



VIA EMAIL

September 28, 2021

Mr. Kenneth Buckland
Wareham Director of Planning
Town Hall
54 Marion Road
Wareham, MA 02571

Re: REVISED Proposal for Preliminary Hydrogeologic and Hydrologic Study –
Proposed Fearing Hill Solar Facility

Dear Mr. Buckland:

The Horsley Witten Group, Inc. (HW) is pleased to provide this REVISED proposal to assist the Town of Wareham (the Town) with a preliminary hydrogeologic and hydrologic study of the proposed Fearing Hill Solar Facility located at 91 and 101 Fearing Hill Road in Wareham, MA. As instructed at last night's Planning Board meeting, this Revised proposal is submitted to add HW guidance and review of Applicant-conducted subsurface exploration activities to the previously submitted Scope of Work for Phase 1 evaluation. The collection and evaluation of site-specific sub-surface field data will allow for a more complete evaluation of the potential from the proposed facility for significant water quantity or quality impacts to neighbors or natural resources. More-detailed analyses (Phase 2) may or may not be necessary following completion of Phase 1.

Initial Scope of Work

Task 1. Meetings and Communication

HW will complete the following communications activities:

- A kickoff meeting/ site visit to be held with Town staff, Applicant's representatives, and any other Town-selected participants (e.g. neighbors). This kickoff meeting will be held after HW has received and reviewed existing information and will be the time when final decisions on the locations and other details of test pits and subsurface borings will be made cooperatively between HW, Town staff, and the Applicant.
- Up to two conference calls/ virtual meetings with Town and/ or Applicant.
- Attendance at one Planning Board meeting to discuss the results of the Phase 1 study.
- Ongoing telephone and email communication at a reasonable level.

Task 2. Review Existing Information

HW will review at least the following available information to inform our evaluation of site hydrogeologic and hydrologic conditions:

- Application materials supplied by the Town (Site plans, Site Plan Review Application, Stormwater Report, Charles Rowley review letter, and submitted comments);
- Available GIS information from MassGIS and Town sources (e.g. LiDAR topography, FEMA flood zones, Natural Heritage Endangers Species Program mapping, wetlands, soils, surficial geology, land use, parcel boundaries, and utilities);
- Other relevant, non-GIS data supplied by Town (e.g. private wells and septic systems information and documented high water groundwater concern locations);
- USGS publications;
- Massachusetts Department of Environmental Protection generalized guidance on ground-mounted solar facility installations from 2017; and
- More detailed guidance on ground-mounted solar facility installations from the Rhode Island Department of Environmental Management (new in June 2021), and other scientific information related to the evaluation of potential impacts from solar facilities.

Task 3. Subsurface Investigation

HW will contribute to an Applicant-conducted subsurface exploration to include test pits, percolation tests, geologic borings, monitoring well installations, and water level data collection, as follows:

- Recommend locations and details for test pits and borings (e.g. depth, sampling frequency, drilling technology, etc.) based on review of Task 2 existing information and discussions with Town staff and Applicant. The Applicant will submit a data collection plan and map as a first step of this process to which HW will review and comment. Final decision of test pits and boring locations will be made in the field at Task 1 kickoff meeting/ site visit.
- Up to two additional site visits to observe boring and test pit results (assumed one visit for each). These will not be full-time, observational site visits. It is assumed that the Applicant's representatives will organize and pay for drilling and test pit subcontractors, provide full-time oversight of subcontractors, collect and document all subsurface data according to common industry practice (e.g., properly completed boring logs, test pit logs, percolation test logs, photographs of subsurface conditions, and collection of materials samples). HW will arrive near the end of one day each for drilling and test pits to observe completed (remaining open) test pits, at least one percolation test, and soil boring materials saved from completed borings. It is assumed that HW will be able to witness worst-case conditions test pits and/or borings during these two site visits. If the applicant wishes to use more-favorable subsurface conditions data for analyses than those test pits or borings witnessed by HW, additional site visits will need to be

conducted for additional fee beyond that included in this proposed Scope of Work and Budget.

- Review standard Title V test pit and percolation test forms, boring logs and monitoring well construction logs, photographs, and soil samples to be submitted by Applicant.
- Provide recommendations, if necessary, for additional field data collection.

Task 4. Analysis

HW will conduct a preliminary analysis of the hydrogeologic, hydrologic, water quality, and related impacts from the proposed facility based on Task 2 available existing information and Task 3 field data. This is intended to be a screening type evaluation of the likelihood for significant impacts in order to identify the importance of and recommend specific new field data, if any, or additional analyses, if any, to be recommended for a subsequent project phase, if necessary. Sensitivity analyses will be conducted to see how sensitive the estimation of potential impacts is relative to the likely variability of specific input factors in order to best identify those factors in greatest need of site-specific field evaluation. Our analyses will include at least the following:

- HydroCAD analyses of rainfall/runoff under existing and proposed conditions for design storm events. We assume that the Applicant's HydroCAD model files will be made available us as a base from which to create our own model configurations for existing and proposed conditions.
- Mounding Analyses of the anticipated height and breadth of the groundwater mounds anticipated to develop beneath the proposed stormwater management facilities.
- MODFLOW groundwater modeling evaluation of the groundwater flow conditions in the vicinity of the proposed project using the existing Plymouth-Carver Aquifer (PCA) USGS groundwater model. Note that this model is a regional-scale model suited only for generalized assessment of groundwater conditions. Localized refinement of the PCA model for the project area could potentially be proposed for Phase 2 work to better evaluate project-specific groundwater concerns, if warranted.
- Conceptual recommendations for potential stormwater design modifications, if necessary and as appropriate, to improve anticipated performance relative to water quantity and quality.

Task 5. Summary Report

HW will compile the methods and results from the above-mentioned tasks into a brief summary letter. The letter will offer an opinion on the suitability of the currently submitted application materials relative to assessing potential water quantity and quality impacts and list suggested Phase 2 activities, if appropriate and necessary, to further evaluate remaining concerns about potential impacts. The letter will also provide generalized discussion of the proposed project relative to overall climate change considerations. A draft version will be submitted electronically to the Town and Applicant for review and comment. After one round of edits a final version will be submitted electronically, with a reasonable amount of paper copies, as requested.

Proposed Budget

Task	Budget
1. Meetings and Communication	\$5,000
2. Information Review	\$8,000
3. Subsurface Field Data	\$6,000
4. Analyses	\$9,500
5. Summary Letter	\$4,500
Total	\$33,000

This work will be conducted hourly at hour standard billing rates up to the above-mentioned Not to Exceed limit as detailed in our attached Standard Municipal Contract Agreement. Any work requested beyond that specifically identified herein will be conducted at our standard hourly rates for additional fee following client approval. As detailed above, it is assumed that the Applicant will be directly responsible for all subcontractor arrangements and costs, providing direct oversight of subcontractors, and recording and submitting all requisite field data per standard engineering practices.

Thank you for the opportunity to provide this proposal. Please sign below and on the attached Standard Municipal Contract Agreement and return to us to authorize work on this project. Please feel free to contact me with any questions at 508-833-6600 or nprice@horsleywitten.com.

Sincerely,

HORSLEY WITTEN GROUP, INC.



Neal M. Price
Principal Scientist

Attachment

ACKNOWLEDGED AND APPROVED:

Name & Title

Date

Horsley Witten Group

Sustainable Environmental Solutions

90 Route 6A • Unit 1 • Sandwich, MA 02563
508-833-6600 • horsleywitten.com



Client Name: Town of Wareham
Address: Town Hall, 54 Marion Road
Town: Wareham, MA 02571
Contact: Mr. Kenneth Buckland, Director of Planning
Re: Preliminary Hydrogeologic and Hydrologic Study
Proposed Fearing Hill Solar Facility, Wareham, MA

STANDARD MUNICIPAL AGREEMENT NOT TO EXCEED MAXIMUM FEE AGREEMENT

I (we) Town of Wareham [hereinafter referred to as "The Client"] the undersigned agrees to and accepts the following terms and, further, understands that such terms shall apply for the duration of this Agreement with HORSLEY WITTEN GROUP, INC. [hereinafter referred to as "HW"].

The Client wishes to engage HW to perform professional services and HW wishes to perform professional services for the Client in an environmentally responsible manner for Preliminary Hydrogeologic and Hydrologic Study, Proposed Fearing Hill Solar Facility, Wareham, MA (the "Project"). In consideration of the above, the client and HW agree as follows:

1. The total project maximum not to exceed fee, including reimbursable expenses, for the work hereupon agreed shall be \$33,000.00 all as more particularly described in the proposal dated September 28, 2021 and attached hereto and made part of this Agreement and describes the Project. The Client shall receive an Invoice monthly from HW for work performed and related expenses incurred during the prior 30-day period (the "billing period"). HW will invoice the Client for services rendered on a Time and Expense basis as hourly and reimbursable expenses are incurred up to a not to exceed fee of \$33,000.00.

The scope of work may contain specific budgets by task; billings may exceed the stated budget of individual tasks, but total project billings will not exceed the total project maximum not to exceed fee without a prior contract amendment.

2. The following hourly rates for Horsley Witten Group personnel shall apply. These rates will remain in effect through January 1, 2022, after which time HW may adjust hourly rates.

	<u>Rate</u>
• Principal	\$220/hr
• Associate Principal	\$190/hr
• Senior Ecologist III; Senior Emergency Response Manager; Senior Engineer III; Senior Planner III; Senior Scientist III	\$170/hr
• Senior Engineer II; Senior Planner II; Senior Scientist II	\$155/hr
• Senior Planner I; Senior Engineer I; Senior Environmental Scientist I; Senior Surveyor I	\$140/hr

- Landscape Architect III; Engineer III; Scientist III; Surveyor III; GIS/Engineering Technician III \$120/hr
- GIS Specialist II; Senior System Administrator/Graphic Designer II; Landscape Architect II; Planner II; Engineer II, Scientist II \$110/hr
- Landscape Architect I; Emergency Response Planner I; Engineer I; Designer I; CAD-GIS Technician I; Graphic Designer I; Planner I; Scientist I \$100/hr
- Administrative Assistant \$65/hr
- Intern \$65/hr
- 2-Man Survey Crew \$155/hr

3. The following rates shall apply to routine job-related expenses incurred by HW. Other direct expenses will be billed at cost:

Mileage Rate: <i>Based on Current Mileage Reimbursement Federally-approved by IRS</i>		Equipment Rental – RTK	\$65.00/hour
		Equipment Rental – WQ Probe	\$150.00/day
Subcontractor Costs:	Cost plus 15%	GIS Online Data Hosting	\$50.00/ 6 months
Photocopies	\$0.10/page	Mylar Plotter Prints	\$2.50/sq.ft.
Plotter Prints	\$1.50/sq.ft.		

The Client shall be billed for disposable field supplies and/or special equipment, as applicable. The maximum not to exceed fee does not include subcontractor's costs for drilling, backhoe and/or lab analysis.

4. Final reports and presentations shall not be provided until final payment is received. If payment has not been received within 30 days of the invoice date, or the Client has failed to notify HW of a dispute of the invoice, HW may, with due notification to the Client, stop work on the project until such time as all outstanding invoices have been resolved.
5. Project findings and reports for which payment has not been received within 30 days of invoice date will be the property of HW and may not be used by the Client for any purpose. Any such use without written consent will be at the Client's sole risk and without liability or legal exposure to HW; and the Client, or whoever shall use said documents in violation of this section, shall indemnify and hold harmless HW from all claim, damages losses and expenses, including attorneys' fees arising out of or resulting therefrom. This section may be specifically enforced by any court of competent jurisdiction by HW which shall, in addition to injunctive relief, be entitled to recover damages, if any, arising from any breach of this section, together with costs and reasonable attorneys' fees in any action brought to enforce the provision of this Section. HW reserves the right to notify all appropriate regulatory agencies that our firm will provide no further support for any materials or testimonies submitted under our name in the event that bills are not paid.
6. Should it become necessary to utilize legal or other resources to collect any or all monies rightfully due for services rendered under this Agreement, HW shall be entitled to full reimbursement of all such costs, including reasonable attorneys' fees, as part of the Agreement.
7. The Client shall at all times indemnify and save harmless HW and its officers, agents and employees on account of any claims, damages, losses, litigation, expenses, counsel fees, and compensation arising out of any claims, damages, personal injuries, property losses and/or economic damages sustained by or alleged

to have been sustained by any person or entity, caused in whole or in part by the acts, omissions or negligence of the Client, its agents, employees, or subcontractors in connection with the project.

8. At any time, either the Client or HW shall have the absolute discretionary right to terminate this Agreement without cause or reason, by giving written notice to the other party by certified mail, return receipt requested to the address listed herein. The termination date of this Agreement shall be the date of receipt of notice or 5 days after the mailing of notice of termination, whichever occurs sooner. Notwithstanding termination of this Agreement, the Client shall be liable for and shall compensate HW for all work performed as of the termination date. HW will deliver to the Client all work products completed as of the termination date for which payment has been received. Upon termination of this Agreement, HW shall not be liable to the Client or any third party for any damages of any kind, including direct, indirect or consequential damages, including, but not limited to damages due to delay, lost revenues and accrued incidental costs. It is understood and agreed that HW will stop work as of the date of termination of this Agreement and will not be responsible for delivery of any additional or future work products.
9. For any damage on account of any error, omission or other professional negligence, the parties agree that to the fullest extent permitted by law, the total liability that HW will be limited to is a sum not to exceed the available proceeds from HW's insurance.
10. HW shall not be responsible for failure to perform or for delays in the performance of work, which arise out of causes beyond the control and without the fault or negligence of HW.
11. All documents including Drawings and Specifications prepared pursuant to this Agreement are instruments of service with respect to the Project. They are not intended or represented to be suitable for reuse by the Client or others on extensions of the Project or on any other Project and shall not be reused without the express written consent of HW. Any reuse without written consent or adaptation by HW for the specific purpose intended will be at the Client's sole risk and without liability or legal exposure to HW; and the Client, or whoever shall reuse said documents, shall indemnify and hold harmless HW from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom. Any such consent or adaptation will entitle HW to additional compensation at rates to be agreed upon by HW and the person or entity seeking to reuse said documents. This section may be specifically enforced by any court of competent jurisdiction by HW which shall, in addition to injunctive relief, be entitled to recover damages, if any, arising from any breach of this section, together with costs and reasonable attorneys' fees in any action brought to enforce the provisions of this Section.
12. This Agreement represents the entire agreement between the parties regarding this Project. In entering into this Agreement, Client has relied only upon the warranties or representations (a) set forth in this Agreement; or (b) implied in law. No oral warranties, representations or statements shall be considered a part of this Agreement or a basis upon which the Client relied in entering into the Agreement. No statements, representations, warranties or understandings, unless contained herein, exist between Client and HW.
13. Should a need for further scope or budget revision be identified by either the Client or HW, the party requesting the revision shall notify the other party immediately. All changes to this Agreement must be in writing, signed by both parties.
14. The client acknowledges that HW is a corporation and agrees that any claim made by the Client arising out of any act or omission of any director, officer, or employee of HW in the performance of this or any other agreement between the parties shall be made against the corporation and not against such director,

officer, or employee individually. Any breach of this section shall entitle such director, officer, or employee of HW to, in addition to all other relief, costs and reasonable attorneys' fees.

15. The invalidity of any portion of this Agreement shall not invalidate the entire agreement. If any portion or clause hereof shall be declared unenforceable or invalid by any court of competent jurisdiction, such portion or clause shall be deemed stricken from the Agreement and remainder hereof shall be binding upon the parties hereto, their heirs, successors and assigns.
16. The Laws of the Commonwealth of Massachusetts shall govern this Agreement.
17. All notices sent pursuant to this Agreement shall be sent to HW and to the Client at the addresses listed on the Client Information Sheet attached hereto.
18. Services do not include legal consultation or constitute legal advice. Appropriate counsel should be employed where warranted.
19. HW shall not be liable for the failure of any manufactured product or any manufactured or factory assembled system of components to conform to the manufacturer's specifications, product literature or written documents.
20. The individual signing below, on behalf of the Client, represents that he/she has full authority to bind the Client to this Agreement.

CLIENT

HORSLEY WITTEN GROUP

DATE

DATE

Horsley Witten Group

Sustainable Environmental Solutions

90 Route 6A • Unit 1 • Sandwich, MA 02563
508-833-6600 • horsleywitten.com



Client Information Sheet

Company Name: _____

Mailing Address: _____

Contact Person: _____

Telephone: _____

Fax: _____

Email: _____

Cell: _____

Website: _____

Accounts Payable Contact: _____

A/P Telephone: _____

Please check appropriate box:

Are you a previous client? Yes ☐ No ☐

If no, how did you hear about HW?

Were you referred by someone? If so, who? _____

***Please mail, email or fax back with signed contract.**

Email: ecabral@horsleywitten.com

Fax: 508-833-3150