Aide	\$60.00
Principal	\$210.00
Sr. Associate	\$195.00
Associate	\$185.00

Rates as reflected subject to review and adjustment on an annual basis.
2021 Public Rates