

# Town of Moriah, New York

## Request for Engineering Services Proposal:

### Sewer District Upgrades

**PROJECT NUMBER: P-1005-2019**

**DATE ISSUED: January 10<sup>th</sup>, 2020**

**UPDATED: TBA**

#### **Program Requirements:**

- NYS Environmental Facilities Corporation (EFC) NYS Clean Water State Revolving Fund and Drinking Water State Revolving Fund
- <https://www.efc.ny.gov/bid-packets>
- <https://nysefc.app.box.com/s/egasr7ez6hzjq53ryk5842jd1b6cwmf>
  
- NYS Department of Environmental Conservation Water Quality Improvement Project Program (WQIP)
- <https://www.dec.ny.gov/pubs/101565.html>

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# REQUEST FOR PROPOSALS – ENGINEERING SERVICES

NOTICE IS HEREBY GIVEN, that the Undersigned, on behalf of the Town of Moriah, will accept proposals **until 2:00 P.M. on February 21st, 2020** for **Municipal Civil Engineering Services** for the **Town of Moriah Sewer District Upgrades** project.

PLEASE TAKE FURTHER NOTICE that the Town affirmatively states that in regard to any contract entered into pursuant to this notice, without regard to race, color, sex, religion, age, national origin, disability, sexual preference or veteran status, disadvantaged and minority or women-owned business enterprises will be afforded equal opportunity to submit bids in response hereto.

**Disadvantaged and Minority/Women-Owned Business Enterprises (M/WBE) businesses, Service-Disabled Veteran Owned Businesses (SDVOB) and Section 3 businesses are strongly encouraged to participate in this project.** The Town is an equal opportunity employer.

In addition to the proposal, Respondents shall submit executed non-collusion certificates signed by the proposer or one of its officers as required by the General Municipal Law Sec. 103d. The Respondents shall also submit an executed certificate of compliance with the Iran Divestment Act signed by the proposer or one of its officers as required by the General Municipal Law Sec. 103g. The Town reserves the right to accept any and all proposal(s), reject any and all proposals not considered to be in the best interest of the Town, and to waive any technical or formal defect in the proposals which is considered by the Town to be merely irregular, immaterial, or unsubstantial.

Please contact the Essex County Planning Office **(518) 873-3426** or **[CommunityResources@co.essex.ny.us](mailto:CommunityResources@co.essex.ny.us)** for additional information concerning the Proposals. Specifications may be obtained at the **NYS Contract Reporter account:**

**“Essex County Department of Community Development & Planning”**

**RFP Title: “Moriah Sewer District Upgrades”**

Specifications may also be obtained at the **Essex County Bids/RFPs website:**  
**<https://www.co.essex.ny.us/bidders/publicbids.aspx>**

All proposals submitted in response to this notice shall be marked "**MORIAH SEWER DISTRICT UPGRADES PROPOSAL**" clearly on email traffic and/or the outside of the envelope containing your electronic/digital response files.

**Published: January 10th, 2020**

*Essex County Office of Community Resources  
Elizabethtown, New York 12932  
CommunityResources@co.essex.ny.us  
(518) 873-3426*

# INTRODUCTION

## A. Overview

This Request for Proposals (“RFP”) is being issued by the TOWN OF MORIAH (“the Town”) for ENGINEERING SERVICES for a municipal project. The project will be funded by New York State Environmental Facilities Corporation (NYS EFC), and all aspects must be compliant to their requirements, which are included herein as **Appendix A**.

Companies with demonstrated experience in *Municipal Civil Engineering Projects* and public funding agency administration interested in making their services available to the Town are invited to respond to this RFP. “Respondents” means the companies or individuals that submit proposals in response to this RFP. It is understood that the selected Respondent acting as an individual, partnership, corporation or other legal entity, is licensed to provide such services in New York State. The Respondent shall be financially solvent and each of its members if a joint venture, its employees, agents or sub-consultants of any tier shall be competent to perform the services required under this RFP document.

The Town is seeking to encourage participation by respondents who are DBE/MBE/WBE, Section 3 and/or Service –Disabled Veterans’ business enterprises. For the purposes of the project, the Town is requiring a *documented* DBE/MBE/WBE & Section 3 participation compliance & good faith effort per the Program requirements listed in **Appendix A** by providing evidence of direct solicitation to these required DBEs after contract award, but before given Notice to Proceed.

Nothing in this RFP shall be construed to create any legal obligation on the part of the Town or any respondents. The Town reserves the right, in its sole discretion, to amend, suspend, terminate, or reissue this RFP in whole or in part, at any stage. In no event shall the Town be liable to respondents for any cost or damages incurred in connection with the RFP process, including but not limited to, any and all costs of preparing a response to this RFP or any other costs incurred in reliance on this RFP. No respondent shall be entitled to repayment from the Town for any costs, expenses or fees related to this RFP. All supporting documentation submitted in response to this RFP will become the property of the Town. Respondents may also withdraw their interest in the RFP, in writing, at any point in time as more information becomes known.

## B. Time of Response

Respondents will have approximately four (4) weeks to provide a response to this RFP. The Town and resources from Essex County will review the proposals and respond within two (2) to four (4) weeks of RFP closure, after Town Board Meetings are held

- |                                |  |
|--------------------------------|--|
| 1. RFP Posted:                 | <b>Friday, January 10th, 2019</b>                          |
| 2. Statements Due:             | <b>Friday, February 21st, by 2:00 pm.</b>                  |
| 3. Town Board Proposal Review: | <b>February 21st – March 11<sup>th</sup></b>               |
| 4. Contract Awarded estimated: | <b>March 12<sup>th</sup>, 2020 (Regular Board Meeting)</b> |

## C. Contract Negotiations

After review and interviews are complete, the Town will approve the successful Proposal via Board Resolution and then provide a Notice of Award to the Respondent

#### **D. Contract Execution**

Once the contract Terms and Conditions have been approved, the final contract cannot be executed until the **NYS EFC CWSRF and NYS DEC WQIP** program requirements are completed and provided as part of the contract documents, such as the EEO, M/WBE Plans, other required forms and plans, etc. Once these have been provided the Town Board will execute the final contracts with the Respondent

#### **E. Term of Contract**

Any contract awarded pursuant to this RFP solicitation shall be for a contract period of approximately **(24) months**. Actual construction schedule of the project may vary; for the purposes of this RFP the term of the engineering services agreement will be limited to the deadline to have construction plans and specifications and any necessary permitting approved by NYS DEC, NYS EFC and any other necessary agencies **by November 1<sup>st</sup>, 2021**.

#### **F. Funding Agency Requirements**

Award recipients must follow the guidance provided in **Appendix A**. All Respondents must demonstrate capability to adhere to the following Funding Agencies' requirements:

- Davis Bacon Related Acts (DBRA) Compliance
- Disadvantaged Business Enterprises (DBE) & Minority Women Business Enterprise (MWBE) Compliance
- Equal Employment Opportunity (EEO) & Sexual Harassment Prevention Compliance
- Anti-Lobbying Policy
- Others as required per Appendix A.

Respondents are strongly encouraged to read these regulations prior to submitting their response to this RFP. Dates and schedules provided by the above funding agencies will be incorporated into project scope of work and schedule requirements.

# PROFESSIONAL SERVICE REQUIREMENTS

## A. Scope of Work

The Town of Moriah owns and operates a sanitary sewer collection system to serve several hamlets and connecting areas. On April 1, 2017, the Village of Port Henry formally dissolved and the Town took over the former Village's collection system. The Town (formally as a joint agreement with the Village) owns and operates a central sewage treatment facility located at 27 Bulwagga Drive in the former Village of Port Henry, on the shore of Lake Champlain. The plant is currently authorized to discharge up to 0.850 million gallons per day (MGD) of treated wastewater effluent from the facility. This volume is based on a maximum monthly average in accordance with the conditions of the State Pollution Discharge Elimination System (SPDES) Permit issued by the New York State Department of Environmental Conservation (NYS DEC). The permitted discharge for treated wastewater is to Lake Champlain.

In 2015, the Town of Moriah entered into an Order on Consent with the New York State Department of Environmental Conservation (NYSDEC) for electrical inspections of existing pump stations, an Inspection and Maintenance (I & M) Program for the Town's sewage treatment works and sewer system, as well as a Comprehensive Performance Evaluation (CPE) with a Capital Improvement Plan (CIP) prepared by a New York State licensed professional engineer. The Town hired a professional engineer to inspect and produce a report on the status of portions of the collection system, including the Plank Road sewer main (MH 260 to MH 108), Grover Hills service area, Moriah Center service area, Switchback Road trunk sewer main, The "Federal Water Main "Gas Main"" trunk sewer main, and the Moriah Corners service area. The conclusion of that report was a recommendation to reconstruct and repair these portions of sewer main and pump stations. The Town of Moriah received a New York State Department of Environmental (NYS DEC) Water Quality Improvement Program (WQIP) grant and is in the process of securing supplemental funding through NYS EFC for these necessary upgrades to the Town sewer district.

The Town requires a professional engineer to create a Map, Plan & Report so the Town can consolidate sewer districts 1 & 2. Also, the Town is pursuing the connection of Stone St., where the Village water plant is located, to Sewer District #1. Once consolidated, the project to be designed and constructed will be spread among the users in the single sewer district, thereby reducing the capital project burden. The engineer shall conduct all necessary surveys and field work to produce plans & specifications for the collection system and pump stations upgrades. Engineer shall also produce an Inspection & Maintenance Plan as part of this scope of work.

This RFP will determine the most qualified Engineering Firm to survey, design, prepare permitting and bidding documents, proceed with construction management and observation including following all State and Federal rules and regulations governing the CWSRF and WQIP Programs. Recipients will provide a Cost Proposal according to the Tasks listed below and also in in the "Deliverables Table" in Appendix K. For a detailed description of the services and deliverables in each Phase, see "Draft Form of Contract", Appendix L, Exhibit A "Requested Services".

**The Scope of Work must include the following tasks, at a minimum:**

- **General Requirements – (Tasks 1 -3)** The consultant shall participate in public meetings, pre-bid meetings, pre-construction and job meetings and distribution of meeting minutes to the Town and Essex County. Monthly progress meetings with the Town, County and the DEC are anticipated during the planning portion of this project. The consultant shall

maintain and produce a project schedule in Gantt Format. The consultant shall work with the Essex County Office of Community Resources for permitting & funding compliance for this project; Essex County will develop all funding applications, funding compliance oversight, act as Minority Business Officer (MBO) and provide finance consultation with the Town with technical input from the consultant as required. The consultant will be responsible for any technical information required for project development and permitting purposes. The consultant shall additionally coordinate with regulatory & funding program representatives as requested for review and approval of the bid package and any compliance measures.

- **Map, Plan & Report – (Task 4, 5)** The consultant shall conduct such field work they deem necessary to obtain the required information to create a Map, Plan & Report that complies with provision of NYS Article 12-A, Section 209-C for consolidating sewer districts 1 & 2 and then also for the Stone St. extension, as separate, distinct Actions. Field & survey work accomplished at this phase shall also be sufficient to properly design the sewer system upgrades. This work may include, but not be limited to surveying, geotechnical/hydrogeological studies, and evaluation of all system components. All data collected during this Task shall be a separate deliverable to the Town in a hard copy format (3 hard copies of full-size plans) and digital format (.shp file, .pdf, etc.).
- **Preliminary Design – (Tasks 6, 7 & 19 - 21)** The consultant shall prepare provide recommendations for system design, prepare preliminary plans for the system upgrade, and develop a Basis of Design Report, in accordance with 10-State Standards and approved by the NYS Department of Health and/or Department of Environmental Conservation. Once the Basis of Design Report is approved by the Town and County, it will be submitted to the regulatory agencies for review and approval.
- **Final Design – (Tasks 8 & 9)** The consultant will provide an updated Basis of Design Report and Finalized Plans & Specifications for review by the Town and state regulatory/funding agencies. Upon approval by these agencies, the consultant shall prepare all construction documents for the purposes of Bidding.
- **Bidding Assistance – (Tasks 10 & 11)** The consultant shall provide bidding assistance for this project including advertisements, providing copies and plans and specifications to be distributed to contractors, attending a pre-bid meeting, issuing minutes for the pre-bid meeting, answering contractor questions, issuing addenda, as necessary, reviewing the bids, and making recommendations to the Town.
- **Construction Administration & Management – (Tasks 12 –17)** The consultant shall provide construction administration and management services including, but not limited to, the following:
  - Issuing a Notice to Proceed (NTP).
  - Reviewing and approving all Submittals, shop drawings and substitutions, as necessary.
  - Reviewing and making recommendations to the Town for any requested Change Orders
  - Reviewing and certify contractor invoices and making recommendations to the Town for payment.
  - Review and certify contractor Certified Payrolls.

- Providing adequate construction observations services to ensure proper construction of the project (Please provide estimate construction period and number of hours. construction inspector will be on-site)
  - ***Approximately one hundred fifty 150 days of Resident Project Representative (RPR) Services.***
  - Review of the final work and development of and punch list
  - Provide a letter of construction compliance at the end of the project.
  - Provide NYS DEC compliant Operations and Maintenance Manuals for the project, as required for new or modified equipment and facilities.
- **Inspection & Maintenance Plan – (Task 21)** The consultant shall work with the Town to produce an I&M Plan, to include GIS mapping, to address the deliverable in the Town’s Order on Consent NYS DEC.

The consultant shall be responsible for coordinating all aspects of this project and addressing any questions or concerns of the NYS DOH, NYS DEC and any other regulatory agencies as required. Additionally, the consultant shall work to meet all DBE, MBE, WBE, SDVOB, and Section 3 participation requirements and goals, as required for funding compliance. Davis-Bacon prevailing wage rate documentation is required for this project, as determined by DOL, and must be included with the bidding documents.

### **B. Quality of Work**

All work shall follow recognized professional practices and standards and meet the specifications required by local, state and federal approval of the project’s plans and specification prior to advertising the project for construction bidding.

### **C. Records**

The design professional is to maintain all books, documents, papers, account records and other evidence pertaining to this work and to make such materials available at their respective offices at all reasonable times during the agreement and for a period up to seven **(7) years** from the date of final payment under the agreement. Throughout the project, the respondent will be required to coordinate with the Town and the Essex County Planning Office via regular project meetings and other electronic project management software.

**All reports, documents, information, presentations, finalized drawings, and other materials prepared by the award recipient in connection with this Agreement are deliverables to be provided to the Town as a result of the project.** Copies of all reports, designs, project documents, supporting information and any materials or equipment furnished to the award recipient by the Owner shall remain the property of the Owner and award recipient’s limited possession of the purpose of carrying out the Work, shall be returned to the Owner at the conclusion of the Agreement. **Nothing written in this paragraph, however, will be interpreted to forbid the award recipient from retaining intellectual properties and a single copy of the project construction documents for its files.**

### **D. Additional Requirements**

Professional services shall comply with all codes, standards, regulations, and workers' safety rules that are administered by federal agencies (EPA, OSHA, and DOT), state agencies (State OSHA, DNR, and DCH), and any other local regulations and standards (i.e. local ordinance and building

codes) that may apply. **Further requirements are identified in the accompanying Appendix of this RFP.**



## SUBMITTAL REQUIREMENTS

### A. Preliminary Requirements

1. **\*Certificate of Authority** (Corporation) or Certificate of Existence (ex: Professional Limited Liability Company or “PLLC”) issued by the NY Secretary of State.
2. **\*Evidence of Insurance:** Commercial General Liability with limits not less than \$2,000,000; Workers Compensation and Employers Liability with limits not less than \$500,000; and, Automobile Liability with limits not less than \$1,000,000 per occurrence.
3. **\*References:** At least three (3) references of *related projects*, including date of project, contact person and phone number, and a brief description of the project.
4. **\*Conflict of Interest Statement & Supporting Documentation:** Respondent shall disclose any professional or personal financial interests that may be a conflict of interest in representing the Town. In addition, all Respondents shall further disclose arrangement to derive additional compensation from various investment and reinvestment products, including financial contracts.
5. **\*Non-Collusion Bidding Affidavit:** Provide completed, signed & notarized form back with Response.
6. **\*Iran Divestment Act Compliance Form:** Provide completed & signed form back with Response.
7. **\*NYS Sexual Harassment Policy & Training Certificate**

*\*RFP RESPONSE WILL BE CONSIDERED INCOMPLETE AND NOT SCORED IF THESE ITEMS ARE NOT PROVIDED\**

### B. Letter of Interest

Submit a Cover Letter of Interest signed by a duly authorized officer or representative of the Respondent, not to exceed two pages in length. The Letter of Interest must also include the following information:

- The principal place of business and the contact person, title, telephone/fax numbers and email address.
- A brief summary of the qualifications of the Respondent and team.
- Description of organization (i.e. Professional Corporation, or Professional Limited Liability Company).
- The names and business addresses of all Principals of the Respondent. For purposes of this RFP “Principals” shall mean persons possessing an ownership interest in the Respondent.
- If the Respondent is a partially owned or fully-owned subsidiary of another organization, identify the parent organization and describe the nature and extent of the parent organization’s approval rights, if any, over the activities of the Respondent.

## C. Main Proposal

The purpose of the proposal is to demonstrate the qualifications, competence and capacity of the Respondents in conformity with the requirements of this RFP. As such, the substance of proposals will carry more weight than their form or manner of presentation. The proposal should demonstrate the qualifications of the firm and of the particular staff to be assigned to this project. It should also specify an approach that will meet the request for proposals requirements.

The proposal should address all the points outlined in the request for proposals. The proposal should be prepared simply and economically, providing a straightforward, concise description of the proposer's capabilities to satisfy the requirements of the request for proposals. While additional data may be presented, the following items must be included; this represents the criteria against which the proposal will be evaluated.

1. **Qualifications Proposal:** Provide a synopsis of the years of experience and detailed qualifications in performing the range of municipal drinking water wells on various project types in compliance with applicable standards, including team's resumes. Respondents should provide narrative examples of a minimum of three (3) projects in detail that are similar in nature to projects described in the RFP (see "References"). References for similar projects and portfolio vignettes will be reviewed to evaluate the level of experience.
2. **Technical Proposal:**
  - a. **Project Management Plan:** Discuss approach to the project in terms of understanding of the established Scope and Deliverables execution, with regard to any constraints identified in this RFP, to include funding requirements. Provide a plan for engaging the Town's project team and regulatory agencies required. Provide the number of full-time and part-time employees, partnerships or subconsultants proposed and their value to the project.
  - b. **Schedule:** Capacity to complete the scope of work within the defined period of performance: March 2020 – December 2021. The successful Respondent will have a detailed project schedule & work plan to illustrate the ability complete the work with respect to constraints, either stated or assumed. The Schedule Proposal must include a Gantt chart to illustrate your proposed schedule.
  - c. **Funding Agency Experience:** Respondents should state whether they are an DBE/MBE/WBE or Section 3 business enterprise; if so, provide a copy of a current DBE/MBE/WBE certification letter. Respondents may also cite previous project experience in working with DBE firms, cite any existing partnerships with DBEs or cite the planned DBE partnerships relevant to addressing requirements of this project & RFP. If Respondents are planning to cite proposed DBE partnerships for this project (e.g., no existing contract vehicle), please provide contact information for reference checks with the appropriate point of contact for validation.
3. **Cost Proposal:**
  - a. Cost will not be the primary factor in the selection of firm. The proposed price will be graded based upon the following formula:
    - Average Bid / Your Price = X (whereby X cannot exceed 100%)
    - X \* 20 points = Points awarded based on cost

- b. This should include the lump sum/unit rates for different Tasks, per the table provided in Appendix K, “Deliverables Table”. Respondents should include a description of the costs and detail proposals for *cost savings* in their Proposal. Labor cost estimates will include payments of prevailing wage rates as determined by the NYS Department of Labor and Industries as applicable (such as Survey work for example).

## SELECTION PROCESS

The Selection Committee comprised of the Town and resources from Essex County staff will review qualifications in accordance with the evaluation criteria set forth herein. Proposals that are submitted timely and comply with the mandatory requirements of the RFP will be evaluated in accordance with the terms of the RFP. Proposals that take exception to any scopes of work and criteria established herein will be considered an incomplete proposal; incomplete proposals will receive a substantially low score. If proposals do not effectively meet the intended scope of this RFP, then those proposals may not be scored due to insufficient comparative scoring criteria. Any professional services contracts resulting from this RFP will not necessarily be awarded to the Respondent with the lowest price. Instead, professional services shall be awarded to vendor whose proposal received the most points in accordance with criteria set forth in RFP.

## EVALUATION CRITERIA AND SCORING

In evaluating responses to this Request for Proposal, the Town will take into consideration the experience, capacity, and costs that are being proposed by the Respondent. The following Evaluation Criteria will be considered in reviewing submittals:

The point system is to evaluate the experience and capacity of the Respondent. Maximum is 100 Points:

- Respondents will be awarded up to 10 Points for Completeness of Response.
  
- Respondents will be awarded up to 35 Points for Qualifications Proposal.
  - Related Project Experience: 25 Points
  - Public Funding Experience: 10 Points
  
- Respondents will be awarded up to 35 Points for the Technical Proposal:
  - Project Management Plan: 25 Points
  - Schedule: 10 Points
  
- Respondents will be awarded up to 20 Points for Cost Proposal.

## QUESTIONS

*Questions regarding this RFP* should be submitted in writing via email to Essex County Community Resources at ([CommunityResources@co.essex.ny.us](mailto:CommunityResources@co.essex.ny.us)) between the hours of 0900 – 1500 *only*. Any RFI responses will in turn be made available to all Respondents as they are received by means of direct emails.

## SUBMITTAL DUE DATE

**Responses to this RFP are due by 2:00pm on Friday, February 21st, 2020 by 2:00 pm.** RFP responses must be submitted via electronic PDF sent to the following web address:

**<https://app.smartsheet.com/b/form/15fa23f5a0e141ecab1c0f4c65ee3f6e>**

The Town will select a Respondent on **March 12<sup>th</sup>, 2020** at a regular Board Meeting.

If you run into technical difficulties providing your response by the web link above, it is also acceptable to submit your RFP responses in writing via email, OR mail-in digital files (.PDF format) on flash-drive to the RFP point of contact:

Essex County Office of Community Resources  
7533 Court Street – PO Box 217  
Elizabethtown, NY 12932  
[CommunityResources@co.essex.ny.us](mailto:CommunityResources@co.essex.ny.us)  
(518) 873-3426

Each respondent shall receive a confirmation of their submission via email; respondents are advised to adhere to the submittal requirements. Failure to comply with the instructions of this RFP will be cause for rejection of submittals. **NO HARD COPIES WILL BE ACCEPTED.**

## **RFP SUBMITTAL REQUIREMENTS CHECKLIST**

### **FORMS FROM RFQ PACKAGE TO RETURN:**

- RFP Submittal Requirements Checklist (*Provide Checklist with RFP Response*)
- \*Appendix C: References (Minimum 4 related projects)
- \*Appendix D: Conflict of Interest Statement & Supporting Documentation
- \*Appendix E: Certification of Authority
  - Aka, Certificate of Good Standing (Corporation) or Certificate of Existence (Limited Liability Company) issued by the Secretary of State (If Respondent is a joint venture, a Certificate of Good Standing or Certificate of Existence, as applicable, must be submitted for each entity comprising the joint venture.)
- \*Appendix F: Vendor Responsibility Questionnaire (if over \$100K in proposed contract value)
- \*Appendix G: W-9 Form
- \*Appendix H: Non-Collusive Bidding Certification
- \*Appendix I: Iran Divestment Act Compliance Form
- \*Appendix K: Deliverables Table with proposed costs
- \*Appendix J: NYS Sexual Harassment Policy Requirements

### **FOR THE RESPONDENT TO PROVIDE:**

- Letter of Interest
- Qualifications Proposal:
  - Description of Company
  - Capacity of Company
  - Resumes of specific staff identified to work on project
  - State License and or Certification
- Technical Proposal:
  - Project Management Plan (*Describe your approach in detail*)
  - Schedule Proposal (*Provide in a Gantt Chart format*)
  - Experience with DBE/MBE/WBE, Local Hiring, HUD Section 3, if applicable
- Pricing Proposal Description (*Also include figures in “Deliverables Table”*)
- \*Evidence of Insurance

\*These documents must be submitted and complete before the Town will review the remainder of the proposal.

## **APPENDIX A: FUNDING PROGRAM REQUIREMENTS**



**Environmental  
Facilities Corporation**

**ANDREW M. CUOMO**  
Governor

**SABRINA M. TY**  
President and CEO

# **Program Requirements and Bid Packet for Non-Construction Contracts**

(For Treatment Works and Drinking Water projects funded with NYS Clean Water State Revolving Fund or Drinking Water State Revolving Fund and Non-Treatment Works projects funded with NYS Clean Water State Revolving Fund)

Effective October 1, 2017

**New York State Environmental Facilities Corporation**  
625 Broadway, Albany, NY 12207-2997  
P: (518) 402-6924 F: (518) 402-7456  
[www.efc.ny.gov](http://www.efc.ny.gov)

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ATTACHMENTS (REQUIRED FORMS)

- Attachment 1 - EEO Policy Statement
- Attachment 2 - EEO Staffing Plan
- Attachment 3 - EEO Workforce Employment Utilization Report
- Attachment 4 - Monthly MWBE Contractor Compliance Report
- Attachment 5 - MWBE Utilization Plan
- Attachment 6 - MWBE Waiver Request
- Attachment 7 - EPA Form 6100-2 - DBE Subcontractor Participation Form
- Attachment 8 - EPA Form 6100-3 - DBE Subcontractor Performance Form
- Attachment 9 - EPA Form 6100-4 - DBE Subcontractor Utilization Form
- Attachment 10 - Lobbying Certification

# PART 1:

## HOW TO USE THIS DOCUMENT

The New York State Environmental Facilities Corporation (“EFC”) implements the New York State Revolving Fund (“SRF”) for both Clean Water and Drinking Water projects.

This Program Requirements and Bid Packet for Non-Construction Contracts document contains (1) a brief description of New York State and federal program requirements for Contracts and Subcontracts funded in whole or part by the New York State Clean Water and Drinking Water SRFs, (2) required language for such Contracts and Subcontracts to satisfy the SRF program requirements, including required forms, and (3) guidance materials to assist entities in complying with these requirements.

### PROGRAM REQUIREMENTS

The following requirements apply to Treatment Works and Drinking Water projects funded with the NYS Clean Water State Revolving Fund or Drinking Water State Revolving Fund as well as Non-Treatment Works projects funded with the NYS Clean Water State Revolving Fund:

- Participation of Minority- and Women-Owned Business Enterprises (“MWBE”) and Equal Employment Opportunities (“EEO”) pursuant to New York State Executive Law, Article 15-A and New York Code of Rules and Regulations, Title 5 (5 NYCRR) Parts 140-145 (Regulations of the Commissioner of Economic Development);
- Participation by Disadvantaged Business Enterprises (“DBE”) in United States Environmental Protection Agency (“EPA”) Programs pursuant to 40 Code of Federal Regulations (CFR) Part 33;
- Equal Employment Opportunities pursuant to Title VI of the Civil Rights Act of 1964 and 40 CFR Part 7;
- Non-discrimination requirements pursuant to Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972;
- Encouragement of participation of Service-Disabled Veteran-Owned Business Enterprises (“SDVOB”) in accordance with New York State Executive Law, Article 17-B and 9 NYCRR Part 252;
- Requirements regarding suspension and debarment pursuant to 2 CFR Part 180, 2 CFR Part 1532, 29 CFR § 5.12, State Labor Law § 220-b, and State Executive Law § 316; and,
- Restrictions on Lobbying pursuant to 40 CFR Part 34.

EFC or its authorized representatives, and other governmental entities as applicable, reserve the right to conduct occasional site inspections to monitor compliance with SRF program requirements.

**This document is not intended to be inclusive of all applicable legal requirements and there may be other legal requirements that need to be included in a particular Contract or Subcontract that are not set forth here. Accordingly, EFC recommends that Recipients, Contractors, Subcontractors, and any other involved entities consult their legal counsel for advice on compliance with all applicable laws, including but not limited to local laws. This document is not intended to be legal advice.**

Refer to the EFC website at [www.efc.ny.gov](http://www.efc.ny.gov) for the latest version of the bid packet to ensure that the most recent forms and contract language are being used.

## REQUIRED CONTRACT LANGUAGE

Part 2 of this document is the Required Contract Language. All of the language in Part 2 must be inserted in to all Contracts and Subcontracts funded in whole or in part with SRF funds, in order for SRF Recipients, Contractors, and Subcontractors to comply with the above-listed SRF program requirements.

## GUIDANCE MATERIALS

Part 3 of this document sets forth Guidance Materials intended to assist SRF Recipients, Contractors, and Subcontractors in complying with the foregoing SRF program requirements, as applicable.

**The Guidance Materials are for informational purposes only and are not intended to be used as contractual language. Please do not incorporate the Guidance Materials into any Contracts or Subcontracts.**

## COMMONLY USED TERMS

The following commonly used terms are defined herein as follows:

**“Contract”** means an agreement between a Recipient and a Contractor.

**“Contractor”** means all bidders, prime contractors, Service Providers, and consultants as hereinafter defined, unless specifically referred to otherwise.

**“Service Provider”** means any individual or business enterprise that provides one or more of the following: legal, engineering, financial advisory, technical, or other professional services, supplies, commodities, equipment, materials, or travel.

**“Subcontract”** means an agreement between a Contractor and a Subcontractor.

**“Subcontractor”** means any individual or business enterprise that has an agreement, purchase order, or any other contractual arrangement with a Contractor.

**“Recipient”** means the party, other than EFC, to a grant agreement or a project finance agreement with EFC through which funds for the payment of amounts due thereunder are being paid in whole or in part.

**“State”** means the State of New York.

**“Treatment Works”** is defined in Clean Water Act (CWA) Section 212.

**“Nonpoint Source Projects”** and **“Green Infrastructure Projects”** are defined in CWA Section 319.

**“Estuary Management Program Project”** is defined in CWA Section 320.

# PART 2:

## REQUIRED CONTRACT LANGUAGE

### SECTION 1 REQUIREMENTS AND PROCEDURES FOR BUSINESS PARTICIPATION OPPORTUNITIES FOR FEDERAL DISADVANTAGED BUSINESS ENTERPRISES AND NEW YORK STATE CERTIFIED MINORITY- AND WOMEN- OWNED BUSINESS ENTERPRISES AND EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITY GROUP MEMBERS AND WOMEN

The Equal Employment Opportunities requirements of this section apply to Contracts and Subcontracts greater than \$10,000, with the exception of the EEO Workforce Employment Utilization Report requirement which applies to construction Contracts and Subcontracts greater than \$25,000.

The Minority- and Women- Owned Business Enterprises ("MWBE") and Disadvantaged Business Enterprises ("DBE") requirements of this section apply to Contractors and Subcontractors working pursuant to: (1) Contracts for labor, services (including, but not limited to, legal, financial, and other professional services), supplies, equipment, materials, or any combination of the foregoing, greater than \$25,000; (2) Contracts that are initially under this threshold but subsequent change orders or contract amendments increase the Contract value to above \$25,000; and, (3) change orders greater than \$25,000.

Disregard this section if it does not apply to this Contract or Subcontract.

#### I. General Provisions

A. Contractors and Subcontractors are required to comply with the following provisions:

1. New York State Executive Law Article 15-A and 5 NYCRR Parts 140-145 ("MWBE Regulations") for all State contracts as defined therein, with a value (1) in excess of \$25,000 for labor, services (including, but not limited to, legal, financial, and other professional services), supplies, equipment, materials, or any combination of the foregoing, or (2) in excess of \$100,000 for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon.
2. 40 CFR Part 33 ("Federal DBE Regulations") for contracts under EPA financial assistance agreements, as those terms are defined therein.
3. Title VI of the Civil Rights Act of 1964 and 40 CFR Part 7 ("Title VI") for any program or activity receiving federal financial assistance, as those terms are defined therein.
4. Section 504 of the Rehabilitation Act of 1973 ("Section 504") for any program or activity receiving federal financial assistance, as those terms are defined therein.
5. The Age Discrimination Act of 1975 ("Age Discrimination Act") for any program or activity receiving federal financial assistance, as those terms are defined therein.
6. Section 13 of the Federal Water Pollution Control Act ("Clean Water Act") Amendments of 1972 ("Section 13") for any program or activity receiving federal financial assistance under the Clean Water Act, as those terms are defined therein.

B. The Contractor and Subcontractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this Contract. The Contractor and Subcontractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the Contractor and Subcontractor to carry out these

requirements is a material breach of this Contract which may result in the termination of this Contract or other legally available remedies.

- C. Contractors and Subcontractors shall have instituted grievance procedures to assure the prompt and fair resolution of complaints when a violation of Title VI of the Civil Rights Act of 1964 or Title 40 CFR Part 7 is alleged.
- D. Failure to comply with all of the requirements herein may result in a finding by the Recipient that the Contractor is non-responsive, non-responsible, and/or has breached the Contract, leading to the withholding of funds or such other actions, liquidated damages pursuant to subsection III(F) of this section, or enforcement proceedings as allowed by the Contract.
- E. If any terms or provisions herein conflict with Executive Law Article 15-A, the MWBE Regulations, Federal DBE Regulations, or Title VI, such law and regulations shall supersede these requirements.
- F. Upon request from the Recipient's Minority Business Officer ("MBO") and/or EFC, Contractor will provide complete responses to inquiries and all MWBE and EEO records available within a reasonable time. For purposes of this section, MBO means the duly authorized representative of the SRF Recipient for MWBE and EEO purposes.

## **II. Equal Employment Opportunities (EEO)**

- A. Each Contractor and Subcontractor performing work on the Contract shall undertake or continue existing EEO programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status. For these purposes, EEO shall apply in the areas of recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation.
- B. Contractor represents that it has submitted an EEO policy statement to Recipient prior to the execution of this Contract.
- C. Contractor represents that it's EEO policy statement includes the following language:
  - 1. The contractor will not discriminate on the basis of race, creed, color, national origin, sex, age, disability, or marital status against any employee or applicant for employment, will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination and will make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on Contracts relating to SRF projects.
  - 2. The Contractor shall state in all solicitations or advertisements for employees that, in the performance of the Contract relating to this SRF project, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.
  - 3. The Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status, and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein.
- D. The Contractor will include the provisions of Subdivisions II(A), II(C), and II(E) in every Subcontract in such a manner that the requirements of these subdivisions will be binding upon each Subcontractor as to work in connection with the Contract.
- E. The Contractor shall comply with the provisions of the Human Rights Law (Executive Law Article 15), Title VI, Section 504, Age Discrimination Act, Section 13, and all other State and Federal

statutory and constitutional non-discrimination provisions. The Contractor and Subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

**F. Required EEO Forms**

**1. EEO Staffing Plan**

To ensure compliance with this section, the Contractor represents that it has submitted prior to execution of this Contract an EEO Staffing Plan to the Recipient's MBO to document the composition of the proposed workforce to be utilized in the performance of the Contract by the specified categories listed, including ethnic background, gender, and federal occupational categories.

**2. EEO Workforce Employment Utilization Report ("Workforce Report")**

- a. The Contractor shall submit a Workforce Report, and shall require each of its Subcontractors to submit a Workforce Report to the Recipient, in such format as shall be required by EFC on a quarterly basis during the term of the Contract.
- b. Separate forms shall be completed by Contractor and any Subcontractor.
- c. In limited instances, the Contractor may not be able to separate out the workforce utilized in the performance of the Contract from the Contractor's and/or Subcontractor's total workforce. When a separation can be made, the Contractor shall submit the Workforce Report and indicate that the information provided related to the actual workforce utilized on the Contract. When the workforce to be utilized on the Contract cannot be separated out from the Contractor's and/or Subcontractor's total workforce, the Contractor shall submit the Workforce Report and indicate that the information provided is the Contractor's total workforce during the subject time frame, not limited to work specifically under the Contract.

**III. Business Participation Opportunities for MWBEs**

**A. Contract Goals**

1. For purposes of this Contract, EFC establishes the following goals for New York State certified MWBE participation ("MWBE Combined Goals") based on the current availability of qualified MBEs and WBEs.

<b>Program</b>	<b>MWBE Combined Goal*</b>
CWSRF, DWSRF, & Green Innovation Grant Program	20%
NYS Water Infrastructure Improvement Act Grants (also receiving EFC loan)	Clean Water project 23% Drinking Water project 26%
NYS Intermunicipal Grants (also receiving EFC loan)	Clean Water project 24% Drinking Water project 24%
NYS financial assistance only	30%
Engineering Planning Grant	30%

\*May be any combination of MBE and/or WBE participation

2. For purposes of providing meaningful participation by MWBEs on the Contract and achieving the MWBE Contract Goals established in Section III-A hereof, the Contractor should reference the directory of New York State Certified MWBEs found at the following internet address: <https://ny.newnycontracts.com>.

3. The Contractor understands that only sums paid to MWBEs for the performance of a commercially useful function, as that term is defined in 5 NYCRR § 140.1, may be applied towards achievement of applicable MWBE participation goals. For construction-related services Contracts or Subcontracts, the portion of the Contract or Subcontract with an MWBE serving as a supplier, and so designated in ESD's Directory, that shall be deemed to represent the commercially useful function performed by the MWBE shall be 60% of the total value of the Contract or Subcontract. The portion of a Contract or Subcontract with an MWBE serving as a broker, as denoted by NAICS code 425120, that shall be deemed to represent the commercially useful function performed by the MWBE shall be the monetary value for fees, or the markup percentage, charged by the MWBE. Where MWBE Contract Goals have been established herein, pursuant to 5 NYCRR § 142.8, the Contractor must document "good faith efforts" to provide meaningful participation by MWBEs as Subcontractors or suppliers in the performance of the Contract. In accordance with Section 316-a of Article 15-A and 5 NYCRR § 142.13, the Contractor acknowledges that if it is found to have willfully and intentionally failed to comply with the MWBE participation goals set forth in the Contract, such a finding constitutes a breach of Contract and the Contractor shall be liable to the Recipient for liquidated or other appropriate damages, as set forth herein.

#### B. MWBE Utilization Plan

1. The Contractor represents and warrants that Contractor has submitted an MWBE Utilization Plan to the Recipient prior to the execution of this Contract.
2. The Contractor agrees to use such MWBE Utilization Plan for the performance of MWBEs on the Contract pursuant to the prescribed MWBE goals set forth in Section III-A of this section.
3. The Contractor further agrees that a failure to submit and/or use such MWBE Utilization Plan shall constitute a material breach of the terms of the Contract. Upon the occurrence of such a material breach, the Recipient shall be entitled to any remedy provided herein, including but not limited to, a finding that the Contractor is not responsive.
4. Contractor must report any changes to the Utilization Plan after Contract award and during the term of the Contract to the Recipient's MBO. Contractor shall indicate the changes to the MBO in the next Monthly MWBE Contractor Compliance Report after the changes occurred. At EFC's discretion, an updated MWBE Utilization Plan form and good faith effort documentation may be required to be submitted. When a Utilization Plan is revised due to execution of a change order, the change order should be submitted to the MBO with the revised Utilization Plan.
5. The Contractor shall submit copies of all fully executed subcontracts, agreements, and purchase orders that are referred to in the MWBE Utilization Plan to the MBO within 30 days of their execution.

#### C. Requests for Waiver

1. If the Contractor, after making good faith efforts, is unable to comply with MWBE goals, the Contractor may submit a Request for Waiver to the Recipient documenting good faith efforts by the Contractor to meet such goals. If the documentation included with the waiver request is complete, the Recipient shall forward the request to EFC for evaluation, and EFC will issue a written notice of acceptance or denial within twenty (20) days of receipt.
2. If the Recipient, upon review of the MWBE Utilization Plan and updated Quarterly MWBE Contractor Compliance Reports determines that the Contractor is failing or refusing to comply with the MWBE Contract Goals and no waiver has been issued in regards to such non-compliance, the Recipient may issue a notice of deficiency to the Contractor. The Contractor must respond to the notice of deficiency within seven (7) business days of receipt. Such response may include a request for partial or total waiver of MWBE Contract Goals.

D. Monthly MWBE Contractor Compliance Report (“Monthly MWBE Report”)

The Contractor agrees to submit a report to the Recipient by the third business day following the end of each month over the term of this Contract documenting the payments made and the progress towards achievement of the MWBE goals of the Contract. The Monthly MWBE Report must be supplemented with proof of payment by the Contractor to its Subcontractors (e.g., copies of both sides of a cancelled check) and proof that Subcontractors have been paid within 30 days of receipt of payment from the Recipient. The final Monthly MWBE Report must reflect all Utilization Plan revisions and change orders.

E. Required Federal DBE Forms

1. EPA Form 6100-3 - DBE Subcontractor Performance Form  
Contractor represents that it has submitted the Form 6100-3 to all of its Subcontractors, all of its Subcontractors have completed the form, and that Contractor submitted such completed forms to Recipient with its bid submission.
2. EPA Form 6100-4 - DBE Subcontractor Utilization Form  
Contractor represents that it has completed the Form 6100-4 and submitted such completed form to Recipient with its bid submission.
3. EPA Form 6100-2 - DBE Subcontractor Participation Form  
Contractor represents that it has distributed a Form 6100-2 to its MWBE Subcontractors for completion prior to execution of this Contract.

F. Liquidated Damages - MWBE Participation

In accordance with Section 316-a of Article 15-A and 5 NYCRR §142.13, if it has been determined by the Recipient or EFC that the Contractor has willfully and intentionally failed to comply with the MWBE participation goals, the Contractor shall be obligated to pay to Recipient liquidated damages or other appropriate damages, as specified herein and as determined by the Recipient or EFC.

Liquidated damages shall be calculated as an amount not to exceed the difference between:

1. All sums identified for payment to MWBEs had the Contractor achieved the approved MWBE participation goals; and,
2. All sums actually paid to MWBEs for work performed or materials supplied under this Contract.

The Recipient and EFC reserve the right to impose a lesser amount of liquidated damages than the amount calculated above based on the circumstances surrounding the Contractor’s non-compliance.

In the event a determination has been made by the Recipient or EFC which requires the payment of damages identified herein and such identified sums have not been withheld, Contractor shall pay such damages to the Recipient within sixty (60) days after they are assessed unless prior to the expiration of such sixtieth day, the Contractor has filed a complaint with the Empire State Development Corporation – Division of Minority and Women’s Business Development (“ESD”) pursuant to Subdivision 8 of Section 313 of the Executive Law in which event the damages shall be payable if the Director of ESD renders a decision in favor of the Recipient.



## **SECTION 2 PARTICIPATION OPPORTUNITIES FOR NEW YORK STATE CERTIFIED SERVICE-DISABLED VETERAN-OWNED BUSINESSES**

New York State Executive Law Article 17-B and 9 NYCRR Part 252 provide for more meaningful participation in public procurement by certified Service-Disabled Veteran-Owned Businesses (“SDVOBs”), thereby further integrating such businesses into New York State’s economy. EFC recognizes the need to promote the employment of service-disabled veterans and to ensure that certified service-disabled veteran-owned businesses have opportunities for maximum feasible participation in the performance of EFC contracts.

In recognition of the service and sacrifices made by service-disabled veterans and in recognition of their economic activity in doing business in New York State, Contractors are strongly encouraged and expected to consider SDVOBs in the fulfillment of the requirements of the Contract. Such participation may be as Subcontractors or suppliers, as protégés, or in other partnering or supporting roles.

Contractor is encouraged to make good faith efforts to promote and assist in the participation of SDVOBs on the Contract for the provision of services and materials. The directory of New York State Certified SDVOBs can be viewed at: <http://ogs.ny.gov/Core/SDVOBA.asp>

Contractor is encouraged to contact the Office of General Services’ Division of Service-Disabled Veteran’s Business Development at 518-474-2015 or [VeteransDevelopment@ogs.ny.gov](mailto:VeteransDevelopment@ogs.ny.gov) to discuss methods of maximizing participation by SDVOBs on the Contract.

## **SECTION 3 REQUIREMENTS REGARDING SUSPENSION AND DEBARMENT**

The requirements of this section apply to all Contracts and Subcontracts.

Contractor and any Subcontractors shall comply with, Subpart C of 2 CFR Part 180 as implemented and supplemented by 2 CFR Part 1532. The Contractor is not a debarred or suspended party under 2 CFR Part 180 or 2 CFR Part 1532, or 29 CFR § 5.12. Neither the Contractor nor any of its Subcontractors have contracted with, or will contract with, any debarred or suspended party under the foregoing regulations.

The Contractor and any Subcontractors have not been deemed ineligible to submit a bid on or be awarded a public contract or subcontract pursuant to Article 8 of the State Labor Law, specifically Labor Law § 220-b. In addition, neither the Contractor nor any Subcontractors have contracted with, or will contract with, any party that has been deemed ineligible to submit a bid on or be awarded a public contract or subcontract under Labor Law § 220-b.

In addition, the Contractor and any Subcontractors have not been deemed ineligible to submit a bid and have not contracted with and will not contract with any party that has been deemed ineligible to submit a bid under Executive Law § 316.

## **SECTION 4 RESTRICTIONS ON LOBBYING**

The requirements of this section apply to all Contracts and Subcontracts greater than \$100,000. Disregard this section if it does not apply to this Contract or Subcontract.

The Contractor and any Subcontractor executing a Contract or Subcontract in excess of \$100,000 agree to provide to the Recipient an executed Certification Regarding Lobbying pursuant to 40 CFR Part 34 (“Lobbying Certification”) in the form attached hereto as Attachment 10, consistent with the prescribed form provided in Appendix A to 40 CFR Part 34.

# PART 3:

## GUIDANCE MATERIALS

### APPLICABILITY OF PROGRAM REQUIREMENTS

This chart contains a listing of the SRF program requirements contained within this document, as well as the following details regarding each requirement: (1) its applicability, i.e., what types of contracts/subcontracts, particular monetary thresholds if applicable; (2) a section reference to the Required Contract Language that applies from Part 2; and (3) a section reference to the Guidance that applies from this Part.

Requirement	Applicability	Section of Required Contract Language from Part 2	Section of Appropriate Guidance from Part 3
Minority- and Women- Owned Business Enterprises (MWBE) and Disadvantaged Business Enterprises (DBE)	Contractors and Subcontractors working pursuant to: (1) Contracts for labor, services (including, but not limited to, legal, financial, and other professional services), supplies, equipment, materials, or any combination of the foregoing, greater than \$25,000; (2) Contracts that are initially under this threshold but subsequent change orders or Contract amendments increase the Contract value above \$25,000; and, (3) Change orders greater than \$25,000	1	1
Equal Employment Opportunities (EEO)	Contracts and Subcontracts greater than \$10,000, with the exception of the EEO Workforce Employment Utilization Report requirement which applies to construction Contracts and Subcontracts greater than \$25,000	1	1
Service-Disabled Veteran-Owned Businesses (SDVOB)	Not required, but strongly encouraged	2	2
Suspension and Debarment	All Contracts and Subcontracts	3	3
Restrictions on Lobbying	All Contracts and Subcontracts greater than \$100,000	4	4

# SECTION 1 GUIDANCE FOR THE REQUIREMENTS AND PROCEDURES FOR BUSINESS PARTICIPATION OPPORTUNITIES FOR FEDERAL DISADVANTAGED BUSINESS ENTERPRISES AND NEW YORK STATE CERTIFIED MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISES AND EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITY GROUP MEMBERS AND WOMEN

## I. Summary of EEO, MWBE, and DBE Forms

### A. Forms to be Submitted Prior to Contract Execution

#### 1. EEO Policy Statement

To be submitted by the Contractor to the Recipient's Minority Business Officer ("MBO") prior to Contract execution. The "MBO" refers to the duly authorized representative of the SRF Recipient for MWBE and EEO purposes. This form is attached hereto as Attachment 1. See Required Contract Language, Section 1(II).

#### 2. EEO Staffing Plan

To be submitted by the Contractor to the MBO prior to Contract execution. This form is attached hereto as Attachment 2. See required Contract Language, Section 1(II).

#### 3. EPA Form 6100-3 – DBE Subcontractor Performance Form

To be submitted by the Contractor to the MBO with its bid submission. This form is attached hereto as Attachment 8. See Required Contract Language, Section 1(III)(E).

#### 4. EPA Form 6100-4 – DBE Subcontractor Utilization Form

To be submitted by the Contractor to the MBO with its bid submission. This form is attached hereto as Attachment 9. See Required Contract Language, Section 1(III)(E).

#### 5. EPA Form 6100-2 – DBE Subcontractor Participation Form

To be submitted by the Subcontractors to the MBO prior to Contract execution. The Contractor must provide the form to the Subcontractors for completion. The Contractor should also submit documentation (e.g., email, letter, certified mail receipt) to the MBO that the 6100-2 form was made available to the MWBE Subcontractors. This form is attached hereto as Attachment 7. See Required Contract Language, Section 1(III)(E).

#### 6. MWBE Utilization Plan

To be submitted by the Contractor to the MBO after the bid opening, but in no case more than ten (10) business days after the Contractor receives notice from the Recipient that the Contractor has submitted a low bid. This form is attached hereto as Attachment 5. See Required Contract Language, Section 1(III)(B).

### B. Forms to be Submitted During the Term of the Contract

#### 1. EEO Workforce Employment Utilization Report ("Workforce Report")

To be submitted by the Contractor to the MBO on a quarterly basis during the term of the Contract. An exemplar form with instructions is attached hereto as Attachment 3. The actual Excel fillable form for Contractors and Subcontractors to complete will be e-mailed to MBOs by EFC at the start of the Contract term. See Required Contract Language, Section 1(II)(G).

#### 2. Request for Partial or Total Waiver

If applicable, to be submitted by the Contractor to the MBO at any time during the term of the Contract, but not later than prior to the submission of a request for final payment on the

Contract. This form is attached hereto as Attachment 6. See Required Contract Language, Section 1(III)(C).

3. **Monthly MWBE Contractor Compliance Report (“Monthly MWBE Report”)**

To be submitted by the Contractor to the MBO by the third business day following the end of each month over the term of the Contract. This form is attached hereto as Attachment 4. See Required Contract Language, Section 1(III)(D).

**II. Business Participation Opportunities for MWBEs**

A. Contract Goals

The goals provided herein (Required Contract Language, Section 1(III)(A)) are effective as of October 1, 2017. MWBE participation goals for a contract will be based on the goals in place at the time of the execution date of each respective contract, unless otherwise specified. In certain instances, the goals may vary, such as with projects co-funded by EFC and other state/federal agencies. With some co-funded projects, EFC may defer to the MBE and WBE participation goals and program established by those agencies.

Please contact EFC if you have any questions about the applicable MWBE participation goals for your contract.

B. Good Faith Efforts

The Contractor must make good faith efforts to develop an adequate MWBE Utilization Plan and must continue such good faith efforts in order to meet applicable MWBE participation goals. The Contractor shall maintain documentation of good faith efforts to solicit participation of MWBE firms for SRF-funded projects. If a Contractor is unable to meet contract MWBE participation goals, and submits a Request for Waiver, documentation of such good faith efforts must accompany the request. See Required Contract Language, Section 1(III)(C).

Contractor should also continue good faith efforts to seek opportunities for MWBE participation during the life of the contract even if proposed goals have been achieved.

Examples of documentation of good faith efforts are set forth below:

- Information on the scope of work related to the contract, such as a copy of the schedule of values from the bid submission, and specific steps taken to reasonably structure the scope of work to break out tasks or equipment needs for the purpose of providing opportunities for subcontracting with, or obtaining supplies or services from, MBEs or WBEs.
- Printed screenshots of the directory of Certified Minority- and Women- Owned Business Enterprises (“MWBE directory”) on ESD’s website on a Statewide basis, if appropriate, for both MBEs and WBEs that provide the services or equipment necessary for the contract. Contact the MBO for assistance in performing a proper search including identifying a sufficient number of solicitations to show that good faith effort was made.
- Copies of timely solicitations and documentation (e.g., faxes and emails) that the Contractor offered relevant plans, specifications, or other related materials to MBE and WBE firms on ESD’s MWBE directory to participate in the work, with the responses.
- A log prepared by the Contractor in a sortable spreadsheet documenting the Contractor’s solicitation of MBEs and WBEs for participation as Subcontractors or suppliers pursuant to a contract. The log should consist of the list of MBE and WBE firms solicited, their contact information, the type of work they were solicited to perform (or equipment to provide), how the solicitation was made (fax, phone, email) and the contact information, the contacts name and the outcome. If a bid was

received, the bid price should also be included in the log. See a sample log format below:

Date	M/WBE Type	Company	Scope of work	Contact Name	Phone/ Email	Solicitation Format	MWBE Response	Negotiation Required?	Selected? If not, Explain

If no response was received to an initial solicitation, at least one follow-up solicitation should be made in a different format than the first, e.g. fax followed by phone call. Any bids received from non-MWBE firms for the same areas MWBEs were solicited should also be tracked on the log.

- Copies of the EPA 6100-3 and 6100-4 forms that are required with the bid submission. A properly completed EPA 6100-3 form is good indication of a contact to an MWBE and their response to the contact. If solicitations do not result in obtaining sufficient participation of MWBE firms due to non-responsiveness, please contact the MBO or EFC MWBE representative for support.
- Copies of any advertisements of sufficient duration to effectively seek participation of certified MBE and WBEs timely published in appropriate general circulation, trade and MWBE oriented publications, together with listing and dates of publication of such advertisements. EFC recommends the use of the NYS Contract Reporter that is free to all Contractors - <https://www.nyscr.ny.gov/>. A log should be kept of the responses to the ads, similar to the log for MWBE firm solicitation and should include the non-MWBE firms that responded and the bid prices. Any negotiations should be documented in the log.
- Documents demonstrating that insufficient MBEs or WBEs are reasonably available to perform the work.
- A written demonstration that the Contractor offered to make up any inability to meet the project MWBE participation goals in other contracts and/or agreements performed by the Contractor on another SRF funded project.
- The date of pre-bid, pre-award, or other meetings scheduled by the Recipient, if any, and the contact information of any MBEs and WBEs who attended and are capable of performing work on the project.
- Any other information or documentation that demonstrates the Contractor conducted good faith efforts to provide opportunities for MWBE participation in their work. For instance, Prime Contractors and MBOs should develop a list of MWBE firms that have expressed interest in working on SRF-funded projects
- The use of certified DBE and small businesses certified through the US Small Business Administration (SBA) may be considered as a demonstration of Good Faith Efforts.

### C. MWBE Utilization Plan

1. The MWBE Utilization Plan must be submitted to the Recipient's MBO after the bid opening, but in no case more than ten (10) business days after the Contractor receives notice from the Recipient that the Contractor has submitted a low bid.
2. The MBO will evaluate a completed MWBE Utilization Plan. If the MBO finds the Utilization Plan sufficient, it will be forwarded to EFC for review. If the MBO finds the Utilization Plan insufficient, the MBO will work with the Contractor to address deficiencies

before submitting to EFC for review. A written notice of acceptance or deficiency will be issued by EFC within 20 business days of receipt of the Utilization Plan. Upon receipt of a notice of deficiency from either the MBO or EFC, the Contractor shall respond with a written remedy to such notice within seven (7) business days of receipt.

3. In coordination with the MBO, EFC will accept an MWBE Utilization Plan upon consideration of many factors, including the following:
  - a. The MWBE Utilization Plan indicates that the proposed goals for the project will be achieved;
  - b. A Contractor, who is a certified MBE or WBE, will be credited for up to 100% of the category of their certification. However, good faith efforts to seek participation in the other category are also required; and,
  - c. Adequate documentation to demonstrate good faith efforts and/or support a specialty equipment/services waiver as described below in Section II(E).
4. EFC reserves the right to request additional information and/or documentation to support the adequacy of the MWBE Utilization Plan.
5. Within 10 days of EFC's acceptance of a MWBE Utilization Plan, EFC will post the approved Utilization Plan on the EFC website.
6. In coordination with the MBO, EFC may issue conditional acceptance of Utilization Plans pending submission of additional documentation that demonstrates there will be an increase in MWBE participation.

#### D. Eligibility for MWBE Participation Credit

1. To receive MWBE participation credit, Contractors or Subcontractors performing work that have been identified in an approved MWBE Utilization Plan must be certified as an MBE or WBE by ESD.
2. Prime Contractors may also include second or lower tier Subcontractors (Subcontractors hired by Subcontractors) on their MWBE Utilization Plan.
3. Credit for MWBE participation shall be granted only for MWBE firms performing a commercially useful business function according to custom and practice in the industry.
  - a. Factors to be used in assessing whether an MWBE is performing a commercially useful function include:
    - i. The amount of work subcontracted;
    - ii. Industry practices;
    - iii. Whether the amount the MWBE is to be paid under the contract is commensurate with the work it is to perform;
    - iv. The credit claimed towards MWBE utilization goals for the performance of the work by the MWBE; and,
    - v. Any other relevant factors.
  - b. "Commercially useful functions" normally include:
    - i. Providing technical assistance to a purchaser prior to a purchase, during installation, and after the supplies or equipment are placed in service;
    - ii. Manufacturing or being the first tier below the manufacturer of supplies or equipment;
    - iii. Providing functions other than merely accepting and referring requests for supplies or equipment to another party for direct shipment to a Contractor; or,
    - iv. Being responsible for ordering, negotiating price, and determining quality and quantity of materials and supplies.
  - c. For construction-related services Contracts or Subcontracts, the following rules apply when calculating MWBE utilization:
    - i. The portion of a Contract or Subcontract with an MWBE serving as a manufacturer that shall be deemed to represent the commercially useful function performed by the MWBE shall be 100% of the total value of the Contract or Subcontract.
    - ii. the portion of a Contract or Subcontract with an MWBE serving as a supplier (as denoted by a NAICS code beginning with 423 or 424, or a

NIGP code that does not begin with the number 9), and so designated in ESD's Directory, that shall be deemed to represent the commercially useful function performed by the MWBE shall be 60% of the total value of the Contract or Subcontract.

- iii. the portion of a Contract or Subcontract with an MWBE serving as a broker (as denoted by NAICS code 425120) that shall be deemed to represent the commercially useful function performed by the MWBE shall be the monetary value for fees, or the markup percentage, charged by the MWBE.
- 4. No credit will be granted for MWBEs that do not perform a commercially useful function. An MWBE does not perform a commercially useful function if its role adds no substantive value and is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of participation.

E. Requests for Waiver

- 1. If the Contractor's application of good faith efforts does not result in the utilization of MWBE firms to achieve the aforementioned goals or a specialty equipment/service waiver is requested, the Contractor may request a full or partial waiver of MWBE participation goals by completing a Request for Waiver form, attaching appropriate documentation of good faith efforts, and submitting same to the MBO. See also Required Contract Language, Section 1(III)(C). Even if an MWBE waiver is granted, EEO information must still be submitted.
- 2. The MBO and EFC will review each waiver request based on the good faith effort criteria presented above and the documentation submitted with the waiver request. EFC will not issue any automatic waivers from MWBE responsibilities.
- 3. In cases where EFC accepts a full or partial waiver of MWBE participation goals, the waiver request will be posted to EFC's website.
- 4. Specialty Equipment/Service Waiver: A specialty equipment/service waiver may be granted in cases where:
  - a. equipment is made by only one non-MWBE manufacturer,
  - b. the technical specifications call for equipment that is not available through an MWBE supplier;
  - c. the equipment is constructed on site by specially trained non-MWBE labor;
  - d. the service is not available through an MWBE (such as work done by National Grid);
  - e. the service is proprietary in nature (such as use of certain computer software necessary for control systems); or,
  - f. the service cannot be subcontracted (such as litigation services).

If the contract includes specialty equipment or services, and documentation is submitted demonstrating that there are no MWBE firms capable of completing this portion of the contract, the specialty amount of the contract may be deducted from the total contract amount to determine the MWBE Eligible Amount and the goals will be applied to the MWBE Eligible Amount. This determination is made at the discretion of the MBO and EFC.

Example:  
\$200,000 - \$50,000 = \$150,000  
(Contract) (Specialty equipment/service) (MWBE Eligible Amount)  
The MWBE goal is applied to the MWBE Eligible Amount.

A request for this specialty equipment/service deduction can be completed by filling out a Request for Waiver form and submitting it to the MBO. The request must include a copy of the page from the contract where the equipment/ service is described and the cost of each item. Additional documentation may be requested by the MBO or EFC.

### III. Subcontractor's Responsibilities

Subcontractors should:

1. Maintain their MWBE certifications, and notify the Contractor and MBO of any change in their certification status.
2. Notify the Contractor of any MWBE Subcontractors they hire so they may be included on the Contractor's Utilization Plan.
3. Respond promptly to solicitation requests by completing and submitting bid information in a timely manner.
4. Maintain business records that should include, but not be limited to, contracts/agreements, records of receipts, correspondence, purchase orders, and canceled checks.
5. Complete and submit the EPA Form 6100-3 - DBE Subcontractor Performance Form to the Contractor prior to submission of the Contractor's bid to the Recipient.
6. Complete and return EPA Form 6100-2 - DBE Subcontractor Participation Form to the Recipient prior to Contractor's execution of the contract.
7. Ensure that a required EEO Policy Statement and applicable MWBE requirements are included in each subcontract.
8. Notify the MBO and EFC when contract problems arise, such as non-payment for services or when the Subcontractor is not employed as described in the MWBE Utilization Plan.

### IV. Protests/Complaints

Contractors or Subcontractors who have any concerns, issues, or complaints regarding the implementation of the SRF MWBE & EEO Program, or wish to protest should do so in writing to the MBO and EFC. The MBO, in consultation with EFC, will review the circumstances described in the submission, investigate to develop additional information, if warranted, and determine whether action is required. If the Contractor or Subcontractor believes the issue has not been resolved to their satisfaction, they may appeal in writing to EFC for consideration.

### V. Waste, Fraud and Abuse

Subcontractors, Contractors, or Recipients who know of or suspect any instances of waste, fraud, or abuse within the MWBE & EEO Program should notify the project MBO and EFC immediately. Additionally, suspected fraud activity should be reported to the USEPA – Office of Inspector General Hotline at (888) 546-8740, the New York State Office of Inspector General at (800) 367-4448, or the ESD Compliance Office at (212) 803-3266.

## **SECTION 2      GUIDANCE FOR NEW YORK STATE CERTIFIED SERVICE-DISABLED VETERAN-OWNED BUSINESS ENTERPRISES (“SDVOB”) PARTICIPATION OPPORTUNITIES**

Contractor may contact the Office of General Services' Division of Service-Disabled Veteran's Business Development at 518-474-2015 or [VeteransDevelopment@ogs.ny.gov](mailto:VeteransDevelopment@ogs.ny.gov) to discuss methods of maximizing participation by SDVOBs on the Contract. The directory of New York State Certified SDVOBs can be viewed at: <http://ogs.ny.gov/Core/SDVOBA.asp>

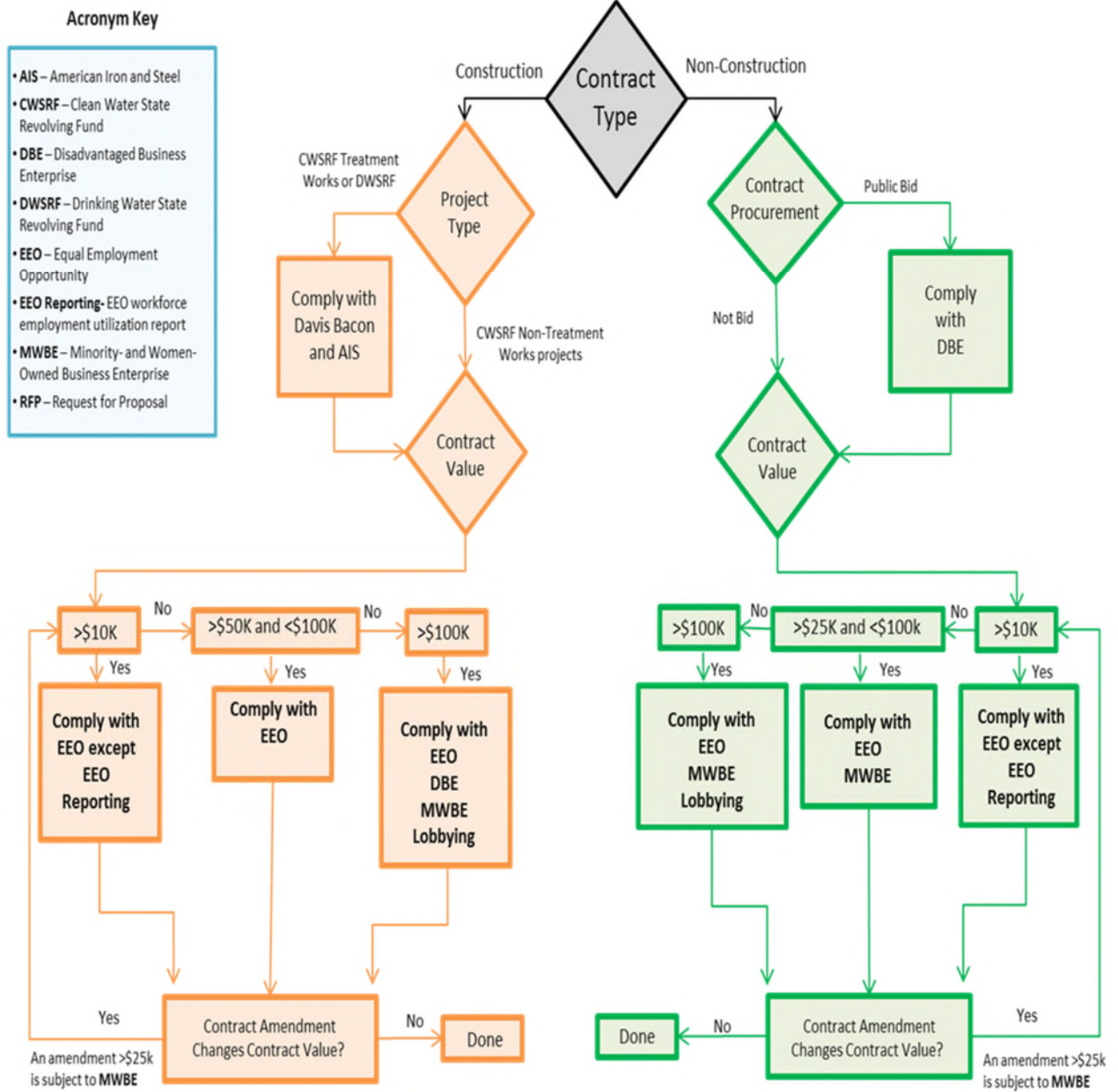
Please contact EFC if you have any questions about utilizing SDVOBs on the Contract.





# SECTION 5

# PROGRAM CONTRACT REQUIREMENT DECISION TREE



## SECTION 6 SUMMARY OF CONTRACTOR REQUIREMENTS FOR SRF-FUNDED PROJECTS

Forms can be found as attachments to this document or online at [www.efc.ny.gov](http://www.efc.ny.gov)

Forms should be submitted electronically via email or through EFC's [dropbox](#)

### To be submitted with this bid:

- EEO Policy Statement
- Documented Proof that EPA Form 6100-2 - DBE Subcontractor Participation Form was given to MWBE Subcontractors
- EPA Form 6100-3 - DBE Subcontractor Performance Form
- EPA Form 6100-4 - DBE Subcontractor Utilization Form
- Lobbying Certification

**Refer to Part 3  
Guidance Section**  
Section 1  
Section 1  
Section 1  
Section 1  
Section 4

### To be submitted prior to or upon Contract award:

- Executed Contracts, Subcontracts, agreements, and purchase orders
- MWBE Utilization Plan and/or Waiver Request
- EEO Staffing Plan

Section 1  
Section 1

### Ongoing documentation & tasks:

- EEO Workforce Utilization Report
- Submit Monthly MWBE Reports to MBO
- Maintain proof of payments for MWBE Subcontractors
- Ensure that all Subcontracts contain Part 2: Required Contract Language

Section 1  
Section 1  
Section 1

**Attachment 1**  
**New York State Environmental Facilities Corporation**  
**EQUAL EMPLOYMENT OPPORTUNITY POLICY STATEMENT**  
**NEW YORK STATE REVOLVING FUND (SRF)**

I, \_\_\_\_\_, am the authorized representative of \_\_\_\_\_.  
Name of Representative Name of Contractor/Service Provider  
I hereby certify that \_\_\_\_\_ will abide by the equal employment  
Name of Contractor/Service Provider  
opportunity (EEO) policy statement provisions outlined below.

- (i) The Contractor will not discriminate on the basis of race, creed, color, national origin, sex, age, disability, or marital status against any employee or applicant for employment, will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination and will make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on Contracts relating to SRF projects.
- (ii) The Contractor shall state in all solicitations or advertisements for employees that, in the performance of the Contract relating to this SRF project, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.
- (iii) The Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status, and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein.
- (iv) The Contractor shall comply with the provisions of the Human Rights Law (Article 15 of the Executive Law), including those relating to non-discrimination on the basis of prior criminal conviction and prior arrest, and with all other State and federal statutory and constitutional non-discrimination provisions, including Titles VI and VII of the Civil Rights Act of 1964, 40 CFR Part 7, 41 CFR Part 60-1 Subpart A, 41 CFR Part 60-4, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975. The Contractor and Subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status.
- (v) The Contractor will include the provisions of subdivisions (i) through (iv) in every Subcontract in such a manner that the requirements of these subdivisions will be binding upon each Subcontractor as to work in connection with the Contract.

**X**

\_\_\_\_\_  
Contractor/Service Provider Representative

**Attachment 2  
New York State Environmental Facilities Corporation  
Equal Employment Opportunity (EEO) Staffing Plan**

Municipality:	County:	SRF Project No.:	Contract ID:
Service Provider Name:		Date:	

**Report Includes – Please select one from the options below:**

- Workforce utilized on this contract
- Contractor/subcontractor’s total workforce

**Reporting Entity – Please select one from the options below:**

- Prime Service Provider
- Subcontractor

Job Categories	Hispanic/ Latino		Not Hispanic or Latino											
			Male						Female					
	Male	Female	White	Black/ African American	Native Hawaiian/ Other Pacific Islander	Asian	Native American/ Alaska Native	Two or More Races	White	Black/ African American	Native Hawaiian/ Other Pacific Islander	Asian	Native American/ Alaska Native	Two or More Races
Senior Level Officials/Managers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Level Officials/Managers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Professionals	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Technicians	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales Workers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administrative Support Workers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skilled Craftsmen	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operatives Semi-Skilled	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laborers & Helpers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Service Workers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Journeypersons														
Apprentices														
Trainees														

<b>Electronic Signature of Service Provider:</b> <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge. <b>Name</b> (Please Type):	<b>Date:</b>
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**Attachment 2**  
**New York State Environmental Facilities Corporation**  
**Equal Employment Opportunity (EEO) Staffing Plan**  
**INSTRUCTIONS**

All Service Providers (including legal, engineering, financial advisory or other professional services, and labor) and each subcontractor identified in the bid or proposal must complete an EEO Staffing Plan and submit it no later than the date of execution of the contract to the Recipient's Minority Business Officer (MBO). Where the work force to be utilized in the performance of the contract **can** be separated out from the contractor's or subcontractors' total work force, the contractor shall complete this form *only for the anticipated work force to be utilized on the contract*. Where the work force to be utilized in the performance of the contract **cannot** be separated out from the contractor's or subcontractors' total work force, the contractor shall complete this form for the contractor's or subcontractors' *total work force*.

**RACE/ETHNIC IDENTIFICATION:** Definitions of race and ethnicity for purposes of completion of this form are as follows:

- **Hispanic or Latino** - A person having origins in Cuba, Mexico, Puerto Rico, South or Central America.
- **White** - A person having origins of Europe, the Middle East, or North Africa.
- **Black or African-American** - A person having origins in any of the black racial groups of Africa.
- **Native Hawaiian or Other Pacific Islander**- A person having origins in any of the peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- **Asian** - A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent
- **American Indian or Alaska Native** – **A person having** origins in any of the original peoples of North, Central, and South America and who maintain tribal affiliation or community attachment.
- **Two or More Races** - All persons who identify with more than one of the above (Non-Hispanic or Latino) five races.

**DESCRIPTION OF JOB CATEGORIES:** The major job categories used in EEO Staffing Plan are as follows:

- **Senior Level Officials and Managers** - Individuals residing in the highest levels of organizations who plan, direct and formulate policies, set strategy and provide the overall direction of enterprises/organizations for the development and delivery of products or services.
- **Mid-Level Officials and Managers** - Individuals who receive directions from the Senior Level management and serve as managers, other than those who serve as Senior Level Officials and Managers, including those who oversee and direct the delivery of products, services or functions at group, regional or divisional levels of organizations.
- **Professionals** - Most jobs in this category require bachelor and graduate degrees, and/or professional certification. In some instances, comparable experience may establish a person's qualifications.
- **Technicians** - Jobs in this category include activities that require applied scientific skills, usually obtained by post-secondary education of varying lengths, depending on the particular occupation, recognizing that in some instances additional training, certification, or comparable experience is required.
- **Sales Workers** - These jobs include non-managerial activities that wholly and primarily involve direct sales.
- **Administrative Support Workers** - These jobs involve non-managerial tasks providing administrative and support assistance, primarily in office settings.
- **Skilled Craftsmen** – Includes higher skilled occupations in construction (building trades craft workers and their formal apprentices) and natural resource extraction workers. Examples of these types of positions include: boilermakers; brick and stone masons; carpenters; electricians; painters.
- **Operatives Semi-Skilled** - Most jobs in this category include intermediate skilled occupations and include workers who operate machines or factory-related processing equipment. Most of these occupations do not usually require more than several months of training. Examples include: textile machine workers.
- **Laborers & Helpers** - Jobs in this category include workers with more limited skills who require only brief training to perform tasks that require little or no independent judgment.
- **Service Workers** - Jobs in this category include food service, cleaning service, personal service, and protective service activities.

See the bid packet at [www.efc.ny.gov](http://www.efc.ny.gov) or your designated MBO for further guidance.

### **Attachment 3 Instructions for Completing and Submitting the Equal Employment Opportunity Workforce Utilization Report**

The Equal Employment Opportunity (“EEO”) Workforce Utilization Report (“Report”) is used by contractors and subcontractors to report the actual workforce utilized in the performance of the contract broken down by job title for a particular reporting period. When the workforce utilized in the performance of the contract can be separated out from the contractor’s and/or subcontractor’s total workforce, the contractor and/or subcontractor shall submit a Report of the workforce utilized on the contract. When the workforce to be utilized on the contract cannot be separated out from the contractor’s and/or subcontractor’s total workforce, information on the contractor’s and/or subcontractor’s total workforce shall be included in the Report.

#### **Instructions for Completing the Report**

1. **Reporting Entity.** Check off the appropriate box to indicate if the entity completing the Report is the contractor or a subcontractor.
2. **Federal Employer Identification Number (“FEIN”).** Enter the FEIN assigned by the Internal Revenue Service (“IRS”) to the contractor or subcontractor for which the Report has been prepared. If the contractor or subcontractor uses a social security number instead of a FEIN, leave this field blank. The contractors and subcontractors for recipients of a grant only (such as an Engineering Planning Grant (EPG), a Water Infrastructure Improvement Act (WIIA) grant, or an Intermunicipal Grant Program (IMG) grant) do not need to fill out this section of the Report.
3. **Name.** Enter the name of the contractor or subcontractor for which the Report has been prepared.
4. **Address.** Enter the address of the contractor or subcontractor for which the Report has been prepared.
5. **Contract Number.** Enter the number of contract that the Report applies to, if applicable.
6. **Reporting Period / Month.** Check off the box that corresponds to the applicable quarterly or monthly (not both) reporting period for this Report. The Report is to be submitted on a monthly basis for construction contracts, and a quarterly basis based on the calendar quarter for all other contracts, during the life of the contract.
7. **Workforce Identified in Report.** Check off the appropriate box to indicate if the workforce being reported is just for the contract or the contractor’s or subcontractor’s total workforce.
8. **Preparer’s Name, Preparer’s Title, Date.** Enter the name and title for the person completing the Report, enter the date upon which the Report was completed, and check the box accepting the name entered into the Report as the digital signature of the preparer.
9. **Occupation Classifications (SOC Major Group) and SOC Job Title.** First, enter the applicable Occupation Classification (SOC Major Group) so a dropdown menu appears under SOC Job Title. Choose the SOC Job Title that best describes the worker.
10. **EEO Job Title and SOC Job Code.** The EEO Job Title and the SOC Job Code will automatically populate in the spreadsheet based upon the Occupation Classifications (SOC Major Group) and SOC Job Title selected. Please do not modify the information populated in these fields.

11. **Race/Ethnic Identification.** Race/ethnic designations do not denote scientific definitions of anthropological origins. For the purposes of this Report, an employee must be included in the group to which he or she appears to belong, identifies with, or is regarded in the community as belonging. However, no person should be counted in more than one race/ethnic group. The race/ethnic categories for this Report are:
- **WHITE** (not of Hispanic origin) all persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.
  - **BLACK/AFRICAN AMERICAN** a person, not of Hispanic origin, who has origins in any of the black racial groups of the original peoples of Africa.
  - **HISPANIC/LATINO** a person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.
  - **ASIAN, NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER** a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands.
  - **NATIVE AMERICAN/ALASKAN NATIVE** a person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
12. **Number of Employees and Number of Hours.** Enter the number of employees and the total number of hours worked by such employees for each SOC Job Title under the columns corresponding to the gender and racial/ethnic groups with which the employees most closely identify.
13. **Total Compensation.** Enter the total compensation paid to all employees for each SOC Job Title, each gender, and each racial/ethnic group. Contractors and subcontractors should report only compensation for work on the contract paid to employees during the period covered by the Report. Compensation should include only sums which must be reported in Box 1 of IRS Form W-2. The contractors and subcontractors for recipients of a grant only (such as an EPG, a WIIA, or an IMG grant) do not need to fill out this section of the Report.
14. **For EFC Use Only.** This section is for EFC use only and does not need to be filled out by the contractor/subcontractor.

### Instructions for Submitting the Report

The Report is to be submitted on a monthly basis for construction contracts, and a quarterly basis based on the calendar quarter for all other contracts, during the life of the contract.

EFC will provide a Report form in Excel format to the Recipient's Minority Business Officer ("MBO"). The Recipient's MBO is responsible for providing the Report form to all contractors. Each contractor is responsible for providing the Report form to all subcontractors.

Reports are to be submitted electronically in Excel format, using the Report form provided, within ten (10) days of the end of each month or quarter, whichever is applicable. For example, the January monthly Report for a construction contract is due by February 10<sup>th</sup> and the January – March quarterly Report for a non-construction contract is due by April 10<sup>th</sup>.

Once the Report form has been completed, each contractor/subcontractor must submit the Report form to EFC and the Recipient's MBO. The Report form must be submitted to EFC according to the following instructions:

1. Go to [www.efc.ny.gov/eeoreporting](http://www.efc.ny.gov/eeoreporting).
2. Enter the requested information pursuant to the instructions on the page. Make sure to choose the correct applicable funding program (Clean Water State Revolving Fund (SRF), Drinking Water SRF, non-SRF Grant Only (e.g. EPG, WIIA, IMG)) and the correct reporting period (reporting



quarter for non-construction OR reporting month for construction). Enter the reporting period of the data, not the date it's submitted.

3. Submit your Report(s) pursuant to the instructions on the page.
4. If you are a contractor, use the naming convention provided by EFC (in the "For EFC Use Only" section of the Report form) for naming the file for upload (i.e., Funding Program – Project Number– Contractor short name (up to fifteen characters) – MWBE ID). The funding programs include CW (clean water SRF), DW (drinking water SRF), and GO (non-SRF grant only). If you are a subcontractor, use the naming convention provided by EFC and replace the contractor's short name with the first fifteen characters of the subcontractor's name, omitting any spaces or special characters.

### **Questions**

If you have questions about or require assistance completing or submitting the Report, please contact EFC at [mwbe@efc.ny.gov](mailto:mwbe@efc.ny.gov) or 518-402-6924.



**Attachment 4**  
**New York State Environmental Facilities Corporation**  
**Monthly Minority- & Women- Owned Business Enterprise (MWBE) Contractor Compliance Report**  
**(“Monthly MWBE Report”)**

**Instructions:**

- Contractors are to complete the report in Word version and email to the Recipient’s Minority Business Officer (“MBO”) on a monthly basis.
- If you require additional pages, you may find them on EFC’s website at [www.efc.ny.gov](http://www.efc.ny.gov).
- **All** MWBE Subcontractors for this contract **MUST** be listed on the form regardless of whether they were paid this month.
- Please save Report as “*MRReport – (Project No). – (Municipality) – (Firm Name) – (Date)*” and send the Word version of this document.
- Proofs of payment in the amounts shown below must be transmitted to the MBO with the report.

Municipality:		County:		Contract ID:		Month:	Year:	
Project No.:		GIGP/EPG No:		Registration No. (NYC only):				
Prime Contractor/Service Provider:			Award Date:		Start Date:		<b>Date all MWBE subs paid in full:</b>	
<b>Signature of Contractor:</b> <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.							Date:	
Last Month’s Contract Amt: \$	<b>MWBE Eligible Amt: \$</b> (Goals are applied to this amount and includes eligible change orders, amendments & waivers)		<b>EFC MWBE Goals</b>			<b>Total Paid to Prime</b>		
Revised Contract Amt: \$			MBE: %	MBE Amt: \$	Total Paid this Month: \$			
			WBE: %	WBE Amt: \$	Total Paid to Date: \$			
			Total: %	Total Amt: \$				
NYS Certified MWBE Contractor & Subcontractor		Please Specify Any Revisions this Month.		Subcontractor Total Amount		Payments this Month	Previous Payments	Total Payments Made to Date
				Original	Revised			
Name: Fed. Employer ID#: <u>Select Only One:</u> <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: <u>Select Only One:</u> <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A		<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED						
Name: Fed. Employer ID#: <u>Select Only One:</u> <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: <u>Select Only One:</u> <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A		<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED						
Name: Fed. Employer ID#: <u>Select Only One:</u> <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: <u>Select Only One:</u> <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A		<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED						

**Attachment 4**  
**New York State Environmental Facilities Corporation**  
**Monthly Minority- & Women- Owned Business Enterprise (MWBE) Contractor Compliance Report**  
**(“Monthly MWBE Report”)**

NYS Certified MWBE Contractor & Subcontractor	Please Specify Any Revisions this Month.	Subcontractor Contract Amount		Payments this Month	Previous Payments	Total Payments Made to Date
		Original	Revised			
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					

**Attachment 4**  
**New York State Environmental Facilities Corporation**  
**Monthly Minority- & Women- Owned Business Enterprise (MWBE) Contractor Compliance Report**  
**(“Monthly MWBE Report”)**

NYS Certified MWBE Contractor & Subcontractor	Please Specify Any Revisions this Month.	Subcontractor Total Amount		Payments this Month	Previous Payments	Total Payments Made to Date
		Original	Revised			
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					
Name: Fed. Employer ID#: Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: Select Only One: <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED					

**Attachment 4**  
**New York State Environmental Facilities Corporation**  
**Monthly Minority- & Women- Owned Business Enterprise (MWBE) Contractor Compliance Report**  
**("Monthly MWBE Report")**

Name: Fed. Employer ID#: <u>Select Only One:</u> <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: <u>Select Only One:</u> <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED				
Name: Fed. Employer ID#: <u>Select Only One:</u> <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: <u>Select Only One:</u> <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED				
Name: Fed. Employer ID#: <u>Select Only One:</u> <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: <u>Select Only One:</u> <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED				
Name: Fed. Employer ID#: <u>Select Only One:</u> <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other: <u>Select Only One:</u> <input type="checkbox"/> Broker ___% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<input type="checkbox"/> Subcontractor is REMOVED <input type="checkbox"/> NEW Subcontractor <input type="checkbox"/> Subcontract Amt. INCREASED <input type="checkbox"/> Subcontract Amt. DECREASED				
Additional Pages can be found at <a href="http://www.efc.ny.gov">www.efc.ny.gov</a> TOTAL					
<b>Please explain any revisions and note the scope of work that new subcontractors will be providing. Please note that change orders over \$25K may require that good faith efforts be made to obtain additional MWBE participation:</b>  					

**Attachment 5**  
**NYS Environmental Facilities Corporation**  
**Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan**

**Instructions for Contractors & Service Providers:**

Contractors and Service Providers must complete Sections 2 and 3. **Submit the completed, signed (electronic signature box checked and dated) form in Microsoft Word format to the Recipient's designated Minority Business Officer (MBO) no later than the date of contract execution.** Incomplete forms will be found deficient. If more than 10 subcontractors are used, additional pages for Section 3 can be found on EFC's website.

**If the prime contract is being performed by the parties to a Joint Venture, Teaming Agreement, or Mentor-Protégé Agreement that includes a certified MWBE, please contact EFC for assistance.**

MWBE firms must be certified by the NYS Empire State Development Corporation (ESD) in order to be counted towards satisfaction of MWBE participation goals. The utilization of certified MWBEs for non-commercially useful functions may not be counted towards utilization of certified MWBEs in the Utilization Plan. Please note whether a firm is serving as a broker or supplier on the contract. A broker is denoted by NAICS code 425120 and is designated as a broker in ESD's MWBE Directory. A supplier is denoted by a NAICS code beginning with 423 or 424, or a NIGP code that does not begin with the number 9, and is designated as a supplier in ESD's MWBE Directory. If a firm is serving as a broker, please additionally provide the percentage of the broker's commission on the contract.

See the Bid Packet at [www.efc.ny.gov](http://www.efc.ny.gov) or consult your designated MBO for further guidance.

**Instructions for Minority Business Officers (MBO):**

The MBO must complete Section 1. The MBO may designate an Authorized Representative to complete and submit quarterly payment reports on its behalf, and, if so designated, the MBO's Authorized Representative must also complete Section 1. The Authorized Representative may only submit quarterly payment reports on behalf of the MBO and may not submit any other required forms or reports for the MBO. The MBO must complete Section 1 even if designating an Authorized Representative. **Submit the completed, signed (electronic signature box checked and dated) form in Microsoft Word format via e-mail to your EFC MWBE Representative.**

The subject heading of the e-mail to the EFC MWBE Representative should follow the format "UP, Project Number, Contractor." EFC will review the Utilization Plan and notify the MBO via e-mail of its acceptance or denial.

Within 10 days of EFC's acceptance of a Utilization Plan, EFC will post the approved Utilization Plan on the EFC website.

**Attachment 5  
NYS Environmental Facilities Corporation  
Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan**

SECTION 1: MUNICIPAL INFORMATION			
Recipient/Municipality:		County:	
Project No.:	GIGP/EPG No.:	Contract ID:	Registration No. (NYC only):
Minority Business Officer:		Email:	Phone #:
Address of MBO:			
Electronic Signature of MBO: <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.			Date:
<i>Complete if applicable:</i>			
Authorized Representative:		Title:	
Authorized Rep. Company:		Email:	Phone #:
Electronic Signature of Authorized Rep.: <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.			Date:

SECTION 2: PRIME CONTRACTOR / SERVICE PROVIDER INFORMATION				
Firm Name:			Contract Type: <input type="checkbox"/> Construction <input type="checkbox"/> Other Services	
Prime Firm is Certified as: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> N/A <input type="checkbox"/> Other: Please repeat information in the Utilization Plan below (Section 3). If dual certified, you must select either MBE or WBE.				
Address:		Phone #:	Fed. Employer ID #:	
Description of Work:				
Award Date:	Start Date:	Completion Date:	<b>MWBE GOAL Total</b>	<b>PROPOSED MWBE Participation</b>
Total Contract Amount: \$ MWBE Eligible Contract Amount: \$ (MWBE Goals are applied to this amount and includes all change orders, amendments, & waivers)			MBE:      %    \$	MBE:      %    \$
			WBE:      %    \$	WBE:      %    \$
			<b>Total:</b> %    \$	<b>Total:</b> %    \$



**Attachment 5**  
**NYS Environmental Facilities Corporation**  
**Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan**

SECTION 3: M/WBE SUBCONTRACTOR INFORMATION				
<b>This Submittal is:</b> <input type="checkbox"/> The First/Original Utilization Plan <input type="checkbox"/> Revised Utilization Plan #:				
NYS Certified M/WBE Subcontractor Info		Contract Amount:		For EFC Use:
		MBE (\$)	WBE (\$)	
<b>Name:</b>		<b>Fed. Employer ID#:</b>		
<b>Address:</b>		<b>Phone #:</b>		
<b>Scope of Work:</b>		<b>Email:</b>		
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:		<b>Start Date:</b>		
Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A		<b>Completion Date:</b>		
<b>Full Contract Amount: \$</b>				
<b>Name:</b>		<b>Fed. Employer ID#:</b>		
<b>Address:</b>		<b>Phone #:</b>		
<b>Scope of Work:</b>		<b>Email:</b>		
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:		<b>Start Date:</b>		
Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A		<b>Completion Date:</b>		
<b>Full Contract Amount: \$</b>				
<b>Name:</b>		<b>Fed. Employer ID#:</b>		
<b>Address:</b>		<b>Phone #:</b>		
<b>Scope of Work:</b>		<b>Email:</b>		
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:		<b>Start Date:</b>		
Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A		<b>Completion Date:</b>		
<b>Full Contract Amount: \$</b>				
<b>Name:</b>		<b>Fed. Employer ID#:</b>		
<b>Address:</b>		<b>Phone #:</b>		
<b>Scope of Work:</b>		<b>Email:</b>		
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:		<b>Start Date:</b>		
Select Only One: <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A		<b>Completion Date:</b>		
<b>Full Contract Amount: \$</b>				

**Attachment 5**  
**NYS Environmental Facilities Corporation**  
**Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan**

SECTION 3: M/WBE SUBCONTRACTOR INFORMATION continued				
<b>Name:</b>	<b>Fed. Employer ID#:</b>			
<b>Address:</b>	<b>Phone #:</b>			
<b>Scope of Work:</b>	<b>Email:</b>			
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:	<b>Start Date:</b>			
<b>Select Only One:</b> <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<b>Completion Date:</b>			
<b>Full Contract Amount: \$</b>				
<b>Name:</b>	<b>Fed. Employer ID#:</b>			
<b>Address:</b>	<b>Phone #:</b>			
<b>Scope of Work:</b>	<b>Email:</b>			
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:	<b>Start Date:</b>			
<b>Select Only One:</b> <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<b>Completion Date:</b>			
<b>Full Contract Amount: \$</b>				
<b>Name:</b>	<b>Fed. Employer ID#:</b>			
<b>Address:</b>	<b>Phone #:</b>			
<b>Scope of Work:</b>	<b>Email:</b>			
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:	<b>Start Date:</b>			
<b>Select Only One:</b> <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<b>Completion Date:</b>			
<b>Full Contract Amount: \$</b>				
<b>Name:</b>	<b>Fed. Employer ID#:</b>			
<b>Address:</b>	<b>Phone #:</b>			
<b>Scope of Work:</b>	<b>Email:</b>			
Select Only One: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> Other:	<b>Start Date:</b>			
<b>Select Only One:</b> <input type="checkbox"/> Broker __% <input type="checkbox"/> Supplier <input type="checkbox"/> N/A	<b>Completion Date:</b>			
<b>Full Contract Amount: \$</b>				
SIGNATURE				
<b>Electronic Signature of Contractor:</b> <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and that all MWBE subcontractors will perform a commercially useful function.				<b>Date:</b>
<b>Name (Please Type):</b>				

**Attachment 6**  
**New York State Environmental Facilities Corporation**  
**Minority & Women Owned Business Enterprise (MWBE) Waiver Request Form**

**Instructions for Contractors & Service Providers:**

Contractors and Service Providers must complete Sections 2, 3, and 4. **Submit the completed, signed (electronic signature box checked and dated) form in Microsoft Word format to the Recipient's designated Minority Business Officer (MBO).** Incomplete forms will be found deficient.

See the Bid Packet at [www.efc.ny.gov](http://www.efc.ny.gov) or consult your designated MBO for further guidance.

**Instructions for Minority Business Officers (MBO):**

The MBO must complete Section 1. **Submit the completed, signed (electronic signature box checked and dated) form in Microsoft Word format via e-mail to your EFC MWBE Representative.** The subject heading of the e-mail to the EFC MWBE Representative should follow the format "Waiver Request, Project Number, Contractor." EFC will review and notify the MBO via e-mail of its acceptance or denial.

If a partial MWBE waiver is requested, an MWBE Utilization Plan must also be submitted for the amount of proposed MWBE participation.

SECTION 1: MUNICIPAL INFORMATION			
Recipient/Municipality:		County:	
Project No.:	GIGP/EPG No.:	Contract ID:	Registration No. (NYC only):
Minority Business Officer (MBO):		Email:	Phone #:
Address of MBO:			
Signature of MBO: <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.			Date:

SECTION 2: PRIME CONTRACTOR / SERVICE PROVIDER INFORMATION			
Firm Name:		Contract Type: <input type="checkbox"/> Construction <input type="checkbox"/> Other Services	
Prime Firm is Certified as: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> N/A <input type="checkbox"/> Other:			
Address:		Phone #:	Fed. Employer ID #:
Contact Information of Firm Representative Authorized to Discuss Waiver Request:			
Name:		Title:	Phone #: E-mail:
Description of Work:		<b>EFC MWBE GOAL Total</b>	
Award Date:	Start Date:	Completion Date:	<b>MBE:    %    \$</b>
Total Contract Amount: \$		<b>WBE:    %    \$</b>	
MWBE Eligible Contract Amount: \$ (MWBE Goals are applied to this amount and includes all change orders, amendments, & waivers)			
		<b>Total:    %    \$</b>	

**Attachment 6**  
**New York State Environmental Facilities Corporation**  
**Minority & Women Owned Business Enterprise (MWBE) Waiver Request Form**

**SECTION 3: TYPE OF MWBE WAIVER REQUESTED**

1.  **Full Waiver** (No MWBE participation)
2.  **Partial Waiver** (Less than the MWBE goals; indicate below the proposed MWBE participation)

**PROPOSED MWBE Participation**

**MBE:**        %    \$

**WBE:**        %    \$

**Total:**      %    \$

3.  **Specialty Equipment/Services Waiver** (Must be of SIGNIFICANT cost - list of equipment and cost must be attached in addition to the supporting documentation outlined below)

**SECTION 4: SUPPORTING DOCUMENTATION**

To be considered, the Request for Waiver Form must be accompanied by the documentation requested in items 1 – 9, as listed below. If a Specialty Equipment Waiver is requested, it must be accompanied by the documentation requested in items 1 - 13. If a Specialty Services Waiver is requested, it must be accompanied by the items requested in items 1 – 9 and item 14. Copies of the following information and all relevant supporting documentation must be submitted along with the request. Please contact EFC for assistance, including sample documentation.

1. A letter of explanation setting forth your basis for requesting a partial or total waiver and detailing the good faith efforts that were made.
2. Copies of advertisements in any general circulation, trade association, and minority- and women-oriented publications in which you solicited MWBEs for the purposes of complying with your participation goals, with the dates of publication.
3. Screenshots of search results (by business description or commodity code) from Empire State Development Corporation's (ESD) MWBE Directory of all certified MWBEs that were solicited for purposes of complying with your MWBE participation goals.
4. Copies of faxes, letters, or e-mails sent to MWBE firms to solicit participation and their responses.
5. A log of solicitation results, consisting of the list of MWBE firms solicited for the contract and the outcome of the solicitations. The log should be broken out into separate areas for each task that is solicited (e.g., trucking, materials, electricians) and clearly provide a rationale for firms included on the completed Utilization Plan as well as for those not chosen. The log should show: that each MWBE firm was contacted twice by two different methods (e.g., fax and phone); who was spoken to; what was said; and the final outcome of the solicitation.
6. A description of any contract documents, plans, or specifications made available to MWBEs for purposes of soliciting their bids and the date and manner in which these documents were made available. Specifically, include information on the scope of work in the contract and a breakout of tasks or equipment, such as

**Attachment 6**  
**New York State Environmental Facilities Corporation**  
**Minority & Women Owned Business Enterprise (MWBE) Waiver Request Form**

a schedule of values for a construction contract or a proposal or excerpt from a professional services agreement.

7. Documentation of any negotiations between you, the Contractor, and the MWBEs undertaken for purposes of complying with your MWBE participation goals.
8. Any other information you deem relevant which may help us in evaluating your request for a waiver. Examples may include sign-in sheets from any pre-bid meetings where MWBE firms were invited, attendance at MWBE forums, etc.
9. EFC and the MBO reserve the right to request additional information and/or documentation.

**Additional Documentation for Requests for Specialty Equipment Waivers:**

10. Copies of the appropriate pages of the technical specification related to the equipment showing the choices for manufacturers or other information that limits the choice of vendor.
11. Letter, e-mail or screenshot of website from the manufacturer listing their distributors in NYS and the locations.
12. Screenshots of ESD's MWBE Directory searches for the manufacturer and distributor showing that they are not found in the Directory.
13. An invoice or purchase order showing the value of the equipment.

**Additional Documentation for Requests for Specialty Service Waivers:**

14. A letter of explanation containing information about the scope of work and why no MWBE firms could be subcontracted to provide that service.

**Note:** Unless a Total Waiver has been granted, Firms will be required to submit all reports and documents pursuant to the provisions set forth in the procurement and/or contract, as deemed appropriate by EFC, to determine MWBE compliance. In cases where EFC accepts a full or partial waiver of MWBE participation goals, the waiver request will be posted to EFC's website.

**SIGNATURE**

**Electronic Signature of Contractor:**

I certify that the information submitted herein is true, accurate and complete to the best of my knowledge.

**Name:** (Please Type):

**Date:**

**Attachment 7**  
**United States Environmental Protection Agency**  
**Form 6100-2**  
**DBE Subcontractor Participation Form**

## Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Participation Form

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE<sup>1</sup> subcontractor<sup>2</sup> the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Received from the Prime Contractor Involving Construction, Services, Equipment or Supplies	Amount Received by Prime Contractor

<sup>1</sup> A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

<sup>2</sup> Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.





**Attachment 8**  
**United States Environmental Protection Agency**  
**Form 6100-3**  
**DBE Subcontractor Performance Form**

**Disadvantaged Business Enterprise (DBE) Program  
DBE Subcontractor Performance Form**

This form is intended to capture the DBE<sup>1</sup> subcontractor's<sup>2</sup> description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractor's bid or proposal package.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor
DBE Certified By: ___ DOT ___ SBA ___ Other: _____		Meets/ exceeds EPA certification standards? ___ YES ___ NO ___ Unknown

<sup>1</sup> A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

<sup>2</sup> Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**Disadvantaged Business Enterprise (DBE) Program  
DBE Subcontractor Performance Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

<b>Prime Contractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

<b>Subcontractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

**Attachment 9**  
**United States Environmental Protection Agency**  
**Form 6100-4**  
**DBE Subcontractor Utilization Form**

### Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE<sup>1</sup> subcontractors<sup>2</sup> and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Issuing/Funding Entity:			

I have identified potential DBE certified subcontractors	__ YES	__ NO	
If yes, please complete the table below. If no, please explain:			
Subcontractor Name/ Company Name	Company Address/ Phone/ Email	Est. Dollar Amt	Currently DBE Certified?

Continue on back if needed

<sup>1</sup> A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

<sup>2</sup> Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**Disadvantaged Business Enterprise (DBE) Program  
DBE Subcontractor Utilization Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

<b>Prime Contractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

**Attachment 10**  
**New York State Environmental Facilities Corporation**  
**CERTIFICATION REGARDING LOBBYING**  
**FOR**  
**CONTRACTS, GRANTS, LOANS, AND**  
**COOPERATIVE AGREEMENTS**  
**40 CFR Part 34**

**SRF Project No.:** \_\_\_\_\_

The undersigned certifies, to the best of his or her knowledge and belief, that:

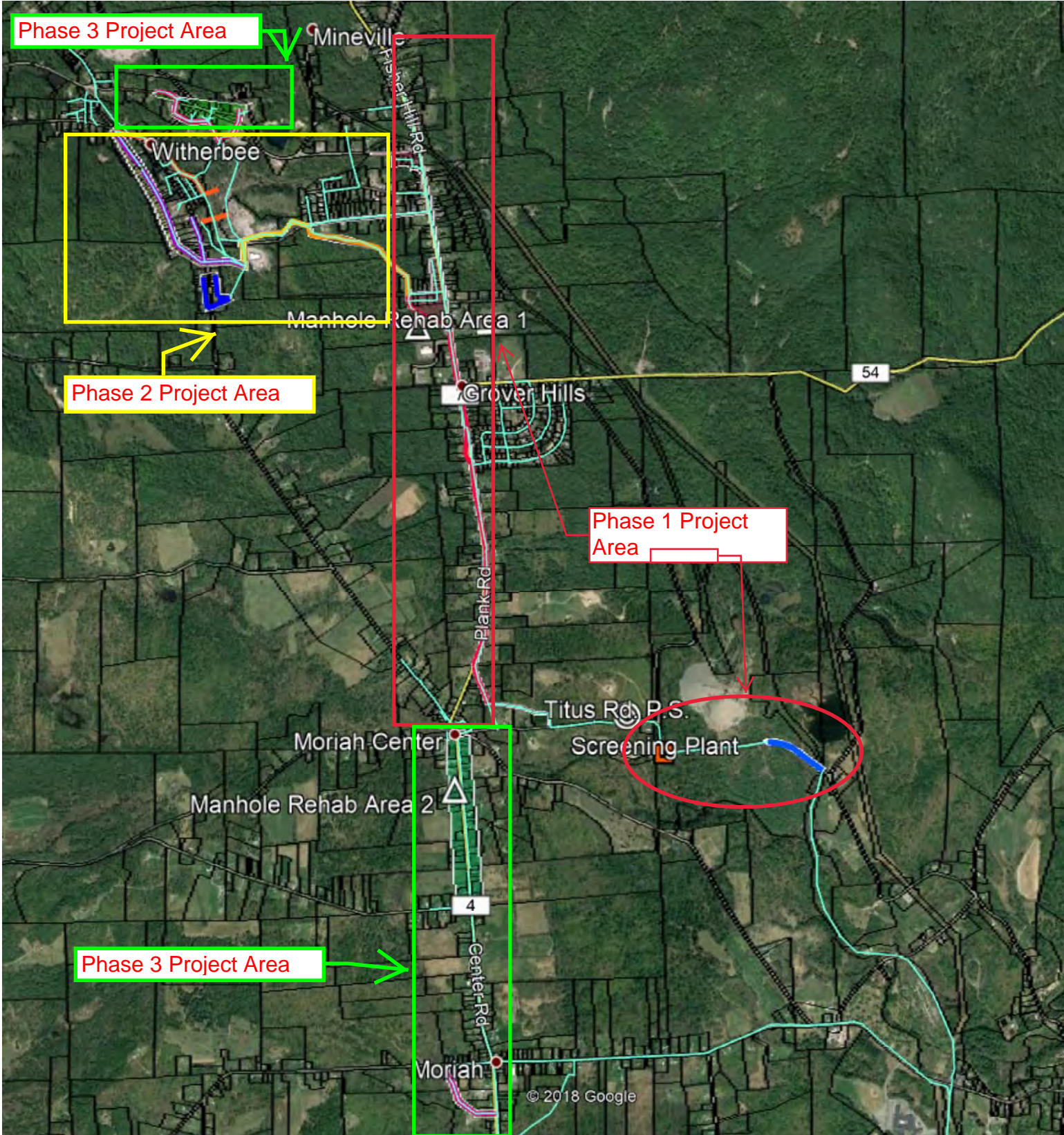
- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_  
Contract ID: \_\_\_\_\_

## **APPENDIX B: PROJECT REFERENCE DATA**





# Town of Moriah

## Collection System Evaluation *(Revised)*

NYSEFC Engineering Planning Grant (EPG)  
Project No.: 46088

Prepared for the  
Town of Moriah  
38 Park Place, Suite 1  
Port Henry, NY 12974

January 3, 2017



Architecture, Engineering, and Land Surveying Northeast, PLLC

10-12 City Hall Place, Plattsburgh, New York

Tel: 518-561-1598 Fax: 518-561-1990

[www.aesnortheast.com](http://www.aesnortheast.com)

AES Project No. 4410

**EXECUTIVE SUMMARY**

**PROJECT BACKGROUND &  
HISTORY**

**ALTERNATIVE ANALYSIS**

**SUMMARY & COMPARISON OF  
ALTERNATIVES**

**RECOMMENDED ALTERNATIVE**

**FIGURES**

**TABLES**

**APPENDICES**

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## 1) EXECUTIVE SUMMARY

*This report, revises and supersedes the previously issued August 31, 2017 to update and correct information based on NYSDEC reviews and with addition information provided by the Town.*

### 1.1 Background

The Town of Moriah owns and operates a sanitary sewer collection system to serve several hamlets and connecting areas. On April 1, 2017, the Village of Port Henry formally dissolved and the Town took over the former Village's collection system. The Town (formally as a joint agreement with the Village) owns and operates a central sewage treatment facility located at 27 Bulwagga Drive in the former Village of Port Henry, on the shore of Lake Champlain. The plant is currently authorized to discharge up to 0.850 million gallons per day (MGD) of treated wastewater effluent from the facility. This volume is based on a maximum monthly average in accordance with the conditions of the State Pollution Discharge Elimination System (SPDES) Permit issued by the New York State Department of Environmental Conservation (NYSDEC). The permitted discharge for treated wastewater is to Lake Champlain.

### 1.2 Purpose

This report focuses on the Town's collection system.

In 2015, the Town of Moriah entered into an Order on Consent with the New York State Department of Environmental Conservation (NYSDEC) for electrical inspections of existing pump stations, an Inspection and Maintenance (I & M) Program for the Town's sewage treatment works and sewer system, as well as a Comprehensive Performance Evaluation (CPE) with a Capital Improvement Plan (CIP) prepared by a New York State licensed professional engineer.

The original scope of this report (around which the grant application was written) was to evaluate the Town's two pump stations as well as the Town's screening plant and siphon. However, the scope was increased after the receipt of the Order to include an evaluation of the remaining collection system components. Please note that an evaluation does not require a full inspection of every pipe and manhole, and that extent work is outside of the scope of this report. The former Village of Port Henry collection system was not part of the Town when the Order was issued and the report scope was developed, therefore, an evaluation of the Village of Port Henry collection system is outside of the scope of this report and is not included.

The (I&M) Program is outside of the scope of this report and will be submitted separately.

Previous reporting (from 2015) evaluated the sewer system in the areas of Mineville, Witherbee, and portions of plant road.

This report includes an evaluation of the remaining portions of the collection system, including the Plank Road sewer main (MH 260 to MH 108), Grover Hills service area, Moriah Center service area, Switchback Road trunk sewer Main, The "Federal Water Main "Gas Main"" trunk sewer main, and the Moriah Corners service area.

A reference to the 2015 report's cost and schedule combined with the cost and schedule for the project identified in this report is included in this document to satisfy the CIP requirement.

### 1.3 Evaluations Conducted

AES Northeast gathered existing mapping, performed targeted manhole inspections, pump station inspections, gathered background data from the operators and reviewed sewer main inspections provided by the Town in order to provide a conditions assessment of the collection system and provide recommendations for repair and upgrade. Along with Town staff, AES located, using GIS equipment, as many manholes as could be found during



walkthroughs. It is highly likely that additional manholes exist in the collection system that were not able to be located (paved over, buried, etc.).

#### **1.4 Recommendations**

It is recommended that the Town continue to pursue grant funds to allow for reconstruction and repair of sewer mains and pump stations as outlined in both this and the 2015 report.

#### **1.5 Report Status**

*Although funded through a separate Engineering Planning Grant, this report is considered a modification and extension of the 2015 report. As such the proposed projects can and should be grouped with the proposed projects in the base 2015 report.*

## 2) PROJECT BACKGROUND & HISTORY

### 2.1 Relevant Documentation, Previous Reports, Jurisdictional Permitting Agencies, and Regulatory Design Manuals.

#### 2.1.1 Relevant Documentation

The following documents have been included for easy reference.

##### a. Order on Consent

Refer to **Appendix A**: *Order on Consent*. Included in the appendix is a copy an extension letter received to allow for additional time to complete this report.

##### b. Previous Reports

The following reports were reviewed in preparation of this report:

**Village of Port Henry/Town of Moriah, Inflow/Infiltration Study, Flow Monitoring Report - August 17, 2001: AES Northeast, PLLC.**

**Engineering Report of Findings for the Village of Port Henry/Town of Moriah Joint Wastewater Treatment Plant - August 17, 2001: AES Northeast, PLLC.**

**Village of Port Henry, Addendum #1, Engineering Report of Findings for the Sanitary Sewer Overflows (SSO) for Manhole 13 - August 11, 2010: AES Northeast, PLLC.**

**Town of Moriah, Collection System Evaluation, Engineering Planning Grant, CFA Project #27719 – April 30, 2015: AES Northeast, PLLC.**

- Investigation of Mineville and Witherbee service areas, along with portions of the Plank Road sewer main.
- The relevant portion of the report, relating to the basis of design, has been included as **Appendix B**: *Excerpt from "Town of Moriah, Collection System Evaluation, Engineering Planning Grant, CFA Project #27719"*.

#### 2.1.2 Jurisdictional Permitting Agencies

##### a. Town of Moriah State Environmental Quality Review Act (SEQR)

Per the NYSDEC website "In New York State, most projects or activities proposed by a state agency or unit of local government, and all discretionary approvals (permits) from a NYS agency or unit of local government, require an environmental impact assessment as prescribed by [Statutory authority: Environmental Conservation Law Sections 3-0301(1) (b), 3-0301(2) (m) and 8-0113]. SEQR requires the sponsoring or approving governmental body to identify and mitigate the significant environmental impacts of the activity it is proposing or permitting.

Environmental assessments are standardized through use of the Environmental Assessment Form (EAF). [The Environmental Assessment Forms](#) are in a pdf format that can be filled and saved. To assist applicants in preparing Part 1 of either the Short or Full EAF, the NYSDEC has developed EAF Workbooks and a GIS mapping program (the EAF Mapper) that searches spatial data bases and provides answers to location-based questions which are automatically filled onto a pdf copy of an EAF and provided to the user. The spatial data used by the EAF mapping program to complete the new EAFs is based on the GIS data sets used and maintained by DEC, or actively maintained by various agencies and shared with DEC.

The Legislature has made SEQR self-enforcing; that is, each agency of government is responsible to see that it meets its own obligations to comply."

b. New York's State Historic Preservation Office (SHPO)

SHPO helps communities identify, evaluate, preserve, and revitalize their historic, archeological, and cultural resources. The SHPO administers programs authorized by both the National Historic Preservation Act of 1966 and the New York State Historic Preservation Act of 1980. The SHPO is responsible to review archeological reports prepared on behalf of the community, as the community may be required to retain a professional archeologist for review of any projects receiving state or federal aid. If archeological finds are discovered, the SHPO will direct how they are addressed and preserved. The SHPO utilizes an online mapper, Cultural Resource Informational System (CRIS) that can be accessed to identify potential cultural resources that may be located in the project planning area.

c. Adirondack Park Agency (APA)

For communities located within the Adirondack Park, the APA has land use designations that can affect improvement projects and restrictions and setbacks from natural resources such as streams and wetlands. The project planning area falls within the hamlet area of the town. Hamlets are the least regulated areas (by the APA) of the park, however certain criteria, specifically wetlands if present, may require an APA permit.

d. The New York State Department of Environmental Conservation (NYSDEC)

NYSDEC also has environmental regulatory review for all major projects involving the surface waters of the State of New York, both discharging to, and the taking of, water from those natural resources, discharges and taking of groundwater aquifer water resources, and various stormwater and wetland regulations that may pertain to the planning process for a community. NYSDEC also is responsible to verify that all sanitary sewer projects comply with all applicable regulations.

e. The New York State Department of Transportation (NYSDOT)

NYSDOT owns and operates state highways, as well as manages preservation efforts for scenic byways and highways. NYSDOT typically owns, or secures through easement, a Right-of-Way (ROW) to allow maintenance and protection of the roads that it manages. NYSDOT allows municipalities to install infrastructure, such as utility lines, within the NYSDOT ROW. All installations must comply with all NYSDOT standards and must not adversely impact the roadways. NYSDOT requires review of all engineering plans for work within the ROW and must approve the plans. In addition, highway work permits are required of the contractor that dictate traffic control, bonding, etc.

f. U.S. Army Corps of Engineering (ACOE)

ACOE is a U.S. Federal Agency under the Department of Defense. It is one of the world's largest public engineering, design, and construction management agencies. The ACOE's regulatory program is authorized to protect the Nation's aquatic resources through evaluation of permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. Waters of the United States include all navigable waters, tributaries to navigable waters, and adjacent wetlands. Navigable waters are defined as "those waters that are subject to the ebb and flow of the tide and/or are presently being used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. The Corps must first determine if the waters at the project site are jurisdictional and subject to the requirements of the Section 404 permitting program. Once jurisdiction has been established, permit review and authorization follows a sequential process that encourages avoidance of impacts, followed by minimizing impacts and, finally, requiring mitigation for unavoidable impacts to the aquatic environment.

g. Environmental Protection Agency (EPA)

The US EPA develops the regulations and implementation strategies that are required of municipalities with regard to water quality. In New York, regulation and enforcement is typically handled through the NYSDEC, however the EPA can in certain cases, become involved.

h. Essex County Department of Public Works

Like, NYSDOT, Essex County regulated utility work within County Road ROW. Any work within the ROW will require approval and permits.

### **2.1.3 Regulatory Design Manuals**

a. New York State Department of Environmental Conservation (NYSDEC) Design Manual

New York State Department of Environmental Conservation, "Design Standards for Intermediate –Sized Wastewater Treatment Systems," published in 2012.

b. "10 States Standards"

Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, "Recommended Standards for Wastewater Facilities," published in 2014.

## **2.2 Site Information**

### **2.2.1 Location (include maps with appropriate scale topographical features, legal boundaries, as well as photographs)**

The Town of Moriah is located in the southeastern portion of Essex County, New York. The Town is entirely located within the Adirondack Park and nearly one-half of its land area classified as Resource Management according to the Adirondack Park Agency (APA).

Refer to **Figure 2.1**: *General Location Map*.

### **2.2.2 Land Use**

a. State Conservation Areas – Wild Forests and Wilderness Areas

The Town of Moriah has one state designated conservation area located within the town border. 4,724 acres of the 40,000 acre Hammond Pond Wild Forest Area is located in Moriah, however, the projected project area is not in this designated area.

A wilderness area is an area of state land or water having a primeval character, without significant improvement or protected and managed so as to preserve, enhance and restore, where necessary, its natural conditions.

Wild forest areas convey less of a sense of remoteness and provide fewer outstanding opportunities for solitude for visitors and, therefore, are managed to provide opportunities for a greater variety of recreational activities and a higher intensity of recreational use.

The presence of the designated forest and wilderness areas provides multiple opportunities for residents and visitors to the region to directly experience the natural environment.

All land, both public and private, within the Adirondack Park has been designated a land use classification by the APA. The land use classification sets restrictions on land use and development, and establishes setbacks from

natural resources. The purpose of the APA land use classifications is to balance private ownership and economic growth and development with maintaining the natural character of the Adirondack Park.

Refer to **Figure 2.2**: *APA Land Use Designations*.

b. Zoning

The land use regulations of the Adirondack Park will be the limiting factor in the amount of growth that can occur with planning area. The Town of Moriah does not currently have zoning regulations. A map of the former Village of Port Henry's zoning has been included for reference.

Refer to **Figure 2.3**: *Zoning Map*.

c. Scenic Byways

New York State and the federal government both have programs that identify historically and visually significant highways and manage projects in and around these highways to avoid disturbing aesthetics of the areas around the highways. Designated highways are known as Scenic Byways. NYSDOT is the agency responsible for managing this program. The NYS Scenic Byway "Lakes to Locks Passage" All American Road runs through Port Henry as part of NYS-9N. At this time any modifications to NYS-9N is outside of the scope of this report.

Refer to **Figure 2.4**: *NYSDOT Scenic Byways*.

### 2.2.3 Geologic Conditions

a. Topography

Refer to **Figure 2.5**: *Town of Moriah Topography*.

b. Soils

The United States Department of Agriculture (USDA) Web Soil Survey was utilized for information on soil type, hydrologic soil group classification, and depth to any restrictive feature.

The project site contains a wide array of soil types and slope characteristics consisting of the following: Champlain, Colton, Hollis-Rock, Kalurah, Lyman-Knob Lock, Malone, Nicholville, Pyrities, Pyrities-Nehasne, Roundabout, Tunbridge-Lyman, Udorthents and Vergennes.

Soils are also classified into Hydrologic Soil Groups (HSG) to indicate the minimum rate of infiltration obtained for bare soil after prolonged wetting. The HSGs for the Project area range from A to D soils. The following is a general description of HSGs in order of highest rate of infiltration to lowest rate of infiltration:

<u>HSG</u>	<u>Soil Texture</u>
A	Sand, loamy sand, or sandy loam (highest infiltrating soil)
B	Silt loam or loam
C	Sandy clay loam
D	Clay loam, silty clay loam, sandy clay, silty clay, or clay (lowest infiltrating soil)

USDA also provides information on depth to any restrictive feature (i.e., bedrock). The restrictive features vary from 0" to >79" for Moriah. A subsurface investigation was not performed for this report.

Refer to **Figure 2.6**: *USDA Soils Map*.

Refer to **Figure 2.7**: *USDA Hydrologic Soils Group Map*.

Refer to **Figure 2.8**: *USDA Depth to Any Restrictive Feature*.

## 2.2.4 Environmental Resources

### a. Water Bodies

Moriah is surrounded by several surface water bodies that ultimately drain towards Lake Champlain. Water bodies include McKenzie Brook, Mill Brook, Stony Brook, and Bartlett Brook. These water bodies are classified as Class A, Class AA(T), and Class C(T) by the NYSDEC. Special requirements apply to sustain these waters that support drinking water, and valuable and sensitive fisheries.

NYSDEC describes the meaning of these classifications of water bodies as follows.

- Class AA and Class A water bodies are used or are suitable for use as drinking water.
- Class C water bodies are suitable to support fisheries and are suitable for con-contact use.
- The (T) designation indicates that the water body may support trout population.

Per NYSDEC: *"Certain waters of the state are protected on the basis of their classification. Streams and small water bodies located in the course of a stream with a classification of AA, A, or B, or with a classification of C with a standard of (T) or (TS) are collectively referred to as "protected streams," and are subject to the stream protection provisions of the Protection of Waters regulations."*

As a result of the water body designation, permits (Article 15) for any disturbance of the water body will be required.

Mill Brook begins south of Rockport Pond, runs northeast through Tub Mill Pond, then up along English Pond Road, across Moriah Center, and finally discharges into Lake Champlain.

The existing sewer main crisscrosses Mill Brook along the Witherbee Road, at the Titus Road pump stations, as well as across from Golf Course Way. Any work performed on these sewer mains will likely impact Mill Brook.

Bartlett Brook begins north of Mineville out of the Mud Pond and runs south into Bartlett Pond, continues south across Pifershire Road, and ultimately makes its way through Port Henry and discharges into Lake Champlain. This water body crosses over the sewer main on Switchback Road.

McKenzie Brook crosses Windy Hill Road and South Moriah Road, into Lake Champlain, but does not cross any sewer mains.

Stony Brook crosses the Tarbell Hill Road sewer main, right near the pump station #1, as well as the sewer main on Golf Course Way, as they run down along each other towards Lake Champlain.

With the proximity of these water bodies to sewer mains and the ultimate outlets into Lake Champlain, the condition of the sewer mains are of utmost importance. A failure of any of the mains could lead to a direct (or indirect) discharge of raw sewage into these waters. Failures of the system hold an inherent danger to the animal and plant life but pose a threat to human health and the risk of the town being fined.

## b. Wetlands

With its abundance of surface water resources, the Town and surrounding areas have several APA designated wetlands.

A map showing the approximate location of NYSDEC and APA regulated wetlands is included. The wetlands data has been compiled from readily available government databases. The wetlands mapping is provided to indicate projects with potential wetland impacts. If wetlands are identified in the project area, field verification of the exact location of the wetlands should be performed by a wetland biologist. Wetlands under 1 acre may not be jurisdictional by the APA, however the ACOE will likely take jurisdiction if any work disturbs the wetlands (even temporarily).

Refer to **Figure 2.9** *APA & DEC Wetlands*.

## c. Endangered Species

Both the New York Department of Environmental Conservation (NYSDEC) and United States Fish & Wildlife Service (USFWS) online databases were utilized to determine the presence of potential endangered species in the project planning area. The NYSDEC mapper and the USFWS resource search indicated that the Indiana Bat and the Northern Long-Eared Bat have the potential to be impacted within the Town of Moriah.

Refer to **Figure 2.10**: NYSDEC Environmental Resource Mapper.

Refer to **Figure 2.11**: USFWS IPAC System Trust Resources.

Working in areas that may impact the Indiana Bat places requirements related to tree cutting. Tree cutting is generally restricted to November 1<sup>st</sup> to March 31<sup>st</sup>, or if cutting must occur outside of those months, then biologists must be called in to determine if there will be any impacts to the bat. The Northern Long-Eared Bat is federally listed as a threatened species. Both bats typically hibernate in caves/mines in the winter and roost in trees in the summer. Similar precautions should be taken to protect both species, although the requirements for protection of the Indiana Bat are more stringent based on its classification as Endangered.

Refer to **Figure 2.12**: *USFWS Bat Fact Sheets* for the USFWS details for working in an area inhabited by the Indiana Bat and Northern Long Eared Bat.

## **2.2.5 Spills and Brownfields**

The New York State Department of Environmental Conservation maintains databases of spill incidents and environmental remediation sites being addressed under one of the Division of Environmental Remediation's remedial programs (State Superfund, Brownfield Cleanup, Environmental Restoration, and Voluntary Cleanup).

A search of the spills database revealed quite a few spill incidents within the project area over the last 10 years (from 2007 through 2017).

One gallon of anti-freeze was spilled at Moriah Center School on 6/5/2015, and this spill case #1502488 was closed 6/11/2015. An unknown petroleum was spilled at the Mill Brook Bridge in Moriah Center on 5/12/2014. This spill case #1401476 was closed on 9/8/2014. An unknown amount of #2 fuel oil was spilled at the residence of 2667 Center Road on 12/5/2013, and this case number #1308906 was closed out on 12/12/2013. A traffic accident caused one gallon of transformer oil to spill onto Tarbell Hill Road at Pole Top 68.5 on 7/16/2013, and this case #1304052 was closed the same day. Another spill of one gallon of #2 fuel oil was caused by an equipment failure at the residence of 624 Tarbell Hill Road on 1/14/2012, and this case #1112026 was closed 1/19/2012. On 10/10/2011, two gallons of hydraulic oil was spilled at 2819 Plank Road due to an equipment failure, and this case #1108661 was closed the following day on 10/11/2011. Moriah Central School was the location of another spill of #2 fuel oil on

5/24/2011, and this case #1102325 was closed on 5/31/2011. The Broad Street Bridge encountered a raw sewage spill of 1000 gallons on 4/27/2011, and the case #1100953 was closed on 4/29/2011. More #2 fuel oil was spilled at Moriah Central School, this time at the bus garage, on 3/8/2011. The case #1012163 was closed 4/4/2011. Mineville Oil Co. spilled an unknown amount of gasoline due to an equipment failure, at 2815 Plank Road on 10/8/2008. This case #0807704 was closed on 12/29/2008. At the Donald Jaquish Residence of 2717 Center Road, fifteen gallons of #2 fuel oil was spilled on 1/5/2008, and this case #0710534 was closed on 10/7/2008. The final spill over the past ten years occurred on the Pelfershire Road on 11/20/2007. This spill involved 2,600 gallons of #2 fuel oil being spilled due to human error. This case #0709059 was closed on 2/8/2008.

A search of the Remedial Site Database produced a list of one remediation site located within the Town of Moriah.

Site Code	Site Name	Program	Site Class	County	City/town	Address
516003	Republic Steel Corp. (Mesaba)	HW	N	Essex	Mineville	Neartown Road

Site Class	
Class 1	Contamination constitutes a significant threat to public health and the environment. The significant threat to public health and the environment is causing, or presents and imminent danger of causing, either irreversible or irreparable damage to the environment.
Class 2	The disposal of hazardous waste has been confirmed and the presence of such hazardous waste or its components or breakdown products represents a significant threat to public health or the environment; or hazardous waste disposal has not been confirmed, but the site has been listed on the Federal National Priorities List.
Class 3	Contamination does not presently and is not reasonable foreseeable to constitute a significant threat to public health or the environment.
Class 4	The site has been properly closed but requires continued site management consisting of operation, maintenance, and/or monitoring.
Class 5	The site has been properly closed and requires no further action, but the site is not suitable for delisting from the Registry.
Class A	Active
Class C	Completed
Class P	Potential
Class N	No further action at this time
Program	
ERP	Environmental Restoration Program
HW	State Superfund Program
VCP	Voluntary Cleanup Program

## 2.2.6 Floodplain Considerations



Changes in local weather patterns in recent years causing the increased frequency of severe and intense storms, including hurricanes/tropical storms in Upstate New York, have emphasized the need to verify that proposed work can withstand the 100 year and possibly the 500 year flooding events. Climate models predict that the region in and around Moriah is likely to become warmer and wetter, and experience more extreme weather events. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) are used to determine the extent of the 100 year and 500 year flood.

The map for the entire Town of Moriah is numbered 3613890010A, and became effective September 24, 1984. The map shows that the entire sewer collection system is located in what is called Zone C, which is an area of minimal flooding.

Refer to **Figure 2.13**: *FEMA Flood Insurance Rate Map*.

## **2.3 Ownership and Service Area**

### **2.3.1 Sewer Districts**

The Town of Moriah consists of four (4) Sewer Districts; Grover Hills area entails sewer district #1, the Mineville/Witherbee area contains Sewer District #2, Sewer District #3 consists of the Moriah Corners area, and Sewer District #4 is the Moriah Center area.

*The Town of Moriah consists of two sewer districts. The whole of the Town of Moriah collection system outside of the former Village of Port Henry has been incorporated into sewer district #1. The Former Village of Port Henry has been incorporated into sewer district #2.*

### **2.3.2 Industrial Discharges or Hauled Waste**

Not Applicable (Residential Collection System)

### **2.3.3 Population Trends and Growth**

According to the 2000 Census, there were 4,879 persons in the Town of Moriah. According to the American Community Survey, sponsored by the U.S. Census Bureau, the 2010 Population for the Town of Moriah was 4,798 persons and Essex County had a population of 39,370 persons (American Community Survey, 2010 Data), resulting in an approximate 2% population decrease.

Refer to the financing section below for a discussion on number of persons served by Sewer District #1.

## **2.4 Existing Facilities Description**

### **2.4.1 General Description & History**

#### **a. Community History**

(source: <http://www.porthenrymoriah.com/living-here/about>)

Moriah's industrialized past is evident in its landscape and in its buildings. The level strip of land along the lake was suitable for cultivation, but Moriah's riches came from the superior quality of iron found in its hills.

Moriah, was a boom and bust town. When the iron arrived, it turned Port Henry, situated on Lake Champlain, into a booming transport terminal. The railroad and Lake Champlain barge routes were established to transport goods to market. Until the great open pit mines of the west were developed, Moriah was a capital of the iron industry.

In its early history, a mill was first built in Port Henry in 1766 with the first permanent settlement in 1785. In that year, William McKenzie settled in what is now the southern part of Port Henry. According to reminiscences printed in the 1873 Port Henry Journal, "he found no white inhabitants other than Mr. Lewis (the mill owner), but plenty of the St. Regis and Swagotchie (Oswegatchie) tribes. The Indians who came there to hunt remained all winter and sometimes through the spring; they were very friendly. Bear, deer, wolves, and rattlesnakes were then very numerous in this region". In 1804, there were still Indians living in wigwams at Moriah Corners, according to historian H.P. Smith and others who came to hunt.

Timber harvesting and land clearing occurred at a great rate as there were 20 sawmills on the river between Ensign Pond and Lake Champlain in the first half of the 19th century. Docks were built at Port Henry as early as 1820. Lumber was rafted north to Canada, and, when the Champlain Canal opened, to southerly markets.

The oldest iron bed in Moriah is the Cheever bed, located just one and one-half miles north of Port Henry. In its earliest days, settlers would go to the mine, pile the iron on to a sled and drag it back to town. The Cheever Bed's value was not appreciated until 1853 when it began to be worked seriously. A number of other small beds in that area also were worked for several years. Five or six large companies operated mines in the township, the best remembered is the Witherbee, Sherman Company, whose magnificent headquarters in Port Henry are now used for the town offices.

Larger mining operations, that became Republic Steel, were centered in Mineville and Witherbee. Mineville and Witherbee were company towns. The streets lined with company houses constructed with blocks made from iron ore tailings still exist, as well as the extraordinary Catholic Church built from the same material.

Along with the mining companies came the railroad for bringing ore from Mineville and Witherbee to the main line at Port Henry. An aggregate of 230,000 tons was produced from the ore beds in 1868. In 1885, Smith wrote, "It is not safe to attempt to predict the future of the iron industry in this town; but it probably can be stated with confidence, that as long as coal can be transported here, and the ore transported from the mines to the lake with such economy the companies can compete successfully with the prices placed upon the product of other sections, so long will the industry thrive".

Moriah attracted immigrants of many nationalities to work in the mines. It remains one of the most populated towns on Essex County. Moriah's industrial past is still evident, reflected in the industrial park located there today and in the tourist industry which is developing around the industries artifacts. The story of its mining past is being collected and exhibited at the Iron Center Museum in Port Henry and at the Essex County Historical Society in Elizabethtown.

#### **b. Wastewater Collection and Treatment System**

The Town of Moriah and the former Village of Port Henry sanitary sewage collection systems combine outside the joint wastewater treatment plant grounds, just prior to entry to the treatment plant's influent chamber.

The Town of Moriah sewage collection system is remnant of the mining industry that dominated the area. Trunk sewers were installed for sewage collection in 1948 for the Witherbee/Mineville area. Previous to this, small sewer laterals and individual sewage systems served the area. In 1948, these sewers were collected and treated at primary treatment facilities, one for Witherbee located along Joyce Road and one for the Mineville area located at Moriah Center. In 1986, plans had begun to combine the collection systems with the Village of Port Henry. The existing treatment plants were unable to serve some areas of southern parts of the Town of Moriah below the Moriah Center area. With a joint plant located in the Village of Port Henry, these areas were incorporated into the combined treatment facility. Other additions were made to incorporate sewage flows from Essex County Industrial Park and CV-TEC. Pre-treatment was added to the collection system before entering the main collector sewer going to the joint plant. Pre-treatment consists of a coarse bar rack, flow monitoring, and a grit channel. In 1988, New York State

Department of Corrections added the Moriah Shock Correctional Facility to the Moriah collection system. An additional Pump Station #1 was added along with new sewers to pick up sewage flows east of the Moriah Corners area. The wastewater treatment plant was completely upgraded in 2007.

## **2.4.2 Regulatory Compliance Requirements**

In 2015, the Town of Moriah entered into an Order on Consent with the New York State Department of Environmental Conservation (NYSDEC) for electrical inspections of existing pump stations, an Inspection and Maintenance (I & M) Program for the Town's sewage treatment works and sewer system, as well as a Comprehensive Performance Evaluation (CPE) with a Capital Improvement Plan (CIP) prepared by a New York State licensed professional engineer.

## **2.4.3 Existing Energy Consumption**

The majority of the collection system consists of gravity sewer mains which require no energy inputs. Energy efficiency evaluations (when relevant) have been included with the pump station evaluations as applicable.

## **2.4.4 History of Storm Damage**

There has been no reported storm damage to the collection system.

## **2.4.5 Location Map**

An overall map of the existing relevant sewer collection system has been included. Photos of the existing utilities are included as part of the inspection reports.

Refer to **Figure 2.14**: *Overall Existing Sewer Collection Map*.

## **2.5 Methods of Unit Process Evaluation/Condition of Existing Facilities**

### **2.5.1 Collection of Operator Data**

The best source of information for any sanitary sewer collection system is the operations staff that work with the system every day. AES Northeast recognizes the value in gathering information from the operations staff and uses that knowledge to help develop the scope of the report as well as the findings of the report. AES Northeast staff and the operations staff performed a walkthrough of the collection system identifying ongoing maintenance issues, sewer related callouts, and the impact of storm events. The information gleaned through these onsite inspections provided valuable knowledge to help identify the key areas of concern. Not everything discussed makes it into the written parts of this report, but the information gathered directed the focus of the report and can be found in the descriptions of the investigations attached to the report.

*Hard data as required has been incorporated in the appropriate sections of the report. Much of the information is anecdotal not necessarily quantifiable, but the discussions with the operator help paint a picture of the collection system that help focus efforts on problem areas. The scope of the report reflects these discussions.*

*The following list identifies several (but not all) of the operator's routines that help inspect and investigate the system and from which this information was gathered.*

*Daily:*

- *Check of the four pump stations and the screening plant (including the two pump stations in Port Henry).*
- *Data is recorded daily at each station that includes pump hours and flow.*

*Weekly:*

- *Walk sewer lines to check for overflows.*
- *Inspect known problematic manholes*
- *Add either degreaser or root killer as needed to treat the lines.*

*Annually:*

- *Clearing right-of-ways for both sewer and water lines where they go through the wooded areas.*

## **2.5.2 Collection and Compiling of Existing Mapping**

The first step in performing the sewer investigation was to gather all available existing mapping and load it into AutoCAD and GIS software. AES Northeast collected electronic mapping using a Bad Elf GPS PRO+, along with Trimble Terraflex software to get GPS manhole locations and pictures. The collected data was then drafted into the computer programs for use in analysis of the system. Manholes not found while using the GPS system were reproduced into the CAD drawing using previous drawing from Greiner Engineering Sciences and Morrell Vrooman Engineers, drawn in 1985 and 1987.

Refer to **Figure 2.15**: *MH GIS System Map*.

## **2.5.3 Manhole Inspections**

A limited manhole inspection survey was conducted to determine the general condition of manholes in each service area. The condition of the few manholes has been used to generate the recommendations in the report. A complete inspection of all manholes is outside of the scope of this project

## **2.5.4 Manhole Numbering Scheme**

The majority of sewer systems employ a numbering scheme to help identify manholes on maps. With the addition of GIS systems having a consistent numbering system is critical. The Town's numbering system is inconsistent as various construction projects over the years never matched the system of the previous or surrounding projects. It is outside of the scope of this report, but it is highly recommended that the Town renumber their collection system with a consistent scheme.

## **2.5.5 Sewer Main Inspections**

A limited sewer main survey was conducted to determine the general condition of sewer mains in each service area. This data, along with review of plans, operator experience, and review of pipe materials and age has been used to generate the recommendations in the report. A complete inspection of all sewer mains is outside of the scope of this project.

## **2.5.6 Wastewater Flow Analysis**

Full flow monitoring of the collection system is outside of the scope of this report. However, flow metering and flow data collection was performed in conjunction with the pump station inspections and siphon inspection, and the results have been incorporated into the respective reports included as Appendices to this report.

## **2.5.7 Pump Station Inspections**

Inspections of the Town's two pump stations (outside of the former Village of Port Henry) were conducted by AES staff and Essex County Staff with the assistance of the Town of Moriah staff. The results of the inspection have been used to generate the recommendations in the report.

## **2.5.8 Screening Plant and Siphon Inspection and Study**

Inspections of the Town's screening plant and siphon were conducted by AES staff and Essex County Staff with the assistance of the Town of Moriah staff. The results of the inspection have been used to generate the recommendations in the report. An internal pipe inspection of the siphon is outside of the scope of this report.

## **2.6 Existing Facilities Condition Assessment Summary**

The Moriah collection system can be broken down into several service areas based on construction dates and neighborhoods and logical or hydraulic breaks in the system that allow for easier reporting and allow for more clear recommendations. Please note that the service areas may not exactly line up with sewer districts, although they are similar areas. The service areas are used in this report to summarize existing conditions and in making repair and project recommendations. Those service areas investigated in the 2015 report and this report are noted below.

### **2.6.1 Mineville Service Area**

Work was completed in 2015 report.

### **2.6.2 Witherbee Service Area**

Work was completed in 2015 report.

### **2.6.3 Plank Road Sewer Main (from MH 108 North (Upstream))**

Work was completed in 2015 report.

### **2.6.4 Grover Hills Service Area**

The Grover Hill Collection system was installed in 1994. The system consists of precast manholes and PVC sewer mains. The area has a separate storm sewer system. According to a local resident, the basements of most homes have sump pumps and the sump pumps are connected to the sanitary sewer system. Ideally, they should have been tied to the storm sewer system during the original construction. I&I in the area likely comes from the sump pumps. Based on the age of the pipe and manholes and the limited inspection, it is not expected that there has been significant deterioration of the pipes or manholes in the collection system. An inspection of a manhole supports that that assumption. It does appear that the pipes do become surcharged at times likely due to I&I and/or surcharged conditions downstream of the Grover Hills service area.

Refer to **Appendix C**: *Grover Hills Service Area Inspection Report*.

### **2.6.5 Plank Road Sewer Main (MH 254 to MH 108)**

The sewer main on Plank Road extends from the Mineville and Witherbee area in the northern parts of the Town of Moriah, past the Grover Hills service area, crossing private property and finally discharging into a manhole on Switchback Road. The sewer main on Plank Road north of manhole 108 was covered in the 2015 AES report. For the purposes of this report the Plank Road sewer main starts (downstream) at MH 254 on Switchback Road, crosses private property until it reaches Plank Road and continues to MH 108 on Plank Road. Unfortunately, the inconsistent numbering scheme in Moriah's collection system shows up in this sewer district. The manholes count up from Switchback Road until part way between Switchback Road and Plank Road and then start counting down at a totally different numbering scheme.

The sewer main from MH 254 to MH 260 was replaced in the 1980's as part of the "Federal Water Main "Gas Main"" and Switchback Road projects (Interceptor Sewers) and is expected to be in relatively good condition based on age and pipe/manhole material (PVC/precast). The sewer main from MH 254 to MH 108 is VCT (clay tile), portions

installed in the 1960's and portions installed at an earlier unknown date. Although the 1963 precast manholes appear to be in relatively good condition, the VCT sewer mains of this vintage (and earlier) have been found to have been deteriorated. The sewer main that crosses private property appears to be older than that from the 1960's and has brick manholes. This sewer main is expected to have root problems and contribute to I&I, based on age and location through the woods.

Refer to **Appendix D**: *Plank Road (MH 254 to MH 108) Inspection Report*.

## **2.6.6 Moriah Center Service Area**

### **a. Gravity Sewer Collection Main**

The Moriah Center Service Area was constructed in the late 1980s and encompasses the Moriah Center hamlet, including the Titus Road Pump Station. All sanitary sewer mains in this district were referenced from Morrell Vrooman Engineer's drawings titled "*Town of Moriah, Essex County, New York, Wastewater Treatment Facilities Sewer District No. 4*".

As the gravity sewer system in this area was constructed in the 1980s of PVC pipe and precast manholes, it is not expected that there has been significant deterioration of the piping system. Two manholes were inspected and were found to have some leakage, either through the cover or through the sides. It is recommended that the town inspect all manholes and seal all leaks and/or repair leaking covers. In addition, the two manholes did not have proper troughs formed (despite the correct details in the plans). If possible, troughs should be formed in these manholes.

### **b. Pump Station #2 (Titus Road)**

An upgrade took place at the Titus Road pump station in 2016. An evaluation was performed by AES Northeast and the work was performed by Reale Construction on an emergency basis because one of the two pumps had failed, and the remaining functional pump was designed for another application and was operating poorly. In addition to the replacement pumps, new slide rails were installed, upgrades were made to the control system and a few other minor upgrades were performed as part of the emergency project. The original design of the pump station gave the Town a good basis from which to work, the upgrades were necessary primarily due to age and pumps that were not well suited to the application.

Pump hours were collected for the newly installed pumps from January 2017 through August 2017. Average total pump hours per day during that time period was 1.4 hours and total max pump hours in a day was 4.9 hours, which equates to an average of 19,060 gallons pumped per day, and a max of 65,880 gallons pumped per day. The maximum pump hours occurred in early April during spring thaw/runoff. The design average day flow for the pump station per NYSDEC design standards assuming 3 bedroom homes and 150 gpd/bedroom (assuming older fixtures) was calculated to be 38,250 gpd. As such the flows into the pump station appear reasonable, with only nominal impacts from I&I (inflow and infiltration), likely due to residential sump pumps tied into the system given the age of the system (1987) and its PVC pipe construction.

Since the upgrades have occurred only a few remaining items remain that would help operations and safety at the pump station. It is recommended that the Operator regularly check float functionality as today's mechanically activated floats are not as reliable as the old mercury floats used to be. It is also recommended that an additional float be added as a dedicated high level alarm (currently a single float is used for lag pump and high alarm). It is strongly recommended that an autodialer or other means of remote notification of pump failure and high level be installed at the pump station. The current light and alarm system is in a location that is likely to go unnoticed during the nighttime. In addition, the fence around the pump station requires some repair.

### c. Force Main and Discharge Gravity Sewer

The force main is a 6" ductile iron force main. Unfortunately, there are no force main cleanouts on this pipe and therefore there is no means to clean the main. Installation of force main cleanouts would aid in the ability to clean and inspect the force main. Based on its age, the main is expected to be in relatively good condition. In addition, the upgrades performed in 2016 accounted for the size of the force main. Unfortunately, the design page of the discharge gravity main drawings has been lost, however, the force main appears to discharge into the gravity sewer main replaced on The Plank Road sewer main (extending upstream from Switchback Road). When work is performed on the Plank Road sewer main, the piece of gravity sewer into which this force main discharges should be inspected and repaired/replaced as necessary.

Refer to **Appendix E**: *Pump Station #2 (Titus Road) Inspection Report*.

Refer to **Appendix F**: *Moriah Center Service Area Inspection Report*.

## **2.6.7 Switchback Road Trunk Sewer Main**

### a. Gravity Sewer Main

The gravity sewer main was installed in the late 1980's. The sewer main is PVC and the manholes are precast concrete. Based on the age and materials the pipes and manholes are not expected to be significantly deteriorated. Although flow monitoring was outside of the scope of this report, it does appear that portions of this line are at or near capacity and the mains likely surcharge during I&I events. This is most likely due to I&I infiltration in service areas upstream from this main. Additional flow monitoring is needed to confirm, but it is likely that reduction in I&I would help gain capacity in these pipes.

### b. Screening House

The screening house appears to be functional. The heating and ventilation is either inadequate or severely deteriorated. The screening house lacks storage for screenings and grit other than an open pit for each. The flow meter at the measurement flume ahead of the siphon in the screening building does not seem to be registering flows accurately and should be re-calibrated.

### c. Siphon

The siphon line consists of a 6" main and an 8" main. The 8" main is currently the primary main and the 6" main is the backup main. The recommended arrangement would be to have the 6" main be the online main and the 8" main the backup/overflow main. The current configuration for the distribution box (D-Box) is incorrect, difficult to access, unsafe, and the valves are likely inoperable. In addition, the distribution box could have been installed at a higher elevation to provide more head on the system. There are no cleanouts on the siphon to allow for access for cleaning of the siphon lines, a necessary maintenance activity.

Refer to **Appendix G**: *Screening Plant & Siphon Inspection Report*.

Refer to **Appendix H**: *Switchback Road Trunk Sewer Main Inspection Report*.

## **2.6.8 "Federal Water Main" "~~Gas Line~~" Trunk Sewer Main**

The "*Federal Water Main*" "~~Gas Line~~" is the trunk sewer main for the Town of Moriah's sewer system for all areas except for the former Village of Port Henry.



The gas line is a 16" steel main converted from an old water gas line installed by the federal government for a war project used to feed the mines. In 1985 manholes were placed over the main and access points cut into the pipe in these manholes. The pipe slopes toward the wastewater treatment plant.

A few manholes were inspected. Based on the age of the system and manhole type, it is expected that the majority of manholes are in relatively good condition, however, as one manhole appeared to leak, had a root intrusion, and a poorly formed trough. It is recommended that all manholes be inspected and spot repairs made.

The sewer main was not inspected. ~~It is recommended that the town perform metal integrity and thickness testing on the sewer main. This type of testing will tell the Town if the steel is degrading and will be more informative than an internal video inspection. If the pipe is deteriorating the likely course of action would be to slip line the pipe with a Cured in Place Pipe (CIPP). This felt and resin liner is a structural pipe.~~

*Further discussions with the Town revealed that the pipe is in good condition and the steel is nearly 1" thick. It is recommended that the Town continue with inspections through the Town's I&M program and if deficiencies are found correct them.*

Refer to **Appendix I**: "Federal Water Main" ~~"Gas Main"~~ Trunk Sewer Main Inspection Report.

## **2.6.9 Moriah Corners Service Area**

### **a. Gravity Sewer Collection Main**

The Moriah Corners collection system was installed in 1987. The system consists of precast manholes and PVC sewer mains. Based on the age of the pipe and the limited inspection manholes, it is not expected that there has been significant deterioration of the pipes or manholes in the collection system. It is recommended that the town inspect all pipes and manholes and perform any needed spot repairs.

### **b. Pump Station #1 (Tarbell Hill Road)**

The Tarbell Hill pump station pumps all sewage flows from the Moriah Corners service area over a slight rise on Tarbell Hill road. The pump station was well constructed but many of its components have reached the end of their useful life and are due for replacement.

Flow monitoring of incoming flows to the pump station in May 2018 indicated an average day flow of approximately 45,800 gpd and a peak hour flow of approximately 170,000 gpd. At the time of the peak flow the pumps recorded approximately 4 hours of run time. Maximum total pump run time based on the data available at the time of the report (May 2016, August 2016 – March 2017, and May 2017) indicated a peak pump run time of 14.5 hours during a day, an average pump run time of 2.7 hours per day, and a median pump run time of 2.3 hours per day. While the peak pump run time of 14.5 is not desirable, it is within the capability of the pumps and appears to have been a limited occurrence based on the surrounding day's pump hours and its timing in February of 2017, and not related to significant inflow and infiltration (I&I). I&I is not considered to be a significant concern for the Tarbell Hill pump station based on the flow monitoring performed, pump hours obtained, vintage of the contributing collection system (1980's), and collection system pipe types (PVC, ductile iron, and steel pipe). Further flow monitoring performed during peak I&I times such as spring thaw/runoff can further verify the existence/absence of significant I&I contributions.

Information on the existing pumps was not able to be obtained during the course of the investigation. More extensive flow monitoring should be performed and additional pump data should be obtained, including the existing pump curves and existing pump age, prior to any upgrades.

The pumps, rails, controls and electrical systems are in need of replacement/upgrade. The floats should be reset to allow for longer, less frequent pump operation. The wetwell has evidence of leakage and concrete decay and should



be further evaluated for replacement or cleaning and sealing. The valve vault, which is housed under the control building has a mass of wires haphazardly hung and is full of water, creating a very dangerous environment. There is no drain in the valve vault, which is why the vault has filled with water. There is no back-up generator to provide power in the event of an outage and no autodialer to notify the Operator in the event of a high level in the pump station.

c. Force Main and Discharge Gravity Sewer

The force main is a 6" ductile iron force main. Unfortunately, there are no force main cleanouts on this pipe and therefore there is no means to clean the main. Installation of force main cleanouts would aid in the ability to clean and inspect the force main. Based on its age, the main is expected to be in relatively good condition.

Refer to **Appendix J**: *Pump Station #1 (Tarbell Hill) Inspection Report*.

Refer to **Appendix K**: *Moriah Corners Service Area Inspection Report*.

### **2.6.10 Compliance Issues**

There have been several overflow events reported for the various service areas.

Please see **Appendix L**: *Non-Compliance Reports*.

## **2.7 Definition of the Problem**

### **2.7.1 Health, Sanitation, and Security**

The infrastructure has experienced overflows, but it appears that the majority of the problems stem from upstream I&I issues in the Mineville and Witherbee service areas. The replacement of the Plank Road trunk sewer main would remove the oldest and mostly likely to leak pipes in the areas investigated and would reduce I&I in this area. Upgrades to the screening plant and siphon on the Switchback Road Trunk sewer main would allow for a longer lasting building and safer working environment in the screening building as well as better and safer access to the siphon. The replacement/upgrade of the Tarbell Hill pump station will remove a potentially dangerous situation in the valve vault with live electrical wires potentially mixing with a vault full of water.

### **2.7.2 Aging Infrastructure**

The majority of the collection system that was investigated is in relatively good condition and only part way through its projected useful life. The Plank Road sewer main is aged and in need of replacement. The screening plant HVAC is past its useful life. The Tarbell Hill pump station components are at the end of their useful life and in need of replacement.

### **2.7.3 Infiltration**

The majority of the I&I in the Town's collection system appears to be in The Mineville and Witherbee areas, as covered in the 2015 AES report. Negligible I&I was found during flow monitoring and pump evaluations at the Titus Road and Tarbell Hill pump stations. I&I likely enters the system through the VCT sections of the Plank Road collection system and those sections are recommended for replacement.

### **2.7.4 Reasonable Growth**

The US Census data indicate that the population for the Town of Moriah has decreased over the last decade. Additionally, the population projection indicates further population decrease. There are however vacant lots within the sewer system. Allowing for a 10% increase in flow over the design life of the infrastructure is reasonable.

After further discussions with the Town, it was determined that there are further areas of growth in the collection system. A full evaluation and design of these have not been completed, however, during design, the following additional flows shall be incorporated where required.

<i>Future Service Area</i>		<i>GPD</i>	<i>Total GPD</i>
<i>Fisk Road</i>	<i>38</i>	<i>350</i>	<i>13,300.00</i>
<i>Lake View</i>	<i>36</i>	<i>350</i>	<i>12,600.00</i>
<i>Whitney</i>	<i>15</i>	<i>350</i>	<i>5,250.00</i>
<i>Ensign Pond Road</i>	<i>21</i>	<i>350</i>	<i>7,350.00</i>
<i>Furnace Road</i>	<i>35</i>	<i>350</i>	<i>12,250.00</i>

See Financial Status below for a discussion on actual people served.

### **2.7.5 Water, Energy, and/or Waste Considerations**

The sewer system under consideration is primarily a residential gravity system. This type of system is the least energy intensive form of collection system. The Tarbell Hill pump station obviously uses electricity for the pumps and the correct selection of pumps will allow for the most efficient use of energy in this part of the system.

### **2.7.6 Compliance with Accepted Standards**

All collections systems will be designed in accordance with the most current version of 10 State Standards and NYSDEC design manual in place at the time of design.

## **2.8 Financial Status**

The Town of Moriah charges the following flat fee for the Sewer District (based on ~~2015~~ 2017 data):

Usage: ~~\$236/year~~ \$240/year

Debt: ~~\$184/year~~ \$180/year

There are ~~937~~ 916 Equivalent Dwelling Units (EDUs) that are billed within the Town, including 250 EDUs at Moriah Shock.

Removing Moriah Shock leaves 666 EDUs. Assuming 2.5 people per EDU, this means that 1665 people are served in Sewer District #1.

Refer to **Appendix M**: *Summary of Sewer District Appropriations and Sewer District Estimated Revenues*.

### 3) ALTERNATIVE ANALYSIS

The original scope of this report was to investigate and analyze the Switchback Road siphon and screening plant and both the Titus Road and Tarbell Hill pump stations. The scope of the report was increased to include an overview of as much of the collection system as possible to meet as many of the requirements of the Order-on-Consent entered into between the Town and NYSDEC as possible. Although the scope of the report did not include a full inspection of the collection system, enough data was derived to be able to draw conclusions and recommendations for repairs and upgrades to the system. What was found was that a few areas are in need of major upgrades, but the majority of the work is minor operations and maintenance items that can be addressed through routine work by the operators. These items are identified within the appropriate inspection report and summary. The proposed project in this report focuses on those items more appropriately tackled through a large capital project.

#### 3.1.1 Grover Hills Service Area

No capital projects are recommended at this time.

#### 3.1.2 Plank Road Sewer Main

The Plank Road Sewer Main from MH 260 to MH 108 is VCT with portions constructed in the 1960's and portions at an unknown prior date. Sewer mains of this type and vintage in the Town have been found to be deteriorated and likely sources of I&I. This is especially true of the section of sewer main that travels across private property through wooded areas. This sewer main is in need of replacement.

#### 3.1.3 Moriah Center Service Area

##### a. Gravity Sewer Mains

No capital project is recommended for the sewer collection system at this time.

##### b. The Titus Road Pump Station

This pump station was recently upgraded and no capital projects are recommended at this time.

#### 3.1.4 Switchback Road Trunk Sewer Main

##### a. Screening Plant

The Screening Plant's heating and ventilation is in need up upgrades. Both are deteriorated and/or inadequate and should be replaced for the longevity of the building and for the safety of the operations staff. The flow meter at the flume should be checked and recalibrated as soon as possible and then on a regular basis in the future. It is also recommended that the flow monitoring at the screening plant be tied into the Town's WWTP SCADA system.

##### b. Siphon

The siphon distribution box arrangement and lack of cleanouts on the siphon lines themselves make cleaning the siphon very difficult. Cleaning of the siphon mains is a necessary maintenance activity that should be performed regularly, but has not been performed since the siphons were installed. Therefore, it is recommended that the distribution box be reconstructed and that cleanouts be added to the siphon lines.

#### 3.1.5 "Federal Water Main "Gas Main"" Trunk Sewer Main

No capital project is recommended for the sewer collection system at this time.

### **3.1.6 Moriah Corners Service Area**

#### **a. Gravity Sewer Mains**

No capital project is recommended for the sewer collection system at this time.

#### **b. Tarbell Hill Pump Station**

The Tarbell Hill pump station is in need of upgrades. The pump, slide rails, electrical, and controls are all aged (30 years old) and are due for replacement. The wetwell has evidence of leakage and concrete decay and should be further evaluated for replacement or cleaning and sealing. The valve vault has old electrical lines that are partially submerged and make for very unsafe operating conditions. The valve vault requires a drain.

## **3.2 Alternatives Description**

### **3.2.1 Proposed Project**

The proposed project will incorporate the required upgrades of the Plank Road sewer main, the screening plant and siphon and the upgrades to Tarbell Hill. Each piece of the project will be analyzed separately and the final recommended project will be the combination of the recommendations of the three individual components.

### **3.2.2 No Action Alternative**

The no action alternative leaves the Plank Road sewer main, Switchback Road siphon, and Tarbell Hill pump station in their current state.

### **3.2.3 Plank Road Sewer Main**

The Plank Road sewer main project is the rehabilitation of the sewer main from MH 260 to MH 108.

#### **a. Alternative 1**

Alternative 1 is the replacement of the sewer main in-kind, with adjustments to grade and alignment. The pipe would be replaced with a 10" SDR 26 PVC sewer main and precast manholes.

#### **b. Alternative 2**

Alternative 2 is the rehabilitation of the sewer main with a Cured-in-Place Pipe (CIPP). CIPP is a felt pipe impregnated with resin that when cured forms a structural pipe. Spot repairs would be made to correct any sags or pipe collapses.

### **3.2.4 Switchback Road Trunk Sewer Main**

#### **a. Alternative 1**

Alternative 1 is a proposed upgrade to the HVAC systems at the screening plant as well as upgrading/calibrating the screening plant flow monitoring system and incorporating the screening plant flow monitoring into the Town's SCADA system at the WWTP. In addition, the distribution box to the siphon would be reconstructed uphill from the current location in order to increase the head on the system. The reconstructed distribution box will also allow for a better arrangement and valving for control of the primary and secondary barrels (pipes). The 6" barrel will be made the primary pipe and the 8" barrel the backup. In addition, cleanout manholes will be added to each of the pipes to allow for better access for cleaning.

b. Alternative 2

Alternatives 2 would involve the replacement of the screening plant and siphon with a pump station and force main. The screening plant would be replaced with a pump station control building. A wet well and valve vault would be installed outside of the control building. A new force main would be installed along Switchback road, under Mill Brook and would discharge into the same manhole the siphon currently discharges into.

### 3.2.5 Moriah Corners Sewer Service Area

a. Alternative 1

Alternative 1 is to provide replacement equipment and a revamped valve vault for the Tarbell Hill pump station. The upgraded equipment includes new pumps and rails. New controls tied to the Town's WWTP SCADA system or an autodialer would be installed. The electrical wiring in the control building would be replaced to move it out of the valve vault and make it safe. A drain from the valve vault to the pump station would be installed.

b. Alternative 2

Alternative 2 would be to replace the pump station with a siphon. There is likely room for a screening plant for this siphon. A distribution box would be installed uphill from the current pump station location. Two new siphon barrels (pipes) would be installed from this point to the current pump station location, where one barrel would be tied into the existing force main for reuse as a siphon barrel. The second barrel would be installed parallel to the current force main. The current force main would be reconfigured at the discharge end and extended to a new manhole on the existing gravity main to provide adjustment to the discharge elevation. The second barrel would be extended to this same discharge manhole. Existing users located downstream from the head of the siphon would have grinder pumps installed to pump the flow to the siphon distribution box or siphon discharge manhole, whichever, is closer to each particular residence.

### 3.2.6 Design Criteria

All work shall be subjected to the design requirements of NYSDEC Design Manual and 10 States Standards, latest additions.

### 3.2.7 Map

This section includes a map of each planning area. For each planning area map, refer to the following:

Refer to **Figure 3.1**: Plank Road Sewer Main Alternative 1.

Refer to **Figure 3.2**: Plank Road Sewer Main Alternative 2.

Refer to **Figure 3.3**: Switchback Road Trunk Sewer Main Alternative 1.

Refer to **Figure 3.4**: Switchback Road Trunk Sewer Alternative 2.

Refer to **Figure 3.5**: Moriah Corners Sewer Service Area Alternative 1.

Refer to **Figure 3.6**: Moriah Corners Sewer Service Area Alternative 1.

### 3.2.8 Environmental Impacts

a. Impacts of No Action Alternatives

An aging sewer main, a difficult to access siphon barrel, and an aging and potentially unsafe pump station would be left untouched, potentially leading to sewer overflows and/or injuries to workers. The No Action Alternative does not meet the needs or goals of the Town and will not be considered further.

b. General Impacts of Replacement Alternatives

All replacement actives will present temporary disturbance of the area. Work within road right-of-way's will have minimal impact to wildlife, endangered species, water bodies, and wetlands. All construction activities must comply with NYSDEC stormwater protection requirements (New York Standards and Specifications for Erosion and Sediment Control and New York State Stormwater Management Design Manual, latest version, and including all addendums thereto). Projects that disturb more than one acre are required to have a Stormwater Pollution Prevention Plan (SWPPP) with weekly inspections (performed by a licensed person) and reporting, with a State Pollution Discharge Elimination System Stormwater General Permit, filled with NYSDEC. Smaller projects will implement the stormwater protections, without the inspections and reporting.

### 3.3 Land Requirements

#### 3.3.1 Plank Road Sewer Main

a. Alternative 1

The Town must verify is easements are in place for existing sewer mains. Replacement work expected to take place within or alongside existing sewer main trench.

b. Alternative 2

The Town must verify is easements are in place for existing sewer mains. Work occurs within existing pipe, however, access is needed to reach the pipe.

#### 3.3.2 Switchback Road Trunk Sewer Main

a. Alternative 1

No land acquisition and/or easements are expected.

b. Alternative 2

Additional land may be required lot allow for siting of the new pump station Control building, wet well, and valve vault, depending on the exact size of the current town lot and final design configuration.

#### 3.3.3 Moriah Corners Sewer Service Area

a. Alternative 1

No land acquisition and/or easements are expected.

b. Alternative 2

No land acquisition and/or easements are expected.

### 3.4 Potential Construction Problems

#### 3.4.1 Plank Road Sewer Main

a. Alternative 1

The location of the existing sewer main through the woods and across private property may make access difficult. Care will be required so as not to overly burden the property owners. Existing site features such as driveways will have to be restored to the satisfaction of the property owners. Tree replanting may be required to replace trees cut for access.

b. Alternative 2

Although CIPP pipe repair is minimally invasive (minimal excavation work), access is still required for the cleaning trucks and for bypass pumping. Care will be required so as not to overly burden the property owners. Existing site features such as driveways will have to be restored to the satisfaction of the property owners. Tree replanting may be required to replace trees cut for access.

### **3.4.2 Switchback Road Trunk Sewer Main**

a. Alternative 1

Bypass pumping may be required while work is completed on the siphon barrels.

b. Alternative 2

Bypass pumping and coordination will be required to maintain sewer service during the installing of the new pump station.

### **3.4.3 Moriah Corners Sewer Service Area**

a. Alternative 1

Bypass pumping will be required to allow for the existing wet well to be taken out of service for the installation of the new slide rails and pumps as well as electrical and control upgrades. The addition of a manhole and/or dry hydrant may aid in this effort.

b. Alternative 2

Bypass pumping may be required to allow for connections to the existing force main.

## **3.5 Water and Energy Efficiency**

### **3.5.1 Plank Road Sewer Main**

a. Alternative 1

The replacement of VCT pipe and manholes will reduce or eliminate I&I, therefore, less wastewater will be discharged to the wastewater treatment plant, resulting in less energy consumption.

b. Alternative 2

The rehabilitation of VCT pipe and manholes will reduce or eliminate I&I, therefore, less wastewater will be discharged to the wastewater treatment plant, resulting in less energy consumption.

### **3.5.2 Switchback Road Trunk Sewer Main**

a. Alternative 1

The current siphon does not require any outside energy inputs. This is the most efficient means to move sewer under Mill Brook.

b. Alternative 2

Replacing the siphon with a pump station would take a gravity system and turn it into a mechanical system. This would require the addition of continuous energy inputs. While efficient pumps and variable frequency drives can be used to minimize electrical use, the use would be more than that of the current gravity system.

### **3.5.3 Moriah Corners Sewer Service Area**

a. Alternative 1

The replacement of the pumps and control system will allow for the review of the pumps used and allow for pump selection to account for efficiency. In addition, VFDs may be added to the control system to minimize energy use.

b. Alternative 2

The replacement of the current pump station with a siphon would remove the electrical inputs into the system and would result in a reduction in electrical usage by the Town.

### **3.6 Green Infrastructure**

The proposed projects utilize traditional replacement, rehabilitation methods, and new construction. Green infrastructure is generally not installed for sanitary sewer applications.

### **3.7 Impact on Existing Facilities**

Other than temporary disturbances during construction there are not expected to be any impacts on the existing facilities.

### **3.8 Schedule**

#### **3.8.1 Plank Road Sewer Main**

The installation of a Cured-in-Place-Pipe will be significantly shorter than replacement in-kind. The installation can take place in probably a weeks' time compared with several months for traditional replacement pipe.

#### **3.8.2 Switchback Road Trunk Sewer Main**

The installation of a new pump station would take significantly longer than the work to upgrade the screening plant and add a distribution box and cleanouts to the siphon based on scope of work.

#### **3.8.3 Moriah Corners Sewer Service Area**

The upgrade of the existing pump station would take significantly less time than the work to install the infrastructure necessary for a siphon based on scope of work.

### **3.9 Constructability**

#### **3.9.1 Plank Road Sewer Main**



The ability to install CIPP depends on the host pipe condition. CIPP can correct cracked pipes and root intrusions, but cannot correct sags and collapsed pipe. Replacement pipe can correct all deficiencies in the pipe line.

### **3.9.2 Switchback Road Trunk Sewer Main**

There is not expected to be significant differences in constructability.

### **3.9.3 Moriah Corners Sewer Service Area**

There is not expected to be significant differences in constructability.

## **3.10 Storm and Flood Resiliency**

The Town of Moriah collection system is generally in upland areas and not subjected to flooding. For the few low-lying stream crossings, any proposed work will be sufficiently protected (via bury depth) from flooding or potential damage.

## **3.11 Regional Consolidation Opportunities**

The Town of Moriah sanitary sewer system is actually a combination several hamlets sewer collection systems connected and sent to a regional treatment plant. As the infrastructure is in place, there is no need to change this arrangement.

## **3.12 Cost Estimates**

Refer to **Table 3.1**: *Cost Estimates for the Proposed Projects*.

## **3.13 Non-Monetary Factors**

### **3.13.1 Plank Road Sewer Main**

The replacement of the sewer main assumes a worst-case scenario. The town would prefer to utilize existing infrastructure wherever possible, however, without a complete inspection report, it is not possible to determine if the existing VCT pipe is of sufficient quality for allow for installation of the CIPP.

### **3.13.2 Switchback Road Trunk Sewer Main**

The Town prefers to maintain gravity systems wherever possible.

### **3.13.3 Moriah Corners Sewer Service Area**

The Town has expressed a desire to switch from a pump system to a gravity system if feasible. Alternative 2, while feasible simply requires such a significant installation that its viability is limited.

## 4) SUMMARY & COMPARISON OF ALTERNATIVES

### 4.1 Life Cycle Analysis

Refer to **Table 4.1**: *Life Cycle Cost Analysis*.

### 4.2 Alternative Summary Matrix

Refer to **Table 4.2**: *Plank Road Sewer Main Alternative Comparison*.

Refer to **Table 4.3**: *Switchback Road Trunk Sewer Main Alternative Comparison*.

Refer to **Table 4.4**: *Moriah Corners Service Area Alternative Comparison*.

## 5) RECOMMENDED ALTERNATIVE

Alternatives have been presented for the Plank Road Sewer Main, the Switchback Road Trunk Sewer Main, and the Moriah Corners Service Area. An alternative has been recommended for each of these service areas and these combined will form the capital project that the Town will pursue.

### 5.1 Basis of Selection

#### 5.1.1 Plank Road Sewer Main

Alternative 1 is the recommended alternative as this is the alternative that is known to be feasible at this point. The condition of the entire main must be known before CIPP can be recommended.

#### 5.1.2 Switchback Road Trunk Sewer Main

Alternative 1 is the recommended alternative as the Town prefers to maintain the siphon system to minimize electrical usage and maintenance costs.

#### 5.1.3 Moriah Corners Sewer Service Area

Alternative 1 is the recommended alternative because there is simply too much infrastructure in place to make replacement of the pump station with a siphon economically viable.

### 5.2 Project Map

Refer to **Figure 5.1**: *Plank Road Sewer Main Recommended Alternative*.

Refer to **Figure 5.2**: *Switchback Road Trunk Sewer Main Recommended Alternative*.

Refer to **Figure 5.3**: *Moriah Corners Sewer Service Area Recommended Alternative*.

### 5.3 Total Project Cost Estimate

Refer to **Table 5.1**: *Alternative 1 Cost Estimate*.

Refer to **Table 5.2**: *Project Financing and Estimated User Rates*.

### 5.4 Project Schedule

Once funded, the project is expected to take 1 year for design and 1 construction season to complete.

### 5.5 Capital Improvement Plan

The 2015 AES report detailed a significant number of sewer main construction/reconstructions. A schedule was presented in the report based on NYSEFC financing. Portions of that time frame have since passed. The proposed project here will be listed with NYSEFC for financing as well, as the proposed project timeframes are dependent on that financing.

NYSDEC has required that a Capital Improvement Plan, essentially a schedule that incorporates the project presented in the 2015 report and this project be presented here.

The project schedule must take into account the timeframes it takes to finance projects. The Town of Moriah is a small town and is now facing upwards of \$10,000,000 in construction costs. A project that is not financially feasible will not be viable for the Town.

Refer to **Appendix N**: *Capital Improvement Plan*.

## **5.6 Next Steps**

The next steps for the Town are to review and accept this Engineering Report and the proposed project. The Town should then schedule a meeting with NYSDEC and NYSEFC so that a reasonable schedule and a plan of finance can be developed for the Town.

## **5.7 Attached Signed Engineering Report Certification**

Refer to **Appendix O**: *Engineering Report Certification*.

## **5.8 Attached Signed Smart Growth Assessment**

Refer to **Appendix P**: *Smart Growth Assessment*.

## **5.9 DEC Report Comments and Response**

*On October 10, 2017, NYSDEC provided comments to the engineering report. This revised report reflects changes to the report based on these comments. A response to the comments has been generated and included in the appendices. A copy of the original cover letter from AES to DEC for this report is also documented in this appendix.*

Refer to **Appendix Q**: *NYSDEC Report Comments & Response*.

## 6) FIGURES

Figure 2.1: *General Location Map*

Figure 2.2: *APA Land Use Designations*

Figure 2.3: *Zoning Map*

Figure 2.4: *NYSDOT Scenic Byways*

Figure 2.5: *Town of Moriah Topography*

Figure 2.6: *USDA Soils Map*

Figure 2.7: *USDA Hydrologic Soils Group Map*

Figure 2.8: *USDA Depth to Any Restrictive Feature*

Figure 2.9 *APA & DEC Wetlands*

Figure 2.10: *NYSDEC Environmental Resource Mapper*

Figure 2.11: *USFWS IPAC System Trust Resources*

Figure 2.12: *USFWS Bat Fact Sheets*

Figure 2.13: *FEMA Flood Insurance Rate Map*

Figure 2.14: *Overall Existing Sewer Collection Map*

Figure 2.15: *MH GIS System Map*

Figure 3.1: *Plank Road Sewer Main Alternative 1*

Figure 3.2: *Plank Road Sewer Main Alternative 2*

Figure 3.3: *Switchback Road Trunk Sewer Main Alternative 1*

Figure 3.4: *Switchback Road Trunk Sewer Alternative 2*

Figure 3.5: *Moriah Corners Sewer Service Area Alternative 1*

Figure 3.6: *Moriah Corners Sewer Service Area Alternative 1*

Figure 5.1: *Plank Road Sewer Main Recommended Alternative*

Figure 5.2: *Switchback Road Trunk Sewer Main Recommended Alternative*

Figure 5.3: *Moriah Corners Sewer Service Area Recommended Alternative*

## 7) TABLES

Table 3.1: *Cost Estimates for the Proposed Projects*

Table 4.1: *Life Cycle Cost Analysis*

Table 4.2: *Plank Road Sewer Main Alternative Comparison*

Table 4.3: *Switchback Road Trunk Sewer Main Alternative Comparison*

Table 4.4: *Moriah Corners Service Area Alternative Comparison*

Table 5.1: *Alternative 1 Cost Estimate*

Table 5.2: *Project Financing and Estimated User Rates*

## 8) APPENDICES

Appendix A: *Order on Consent*

Appendix B: *Excerpt from "Town of Moriah, Collection System Evaluation, Engineering Planning Grant, CFA Project #27719"*

Appendix C: *Grover Hills Service Area Inspection Report*

Appendix D: *Plank Road (MH 254 to MH 108) Inspection Report*

Appendix E: *Pump Station #2 (Titus Road) Inspection Report*

Appendix F: *Moriah Center Service Area Inspection Report*

Appendix G: *Screening Plant & Siphon Inspection Report*

Appendix H: *Switchback Road Trunk Sewer Main Inspection Report*

Appendix I: *"Federal Water Main" ~~Gas Main~~ Trunk Sewer Main Inspection Report*

Appendix J: *Pump Station #1 (Tarbell Hill) Inspection Report*

Appendix K: *Moriah Corners Service Area Inspection Report*

Appendix L: *Non-Compliance Reports*

Appendix M: *Summary of Sewer District Appropriations and Sewer District Estimated Revenues*

Appendix N: *Capital Improvement Plan*

Appendix O: *Engineering Report Certification*

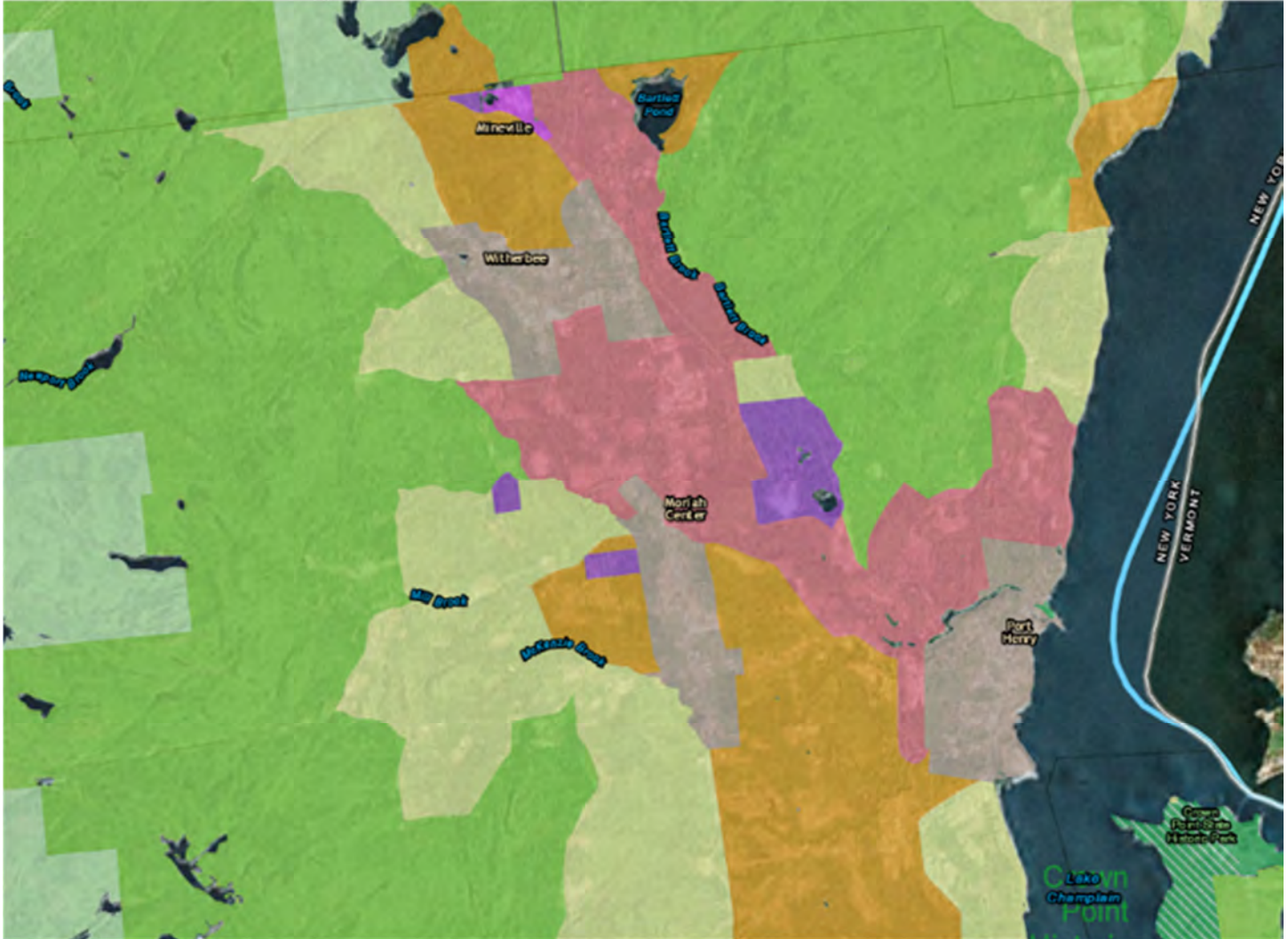
Appendix P: *Smart Growth Assessment*

Appendix Q: *NYSDEC Report Comments & Response*





## Town of Moriah Collection System Evaluation Figure 2.2 APA Land Classifications



### Legend

#### Boundaries - Cities and Towns



#### Adirondack Park Boundary










### Adirondack Park 2017 State and Private Land Class

#### Adirondack Park Land Use and Development Plan

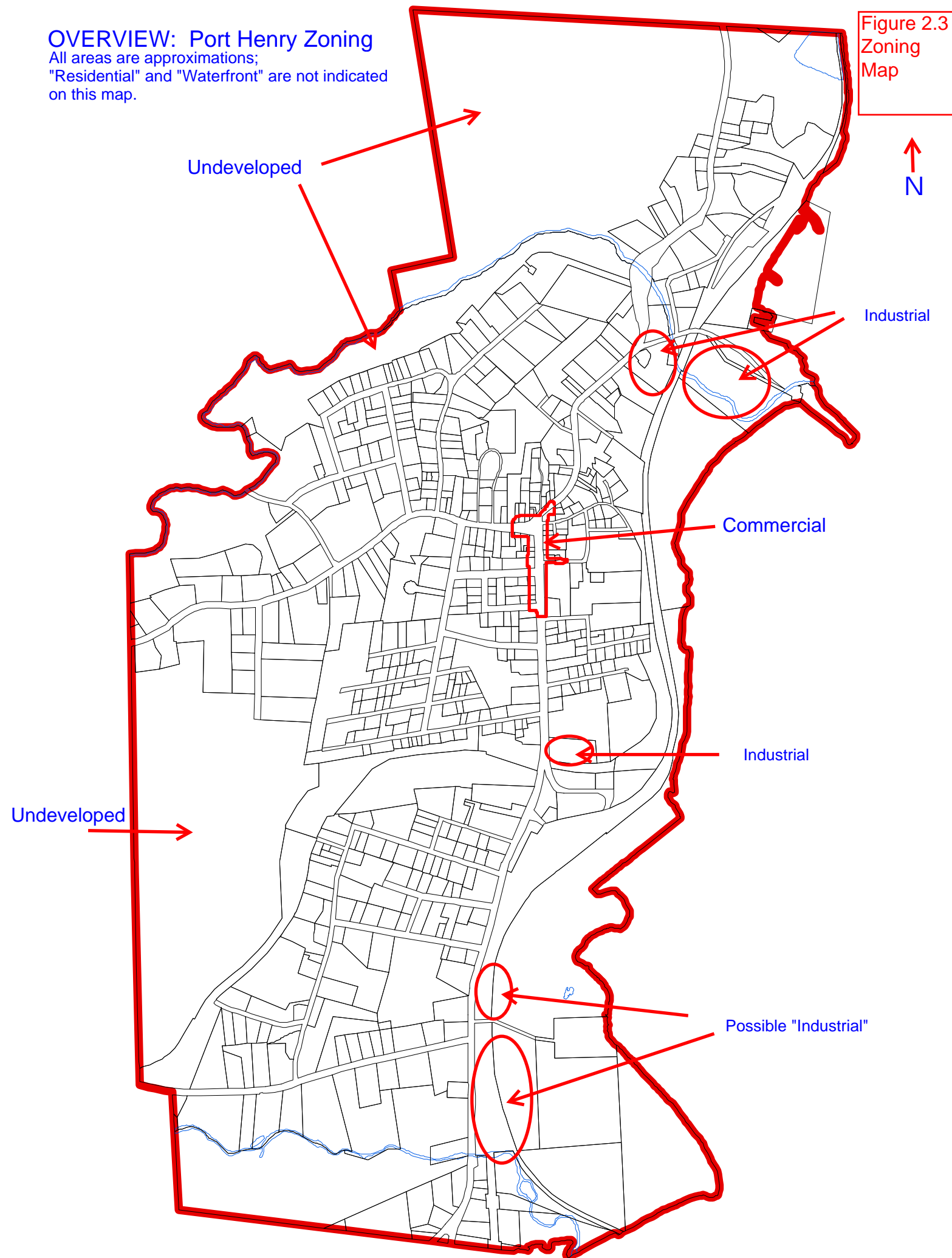
-  Hamlet
-  Moderate Intensity
-  Low Intensity
-  Rural Use
-  Resource Management
-  Industrial Use
-  Pending Pvt Land

#### State Land Map

-  Wilderness
-  Canoe Area
-  Primitive Area
-  Wild Forest
-  Intensive Use
-  Historic
-  State Administrative
-  Pending Classification

**OVERVIEW: Port Henry Zoning**  
All areas are approximations;  
"Residential" and "Waterfront" are not indicated  
on this map.

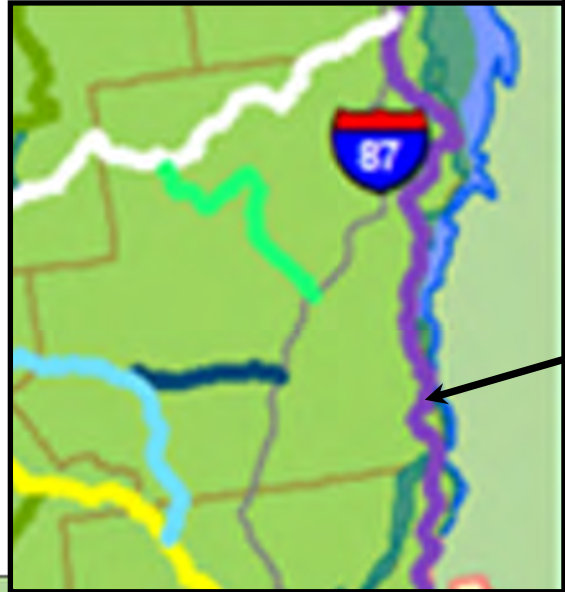
Figure 2.3  
Zoning  
Map



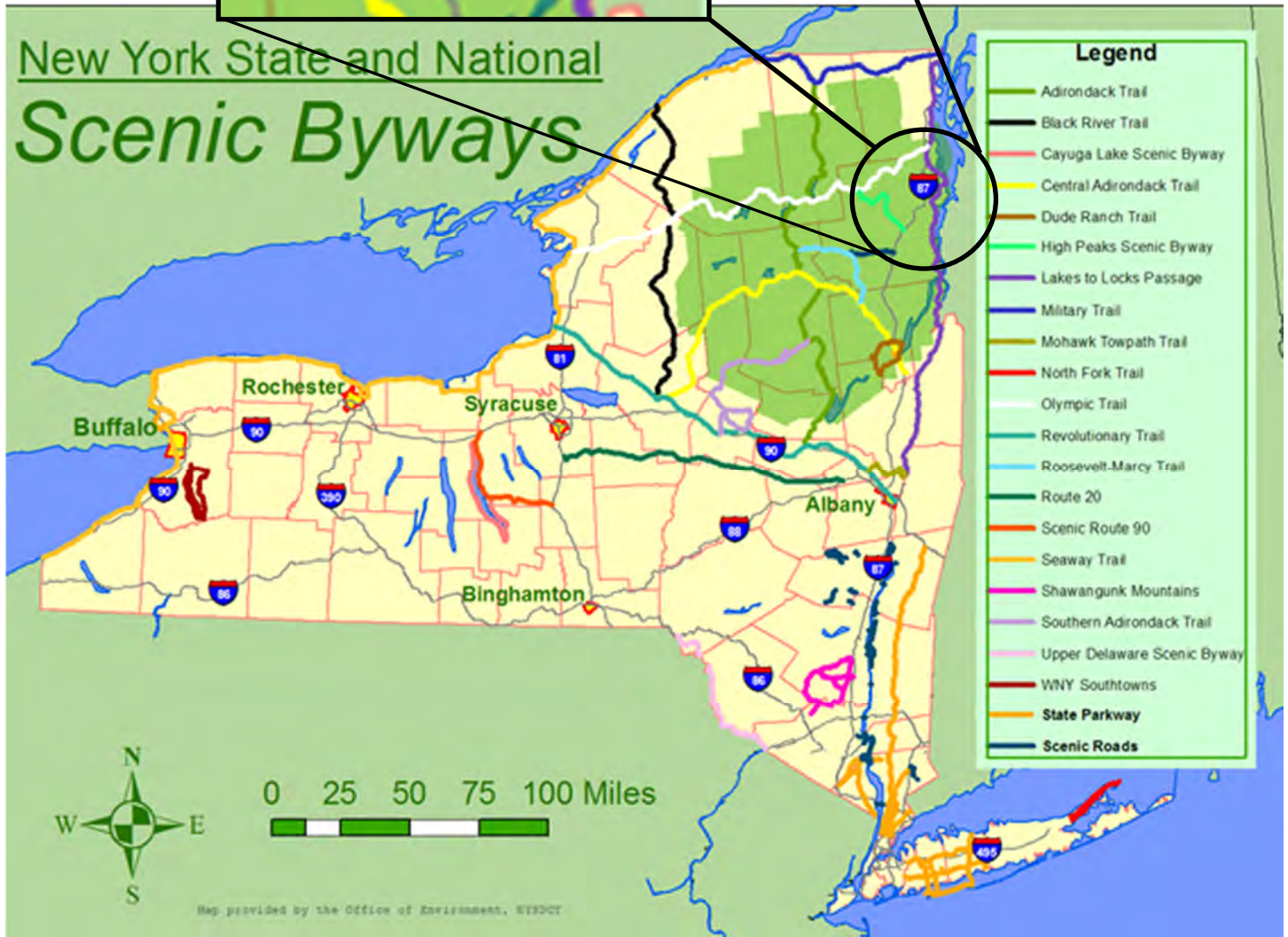


## Town of Moriah Collection System Evaluation

### Figure 2.4 NYSDOT Scenic Byways

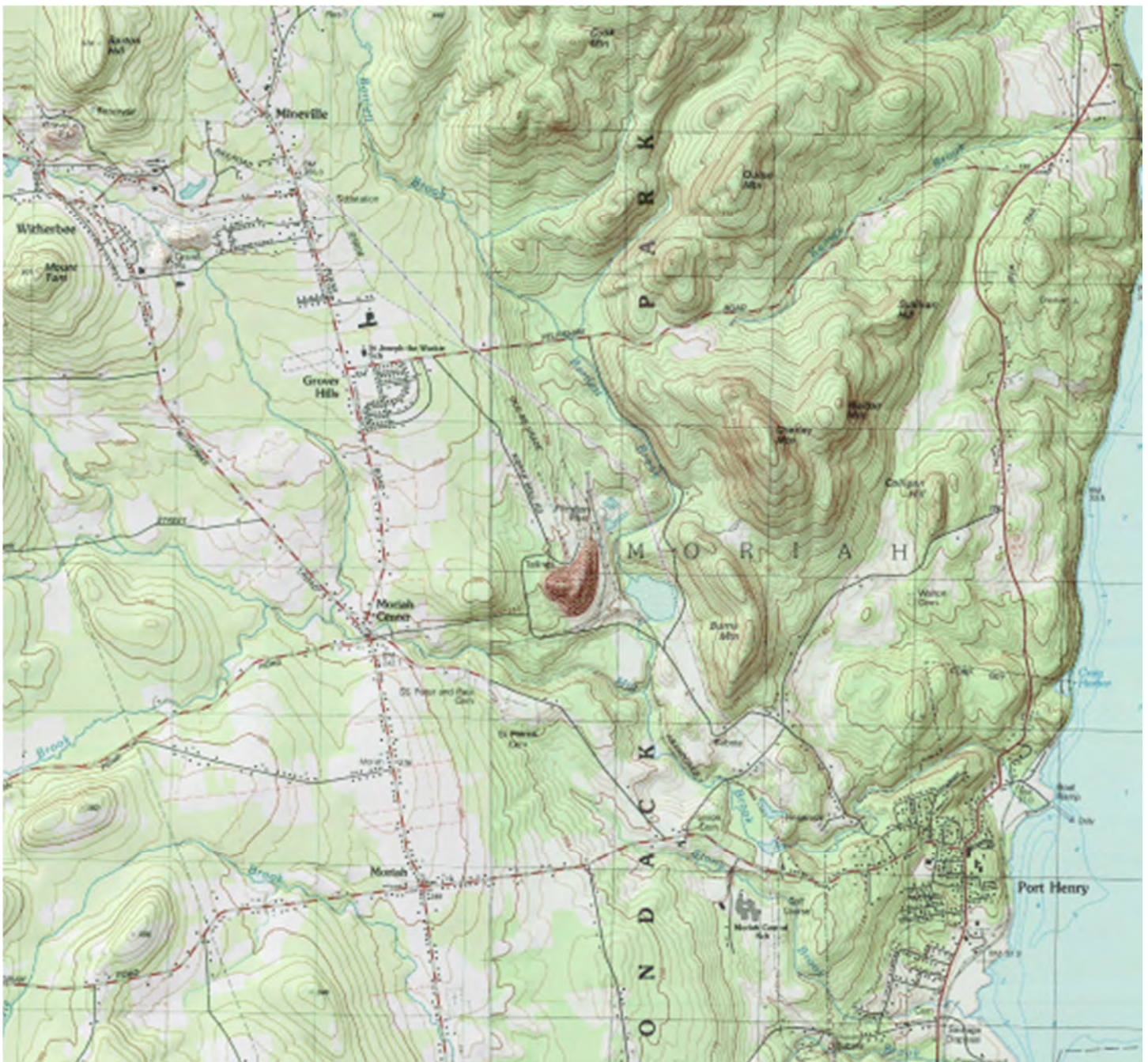


Town of Moriah





## Town of Moriah Collection System Evaluation Figure 2.5 Town of Moriah Topography







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 10 -12 City Hall Place, Plattsburgh, NY 12901  
 Phone: (518) 561-1598 Fax: (518) 561-1990  
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Town of Moriah  
 Collection System Evaluation  
 Figure 2.6  
 USDA Soils Map

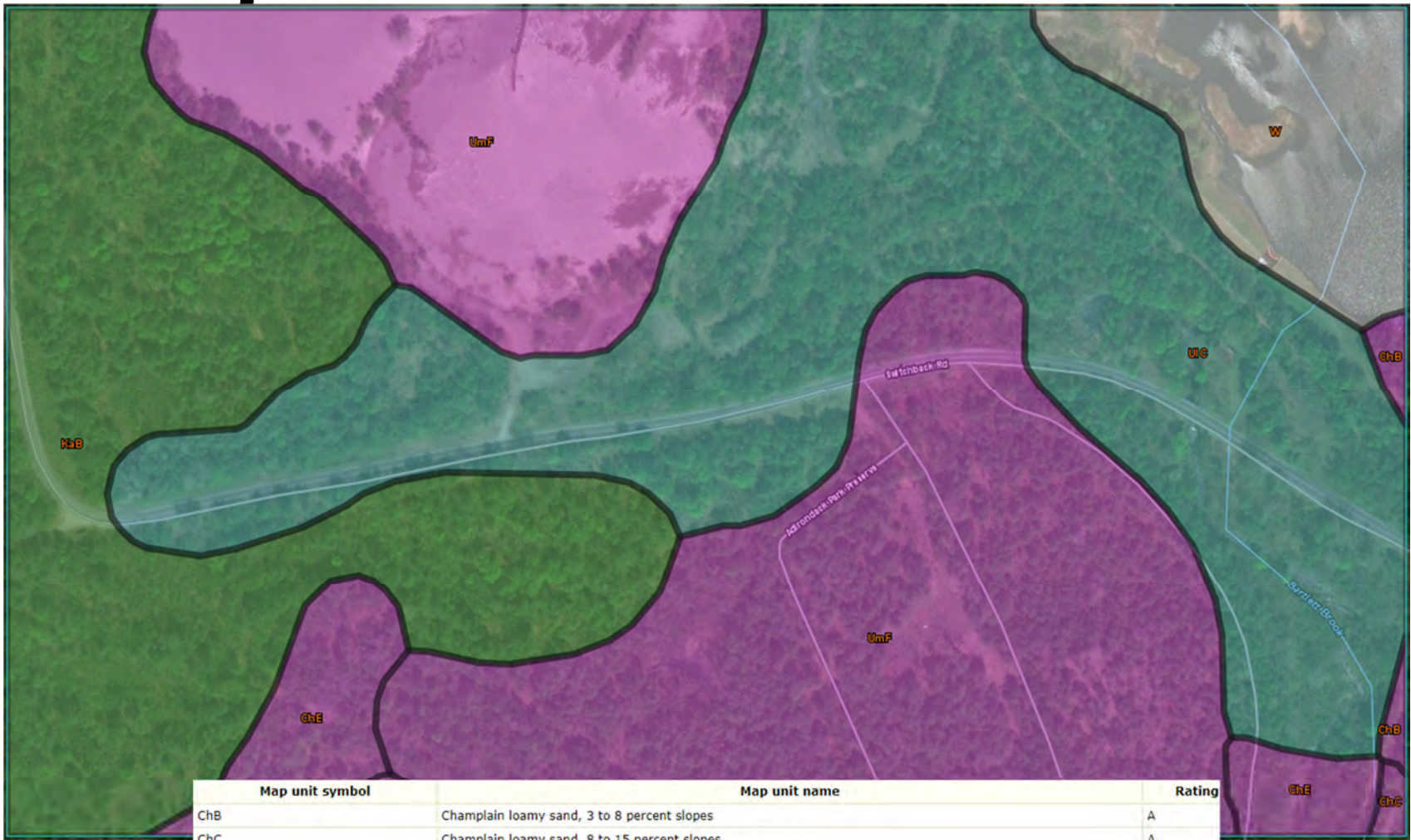
Essex County, New York (NY031)

Map Unit Symbol	Map Unit Name
ChB	Champlain loamy sand, 3 to 8 percent slopes
ChC	Champlain loamy sand, 8 to 15 percent slopes
ChE	Champlain loamy sand, 25 to 45 percent slopes
CsC	Colton very gravelly loamy sand, 8 to 15 percent slopes
KaB	Kalurah silt loam, 3 to 8 percent slopes
UIC	Udorthents, nearly level through strongly sloping
UmF	Udorthents, mine spoil, nearly level through very steep
W	Water





## Town of Moriah Collection System Evaluation Figure 2.7 USDA Hydrological Soils Group Map



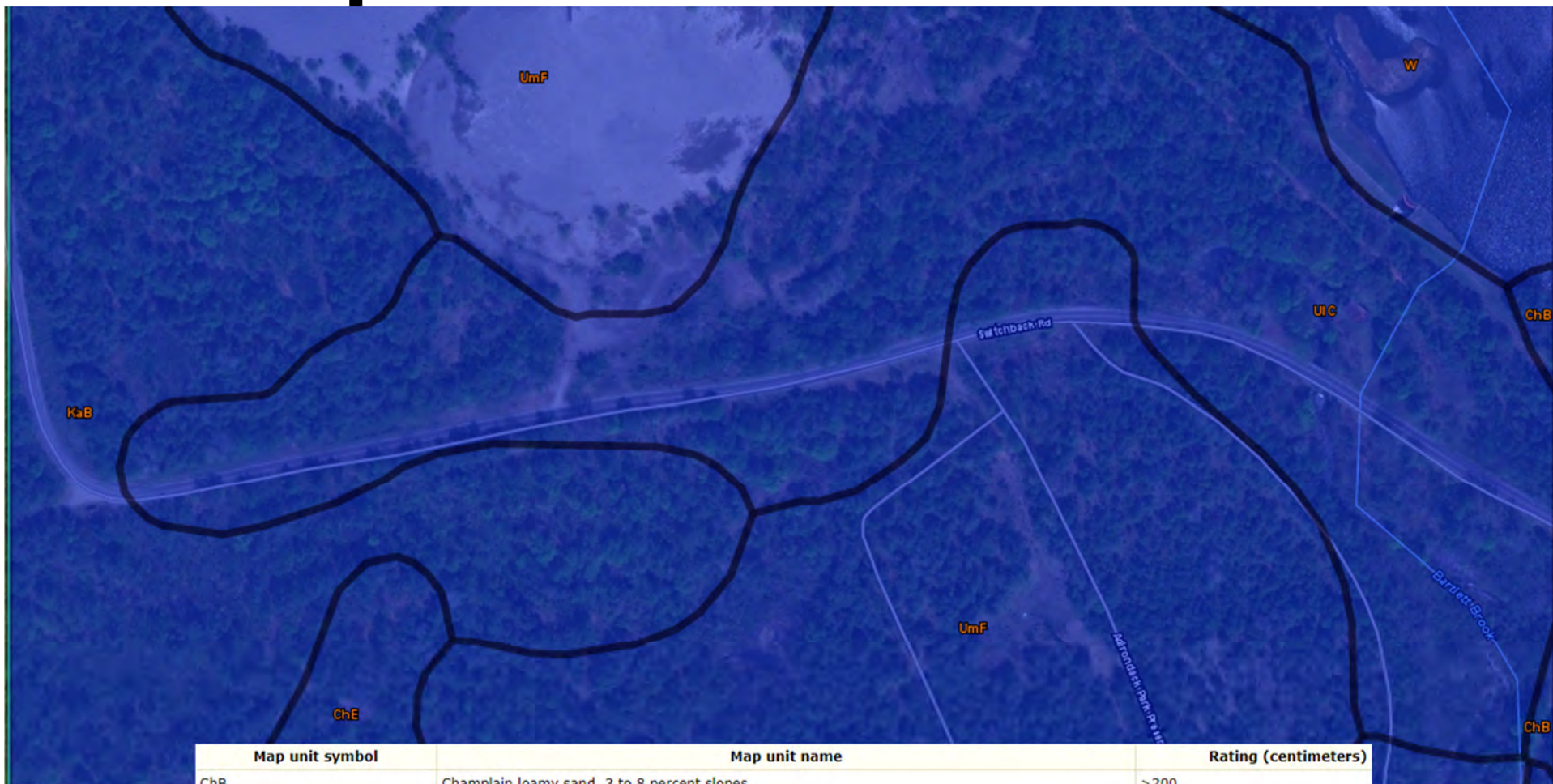
Map unit symbol	Map unit name	Rating
ChB	Champlain loamy sand, 3 to 8 percent slopes	A
ChC	Champlain loamy sand, 8 to 15 percent slopes	A
ChE	Champlain loamy sand, 25 to 45 percent slopes	A
CsC	Colton very gravelly loamy sand, 8 to 15 percent slopes	A
KaB	Kalurah silt loam, 3 to 8 percent slopes	A/D
UIC	Udorthents, nearly level through strongly sloping	C
UmF	Udorthents, mine spoil, nearly level through very steep	A



## Town of Moriah Collection System Evaluation

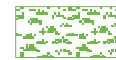

### Figure 2.8

### USDA Depth to Restrictive Feature Map



Map unit symbol	Map unit name	Rating (centimeters)
ChB	Champlain loamy sand, 3 to 8 percent slopes	>200
ChC	Champlain loamy sand, 8 to 15 percent slopes	>200
ChE	Champlain loamy sand, 25 to 45 percent slopes	>200
CsC	Colton very gravelly loamy sand, 8 to 15 percent slopes	>200
KaB	Kalurah silt loam, 3 to 8 percent slopes	>200
UIC	Udorthents, nearly level through strongly sloping	>200
UmF	Udorthents, mine spoil, nearly level through very steep	>200

**Legend**

-  Wetlands
-  Moriah Town Boundary



TOWN OF MORIAH

Town of Moriah  
Collection System Evaluation  
Figure 2.9  
APA Wetland Map



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10 -12 City Hall Place, Plattsburgh, NY 12901  
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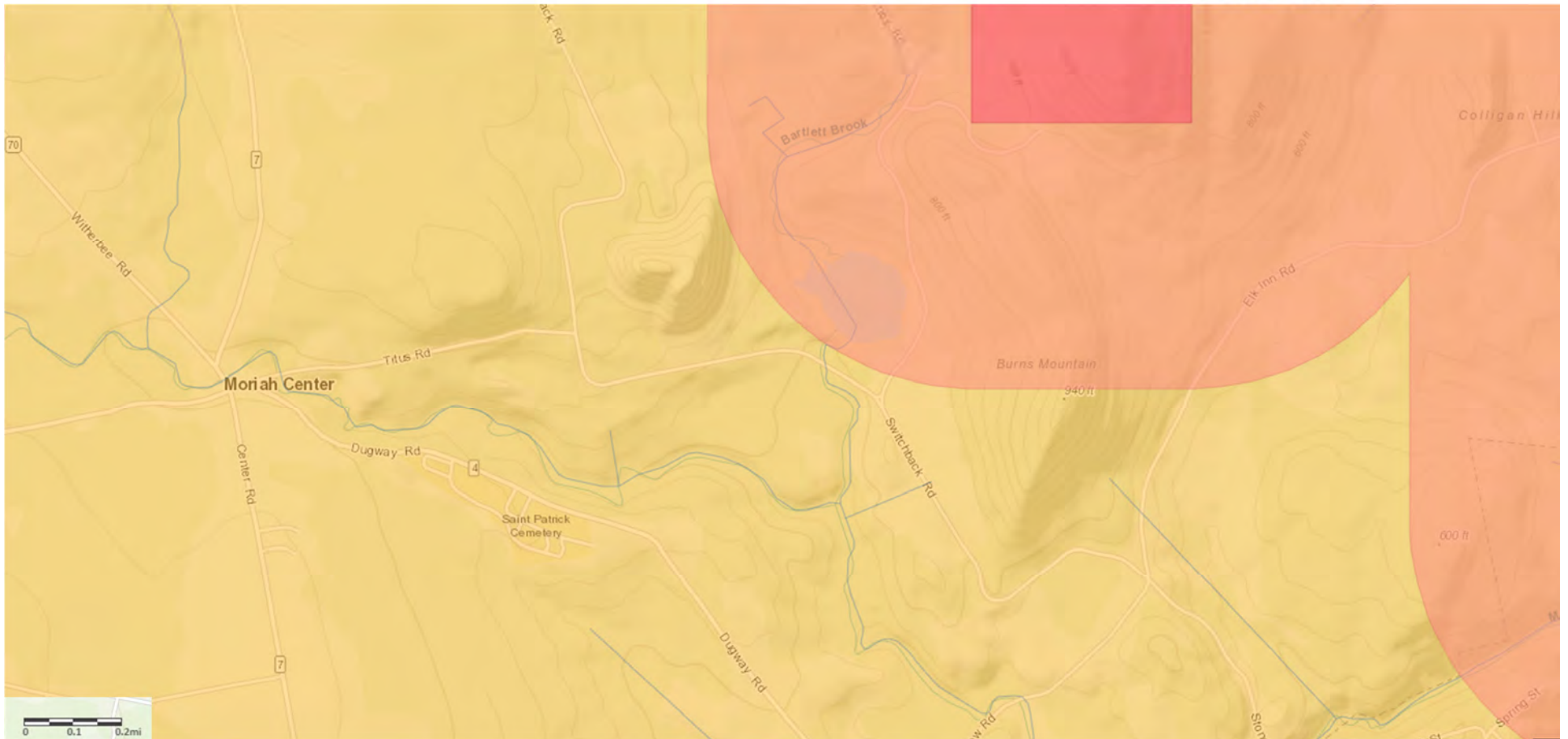




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10 -12 City Hall Place, Plattsburgh, NY 12901  
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# Town of Moriah Collection System Evaluation Figure 2.10 State Wetlands Map

- ★ Unique Geological Features
- Waterbody Classifications for Rivers/Streams
- Waterbody Classifications for Lakes
- State Regulated Freshwater Wetlands
- State Regulated Wetland Checkzone ⓘ
- Significant Natural Communities
- Natural Communities Near This Location ⓘ
- Rare Plants or Animals

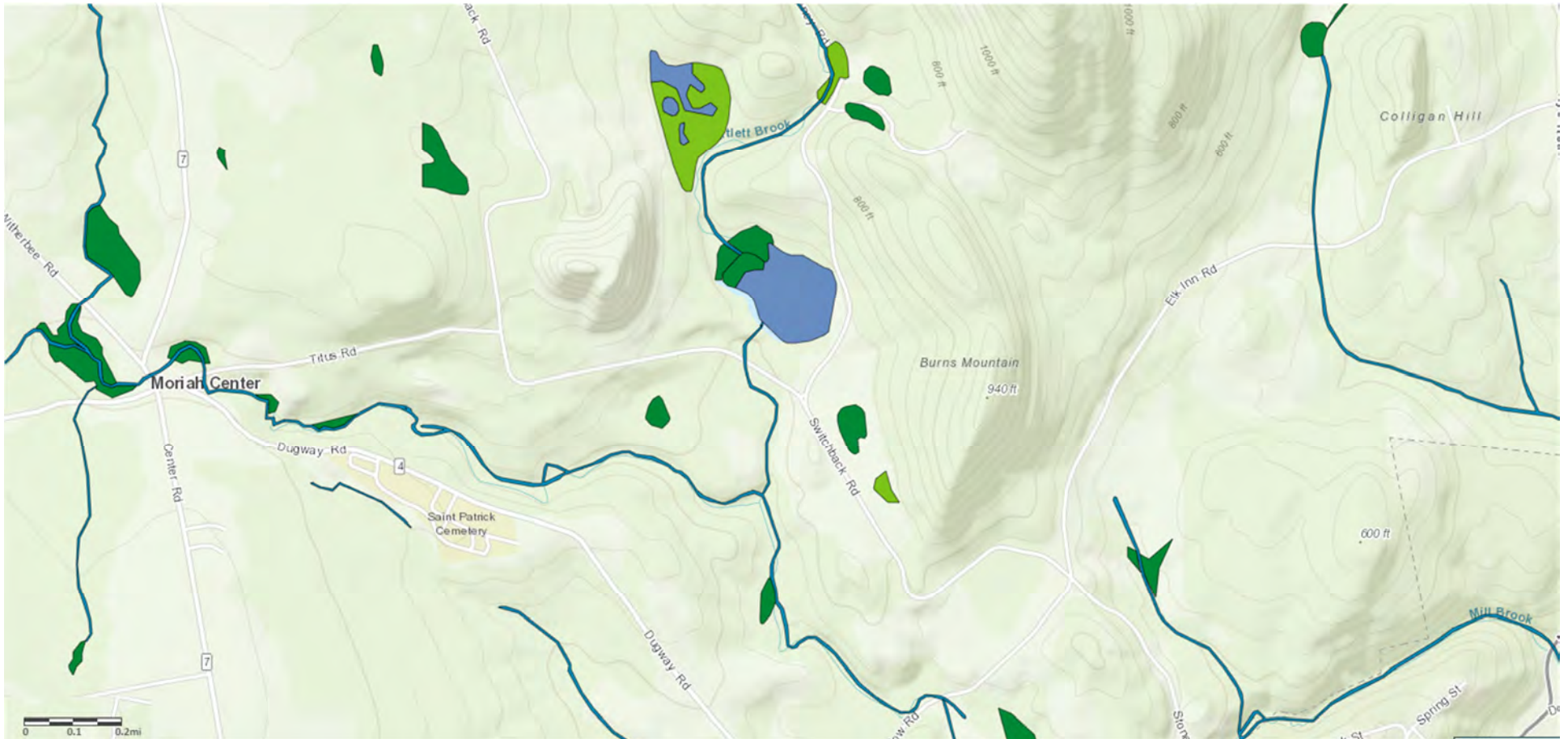




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10 -12 City Hall Place, Plattsburgh, NY 12901  
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# Town of Moriah Collection System Evaluation Figure 2.10a National Wetlands Map

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Essex County, New York



## Local office

New York Ecological Services Field Office

☎ (607) 753-9334

📠 (607) 753-9699

3817 Luker Road  
Cortland, NY 13045-9349

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

## Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.



5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> are managed by the [Endangered Species Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any activity that results in the ~~take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct)~~ of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service<sup>3</sup>. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data <http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The migratory birds species listed below are species of particular conservation concern (e.g. [Birds of Conservation Concern](#)) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the [AKN Histogram Tools](#) and [Other Bird Data Resources](#). To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
American Bittern <i>Botaurus lentiginosus</i> <a href="https://ecos.fws.gov/ecp/species/6582">https://ecos.fws.gov/ecp/species/6582</a>	Breeding
Bald Eagle <i>Haliaeetus leucocephalus</i> <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Year-round
Black Tern <i>Chlidonias niger</i> <a href="https://ecos.fws.gov/ecp/species/3093">https://ecos.fws.gov/ecp/species/3093</a>	Breeding

Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> <a href="https://ecos.fws.gov/ecp/species/9399">https://ecos.fws.gov/ecp/species/9399</a>	Breeding
Black-crowned Night-heron <i>Nycticorax nycticorax</i> <a href="https://ecos.fws.gov/ecp/species/6487">https://ecos.fws.gov/ecp/species/6487</a>	Breeding
Canada Warbler <i>Wilsonia canadensis</i>	Breeding
Common Tern <i>Sterna hirundo</i> <a href="https://ecos.fws.gov/ecp/species/4963">https://ecos.fws.gov/ecp/species/4963</a>	Breeding
Golden-winged Warbler <i>Vermivora chrysoptera</i> <a href="https://ecos.fws.gov/ecp/species/8745">https://ecos.fws.gov/ecp/species/8745</a>	Breeding
Olive-sided Flycatcher <i>Contopus cooperi</i> <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>	Breeding
Peregrine Falcon <i>Falco peregrinus</i> <a href="https://ecos.fws.gov/ecp/species/8831">https://ecos.fws.gov/ecp/species/8831</a>	Breeding
Pied-billed Grebe <i>Podilymbus podiceps</i>	Breeding
Prairie Warbler <i>Dendroica discolor</i>	Breeding
Short-eared Owl <i>Asio flammeus</i> <a href="https://ecos.fws.gov/ecp/species/9295">https://ecos.fws.gov/ecp/species/9295</a>	Year-round
Upland Sandpiper <i>Bartramia longicauda</i> <a href="https://ecos.fws.gov/ecp/species/9294">https://ecos.fws.gov/ecp/species/9294</a>	Breeding
Willow Flycatcher <i>Empidonax traillii</i> <a href="https://ecos.fws.gov/ecp/species/3482">https://ecos.fws.gov/ecp/species/3482</a>	Breeding
Wood Thrush <i>Hylocichla mustelina</i>	Breeding

#### What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

##### Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

##### Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAA/NCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAA/NCCOS models: the models were developed as part of the NOAA/NCCOS project: [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#). The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the [Northeast Ocean Data Portal](#), which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

#### Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

##### Landbirds:

The [Avian Knowledge Network \(AKN\)](#) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest, survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the [Migratory Bird Programs AKN Histogram Tools](#) webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

#### Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCOS [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project](#) webpage.

## Facilities

### Wildlife refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

**Not for consultation**



## Indiana Bat (*Myotis sodalis*)

The Indiana bat is an endangered species. Endangered species are animals and plants that are in danger of becoming extinct. Threatened species are those that are likely to become endangered in the foreseeable future. Identifying, protecting, and restoring endangered and threatened species are primary objectives of the U.S. Fish and Wildlife Service's endangered species program.

### What is the Indiana Bat?

#### **Description**

The scientific name of the Indiana bat is *Myotis sodalis* and it is an accurate description of the species. *Myotis* means "mouse ear" and refers to the relatively small, mouse-like ears of the bats in this group. *Sodalis* is the Latin word for "companion." The Indiana bat is a very social species; large numbers cluster together during hibernation. The species is called the Indiana bat because the first specimen described to science in 1928 was based on a specimen found in southern Indiana's Wyandotte Cave in 1904.

The Indiana bat is quite small, weighing only one-quarter of an ounce (about the weight of three pennies). In flight, it has a wingspan of 9 to 11 inches. The fur is dark-brown to black. The Indiana bat is similar in appearance to many other related species. Biologists can distinguish it from similar species by comparing characteristics such as the structure of the foot and color variations in the fur.

#### **Habitat**

Indiana bats hibernate during winter in caves or, occasionally, in abandoned mines. For hibernation, they require cool, humid caves with stable temperatures, under 50° F but above freezing. Very few caves within the range of the species have these conditions.



Photo by Rich Fields

*Indiana bats eat up to half their body weight in insects each night.*

Hibernation is an adaptation for survival during the cold winter months when no insects are available for bats to eat. Bats must store energy in the form of fat before hibernating. During the six months of hibernation the stored fat is their only source of energy. If bats are disturbed or cave temperatures increase, more energy is needed and hibernating bats may starve.

After hibernation, Indiana bats migrate to their summer habitat in wooded areas where they usually roost under loose tree bark on dead or dying trees. During summer, males roost alone or in small groups, while females roost in larger groups of up to 100 bats or more. Indiana bats also forage in or along the edges of forested areas.

#### **Reproduction**

Indiana bats mate during fall before they enter caves to hibernate. Females store the sperm through winter and become pregnant in spring soon after they emerge from the caves.

After migrating to their summer areas, females roost under the peeling bark of dead and dying trees in groups of up to 100 or more. Such groups are called maternity colonies. Each female in the colony gives birth to only one pup per year. Young bats are nursed by the mother, who leaves the roost tree only to forage for food. The young stay with the maternity colony throughout their first summer.

#### **Feeding Habits**

Indiana bats eat a variety of flying insects found along rivers or lakes and in uplands. Like all insect-eating bats, they benefit people by consuming insects that are considered pests or otherwise harmful to humans. Their role in insect control is not insignificant – Indiana bats eat up to half their body weight in insects each night.

#### **Range**

Indiana bats are found over most of the eastern half of the United States. Almost half of all Indiana bats (207,000



in 2005) hibernate in caves in southern Indiana. In 2005, other states which supported populations of over 40,000 included Missouri (65,000), Kentucky (62,000), Illinois (43,000) and New York (42,000). Other states within the current range of the Indiana bat include Alabama, Arkansas, Connecticut, Iowa, Maryland, Michigan, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Vermont, Virginia, West Virginia. The 2005 population estimate is about 457,000 Indiana bats, half as many as when the species was listed as endangered in 1967.

## **Why is the Indiana Bat Endangered?**

### ***Human Disturbance***

Indiana bats, because they hibernate in large numbers in only a few caves, are extremely vulnerable to disturbance. During hibernation, they cluster in groups of up to 500 per square foot. Since the largest hibernation caves support from 20,000 to 50,000 bats, it is easy to see how a large part of the total population can be affected by a single event. Episodes of large numbers of Indiana bat deaths have occurred due to human disturbance during hibernation.

### ***Cave Commercialization and Improper Gating***

The commercialization of caves – allowing visitors to tour caves during hibernation – drives bats away. Changes in the structure of caves, such as blocking an entrance, can change the temperature in a cave. A change of even a few degrees can make a cave unsuitable for hibernating bats. Some caves are fitted with gates to keep people out, but improper gating that prevents access by bats or alters air flow, temperature, or humidity can also be harmful. Properly constructed gates are beneficial because they keep people from disturbing hibernating bats while maintaining temperature and other requirements and allowing access for bats.

### ***Summer Habitat Loss or Degradation***

Indiana bats use trees as roosting and foraging sites during summer months.

Loss and fragmentation of forested habitats can affect bat populations.

### ***Pesticides and Environmental Contaminants***

Insect-eating bats may seem to have an unlimited food supply, but in local areas, insects may not be plentiful because of pesticide use. This can also affect the quality of the bats' food supply. Many scientists believe that population declines occurring today might be due, in part, to pesticides and environmental contaminants. Bats may be affected by eating contaminated insects, drinking contaminated water, or absorbing the chemicals while feeding in areas that have been recently treated.

## **What is Being Done to Prevent Extinction of the Indiana Bat?**

### ***Listing***

Prompted by declining populations caused by disturbance of bats during hibernation and modification of hibernacula, the Indiana bat was listed in 1967 as “in danger of extinction” under the Endangered Species Preservation Act of 1966. It is listed as “endangered” under the current Endangered Species Act of 1973. Listing under the Endangered Species Act protects the Indiana bat from take (harming, harassing, killing) and requires Federal agencies to work to conserve it.

### ***Recovery Plan***

The Endangered Species Act requires that recovery plans be prepared for all listed species. The U.S. Fish and Wildlife Service developed a recovery plan for the Indiana bat in 1983 and is now revising that Plan. The recovery plan describes actions needed to help the bat recover.

### ***Habitat Protection***

Public lands like National Wildlife Refuges, military areas, and U.S. Forest Service lands are managed for Indiana bats by protecting forests. This means ensuring that there are the size and species of trees needed by Indiana bats for roosting; and providing a supply of dead and dying trees that can be used as roost sites. In addition, caves used for hibernation are managed to

maintain suitable conditions for hibernation and eliminate disturbance.

### ***Education and Outreach***

Understanding the important role played by Indiana bats is a key to conserving the species. Helping people learn more about the Indiana bat and other endangered species can lead to more effective recovery efforts.

***U.S. Fish & Wildlife Service***

***1 Federal Drive***

***Fort Snelling, Minnesota 55111***

***612/713-5350***

***<http://www.fws.gov/midwest/endangered>***

***December 2006***



## Northern Long-Eared Bat

### *Myotis septentrionalis*

The northern long-eared bat is federally listed as a threatened species under the Endangered Species Act. **Endangered** species are animals and plants that are in danger of becoming extinct. **Threatened** species are animals and plants that are likely to become endangered in the foreseeable future. Identifying, protecting and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's Endangered Species Program.

#### What is the northern long-eared bat?

**Appearance:** The northern long-eared bat is a medium-sized bat with a body length of 3 to 3.7 inches and a wingspan of 9 to 10 inches. Their fur color can be medium to dark brown on the back and tawny to pale-brown on the underside. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, *Myotis*.

**Winter Habitat:** Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. Within hibernacula, surveyors find them hibernating most often in small crevices or cracks, often with only the nose and ears visible.

**Summer Habitat:** During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. They rarely roost in human structures like barns and sheds.

**Reproduction:** Breeding begins in late summer or early fall when males begin to swarm near hibernacula. After



*This northern long-eared bat, observed during an Illinois mine survey, shows visible symptoms of white-nose syndrome.*

copulation, females store sperm during hibernation until spring. In spring, females emerge from their hibernacula, ovulate and the stored sperm fertilizes an egg. This strategy is called delayed fertilization.

After fertilization, pregnant bats migrate to summer areas where they roost in small colonies and give birth to a single pup. Maternity colonies of females and young generally have 30 to 60 bats at the beginning of the summer, although larger maternity colonies have also been observed. Numbers of bats in roosts typically decrease from the time of pregnancy to post-lactation. Most bats within a maternity colony give birth around the same time, which may occur from late May or early June to late July, depending where the colony is located within the species' range. Young bats start flying by 18 to 21 days after birth. Maximum lifespan for the northern long-eared bat is estimated to be up to 18.5 years.

**Feeding Habits:** Like most bats, northern long-eared bats emerge at dusk to feed. They primarily fly through the

understory of forested areas feeding on moths, flies, leafhoppers, caddisflies, and beetles, which they catch while in flight using echolocation or by gleaning motionless insects from vegetation.

**Range:** The northern long-eared bat's range includes much of the eastern and north central United States, and all Canadian provinces from the Atlantic Ocean west to the southern Yukon Territory and eastern British Columbia. The species' range includes 37 States and the District of Columbia: Alabama, Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.

#### Why is the northern long-eared bat in trouble?

**White-nose Syndrome:** No other threat is as severe and immediate as



this. If this disease had not emerged, it is unlikely that northern long-eared bat populations would be experiencing such dramatic declines. Since symptoms were first observed in New York in 2006, white-nose syndrome has spread rapidly from the Northeast to the Midwest and Southeast; an area that includes the core of the northern long-eared bat's range, where it was most common before this disease. Numbers of northern long-eared bats (from hibernacula counts) have declined by up to 99 percent in the Northeast. Although there is uncertainty about the rate that white-nose syndrome will spread throughout the species' range, it is expected to continue to spread throughout the United States in the foreseeable future.

#### **Other Sources of Mortality:**

Although no significant population declines have been observed due to the sources of mortality listed below, they may now be important factors affecting this bat's viability until we find ways to address WNS.

**Impacts to Hibernacula:** Gates or other structures intended to exclude people from caves and mines not only restrict bat flight and movement, but also change airflow and microclimates. A change of even a few degrees can make a cave unsuitable for hibernating bats. Also, cave-dwelling bats are vulnerable to human disturbance while hibernating. Arousal during hibernation causes bats to use up their energy stores, which may lead to bats not surviving through winter.

#### **Loss or Degradation of Summer**

**Habitat:** Highway construction, commercial development, surface mining, and wind facility construction permanently remove habitat and are activities prevalent in many areas of this bat's range. Many forest management activities benefit bats by keeping areas forested rather than converted to other uses. But, depending on type and timing, some forest management activities can cause mortality and temporarily remove or degrade roosting and foraging habitat.

**Wind Farm Operation:** Wind turbines kill bats, and, depending on the species, in very large numbers. Mortality from windmills has been documented for northern long-eared bats, although a

small number have been found to date. However, there are many wind projects within a large portion of the bat's range and many more are planned.

#### **What Is Being Done to Help the Northern Long-Eared Bat?**

**Disease Management:** Actions have been taken to try to reduce or slow the spread of white-nose syndrome through human transmission of the fungus into caves (e.g. cave and mine closures and advisories; national decontamination protocols). A national plan was prepared by the Service and other state and federal agencies that details actions needed to investigate and manage white-nose syndrome. Many state and federal agencies, universities and non-governmental organizations are researching this disease to try to control its spread and address its affect. See [www.whitenosesyndrome.org/](http://www.whitenosesyndrome.org/) for more.

#### **Addressing Wind Turbine**

**Mortality:** The Service and others are working to minimize bat mortality from wind turbines on several fronts. We fund and conduct research to determine why bats are susceptible to turbines, how to operate turbines to minimize mortality and where important bird and bat migration routes are located. The Service, state natural resource agencies, and the wind energy industry are developing a Midwest Wind Energy Habitat Conservation Plan, which will provide wind farms a mechanism to continue operating legally while minimizing and mitigating listed bat mortality.

**Listing:** The northern long-eared bat is listed as a threatened species under the federal Endangered Species Act. Listing a species affords it the protections of the Act and also increases the priority of the species for funds, grants, and recovery opportunities.

**Hibernacula Protection:** Many federal and state natural resource agencies and conservation organizations have protected caves and mines that are important hibernacula for cave-dwelling bats.

#### **What Can I Do?**

##### ***Do Not Disturb Hibernating Bats:***

To protect bats and their habitats, comply with all cave and mine closures, advisories, and regulations. In areas without a cave and mine closure policy, follow approved decontamination protocols (see <http://whitenosesyndrome.org/topics/decontamination>). Under no circumstances should clothing, footwear, or equipment that was used in a white-nose syndrome affected state or region be used in unaffected states or regions.

##### ***Leave Dead and Dying Trees***

**Standing:** Like most eastern bats, the northern long-eared bat roosts in trees during summer. Where possible and not a safety hazard, leave dead or dying trees on your property. Northern long-eared bats and many other animals use these trees.

**Install a Bat Box:** Dead and dying trees are usually not left standing, so trees suitable for roosting may be in short supply and bat boxes may provide additional roost sites. Bat boxes are especially needed from April to August when females look for safe and quiet places to give birth and raise their pups.

**Support Sustainability:** Support efforts in your community, county and state to ensure that sustainability is a development goal. Only through sustainable living will we provide rare and declining species, like the northern long-eared bat, the habitat and resources they need to survive alongside us.

**Spread the Word:** Understanding the important ecological role that bats play is a key to conserving the northern long-eared and other bats. Helping people learn more about the northern long-eared bat and other endangered species can lead to more effective recovery efforts. For more information, visit [www.fws.gov/midwest/nleb](http://www.fws.gov/midwest/nleb) and [www.whitenosesyndrome.org](http://www.whitenosesyndrome.org)

**Join and Volunteer:** Join a conservation group; many have local chapters. Volunteer at a local nature center, zoo, or national wildlife refuge. Many state natural resource agencies benefit greatly from citizen involvement in monitoring wildlife. Check your state agency websites and get involved in citizen science efforts in your area.





**KEY TO MAP**

Zone Designations*	<b>ZONE C</b>
	<b>ZONE A</b>
	<b>ZONE C</b>
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation In Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7X
Zone D Boundary	
River Mile	•M1.5

\*\*Referenced to the National Geodetic Vertical Datum of 1929

**\*EXPLANATION OF ZONE DESIGNATIONS**

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AD	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

**NOTES TO USER**

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures. This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

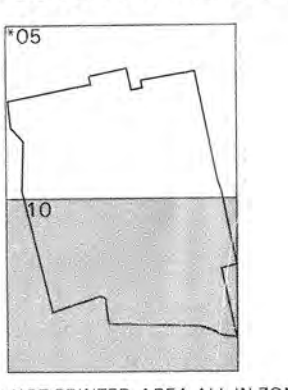
INITIAL IDENTIFICATION:  
NOVEMBER 22, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:  
SEPTEMBER 24, 1984

FLOOD INSURANCE RATE MAP REVISIONS:

**MAP LOCATOR DIAGRAM**



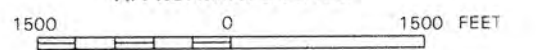
\* PANEL NOT PRINTED-AREA ALL IN ZONE C

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.



APPROXIMATE SCALE



**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM FLOOD INSURANCE RATE MAP**

**TOWN OF MORIAH, NEW YORK**  
ESSEX COUNTY

PANEL 10 OF 10

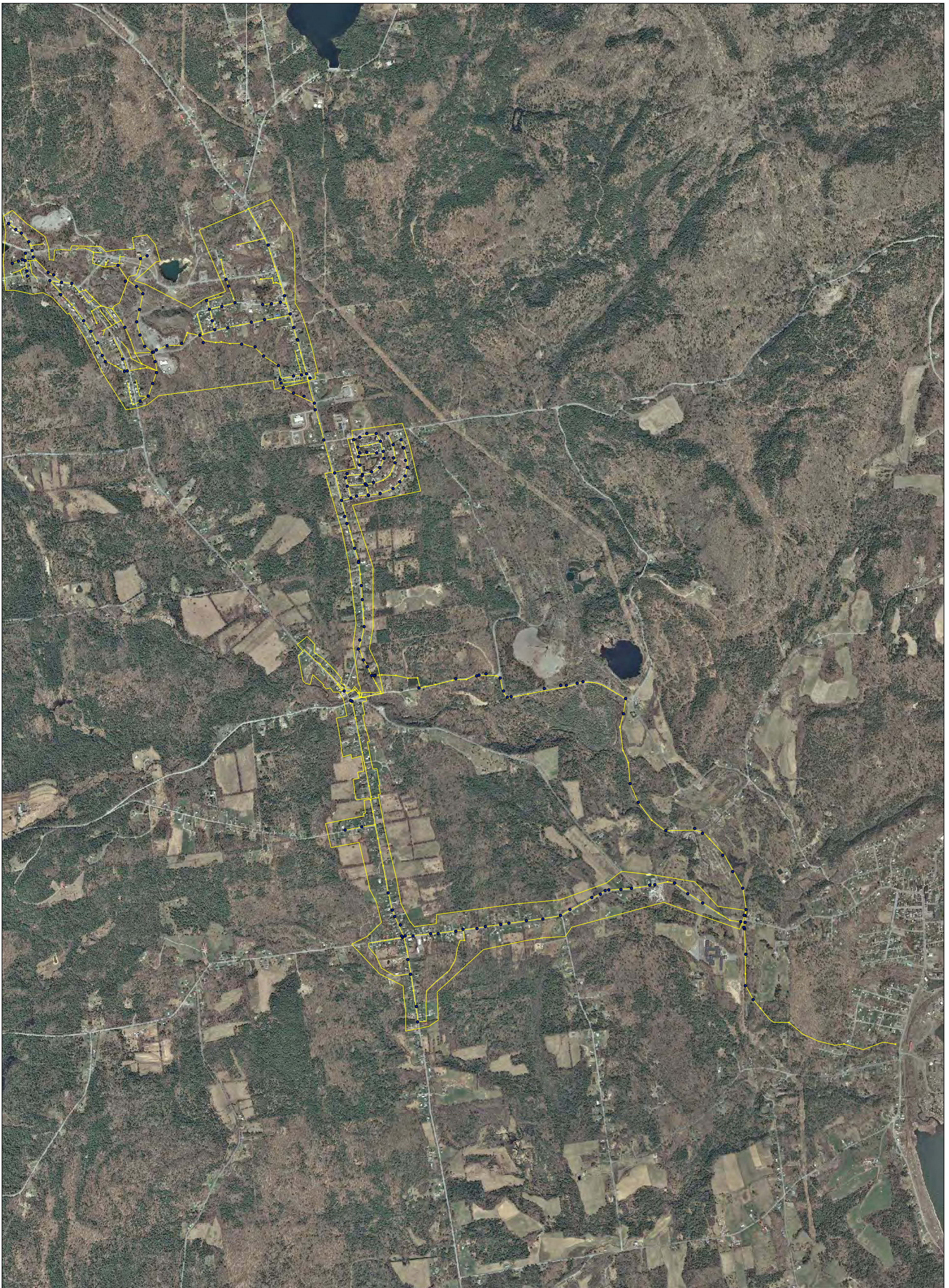
COMMUNITY-PANEL NUMBER  
361389 0010 A

EFFECTIVE DATE:  
SEPTEMBER 24, 1984



Federal Emergency Management Agency





3,500 1,750 0 3,500 Feet

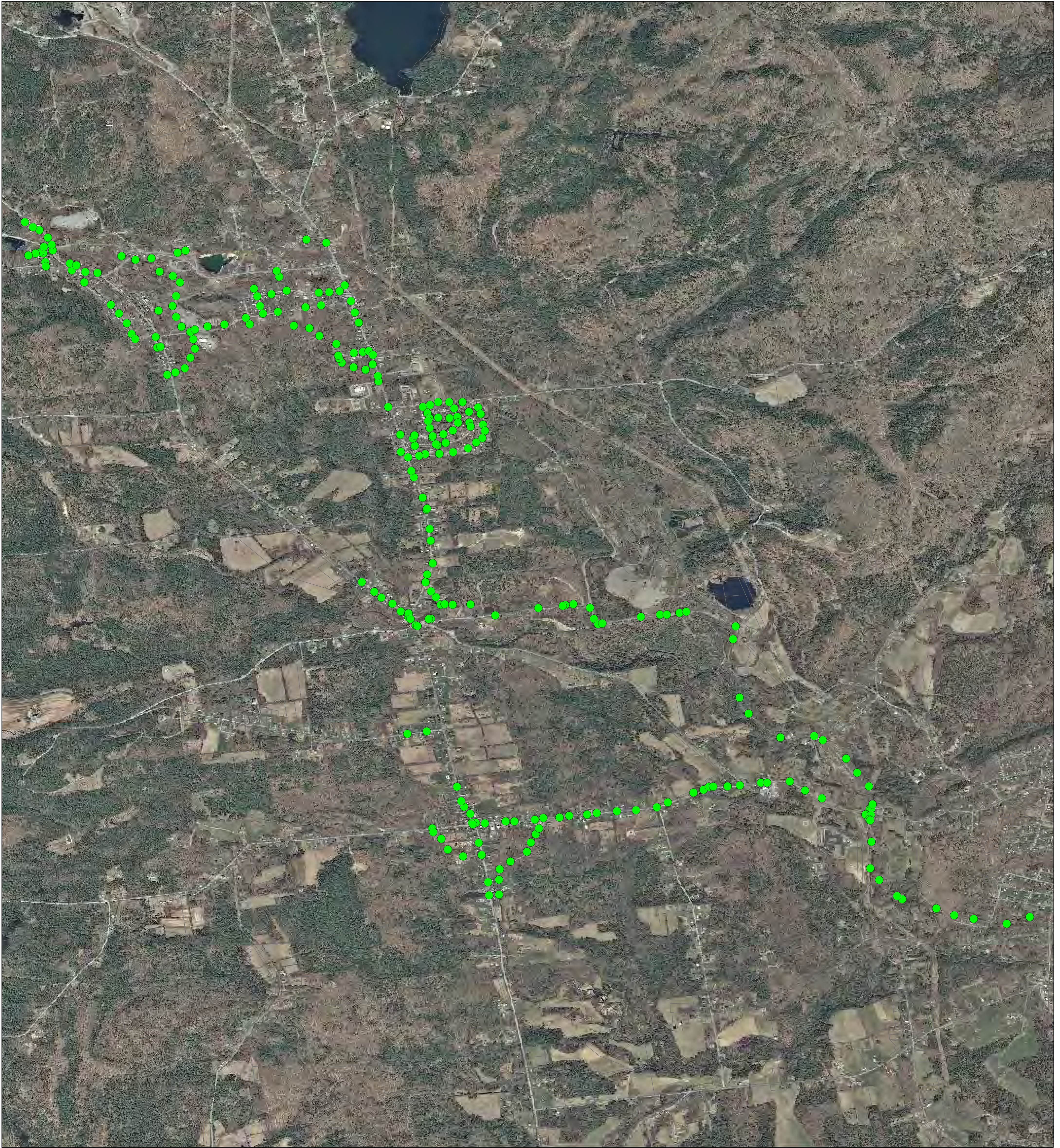
**Legend**

- Manholes found with GPS Accuracy
- Sanitary Sewer Lines and Districts



FIGURE 2.14 OVERALL COLLECTION SYSTEM MAP





**Legend**

- SANITARY SEWER MANHOLE

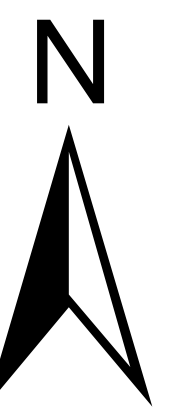
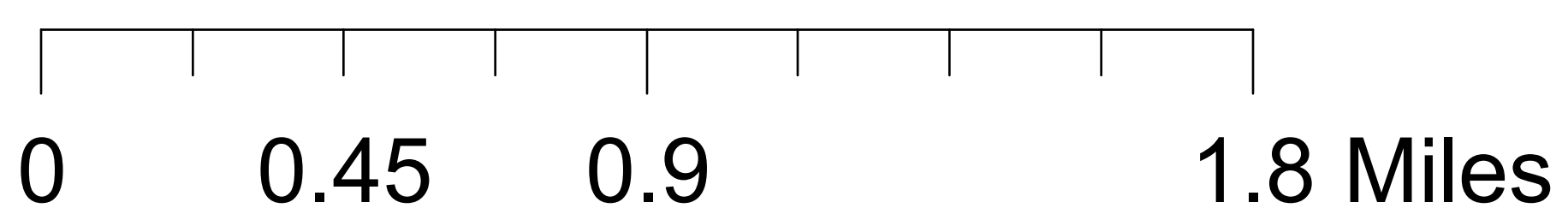
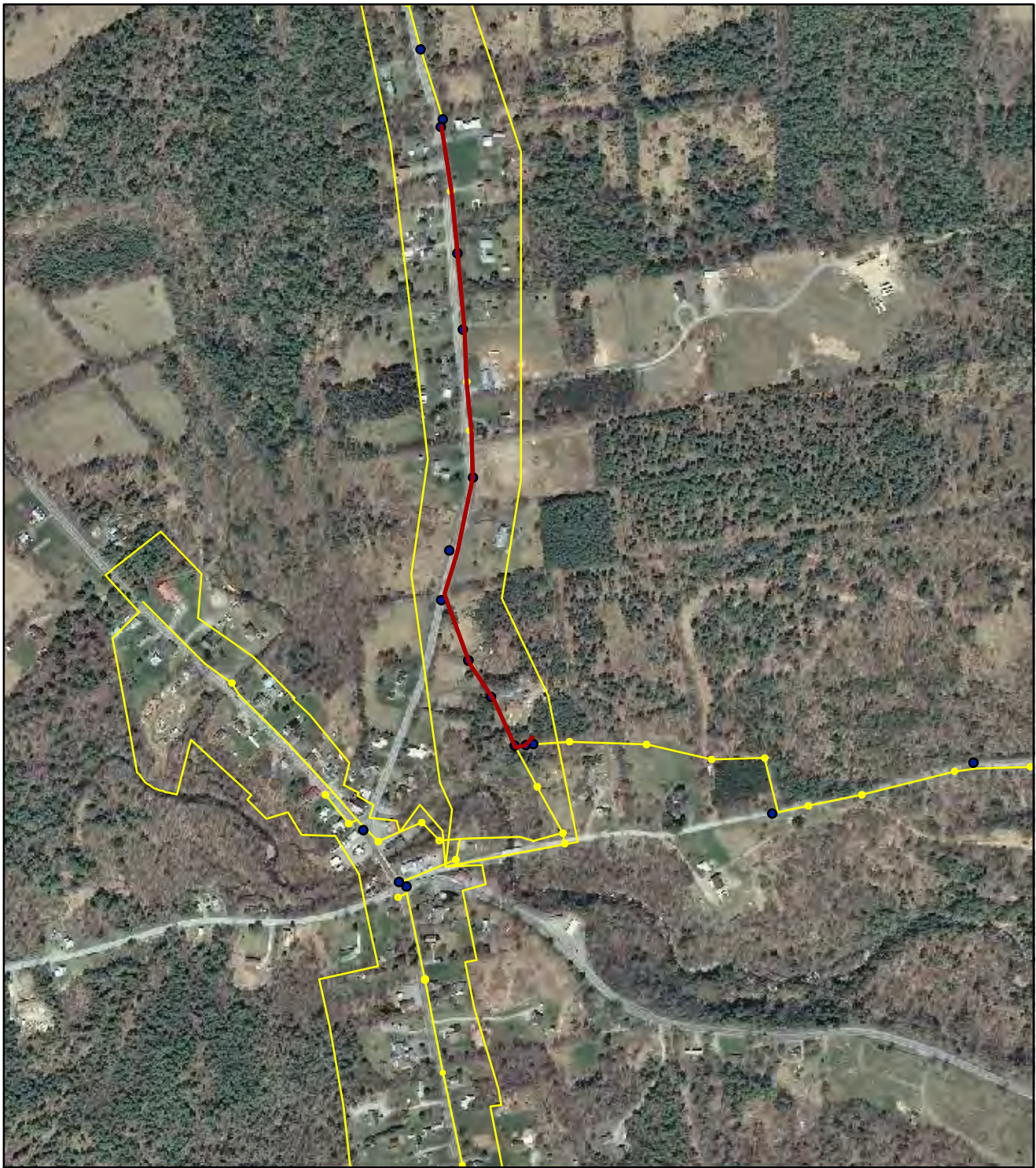


FIGURE 2.15 MH GIS SYSTEM MAP







**Legend**

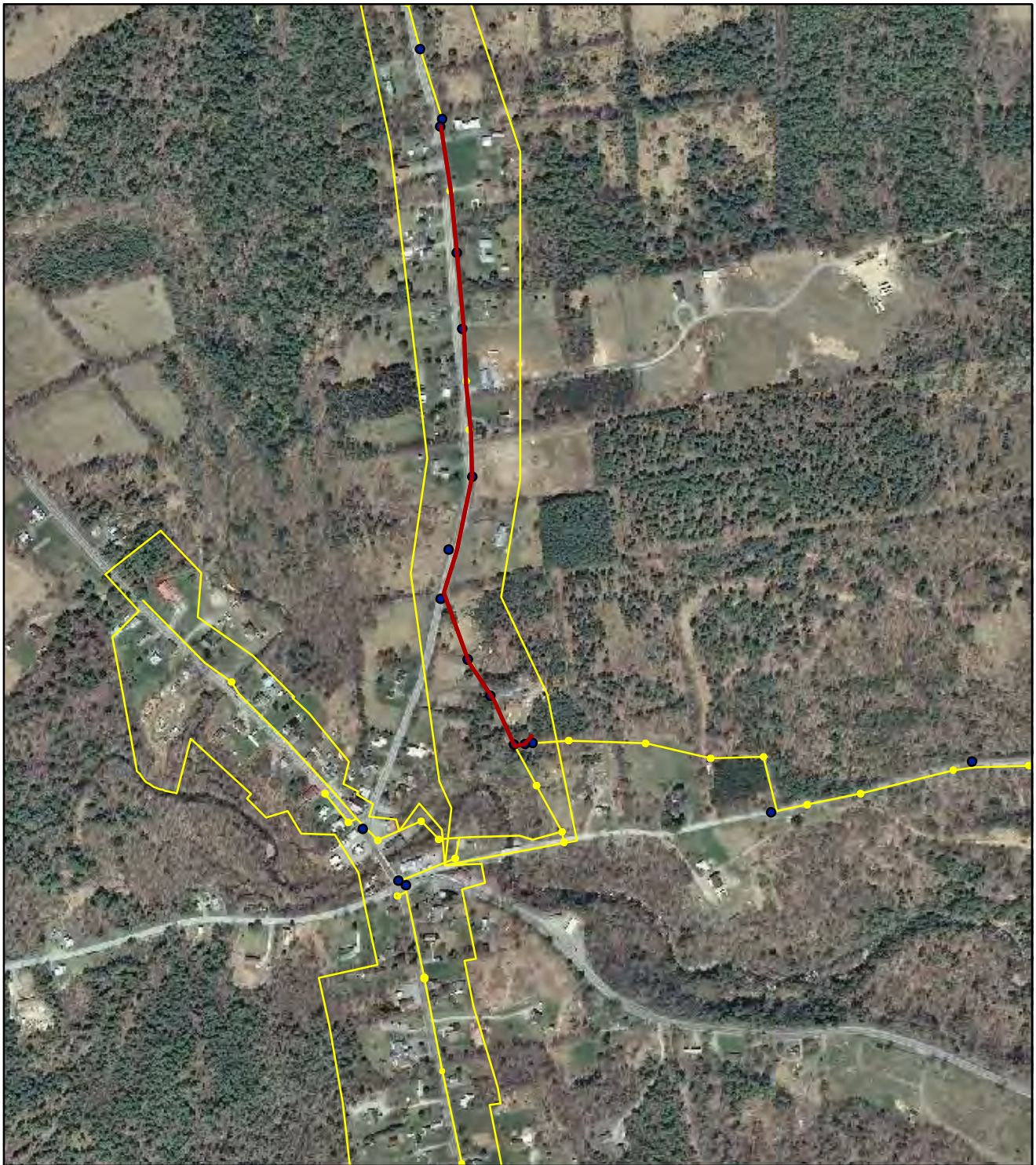
- Manholes found with GPS Accuracy
- Proposed Plank Road Repairs
- Sanitary Sewer Lines and Districts



**Figure 3.1**  
**Plank Road Sewer Main**  
**Alternative 1**







**Legend**

- Manholes found with GPS Accuracy
- Proposed Plank Road Line CIPP
- Sanitary Sewer Lines and Districts



Figure 3.2  
Plank Road Sewer Main  
Alternative 2













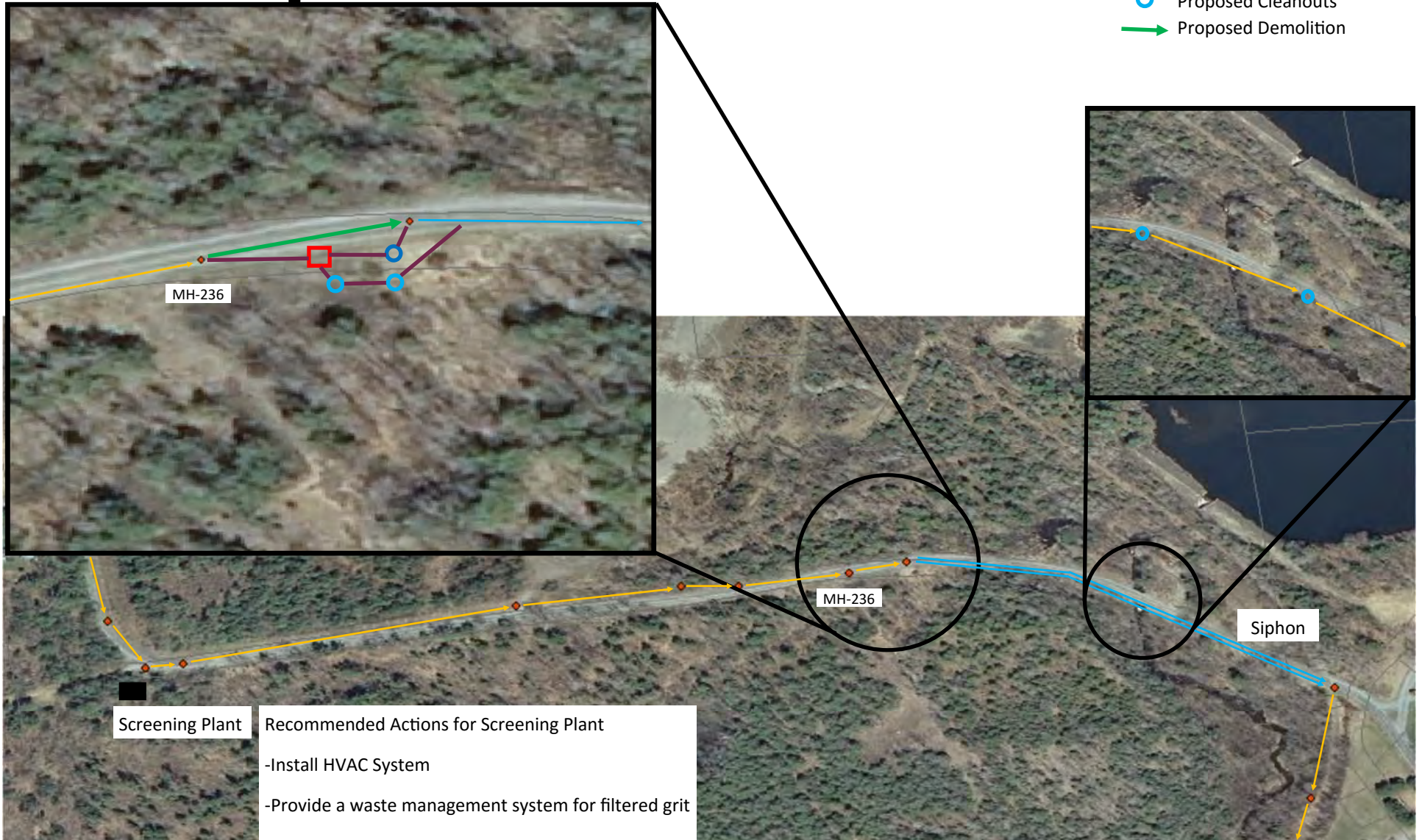
Town of Moriah  
Collection System Evaluation

Figure 3.3

Switchback Road Trunk Sewer Main Alternative 1

Legend







-  Existing Manhole
-  Existing Gravity Sewer
-  Existing Siphon Barrel
-  Proposed Distribution Box
-  Proposed Manhole
-  Proposed Siphon Barrel
-  Proposed Cleanouts
-  Proposed Demolition





Town of Moriah  
Collection System Evaluation

Figure 3.4  
Switchback Road Trunk Sewer Main Alternative 2

- Legend
-  Existing Manhole (To Be Abandoned)
  -  Existing Gravity Sewer
  -  Proposed PS Control Building
  -  Valve Vault and Wet well
  -  Proposed Force Main
  -  Proposed Cleanouts





Town of Moriah  
Collection System Evaluation  
Figure 3.5

Moriah Corners Sewer Service Area Alternative 1

Wet Well Recommendations

- Replacement of Pumps and Rails

Control Building Recommendations

- Replacement of Controls and Electrical Runs
- Installation of drain from valve vault back to wet well





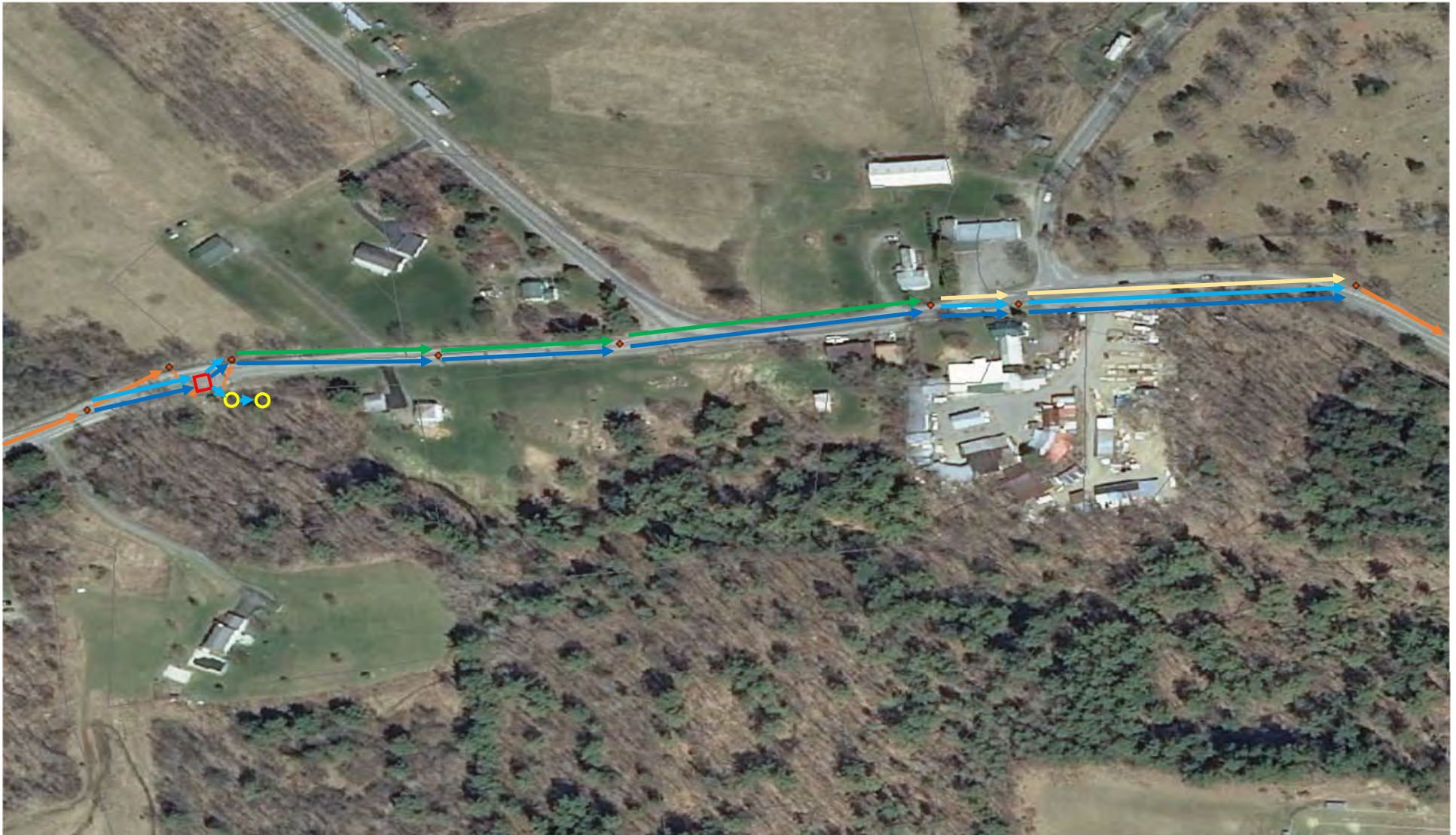
Town of Moriah  
Collection System Evaluation

Figure 3.6

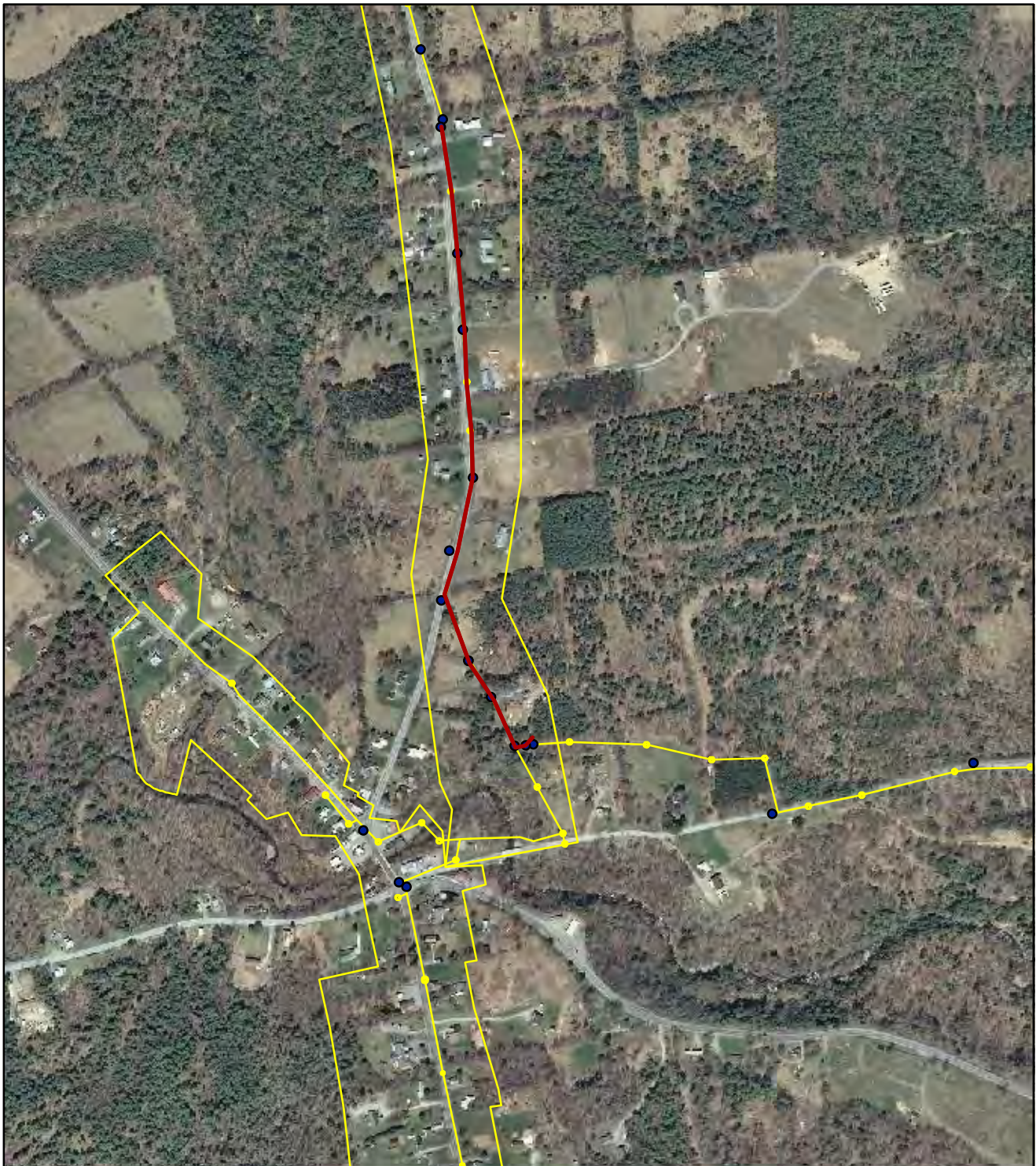
Moriah Corners Sewer Service Area Alternative 2

Legend

- Primary Siphon Barrel
- Secondary Siphon Barrel
- Existing Pipe
- Reusable Force Main
- Demolition
- Distribution Box
- Cleanouts

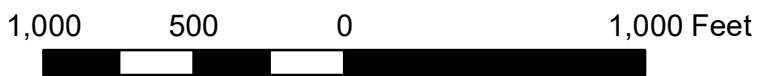






**Legend**

- Manholes found with GPS Accuracy
- Proposed Plank Road Repairs
- Sanitary Sewer Lines and Districts



**Figure 5.1**  
**Plank Road Sewer Main**  
**Recommended Alternative**











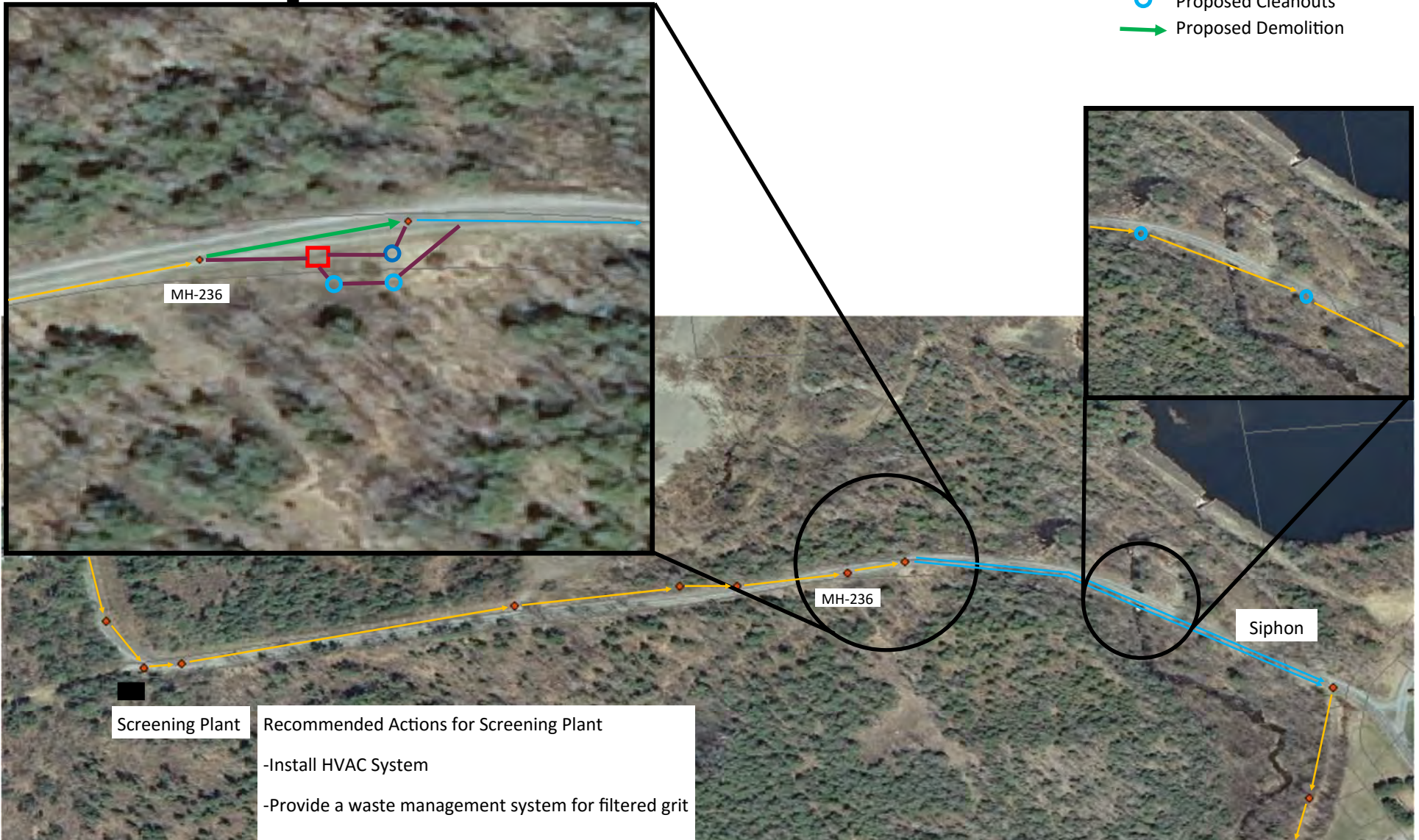
Town of Moriah  
Collection System Evaluation

Figure 5.2

Switchback Road Trunk Sewer Main  
Recommended Alternative

Legend

-  Existing Manhole
-  Existing Gravity Sewer
-  Existing Siphon Barrel
-  Proposed Distribution Box
-  Proposed Manhole
-  Proposed Siphon Barrel
-  Proposed Cleanouts
-  Proposed Demolition





Town of Moriah  
Collection System Evaluation  
Figure 5.3

Moriah Corners Sewer Service Area Recommended Alternative



Wet Well Recommendations

- Replacement of Pumps and Rails

Control Building Recommendations

- Replacement of Controls and Electrical Runs
- Installation of drain from valve vault back to wet well



**Table 3.1  
Town of Moriah  
Collection System Evaluation  
Cost Estimate Comparison**

<b>Plank Road Trunk Sewer Main</b>		
<b>Description</b>	<b>Option 1</b>	<b>Option 2</b>
Total Construction Cost	\$ 793,653	\$ 479,966.40
Engineering, Construction Observation, Legal and Bonding Fees, Funding Program Administration @ 20%	\$ 158,731	\$ 95,993
Project Contingencies @ 10%	\$ 95,238	\$ 57,596
<b>Total Cost</b>	<b>\$ 1,047,622</b>	<b>\$ 633,556</b>

<b>Switchback Road Trunk Sewer Main</b>		
<b>Description</b>	<b>Option 1</b>	<b>Option 2</b>
Total Construction Cost	\$ 157,176	\$ 1,101,109.64
Engineering, Construction Observation, Legal and Bonding Fees, Funding Program Administration @ 20%	\$ 31,435	\$ 220,222
Project Contingencies @ 10%	\$ 18,861	\$ 132,133
<b>Total Cost</b>	<b>\$ 207,473</b>	<b>\$ 1,453,465</b>

<b>Moriah Corners Sewer Service Area</b>		
<b>Description</b>	<b>Option 1</b>	<b>Option 2</b>
Total Construction Cost	\$ 120,300	\$ 597,177.80
Engineering, Construction Observation, Legal and Bonding Fees, Funding Program Administration @ 20%	\$ 24,060	\$ 119,436
Project Contingencies @ 10%	\$ 14,436	\$ 71,661
<b>Total Cost</b>	<b>\$ 158,796</b>	<b>\$ 788,275</b>



**Table 4.1  
Town of Moriah  
Collection System Evaluation  
Life Cycle Cost Analysis**

<b>Plank Road Trunk Sewer Main</b>								
Alternative	Capital Costs	Annual O&M	Period (N)	Real Interest Rate (i)	USPW (O&M) Multiplier	Total O&M (20 Years) (USPW)	Salvage Value	NPV
Alternative 1	\$ 1,047,621.82	\$ 1,345.91	\$ 20.00	1.6%	17.00	\$ 22,881.23	\$ -	\$ 1,070,503.05
Alternative 2	\$ 633,555.65	\$ 1,357.09	\$ 20.00	1.6%	17.00	\$ 23,071.28	\$ -	\$ 656,626.93

<b>Switchback Road Trunk Sewer Main</b>								
Alternative	Construction Costs	Annual O&M	Period (N)	Real Interest Rate (i)	USPW (O&M) Multiplier	Total O&M (20 Years) (USPW)	Salvage Value	NPV
Alternative 1	\$ 207,472.85	\$ 1,328.58	\$ 20.00	1.6%	17.00	\$ 22,586.62	\$ -	\$ 230,059.47
Alternative 2	\$ 1,453,464.72	\$ 26,739.44	\$ 20.00	1.6%	17.00	\$ 454,585.97	\$ -	\$ 1,908,050.69

<b>Moriah Corners Sewer Service Area</b>								
Alternative	Construction Costs	Annual O&M	Period (N)	Real Interest Rate (i)	USPW (O&M) Multiplier	Total O&M (20 Years) (USPW)	Salvage Value	NPV
Alternative 1	\$ 158,796.00	\$ 27,039.44	\$ 20.00	1.6%	17.00	\$ 459,686.14	\$ -	\$ 618,482.14
Alternative 2	\$ 788,274.69	\$ 1,060.28	\$ 20.00	1.6%	17.00	\$ 18,025.35	\$ -	\$ 806,300.04

**Table 4.2  
Town of Moriah  
Collection System Evaluation  
Plank Road Sewer Main Alternative Comparison**

	Environmental Impacts	Land Requirements	Potential Construction Problems	Sustainability Considerations	Impact on Existing Facilities:	Schedule and Constructability	Storm and Flood Resiliency	Cost Estimates	Non-Monetary Factors
<b>Alternative 1</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments</b>	Temporary, construction related, and semi-permanent, may require tree clearing	Verification of Easements for current line	Access through private property	Maintains gravity sewer	Temporary, construction related	Increased Construction Time	N/A Buried sewer main.	Costs Significantly Higher	Only Alternative with known chance of success.
<b>Alternative 2</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments</b>	Minimal semi-permanent, may require tree clearing	Verification of Easements for current line	Minimal Access through private property	Maintains gravity sewer	Temporary, construction related	Unknown feasibility. Pipeline requires full inspection.	N/A Buried sewer main.	Costs Significantly Lower	Too many unknowns existing pipe conditions to select.

**Table 4.3**  
**Town of Moriah**  
**Collection System Evaluation**  
**Switchback Road Trunk Sewer Main Alternative Comparison**

	Environmental Impacts	Land Requirements	Potential Construction Problems	Sustainability Considerations	Impact on Existing Facilities:	Schedule and Constructability	Storm and Flood Resiliency	Cost Estimates	Non-Monetary Factors
<b>Alternative 1</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Comments</b>	Temporary, construction related	None	Maintaining sewer service through construction	Maintains pump station and electrical usage	Temporary, construction related	Minimal construction timeframe and reasonable constructability	Maintains pump station which could be damaged during a storm event	Costs Significantly Lower	Maintains pump station
<b>Alternative 2</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments</b>	Temporary, construction related	Need to property of pump station	Maintaining sewer service through construction	Removes a pump station and replaces it with a gravity sewer	Removes electrical usage from town	Longer construction timeframe and reasonable constructability	Removes mechanical device in favor of buried utilitis.	Costs Significantly Higher	Removes pump station, a stated goal of the town.

**Table 4.4**  
**Town of Moriah**  
**Collection System Evaluation**  
**Moriah Corners Service Area Alternative Comparison**

	Environmental Impacts	Land Requirements	Potential Construction Problems	Sustainability Considerations	Impact on Existing Facilities:	Schedule and Constructability	Storm and Flood Resiliency	Cost Estimates	Non-Monetary Factors
<b>Alternative 1</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments</b>	Temporary, construction related	None	Maintaining sewer service through construction	Maintains gravity sewer	Temporary, construction related	Minimal construction timeframe and reasonable constructability	N/A Buried sewer main.	Costs Significantly Lower	Maintains gravity sewer a town priority
<b>Alternative 2</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments</b>	Temporary, construction related	None	Maintaining sewer service through construction	Add pump station to a previously gravity sewer	Temporary, construction related and adds electrical usage.	Medium construction timeframe and reasonable constructability	Adds mechanically system which could fail in storm, although unlikely to flood due to location.	Costs Significantly Higher	Adds pumps where non are needed

**Table 5.1**  
**Town of Moriah**  
**Collection System Evaluation**  
**Recommended Alternative Total Project Costs**

Service Area	Chosen Alternative	Cost
Plank Road Sewer Main	Alternative 1	\$ 793,652.89
Switchback Road Trunk Sewer Main	Alternative 1	\$ 157,176.40
Moriah Corners Service Area	Alternative 1	\$ 120,300
Total Construction Cost		\$ 1,071,129
Engineering, Construction Observation, Legal and Bonding Fees, Funding Program Administration @ 20%		\$ 214,226
Project Contingencies @ 10%		\$ 128,536
Total Cost		<b>\$ 1,413,891</b>

Table 5.2 Revised 2018-01-03  
Town of Moriah  
Collection System Evaluation  
Project Financing and User Rates

**Total Project Costs**

<b>Improvement Projects</b>			
Alternative 1			\$ 1,047,621.82
	<b>Total Project Cost</b>		<b>\$ 1,047,621.82</b>

**Available Funding**

NYS EFC, CWSRF Financing (Assuming Hardship)			\$ 1,047,622
Anticipated Loan Period	30 yrs		
Anticipated interest rate	0.00%		
Cost of Loan (Interest and Debt annually)			<b>\$ 34,920.73</b>

**Estimated Cost Per User**

<b>Existing Annual Sewer Rates</b>			
# of User Units (EDU)s		916	

<b>Summary of Total Costs Per User</b>			
2017 O&M	\$	240.00	
2017 Existing Debt (Does not Include proposed 2015 report work)	\$	180.00	
Proposed Debt Increase	\$	38.12	
Proposed New Rate	<b>\$</b>	<b>458.12</b>	

# APPENDIX A

## ORDER ON CONSENT

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Office of General Counsel, Region 5

1115 State Route 86, PO Box 296, Ray Brook, NY 12977-0296

P: (518) 897-1227 | F: (518) 897-1394

[www.dec.ny.gov](http://www.dec.ny.gov)

December 10, 2015

Honorable Thomas Scozzafava  
Town Supervisor  
Town of Moriah  
38 Park Place  
Port Henry, New York 12974  
[moriahsuper@nycap.rr.com](mailto:moriahsuper@nycap.rr.com)

Re: Town of Moriah Collection System  
DEC Order on Consent No. R5-20150721-2173

Dear Supervisor Scozzafava:

This letter is in response to yours of November 30, 2015, providing information regarding the status of Item 1 of the Schedule "A" Schedule of Compliance of the above-referenced Order on Consent, and requesting extended deadlines to Items 2 and 3. Staff has reviewed the submission and accepts the information provided with respect to Item 1 as satisfying those requirements. A note to this effect has been added in the Schedule "A" Schedule of Compliance for this Item. It includes a requirement to notify staff of the completion of the Titus Road Pump Station work when it occurs in February 2016.

With respect to Items 2 and 3, staff believes the requested extensions to those deadlines is a reasonable one, given the schedule for obtaining EFC funding for the engineering and planning grant referenced in your letter. Accordingly, I have prepared a Modified Order on Consent that imposes new deadlines for the completion of that work. The suspended penalty remains in effect, but there is no additional payable penalty imposed in the Modified Order.

Staff cannot agree to your request to modify the terms of Item 3 of the Schedule "A" Schedule of Compliance to change the current requirement that the approved Capital Improvement Program be an enforceable term of the Order, to a voluntary goal. Other Orders of this type with other municipalities, include this requirement and incorporate such approved plans as enforceable terms of the Order. It would be inconsistent with both the Department's approach to Orders of this nature and with the Department's general enforcement framework to proceed otherwise in this case. However, Department staff remain cognizant of and sensitive to the burdens of wastewater treatment plant compliance on municipalities like the Town of Moriah. Staff will continue to work with the Town on a reasonable approach to compliance, as has been our consistent practice to date. If it becomes necessary in the future to further



Department of  
Environmental  
Conservation



extend the milestone deadlines in the Order on Consent to accommodate the Town's fiscal concerns, staff is willing to consider timely requests for such modifications.

A Modified Order on Consent is enclosed. Please carefully review the terms of the Order. There are some minor changes, most notably the termination date, which has been revised from a fixed 5-year period to the date on which there has been full compliance with the terms of the Order.

If the Order is acceptable to you, please sign it in the presence of a notary public and return it to my attention at your earliest convenience. Otherwise please feel free to contact me to discuss any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Michelle A. Crew". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Michelle A. Crew  
NYSDEC – Region 5  
Regional Attorney  
[michelle.crew@dec.ny.gov](mailto:michelle.crew@dec.ny.gov)

MAC/rif  
Enclosure

ec: R. Stegemann  
T. Venne

**STATE OF NEW YORK:  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

---

In the Matter of the Violations of Article 17 of the Environmental Conservation Law of the State of New York and Title 6 of the Official Compilation Of Codes, Rules and Regulations, 6 NYCRR 750-2.1 (e)

**MODIFIED  
ORDER ON CONSENT**

**DEC CASE NO.: R5-20150721-2173M1  
SPDES Permit No.: 5-1536-00020/00001**

-By-

**Town of Moriah,**  
Respondent.

---

**WHEREAS:**

**JURISDICTION AND PARTIES**

1. The New York State Department of Environmental Conservation (the "Department") is vested with jurisdiction to enforce laws governing the control and prevention of water pollution pursuant to Article 17 of the Environmental Conservation Law ("ECL"), the rules promulgated pursuant thereto at Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR") Part 750, and ECL § 3-0301.
2. The Town of Moriah ("Respondent" or "the Town") is a municipal corporation with offices located at 38 Park Place, Port Henry in Essex County.
3. Respondent owns and operates a sewage treatment works and sewer system that serves the hamlets of Mineville, Witherbee and Moriah Center.
4. The sewer system includes approximately 37 miles of pipe and two pump stations; components of the system were installed in the 1940s.
5. The sewer system is connected to the Village of Port Henry and Town of Moriah Joint Wastewater Treatment Plant, which, along with the sewer system, is a "sewage treatment works" and "sewer system" as those terms are defined in 6 NYCRR 750-1.2 (a) (78) and (79), respectively. The Wastewater Treatment Plant is located at

29 Bulwagga Drive in the Village of Port Henry. The Town's sewage treatment works discharges wastewater to Lake Champlain, a Class A waterbody of New York State.

6. The Department issued Respondent a permit under the State Pollutant Discharge Elimination System ("SPDES") program to operate the Town's sewage treatment works; the DEC SPDES Permit Number is 5-1536-00020/00001; the effective date of the SPDES Permit was August 1, 2011 and the expiration date of the SPDES Permit is July 31, 2016 ("SPDES Permit").

7. Respondent is a "permittee" as that term is defined in 6 NYCRR 750-1.2 (a) (63).

8. Respondent is a "person" as that term is defined at ECL § 17-0105 (1) and 6 NYCRR 750-1.2 (a) (64).

#### **BACKGROUND**

9. The Town's sewage system has experienced various Sanitary Sewer Overflows (SSOs) over the years that have been reported to the Department and were also documented in the April 2015 "Collection System Evaluation." The Collection System Evaluation is an engineering report prepared for the Town using funds awarded from a New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant, which addressed the capacity and conditions of the collection system, documented Infiltration and Inflow ("I & I"), and made recommendations regarding an estimated \$6.5 million dollars of needed improvements in the sewer system. The summary of SSOs, included as "Exhibit C, Reports of Noncompliance Events" in the Collection System Evaluation, is attached to and made a part of this Order as **Exhibit 1**.

10. The Overview of the Report of Noncompliance Events states as follows:

"SSOs have occurred in the Town of Moriah sanitary sewer collection system, mainly during wet weather periods (i.e. spring, rain events). These SSOs are the result of Inflow and Infiltration (I&I) events, which increase the volume of wastewater in the collection system and the condition of the

existing collection system (i.e., root blockages, grease accumulation, etc.). When the volume of wastewater in the system exceeds the capacity and/or the pipe capacity is compromised due to blockages, SSOs occur.”

11. On June 16, 2015, Respondent telephoned Department staff to report that the two pumps in the duplex pump station on Titus Road adjacent to Mill Brook were 30 years old, in failing condition, and likely to result in further SSO events in the near future. Respondent stated that the Town was pursuing emergency funding for a replacement pump station.

#### **ENFORCEABLE PROVISIONS OF LAW**

12. ECL § 17-0803 prohibits the discharge of pollutants to the waters of the State from any outlet or point source without a SPDES permit or in any manner other than as prescribed by such permit.

13. ECL § 17-0511 provides that the use of existing or new outlets or point sources, which discharge sewage, industrial wastes or other wastes into the waters of the State is prohibited unless such use is in compliance with all standards, criteria, limitations, rules and regulations promulgated or applied by the Department pursuant to Article 17.

14. The Town’s SPDES Permit allows the Town to discharge treated wastewater to the waters of the State from a single point, referred to in the SPDES Permit as “Outfall No. 001.”

15. A discharge of sewage or partially-treated wastewater to the waters of the State from any point other than Outfall No. 001 violates the SPDES Permit.

16. The Sanitary Sewer Overflows (“SSOs”) described in **Exhibit 1** are discharges of sewage or partially-treated wastewater to waters of the State that represent repeated non-compliance with the terms and conditions of the Town’s SPDES Permit.



17. The permittee must comply with all terms and conditions of the SPDES Permit; any permit noncompliance constitutes a violation of the Environmental Conservation Law and the Clean Water Act and is grounds for: enforcement action; for permit suspension, revocation or modification; and for denial of a permit renewal application. 6 NYCRR 750-2.1 (e)

18. The SSOs that have occurred from the sewer system, as reported to the Department in compliance with 6 NYCRR Part 750 and documented in the Collection System Evaluation, constitute violations of ECL § 17-0803, ECL § 17-0511, and 6 NYCRR 750-2.1 (e). Six such SSOs have occurred during the current term of the SPDES Permit, i.e., since August 1, 2011.

19. Pursuant to ECL § 71-1929 (1), any person who violates any of the provisions of Titles 7 or 8 of the ECL shall be liable for a penalty of up to thirty-seven thousand five hundred dollars (\$37,500) per day for each violation.

20. Respondent hereby affirmatively waives its right to a hearing in this matter in the manner as provided by law, consents to the issuance of this Order and agrees to be bound by the terms, provisions and conditions contained herein.

**NOW**, having considered this matter and being duly advised, it is **HEREBY ORDERED BY THE COMMISSIONER OF THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION:**

**I. CIVIL PENALTY**

**A.** Respondent is hereby assessed a total civil penalty in the amount of **FIVE THOUSAND SIX HUNDRED DOLLARS (\$5,000)**.

**B.** On or about August 18, 2015, Respondent timely submitted the civil penalty imposed under the original Order on Consent, in the amount of **ONE THOUSAND FIVE HUNDRED DOLLARS (\$1,000)**.

C. The remaining penalty of **FOUR THOUSAND DOLLARS (\$4,000)** shall be and shall remain suspended provided that Respondent strictly and fully complies with the requirements of the attached Schedule "A" Schedule of Compliance.

D. In the event that Respondent fails to strictly and fully comply with the terms of this Modified Order, including Schedule "A" Schedule of Compliance attached hereto, the suspended sum set forth in Paragraph I.C. herein shall be due within sixty (60) days of service on Respondent of written notice by Department staff of noncompliance. Department staff's determination of noncompliance shall be final and binding on Respondent, and Respondent consents to payment of such suspended penalty and affirmatively waives the right to any hearing or other process in connection with its penalty obligations under the terms of this Modified Order on Consent.

## II. SCHEDULE OF COMPLIANCE

Respondent shall fully comply with the provisions of the Schedule of Compliance attached hereto and made an enforceable part of this Modified Order on Consent as "Schedule A."

## III. STIPULATED PENALTIES

In the event that Respondent fails to strictly and fully comply with any of the provisions of this Modified Order, including Schedule "A" – Schedule of Compliance, the following stipulated penalties shall be due and payable:

<u>Period of Noncompliance</u>	<u>Penalty</u>
1st day through 30 <sup>th</sup> day	\$267.50 per day
31 <sup>st</sup> day through 59 <sup>th</sup> day	\$374.50 per day
each day thereafter	\$535.00 per day

### A. **Notice of Noncompliance and Stipulated Penalty Payment Procedure**

In the event that the Department determines, in the Department's sole discretion, that Respondent failed to timely and fully comply with any provision of this Modified Order, the Department may serve upon Respondent a notice of

noncompliance setting forth the nature of the violation(s). Service of such notice may be by personal service or by certified mail return receipt requested (restricted delivery not required) at Respondent's address as specified in Paragraph IX of this Order, or, if such service is refused or cannot be completed, by ordinary mail. Such notice shall be deemed a part of this Modified Order.

Respondent shall deliver the full stipulated penalty amount to the Department within fifteen (15) business days after receipt of such notice. Neither the Department's demand for payment of a stipulated penalty, nor Respondent's payment thereof, shall discharge Respondent from the obligation to comply with any obligation established under this Order. The payment of stipulated penalties as set forth above shall not limit the Department's right to seek such other relief as may be authorized by law.

**B. Respondent's Right to Review of Notice of Noncompliance**

If the Department issues a notice of noncompliance to Respondent pursuant to the terms of this Modified Order on Consent, Respondent shall have the right, upon written request made within ten (10) business days of the date of such notice, to meet with the Regional Attorney and Department staff to discuss the circumstances of issuance of the notice. A request for a meeting shall not suspend or otherwise affect Respondent's obligation to comply with all terms of this Modified Order on Consent, including the notice of noncompliance, and shall not affect any obligation to pay penalties thereunder, which shall continue to accrue from the date of commencement of the violation for as long as the violation continues. Following any such meeting, the determination of Department staff as to whether to impose the stipulated penalty payment requirement shall be final and binding upon Respondent.

**IV. RELEASE**

This Modified Order shall satisfy and settle all civil and administrative claims that could be asserted by the Department against Respondent, its directors, trustees, officers, servants, agents, employees, successors and assigns, for those violations

specifically set forth herein, provided, however, that this Modified Order shall not be construed as satisfying or settling events regarding which the Department lacks knowledge.

**V. FAILURE, DEFAULT AND VIOLATION OF ORDER**

The failure of Respondent to comply with any provision of this Modified Order shall constitute a default and failure to perform an obligation under this Modified Order and shall be deemed a violation of this Modified Order and of the ECL.

**VI. FORMAL TERMS**

No term, condition, understanding or agreement purporting to modify or vary the terms of this Modified Order shall be binding unless made in writing pursuant to the procedure set forth in Paragraph XI below. No informal oral or written advice, guidance, suggestion or comment by the Department regarding a report, proposal, plan, specification, schedule or any other writing submitted by Respondent, shall be construed as relieving Respondent's obligation to obtain such formal approval as may be required by the terms of this Modified Order on Consent.

**VII. SETTLEMENT AND RESERVATION OF RIGHTS**

Upon completion of all obligations created in this Modified Order on Consent, this Modified Order settles only those claims for civil and administrative penalties concerning the violations described herein. Nothing contained in this Modified Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the State of New York's civil, criminal or administrative rights or authorities in any other proceeding against Respondent or any other parties, including but not limited to the failure of Respondent to obtain required permits or other authorizations, whether prior to or subsequent to the Effective Date of this Modified Order on Consent. Nothing contained in this Modified Order shall be construed to prohibit the Commissioner or his duly authorized representatives from exercising any Summary Abatement powers.

**VIII. ACCESS**

Respondent shall allow duly authorized representatives of the Department access to the Town's sewage treatment works facility and sewer system, without prior



notice, for inspection and a determination of Respondent's compliance with the terms of this Modified Order on Consent. Department staff will attempt to provide notice to Respondent on or before arrival at the facility. The Department agrees that its personnel, contractors, and representatives shall comply with any health or safety directives and instructions issued by Respondent or Respondent's agent.

**IX. COMMUNICATIONS**

Correspondence to the Department required by this Modified Order on Consent shall be provided to the following:

Tamara Venne  
Division of Water  
DEC Region 5  
1115 NYS Route 86  
P.O. Box 296  
Ray Brook, NY 12977

and

Michelle Crew, Esq.  
Office of General Counsel  
DEC Region 5  
1115 NYS Route 86  
P.O. Box 296  
Ray Brook, NY 12977

Correspondence to Respondent under this Modified Order on Consent shall be provided to:

Honorable Thomas R. Scozzafava  
Supervisor, Town of Moriah  
38 Park Place, Suite 1  
Port Henry, New York 12974

The Department and Respondent, respectively, reserve the right to designate other or different addressees on written notice to the other.

**X. MODIFICATION**

No change to this Modified Order shall be effective except as set forth in written Order of the Commissioner or Commissioner's designee: (a) upon written application by Respondent and with specific justification for the relief sought; or (b) upon the findings

of the Commissioner after providing Respondent with notice and an opportunity to be heard; or (c) pursuant to the Summary Abatement provisions of the ECL. In those instances in which Respondent desires that any of the provisions, terms or conditions of this Modified Order be changed, Respondent shall make written application in accordance with the provisions of Paragraph X herein, setting forth the grounds for the relief sought, and such changes shall not become effective except as specifically set forth by written Order of the Commissioner or Commissioner's designee.

**XI. FORCE MAJEURE**

Respondent shall not suffer any penalty under this Modified Order, or be deemed to be in violation hereof or be subject to any proceeding or action if Respondent's compliance with any requirement hereof is rendered impossible by a natural event, war, strike, work stoppage, delay attributable to any governmental body other than the Department in issuing permits or approvals needed by Respondent, riot or other catastrophe as to which negligence or misconduct on the part of Respondent was not the proximate cause; provided, however, that Respondent shall make its best effort to comply nonetheless and shall, within seventy-two (72) hours, notify the Department in writing, pursuant to Paragraph X of this Modified Order, after obtaining knowledge of any such condition or event, and shall request an appropriate extension or modification to this Modified Order.

**XII. BINDING EFFECT OF ORDER**

The provisions of this Modified Order shall inure to the benefit of and be binding upon the Department and Respondent, their agents, employees, successors and assigns, and all persons, firms, or corporations acting subordinate thereto.

**XIII. INDEMNIFICATION**

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Modified Order by Respondent, its trustees, officers, employees, servants, agents, successors or assigns.

**XIV. ENTIRE AGREEMENT**

This Modified Order on Consent shall constitute the entire agreement of the Department and Respondent with respect to settlement of the violations specifically referenced herein.

**XV. EFFECTIVE AND TERMINATION DATES**

The Effective Date of this Modified Order on Consent shall be the date it is signed by the Commissioner or Commissioner's designee. This Modified Order on Consent shall terminate upon Respondent's full and timely compliance with its terms.

**DATED:** Ray Brook, New York

\_\_\_\_\_, 2015  
("Effective Date")

Basil Seggos, Acting Commissioner  
New York State Department of  
Environmental Conservation

By: \_\_\_\_\_  
Robert S. Stegemann  
Regional Director - Region 5





**SCHEDULE A  
SCHEDULE OF COMPLIANCE  
For  
TOWN OF MORIAH  
Case No. R5-20150721-2173**

**ELECTRICAL INSPECTION**

1. (a) The Town shall obtain the services of a qualified electrician to inspect all pump stations that are connected to the Town's sewage treatment works and sewer system (also referred to as the publically-owned sewage system, or "POSS") and make a detailed inventory of all deficiencies and a description of actions that the Town should take to correct each deficiency.
  
- (b) **No later than sixty (60) days from the Effective Date of this Order on Consent**, the Town shall submit to Department staff a list of all actions, repairs, and replacements recommended by the electrical inspection. The Town shall complete all such actions, repairs, and replacements **within sixty (60) days of the date of the electrician inspection**.

*By letter dated November 30, 2015, Respondent submitted an inspection report by a retired industrial electrician which reflected no deficiencies with the Tarbell Hill Road Pump Station. Respondent's letter stated that the Titus Road Pump Station is scheduled for repair work that is anticipated to be completed in February 2016. Prior to February 29, 2016, Respondent shall provide a status report with respect to the completion of work at the Titus Road Pump Station.*

**INSPECTION AND MAINTENANCE PROGRAM**

2. (a) **On or before June 30, 2017**, Respondent shall submit an approvable written inspection and maintenance program (referred to as "I & M Program") for the Town's sewage treatment works and sewer system.
  
- (b) An approvable I & M Program shall, at a minimum, describe the condition of the Town's entire sewer system and assess the impacts of inflow and infiltration (referred to as "I & I") on the ability of the Town's sewage treatment works to meet applicable limits in its SPDES Permit.
  
- (c) An approvable I & M Program shall include but not be limited to sump pump surveys, smoke/dye monitoring and detailed global positioning system

(GPS) mapping of sewer system components.

(d) Respondent shall fully implement the approved sewer system I & M Program **within sixty (60) days** of the date of mailing of the Department's written approval of the I & M Program.

(e) **Beginning on January 31, 2018** and continuing annually thereafter for the duration of this Order on Consent, Respondent shall submit an annual report summarizing the I & M Program tasks completed each year in compliance with the approved I & M Program. Each annual report shall be submitted **on or before January 31 of each year**.

**COMPREHENSIVE PERFORMANCE EVALUATION AND  
CAPITAL IMPROVEMENT PLAN**

3. (a) **On or before June 30, 2017**, Respondent shall submit an approvable written Comprehensive Performance Evaluation ("CPE") Engineering Report of the Town's sewer system, which shall be prepared by a professional engineer licensed to practice in the State of New York and with the requisite education, training, and experience to complete the CPE Engineering Report.

(b) The CPE shall contain a Capital Improvement Plan ("CIP") and a detailed schedule for the implementation of the CPE recommendations.

(c) The CIP shall include provisions for as-built diagrams of the Town's sewer system.

(d) **NOTE:** The Town of Moriah Collection System Evaluation prepared for the Town of Moriah, dated April 2015, evaluated the sewer system in the areas of Mineville and Witherbee. The CPE described in this Schedule A shall include the remaining sewer systems in the Town not yet evaluated, such as Moriah Center, pump stations, screenings building and downstream siphon. The CIP schedule shall include the entire sewer system, including Mineville and Witherbee.

(e) On the date the Department approves the Town's CIP schedule in writing, the CIP schedule shall become a material and enforceable term of this Order.

# EXHIBIT 1

## COMPREHENSIVE DEVELOPMENT PLAN AND LOCAL IMPROVEMENT PLAN

The Comprehensive Development Plan (CDP) is a long-term plan that provides a framework for the future development of the Town of Moriah. The CDP is a living document that will be updated as needed to reflect changes in the community and the region. The CDP is a key tool for the Town of Moriah to guide its development and to ensure that its growth is sustainable and equitable.

The CDP is a key tool for the Town of Moriah to guide its development and to ensure that its growth is sustainable and equitable. The CDP is a living document that will be updated as needed to reflect changes in the community and the region.

The CDP is a key tool for the Town of Moriah to guide its development and to ensure that its growth is sustainable and equitable. The CDP is a living document that will be updated as needed to reflect changes in the community and the region.

**NOTE:** The Town of Moriah is currently reviewing the CDP and will be holding public hearings on the CDP in the future. The CDP is a key tool for the Town of Moriah to guide its development and to ensure that its growth is sustainable and equitable. The CDP is a living document that will be updated as needed to reflect changes in the community and the region.

The CDP is a key tool for the Town of Moriah to guide its development and to ensure that its growth is sustainable and equitable. The CDP is a living document that will be updated as needed to reflect changes in the community and the region.

# **APPENDIX C**

## **REPORTS OF NONCOMPLIANCE EVENTS**





Architecture, Engineering, and Land Surveying Northeast, PLLC  
10 1/2 City Hall Place, Plattsburgh, NY 12901  
Phone: (518) 561-1588 Fax: (518) 561-1990  
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**Town of Moriah  
Collection System Evaluation  
Appendix C  
Reports of Noncompliance Events**

## **Report of Noncompliance Events: Overview**

According to the NYSDEC and the State Pollution Discharge Elimination System (SPDES) Permit General Conditions, certain discharges of untreated or partially treated sewage must be reported orally and in writing within five (5) days to the NYSDEC. As a result, the Town of Moriah is required to submit Report of Noncompliance Events to the NYSDEC, specifically for SSOs. SSOs have occurred in the Town of Moriah sanitary sewer collection system, mainly during wet weather periods (i.e., spring, rain events). These SSOs are the result of Inflow & Infiltration (I&I) events, which increase the volume of wastewater in the collection system and the condition of the existing collection system (i.e., root blockages, grease accumulation, etc.). When the volume of wastewater in the system exceeds the capacity and/or the pipe capacity is compromised due to blockages, SSOs occur.

The table below summarizes Town documented SSOs that have occurred since 2001. As shown in the table, SSOs occurred due to blockages in the sanitary sewer mains.



Administrative Engineering and Land Surveying Northeast, PLLC  
 1012 City Hall Plaza, Pittsburgh, NY 15201  
 Phone: (412) 551-1595 Fax: (412) 551-1950  
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**Town of Moriah  
 Collection System Evaluation  
 Appendix C  
 Reports of Noncompliance Events**

Date	Location	Project Planning Area	Type of Noncompliance	Description of Noncompliance Event
4/12/2001	Plank Rd	Plank Rd	Manhole overflow	VCT pipe plugged
7/3/2001	Highway Dept (MH6)	Wasson St / Witherbee Rd	Manhole overflow	Blockage in sewer line between manholes
7/9/2001	Highway Dept (MH6)	Wasson St / Witherbee Rd	Manhole overflow	8" VCT pipe plugged with roots
3/5/2002	Witherbee Rd/Lamos Lane	Lamos Ln	Manhole overflow	6" VCT pipe plugged with roots and reas
3/2/2003	Plank Rd	Plank Rd	Manhole overflow	VCT pipe plugged
3/3/2003	Republic St MH	Joyce Rd to Republic St	Manhole overflow	6" VCT pipe plugged with roots
4/24/2003	Plank Rd	Plank Rd	Manhole overflow	VCT pipe plugged
4/30/2003	Wasson Street	Wasson St	Manhole overflow	6" VCT pipe plugged with roots
8/1/2003	Wasson Street	Wasson St	Manhole overflow	Blockage in 6" VCT pipe
10/28/2003	Plank Rd	Plank Rd	Manhole overflow	VCT pipe plugged
3/3/2004	MH7 / MH8	Witherbee Rd	Manhole overflow	6" VCT pipe plugged with roots
3/6/2004	MH8	Witherbee Rd	Manhole overflow	6" VCT pipe plugged
4/3/2004	MH8 (upstream)	Witherbee Rd	Manhole overflow	6" VCT pipe plugged with roots
4/6/2004	MH8	Witherbee Rd	Manhole overflow	6" VCT pipe plugged with roots
5/4/2004	MH3	Joyce Rd	Manhole overflow	Overflow due to blockage within MH
5/4/2004	MH7	Witherbee Rd	Manhole overflow	6" VCT pipe plugged with roots
3/10/2005	MH21 / MH22	Wasson St	Manhole overflow	6" VCT pipe plugged with grease
1/15/2006	Plank Rd	Plank Rd	Manhole overflow	VCT pipe plugged
4/10/2006	MH44	Raymond Wright Rd	Manhole overflow	Overflow due to excessive roots within VCT pipe
10/14/2008	MH 42 / MH 43	Raymond Wright Rd	Manhole overflow	Overflow due to blockage between MH 42 and MH 43
8/2/2009	MH22	Wasson St	Manhole overflow	Overflow due to blockage in the invert.
8/2/2009	MH32	Lamos Ln	Manhole overflow	Overflow due to blockage. Town removed dirt, stones, grease.
2/10/2010	MH33 / MH34	Lamos Ln	Manhole overflow	Grease blockage caused sewer backup into customer home
3/26/2010	MH28	Lamos Ln	Manhole overflow	Overflow due to high rainfall event
6/22/2011	MH44	Raymond Wright Rd	Manhole overflow	Grease accumulation within MH caused overflow.
8/29/2011	Plank Rd	Plank Rd	Manhole overflow	Cause unknown
12/21/2013	MH3	Joyce Rd	Manhole overflow	Overflow due to frozen pipe
4/15/2014	Plank Rd	Plank Rd	Manhole overflow	Excessive l&l

This table summarizes Town documented SSOs that have occurred since 2001. As shown in the table, SSOs occurred due to blockages in the sanitary sewer mains.

Town provided documentation of each SSO is provided in this appendix.

SECTION 1

New York State Department of Environmental Conservation -  
Division of Water

Report of Noncompliance Event

To: DEC Water Contact TAMARA Venne DEC Region: 5

Report Type:  5 Day  Permit Violation  Order Violation  Anticipated Noncompliance  Bypass/Overflow

SECTION 2

SPDES #: NY- Facility: Town of Morik

Date of noncompliance: 4/15/14 Location (Outfall, Treatment Unit, or Pump Station): Plant Road

Description of noncompliance(s) and cause(s): STORM RELATED Flooding CAUSED man hole TO OVERFLOW.

Has event ceased? ( Yes) (No) If so, when? 4/16/14 Was event due to plant upset? (Yes) (No) SPDES limits violated? (Yes) (No)

Start date, time of event: 4/15/14, 2:00 (AM) (PM) End date, time of event: 4/16/14, 6:00 (AM) (PM)

Date, time oral notification made to DEC? 4/15/14, 6:30 (AM) (PM) DEC Official contacted: TAMARA Venne

Immediate corrective actions: NONE COULD BE APPLIED BECAUSE OF STORM WITH Flooding conditions.

Preventive (long term) corrective actions: Replace clay tile with larger PVC pipe and manholes

SECTION 3

Complete this section if event was a bypass:

Bypass amount: \_\_\_\_\_ Was prior DEC authorization received for this event? (Yes) (No)

DEC Official contacted: \_\_\_\_\_ Date of DEC approval: 1/1

Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.

SECTION 4

Facility Representative: Ethan Snyder Title: Deputy Superintendent Date: 4/15/14

Phone #: (518) 942-3340 Fax #: (518) 942-3340

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Office of General Counsel, Region 5  
1115 State Route 86, PO Box 296, Ray Brook, NY 12977-0296  
P: (518) 897-1227 | F: (518) 897-1394  
[www.dec.ny.gov](http://www.dec.ny.gov)

June 23, 2017

Honorable Thomas R. Scozzafava  
Supervisor, Town of Moriah  
38 Park Place, Suite 1  
Port Henry, New York 12974

**Re: Order on Consent**  
**Case No. R5-20150721-2173**

Dear Supervisor Scozzafava:

This letter is to respond to your consultant's request for an extension of the two June 30, 2017 deadlines in the Schedule of Compliance for the above-referenced Order on Consent. Those deadlines are for the submission of an approvable inspection and maintenance program, and an approvable comprehensive performance evaluation. The consultant has requested a two-month extension, to August 31, 2017.

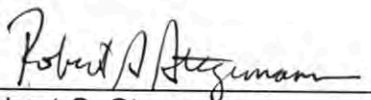
Pursuant to the authority of the Regional Director as the Commissioner's designee, the Department is hereby extending the deadlines for these compliance items to the requested date. If you agree to the terms of this letter modification to the Order on Consent, please co-sign this letter in the presence of a notary public, return the original copy to my attention and keep a copy for your records. If you have any questions or concerns, please feel free to contact me.

Sincerely,



Michelle A. Crew  
Regional Attorney  
[michelle.crew@dec.ny.gov](mailto:michelle.crew@dec.ny.gov)

Approved



Robert S. Stegemann  
Regional Director

6/23/17  
Date

MAC/rif

ec: T. Venne  
T. Waite



NEW YORK  
STATE OF  
OPPORTUNITY

Department of  
Environmental  
Conservation





## APPENDIX B

Excerpt from "*Town of Moriah,  
Collection System Evaluation,  
Engineering Planning Grant, CFA  
Project #27719*"

**Table 5.1  
Town of Moriah  
Collection System Evaluation  
Cost Estimates for the Proposed Projects**

<b>Wasson Street Sewer Main Replacement</b>		
<b>Description</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Total Construction Cost	\$ 923,489	N/A
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$ 184,698	N/A
Project Contingencies @ 10%	\$ 110,819	N/A
<b>Total Cost</b>	<b>\$ 1,219,005</b>	<b>\$ -</b>
<b>Lamos Lane Sewer Main Replacement</b>		
<b>Description</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Total Construction Cost	\$ 448,864	N/A
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$ 89,773	N/A
Project Contingencies @ 10%	\$ 53,864	N/A
<b>Total Cost</b>	<b>\$ 592,500</b>	<b>\$ -</b>
<b>Joyce Road Sewer Main Replacement</b>		
<b>Description</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Total Construction Cost	\$ 330,540	N/A
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$ 66,108	N/A
Project Contingencies @ 10%	\$ 39,665	N/A
<b>Total Cost</b>	<b>\$ 436,312</b>	<b>\$ -</b>
<b>Raymond Wright Avenue Sewer Main Replacement</b>		
<b>Description</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Total Construction Cost	\$ 421,245	N/A
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$ 84,249	N/A
Project Contingencies @ 10%	\$ 50,549	N/A
<b>Total Cost</b>	<b>\$ 556,043</b>	<b>\$ -</b>
<b>Witherbee Road Sewer Main Replacement</b>		
<b>Description</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Total Construction Cost	\$ 264,385	N/A
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$ 52,877	N/A
Project Contingencies @ 10%	\$ 31,726	N/A
<b>Total Cost</b>	<b>\$ 348,989</b>	<b>\$ -</b>

**Table 5.1  
Town of Moriah  
Collection System Evaluation  
Cost Estimates for the Proposed Projects**

<b>Joyce Road to Republic Street Sewer Main</b>		
<b>Description</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Total Construction Cost	\$546,768	N/A
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$109,354	N/A
Project Contingencies @ 10%	\$65,612	N/A
<b>Total Cost</b>	<b>\$ 721,733</b>	<b>\$ -</b>
<b>Fisher Hill Road/Plank Road Sewer Main</b>		
<b>Description</b>	<b>Alternative 1/2*</b>	
Total Construction Cost	\$1,929,032	
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$385,806	
Project Contingencies @ 10%	\$231,484	
<b>Total Cost</b>	<b>\$ 2,546,322</b>	<b>\$ -</b>
<b>Fisk Road and Lakeview Ave</b>		
<b>Description</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Total Construction Cost	\$ 2,652,029	N/A
Engineering, Construction Observation, Legal and Bonding Fees @ 20%	\$ 530,406	N/A
Project Contingencies @ 10%	\$ 318,243	N/A
<b>Total Cost</b>	<b>\$ 3,500,678</b>	<b>\$ -</b>

\*A combination of Alternative 1 & 2 will be utilized for this planning area.



**Table 7.9**  
**Town of Moriah**  
**Project Financing and User Rates**

**Total Project Costs**

Wasson Street Sewer Main	\$	1,219,005
Lamos Lane Sewer Main	\$	592,500
Joyce Road Sewer Main	\$	436,312
Raymond Wright Ave Sewer Main	\$	556,043
Witherbee Road Sewer Main	\$	348,989
Joyce Road to Republic Street Sewer Main	\$	721,733
Fisher Hill/Plank Road Sewer Main	\$	2,546,322
Fisk Road and Lakeview Ave Sewer Extension	\$	3,500,678
<b>Total Estimate of Probable Costs</b>	<b>\$</b>	<b>9,921,584</b>

**Available Funding**

**Improvements**

Loan amount at 0%		\$ 9,921,584
Anticipated Loan Period	30 yrs	
Anticipated Interest Rate	0.00%	
Interest Paid		\$ -
Total Loan		\$ 9,921,584.29
Annual Payment		<b>\$ 330,719.48</b>

**Estimated Cost Per User**

Existing Annual Debt Payment (per EDU)		\$184.00
EDUs		937
Additional Cost per Year per EDU	\$	352.96
Total Cost per Year per EDU	\$	536.96

**Existing Users**

	Existing Users	
# of Users (In District)	937	

**Operations and Maintenance**

Anticipated Operations and maintenance, Total Per Year	\$	17,828.69
Anticipated Operation and Maintenance Per User Per Year	\$	19.03

**Summary of Total Costs Per User**

<u>Existing</u>		
Usage		\$236
Debt Service		\$184
Total		\$420
<u>Proposed</u>		
Usage	\$	255.03
Debt	\$	536.96
Total	\$	791.98

**Table 7.10**  
**Town of Moriah**  
**Project Financing and User Rates - Fisk Road and Lakeview Ave**

**Total Project Costs**

Fisk Road and Lakeview Ave Sewer Extension	\$	3,500,678
<b>Total Estimate of Probable Costs</b>	<b>\$</b>	<b>3,500,678</b>

**Available Funding**

**Improvements**

Loan amount at 0%		\$	3,500,678
Anticipated Loan Period	30 yrs		
Anticipated Interest Rate	0.00%		
Interest Paid		\$	-
Total Loan		\$	3,500,678.44
Annual Payment		<b>\$</b>	<b>116,689.28</b>

**Estimated Cost Per User**

Existing Annual Debt Payment (per EDU)			\$0.00
EDUs			87
Additional Cost per Year per EDU		\$	1,341.26
Total Cost per Year per EDU		\$	1,341.26

**Proposed Users**

	Existing Users	
# of Users (In District)	87	

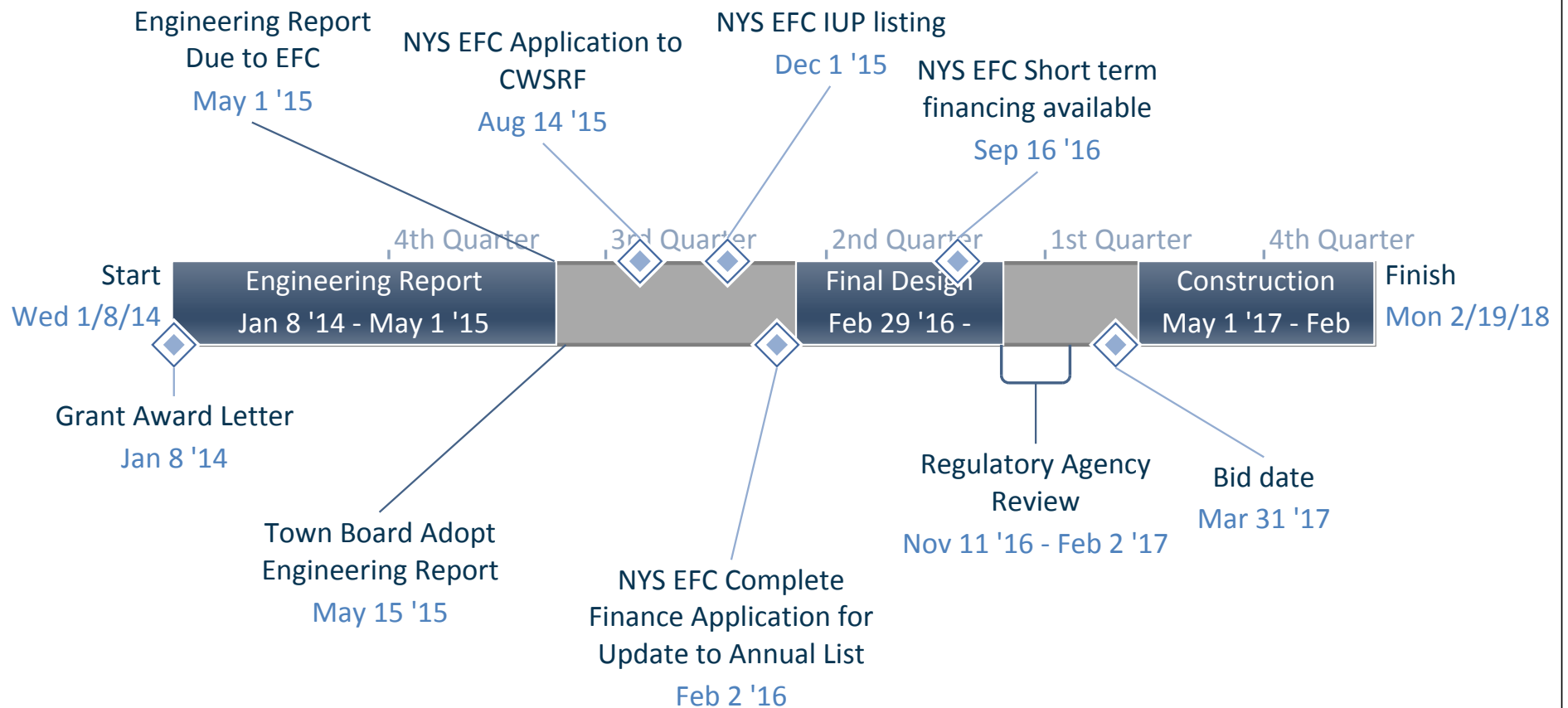
**Operations and Maintenance**

Anticipated Operations and maintenance, Total Per Year	\$	17,828.69
Anticipated Operation and Maintenance Per User Per Year	\$	17.41

**Summary of Total Costs Per User**

<u>Existing</u>		
Usage		\$236
Debt Service		\$0
Total		\$236
<u>Proposed</u>		
Usage	\$	253.41
Debt	\$	1,341.26
Total	\$	1,594.67

Town of Moriah  
 Collection System Evaluation  
 Project Schedule  
 Figure 7.1



# APPENDIX C

## Grover Hills Sewer Service Area Inspection Report

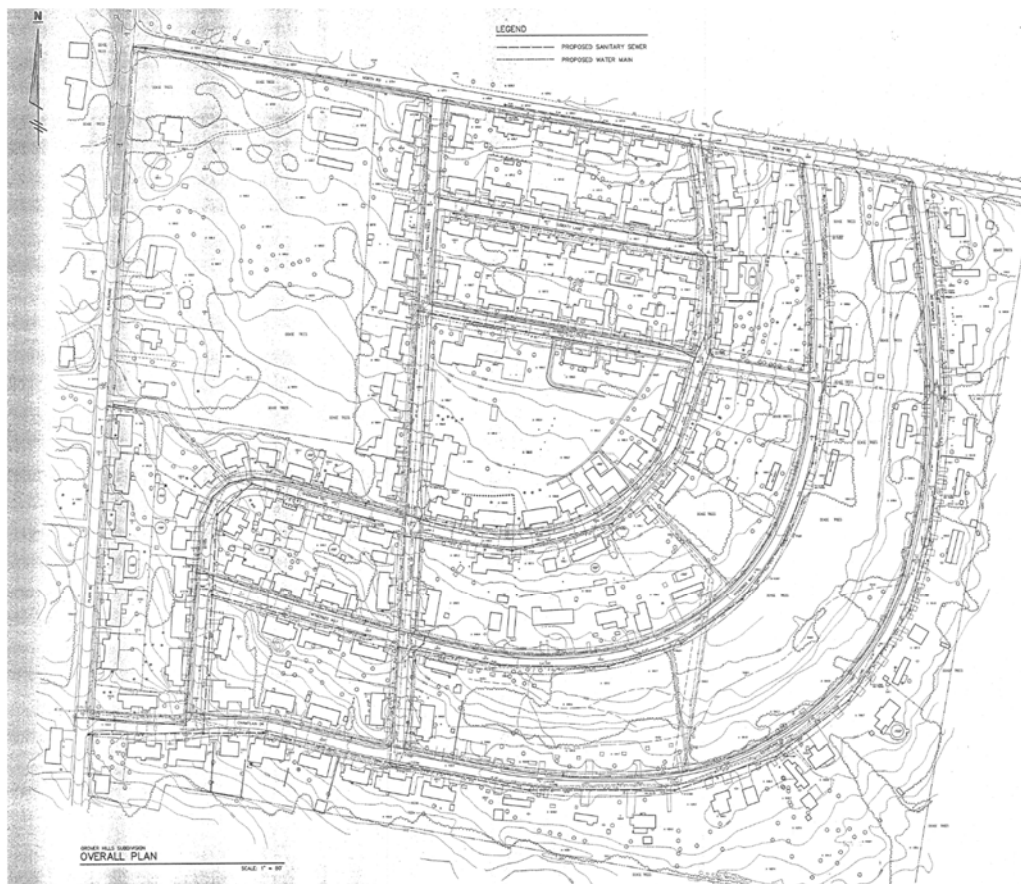


Town of Moriah  
Collection System Evaluation  
Appendix C  
Grover Hills Service Area Inspection Report

## Location Map

As the Grover Hills service area is relatively new and of modern construction, consisting of precast manholes and PVC sewer mains. The sewer system was installed in 1994. The sewers discharge to the Plank Road sewer main

The map below is an excerpt from the collection system design prints.

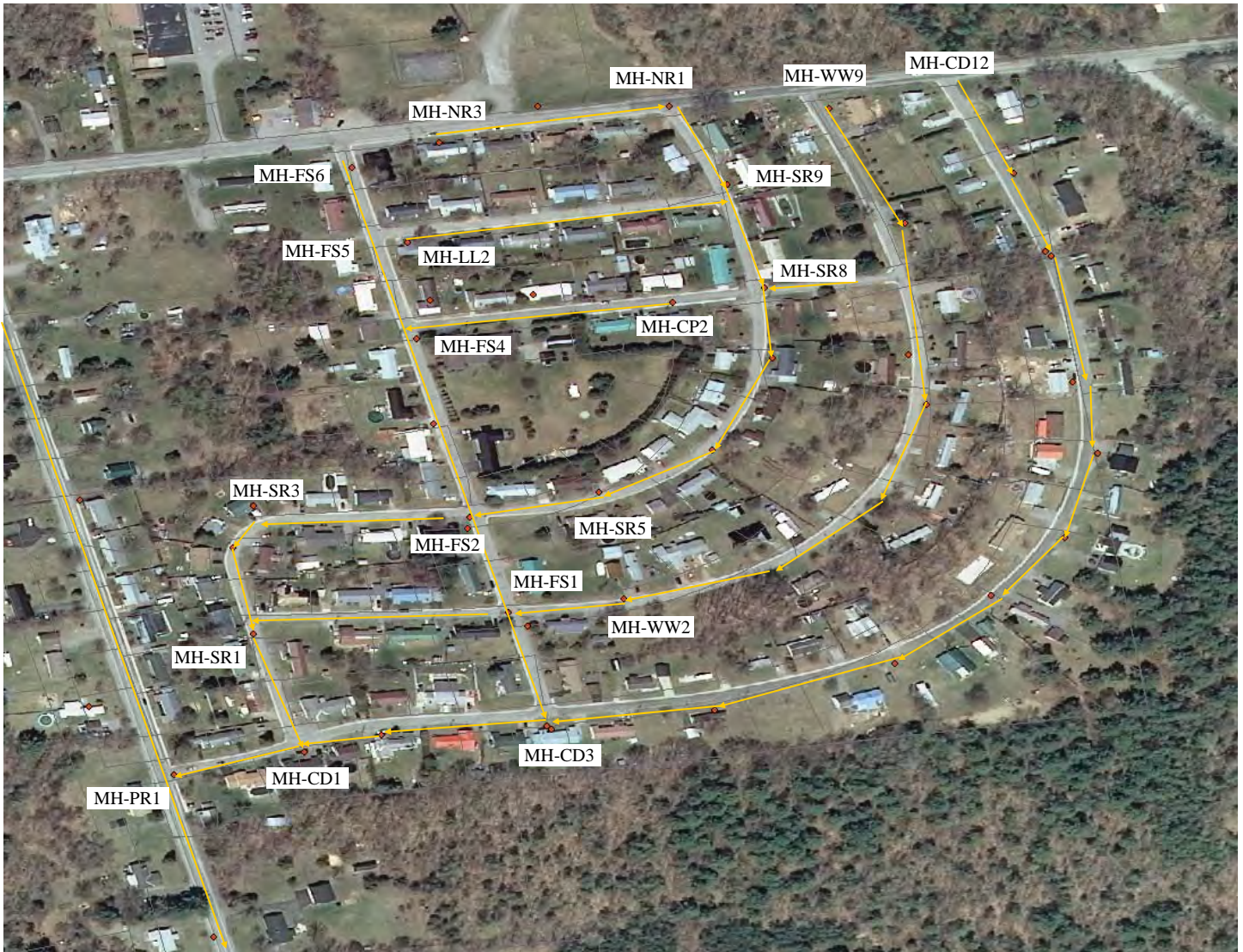




Architecture, Engineering, and Land Surveying Northeast, PLLC  
10 -12 City Hall Place, Plattsburgh, NY 12901

# Town of Moriah Collection System Evaluation Appendix C Grover Hills Service Area Inspection Report

## Collection System





Town of Moriah  
Collection System Evaluation  
Appendix C  
Grover Hills Service Area Inspection Report

## Manhole Inspections

One manhole were inspected to provide a representative sample of the condition of manholes in this portion of the collection system. These sewer mains were installed in 1994. The manholes are precast. The manhole was in relatively good condition at the time of inspection.



## Manhole Inspections

### Manhole Grover Hills Subdivision

Precast Manhole appears to be in relatively good condition at the time of inspection.







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## Sewer Main Inspections

Photos of a sewer main were taken from a manhole showing that the pipe appeared to be in relatively good condition at the time of inspection and based on the age of the sewer system (1994) and pipe material (PVC) it is not expected that the sewer mains will have severely deteriorated.

## Manhole Inspections

### Sewer Main Grover Hills Subdivision

This photo taken from a manhole does show that the pipe has been surcharged. The pipe appears to be in relatively good condition, structurally.





Town of Moriah  
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## Flow Monitoring

Although flow monitoring was not performed on the collection system, it was reported from local residents that sump pumps are present in most homes and those sump pumps are tied to the sanitary sewer collection system and not the storm sewer system.



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Grover Hills Service Area Inspection Report

## Recommendations

**Manholes:** It is recommend that all manholes in this service area be inspected and any minor deficiencies be repaired to avoid larger issues in the future.

**Sewer Mains:** It is recommended that the Town inspect all of the manholes and provide spot repairs to any deficiencies to avoid larger issues in the future.

**Sump Pumps:** It is recommended that is work is performed in the area, that sump pumps are removed from the sanitary sewer system and connected to the storm sewer system. This work would require a new lateral from each home to the storm sewer main.



# APPENDIX D

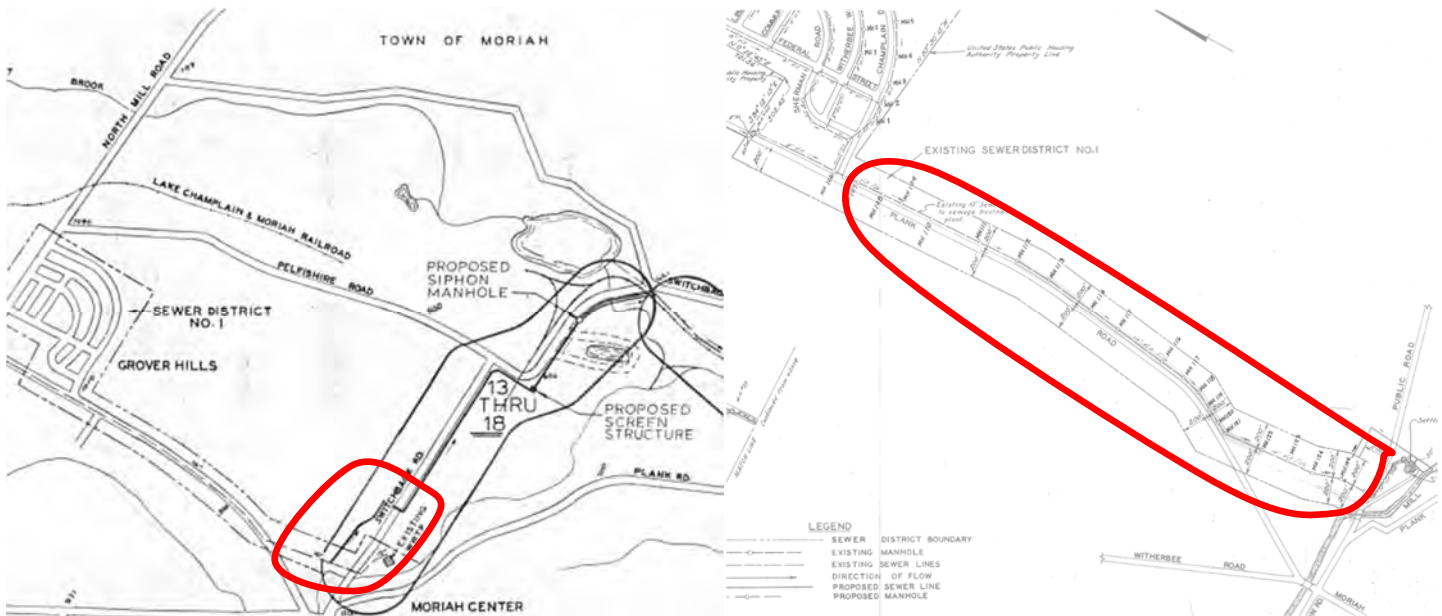
Plank Road (MH 260 to MH 108)

Town of Moriah  
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Plank Road (MH 254 to MH 108) Inspection Report

## Location Map

The Plank Road sewer main upstream of MH 109 was covered in the 2015 AES report. This report focus on the pipe downstream of MH 109. For the purposes of this report, the Plank Road sewer main is the main from MH 254 on Switchback Road to MH 109 on Plank Road. Most of this sewer main travels cross country between the two road, through private property. Portions of the sewer main were constructed in 1963 and portions were reconstructed in 1985.

The map on the right shows the section of pipe replaced in 1985. The map on the left shows the original pipe installed in 1963. Portions of the mains appear to be of an earlier unknown vintage.







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Town of Moriah  
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Plank Road (MH 254 to MH 108) Inspection Report

Collection System





Town of Moriah  
Collection System Evaluation  
Appendix D  
Plank Road (MH 254 to MH 108) Inspection Report

## Manhole Inspections

A limited number of manholes were inspected on both Plank Road and cross lots between Plank Road and Switchback Road. Although aged (1963), it appears the manholes on Plank Road are in relatively good condition.

Several of the manholes between the two roads are brick or manhole block. These manholes appear to be in need of repair or replacement as several have poorly formed troughs.

The manholes replaced between 254 and 269 in 1985 are expected to be in relatively good condition based on age.



**Town of Moriah  
Collection System Evaluation  
Appendix D  
Plank Road (MH 254 to MH 108) Inspection Report**

**Manhole: MH-121 (SD1)**

**Location: 2872 Plank Road**



**Cover and Frame**

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

**Corbel and Walls**

Manhole is pre-cast concrete and was in acceptable condition at the time of inspection.



SIZE & TYPE	FLOW DIRECTION	TO/FROM
10" VCT ???	OUT (SW)	MH-122
10" VCT ???	IN (S)	MH-120



**Steps**

Steps were present and in good condition at the time of inspection.

**Bench Walls and Invert / Trough**

Invert in good condition, with small amount of debris collected on the bench walls.

**General Condition**

Structurally, this manhole is in great condition, especially when compared to some of the other ones in this area. However, this manhole in particular has given the operators a lot of problems, consistently overflowing. More video of the effluent would go a long way to help this issue. The shallow bury and bend in flow direction also contribute to this.

Town of Moriah  
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Appendix D  
Plank Road (MH 254 to MH 108) Inspection Report

Manhole Number Unkown (SD1)

Location: 2850 Plank Road

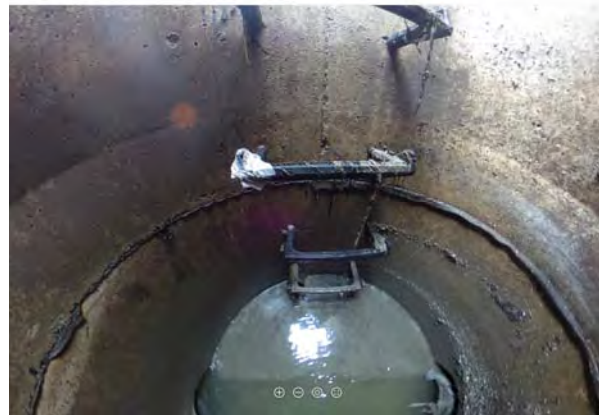


Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in acceptable condition at the time of inspection.



Steps

Steps present and in good condition at time of inspection

SIZE & TYPE	FLOW DIRECTION	TO/FROM
10" VCT	OUT (SE)	MH-122
10" VCT	IN (S)	MH-121



Bench Walls and Invert / Trough

Invert in good condition, but settling water indicated there is a blockage downstream.

General Condition

Town employees mentioned this manhole also overflows often, evidence of this is the roots, debris, and rags collected throughout the entire manhole. The picture to the left shows this is right in a customer's front yard, so this is a big problem. Settling water approx.. 2" at bottom.



Town of Moriah  
Collection System Evaluation  
Appendix D  
Plank Road (MH 254 to MH 108) Inspection Report

**Manhole: MH-122 (SD1)**

**Location: 2850 Plank Road**



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is brick and was in poor condition at the time of inspection.

SIZE & TYPE	FLOW DIRECTION	TO/FROM
10" VCT	OUT (E)	MH-124
10" VCT	IN (SE)	2850 Plank Road



Steps

No steps present.

Bench Walls and Invert / Trough

Roots present throughout. Inflow water level greater than invert.  
Large amount of sludge build-up throughout.

General Condition

Mortar has deteriorated in brick. This deterioration is an inflow point and also causes "loose" bricks. Maintenance difficult due to manhole depth and no steps present. Faulty trough decreasing flow rate and causing build up of solids.



Town of Moriah  
Collection System Evaluation  
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Plank Road (MH 254 to MH 108) Inspection Report

Manhole: MH-123 (SD1)

Location: 2842 Plank Road



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is brick and was in poor condition at the time of inspection.



SIZE & TYPE	FLOW DIRECTION	TO/FROM
10" VCT	OUT (SE)	MH-124
10" VCT	IN (SE)	MH-122

Steps

No steps.

Bench Walls and Invert / Trough

Trough in good condition

General Condition

Mortar has deteriorated in brick. This deterioration is an inflow point and also causes "loose" bricks.





Town of Moriah  
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Plank Road (MH 254 to MH 108) Inspection Report

Manhole: MH-124 (WD1)  
Location: 2842 Plank



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is brick and was in poor condition at the time of inspection. Loose can be seen in the picture below. Root intrusion throughout.



Steps  
No steps.

SIZE & TYPE	FLOW DIRECTION	TO/FROM
10" VCT	OUT (E)	MH-125
10" VCT	IN (SE)	MH-123
10" VCT ???	IN (NE)	Pump Station



Bench Walls and Invert / Trough  
Trough in poor condition.

General Condition

Mortar has deteriorated in brick. This deterioration is an inflow point and also causes "loose" bricks. Heavy root intrusion throughout. Sludge build-up due to high water levels during pump inflow.

Town of Moriah  
Collection System Evaluation  
Appendix D  
Plank Road (MH 254 to MH 108) Inspection Report

Manhole: MH-95 (SD2)

Location: 30 Republic Street



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is concrete masonry units (CMUs) and was in acceptable condition at the time of inspection.

SIZE & TYPE	FLOW DIRECTION	TO/FROM
8" AC	OUT (SE)	MH-96
8" AC	IN (S)	MH-94



Steps

No steps present

Bench Walls and Invert / Trough

No trough or bench walls.



General Condition

No trough or bench wall, therefore, blockages are frequent. Due to the depth of the manhole and the absence of steps, maintenance is difficult.



Town of Moriah  
Collection System Evaluation  
Appendix D  
Plank Road (MH 254 to MH 108) Inspection Report

## Sewer Main Inspections

A limited amount of sewer main inspections were performed. Unfortunately the camera recording failed, however about 110' of sewer main between MH 121 and MH 122 and a blockage was found at the 110' mark.

It is expected that the VCT sewer mains on Plank Road and across private property up to MH 260 require replacement and/or repair based on age and condition of sewer mains in other areas of the collection system of a similar vintage.

As a full inspection was not able to be performed, it is unknown if Cured-in-Placed-Pipe (CIPP) is a viable option for repair.

Based on the age of the collection system and location through wooded areas, it is expected that replacing/repair of this line will reduce I&I in the collection system.



Town of Moriah  
Collection System Evaluation  
Appendix D  
Plank Road (MH 254 to MH 108) Inspection Report

## Recommendations

### Manholes:

- MH 121 TO MH 109 on Plank Road. These manholes are precast and appear to be in relatively good condition. However, if the sewer main is replaced, it is recommended that the manholes should be replaced.
- MH 261 to MH 122 brick manholes on private property. It is recommended that these manholes be replaced.
- MH 254 to MH 260 newer 1985 manholes. It is recommend that these manholes in be inspected and any minor deficiencies be repaired to avoid larger issues in the future.

### Sewer Mains:

- MH 121 TO MH 109 on Plank Road. The sewer main is VCT. It is of unknown condition, but sewer mains of this vintage and material type in other areas of the Town are in need of replacement and are resources of I&I. It is recommended that these sewer mains be replaced.
- MH 261 to MH 122 brick manholes on private property. The sewer main is VCT. At least one blockage was found and based on the location of the pipe though the woods, it is likely that this sewer main is in poor condition. In addition, sewer mains of this vintage and material type in other areas of the Town are in need of replacement and are resources of I&I. It is recommended that these sewer mains be replaced.
- MH 254 to MH 260 newer 1985 manholes. It is recommended that the Town inspect all of the sewer mains and provide spot repairs to any deficiencies to avoid larger issues in the future.



# APPENDIX E

## Pump Station #2 (Titus Road) Inspection Report

## Location Map

The Titus Road Pump Station serves the Moriah Center Service Area and was constructed 1987. The pump station was upgraded in 2016 with new pumps and rails and addition of a dry hydrant for pump station bypass.

As the pump station has been recently upgraded, this report serves to document the recent upgrade, provide flow data, and recommend a few minor upgrades that should be phased in to allow for improved operations.

The mini report that was generated in 2015 by AES Northeast, has been included here for reference.

A map showing the pump station location is included for reference.





Town of Moriah  
Collection System Evaluation  
Appendix E  
Pump Station #2 (Titus Road) Inspection Report

## Pump Station Upgrades & Flow Analysis

Refer to the attached evaluation report and plans for the pump station assessment and upgrades that were performed in 2016.

### Flow Analysis

- Average pump hours per day from 1/1/17 through 8/17/17: 1.4 hours
- Max pump hours per day from 1/1/17 through 8/17/17: 4.9 hours
- Median pump hours per day from 1/1/17 through 8/17/17: 1.2 hours
- Submitted/installed pump design operating point: 230 gpm @ 83 ft TDH
  
- Total average gallons pumped per day: 19,060 gpd
- Total maximum gallons pumped per day: 65,880 gpd
- Design average day flow for the pump station: 38,250 gpd
- Peak hour design flow for the pump station: 191,520 gpd

Conclusion: The new pumps are more than capable of handling the peak flows documented as reaching the pump station based on the minimal hours per day that the pumps are required to operate. The operating hours of the pumps indicate that average flows to the pump station are currently below the calculated design average day flow based on the connected users. The maximum pump hours per day occurred in April, during typical spring thaw/runoff and can be associated with some nominal I&I contributions that are most likely related to connected sump pumps given the age of the collection system (1987) and the construction materials of the collection system (PVC sewer pipe).

Recommendations: It is recommended that the Operator regularly check float functionality as today's mechanically activated floats are not as reliable as the old mercury floats used to be. It is also recommended that an additional float be added as a dedicated high level alarm (currently a single float is used for lag pump and high alarm). It is strongly recommended that an autodialer or other means of remote notification of high level be installed at the pump station. The current light and alarm system is in a location that is likely to go unnoticed during the nighttime. In addition, the fence around the pump station requires some repair

# Town of Moriah

## Titus Road Pump Station Emergency Evaluation

Prepared for the  
Town of Moriah  
38 Park Place, Suite 1  
Port Henry, NY 12974

September 15, 2015



Architecture, Engineering, and Land Surveying Northeast, PLLC

10-12 City Hall Place, Plattsburgh, New York

Tel: 518-561-1598 Fax: 518-561-1990

[www.aesnortheast.com](http://www.aesnortheast.com)

AES Project No. 4399



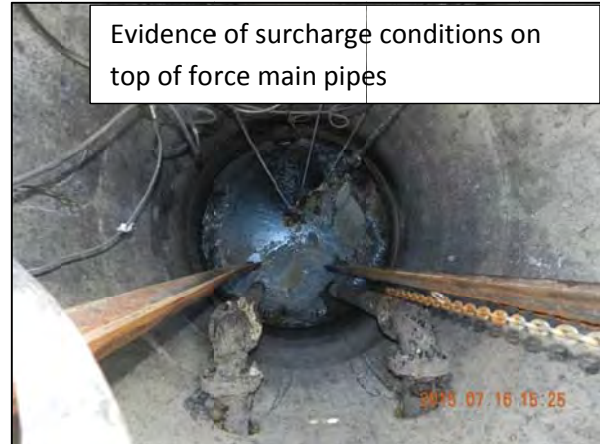


**Location:**

The Titus Road pump station is located off of Titus Road, approximately 265 feet east of the intersection between Titus Road, Center Road, North Hudson Road, and Witherbee Rd (Co Hwy 7a). The pump station is located along the shore of Mill Brook, approximately 110 feet from the nearest bank of the brook.

**The Issue:**

In June 2015 the Town observed that the Titus Road pump station was running non-stop and was having difficulty keeping up with incoming flows. One pump has failed completely and has been removed from the pump station. The remaining pump is operating, but with diminished performance. An emergency evaluation has been performed to identify the cause of the failure and recommend alternatives for addressing the issue.



**Evaluation:**

The pump station consists of a 6 ft diameter wet well, approximately 15 ft in depth, with a separate valve vault, backup generator in an adjacent building, and an electrical backboard mounted to the pump station wet well.

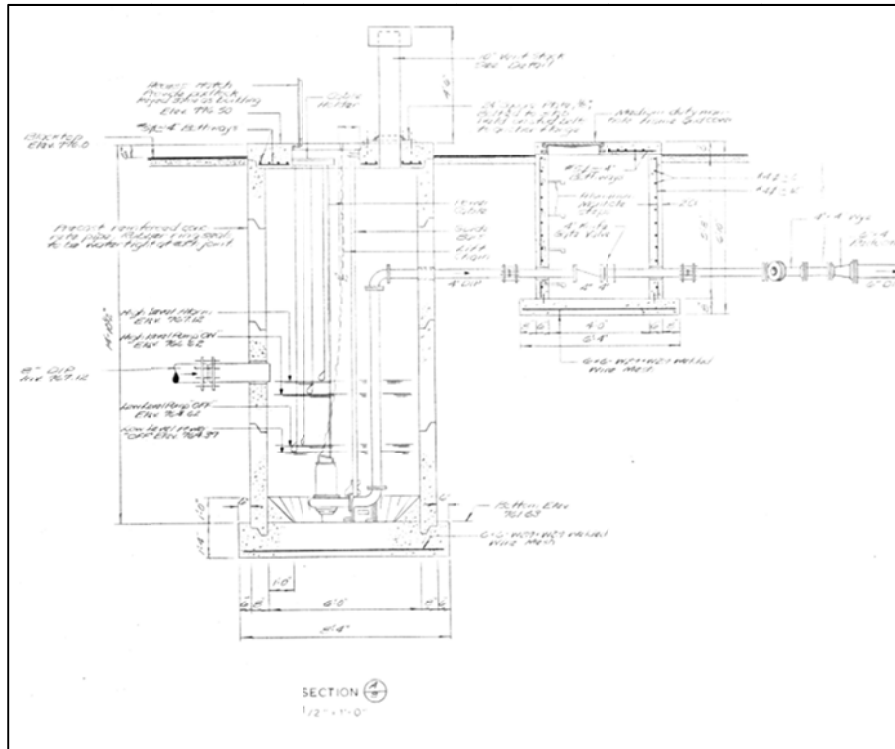
The pump station is equipped with two Yeomans Chicago Series 9100 Model 4103S 10 HP 1750 RPM solids-handling submersible pumps. The pump station serves approximately 85 homes, and is fed by two 8" PVC gravity lines installed in 1987/1988. One gravity line serves North Road (aka Center Rd.) and the other serves Witherbee Rd. (Co Hwy 7a). Based on the vintage of the PVC gravity mains, and the lack of information available on pipe thickness or installation conditions, the mains should be inspected and evaluated to determine their condition.

Design information for the existing pump station was not readily available. Based on NYS DEC Design Standards, and assuming a standard 3 bedroom home and 150 GPD/bedroom (assuming older fixtures), design average daily flow for the current system is 38,250 GPD. Using a conservative peaking factor of 5 (due to extremely small size of this pumped system), design peak flow for the current system is 133 GPM.

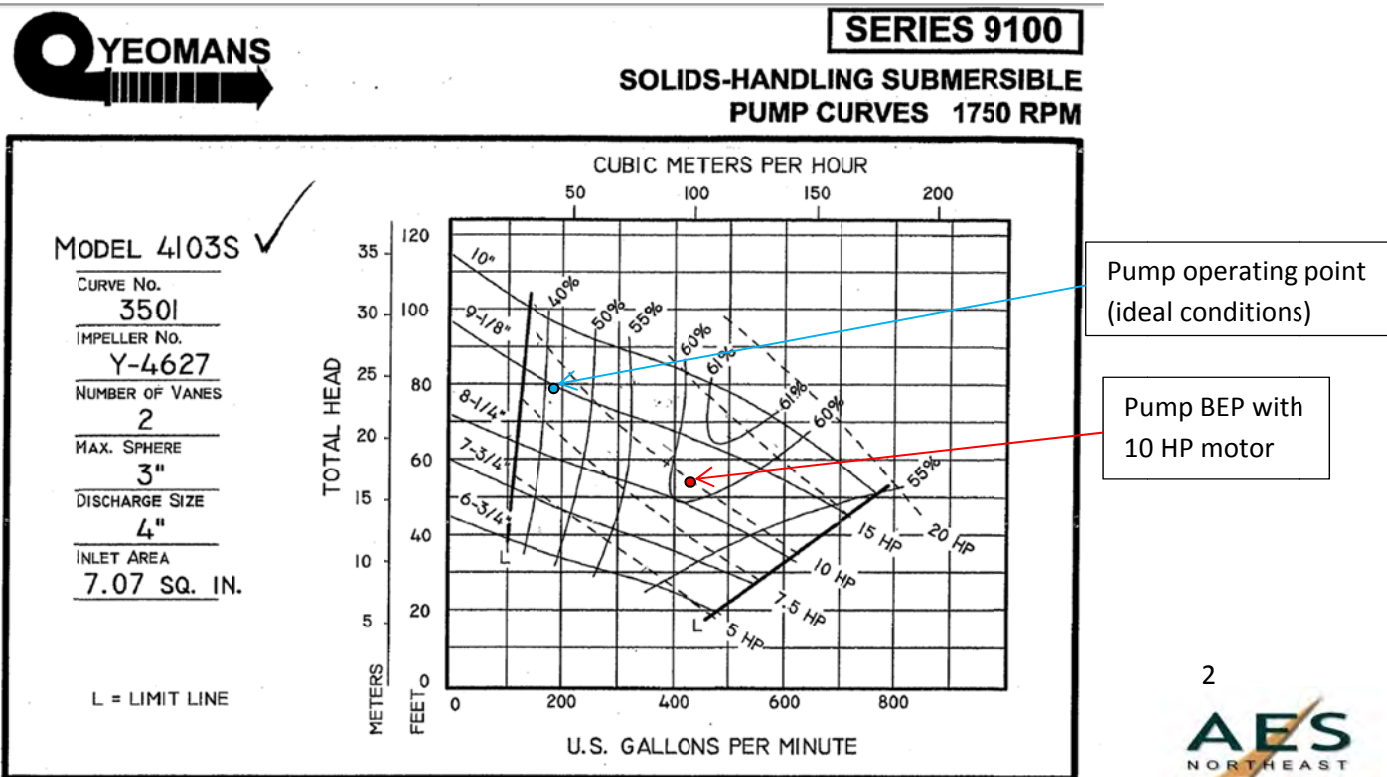
Based on the 1987 plans developed by Morrell Vrooman Engineers, key pump station and force main parameters, elevations and distances are as follows:

- Pump station wet well diameter: 6'
- Pump station bottom elevation: 761.63'
- Low level pump off elevation: 764.37
- Invert in elevation: 767.12'
- Force main discharge elevation: 832.77
- Pump station stationing: 0+19
- Valve vault stationing: 0+29
- End of 6" DI stationing: 3+68
- End of force main stationing: 7+73

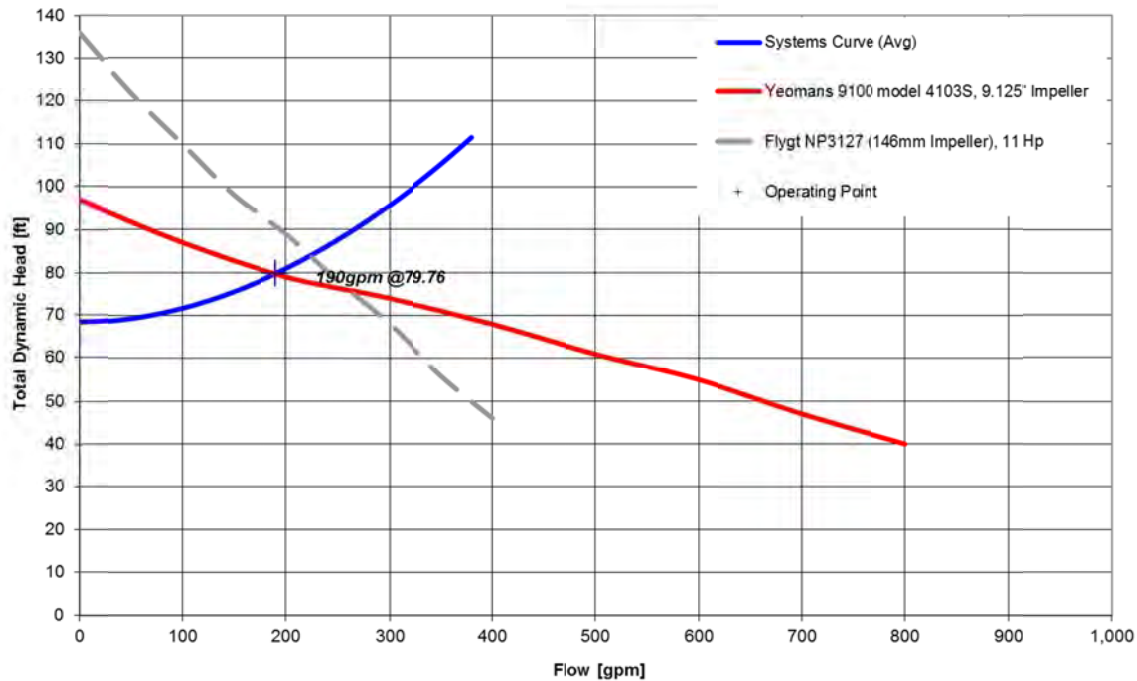
Based on the design pump operating elevations and wet well diameter, the design pump down volume is 423 gallons, and pump down volume from the high alarm/gravity invert in is 529 gallons. At average day flow, pump cycles would occur at approximately 16 minute intervals.



Utilizing the wet well and force main information available in the 1987 plans, the systems curve was developed and plotted against the pump curve for the existing pumps. Presented below is the pump curve for the existing Yeomans Chicago pumps and the pump and systems curve for the existing conditions.



**Town of Moriah  
Titus Road Pump Station Existing Pump  
Pump Curve and Systems Curve**



Based on the analysis performed, the existing pump is not operating at a point that is within the pump's design range. The pump is designed for a lower head and higher flow condition. The best efficiency point for the existing pump and impeller combination is 425 GPM at approximately 53 ft of total dynamic head (TDH) with the 10 HP motor. At 425 GPM the TDH of the Titus Road force main would be 122 ft, clearly out of range of the pump, and velocities would exceed 10 ft/second in the 4" diameter sections of force main, and 5 ft/second in the 6" diameter sections. Actual pump operation per the pump curve is approximately 190 gpm at 80 ft TDH, with an efficiency of approximately 40% under ideal conditions. Operating that far back on the pump curve leads to excessive internal recirculation that further reduces actual pumped flow and efficiency and can lead to ragging and plugging. Based on the fact that the single remaining pump is operating nearly nonstop, and it is unable to keep up with diurnal flow peaks, actual flow pumped is most likely less than the design peak flow of 133 GPM. Additionally, the pump curve is relatively flat, so small changes in TDH result in large changes in pumped flow and efficiency. A steeper pump curve would be more appropriate for this application.

The existing pumps were each installed on a single rail made of steel angle. This set-up allows the pump to shift on the pitless unit more than would occur on a typical two rail set-up where the pump is fixed in the horizontal plane. The poor fit was accommodated using sealing washers, sometimes called "jam packs," which are essentially a neoprene gasket that helps to seal the meeting face of the pump and pitless unit. Sealing washers can shift and leak, and they do not make up for a good face-to-face seal between the pump and the pitless unit. Leaking around the pitless adaptor in the Titus Road pump station was observed by the operator.

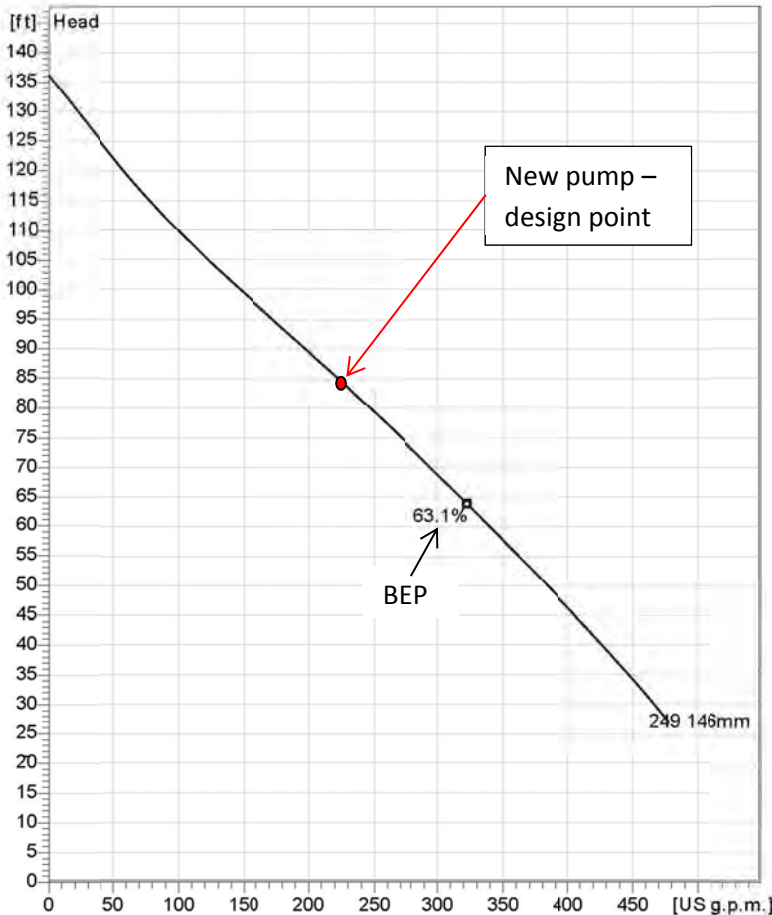
Based on the pump evaluation performed, the existing pumps are misapplied. They are not capable of the high head, moderate flow found in this pumping scenario. One of the pumps has failed completely

and has been removed from the wet well, leaving the remaining pump without a back-up or the nominal assistance of a lag pump in the event that incoming flows overwhelm the pump's current capacity. An emergency pump replacement is deemed necessary to avoid potential overflows and costly back-up pumping utilizing a septic hauler. Replacement rails are also necessary to ensure that the new pumps seat and seal properly to the pitless unit. New rails will also ensure that the new pumps can be readily removed and re-installed during routine maintenance activities.

Typically a failed pump is a maintenance item in which the pump is repaired or replaced by the Owner. In this situation, due to the fact that the existing pumps are misapplied, the pumps need to be replaced with different pumps and appurtenances that fit the application.

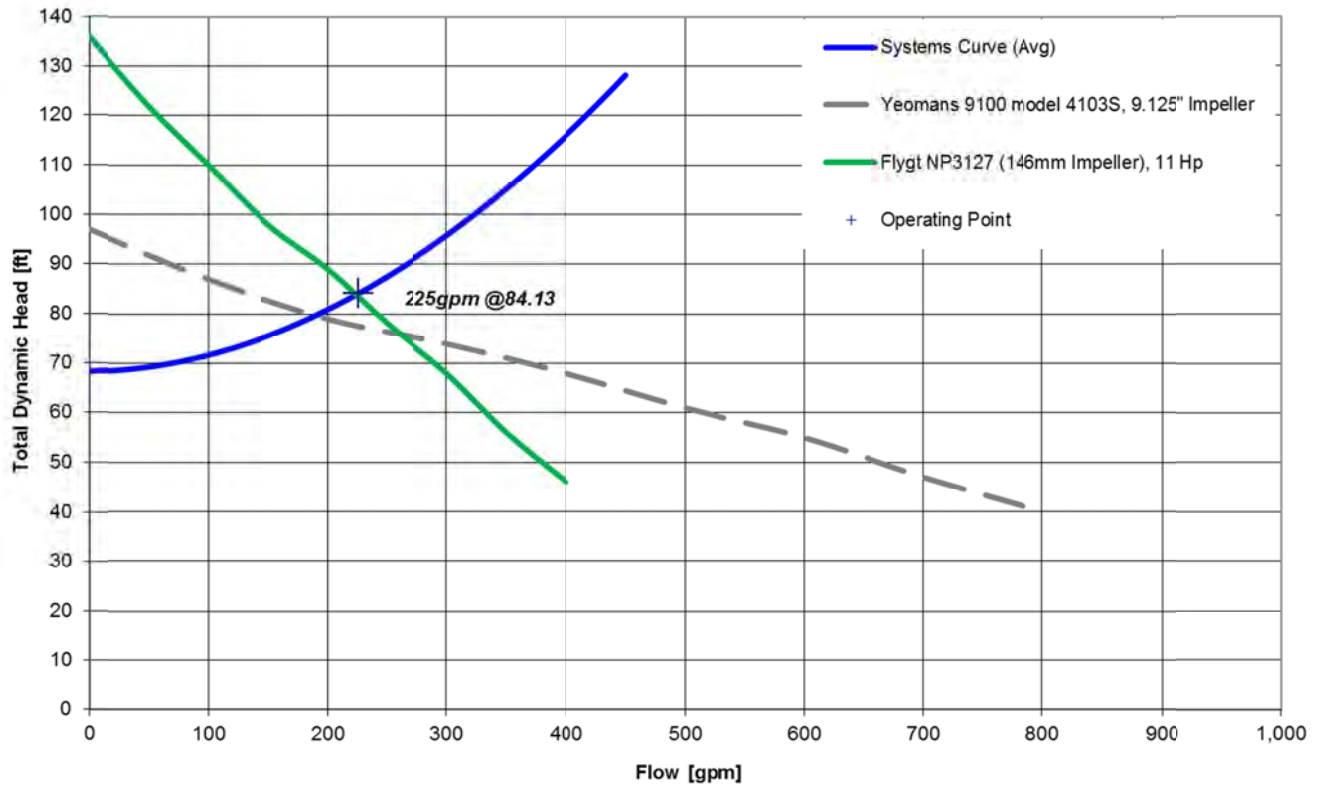
**Proposed Replacement Pump:**

**NP 3127 SH 3~ 249**  
**Technical specification**





**Town of Moriah  
Titus Road Pump Station Proposed Pump  
Pump Curve and Systems Curve**



The Flygt NP 3127 SH pump meets the pump application at an appropriate point on the pump curve. The pump curve is noticeably steeper than the existing Yeomans pump curve, meaning that small changes in TDH do not result in large changes in pumped flow or efficiency, making the pump more resilient to changing operating conditions. The pump design point is 225 GPM at 83 feet TDH. Efficiency at the design point is approximately 54%, net positive suction head (NPSH) required is 18 feet and NPSH available is 32 feet.

**Alternative Pump Options:**

At the Town’s request we evaluated the pump station for the possibility of a retrofit with an above ground suction lift pump station. While above ground suction lift pump stations provide easier access to pump components, they also have more components to maintain (and potentially fail). Initial prime is typically accomplished with vacuum pumps, therefore, the pump station would consist of the two main pumps and two vacuum pumps.

In applications where a pump is asked to both pull and push water, such as with suction lift pump stations, the pump is limited to moderate suction capacity and moderate TDH. Consequently, suction lift pumps operate most efficiently and effectively in higher flow and lower head applications that what exists at the Titus Road Pump Station. A suction lift pump was not able to be identified that could pump at the design pump rate at a sustainable point on the pump curve and with reasonable efficiency. The design point fell far to the left of the best efficiency point on all potential pump curves. In addition, the

NPSH available with the existing wet well configuration in a suction application, when paired with the relatively high TDH of this pump application, would result in NPSH issues in a suction lift pump setup. Therefore, an above ground suction lift pump station is not recommended for this pumping application.

**Conclusion:**

The existing pumps at the Titus Road Pump Station are inappropriate for the pumping application, based on their design operating point and their evident failure. It is recommended that these pumps be replaced as soon as possible with the selected Flygt NP 3127 SH pumps. The Flygt pumps have a lead time of 12-14 weeks. Due to the emergency nature of the situation, with one pump nonfunctional and removed from the pump station, and the other one barely keeping up, it is recommended that the replacement Flygt pumps be ordered as soon as possible. The Town has gone out to bid for the recommended pumps and rails, and received a recommendation to proceed with the low bidder. The drawings and specifications for the pump replacement will be finalized as the pumps are being constructed and shipped.

ID	Std. Reference	Task Name	Std. Response	Current Project	Conflict	Text7
1		10 Chapter 10 - Engineering Reports & Facility Plans				
2		10 General				
11		11 Engineering Report or Facility Plan				
132		20 Chapter 20 - Engineering Plans and Specifications		Yes		
133		20 Plans and support documents - Have all the questions in this section been answered without conflict?		Yes		
216		21 Specifications - Have all of the questions in this section been answered without conflict?		Yes		
235		22 Revisions to approved plans - Have all of the questions in this section been answered without conflict?		Yes		
240		30 Chapter 30 - Design of Sewers				
241		30 Design of sewers - Have all the questions in this section been answered without conflict?		Yes		
242		31 Approval of Sewers - Is the sewer design for a separate system which excludes rain water from roofs, streets, and other areas, and groundwater from foundation drains?		Yes		
243		32 Design Capacity and Design Flow - Have the following questions been answered without conflict?		Yes		
257		33 Details of design and construction - Have the following questions been answered without conflict?		Yes		
353		34 Manholes - Have the following questions been answered without conflict?		Yes		
393		35 Inverted Siphons - Have the following questions been answered without conflict?		Yes		
401		36 Sewers in Relation to Streams - have the following questions been answered without conflict?		Yes		
426		37 Aerial Crossings - Have the following questions been answered without conflict?		Yes		
435		38 Protection of Water Supplies - Have the following questions been answered without conflict?		Yes		
458		40 Chapter 40 - Wastewater Pumping Stations				
459		40 Wastewater Pumping Stations - Have all of the questions in this section been answered without conflict?		Yes		
460		41 General - Have all of the questions below been answered without conflict?	Yes	NA		Existing Pump Station.
461	41.1	Are all structures and electrical and mechanical equipment protected from physical damage by the 100 year flood?	Yes	NA		Existing Pump Station.
462	41.1	Will all structures and electrical and mechanical equipment remain fully operational and accessible during the 25 year flood?	Yes	NA		Existing Pump Station.
463	41.1	Have all pertinent flood plain obstruction regulations of state, provincial, and federal agencies been considered?	Yes	NA		Existing Pump Station.
464	41.2	Is the pumping station readily accessible by maintenance vehicles during all weather conditions?	Yes	NA		Existing Pump Station.
465	41.2	Is the facility located off the traffic way of streets and alleys?	Yes	NA		Existing Pump Station.
466	41.2	Has security fencing and access hatches with locks been provided?	Yes	NA		Existing Pump Station.
467	41.3	Has special consideration been given to design of the wet well and pump station piping to avoid operational problems from the accumulation of grit?	Yes	NA		Existing Pump Station.
468	41.4	Has adequate provision been made to effectively protect maintenance personnel from hazards?	Yes	NA		Existing Pump Station.
469	41.4	Has equipment for confined space entry been provided for all pumping stations and is that equipment in accordance with OSHA and regulatory agency requirements? (Refer to Std. Reference 57)	Yes	NA		Existing Pump Station.
470		42 Design - Have all of the questions below been answered without conflict?	Yes			
471	42.1	Does the pumping station fall into one of the four types in general use: wet well/dry well, submersible, suction lift, or screw pump?	Yes	Yes	+	
472	42.2	Structures - Have all of the questions below been answered without conflict?	Yes	No		
473	42.21	Are dry wells, including their superstructure, completely separated from the wet well?	Yes	NA		
474	42.21	Are common walls gas tight?	Yes	NA		
475	42.22	Have provisions been made to facilitate removal of pumps, motors, and other mechanical and electrical equipment?	Yes	No		Plain steel angle, single rail
476	42.22	Have provisions been made to ensure that individual pump and motor removal does not interfere with the continued operation of remaining pumps?	Yes	Yes	+	
477	42.23	Access and safety landings				
478	42.231	Has a suitable and safe means of access for persons wearing self-contained breathing apparatus been provided for dry wells and wet wells?	Yes	Yes	+	Tripod and confined space entry gear required. Unknown if Town has this equipment.
479	42.231	Does access to wet wells containing bar screens or mechanical equipment requiring inspection or maintenance conform to Std. Reference 61.13? (also refer to Std Reference 57)	Yes	NA		
480	42.232	For build-in-place pump stations does the stairway to the dry well have rest landings at vertical intervals of no greater than 12 feet (3.7 m)?	Yes	NA		
481	42.232	For factory-built pump stations over 15 feet (4.6 m) deep has a rigidly fixed landing been provided at vertical intervals of no greater than 10 feet (3 m)?	Yes	NA		
482	42.232	Do all landings have a suitable and rigidly fixed barrier to prevent an individual from falling past the intermediate landing to a lower level?	Yes	NA		
483	42.232	If a manlift or elevator is used in lieu of landings in a factory-built station has emergency access been included in the design?	Yes	NA		
484	42.232	Have stairways been designed to meet the provisions of Std. Reference 56.5?	Yes	NA		
485	42.24	Has buoyancy of the wastewater pumping station structures been considered where high groundwater conditions are anticipated?	Yes			Existing pump station. No buoyancy or high groundwater issues noted to date.
486	42.24	Have adequate provisions been made to protect pumping station structures where high groundwater conditions are anticipated?	Yes			Existing pump station. No buoyancy or high groundwater issues noted to date.
487	42.25	Have construction materials been selected that are appropriate under conditions of exposure to hydrogen sulfide and other corrosive gases, greases, oils, and other constituents frequently present in wastewater? (esp. for selection of metals and paints)	Yes	No		Plain steel rails, plain steel or galvanized chains.

ID	Std. Reference	Task Name	Std. Response	Current Project	Conflict	Text?
488	42.25	Has contact between dissimilar metals been avoided (or other provisions made) to minimize galvanic action?	Yes	NA	■	Plain steel to cast iron.
489	42.3	<b>Pumps - Have all of the questions below been answered without conflict?</b>	Yes			
490	42.31	Have multiple pumps been provided?	Yes	Yes	+	
491	42.31	Has a minimum of 3 pumps been provided for flows greater than 1 mgd	Yes	NA	■	
492	42.31	If only two units are provided are they of the same size (have the same capacity), and is each capable of handling flows in excess of expected maximum flow?	Yes	No	■	Based on pump curve for existing pumps individual pump operation is possible at the peak flow, but it puts the pump so far back on the curve it is unlikely that peak flow is able to be pumped (due to internal recirculation and leaking at the "jam pack")
493	42.31	If 3 or more units are provided are the units designed to fit actual flow conditions and are they of such capacity that with any one unit out of service the remaining units will have the capacity to handle the design peak hourly flow?	Yes	NA	■	
494	42.31	Have all pumps been tested by the manufacturer (including a hydrostatic test and an operating test)?	Yes	NA	■	Unknown if existing pumps were tested. New proposed pumps will be supplied with the individual pump test results.
495	42.32	<b>Protection Against Clogging</b>				
496	42.321	Are pumps handling combined wastewater preceded by readily accessible bar racks to protect the pumps from clogging or damage?	Yes	NA	■	
497	42.321	Are the clear openings between bars for manually cleaned screens between 1" and 1.75" (25 mm - 45 mm)?	Yes	NA	■	
498	42.321	Are the clear openings for mechanically cleaned screens less than or equal to 1.75"?	Yes	NA	■	
499	42.321	Is a mechanical hoist provided in all situations where a bar rack is provided?	Yes	NA	■	
500	42.321	Where warranted, are mechanically cleaned and/or duplicate bar racks provided?	Yes	NA	■	
501	42.322	Are pumps handling separate sanitary sewage from 30" or larger diameter sewers protected by bar racks that meet bar rack requirements (Std. Ref 42.321 & 61.121 & 61.13)?	Yes	NA	■	
502	42.322	Has appropriate protection from clogging been considered for small pumping stations?	Yes	Yes	+	Existing and proposed new pumps are both solids handling pumps
503	42.33	Are pumps handling raw wastewater capable of passing spheres of at least 3" (80 mm) in diameter?	Yes	Yes	+	
504	42.33	Are pump suction and discharge openings greater than or equal to 4" (100 mm)?	Yes	Yes	+	Existing pumps have 4" discharge. Proposed new pumps have 3.15" discharge. Flygt pumps have been proven to reliably pass 3" solids and are designed for this specific small/intermediate raw wastewater pumping application.
505	42.34	Are pumps placed so that under normal operating conditions they will operate under a positive suction head (except as specified in Std. Reference 43)?	Yes	Yes	+	submersible pumps
506	42.35	Do electrical systems and components in raw wastewater wet wells comply with the National Electrical Code requirements for Class I, Division 1, Group D Locations (explosion-proof)?	Yes	Yes	+	Unknown about current electrical system. New pumps will have new electrical and controls that will comply.
507	42.35	Do electrical systems in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors may be present comply with the National Electrical Code requirements for Class I, Division 1, Group D Locations (explosion-proof)?	Yes	Yes	+	Unknown about current electrical system. New pumps will have new electrical and controls that will comply.
508	42.35	Is equipment located in wet wells suitable for use under corrosive conditions?	Yes	Yes	+	Unknown about current electrical system. New pumps will have new electrical and controls that will comply.
509	42.35	Is each flexible cable provided with a watertight seal and separate strain relief?	Yes	Yes	+	Unknown about current electrical system. New pumps will have new electrical and controls that will comply.
510	42.35	Is a fused disconnect switch located above ground for the main power feed of all pumping stations	Yes			Unknown - existing
511	42.35	If the fused disconnect switch is exposed to weather, does it meet the requirements of weatherproof equipment? (NEMA 3R or 4)	Yes			Unknown - existing
512	42.35	Have lightning and surge protection systems been considered?	Yes			Unknown - existing
513	42.35	For lift stations with a control panel located outdoors, is a 110 volt power receptacle provided inside the control panel to facilitate maintenance?	Yes			Unknown - existing
514	42.35	Has Ground Fault Circuit Interruption (GFCI) protection been provided for all outdoor outlets?	Yes			Unknown - existing
515	42.36	Does each pump have an individual intake?	Yes	Yes	+	
516	42.36	Do wet well and intake designs avoid turbulence near the intake and prevent vortex formation?	Yes	Yes	+	Small pump station. Minimal concern.
517	42.36	Is intake piping as straight and short as possible?	Yes	Yes	+	No intake pipe
518	42.37	Is a sump pump equipped with dual check valves provided in the dry well(s) to remove leakage or drainage? Is the sump pump discharge above the maximum high water level of the wet well?	Yes	NA	■	
519	42.37	Have provisions been made to ensure that water ejectors are not connected to a potable water supply?	Yes	NA	■	
520	42.37	Do all floor and walkway surfaces have an adequate slope to a point of drainage?	Yes	NA	■	
521	42.37	Is pump seal leakage piped or channeled directly to the sump?	Yes	NA	■	
522	42.37	Is the sump pump sized to remove the maximum pump seal water discharge which would occur in the event of a pump seal failure? (Std. Reference 46 & 47)	Yes	NA	■	
523	42.38	Have the pumps and controls of main pumping stations been designed to deliver as uniform a flow as practicable in order to minimize hydraulic surges?	Yes	NA	■	Pumps operate on/off, no modulation. Minimal hydraulic impact from PS.
524	42.38	Is the station design capacity based on peak hourly flow as determined in accordance with Std. Reference 11.24?	Yes	Yes	+	Unknown for existing PS. With replacement pumps PS will be capable of meeting design peak hour flow.
525	42.38	Is the station design capacity adequate to maintain a minimum velocity of 2 feet per second (0.6 m/s) in the force main? (refer to Std. Reference 49)	Yes	Yes	+	
526	42.4	<b>Controls - Have all of the questions below been answered without conflict?</b>	Yes			
527	42.4	Is the type of control system an: (a) air bubbler, (b) encapsulated float, or © flow measuring	Yes	Yes	+	float



ID	Std. Reference	Task Name	Std. Response	Current Project	Conflict	Text?
528	42.4	Are water level control sensing devices located so they are not unduly affected by turbulent flows entering the well or by the turbulent suction of the pumps?	Yes	NA	■	small PS. Minimal turbulence.
529	42.4	Do bubbler type level monitoring systems include dual air compressors?	Yes	NA	■	
530	42.4	Has provision been made to automatically alternate the pumps in use?	Yes	Yes	+	Unknown for exsition pumps. Currently only one pump in operation. Will be provided for new pumps.
531	42.4	Are suction lift stations designed to alternate pumps daily instead of each pumping cycle to extend the life of the priming equipment?	Yes	NA	■	
532	42.4	Does control system electrical equipment comply with National Electrical Code requirements for Class 1, Division 1, Group D location?	Yes	Yes	+	Unknown for existing controls. Yes for new controls.
533	42.5	<b>Valves - Have all of the questions below been answered w/out conflict?</b>	Yes			
534	42.51	Are suitable shutoff valves placed on the suction line of each pump (except submersible and vacuum primed)?	Yes	NA	■	
535	42.52	Are suitable shutoff and check valves placed on the discharge line of each pump (except on screw pumps)?	Yes	Yes	+	
536	42.52	Is the check valve located between the shutoff valve and the pump	Yes	Yes	+	
537	42.52	Are check valves suitable for the material being handled?	Yes	Yes	+	
538	42.52	Are check valves placed on the horizontal portion of discharge piping (except for ball checks, which may be placed in the vertical run)?	Yes	Yes	+	
539	42.52	Are valves capable of withstanding normal pressure and water hammer?	Yes	Yes	+	
540	42.52	Are valves located on outside of wet well?	Yes	Yes	+	
541	42.52	Are all shutoff and check valves operable from the floor level and accessible for maintenance?	Yes	Yes	+	
542	42.52	Are outside levers located on swing check valves (recommended)?	Yes	Yes	+	
543	42.6	<b>Wet Wells - Have all of the questions below been answered without conflict?</b>	Yes			
544	42.61	Is wet well divided into multiple sections and properly interconnected to facilitate repairs and cleaning?	Yes	NA	■	small PS
545	42.62	Has the design fill time and minimum pump cycle time been considered in sizing the wet well?	Yes	Yes	+	Wetwell size is adequate for current flow.
546	42.62	Is the effective volume of the wet well based on the design average flow and a filling time that does not exceed 30 minutes (unless the facility is designed to provide flow equalization)?	Yes	Yes	+	
547	42.62	Were the pump manufacturer's duty cycle recommendations utilized in selecting the minimum cycle time?	Yes	NA	■	Unknown for existing pumps. New pumps are continuous & inverter duty rated and capable of a min of 15 starts/hr
548	42.62	If the anticipated initial flow tributary to the pumping station is less than the design average flow, have provisions been made so that the fill time indicated is not exceeded for initial flows?	Yes	NA	■	
549	42.62	If the wet well is designed for flow equalization as part of a treatment plant, have provisions been made to prevent septicity?	Yes	NA	■	
550	42.62	Is the wet well size adequate to avoid heat buildup in the pump motor and to avoid septic conditions due to excessive detention time?	Yes	Yes	+	
551	42.63	Does the wet well floor have a minimum slope of 1:1 to the hopper bottom?	Yes	Yes	+	
552	42.63	Is the horizontal area of the hopper bottom no greater than necessary for proper installation and function of the inlet?	Yes	Yes	+	
553	42.7	<b>Safety Ventilation - Have all of the questions below been answered without conflict?</b>	Yes			
554	42.71	Has adequate ventilation been provided for all pump stations?	Yes	No	■	No passive or active ventilation of wetwell.
555	42.71	In locations where the dry well is below the ground surface has mechanical ventilation been provided?	Yes	NA	■	
556	42.71	If the wet well has screens or mechanical equipment requiring maintenance or inspection has permanent ventilation been provided?	Yes	NA	■	
557	42.71	Has ventilation been provided and arranged so as to independently ventilate the dry well and the wet well, with no interconnection?	Yes	NA	■	
558	42.72	In dry wells over 15 feet (4.6 m) have multiple inlets and outlets been provided?	Yes	NA	■	
559	42.72	Have fine screens or other obstructions in air ducts been avoided to prevent clogging?	Yes	NA	■	
560	42.72	Have dampers been avoided on exhaust or fresh air ducts?	Yes	NA	■	
561	42.73	Have switches for operation of ventilation equipment been marked and located conveniently?	Yes	NA	■	
562	42.73	Is all intermittently operated ventilation equipment interconnected with the respective pit lighting system?	Yes	NA	■	
563	42.73	Has consideration been given to automatic controls were intermittent operation is used?	Yes	NA	■	
564	42.73	If automatic controls are used does the manual lighting/ventilation switch override the automatic controls?	Yes	NA	■	
565	42.73	For a 2 speed ventilation system with automatic switch over where gas detection equipment is installed, has consideration been given to increasing the ventilation rate automatically in response to the detection of hazardous concentrations of gas/vapor?	Yes	NA	■	
566	42.74	Are fan wheels for mechanical ventilation fabricated from non-sparking material?	Yes	NA	■	
567	42.74	Is automatic heating and dehumidification equipment provided in all dry wells?	Yes	NA	■	
568	42.74	Do the electrical equipment and components meet the requirements in Std. Reference 42.35?	Yes	NA	■	
569	42.75	If wet well ventilation is continuous does it provide at least 12 complete air changes per hour?	Yes	NA	■	
570	42.75	If wet well ventilation is intermittent does it provide at least 30 complete air changes per hour?	Yes	NA	■	
571	42.75	Is air forced into the wet well by mechanical means rather than solely exhausted from the wet well?	Yes	NA	■	
572	42.75	Are the air change requirements for wet well based on 100% fresh air?	Yes	NA	■	
573	42.75	Is portable ventilation equipment provided for use at submersible pump stations and wet wells with no permanently installed ventilation equipment?	Yes	No	■	Town's ventilation equipment and confined space entry procedures are unknown.
574	42.76	If dry well ventilation is continuous does it provide at least 6 complete air changes per hour?	Yes	NA	■	
575	42.76	If dry well ventilation is intermittent does it provide at least 30 complete air changes per hour?	Yes	NA	■	

ID	Std. Reference	Task Name	Std. Response	Current Project	Conflict	Text?
576	42.76	NOTE: If a two speed ventilation system is used a rate of 30 changes per hour for 10 minutes and automatic switch to 6 changes per hour may be used to conserve heat?	Yes	NA	■	
577	42.76	Are the air change requirements for dry well based on 100% fresh air?	Yes	NA	■	
578	42.8	<b>Flow Measurement - Have all of the questions below been answered without conflict?</b>	Yes			
579	42.8	Have suitable devices for measuring wastewater flow been provided at all pumping stations?	Yes	No	■	No existing flow measuring device. Pumped flow for new pumps can be approximated based on pump operating point and pump hours.
580	42.8	Do the flow measurement devices at pumping stations with a 1200 gpm (75 L/s) or greater design peak flow provide indicating, totalizing, and recording flow measurements?	Yes	NA	■	
581	42.8	<b>For stations with a design peak hourly flow up to 1200 gpm (75 L/s) have elapsed time meters used in conjunction with annual pumping rate tests been utilized?</b>	Yes	NA		
582	42.8	If elapsed time meters used in conjunction with annual pumping rate tests have been utilized, has sufficient metering configured to measure the duration of individual and simultaneous pump operation been provided?	Yes	NA	■	
583	42.9	<b>Water Supply - Have all of the questions been answered without conflict?</b>	Yes	Yes		
584	42.9	Does the design ensure that there is no physical connection between any potable water supply and a wastewater pumping station that under any conditions may cause contamination of the potable water supply?	Yes	Yes	+	
585	42.9	If the potable water supply is brought to the station does it comply with Std. Reference 56.23?	Yes	NA	■	
586	43	<b>Suction-Lift Pump Stations - Have all of the questions below been answered without conflict?</b>	Yes			
606	44	<b>Submersible Pump Stations - Special Considerations - Have the following questions been answered without conflict?</b>	Yes			
607	44	Do the submersible pump stations meet all the applicable design requirements of Std. Reference Chapter 42?	Yes	No	■	Some design requirements not met for existing pump station. Refer above.
608	44.1	<b>Construction - Have the following questions been answered without conflict?</b>	Yes			
609	44.1	Have all submersible pumps and motors been designed specifically for raw wastewater use (including totally submerged operation during a portion of each pumping cycle)?	Yes	Yes	+	
610	44.1	Do all submersible pumps and motors meet the requirements of the National Electrical Code for such units?	Yes	Yes	+	
611	44.1	Has an effective method for detecting shaft seal failure or potential shaft seal failure been provided?	Yes	Yes	+	Unknown for existing pumps. Yes for new pumps.
612	44.2	Pump Removal - Are all submersible pumps readily removable and replaceable without personnel entering or dewatering the wet well or disconnecting any piping in the wet well?	Yes	No	■	No for existing pumps. Existing rail system is ineffective and corrosion leads to difficulty pulling pumps. Yes for new pumps with new SS slide rails.
613	44.3	<b>Electrical Equipment - Have the following questions been answered without conflict?</b>	Yes			
614	44.31	Have all electrical supply, control, and alarm circuits been designed to provide strain relief?	Yes	No	■	No for existing. Yes for new.
615	44.31	Have all electrical supply, control, and alarm circuits been designed for disconnection from outside the wet well?	Yes	Yes	+	
616	44.31	Are all terminals and connectors protected from corrosion by being located outside the wet well or by having watertight seals?	Yes	Yes	+	Outside wet well
617	44.32	Are all motor control centers located outside the wet well?	Yes	Yes	+	
618	44.32	Are all motor control centers protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code?	Yes	NA	■	Unknown for existing. Yes for new.
619	44.32	Are all seals located such that the motor may be removed and electrically disconnected without disturbing the seal?	Yes	NA	■	Unknown for existing. Yes for new, no quick disconnects, therefore disconnection will be by pulling pump and removing cable from pump
620	44.32	If control equipment is exposed to weather, does it meet the requirements of weatherproof equipment NEMA 3R or 4?	Yes	NA	■	
621	44.33	Are all pump motor power cords designed for flexibility and serviceability under conditions of extra hard usage?	Yes	Yes	+	
622	44.33	Do all pump motor power cords meet the requirements of the National Electrical Code standards for flexible cords in wastewater pump stations?	Yes	Yes	+	
623	44.33	Has ground fault interruption protection been used to de-energize the circuit in the event of any failure in the electrical integrity of the cable?	Yes	Yes	+	Unknown for existing. Yes for new.
624	44.33	Are all power cord terminal fittings corrosion-resistant and constructed in a manner to prevent the entry of moisture into the cable?	Yes	Yes	+	
625	44.33	Are all power cord terminal fittings provided with strain relief appurtenances?	Yes	Yes	+	
626	44.33	Are all power cord terminal fittings designed to facilitate field connecting?	Yes	Yes	+	
627	44.4	<b>Valves - Have the following questions been answered without conflict?</b>	Yes			
628	44.4	Are all of the valves required by Std. Reference 42.5 located in a separate valve chamber?	Yes	Yes	+	
629	44.4	Have provisions been made to remove or drain accumulated water from the valve chamber?	Yes	No	■	
630	44.4	NOTE: The valve chamber may be dewatered to the wet well through a drain line with a gas and watertight valve	Yes	NA	■	
631	44.4	NOTE: Check valves that are integral to the pump do not need to be located in a separate valve chamber if the valve can be removed from the wet well in accordance with Std. Reference 44.2	Yes	NA	■	
632	44.4	Is access to valves provided in accordance with Std. Reference 42.231?	Yes	Yes	+	
633	45	<b>Screw Pump Stations - Special Considerations - Have the following questions been answered without conflict?</b>	Yes			
638	46	<b>Alarm Systems - Have the following questions been answered without conflict?</b>	Yes			
645	47	<b>Emergency Operation - Have the following questions been answered without conflict?</b>	Yes			

# TOWN OF MORIAH PUMP STATION NO. 2 (TITUS ROAD) EMERGENCY RECONSTRUCTION ESSEX COUNTY, NEW YORK

**EFC CWSRF # C5-5566-05-00**

**SUPERVISOR**

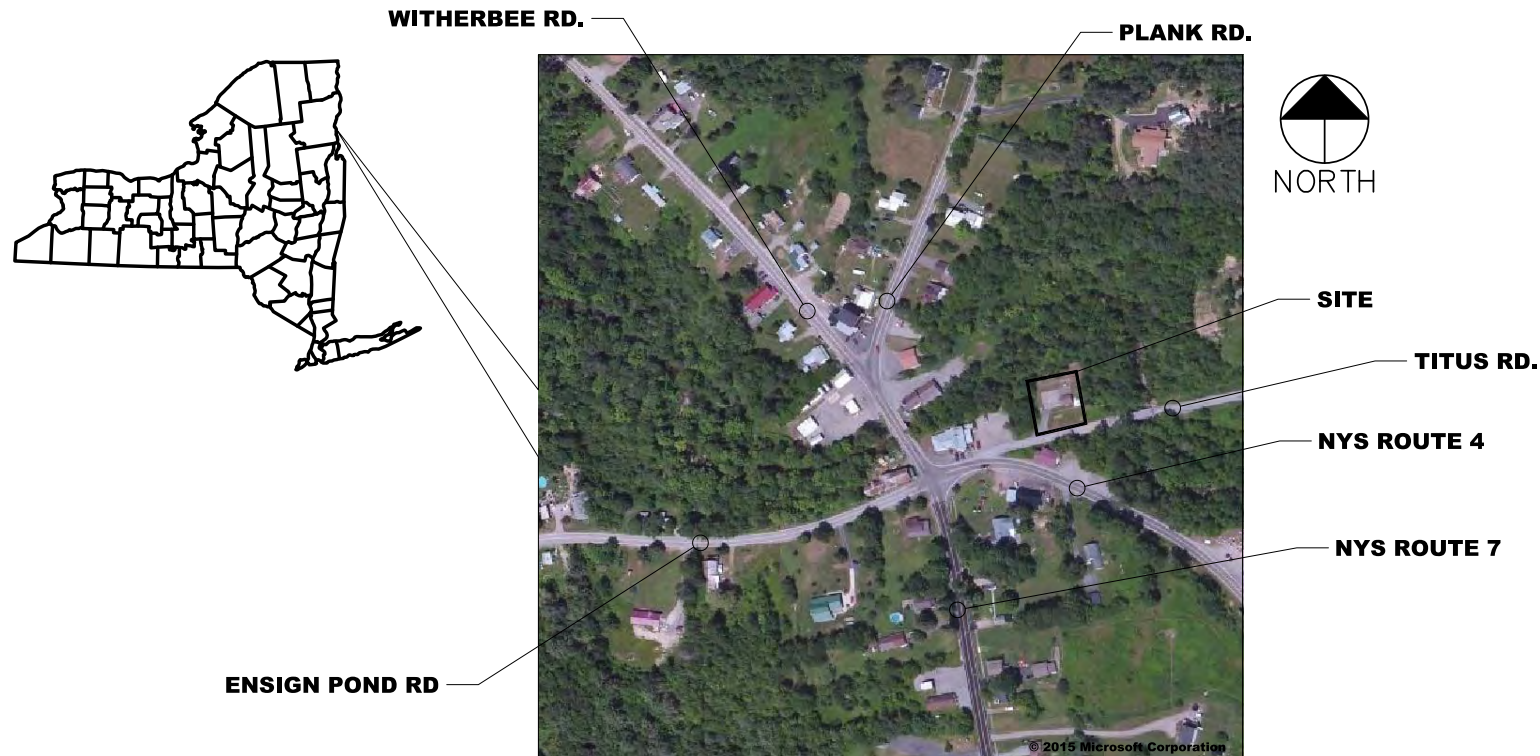
**THOMAS R.  
SCOZZAFAVA**

**CLERK**

**ELAINE C. ADKINS**

**TOWN BOARD MEMBERS**

**TIMOTHY GARRISON, THOMAS ANDERSON, LUCILLE CARPENTER, PAUL SALERNO**



**PROJECT LOCATION  
NOT TO SCALE**

Sheet List Table	
SHEET NUMBER	SHEET TITLE
C-001	COVER SHEET
C-101	GENERAL SITE NOTES
C-101	SITE PLAN
C-401	P.S. DEMO PLAN
C-402	P.S. PROPOSED PLAN AND SECTION
C-501	DETAILS
C-502	DETAILS

### DRAWING SET ORGANIZATION

**DRAWING NUMBERING SYSTEM**

A = ALPHA CHARACTER    N = NUMERIC CHARACTER

A A N N N

DISCIPLINE →      SEQUENTIAL DWG. NO. (00-99)

BLDG. OR STRUCTURE DESIGNATION (SEE BELOW) →      DRAWING TYPE (0-9)

NOTE: IF NO SECOND ALPHA CHARACTER, NUMBER IS MISSING AND USED FOR OVERALL PLANS OR DISCIPLINE DETAILS.

**DRAWING DISCIPLINE DESIGNATORS**

G - GENERAL DRAWINGS	W - PROCESS DRAWINGS
V - SURVEY/MAPPING DRAWINGS	P - PLUMBING DRAWINGS
C - CIVIL DRAWINGS	M - MECHANICAL DRAWINGS
S - STRUCTURAL DRAWINGS	E - ELECTRICAL DRAWINGS
A - ARCHITECTURAL DRAWINGS	X - ABATEMENT DRAWINGS
	F - FIRE PROTECTION DRAWINGS

**DRAWING TYPE DESIGNATOR**  
(3RD CHARACTER OF DWG. NO.)

- 0 GENERAL (SYMBOLS, LEGENDS, NOTES, ETC.) & DIAGRAMS
- 1 PLANS (HORIZONTAL VIEWS)
- 2 ELEVATIONS (VERTICAL VIEWS)
- 3 SECTIONS (SECTIONAL VIEWS)
- 4 LARGE SCALE PLANS, ELEVATIONS, & SECTIONS
- 5 DETAILS
- 6 SCHEDULES
- 7 USER DEFINED
- 8 USER DEFINED
- 9 USER DEFINED



Note: It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Engineer, Architect, Landscape Architect, or Land Surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering Engineer, Architect, Landscape Architect, or Land Surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.

ARCHITECT - ENGINEER - LAND SURVEYOR

PROJECT TITLE:  
**TOWN OF MORIAH  
PUMP STATION NO.  
2 (TITUS ROAD)  
RECONSTRUCTION**  
ESSEX COUNTY, NEW YORK

DRAWING TITLE:  
**COVER SHEET**

REVISIONS		
NO.	DESCRIPTION	DATE (MM/DD/YYYY)
1.	DEC REVIEW SET	09/25/2015
2.	RELEASED FOR BID	12/17/2015

DRAWN BY: T. TROMBLEY	CHECKED BY: J. WEEKS	DATE: 12/17/2015	PROJECT NO.: 4399
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**DRAWING NO.  
G-001**



Plot Date: 12/17/2015 Plot Time: 8:26 AM File Path: P:\31399 Moriah (1) - Pump Sta. No. 2 Reconstruction\Drawings\2 Eng\_Arch\6 Con Docs\3 C-001.dwg

EXISTING SITE FEATURES		PROPOSED SITE FEATURES	
	FOUND SURVEY MONUMENT (DESCRIPTION AS NOTED)		STRUCTURE
	SURVEY MONUMENT TO BE SET (SURVEYOR'S ALUMINUM ID CAP OVER 5/8" DIA. REBAR OR "MAG" NAIL IN PAVED SURFACE)		CONSTRUCTION FENCE
	RAIL ROAD TRACKS		STRAW BALE DIKE
	CABLE TV RISER		DRAIN LINE
	TELEPHONE RISER		FOOTING DRAIN
	ELECTRIC MANHOLE		WATER MAIN
	ELECTRIC PULL BOX		STORM SEWER
	GUY WIRE		SANITARY SEWER
	POLE MOUNTED EXTERIOR LIGHT		CLEARING LIMITS
	UTILITY POLE		PERIMETER DIVERSION DITCH
	UTILITY POLE WITH LIGHT		UNDERGROUND CABLE
	NATURAL GAS MARKER		UNDERGROUND ELECTRIC
	NATURAL GAS VALVE		LPG
	SANITARY SEWER MANHOLE		UNDERGROUND NATURAL GAS LINE
	SANITARY CLEAN OUT		UNDERGROUND TELEPHONE
	CATCH BASIN		OVERHEAD ELECTRIC
	STORM SEWER MANHOLE		TEMPORARY OVERHEAD ELECTRIC
	WELL		EDGE OF PAVEMENT
	WATER SHUTOFF		CHAIN LINK FENCE
	HYDRANT		FLEXIBLE PAVEMENT
	GATE VALVE (GV)		RIGID PAVEMENT/SIDEWALK (CONCRETE)
	WATER METER		RIP RAP
	FINISHED FLOOR		CONTOUR
	LANDSCAPED AREA		GATE VALVE (GV)
	CONIFEROUS TREE		GATE VALVE VAULT
	DECIDUOUS TREE		FIRE HYDRANT UNIT
	ORNAMENTAL BUSH OR SHRUB		WATER CURB STOP
	MAILBOX		METER PIT
	SIGN		C.O. SEWER CLEAN OUT
	DRAINAGE FLOW		BOLLARD
	TRAFFIC FLOW		CATCH BASIN
	HANDICAPPED		LIGHT FIXTURE TYPE H
	DEEP HOLE TEST PIT		POLE MOUNTED LIGHT FIXTURE
	PERC TEST		UTILITY POLE WITH GUY WIRE
	TEST BORING		PULL BOX
	FLAG POLE		JUNCTION BOX
	SANITARY SEWER LINE		TEMPORARY PULL BOX
	SANITARY SEWER FORCE MAIN		MANHOLE STRUCTURE (TAG DENOTES TYPE)
	STORM SEWER LINE		SANITARY SEWER FORCE MAIN
	WATER LINE		

**EROSION CONTROL NOTES:**

- ALL SITE WORK SHALL CONFORM TO THE CLEARING, STRIPPING AND EROSION CONTROL REQUIREMENTS OF THE NYSDEC, THE PROJECT SWPPP, AND ALL THE STORMWATER PERMITS.
- CONTRACTOR TO PROVIDE, INSTALL AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION AT THE SITE.
- EROSION CONTROL DEVICES, INCLUDING SEDIMENT BARRIERS (SILT FENCE, STONE FILTERS OR APPROVED EQUAL) TO BE ESTABLISHED PRIOR TO COMMENCING GRUBBING OPERATIONS. ALL EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE WORK AND UNTIL UPSTREAM GROUND COVER HAS BEEN ESTABLISHED AND REMOVAL IS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL FEATURES AND ALL STORMWATER MANAGEMENT FACILITIES THROUGHOUT THE DURATION OF CONSTRUCTION.
  - ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSPECTED BY A NYSDEC QUALIFIED PROFESSIONAL AT LEAST EVERY 7 CALENDAR DAYS TO ENSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY REQUIRED REPAIRS SHALL BE MADE BY THE CONTRACTOR.
  - ALL SEDIMENT TRAPPING DEVICES, INLET PROTECTION DEVICES AND STORMWATER MANAGEMENT FACILITIES SHALL BE CLEANED OF ACCUMULATED SILT WHEN STORAGE CAPACITY HAS BEEN REDUCED BY APPROXIMATELY 50% OF THEIR DESIGN CAPACITY OR AS INDICATED ON EROSION CONTROL PLANS.
  - ALL SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO A MAXIMUM HEIGHT OF 6" DEEP AT THE FENCE UNLESS OTHERWISE DIRECTED.
  - SEDIMENT COLLECTED BY EROSION CONTROL MEASURES SHALL BE DISPOSED OF BY SPREADING ON-SITE OR HAULED OFF SITE IF DETERMINED TO BE UNSUITABLE FOR FILL.
- DISTURBED AREAS SHALL BE AS SMALL AS PRACTICAL, AND SHALL BE RESTORED, IMPROVED OR TEMPORARILY STABILIZED AS SOON AS POSSIBLE.
- CONTRACTOR SHALL TAKE THE NECESSARY MEASURES, INCLUDING WATER SPRINKLING, TO PROVIDE DUST CONTROL DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL NOT DISCHARGE DUST INTO THE ATMOSPHERE OF SUCH QUANTITIES, CHARACTER OR DURATION THAT IT UNREASONABLY INTERFERES WITH THE COMFORTABLE ENJOYMENT OF LIFE AND PROPERTIES OR IS HARMFUL TO PLANTS AND ANIMALS. NO SEDIMENT FROM THE SITE SHALL BE PERMITTED TO WASH ONTO ADJACENT PROPERTIES, WETLANDS, WATER BODIES, OR ROADS.
- CONTRACTOR SHALL MINIMIZE THE AMOUNT OF SEDIMENT ENTERING UTILITIES. ALL MANHOLES, CURB INLETS, FIELD INLETS, END SECTIONS OR OTHER SIMILAR DRAINAGE INLET STRUCTURES SHALL BE PROTECTED FROM SILTATION BY INSTALLING FILTER FABRIC, CRUSHED STONE CHECK DAMS, EXCAVATED INLET PROTECTION AND/OR OTHER NYSDEC-APPROVED EROSION CONTROL MEASURES. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES.
- ALL DISTURBED AREAS THAT WILL NOT BE WORKED WITHIN 14 DAYS MUST BE SEEDED WITHIN 7 DAYS.
- ALL DISTURBED AND CONSTRUCTED SLOPE AREAS TO BE SEEDED IMMEDIATELY AFTER CONSTRUCTION HAS BEEN COMPLETED.
- CONTRACTOR SHALL SWEEP STREETS WEEKLY OR MORE FREQUENTLY AS REQUIRED TO KEEP STREETS FREE OF DEBRIS.
- THE DESIGN PLANS HAVE BEEN PREPARED AS THE MINIMUM REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL. BASED ON FIELD CONDITIONS, THE CONTRACTOR MAY BE REQUIRED TO PROVIDE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES ON A SITE SPECIFIC BASIS.
- SOIL STOCKPILES SHALL BE STABILIZED AND PROTECTED FROM EROSION. ALL STOCKPILES SHALL BE COVERED WITH TEMPORARY SEEDING AND PERIMETER SILT FENCING OR OTHER APPROVED SEDIMENT CONTROL MEASURE.
- ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE MEASURES MAY HAVE TO BE ALTERED DUE TO EVER-CHANGING SITE CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION AND SEDIMENT CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES OF CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION CONTROL DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER.
- ANY FAILURE OF ANY EROSION CONTROL DEVICE DUE TO FUNCTION AS INTENDED FOR ANY REASON SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- ALL SLOPES OF 3 TO 1 OR GREATER SHALL RECEIVE SLOPE STABILIZATION MEASURES.

**GENERAL NOTES:**

- ALL AREAS OF LAWN SHALL BE BACKFILLED AND COMPACTED TO 90% MAXIMUM DRY DENSITY AND PROVIDED WITH 6" OF TOPSOIL, SEED, & MULCH (OR HYDRO-SEED). RESTORE TO PROPERLY DRAIN AREAS IN AREAS WITH GRASS IN EXCESS OF 24" ON CONTRACTOR SHALL PROVIDE EROSION CONTROL REINFORCEMENT BLANKETS. PROVIDE RIP-RAP ON STEEP BANKS AS REQUIRED BY DRAWINGS OR DIRECTED BY AGENCIES HAVING JURISDICTION.
- WHERE THE INSTALLATION OF WORK WILL PROVIDE INSTABILITY TO ABOVE GROUND FEATURES (I.E. BUILDINGS, WALLS, POWER POLES, SIGN, ETC.) THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PROTECT THOSE ITEMS FROM SETTLING OR DAMAGE (I.E. SHEETING/SHORING). ANY DAMAGE WHICH OCCURS TO THESE ITEMS DURING THE WORK SHALL BE REPAIRED/REPLACED TO THE SATISFACTION OF THE OWNER, UTILITY OWNER, & ENGINEER, AS APPLICABLE. (TYP. ALL AREAS).
- LOCATIONS SHOWING EXISTING UTILITIES ARE ONLY APPROXIMATE. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO LOCATE EXISTING UNDERGROUND UTILITIES (WHETHER SHOWN ON PLANS OR NOT). IF EXISTING UNDERGROUND UTILITIES ARE DAMAGED AS A RESULT OF CONTRACTOR'S WORK ACTIVITIES, CONTRACTOR SHALL REPAIR/REPLACE DAMAGED PORTIONS AS REQUIRED BY OWNER OF THE UTILITY AT NO ADDITIONAL COST TO THE OWNER OR UTILITY OWNER. ALWAYS CALL DIG SAFELY NEW YORK (72) HOURS PRIOR TO EXCAVATIONS. DIG WITH CARE! ALWAYS HAND DIG WITHIN 2 FEET ON EITHER SIDE OF ANY MARKED LINES. IF DAMAGE, CONTACT OR DISTURBANCE OF ANY UNDERGROUND UTILITY LINE OCCURS, IMMEDIATELY NOTIFY THE AFFECTED FACILITY OPERATOR, UTILITY OR PIPELINE COMPANY. IF DAMAGE TO AN UNDERGROUND FACILITY CREATES AN EMERGENCY, TAKE IMMEDIATE STEPS TO SAFEGUARD HEALTH AND PROPERTY. CONTACT 911.
- CONTRACTOR SHALL PROVIDE NECESSARY TOOLS, EQUIPMENT AND LABOR TO MAINTAIN EXISTING UTILITIES IN SERVICE DURING INSTALLATION OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES ADJACENT TO UTILITY POLES. CONTRACTOR TO COORDINATE UTILITY POLE STABILIZATION WITH UTILITY COMPANY. ALL EXPENSES ASSOCIATED WITH UTILITY COMPANY SHALL BE PAID BY THE CONTRACTOR.
- CONTRACTOR SHALL NOT REPAIR, REFUEL, OR LEAVE EQUIPMENT OVERNIGHT CLOSER THAN (100) FEET FROM ANY WATER BODY OR WETLAND AREA. NO STORAGE OF CHEMICALS OR FUELS SHALL BE STORED WITHIN THIS SAME RESTRICTED AREA.
- THE CONTRACTOR IS ENCOURAGED TO REVIEW ANY OF THE EXISTING PLANS THAT ARE ON FILE AT THE OWNER'S OFFICES PRIOR TO INITIATING EXCAVATION ACTIVITIES. SCHEDULE VISITS BY CONTACTING THE OWNER A MINIMUM OF (24) HOURS IN ADVANCE OF VISIT.
- ALL SPOILS RESULTING FROM THIS PROJECT SHALL BE DISPOSED OF AT A PERMITTED SITE (I.E. APTA AND NYS DEC). CONTRACTOR SHALL PROVIDE COPIES OF DISPOSAL PERMITS TO ENGINEER PRIOR TO EXCAVATION ACTIVITIES BEGINNING.
- IF DURING CONSTRUCTION ACTIVITIES, PROPERTY CORNER MONUMENTS ARE DISPLACED OR REMOVED, CONTRACTOR SHALL RE-ESTABLISH MONUMENTS BY EMPLOYING A NYS LICENSED LAND SURVEYOR ACCEPTABLE TO PROPERTY OWNER AND THE OWNER.
- REPLACE EXISTING SHRUBS, TREES, BUSHES, ETC. WHICH ARE DAMAGED DURING CONSTRUCTION ACTIVITIES (OUTSIDE CLEARING LIMITS). REPLACED ITEMS SHALL MATCH EXISTING. AT THE OPTION OF THE CONTRACTOR HE/SHE MAY REMOVE AND TEMPORARILY STORE AND REINSTALL EXISTING PLANTINGS AT ORIGINAL LOCATION. PROVIDE TWO YEAR WARRANTY FOR EITHER METHOD (TYP.).
- WHERE PAVED PRIVATE DRIVES ARE DAMAGED AS A RESULT OF PROJECT, CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT FULL DEPTH. PROVIDE STRAIGHT EVEN CUT PARALLEL TO OR PERPENDICULAR TO TRAVEL LANE OR DRIVE (FULL WIDTH OF DRIVE). APPLY TACK COAT TO EXISTING PAVEMENT EDGES PRIOR TO PLACING NEW PAVEMENT. PROVIDE PAVEMENT TO MATCH EXISTING FINISH GRADES.
- PROVIDE REPLACEMENT CONCRETE SIDEWALKS, CONCRETE CURBING, CONCRETE GUTTERS, AND PAVED ROADSIDE GUTTERS TO REPLACE EXISTING ITEMS DAMAGED DURING INSTALLATION OF UTILITIES AND APPURTENANCES. RESTORATION ITEMS SHALL BE AS SPECIFIED OR MATCH EXISTING CROSS-SECTIONS (WHICHEVER IS GREATER). FOR CONCRETE SIDEWALKS AND GUTTERS THAT CROSS DRIVEWAYS PROVIDE 6" THICKNESS. (TYP. ALL AREAS).
- EXISTING DRIVEWAY CULVERTS THAT ARE REMOVED DURING RECONSTRUCTION OF UTILITY MAINS SHALL BE REPLACED WITH HDPE CULVERT PIPE OF SAME INVERTS, SIZE, AND LENGTH AS PRE-EXISTING CONDITIONS (EXCEPT MINIMUM SIZE TO BE 12"). REPLACEMENT CULVERTS SHALL INCLUDE METAL END SECTIONS, FABRIC AND STONE FILL AS PER DETAILS.
- THE LOCATION OF RIGHT OF WAY BOUNDARIES FOR HIGHWAYS, STREETS, ROADS, AND UTILITIES (R.O.W. BOUNDARIES) ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. DETERMINATION OF THE EXACT LOCATION OF R.O.W. BOUNDARIES ARE BEYOND THE SCOPE OF THE OWNER/ENGINEER AGREEMENT FOR SERVICES FOR THIS PROJECT. R.O.W. BOUNDARIES SHOWN HEREON ARE BASED ON INFORMATION PROVIDED BY OTHERS SUCH AS TAX MAPS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION APPROPRIATION MAPS AND RECORD PLANS, AND INFORMATION PROVIDED BY THE OWNER. THE LOCATION OF THE R.O.W. BOUNDARIES SHOWN HEREON ARE SUBJECT TO THE RESULTS OF AN IN-DEPTH BOUNDARY LINE SURVEY PERFORMED BY A NEW YORK STATE LICENSED LAND SURVEYOR. AES NORTHEAST CANNOT AND DOES NOT GUARANTEE THE ACCURACY OF THE R.O.W. BOUNDARIES SHOWN HEREON.
- LOCATION SHOWN OF EXISTING MAINS ARE ONLY APPROXIMATE. CONTRACTOR SHALL LOCATE EXISTING INFRASTRUCTURE PRIOR TO INSTALLATION OF UTILITY MAINS THROUGH TECHNIQUES ACCEPTABLE TO OWNER AND/OR ENGINEER.
- IF ELEVATION CONFLICTS OCCUR BETWEEN LOCATION OF PROPOSED UTILITIES AND EXISTING SEWER MAINS, WATER MAINS, STORM SEWERS, TELEPHONE CONDUITS, POWER CONDUITS, ETC., OBTAIN DIRECTION FROM ENGINEER. MAINTAIN A MINIMUM OF 18" SEPARATION BETWEEN UTILITIES AND AS PER ENGINEER.
- PRIOR TO ANY EXCAVATION WORK BEING CONDUCTED, CONTRACTOR SHALL PROVIDE TEMPORARY STORMWATER CONTROL MEASURES IN ACCORDANCE WITH NYS DEC BEST MANAGEMENT PRACTICES (BMP'S) AND AS PER DETAILS. CONTRACTOR SHALL ADHERE TO THE MORE STRINGENT OF THE REQUIREMENTS AND SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.
- REFER TO PROFILES FOR DEPTH OF BURY OF UTILITY MAINS.
- ALL TRAFFIC CONTROL PERMANENT SIGNS ARE TO BE RESET ACCORDING TO MUTCD BY THE END OF THE SAME DAY THAT THEY ARE DISTURBED.
- ALL AREAS OF SOIL DISTURBANCE RESULTING FROM THIS PROJECT SHALL BE SEEDED WITH A PERENNIAL RYE (ANNUAL RYE CAN BE USED FOR TEMPORARY STABILIZATION ACTIVITIES) AND MULCHED WITH STRAW WITHIN (7) DAYS OF ROUGH GRADING. IF CONSTRUCTION ACTIVITIES ARE DISCONTINUED IN AREAS OF SOIL DISTURBANCE BEFORE FINAL GRADING IS COMPLETE, TEMPORARY GRADING SHALL BE SEEDED AND MULCHED WITHIN (7) DAYS, UNLESS CONTRACTOR PLANS TO COMPLETE FINAL RESTORATION WORK IN THAT AREA WITHIN (14) DAYS FROM WHEN ACTIVITIES TEMPORARILY CEASED. MULCH SHALL BE MAINTAINED UNTIL A MINIMUM OF 80% VEGETATIVE COVER HAS BEEN ESTABLISHED.
- DESIGN OF EARTH RESTRAINING SYSTEMS (SHEETING, SHORING, TRENCH BOXES, ETC.) PROPOSED FOR USE DURING THE EXCAVATION OF PITS OR TRENCHES SHALL BE ENGINEERED, STAMPED AND SIGNED BY CONTRACTOR'S EMPLOYED NYS LICENSED PROFESSIONAL ENGINEER. DESIGNS SHALL INCLUDE CALCULATIONS WHICH TAKE INTO ACCOUNT FACTORS INCLUDING, BUT NOT LIMITED TO: SOIL TYPE, EXCAVATION, SOILS CHARACTERISTICS (TYPE, COMPOSITION, COMPACTION, MOISTURE CONTENT, LOCATION IN CUT OR FILL AREAS, ETC.), ELEVATION OF WATER TABLE, PRESENCE OF BEDROCK, PROXIMITY TO SHOULDER, TRAFFIC LOADING, AND IMPACT OF NEARBY FACILITIES AND/OR STRUCTURES, ETC. CONTRACTOR'S DESIGN SHALL BE SUBMITTED FOR REVIEW PRIOR TO INITIATING EXCAVATION ACTIVITIES.
- CONTRACTOR IS TO PROVIDE OWNER WITH A SEQUENCING PLAN THAT DEMONSTRATES MINIMUM IMPACT TO PROPERTIES AND STRUCTURES IN WORK AREAS PRIOR TO CONDUCTING WORK ON PROJECT. PLAN SHALL BE APPROVED BY OWNER AND ENGINEER.
- IN PROJECT AREAS WHERE THERE ARE NUMEROUS CONFLICTS WITH EXISTING PROPERTY IMPROVEMENTS (I.E. SIDEWALKS, SHEDS, FENCES, ETC.), THE CONTRACTOR SHALL COORDINATE AND TEMPORARILY RELOCATE ITEMS UNTIL THE CONSTRUCTION HAS BEEN COMPLETED AND ACCEPTED BY THE OWNER. CONTRACTOR SHALL REPAIR/REPLACE ITEMS TO SAME LOCATION AS PRE-EXISTING. REPAIR DAMAGE OR REPLACE/REINSTALL AT OWNER'S DISCRETION. IN AREAS OF LIMITED WORK SPACE, THE CONTRACTOR IS ENCOURAGED TO UTILIZE APPROPRIATE SIZED EQUIPMENT TO MINIMIZE SITE DISTURBANCE.
- PROVIDE TESTING OF ALL SANITARY AND STORM SEWER MAINS AND MANHOLES PRIOR TO COMMISSIONING PER SPECIFICATION (WHICH MAY BE REQUIRED ON A DAILY BASIS). NO PAYMENT APPLICATIONS WILL BE PROCESSED FOR SECTIONS NOT TESTED AND APPROVED BY ENGINEER.
- WHERE EXISTING UTILITIES ARE BEING CAPPED AND ABANDONED CONTRACTOR SHALL PROVIDE FLOWABLE FILL TO ALL ABANDONED UTILITIES PRIOR TO CAPPING EXCEPT AS DIRECTED OTHERWISE). EACH MAIN MUST BE COMPLETELY FILLED FULL OF FLOWABLE FILL.
- THE CONTRACTOR MAY BE REQUIRED TO PROVIDE ADDITIONAL OPENINGS IN THE MAIN TO ALLOW ACCESS TO INSTALL THE FLOWABLE FILL. THE WORK WILL NOT BE CONSIDERED COMPLETE UNTIL THE CUBIC YARDS OF FLOWABLE FILL INSTALLED MATCHED THE VOLUME OF THE PIPE TO BE FILLED.
- WHERE EXISTING MANHOLES AND CATCH BASINS ARE ABANDONED IN PLACE THE CONTRACTOR SHALL REMOVE THE EXISTING FRAME AND COVER AND RELINQUISH TO THE OWNER. THE CONTRACTOR SHALL REMOVE THE UPPER MOST SECTION(S) OF THE MANHOLE TO A MINIMUM DEPTH OF 24" BELOW THE SUBGRADE OF A ROAD (OR THE TOP SOIL IN LAWN AREAS). FILL THE REMAINDER OF THE MANHOLE WITH FLOWABLE FILL. RESTORE PER THE PIPE TRENCH DETAILS FOR THE APPLICABLE FINISH GRADE MATERIAL. FINE GRADE TO BLEND WITH EXISTING CONTOURS OR TO MATCH PROPOSED FINISH GRADE.
- FOR PAVED AREAS DAMAGED BY CONTRACTOR OUTSIDE OF PAY WIDTH AND AREA SHOWN BY HATCH, PROVIDE RESTORATION OF PAVEMENT AS PER DETAILS. PROVIDE 12" NYS DOT ITEM 304.12, COMPACTED TO 95% MAX. DRY DENSITY IN ROADWAYS AND DRIVE AREAS. PLACE FILL IN 6" (MAX. LOOSE) LIFTS. AT SIDEWALKS (EXCEPT DRIVES) REDUCE TO 6" NYS DOT ITEM 304.12. PROVIDE AT NO ADDITIONAL COST TO THE OWNER.
- REFER TO THE APPENDICES IN THE TECHNICAL SPECIFICATION MANUAL FOR CONDITIONS OF ANY PRE-APPROVED PERMITS. CONTRACTOR IS RESPONSIBLE FOR TOTAL COMPLIANCE WITH ALL CONDITIONS OF THE PERMITS.
- WHERE ROADWAYS ARE DAMAGED AS A RESULT OF PROJECT, CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT FULL DEPTH. PROVIDE STRAIGHT EVEN CUTS PARALLEL TO OR PERPENDICULAR TO TRAVEL LANE. APPLY TACK COAT TO EXISTING PAVEMENT EDGES PRIOR TO PLACING NEW PAVEMENT. PROVIDE PAVEMENT TO MATCH EXISTING FINISH GRADES.
- ELEVATIONS OF EXISTING UTILITIES SHOWN ON PROFILES ARE ESTIMATED ONLY. CONTRACTOR SHALL VERIFY ELEVATION OF EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED WORK. CONTACT ENGINEER FOR DIRECTION IF ANY CONFLICT BETWEEN EXISTING UTILITIES AND PROPOSED WORK EXISTS.
- THE CONTRACT DOCUMENTS PROVIDE NO WARRANTY OR GUARANTEES TO THE TYPE OF ROCK, SOILS OR THE LEVEL OF GROUNDWATER THAT EXIST ON THE SITE. THE CONTRACTOR MAY CONDUCT ANY REASONABLE EXPLORATION OF THE PROJECT SITES PRIOR TO BIDDING, PROVIDED HE/SHE HAS APPROVAL FROM THE OWNER.
- CONTRACTOR IS ADVISED THAT IN AREAS OF EXCAVATION/BLASTING ACTIVITIES, THERE IS EXISTING MUNICIPAL & PRIVATE UNDERGROUND INFRASTRUCTURE, (E.G. WATER, SEWER, STORM, ELECTRIC, TV, TELEPHONE, DATA, FIBER OPTIC, ETC.). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO TAKE NECESSARY MEASURES TO AVOID DAMAGE TO THE EXISTING UTILITIES. IF BLASTING OR EXCAVATION ACTIVITIES CAUSES DAMAGE TO THE EXISTING UTILITIES THE CONTRACTOR SHALL REPAIR/REPLACE TO THE SATISFACTION OF THE OWNER AND ENGINEER AT NO ADDITIONAL TO THE OWNER.
- IN GENERAL, ALL WORK IS TO BE COMPLETED WITHIN THE OWNER'S RIGHT-OF-WAY (R.O.W.) (WHETHER SHOWN OR NOT SHOWN ON PLANS) AND THE CONTRACTOR SHALL WORK WITHIN THE R.O.W. WHERE WORK FOR MAINLINE UTILITY INSTALLATION IS REQUIRED OUTSIDE OF THE R.O.W., THE OWNER HAS OBTAINED NECESSARY EASEMENTS FROM THE PROPERTY OWNER AND THESE EASEMENTS ARE AVAILABLE FROM THE OWNER. CONTRACTOR SHALL WORK WITHIN THE PRESCRIBED WORK AREA OF THE EASEMENT. FOR WORK REQUIRED OUTSIDE OF THE R.O.W., BUT NOT WITHIN SUCH EASEMENTS, THE CONTRACTOR SHALL WORK WITH THE PROPERTY OWNERS FOR SCHEDULING AND PERMISSION TO ACCESS PROPERTIES FOR THE PURPOSE OF INSTALLATION OF WORK (E.G. RECONNECTING SERVICE CONNECTIONS).
- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL FITTINGS, PARTS, PIPE, COUPLERS, AND ACCESSORIES, ETC. TO COMPLETE INSTALLATION OF WORK, WHETHER OR NOT THESE FITTINGS, PARTS, PIPE, COUPLERS, AND ACCESSORIES, ETC. ARE SHOWN OR DESCRIBED SPECIFICALLY ON THE DRAWINGS, DETAILS, OR SPECIFICATIONS.
- COORDINATE ANY TEMPORARY (LESS THAN (8) HOURS) SHUTDOWN OF THE EXISTING UTILITIES WITH EACH PROPERTY OWNER, PROVIDE A MINIMUM OF (2) BUSINESS DAYS WRITTEN NOTICE PRIOR TO DISRUPTION OF SERVICE. CONTRACTOR SHALL COORDINATE ALL SHUTDOWNS WITH THE OWNER, ENGINEER AND PROPERTY OWNER.
- ALL PIPING PENETRATIONS THROUGH TANK OR BUILDING WALLS SHALL HAVE A MECHANICAL COUPLER OR (2) MECHANICAL JOINTS LOCATED MIN. 2 FT. MAX. 5FT FROM BUILDING FACE U.N.O.
- THE TERM "NYS DEC BEST MANAGEMENT PRACTICES," "BEST MANAGEMENT PRACTICES," AND/OR "BMP'S" SHALL REFER TO NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL, LATEST VERSION, AND INCLUDING ALL ADDENDUMS THERETO.

**AES NORTHEAST**  
 Architecture, Engineering, and Land Surveying Northeast, PLLC  
 10-12 City Hall Place, Plattsburgh, NY 12901  
 Phone: (518) 561-1588 Fax: (518) 561-1990  
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**ARCHITECT - ENGINEER - LAND SURVEYOR**

**PROJECT TITLE:**  
 TOWN OF MORIAH  
**PUMP STATION NO. 2 (TITUS ROAD) RECONSTRUCTION**

**ESSEX COUNTY, NEW YORK**

**DRAWING TITLE:**  
**GENERAL SITE NOTES**

REVISIONS	
NO.	DESCRIPTION
1.	DEC REVIEW SET
2.	RELEASED FOR BID

NO.	DESCRIPTION	DATE (MM/DD/YYYY)
1.	DEC REVIEW SET	09/25/2015
2.	RELEASED FOR BID	12/17/2015

DRAWN BY: T. THOMBLEY  
 CHECKED BY: J. WEEKS  
 DATE: 12/17/2015  
 PROJECT NO.: 4399

**C-001**



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**NOTES:**

- 1 LOCATIONS SHOWING EXISTING UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2 APPROXIMATE TIE IN POINT FOR NEW DRY HYDRANT. CONTRACTOR TO LOCATE PURPORTED 6"x4" REDUCER FOR CONNECTION.
- 3 PRIOR TO ANY SITE CLEARING OR SOIL DISTURBING ACTIVITIES, THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES, PER NYS DEC BEST MANAGEMENT PRACTICES, AS SHOWN ON THE DRAWINGS, AND AS DIRECTED BY THE ENGINEER (TYP.).
- 4 THE TOWN WILL PROVIDE ITS VACUUM TRUCK FOR UP TO ONE 8 HOUR DAY DURING INSTALLATION OF DRY HYDRANT. TOWN WILL DISPOSE OF WASTEWATER PUMPED BY ITS VACUUM TRUCK. IF BID ALTERNATE #3 IS AWARDED ALL OTHER BYPASS PUMPING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 5 THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO WASTEWATER DISCHARGES OCCUR DURING CONSTRUCTION.
- 6 CLEAN AROUND BASE OF PUMP STATION COVER AND NEXT WET WELL SECTION. SEAL JOINT WITH HYDRAULIC CEMENT AROUND ENTIRE CIRCUMFERENCE OF WET WELL.

1 SCHEMATIC SITE PLAN  
C-101 N.T.S.



2 EX. WETWELL AND VALVE VAULT  
C-101 N.T.S.

PROJECT TITLE:

TOWN OF MORIAH  
**PUMP STATION NO. 2 (TITUS ROAD) RECONSTRUCTION**

ESSEX COUNTY, NEW YORK

DRAWING TITLE:

**SITE PLAN**

**REVISIONS**

NO.	DESCRIPTION	DATE (MM/DD/YYYY)
1.	DEC REVIEW SET	09/25/2015
2.	RELEASED FOR BID	12/17/2015

DRAWN BY: T. TROMBLEY	CHECKED BY: J. WEEKS	DATE: 12/17/2015	PROJECT NO.: 4399
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DRAWING NO.

**C-101**



Architecture, Engineering, and Land Surveying Northeast, PLLC  
 10 -12 City Hall Place, Plattsburgh, NY 12901  
 Phone: (518) 561-1598 Fax: (518) 561-1990  
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**NOTES:**

- ① REMOVE PUMPS, PUMP BASES, SLIDE RAIL SYSTEM AND RELINQUISH TO OWNER.
- ② REPAIR ANY CONCRETE DAMAGED BY REMOVAL OF PUMPS, PUMP BASES AND SLIDE RAIL SYSTEM WITH 7000 PSI NON SHRINK GROUT
- ③ PROVIDE REPLACEMENT PIPE, WIRE, BRACKETS, ETC. DAMAGED BY THE CONTRACTOR AT NO ADDITIONAL TO THE OWNER (TYP.).

PROJECT TITLE:  
**TOWN OF MORIAH  
 PUMP STATION NO.  
 2 (TITUS ROAD)  
 RECONSTRUCTION**  
 ESSEX COUNTY, NEW YORK

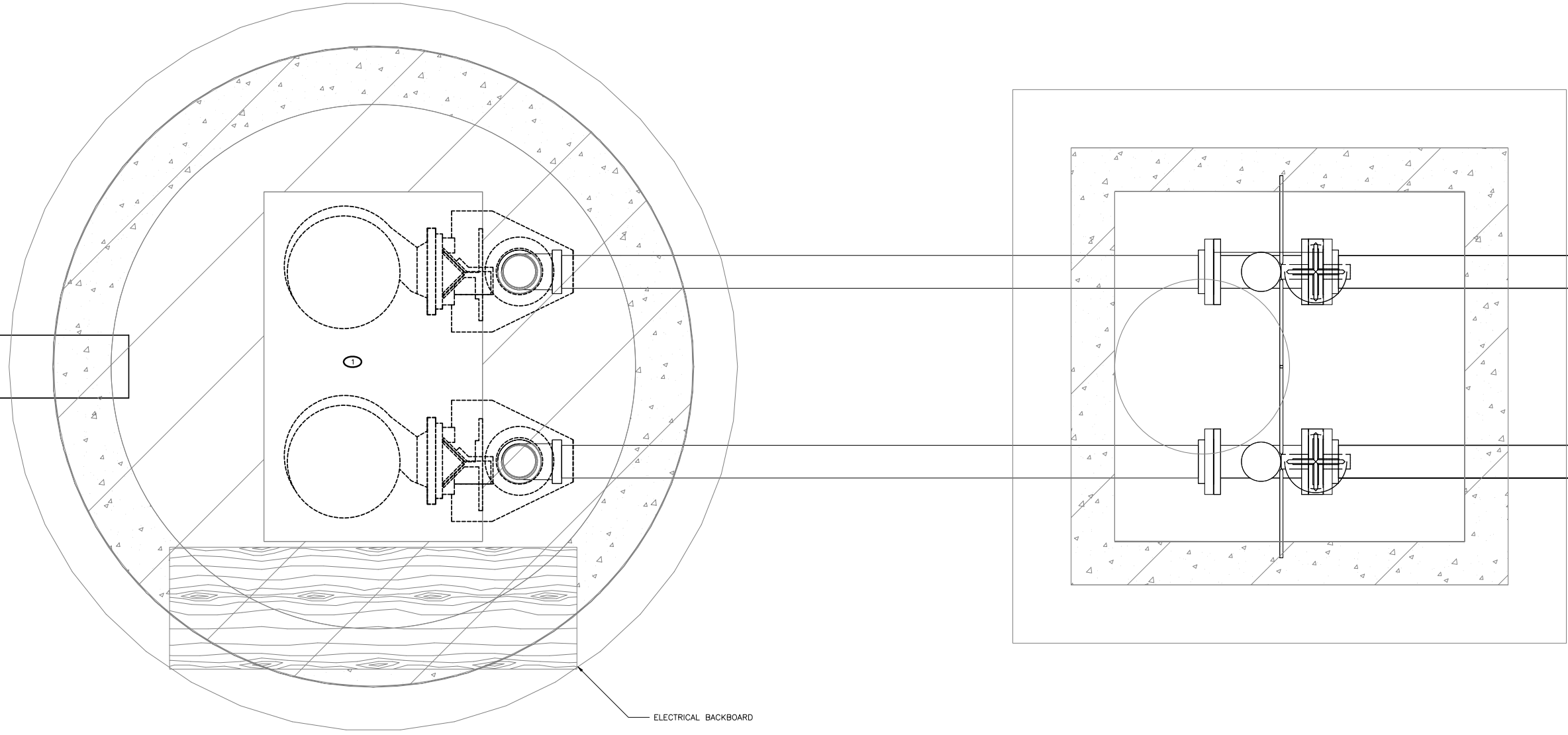
DRAWING TITLE:  
**P.S. DEMO PLAN**

REVISIONS	
NO.	DESCRIPTION
1.	DEC REVIEW SET
2.	RELEASED FOR BID

NO.	DESCRIPTION	DATE (MM/DD/YYYY)
1.	DEC REVIEW SET	09/25/2015
2.	RELEASED FOR BID	12/17/2015

DRAWN BY: T. TROMBLY  
 CHECKED BY: J. WEEKS  
 DATE: 12/17/2015  
 PROJECT NO.: 4399

DRAWING NO.  
**C-401**



Plot Date: 12/17/2015 Plot Time: 8:26 AM  
 File Path: P:\4399 Moriah (T) - Pump Sta No. 2 Reconstruction\F Drawings\2 Eng\_Arch\6 Con Docs\C 400's.dwg

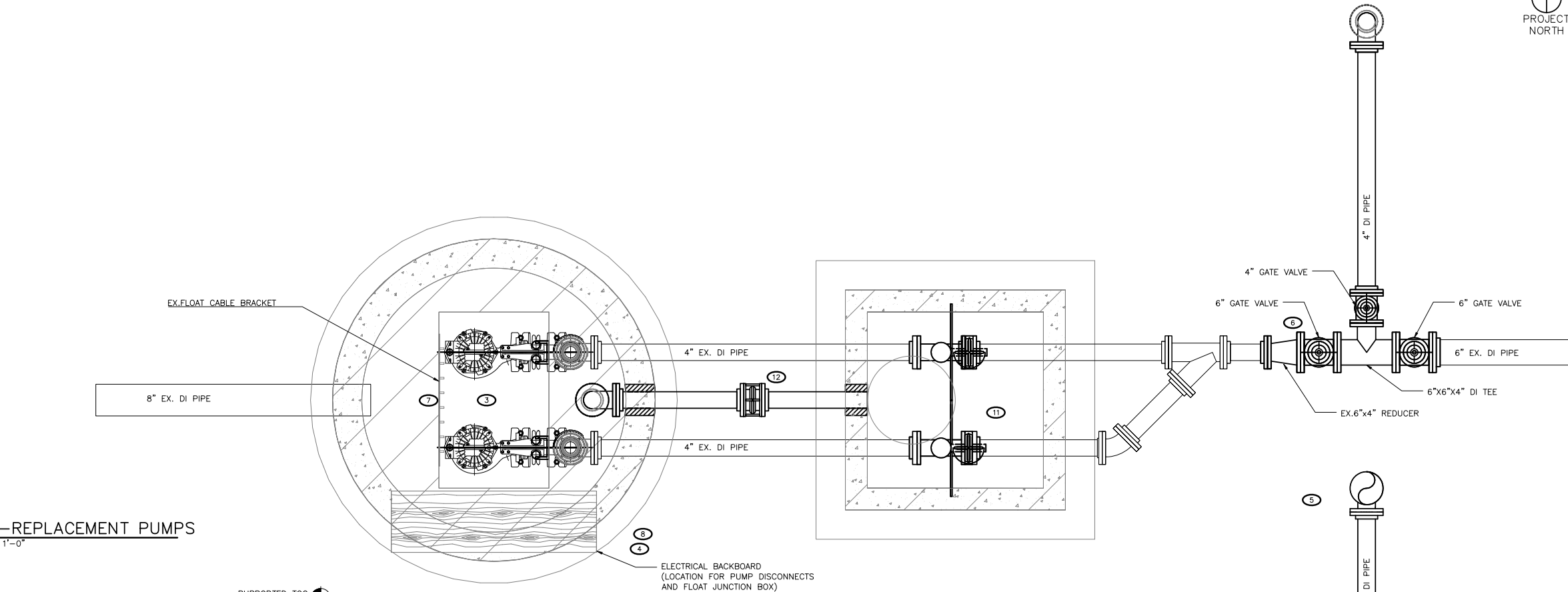
**PUMP DEMOLITION**  
 SCALE: 1 1/2" = 1'-0"



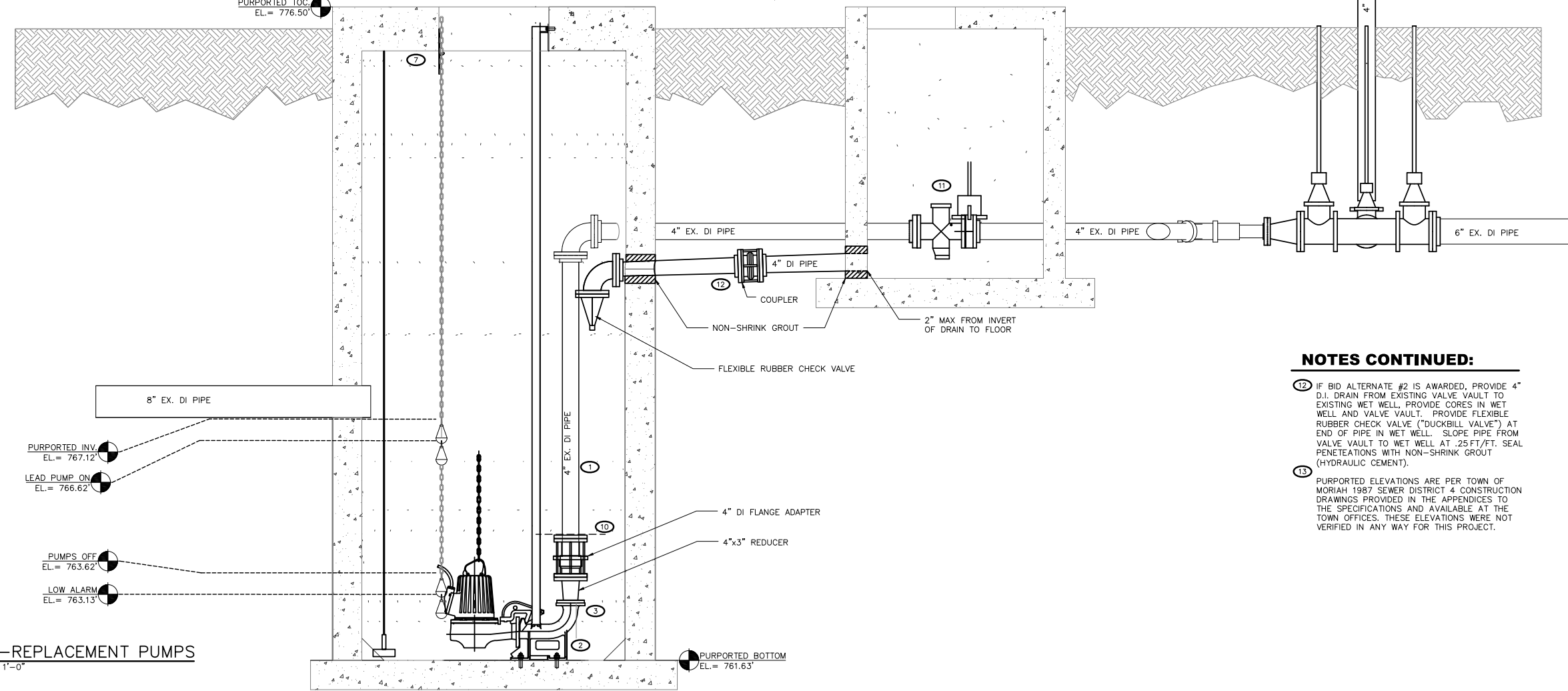


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**1 SECTION-REPLACEMENT PUMPS**  
 SCALE: 3/4" = 1'-0"



**2 SECTION-REPLACEMENT PUMPS**  
 SCALE: 3/4" = 1'-0"



**ARCHITECT - ENGINEER - LAND SURVEYOR**  
**NOTES:**

- 1 REMOVE LENGTH OF VERTICAL DISCHARGE PIPING (4" D.I.) AS NECESSARY FOR ADAPTATION OF REMAINING DISCHARGE PIPE TO NEW PUMP BASE AND REDUCER.
- 2 INSTALL NEW PITLESS BASE COMPLETE WITH SLIDE RAILS AND ANCHORS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 3 INSTALL (2) NEW PUMPS (FURNISHED BY OWNER), INCLUDING WIRING TO POWER AND CONTROL SYSTEMS. WIRE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
- 4 PROVIDE NEW PUMP DISCONNECTS (TYP. (2)) AND FLOAT CONTROL JUNCTION BOX (TYP. (1)) REFER TO DETAILS.
- 5 REFER TO DRY HYDRANT DETAIL.
- 6 LOCATE EXISTING PURPORTED 6"x4" REDUCER FOR CONNECTION TO NEW DRY HYDRANT/VALVE SYSTEM.
- 7 PRESERVE AND RECONNECT EXISTING FLOAT CONTROLS AND BRACKETS.
- 8 RUN NEW PUMP POWER AND CONTROL THROUGH EXISTING CONDUITS. NEW PUMP CABLES TO BE SEAMLESS FROM PUMP TO JB.
- 9 REFER TO C-500'S DETAILS FOR POWER AND CONTROL WORK.
- 10 CONNECTION TO EXISTING PIPING (TYP. (2)) VERIFY EXISTING PIPES ARE IN SERVICEABLE CONDITION FOR ONGOING USE PRIOR TO MAKING CONNECTIONS.
- 11 IF BID ALTERNATE #1 IS AWARDED, REMOVE EXISTING CHECK VALVES (TYP. (2)), KNIFE GATES (TYP. (2)), AND ASSOCIATED FLANGE ADAPTORS (TYP. (4)). PROVIDE REPLACEMENT CHECK VALVES (TYP. (2)), KNIFE GATES (TYP. (2)), AND ASSOCIATED FLANGE ADAPTORS (TYP. (4)).

**NOTES CONTINUED:**

- 12 IF BID ALTERNATE #2 IS AWARDED, PROVIDE 4" D.I. DRAIN FROM EXISTING VALVE VAULT TO EXISTING WET WELL. PROVIDE CORES IN WET WELL AND VALVE VAULT. PROVIDE FLEXIBLE RUBBER CHECK VALVE ("DUCKBILL VALVE") AT END OF PIPE IN WET WELL. SLOPE PIPE FROM VALVE VAULT TO WET WELL AT .25 FT/FT. SEAL PENETRATIONS WITH NON-SHRINK GROUT (HYDRAULIC CEMENT).
- 13 PURPORTED ELEVATIONS ARE PER TOWN OF MORIAH 1987 SEWER DISTRICT 4 CONSTRUCTION DRAWINGS PROVIDED IN THE APPENDICES TO THE SPECIFICATIONS AND AVAILABLE AT THE TOWN OFFICES. THESE ELEVATIONS WERE NOT VERIFIED IN ANY WAY FOR THIS PROJECT.

**PROJECT TITLE:**  
 TOWN OF MORIAH  
**PUMP STATION NO. 2 (TITUS ROAD) RECONSTRUCTION**  
 ESSEX COUNTY, NEW YORK

**DRAWING TITLE:**  
**P.S. PROPOSED PLAN AND SECTION**

REVISIONS	
NO.	DESCRIPTION
1.	DEC REVIEW SET
2.	RELEASED FOR BID

NO.	DESCRIPTION	DATE (MM/DD/YYYY)
1.	DEC REVIEW SET	09/25/2015
2.	RELEASED FOR BID	12/17/2015

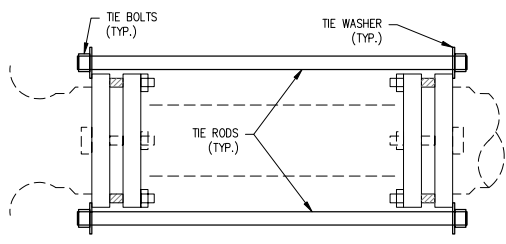
DRAWN BY:	CHECKED BY:	DATE:	PROJECT NO.:
T. TROMBILLO	J. WEEKS	12/17/2015	4399

**DRAWING NO.**  
**C-402**

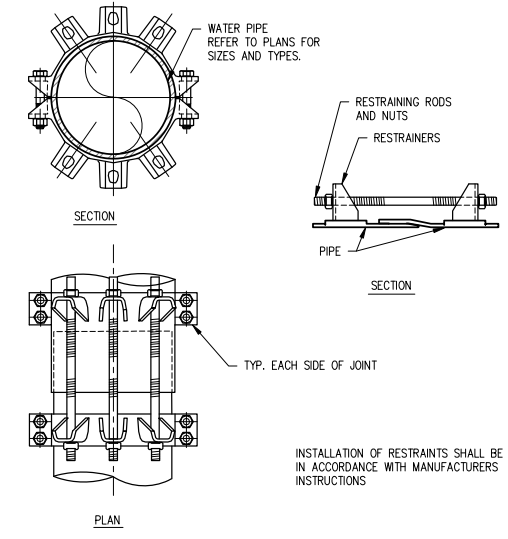
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Note: It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Engineer, Architect, Landscape Architect, or Land Surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering Engineer, Architect, Landscape Architect, or Land Surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.

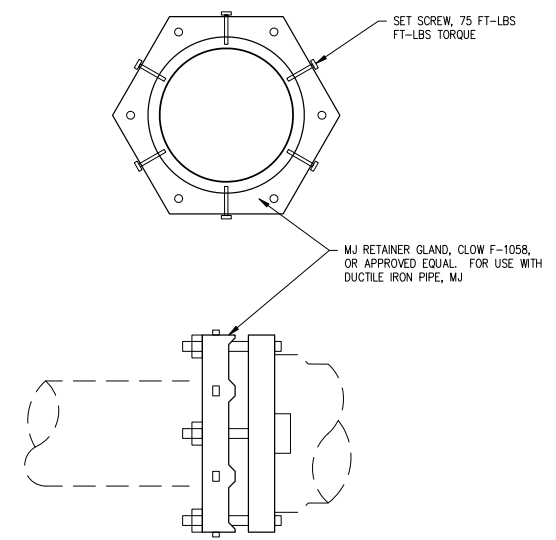
ARCHITECT - ENGINEER - LAND SURVEYOR



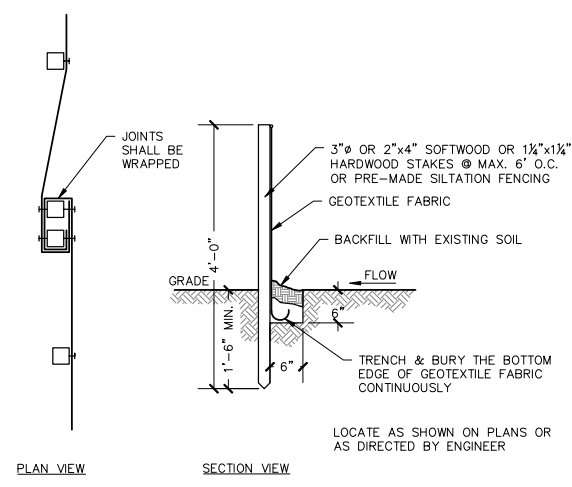
1 TIE ROD THRUST RESTRAINT  
 C-501 SCALE: N.T.S.



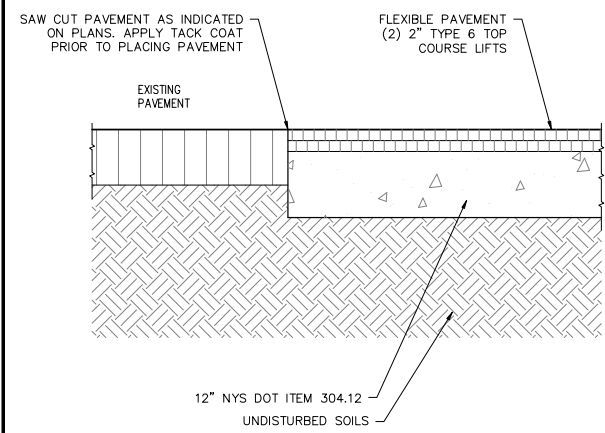
2 MECHANICAL PIPE RESTRAINT  
 C-501 SCALE: N.T.S.



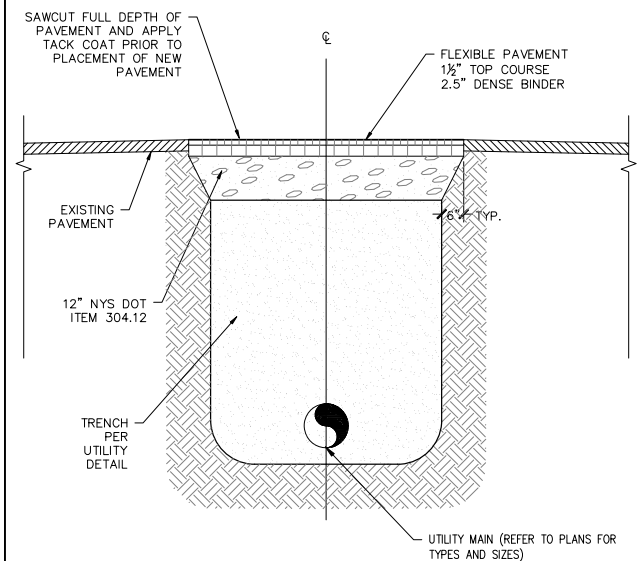
3 RETAINER GLAND THRUST RESTRAINT  
 C-501 SCALE: N.T.S.



4 SILTATION CONTROL FENCE  
 C-501 SCALE: 3/4" = 1'-0"

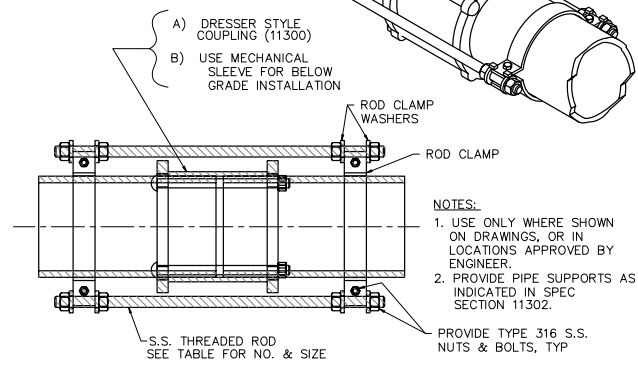


5 DRIVEWAY PAVEMENT REPAIR  
 C-501 SCALE: 3/4" = 1'-0"



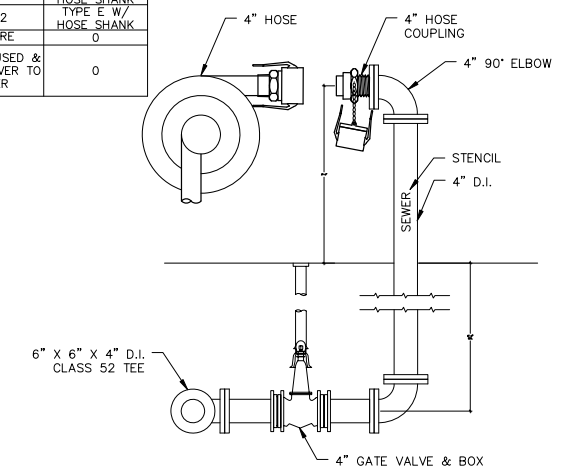
6 PAVEMENT PATCH TOWN ROAD CROSSING  
 C-501 N.T.S.

PIPE SIZE	ROD SIZE	# OF TH'D RODS
3"-4"	5/8"	2
6"-8"	3/4"	2
8"-12"	7/8"	4

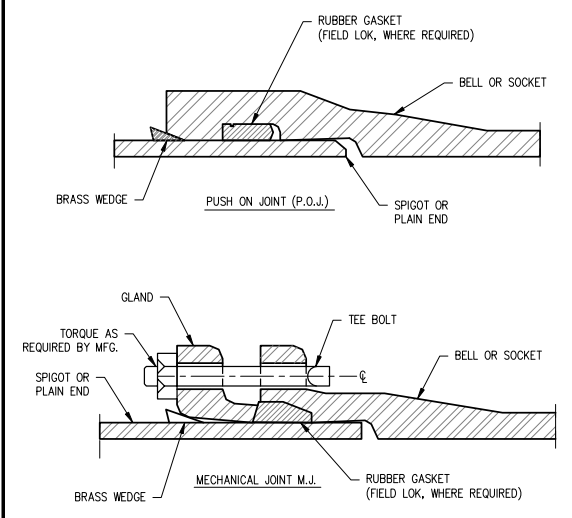


7 EXPANSION JOINT (DUCTILE IRON)  
 C-501 N.T.S.

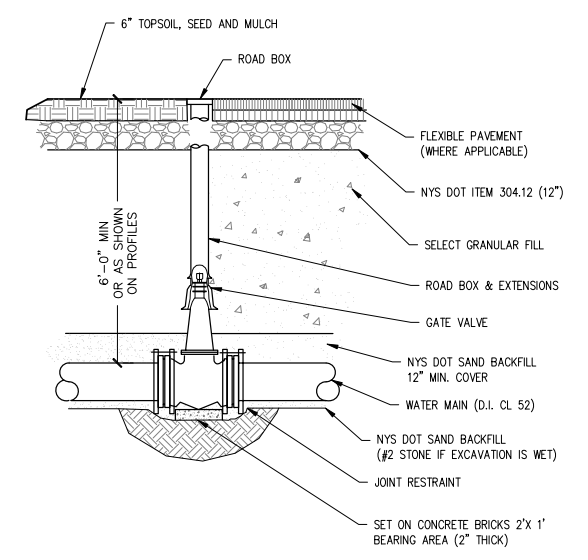
HOSE PARTS TABLE	
LENGTH	50'-0"
O.D.	4"
END 1	TYPE C W/ HOSE SHANK
END 2	TYPE E W/ HOSE SHANK
# SPARE	0
# TO BE USED & TURNED OVER TO OWNER	0



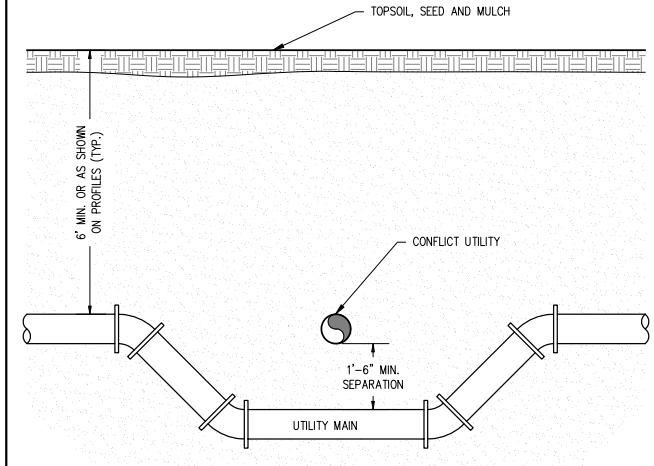
8 SANITARY DRY HYDRANT  
 C-501 SCALE: N.T.S.



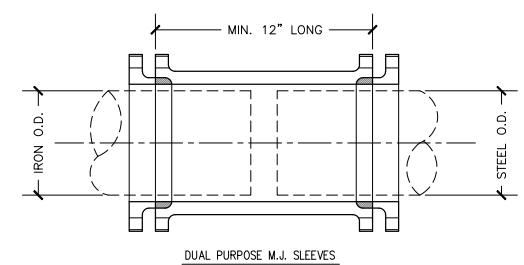
9 TYPICAL JOINTS  
 C-501 SCALE: N.T.S.



10 GATE VALVE AND BOX  
 C-501 SCALE: 1/2" = 1'-0"



11 SECTION - UTILITY CONFLICT  
 C-501 SCALE: 1/2" = 1'-0"



12 LONG SLEEVE COUPLER  
 C-501 SCALE: N.T.S.

PROJECT TITLE:  
**TOWN OF MORIAH**  
**PUMP STATION NO. 2 (TITUS ROAD)**  
**RECONSTRUCTION**  
 ESSEX COUNTY, NEW YORK

DRAWING TITLE:  
**DETAILS**

REVISIONS		
NO.	DESCRIPTION	DATE (MM/DD/YYYY)
1.	DEC REVIEW SET	09/25/2015
2.	RELEASED FOR BID	12/17/2015

DRAWN BY: T. TROMBLEY  
 CHECKED BY: J. WEEKS  
 DATE: 12/17/2015  
 PROJECT NO.: 4399

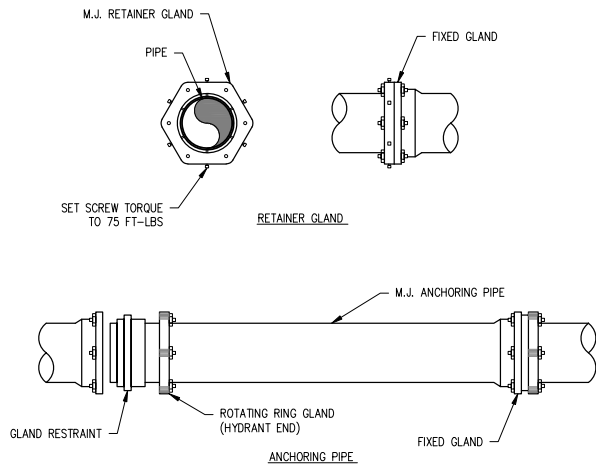
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**C-501**

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ARCHITECT - ENGINEER - LAND SURVEYOR

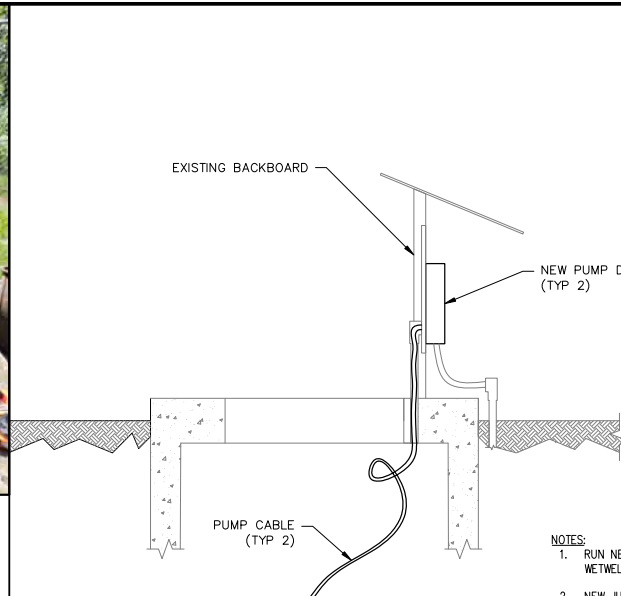


1 THRUST RESTRAINT OPTIONS  
 C-502 SCALE: N.T.S.



NOTES:  
 1. FOR INFORMATIONAL PURPOSES

2 SECTION - EX. WETWELL CONDUIT  
 C-502 N.T.S.



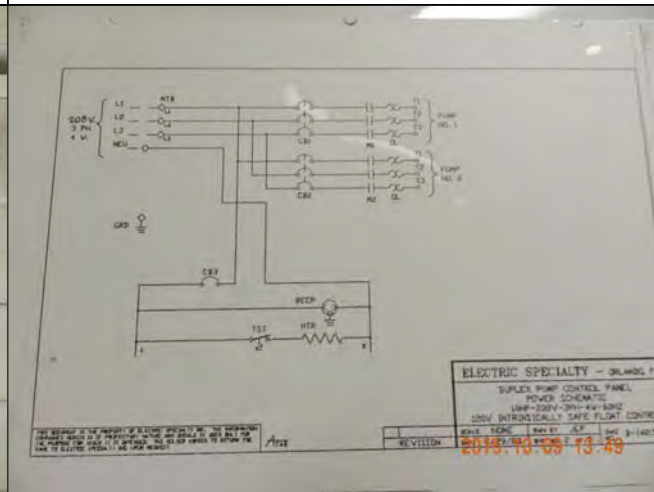
NOTES:  
 1. RUN NEW PUMP CABLE (TYP 2) THROUGH EXISTING WETWELL PENETRATION AND CONDUIT TO NEW DISCONNECT AT WETWELL BACK BOARD.  
 2. NEW JUNCTION BOX FOR FLOAT CONTROLS AND DISCONNECTS FOR PUMPS TO BE PROVIDED BY CONTRACTOR PER SPECIFICATIONS  
 3. UTILIZE EXISTING SEAL LEAK DETECTION CONDUCTORS. INSTALL AND CONNECT TO FLYGT MINICAS IN ACCORDANCE WITH MANUFACTURES INSTRUCTIONS.

3 SECTION - PROPOSED ELECTRICAL  
 C-502 N.T.S.



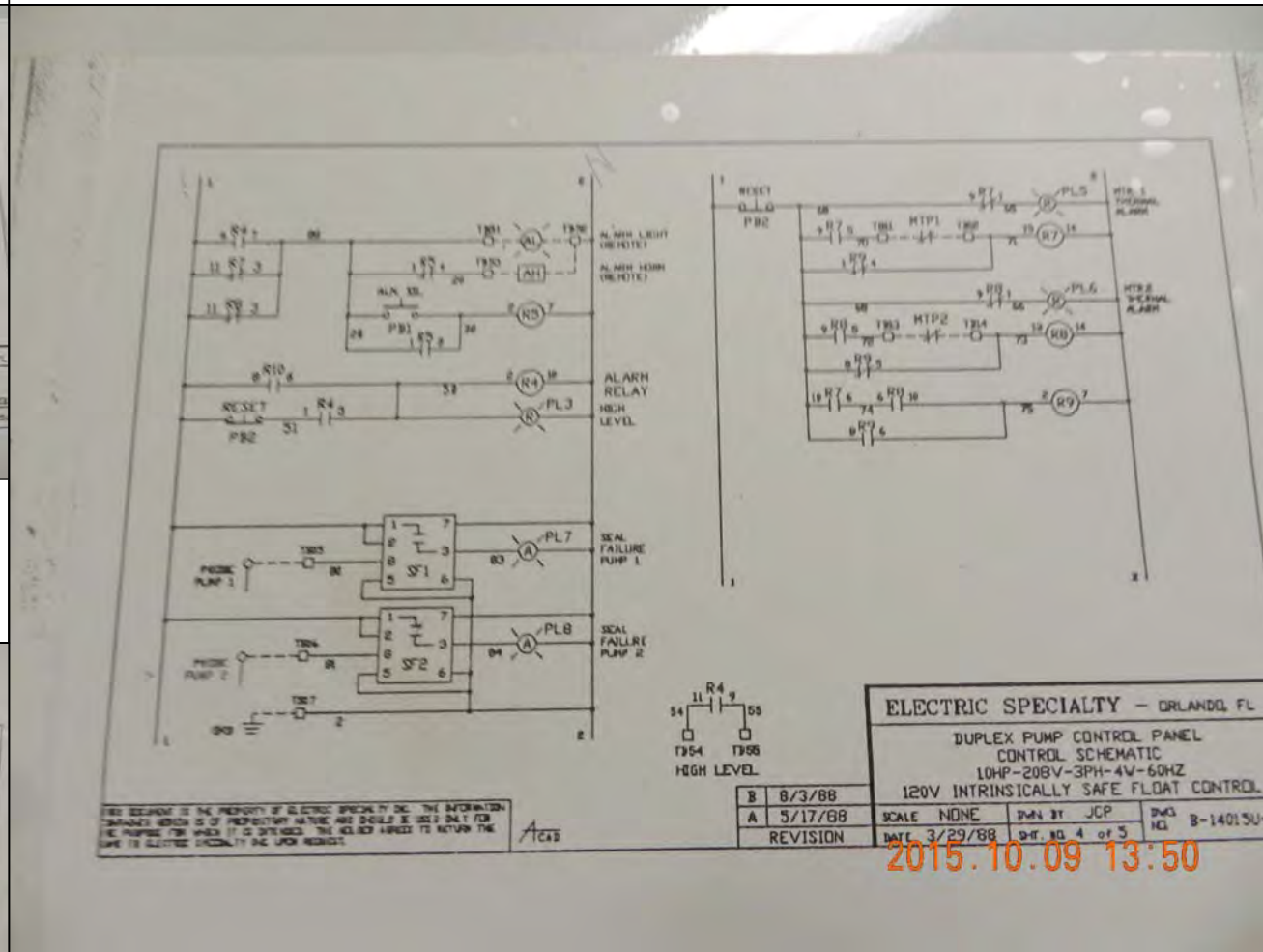
NOTES:  
 1. FOR INFORMATIONAL PURPOSES

4 SECTION - EX. WETWELL CONDUIT  
 C-502 N.T.S.



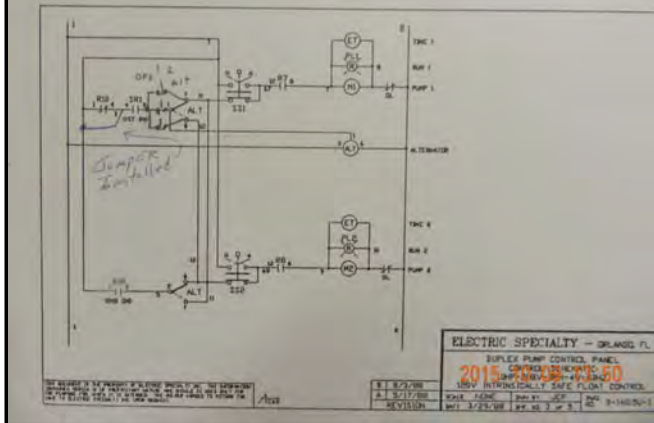
NOTES:  
 1. FOR INFORMATIONAL PURPOSES

5 SECTION - EX. WETWELL CONDUIT  
 C-502 N.T.S.



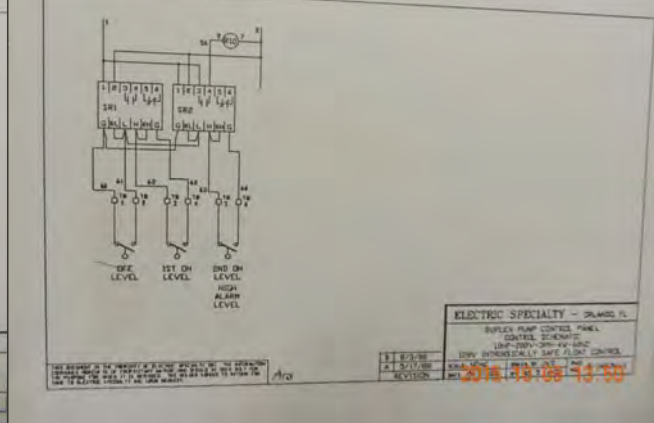
NOTES:  
 1. FOR INFORMATIONAL PURPOSES

8 SECTION - EX. WETWELL CONDUIT  
 C-502 N.T.S.



NOTES:  
 1. FOR INFORMATIONAL PURPOSES

6 SECTION - EX. WETWELL CONDUIT  
 C-502 N.T.S.



NOTES:  
 1. FOR INFORMATIONAL PURPOSES

7 SECTION - EX. WETWELL CONDUIT  
 C-502 N.T.S.

PROJECT TITLE:  
**TOWN OF MORIAH**  
**PUMP STATION NO. 2 (TITUS ROAD) RECONSTRUCTION**  
 ESSEX COUNTY, NEW YORK

DRAWING TITLE:  
**DETAILS**

REVISIONS	
NO.	DESCRIPTION
1.	DEC REVIEW SET
2.	RELEASED FOR BID

NO.	DESCRIPTION	DATE (MM/DD/YYYY)
1.	DEC REVIEW SET	09/25/2015
2.	RELEASED FOR BID	12/17/2015

DRAWN BY:	CHECKED BY:	DATE:	PROJECT NO.:
T. TROMBLEY	J. WEEKS	12/17/2015	4399

DRAWING NO.  
**C-502**

# APPENDIX F

## Moriah Center Service Area Inspection Report



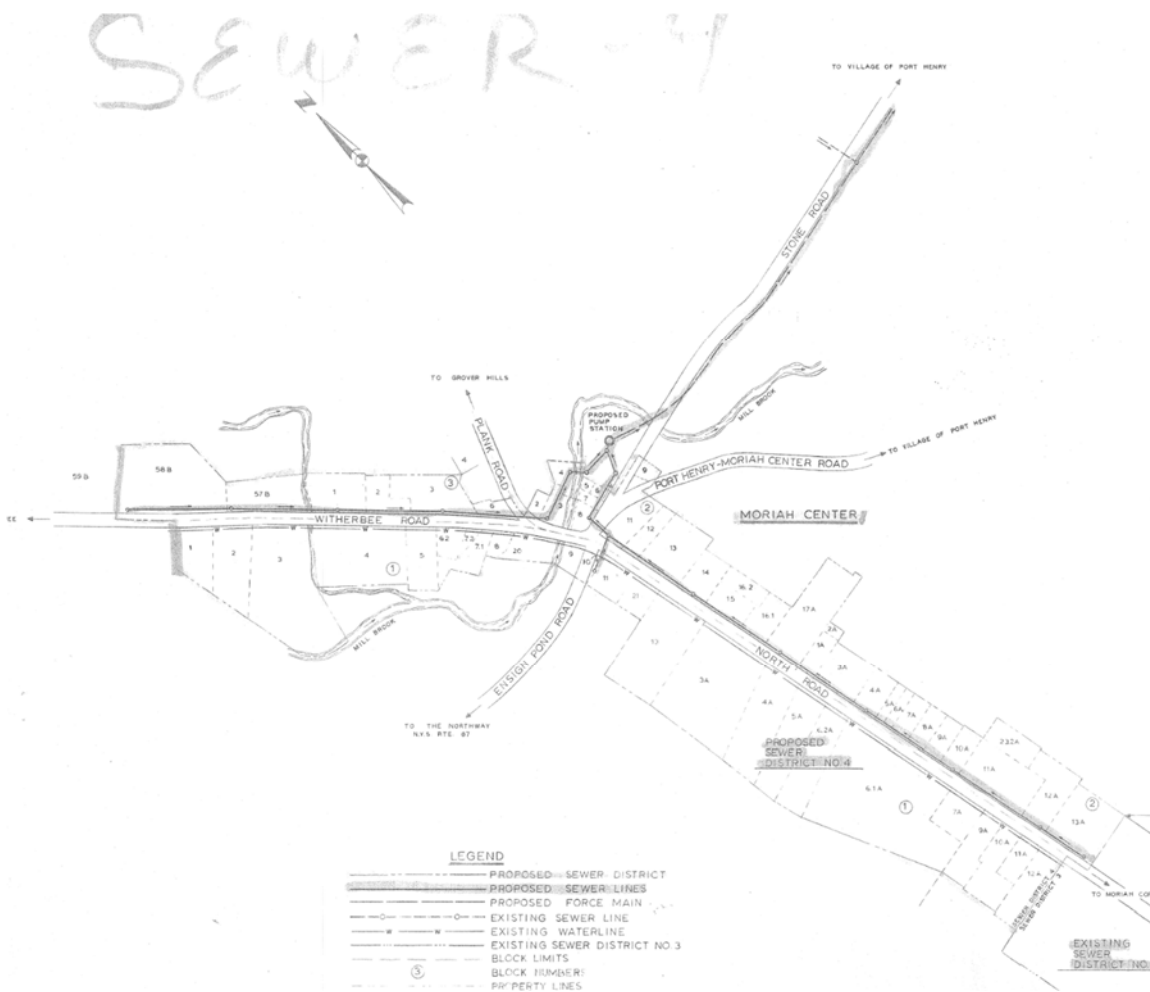
Architecture, Engineering, and Land Surveying Northeast, PLLC  
10 -12 City Hall Place, Plattsburgh, NY 12901

# Town of Moriah Collection System Evaluation Appendix F Moriah Center Service Area Inspection Report

## Sewer Main Inspections: Moriah Center

As the Moriah Center service area is relatively new and of modern construction, consisting of precast manholes and PVC sewer mains. The sewer system was installed in 1987. The sewers discharge to the Titus Road pump station.

The map below is an excerpt from the collection system design prints.





Town of Moriah  
Collection System Evaluation  
Appendix F  
Moriah Center Service Area Inspection Report

## Manhole Inspections

Two manholes were inspected to provide a representative sample of the condition of manholes in this portion of the collection system. These sewer mains were installed in 1987. The manholes are precast. The two manholes are in worse shape than would be expected for manholes of this vintage. It appears that both manholes have staining from leakage. Also, despite plans that show the correct design style of having troughs, neither manholes was constructed with proper troughs.



Town of Moriah  
Collection System Evaluation  
Appendix F  
Moriah Center Service Area Inspection Report

Manhole: MH-22 (WD4)

Location: 3 Witherbee Road



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in acceptable condition at the time of inspection.

SIZE & TYPE	FLOW DIRECTION	TO/FROM
8" PVC	OUT (NE)	MH-15
8" PVC	IN (SE)	MH-23



Steps

Steps in good condition.

Bench Walls and Invert / Trough

No trough or bench walls.



General Condition

Extreme amount of built-up sludge. Debris on all steps suggests periods of overflows. No water standing or flowing at the time of inspection.

Town of Moriah  
Collection System Evaluation  
Appendix F  
Moriah Center Service Area Inspection Report

**Manhole: MH-20 (SD4)**

**Location: 38 Witherbee Road**



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in poor condition at the time of inspection.



Steps

Steps are in good condition.

Bench Walls and Invert / Trough

Trough is deteriorating and water is overflowing invert.

General Condition

Large amount of rocks of varying sizes in invert, including some 3'-4", and one at least 1' in size. This is causing standing water and blockages. Steady inflow/infiltration coming in between bricks between frame and chimney, and running along corbel and walls, and around cone.

SIZE & TYPE	FLOW DIRECTION	TO/FROM
8" PVC	OUT (SE)	MH-19
8" PVC	IN (SE)	MH-21





Town of Moriah  
Collection System Evaluation  
Appendix F  
Moriah Center Service Area Inspection Report

## Sewer Main Inspections

Sewer main inspections were not able to be obtained for this service area, however, based on the age of the sewer system (1987) and pipe material (PVC) it is not expected that the sewer mains will have severely deteriorated.



Town of Moriah  
Collection System Evaluation  
Appendix F  
Moriah Center Service Area Inspection Report

## Recommendations

Manholes: It is recommend that all manholes in this service area be inspected and any cracks or leakage should be repaired. Each manhole with leakage should be lined with high strength grout. If leakage is occurring in the cover, the covers should be repaired/replaced.

Sewer Mains: It is recommended that the Town inspect all of the sewer mains and provide spot repairs to any deficiencies to avoid larger issues in the future.



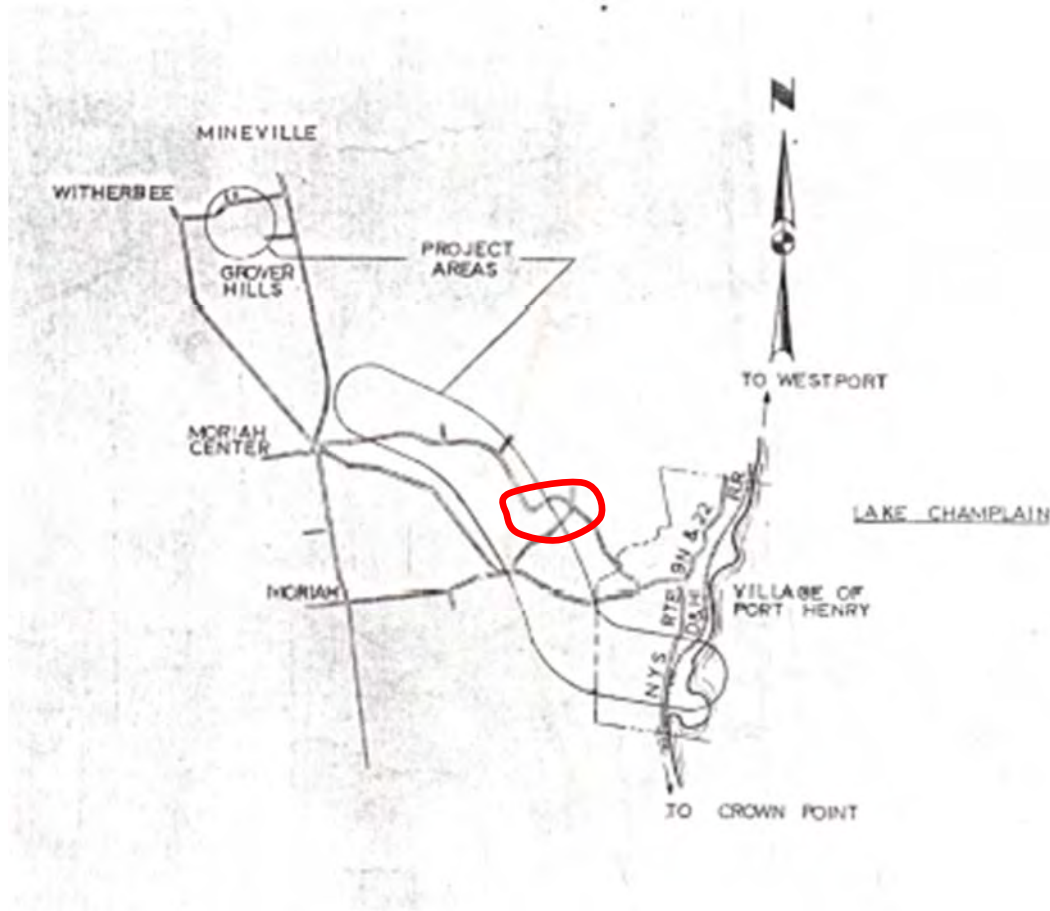
# APPENDIX G

## Screening Plant & Siphon Inspection Report

## Screen Plant & Siphon

The end of the Switchback Road sewer main is a siphon line that allows the sewer to cross under Mill Brook without need for a pump station. The sewer flow is directed first through a screening building which has 6" parshall flume, a bar rack, with a secondary rack for bypass, as well as a degritting chamber. By removing large debris and at least some grit, the siphon line is able to operate more efficiently as less material is likely to be deposited in the siphon lines. During investigations of the collection system, it was found that the siphon consists of an 8" main barrel and a 6" overflow barrel. This is an incorrect configuration as the 6" barrel should be the primary barrel and the 8" barrel should be the secondary barrel. The proper arrangement would allow for better flushing velocities during average day flows and would minimize buildup in the pipelines, allowing for maximum capacity during high flow events.

Excerpts from the 1985 Morrell Vrooman Plans (Port Henry (V) Moriah (T) Joint Wastewater Treatment Facilities, Interceptor Sewers plans are provided throughout this appendix showing are included for reference.





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Town of Moriah  
Collection System Evaluation  
Appendix G  
Screening Plant & Siphon Inspection Report





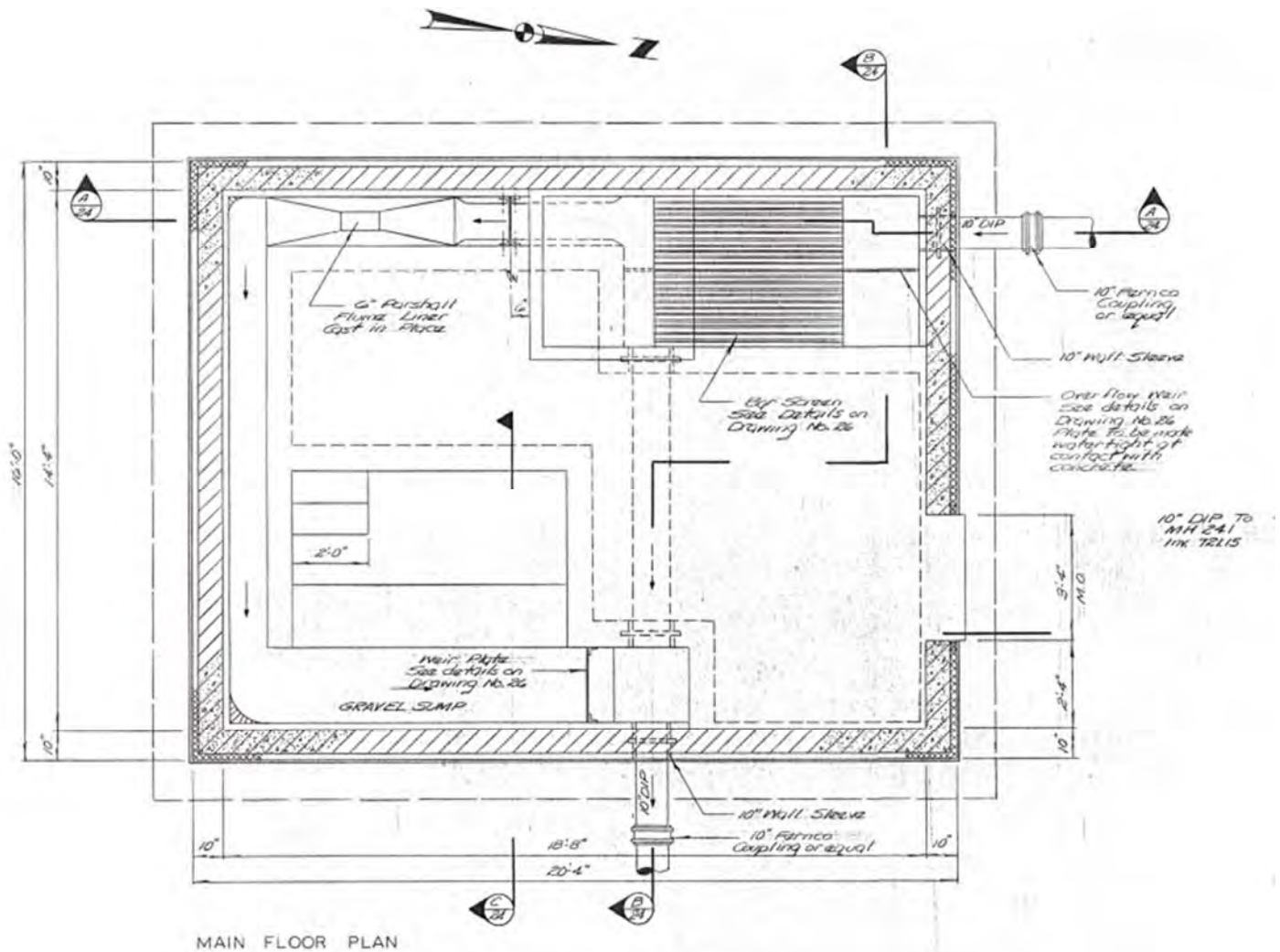


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10 -12 City Hall Place, Plattsburgh, NY 12901

# Town of Moriah Collection System Evaluation Appendix G Screening Plant & Siphon Inspection Report

## Screening Plant Building

The sewer collection system feeds into a screening plant building. It serves as a de-gritting and screening facility prior to the beginning of the siphon system. Manual cleaning and maintenance of the screen and grit filter is recommended on a daily basis. Flow data is captured as it passes through the facility and recorded in the form of a daily totalized flow. The flow enters the building and passes through a coarse manual screen followed by a 6" Parshall Flume to measure flow rate and then passes through a grit settling chamber. The Switchback Road Screening House has an influent and effluent of 10" PVC pipe, followed by 8" PVC. At the time of writing this report each of the components of the wastewater collection system present in the building are in working order. The screen and grit chamber need regular manual cleaning to maintain flow through the system and minimize solids and grit that can be deposited in the siphon. Daily flows taken from the flume seem lower than would be expected from the contributing collection area, therefore the flume flow meter should be re-calibrated and manually checked on a regular basis.





## Screening Plant Building

The facility does not currently have any working HVAC in the facility. There is power hooked up to the facility and an existing space heater installed. This space heater is assumed to be inoperable due to the amount of visible rust and disrepair.

The building itself shows signs of a large amount of flora growth on the roof and evidence of a nest under an eave. The roof (photo: bottom) will need future maintenance to combat the moss, lichen, fungus and algae as there is the potential for it to create an environment which promotes mold growth and decay. This will shorten the lifespan of the roof, potentially incurring unexpected costs. An animal seemed to have created a nest under the northern eave (photo: top right) and is visually bowed out due to the amount of material and use. The nest was not investigated further.







## Distribution Box, cont.



Groundwater has migrated into the siphon distribution box and submerged the siphon pipes, access tees, and knife gate valves. Evidence of backup and surcharged conditions existed. There are many rags and floatables draped on the components in the distribution box. The weir (photo: left) appeared to be in functional condition at the time of inspection, but is not removable. There is no stop plate or gate that enables the 8" line to be shut off and flow diverted to the 6" line. The tees located downstream from the knife gate valves are of limited use in performing siphon cleaning as a jetter cannot be sent down them and used to pull back grit and debris. At the time of inspection, the valves and distribution box had not been cleaned or maintained for a very long time. It is not known the extent of how the lack of maintenance has affected the components of the distribution box. The design of the distribution box limits the necessary maintenance activities that can be performed. The access manhole on the distribution box was installed in an awkward location and does not allow for safe or ready access to the valves or access tees.

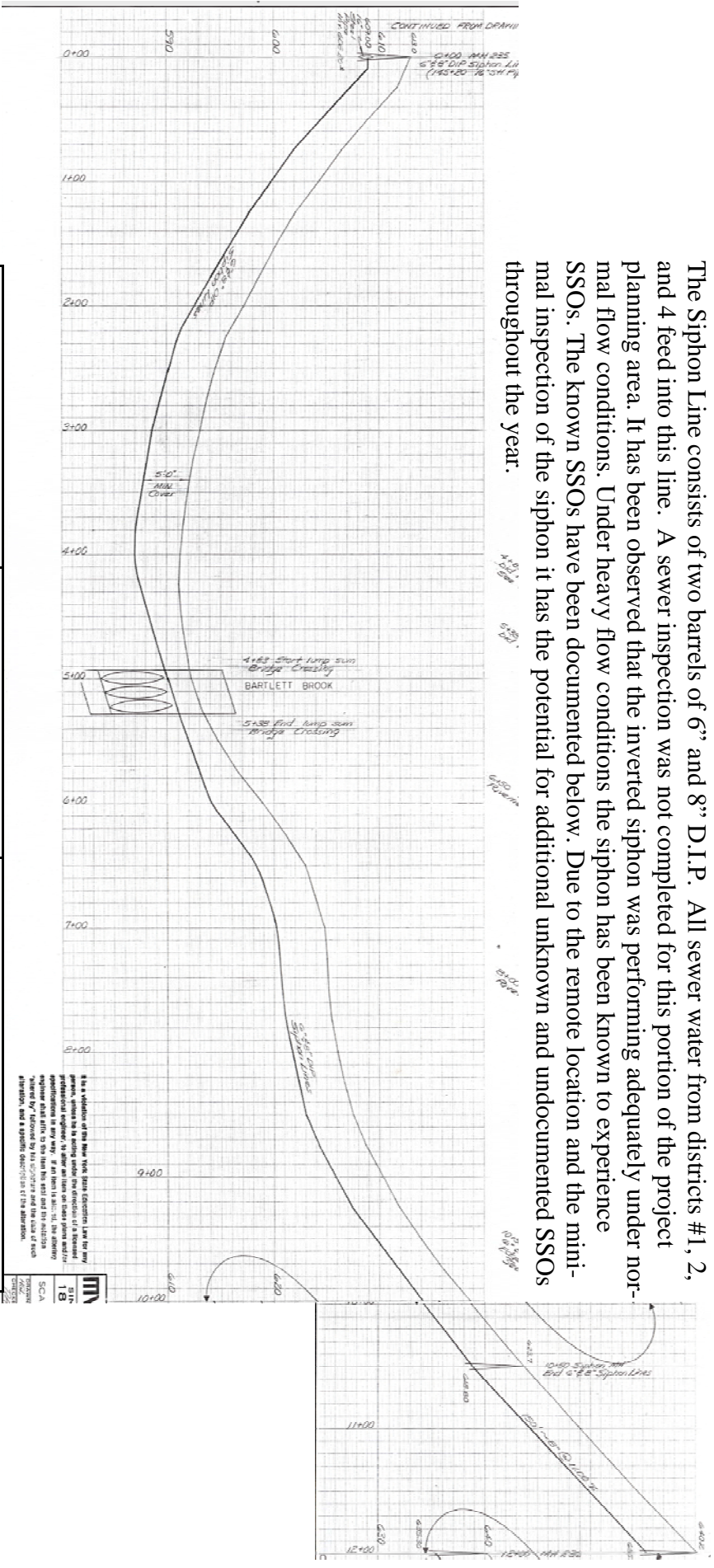




Town of Moriah  
 Collection System Evaluation  
 Appendix G  
 Screening Plant & Siphon Inspection Report

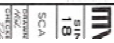
## Inverted Siphon

The Siphon Line consists of two barrels of 6" and 8" D.I.P. All sewer water from districts #1, 2, and 4 feed into this line. A sewer inspection was not completed for this portion of the project planning area. It has been observed that the inverted siphon was performing adequately under normal flow conditions. Under heavy flow conditions the siphon has been known to experience SSOs. The known SSOs have been documented below. Due to the remote location and the minimal inspection of the siphon it has the potential for additional unknown and undocumented SSOs throughout the year.



Date	Manhole (MH)	Cause of SSO
4/28/2011	Siphon line	Excessive storm water
5/4/2011	Siphon line	Excessive storm water
5/27/2011	Siphon line	Excessive storm water

This is a violation of the new York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to allow any tests on design plans and/or specifications to any very or at any time is made. All the drawings prepared by, or for, or on behalf of the contractor and the state of such violation, and a specific description of the violation.







**Town of Moriah  
Collection System Evaluation  
Appendix G  
Screening Plant & Siphon Inspection Report**

## Flow Monitoring

The flow rate of the siphon is gathered from daily readings of a metered 6" Parshall Flume in the screening plant after screening and before grit settling. Readings are recorded daily in a totalized flow. Daily flow data from August 2016 through July 2017 was obtained from the Town. The average flow rate for the data available was 17,531 gpd. The month average peak flow rate for occurred in April 2017 and was 30,859 gpd. The daily maximum peak flow rate was 82,968 gpd for the data available.

Spot checks of flow utilizing a calibrated handheld flow meter in the siphon distribution box performed on 6/8/2017 indicated a velocity of 2.15 fps and a depth of 5.25 inches in the online 8" siphon line, which calculates to be an instantaneous flow of approximately 337,000 gpd. On that same day a daily flow at the screening plant was measured to be 39,714 gpd. Based on this discrepancy the functionality and accuracy of the ultrasonic flow meter at the screening building should be assessed, the flume dimensions should be checked, and flow through the flume should be measured manually on a periodic basis to verify the accuracy of the meter. It is also possible that the velocity measured by the handheld flow meter did not reflect the velocity through the 8" siphon line and that years of grit and solids accumulation within the siphon has resulted in a reduced effective pipe diameter and

The ideal flow rate through the siphon should be between 1.5 and 2.0 fps during peak day flow, which will fluidize grit and help maintain clear passage through the siphon. If the flow measured at the screening plant is accurate then the online 8" siphon would have a velocity of 0.13 fps, which would clearly lead to significant deposition of grit and solids. Even if the 6" siphon was the main online siphon, which would be the typical recommended operating condition, the velocity would only be 0.24 fps. To achieve a minimum velocity of 1 fps the flow would have to be 130,000 gpd for the 6" siphon or 230,000 gpd for the 8" siphon.

Based on the discrepancies between the handheld data and flume data, further calibration and flow measurement should take place before evaluation of the siphon flow condition can be finalized. For cleaning purposes no change to the siphon pipe sizes would be recommended, therefore, if flows are found to be less than what is ideal to achieve daily fluidizing velocities then the Town will need to take this into account with the siphon cleaning schedule once improvements are made to the siphon distribution box to allow for cleaning to occur.



Town of Moriah  
Collection System Evaluation  
Appendix G  
Screening Plant & Siphon Inspection Report

## Recommendations

The screening plant HVAC systems appear to be well past their useful age. The heating and ventilation should be replaced to meet current codes and standards not only for the longevity of the building but also for the health and safety of the operators. Dedicated waste containers would give the operators a place to put screenings and grit, and would minimize the buildup of waste materials and gases associated with breakdown of those wastes in the building.

The siphon system should be rearranged such that the 6" main is the primary main and the 8" main is the backup main. Force main cleanouts should be added to enable siphon cleaning to occur, which is a necessary maintenance activity. The distribution box should be relocated uphill to provide additional head on the system and for a better arrangement for isolating the individual mains for cleaning. When construction of the cleanouts has been completed it is recommended that the siphon be cleaned as soon as possible.

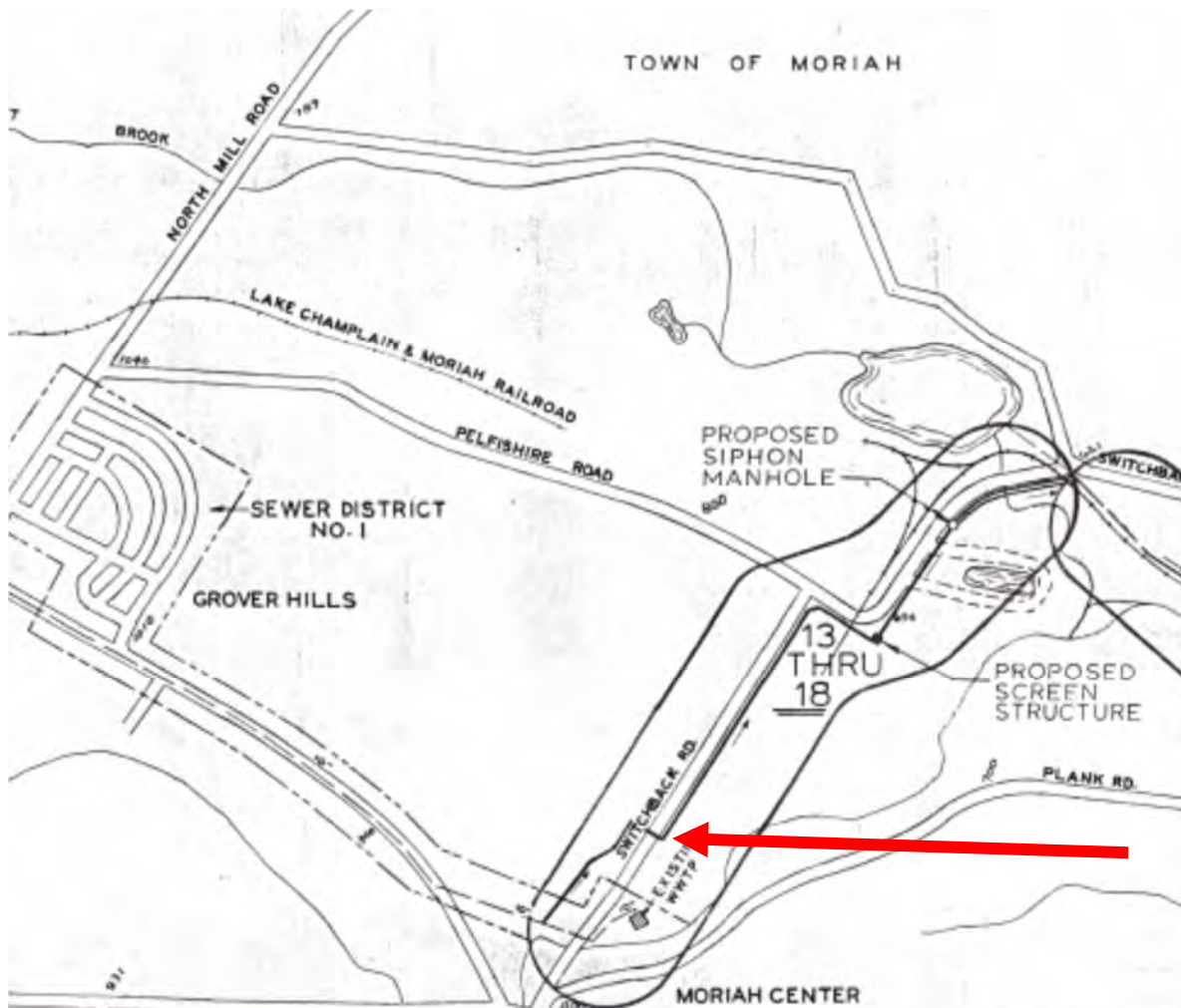
# APPENDIX H

## Switchback Road Trunk Sewer Main Inspection Report

Town of Moriah  
Collection System Evaluation  
Appendix H  
Switchback Road Trunk Sewer Main Inspection Report

## Location Map

The Switchback Road sewer main is a very important component to this collection system. It contains a screening plant, a siphon line, and a ninety degree turn of all the sanitary sewer collected from Mineville, Witherbee, Grover Hills, and Moriah Center. The map below, referenced from drawing "PORT HENRY MORIAH JOINT WASTEWATER TREATMENT FACILITIES INTERCEPTOR SEWERS Morrell Vrooman Engineers 1985", shows switchback road circled and labeled as "13-18". The red arrow points to MH-254, the turn, which was inspected on the following page.







Town of Moriah  
Collection System Evaluation  
Appendix H  
Switchback Road Trunk Sewer Main Inspection Report

## Manhole Inspections

These sewer mains were installed in 1987. The manholes are precast it is not expected that the manholes would be significantly deteriorated. A limited manhole inspection appears to confirm this, although one manhole was found to be lacking a trough..

Town of Moriah  
Collection System Evaluation  
Appendix H  
Switchback Road Trunk Sewer Main Inspection Report

Manhole: MH-254 (04)

Location: 43 Titus Road

Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in good condition at the time of inspection.



SIZE & TYPE	FLOW DIRECTION	TO/FROM
10" PVC	OUT (E)	MH-253
8" PVC	IN (S)	MH-255



Steps

Step in good condition.

Bench Walls and Invert / Trough

No trough visible

General Condition

Roots intruding through frame. 4+ inches of built-up water in manhole. Large rag tied on to step is evidence of overflows.

Town of Moriah  
Collection System Evaluation  
Appendix H  
Switchback Road Trunk Sewer Main Inspection Report

Manhole: MH-250 (05)  
Location: 43 Titus Road

Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in good condition at the time of inspection.



SIZE & TYPE	FLOW DIRECTION	TO/FROM
10" PVC	OUT (E)	MH-249
10" PVC	IN (E)	MH-251

Steps

Step in good condition

Bench Walls and Invert / Trough

Trough and bench walls in good condition



General Condition

Overall, this manhole is in good condition. It was mentioned in an overflow report on 3/9/2010. The manhole just downstream, MH-249, was also mentioned in that report, as well as another SSO on 3/23/2010. This could be due to a shallow bury.



Town of Moriah  
Collection System Evaluation  
Appendix H  
Switchback Road Trunk Sewer Main Inspection Report

## Sewer Main Inspections

Sewer main inspections were not able to be obtained for this service area, however, based on the age of the sewer system (1987) and pipe material (PVC) it is not expected that the sewer mains will have severely deteriorated. One section downstream from MH 43 appears to have some issue that is restricting flow. Either something is blocking the pipe or there is a sag or low slopped section of pipe. The pipeline in general along Switchback Road has portions that appear to be near capacity (surcharged conditions were seen in at least one manhole). This is likely due to high I&I found in the upper reaches of the collection system.





Town of Moriah  
Collection System Evaluation  
Appendix H  
Switchback Road Trunk Sewer Main Inspection Report

## Recommendations

Manholes: It is recommend that all manholes in this service area be inspected and any deficiencies corrected

Sewer Mains: It is recommended that the Town inspect all of the sewer mains and provide spot repairs to any deficiencies to avoid larger issues in the future. Specifically the pipe downstream of MH 43 should be inspected to determine if there is a correctable problem that is causing the surcharged conditions in MH 43.

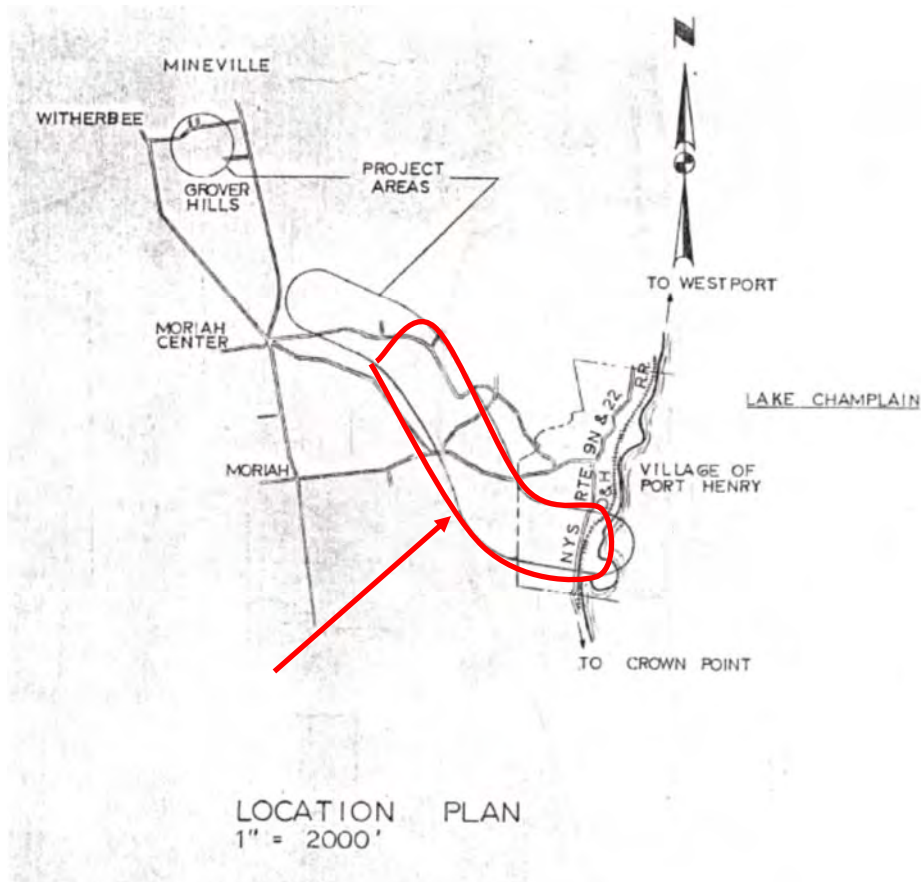
# APPENDIX I

## Federal Water Main—~~Gas Line~~ Trunk Sewer Main Inspection Report

## Location Map

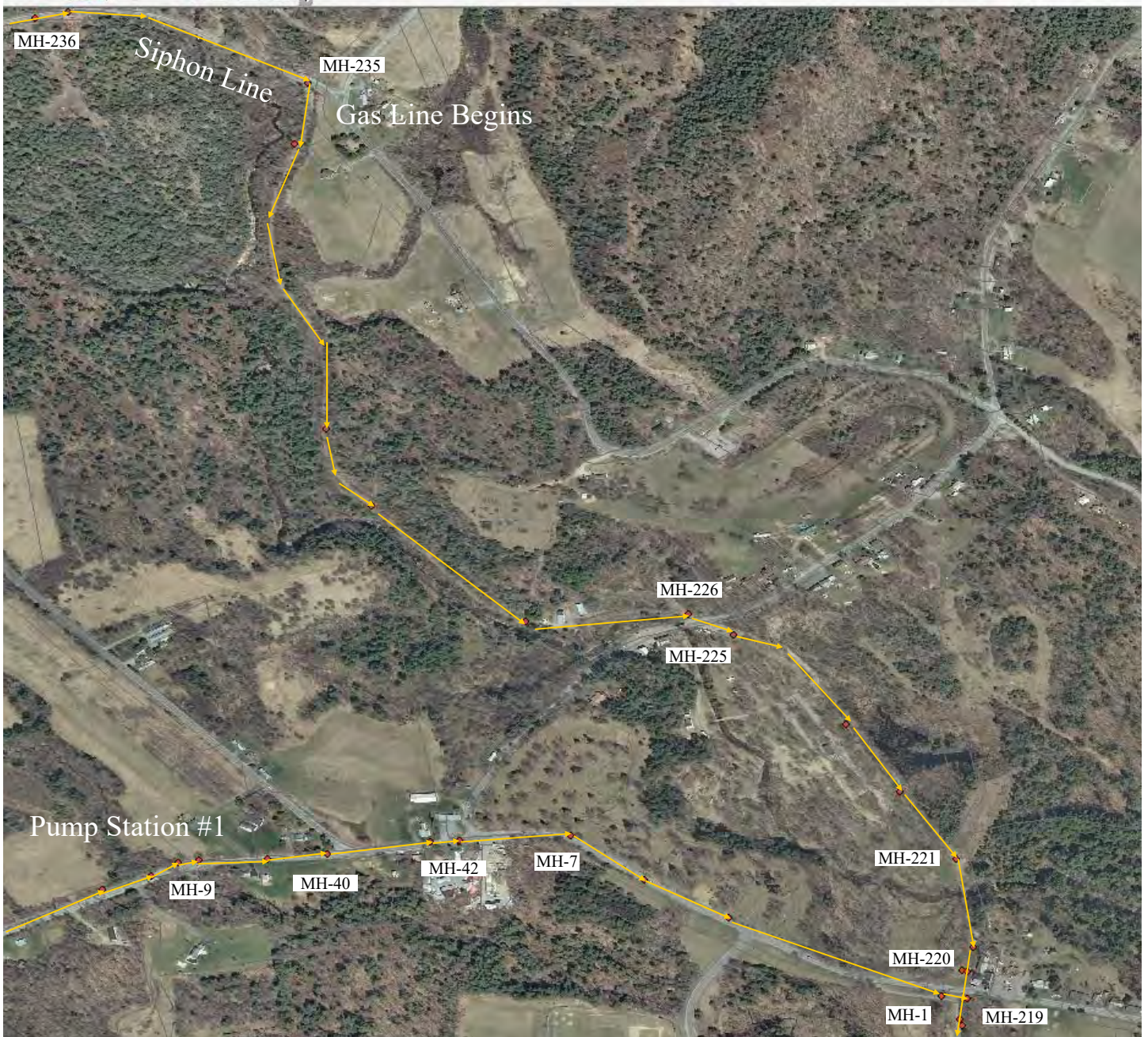
The Federal Water Main “Gas Line” sewer main is a converted pressurized steel gas sewer main that has been converted to a gravity sewer main. This conversion took place in 1985. This sewer main serves as the Town of Moriah’s trunk sewer main, meaning that all sanitary sewer from the Town (except the former Village of Port Henry) flows through this sewer main prior to combining with the flow from the former Village in the newly constructed trunk main just prior to the treatment plant. The sewer main considered the “gas main” is from the mine yard just outside of the WWTP traversing through the woods and ending at the downstream end of the siphon on Switchback Road.

A map showing the inspected sewer mains is included for reference.





## Collection System







Town of Moriah  
Collection System Evaluation  
Appendix I

Federal Water Main "~~Gas Line~~" Trunk Sewer Main Inspection Report

## Manhole Inspections

Manholes were constructed on the existing 16" steel main when the line was converted to a sanitary sewer main.

An attempt was made to inspect a few manholes and the manhole covers were bolted down. The manholes are expected to be precast manholes and should be in relatively good condition, due to the age (32 years old).

Town of Moriah  
Collection System Evaluation  
Appendix I

Federal Water Main "Gas-Line" Trunk Sewer Main Inspection Report

Manhole: MH-208 (PH)

Location: 24 Haven Lane



Cover and Frame

The cover and frame were in poor condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in poor condition at the time of inspection with inflow/infiltration along joints.



SIZE & TYPE	FLOW DIRECTION	TO/FROM
16" Steel	OUT (NE)	MH-207
16" Steel	IN (SE)	MH-209



Steps

One step visible in good condition, covered in roots.

Bench Walls and Invert / Trough

Not visible

General Condition

Heavy inflow/infiltration through frame and chimney, as well as in a few corbel joints. This leads to high water level and constant flow back-up. Roots too large to be killed with standard chemical dosages.

Town of Moriah  
Collection System Evaluation  
Appendix I

Federal Water Main "Gas Line" Trunk Sewer Main Inspection Report

Manhole: MH-221

Location: Mill Pond Bridge



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in poor condition at the time of inspection.



Steps

Steps in good condition.

Bench Walls and Invert / Trough

Trough in good condition. Bench wall appears to be deteriorating due to inflow/infiltration.

General Condition

Marks on corbel and walls evidence of at least two significant holes in joint. Steady flow of inflow/infiltration.

SIZE & TYPE	FLOW DIRECTION	TO/FROM
16" Steel	OUT (S)	MH-220
16" Steel	IN (S)	MH-222





Town of Moriah  
Collection System Evaluation  
Appendix I

Federal Water Main "Gas-Line" Trunk Sewer Main Inspection Report

Manhole: MH-217 (189)

Location: Golf Course Way



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in good condition at the time of inspection.



SIZE & TYPE	FLOW DIRECTION	TO/FROM
16" Steel	OUT (S)	MH-216
16" Steel	IN (S)	MH-218



Steps

No steps present.

Bench Walls and Invert / Trough

Trough deteriorating due to amount of flow.

General Condition





Town of Moriah  
Collection System Evaluation  
Appendix I

Federal Water Main "~~Gas Line~~" Trunk Sewer Main Inspection Report

## Sewer Main Inspections

The sewer main is a converted 16" steel former gas main. The original main appears to have sufficient slope to prevent surcharged areas. The main was not able to be inspected. A plain steel main can be a concern for use as a sewer main, however certain classes and ages of steel pipe perform very well. *Upon further discussion with the Town, the sewer main steel pipe has been found to be in good condition when inspected or worked on.* ~~It is recommended that the town perform metal integrity and thickness testing on the sewer main. This type of testing will tell the Town if the steel is degrading and will be more informative than an internal video inspection. If the pipe is deteriorating the likely course of action would be to slip line the pipe with a cured in place pipe (CIPP). This felt and resin liner is a structural pipe.~~



Town of Moriah  
Collection System Evaluation  
Appendix I

Federal Water Main "Gas-Line" Trunk Sewer Main Inspection Report

## Recommendations

**Manholes:** It is recommended that the Town inspect all manholes and repair and minor deterioration before larger problem develop.

**Sewer Main:** Continue to inspect the sewer main as part of the I&M program and provide repairs if required. ~~It is recommended that the town perform metal integrity and thickness testing on the sewer main. This type of testing will tell the Town if the steel is degrading and will be more informative than an internal video inspection. If the pipe is deteriorating the likely course of action would be to slip line the pipe with a cured in place pipe (CIPP). This felt and resin liner is a structural pipe.~~

# APPENDIX J

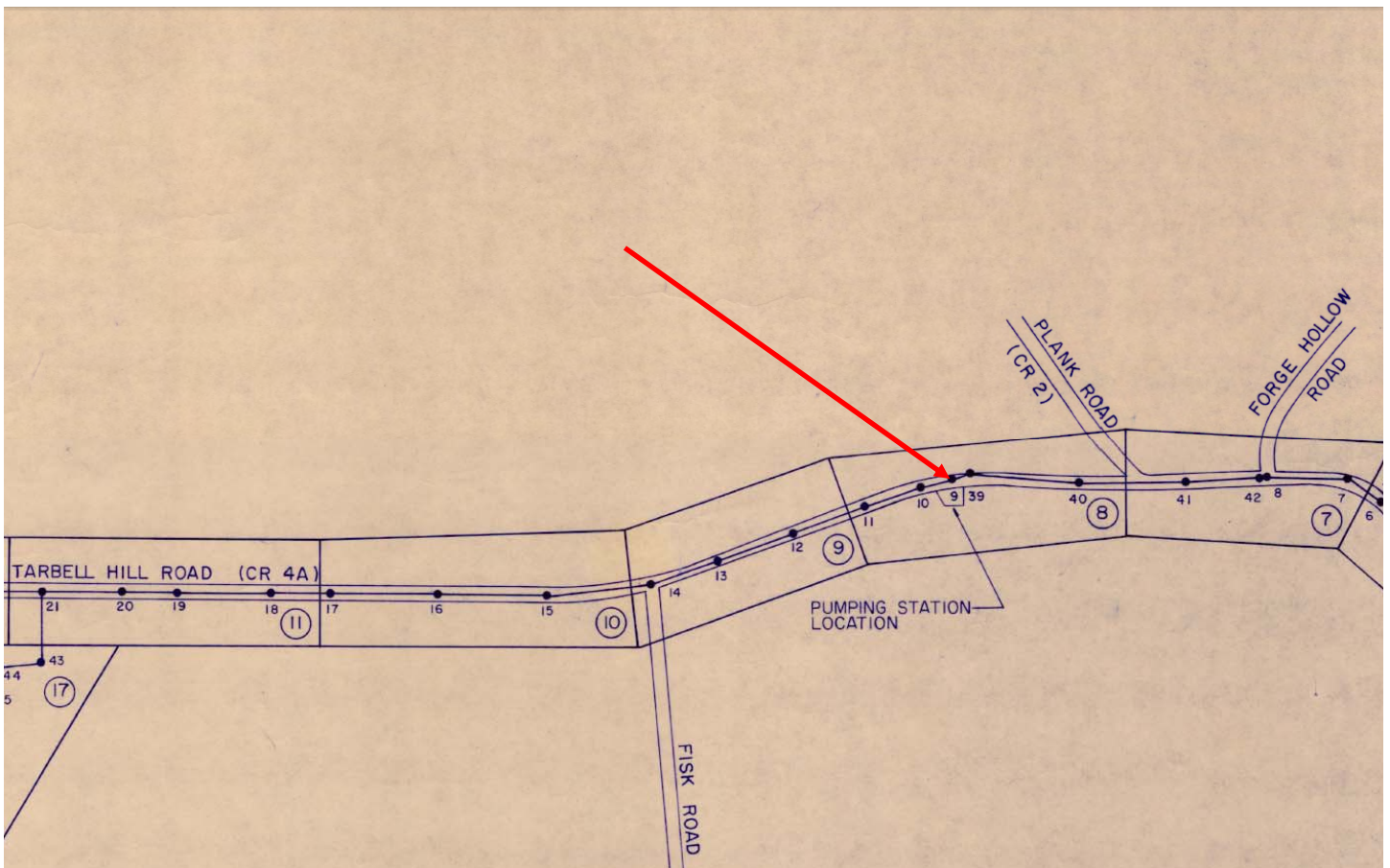
## Pump Station #1 (Tarbell Hill) Inspection Report

Town of Moriah  
Collection System Evaluation  
Appendix J  
Pump Station #1 (Tarbell Hill) Inspection Report

## Location Map

The Tarbell Hill Pump Station serves the Moriah Center Service Area and was constructed in the late 1980s. The pump station is right around its expected useful life (30 years), and the age of the existing pumps is unknown. This report serves to document the existing conditions, provide flow data, and provide recommended upgrades that should limit risk of potential overflow events and the need to declare a state of emergency, like the Titus Road Pump Station

A map showing the inspected sewer mains is included for reference.





Town of Moriah  
Collection System Evaluation  
Appendix J  
Pump Station #1 (Tarbell Hill) Inspection Report

## Pump Station Inspection

Photo to Right: pump station valve vault within structure, limiting access.

Photo Below: Valve vault has infiltrated groundwater and is not equipped with a drain (recommended) or functional sump pump to maintain reasonably dry conditions. Existing equipment and wiring placed haphazardly creates a hazardous environment.



Photo to Right: Pump station rails are in poor condition and will likely impede pump removal/reset. Grease line versus incoming influent main indicates that floats can be further spaced out to reduce pump on/off cycling, increasing motor longevity. Pump station wetwell concrete appears to be in deteriorating condition and has evidence of leakage. Further condition assessment should be performed to determine if wetwell should be scheduled for future replacement or can be rehabilitated.



### Recommendations

The pumps, rails, controls and electrical systems are in need of replacement/upgrade. The floats should be reset to allow for longer, less frequent pump operation. The wetwell has evidence of leakage and concrete decay and should be further evaluated for replacement or cleaning and sealing. The valve vault, which is housed under the control building has a mass of wires haphazardly hung and is full of water, creating a very dangerous environment. There is no drain in the valve vault, which is why the vault has filled with water. There is no back-up generator to provide power in the event of an outage and no autodialer to notify the Operator in the event of a high level in the pump station.



**Town of Moriah**  
**Collection System Evaluation**  
**Appendix J**  
**Pump Station #1 (Tarbell Hill) Inspection Report**

The Tarbell Hill Road sewer main is located on the eastern side of Center Road, which connects the south side of the road, along with all residences at the intersection, to Tarbell Hill. It begins at 2714 Center Road, including Furnace Road east of 216, and runs south to Moriah Center then east to Golf Course Way where it intercepts to the 16" Steel main down to Port Henry. It also collects Windy Hill Road east of 574, runs south to 2500 South Moriah Road, and back up to Tarbell Hill Road.

Sewer District 3 Sewer Mains consist of 8" and 6" PVC piping along with 8" and 6" D.I.P., and a 16" Stl.P. A sewer line was videotaped by Town personnel for inspection, with an AES representative on site. Beginning at MH-50 and traveling downstream toward MH-49, a blockage occurred at approximately 100 feet. The employees mentioned this is one of the best areas of their entire system, and expressed a desire to get rid of this pump station if possible.

There have been three documented SSOs, all in isolated time frames, along with two of the three directly related to the pump station. Evidence of the pump overflows is displayed with rust carrying up the entire manhole height.

<b>Date</b>	<b>Manhole (MH)</b>	<b>Cause of SSO</b>
2/19/2008	Tarbell Hill	Pumps clogged causing thermal alarm
4/27/2011	Tarbell Hill	Excessive rain washed away 8" PVC, 16" Stl.P 'suspended' in air
8/28/2011	Tarbell Hill	Massive flooding in area, too much for pump station to handle

Flow monitoring of incoming flows to the pump station in May 2018 indicated an average day flow of approximately 45,800 gpd and a peak hour flow of approximately 170,000 gpd. At the time of the peak flow the pumps recorded approximately 4 hours of run time. Maximum total pump run time based on the data available at the time of the report (May 2016, August 2016 – March 2017, and May 2017) indicated a peak pump run time of 14.5 hours during a day, an average pump run time of 2.7 hours per day, and a median pump run time of 2.3 hours per day. While the peak pump run time of 14.5 is not desirable, it is within the capability of the pumps and appears to have been a limited occurrence based on the surrounding day's pump hours and its timing in February of 2017, and not related to significant inflow and infiltration (I&I). I&I is not considered to be a significant concern for the Tarbell Hill pump station based on the flow monitoring performed, pump hours obtained, vintage of the contributing collection system (1980's), and collection system pipe types (PVC, ductile iron, and steel pipe). Further flow monitoring performed during peak I&I times such as spring thaw/runoff can further verify the existence/absence of significant I&I contributions.

# APPENDIX K

## Moriah Corners Service Area Inspection Report



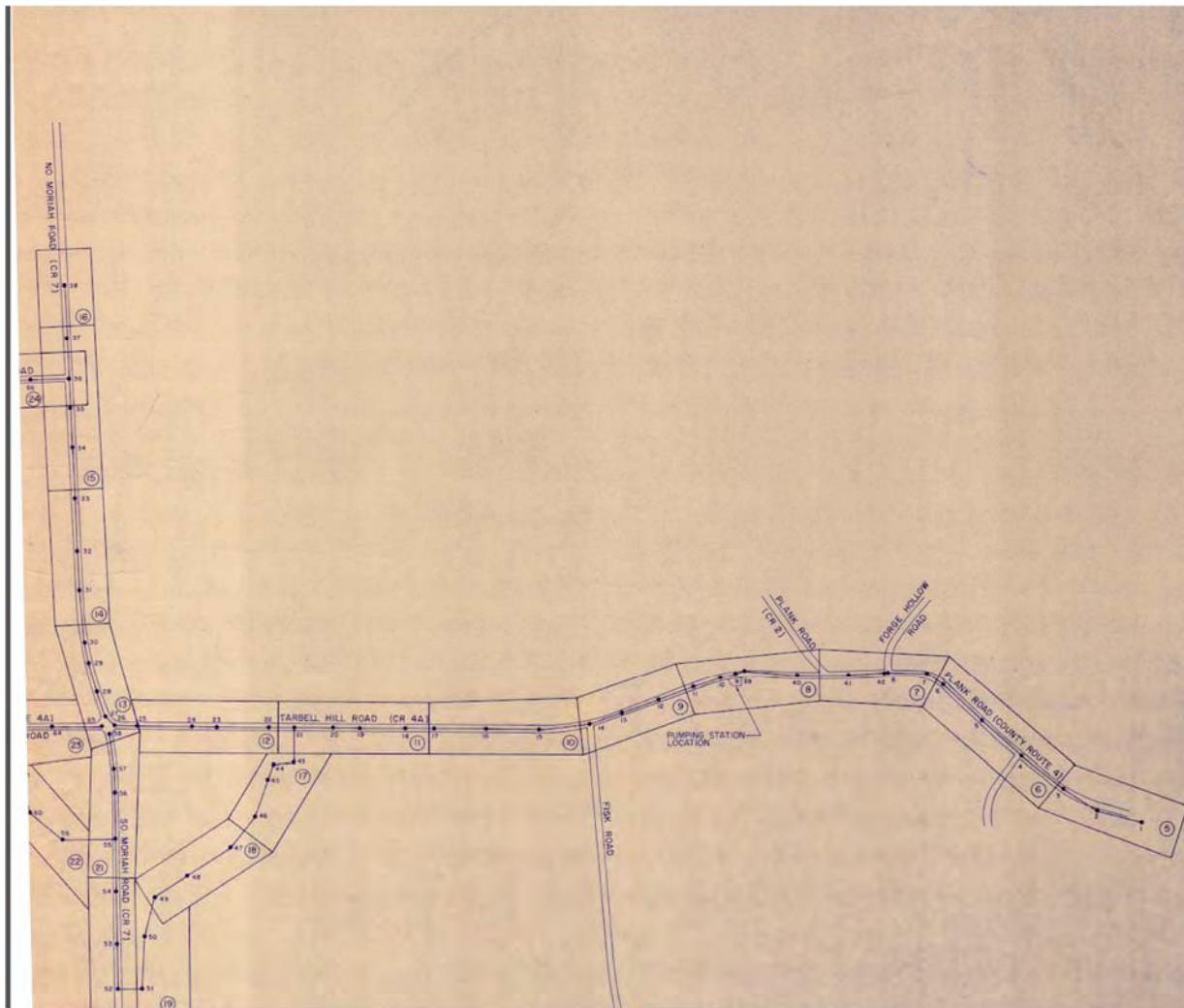
Architecture, Engineering, and Land Surveying Northeast, PLLC  
10 -12 City Hall Place, Plattsburgh, NY 12901

# Town of Moriah Collection System Evaluation Appendix K Moriah Corners Service Area Inspection Report

## Location Map

As the Moriah Corners service area is relatively new and of modern construction, consisting of precast manholes and PVC sewer mains. The sewer system was installed in 1987. The sewers discharge to the Titus Road pump station.

The map below is an excerpt from the collection system design prints.









Town of Moriah  
Collection System Evaluation  
Appendix K  
Moriah Corners Service Area Inspection Report

## Manhole Inspections

One manhole was inspected to provide a representative sample of the condition of manholes in this portion of the collection system. Most manholes in this area are paved over and cannot be accessed without cutting the road. The manholes are precast. The manhole was in relatively good condition at the time of inspection but is showing wear due to general usage and should continue to be monitored. The trough of the manhole is deteriorating. It is assumed that asphalt present in the manhole is an attempt to patch the manhole. The asphalt section is prone to catching



Town of Moriah  
Collection System Evaluation  
Appendix K  
Moriah Corners Service Area Inspection Report

Manhole: MH-26 (SD3)

Location: 619 Tarbell Hill Road



Cover and Frame

The cover and frame were in acceptable condition at the time of inspection. Cover is 24" (+/-) clear opening.

Corbel and Walls

Manhole is pre-cast concrete and was in good condition at the time of inspection.



Steps

Steps in good condition

Bench Walls and Invert / Trough

Trough in poor condition, deteriorating. Heavy build up on bench walls.

General Condition

Piece of asphalt blocking outflow pipe causing rag build-up. Appears to be asphalt on bench walls, covering the invert at a few points, disrupting flow.

SIZE & TYPE	FLOW DIRECTION	TO/FROM
8" PVC	OUT (E)	MH-25
8" PVC	IN (SE)	MH-27





Town of Moriah  
Collection System Evaluation  
Appendix K  
Moriah Corners Service Area Inspection Report

## Sewer Main Inspections

Sewer main inspections were not able to be obtained for this service area, however, based on the age of the sewer system (1985) and pipe material (PVC) it is not expected that the sewer mains will have severely deteriorated.





Town of Moriah  
Collection System Evaluation  
Appendix K  
Moriah Corners Service Area Inspection Report

## Recommendations

**Manholes:** It is recommend that all manholes in this service area be inspected and any cracks or leakage should be repaired. Each manhole with leakage should be lined with high strength grout. If leakage is occurring in the cover, the covers should be repaired/replaced. It is also recommended to cut the pavement at manhole locations and put risers under the frames to bring the manholes to grade.

**Sewer Mains:** It is recommended that the Town inspect all of the sewer mains and provide spot repairs to any deficiencies to avoid larger issues in the future.

# APPENDIX L

## REPORTS OF NONCOMPLIANCE EVENTS



Town of Moriah  
Collection System Evaluation  
Appendix L  
Reports of Noncompliance Events

## Report of Noncompliance Events: Overview

According to the NYSDEC and the State Pollution Discharge Elimination System (SPDES) Permit General Conditions, certain discharges of untreated or partially treated sewage must be reported orally and in writing within five (5) days to the NYSDEC. As a result, the Town of Moriah is required to submit Report of Noncompliance Events to the NYSDEC, specifically for SSOs. SSOs have occurred in the Town of Moriah sanitary sewer collection system, mainly during wet weather periods (i.e., spring, rain events). These SSOs are the result of Inflow & Infiltration (I&I) events, which increase the volume of wastewater in the collection system and the condition of the existing collection system (i.e., root blockages, grease accumulation, etc.). When the volume of wastewater in the system exceeds the capacity and/or the pipe capacity is compromised due to blockages, SSOs occur.

The table below summarizes Town documented SSOs that have occurred since 2001. As shown in the table, SSOs occurred due to blockages in the sanitary sewer mains.



Architecture, Engineering, and Land Surveying Northeast, PLLC  
 10 -12 City Hall Place, Plattsburgh, NY 12901  
 Phone: (518) 561-1598 Fax: (518) 561-1990  
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## Town of Moriah Collection System Evaluation Appendix L Reports of Noncompliance Events

This table summarizes Town documented SSOs that have occurred since 2000. As shown in the table, SSOs occurred due to blockages in the sanitary sewer mains.

Town provided documentation of each SSO is provided in this appendix.

Date	Location	Project Planning Area	Type of Noncompliance Event	Description of Noncompliance Event
2/28/2000	Pump Station	Pump Station	Pump Station overflow	Rain and thawing caused flooding in Pump Station
3/10/2000	Pump Station	Pump Station	Pump Station overflow	Too much flow for pump to handle
3/29/2000	Pump Station	Pump Station	Pump Station overflow	Water flooded building up to door lock
4/4/2000	Pump Station	Pump Station	Pump Station overflow	Too much flow for pump to handle
4/12/2001	Plank Road	Plank Road	Manhole overflow	Plugged line SSO
4/15/2002	Pilfershire Road	Sewer District #1	Manhole overflow	VCT main pipe plugged
6/20/2002	Titus Road	Titus Road	Manhole overflow	Pipe plugged with root ball
3/2/2003	Plank Road	Plank Road	Manhole overflow	Plugged 8" VTC line
10/28/2003	Plank Road	Plank Road	Manhole overflow	Plugged 8" VTC line
1/15/2006	Plank Road	Plank Road	Manhole overflow	Plugged 10" VTC line
2/19/2008	Pump Station #1	Tarbell Hill	Pump Station alarm	Pumps clogged causing a thermal alarm
3/9/2010	MH-249	Titus Road	Manhole overflow	Blockage in deep MH
3/23/2010	MH-248, MH249	Titus Road	Manhole overflow	MHs overflowing, line down stream at max capacity, rain storm
4/27/2011	Broad Street Bridge	Tarbell Hill	Manhole overflow	Excessive rain washed away 8" PVC, 16" St.P 'suspended' in air
4/28/2011	Siphon	Screening Plant/Siphon	Manhole overflow	Storm water causing double barrel siphon to overflow
5/4/2011	Siphon	Screening Plant/Siphon	Manhole overflow	Both 6" and 8" lines full
5/27/2011	Siphon	Screening Plant/Siphon	Manhole overflow	Storm caused two MHs on Siphon line to overflow
8/28/2011	Pump Station #1	Tarbell Hill	Pump Station overflow	Massive flooding in area, too much for pump station to handle
8/29/2011	Plank Road	Plank Road	Manhole overflow	Excessive storm water along with possibly root ball / silt / grease
4/15/2014	Plank Road	Plank Road	Manhole overflow	VCT pipe plugged after storm



# APPENDIX M

## Summary Sewer District Appropriations and Sewer District Estimated Revenues

SEWER DISTRICT APPROPRIATIONS

ACCOUNTS	CODE	ACTUAL LAST YEAR 20 <u>13</u>	BUDGET THIS YEAR AS AMENDED 20 <u>14</u>	BUDGET OFFICERS TENTATIVE BUDGET 20 <u>15</u>	PRE- LIMINARY BUDGET 20 <u>15</u>	ADOPTED 20 <u>15</u>
UNDISTRIBUTED						
<b>DEBT SERVICE</b>						
<b>PRINCIPAL</b>						
Serial Bonds	SS9710.6	<u>147,923</u>	<u>149,358</u>	<u>155,790</u>	<u>155,790</u>	<u>155,790</u>
Statutory Bonds	SS9720.6					
Bond Anticipation	SS9730.6	<u>2,399</u>	<u>5,099</u>	<u>5,400</u>	<u>5,400</u>	<u>5,400</u>
Capital Notes	SS9740.6					
Budget Notes	SS9750.6					
Revenue Antici.	SS9770.6					
Debt Payments to Public Authorities	SS9780.6					
<b>TOTAL</b>		<u>150,322</u>	<u>154,457</u>	<u>161,190</u>	<u>161,190</u>	<u>161,190</u>
<b>INTEREST</b>						
Serial Bonds	SS9710.7	<u>12,599</u>	<u>12,446</u>	<u>10,321</u>	<u>10,321</u>	<u>10,321</u>
Statutory Bonds	SS9720.7					
Bond Anticipation	SS9730.7	<u>144</u>	<u>378</u>	<u>317</u>	<u>317</u>	<u>317</u>
Capital Notes	SS9740.7					
Budget Notes	SS9750.7					
Revenue Antici.	SS9770.7					
Debt Payments to Public Authorities	SS9780.7					
<b>TOTAL</b>		<u>12,743</u>	<u>12,824</u>	<u>10,638</u>	<u>10,638</u>	<u>10,638</u>
<b>INTERFUND TRANSFERS</b>						
<b>TRANSFER TO:</b>						
Other Funds	SS9901.9					
Capital Project Fund	SS9950.9					
<b>TOTAL</b>						
<b>BUDGETARY PROVISIONS</b>						
FOR OTHER USES	SS962					
<b>TOTAL APPROPRIATIONS AND OTHER USES</b>		<u>437,845</u>	<u>521,436</u>	<u>531,544</u>	<u>531,544</u>	<u>531,544</u> *

\* Transfer to Page 1

SEWER DISTRICT APPROPRIATIONS

ACCOUNTS	CODE	ACTUAL LAST YEAR 2013	BUDGET THIS YEAR AS AMENDED 2014	BUDGET OFFICERS TENTATIVE BUDGET 2015	PRE- LIMINARY BUDGET 2015	ADOPTED 2015
<b>SPECIAL ITEMS</b>						
<b>TAXES ON SEWER</b>						
<b>DISTRICT PROPERTY</b>						
Contractual Exp.	SS1950.4	_____	_____	_____	_____	_____
<b>ADMINISTRATION</b>						
Personal Services	SS8110.1	<u>47,890</u>	<u>63,344</u>	<u>64,168</u>	<u>64,168</u>	<u>64,168</u>
Equipment	SS8110.2	<u>2,467</u>	<u>6,000</u>	<u>6,000</u>	<u>6,000</u>	<u>6,000</u>
Contractual Exp.	SS8110.4	<u>19,986</u>	<u>68,000</u>	<u>68,000</u>	<u>68,000</u>	<u>68,000</u>
TOTAL		<u>70,343</u>	<u>137,344</u>	<u>138,168</u>	<u>138,168</u>	<u>138,168</u>
<b>SEWAGE COLLECTING SYSTEM</b>						
Personal Services	SS8120.1	_____	_____	_____	_____	_____
Equipment	SS8120.2	_____	_____	_____	_____	_____
Contractual Exp.	SS8120.4	_____	_____	_____	_____	_____
TOTAL		_____	_____	_____	_____	_____
<b>SEWAGE TREATMENT AND DISPOSAL</b>						
Personal Services	SS8130.1	_____	_____	_____	_____	_____
Equipment	SS8130.2	_____	_____	_____	_____	_____
Contractual Exp.	SS8130.4	<u>154,050</u>	<u>158,688</u>	<u>169,390</u>	<u>169,390</u>	<u>169,390</u>
TOTAL		<u>154,050</u>	<u>158,688</u>	<u>169,390</u>	<u>169,390</u>	<u>169,390</u>
<b>UNDISTRIBUTED</b>						
<b>EMPLOYEE BENEFITS</b>						
State Retirement	SS9010.8	<u>13,084</u>	<u>15,021</u>	<u>15,515</u>	<u>15,515</u>	<u>15,515</u>
Social Security	SS9030.8	<u>3,514</u>	<u>4,846</u>	<u>4,909</u>	<u>4,909</u>	<u>4,909</u>
Compensation Ins.	SS9040.8	_____	_____	_____	_____	_____
Life Insurance	SS9045.8	_____	_____	_____	_____	_____
Unemployment Ins.	SS9050.8	_____	_____	_____	_____	_____
Disability Ins.	SS9055.8	_____	_____	_____	_____	_____
Hospital and Medical Insurance	SS9060.8	<u>33,789</u>	<u>38,256</u>	<u>31,734</u>	<u>31,734</u>	<u>31,734</u>
TOTAL		<u>50,387</u>	<u>58,123</u>	<u>52,158</u>	<u>52,158</u>	<u>52,158</u>

SEWER DISTRICT ESTIMATED REVENUES

ACCOUNTS	CODE	ACTUAL LAST YEAR 2013	BUDGET THIS YEAR AS AMENDED 20 14	BUDGET OFFICERS TENTATIVE BUDGET 20 15	PRE- LIMINARY BUDGET 20 15	ADOPTED 20 15
Sewer Rents	SS2120	<u>355,448</u>	<u>347,802</u>	<u>358,494</u>	<u>358,494</u>	<u>358,494</u>
Sewer Charges	SS2122	<u>104,095</u>	<u>104,000</u>	<u>104,000</u>	<u>104,000</u>	<u>104,000</u>
Interest and Penalties on Sewer Rents	SS2128	<u>12,098</u>	<u>10,000</u>	<u>10,000</u>	<u>10,000</u>	<u>10,000</u>
	SS2144					
Interest and Earnings	SS2401	<u>296</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
Sales of Scrap and Excess Materials	SS2650					
Minor Sales, Other Insurance	SS2655					
Recoveries	SS2680					
Other Compensation For Loss	SS2690					
State Aid for Operation and Maintenance of Sewage Disposal Plant	SS3901					
Other, Specify	SS					
<b>TOTAL</b>		<u><u>471,937</u></u>	<u><u>462,262</u></u>	<u><u>472,894</u></u>	<u><u>472,894</u></u>	<u><u>472,894</u></u> *
			<b>UNEXPENDED BALANCE</b>			
<b>UNEXPENDED BALANCE</b>			<u><u>59,174</u></u>	<u><u>58,650</u></u>	<u><u>58,650</u></u>	<u><u>58,650</u></u> *

\* Transfer to Page 1



# **APPENDIX N**

**Capital Improvement Plan  
(To be Inserted at a Later Date)**

# APPENDIX O

## Engineering Report Certification

## Appendix C: Engineering Report Certification (required)

### Engineering Report Certification

#### To Be Provided by the Professional Engineer Preparing the Report

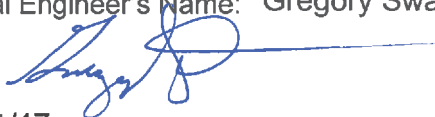
During the preparation of this Engineering Report, I have studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is being sought from the New York State Clean Water State Revolving Fund. In my professional opinion, I have recommended for selection, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account the cost of constructing the project or activity, the cost of operating and maintaining the project or activity over the life of the project or activity, and the cost of replacing the project and activity.

Title of Engineering Report: Town of Moriah Pump Station & Collection System  
Evaluation

Date of Report: 8/31/17

Professional Engineer's Name: Gregory Swart, PE

Signature:



Date: 8/31/17

# APPENDIX P

## Smart Growth Assessment



## Appendix D: Smart Growth Assessment Form (required)

### Smart Growth Assessment Form

#### New York State Clean Water State Revolving Fund (CWSRF)

This form should be completed by the applicant's project engineer or other design professional.<sup>2</sup>  
Please refer to EFC's "[Smart Growth Guidance](#)".<sup>3</sup>

##### Applicant Information

CWSRF Applicant: Town of Moriah

CWSRF No.: None to Date

Project Name: Town of Moriah Pump Station & Collection System Reconstruction

Is project construction complete?  Yes, date:

No

Project Summary: (provide a short project summary in plain language including the location of the area the project serves)

#### Section 1 – Screening Questions

##### 1. Prior Approvals

1A. Has the project been previously approved for CWSRF financing?  Yes  No

1B. If so, what was the CWSRF project number(s) for the prior approval(s)?

CWSRF No.:

Is the scope of the project substantially the same as that which was approved?  Yes  No

IF THE PROJECT WAS PREVIOUSLY APPROVED BY EFC'S BOARD AND THE SCOPE OF THE PROJECT HAS NOT MATERIALLY CHANGED, THE PROJECT IS **NOT** SUBJECT TO SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.

##### 2. New or Expanded Infrastructure

2A. Does the project add a new wastewater collection or treatment system?  Yes  No  
*Note: A new infrastructure project adds wastewater collection or treatment where none existed previously*

<sup>2</sup> If project construction is complete and the project was not previously financed through the CWSRF, an authorized municipal representative may complete and sign this assessment.

<sup>3</sup> Available at [www.efc.ny.gov/smartgrowth](http://www.efc.ny.gov/smartgrowth)

- 2B. Will the project result in an increase of the State Pollution Discharge Elimination System (SPDES) permitted flow capacity for an existing treatment system? *Note: An expanded infrastructure project results in an increase of the SPDES permitted flow capacity for the treatment system*  Yes  No

IF THE ANSWER IS “NO” TO BOTH “2A” AND “2B”, THE PROJECT IS **NOT** SUBJECT TO FURTHER SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.

### 3. Court or Administrative Consent Orders

- 3A. Is the project expressly required by a court or administrative consent order?  Yes  No
- 3B. If so, have you previously submitted the order to NYS EFC?  Yes  No  
If not, please attach.

## Section 2 – Additional Information Needed for Relevant Smart Growth Criteria

EFC has determined that the following smart growth criteria are relevant for CWSRF projects and that projects must meet each of these criteria to the extent practicable:

### 1. Uses or Improves Existing Infrastructure

- 1A. Does the project use or improve existing infrastructure?  Yes  No  
Please describe:

### 2. Serves a Municipal Center

Projects must serve an area in either 2A, 2B or 2C to the extent practicable.

- 2A. Does the project serve an area **limited** to one or more of the following municipal centers?
- i. A City or incorporated Village  Yes  No
  - ii. A central business district  Yes  No
  - iii. A main street  Yes  No
  - iv. A downtown area  Yes  No
  - v. A Brownfield Opportunity Area  Yes  No  
(for more information, go to [www.dos.ny.gov](http://www.dos.ny.gov) & search “Brownfield”)
  - vi. A downtown area of a Local Waterfront Revitalization Program Area  Yes  No  
(for more information, go to [www.dos.ny.gov](http://www.dos.ny.gov) and search “Waterfront Revitalization”)
  - vii. An area of transit-oriented development  Yes  No
  - viii. An Environmental Justice Area  Yes  No  
(for more information, go to [www.dec.ny.gov/public/899.html](http://www.dec.ny.gov/public/899.html))
  - ix. A Hardship/Poverty Area  Yes  No  
*Note: Projects that primarily serve census tracts and block numbering areas with a poverty rate of at least twenty percent according to the latest census data*

Please describe all selections:


2B. If the project serves an area located outside of a municipal center, does it serve an area located adjacent to a municipal center which has clearly defined borders, designated for concentrated development in a municipal or regional comprehensive plan and exhibit strong land use, transportation, infrastructure and economic connections to an existing municipal center? Yes No

Please describe:

2C. If the project is not located in a municipal center as defined above, is the area designated by a comprehensive plan and identified in zoning ordinance as a future municipal center? Yes No

Please describe and reference applicable plans:

**Signature Block:** By entering your name in the box below, you agree that you are authorized to act on behalf of the applicant and that the information contained in this Smart Growth Assessment is true, correct and complete to the best of your knowledge and belief.

Applicant: Town of Moriah	Phone Number 518 546-3341
Gregory Swart, PE Project Manager/Engineer AES Northeast, PLLC	
(Name & Title of Project Engineer or Design Professional or Authorized Municipal Representative)	
	8/31/17
(Signature)	(Date)

# *APPENDIX Q*

## *NYSDEC Report Comments & Response*



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Office of Environmental Quality, Region 5  
232 Golf Course Road, Warrensburg, NY 12885  
P: (518) 623-1203 | F: (518) 623-3603  
www.dec.ny.gov

***Sent via Email only – no hard copy will follow.***

October 16, 2017

Honorable Thomas R. Scozzafava  
Office of the Supervisor  
Town of Moriah  
Town Hall  
38 Park Place, Suite 1  
Port Henry, NY 12974  
[supervisor@townofmoriahny.gov](mailto:supervisor@townofmoriahny.gov)

**RE: Town of Moriah Collection System Evaluation  
August 31, 2017, by AES Northeast, PLLC  
Town of Moriah WWTP  
SPDES No. NY 002-2969  
Moriah (T), Essex County**

Dear Supervisor Scozzafava:

The New York State Department of Environmental Conservation (“the Department”) has received (8/31/17) and reviewed the above-referenced engineering report. The engineering report was funded by a 2015 Round 5 NYS Engineering Planning Grant (EPG) and was reviewed according to the applicable design standards, “Ten States Standards for Wastewater Facilities, 2014 Edition. The Department’s comments are as follows:

## **Engineering Report Comments**

1) Section 2.24 (a) of the report discusses the streams that the existing collection system crosses. The report does not detail the condition of the sewers relative to the stream crossings. It is not clear from the narrative if the sewers cross the stream in the bed of the stream, or if they are aerial crossings. More detail on these crossings and the condition of the sewers is needed. If the crossings are within the bed of the stream, the manholes on either side should be surveyed to see if there is I/I coming from the crossing. The sites of the crossings should be surveyed to check the physical condition of the sewers at this point. Please provide this information.

- 2) Section 2.3.1 of the report lists the various sewer districts that are tributary to the treatment plant. Does this include the former Village of Port Henry? If not, please add this sewer district to the list. It is noted that the report didn't evaluate this collection system.
- 3) Section 2.5.1 of the report discusses the collection of operator data from staff tasked with maintaining the collection system. A table detailing recent maintenance activity would be useful, particularly the locations of repeated maintenance issues. Please add a table or narrative detailing recent maintenance activity or issues.
- 4) Section 2.6.4 of the report discusses sump pump issues in the Grover Hills area. Apparently there is anecdotal information that residential sump pumps are connected to the municipal sewers. Presumably there is a sewer use ordinance for this area that would preclude this. Does the town plan on a sump pump survey to enforce the sewer use ordinance and remove this source of I/I?
- 5) Section 2.6.5 of the report discusses a section of the sewer main on Plank Road that is 1960's vintage vitreous clay tile. Is a camera investigation of this section of sewer planned? The report later discusses lining this sewer system, but typically a camera investigation is needed first to determine that the sewer is in good enough condition to be suitable for lining.
- 6) Section 2.6.6(a) of the report discusses manholes that were found without the appropriate benching and troughs in the Moriah Center area. This is of concern, as the manholes would not have met the applicable design standards, even during the 1980's when this section of sewer was apparently constructed. More investigation of the condition of this section of sewer should be performed to verify that there are no other issues with the construction of these sewers that do not meet the applicable design standards.
- 7) Section 2.6.6(b) of the report discusses the condition of Pump Station #2 (Titus Road). The discussion states that a high level alarm or an autodialer should be installed. It appears that the pump station presently has a red light alarm and is in an area that would not typically be notice. Some sort of remote alarm or SCADA system alarm should be installed on this pump station to prevent a sanitary sewer overflow from occurring during non-business hours (see 10 States Standards Section 46). Standby power for this pump station should also be discussed (see 10 States Standards Section 47). Please provide this information.
- 8) Section 2.6.7(a) of the report discusses the Switchback Road Trunk Sewer gravity sewer main. It appears from the discussion, that more I/I investigation is needed in this area. What is planned in terms of an I/I investigation of this section of sewer?

9) Section 2.6.7(b) of the report discusses the siphon station serving the Switchback Road Trunk Sewer. The report details that the siphon station is currently "unsafe" to operate because of the current configuration of the distribution box. Ten States Standards 57.1 discusses employee safety and states that, "adequate provision shall be made to effectively protect plant personnel and visitors from hazards. Then States Standards 42.23 discusses access and safety landings, and while it is meant for pump stations, it would also apply the siphon station. This section of the report is of particular concern. If there truly is an unsafe condition that would be a hazard to maintenance staff, it should be corrected immediately.

10) Section 2.6.8 of the report discusses the Gas Line Trunk sewer main. The gravity main was apparently originally a gas line made of iron piping. While iron pipe is commonly used in sewer force mains, it typically would not be used for a gravity sewer without some sort of lining due to the corrosive atmosphere in a sanitary sewer. This sewer line is of particular concern. A thorough investigation of the condition of this steel piping is needed to verify that it has enough structural integrity to be lined, as was recommended and proposed in the report.

11) Section 2.6.9(b) of the report discusses the current condition of Pump Station #1 on Tarbell Hill Road. This part of the report identifies another serious safety hazard to maintenance staff, which should be corrected immediately. 10 States Standards section 41.4 states that, "adequate provision shall be made to effectively protect maintenance personnel from hazards." In addition, the report states that the pump station does not meet the current 10 States Standards sections 46 and 47 covering alarms and emergency operation. The necessary upgrades to meet current standards must be part of the final design of the project.

12) A draft construction schedule for the proposed repairs and upgrades detailed in the report would be useful. Please provide this information.

13) The engineering report should provide details on the ownership of the wastewater treatment plant and the collection system, since the Village of Port Henry dissolved and merged with the Town of Moriah. Please also include the population served in each of sewer districts #1 and #2, and the debt structures of the existing districts.

#### **Comments from 10 States Standards**

1) Ten States Standards Section 11.12 discusses flows and organic loadings. While the report has some discussion of this aspect of the proposed upgrades, more is needed. For example, some of the blockages that have led to overflows of the sanitary sewers have been attributed to grease. Discussion is needed as to the areas

contributing grease to the system (restaurants for example) and the preventative measures that have been taken to prevent these types of issues (requiring grease traps on restaurants, code inspection, etc.) Please provide this information.

2) Ten States Standards Section 11.2 discusses a description of the planning area and existing and potential future service areas. The report does not discuss future service areas that may potentially be added to the sewage collection system. Are there potential future service areas? Please provide this information.

3) Ten States Standards Section 11.24 discusses hydraulic capacity for wastewater facilities. There is discussion in the report, but it is not clear that the siphon station and the two pump stations are capable of meeting design peak hourly and design peak instantaneous flow. Please provide this information.

4) Ten States Standards Section 11.252(c) discusses the impact of industrial sources on existing collection systems. Are there industrial sources that are connected to the existing collection system that are, or may potentially, impact the collection system or wastewater treatment plant? Please provide this information.

5) Ten States Standards Section 11.28(d)1 discusses the consideration of potential odor issues during the design of wastewater treatment facilities. Have there been odor issues associated with the existing siphon station and the two pump stations? If so, how will this be mitigated in the proposed upgrades?

6) Ten States Standards Section 11.28 discusses treatment during construction. Presumably temporary pumping equipment would be installed to move wastewater around areas of sewers or other infrastructure during construction, but the report did not provide details. How will the transport of wastewater be handled during sewer construction and upgrades to the siphon station and two pump stations?

7) Ten States Standards section 35 discusses inverted siphons. Will the siphon station meet the terms of section 35 following construction for velocities, as well as the other details specified in this section after the upgrade?

8) Ten States Standards section 41.3 discusses grit and the design of pump stations to avoid operational problems from the accumulation of grit. Are the existing pumping stations and siphon station subject to issues associated with grit accumulation? If so, how will the upgrades alleviate this condition?

9) Ten States Standards sections 46 and 47 discuss pump station alarms, and emergency operation. This was discussed above. Please provide the requested details.



Honorable Thomas R. Scozzafava  
Page 5  
October 16, 2017

Please have your engineering consultant provide a response to these comments. Given the need for a long-term approach to the projects required under the order on consent, a meeting of all parties may be useful. Should you have any questions or wish to meet, please give me a call at 518-623-1221, or by e-mail at [robert.streeter@dec.ny.gov](mailto:robert.streeter@dec.ny.gov).

Sincerely,



Robert W. Streeter  
Environmental Program Specialist 2  
Division of Water

RWS:th

ec: Joseph M. Zalewski, P.E., Regional Engineer  
Michelle Crew, Regional Attorney  
Tammy Venne, Region 5 DOW  
Jason Denno, P.E., NYSEFC

## Engineering Report Comments

- 1.) Section 2.24 (a) of the report discusses the streams that the existing collection system crosses. The report does not detail the condition of the sewers relative to the stream crossings. It is not clear from the narrative if the sewers cross the stream in the bed of the stream, or if they are aerial crossings. More detail on these crossings and the condition of the sewers is needed. If the crossings are within the bed of the stream, the manholes on either side should be surveyed to see if there is I/I coming from the crossing. The sites of the crossings should be surveyed to check the physical condition of the, sewers at this point. Please provide this information.

### AES Response:

*The sewer main (siphon line) was constructed in the road bed above the culverts that make up the bridge, therefore, the main is above the water surface. Actual inspection of the sewer main is very difficult, if not impossible, due to the configuration of the siphon piping, manholes, and siphon box. The intent of the proposed capital projects is to replace the existing siphon diversion box as well as add cleanout points to the downstream main. Once that work is complete, a thorough cleaning and inspection of the main can take place. It is expected that while there may be settled debris in the sewer main and that needs to be removed, the existing pipe is PVC that is only about 30 years old and should be in relatively good condition. If any deficiencies are found during the subsequent inspection they can be corrected.*

*For the other sewer mains in the collection system that have not been designated for replacement and/or repair in this or the 2015 report, the sewer mains are expected to be in relatively good condition based on age and material. The report recommends that the Town continue inspections of the sewer system in conjunction with the Town's I&M program and that can and should include sewer mains under brooks/streams. The documentation of those inspections is outside of the scope of this report.*

- 2.) Section 2.3.1 of the report lists the various sewer districts that are tributary to the treatment plant. Does this include the former Village of Port Henry? If not, please add this sewer district to the list. It is noted that the report didn't evaluate this collection system.

### AES Response:

*All sewer users outside of the former Village boundaries are in Sewer District #1. The former Village users are in Sewer District #2. The report will be corrected to reflect these updates.*

- 3.) Section 2.5.1 of the report discusses the collection of operator data from staff tasked with maintaining the collection system. A table detailing recent maintenance activity would be useful, particularly the locations of repeated maintenance issues. Please add a table or narrative detailing recent maintenance activity or issues.

### AES Response:

*A list of some of the operator's inspection checklist has been included. The Operator reported that there have been no major issues to report as of late. Other relevant data have been included in other sections of the report.*

- 4.) Section 2.6.4 of the report discusses sump pump issues in the Grover Hills area. Apparently, there is anecdotal information that residential sump pumps are connected to the municipal sewers. Presumably there is a sewer use ordinance for this area that would preclude this. Does the town plan on a sump pump survey to enforce the sewer use ordinance and remove this source of I/I?

### AES Response:

*The Town's sewer use ordinances does prohibit sump pump connections.*

- 5.) Section 2.6.5 of the report discusses a section of the sewer main on Plank Road that is 1960's vintage vitreous clay tile. Is a camera investigation of this section of sewer planned? The report later discusses lining this sewer system, but typically a camera investigation is needed first to determine that the sewer is in good

enough condition to be suitable for lining.

**AES Response:**

*The option for slip lining was provided to provide multiple alternatives (a report requirement), however due to the age and the problems in the area, the Town has elected to select the report's recommended option to replace the main. Therefore, further investigation is not required.*

- 6.) Section 2.6.6(a) of the report discusses manholes that were found without the appropriate benching and troughs in the Moriah Center area. This is of concern, as the manholes would not have met the applicable design standards, even during the 1980's when this section of sewer was apparently constructed. More investigation of the condition of this section of sewer should be performed to verify that there are no other issues with the construction of these sewers that do not meet the applicable design standards.

**AES Response:**

*The Town staff will continue with these inspections and provide corrections as they are found. The work can be completed in conjunction with the Town's I&M plan. The documentation of this information is outside of the scope of this report.*

- 7.) Section 2.6.6(b) of the report discusses the condition of Pump Station #2 (Titus Road). The discussion states that a high-level alarm or an autodialer should be installed. It appears that the pump station presently has a red-light alarm and is in an area that would not typically be notice. Some sort of remote alarm or SCADA system alarm should be installed on this pump station to prevent a sanitary sewer overflow from occurring during non-business hours (see 10 States Standards Section 46). Standby power for this pump station should also be discussed (see 10 States Standards Section 47). Please provide this information.

**AES Response:**

*The Town plans to relocate the light to a more visible area. A remote dialer or connection to SCADA can be added during the proposed capital upgrades of the Tarbell Hill pump station. The pump station does have an on-site backup generator.*

- 8.) Section 2.6.7(a) of the report discusses the Switchback Road Trunk Sewer gravity sewer main. It appears from the discussion, that more I/I investigation is needed in this area. What is planned in terms of an I/I investigation of this section of sewer?

**AES Response:**

*The majority of flow into the Switchback Road Trunk Sewer comes from the Mineville and Witherbee area. Both of which were documented in the 2015 AES report. Any deficient sewer mains upstream of this area have already been slated for repair/replacement. As the majority of I&I in the area is expected to come from these sewer mains the Town plans to pursue the recommended upgrades. Once these upgrades are completed, flow monitoring should be performed on the switchback line to confirm that the line has adequate capacity for flows received. If flows are higher than expected, additional I&I studies can be performed.*

- 9.) Section 2.6.7(b) of the report discusses the siphon station serving the Switchback Road Trunk Sewer. The report details that the siphon station is currently "unsafe" to operate because of the current configuration of the distribution box. Ten States Standards 57.1 discusses employee safety and states that, "adequate provision shall be made to effectively protect plant personnel and visitors from hazards. Then States Standards 42.23 discusses access and safety landings, and while it is meant for pump stations, it would also apply the siphon station. This section of the report is of particular concern. If there truly is an unsafe condition that would be a hazard to maintenance staff, it should be corrected immediately.

**AES Response:**

*The Town agrees that this box needs to be replaced. As the Town prioritizes the proposed construction projects, this work will be near the top of the list and the Town plans to pursue funding in the near future to correct it.*

- 10.) Section 2.6.8 of the report discusses the Gas Line Trunk sewer main. The gravity main was apparently originally a gas line made of iron piping. While iron pipe is commonly used in sewer force mains, it typically would not be used for a gravity sewer without some sort of lining due to the corrosive atmosphere in a sanitary

sewer. This sewer line is of particular concern. A thorough investigation of the condition of this steel piping is needed to verify that it has enough structural integrity to be lined, as was recommended and proposed in the report.

**AES Response:**

*The report incorrectly identified this main as a former gas line, it is in fact a former steel water line installed by the federal government for a war project. The report will be corrected and the line identified as Federal Water Line Trunk Sewer Main. Upon further discussion with the Town, the steel main is nearly 1" thick. Whenever the Town has worked on this main (lateral connections, etc.) they have found that the steel is in very good condition. Therefore, additional testing is not likely warranted. The Town will continue to inspect this main as part of its I&M program and will correct any deficiencies found. Documenting this work is outside of the scope of this report.*

- 11.) Section 2.6.9(b) of the report discusses the current condition of Pump Station #1 on Tarbell Hill Road. This part of the report identifies another serious safety hazard to maintenance staff, which should be corrected immediately. 10 States Standards section 41.4 states that, "adequate provision shall be made to effectively protect maintenance personnel from hazards." In addition, the report states that the pump station does not meet the current 10 States Standards sections 46 and 47 covering alarms and emergency operation. The necessary upgrades to meet current standards must be part of the final design of the project.

**AES Response:**

*The Town will correct the safety hazard. From further discussion with the Town, the pump station is served by a portable backup generator and has an audible alarm. A remote dialer or connection to SCADA can be added during the proposed capital upgrades of the pump station.*

- 12.) A draft construction schedule for the proposed repairs and upgrades detailed in the report would be useful. Please provide this information.

**AES Response:**

*A final schedule with dates is in progress. It is the Town's desire to work with DEC to prioritize the recommended projects (from this and the 2015 report) and develop a schedule that is both realistic and acceptable to the department. Providing specific dates at this time would be premature. In general terms, it is expected that funding and design will take 2-3 years and construction will take 1 year.*

- 13.) The engineering report should provide details on the ownership of the wastewater treatment plant and the collection system, since the Village of Port Henry dissolved and merged with the Town of Moriah. Please also include the population served in each of sewer districts #1 and #2, and the debt structures of the existing districts.

**AES Response:**

*Table 5.2 will be updated in the report to reflect the following:  
SD #1: 916 users, \$2,442,130 in debt, \$420/year user fee of which \$180 is debt.  
SD #2: 591 users, \$3,939,423 in debt, \$420/year user fee of which \$180 is debt.  
Both districts share the cost of the wastewater treatment plant.*

*Please note, only SD #1 users will bear the costs of the proposed upgrades, therefore Table 5.2 only includes these users in the calculations.*

**Comments from 10 States Standards**

- 1.) Ten States Standards Section 11.12 discusses flows and organic loadings. While the report has some discussion of this aspect of the proposed upgrades, more is needed. For example, some of the blockages that have led to overflows of the sanitary sewers have been attributed to grease. Discussion is needed as to the area contributing grease to the system (restaurants for example) and the preventative measures that have been taken to prevent these types of issues (requiring grease traps on restaurants, code inspection, etc.) Please provide this information.



**AES Response:**

*There are restaurants as well as the Moriah Shock prison with cooking facilities that can contribute grease to the system. The Town's sewer use ordinance requires grease traps on all applicable restaurants. The Town will work to identify all users that may require grease traps and work with those owners to ensure that they are adhering to a proper maintenance schedule. This work can be complete as part of the Town's I&M program. The documentation of this work is outside of the scope of this report.*

- 2.) Ten States Standards Section 11.2 discusses a description of the planning area and existing and potential future service areas. The report does not discuss future service areas that may potentially be added to the sewage collection system. Are there potential future service areas? Please provide this information.

**AES Response:**

*There are a number of residential streets that are on the Town's priority list for future sewer service. Those streets are Fisk Road, Lake View, Whitney, Furnace Road, and Ensign Pond Road. Although the design and layout of these future service areas is outside of the scope of this report, a table with estimated design flows has been included which can be incorporated into future design projects.*

- 3.) Ten States Standards Section 11.24 discusses hydraulic capacity for wastewater facilities. There is discussion in the report, but it is not clear that the siphon station and the two pump stations are capable of meeting design peak hourly and design peak instantaneous flow. Please provide this information.

**AES Response:**

*The 6" main line for the siphon has the capacity to handle the average day and peak hour flows based on the flow data gathered from the operator records.*

*The replacement pumps proposed for Tarble Hill will be sized to handle the peak hour flow.*

*The replacement pumps already installed in the Titus Road pump station have been sized for peak hour flow.*

- 4.) Ten States Standards Section 11.252(c) discusses the impact of industrial sources on existing collection systems. Are there industrial sources that are connected to the existing collection system that are, or may potentially, impact the collection system or wastewater treatment plant? Please provide this information.

**AES Response:**

*There are two industrial users in the system, Essex Industries, and Pretech. The 2015 report discussed potential future expansion of the Moriah Industrial Park.*

- 5.) Ten States Standards Section 11.28(d) 1 discusses the consideration of potential odor issues during the design of wastewater treatment facilities. Have there been odor issues associated with the existing siphon station and the two pump stations? If so, how will this be mitigated in the proposed upgrades?

**AES Response:**

*There have been no reported odor issues at any of these facilities.*

- 6.) Ten States Standards Section 11.28 discusses treatment during construction. Presumably temporary pumping equipment would be installed to move wastewater around areas of sewers or other infrastructure during construction, but the report did not provide details. How will the transport of wastewater be handled during sewer construction and upgrades to the siphon station and two pump stations?

**AES Response:**

*Temporary bypass pumps would be used with piping connected from the nearest upstream manhole to the nearest downstream manhole around the proposed work. The piping would be above grade, installed with protections from traffic as necessary.*

- 7.) Ten States Standards section 35 discusses inverted siphons. Will the siphon station meet the terms of section 35 following construction for velocities, as well as the other details specified in this section after the upgrade?

**AES Response:**

*Based on the flows recorded by the operator, the peak hour and average day flows do not achieve the required velocities for flushing. As the pipe sizes are already at a minimum, the Town may have to increase cleaning frequencies once the upgrades are complete and that allow for better access and cleaning. The relocated diversion box will be placed at the best possible location to achieve the maximum head for the system. The diversion box will be arranged to allow for safe access with cleaning and inspection capabilities and the ability to divert flow from one barrel into the other. In addition, the cleanouts added to the line will aid in cleaning.*

- 8.) Ten States Standards section 41.3 discusses grit and the design of pump stations to avoid operational problems from the accumulation of grit. Are the existing pumping stations and siphon station subject to issues associated with grit accumulation? If so, how will the upgrades alleviate this condition?

**AES Response:**

*The siphon station is protected from grit by removal at the existing screening plant building. The pump stations are likely subject to grit but the pumps in Titus Road and the proposed pumps for Tarbel Hill are/will be capable of handling grit. A flush valve is proposed on one of the pumps to help keep grit in suspension and pumped out. No additional grit removal is planned.*

- 9.) Ten States Standards sections 46 and 47 discuss pump station alarms, and emergency operation. This was discussed above. Please provide the requested details.

**AES Response:**

*See above.*



September 14, 2017

Ms. Tamara Venne, Environmental Program Specialist  
NYS Department of Environmental Conservation  
1115 Route 86  
Ray Brook, NY 12977

**RE: Town of Moriah  
Collection System Evaluation  
NYSEFC Engineering Planning Grant (EPG)  
Project No. 46088  
AES Project No. 4410**

Dear Tammy:

Submitted herein is the Collection System Evaluation Engineering Planning Grant (EPG) for the Town of Moriah, for your review.

As a reminder, the Town was awarded an Engineering Planning Grant (EPG) from New York State Environmental Facilities Corporation (EFC). The EPG was scoped to cover two town pump station and Switchback Road Siphon. After the scoping of the EPG, the Town signed an Order with the Department with several items for reporting in addition to the scope of the EPG. AES agreed to increase the scope of the EPG to cover as many items as possible on the Town's Order. AES was able to increase the scope to include a CPE for the remainder of the collection system not previously covered by a 2015 AES report. The report submitted on August 31, 2017 to you via email is this report. I would like to point out a few key points.

This report does not contain the I&M program, the Town is providing that separately. Some of the data from this report is needed to help complete the I&M program.

The report is not a complete inspection report. AES worked with available data and targeted site inspections to assess the general condition of the collection system and make recommendations for capital improvements. It is important to understand that the EPG, no matter the scope of work, is intended to develop a capital project, not simply identify maintenance items. In the report, we did try to identify specific maintenance items or repair projects that are recommended, but do not rise to the level of a capital project. Those recommendations can be found in the inspection mini inspection reports included in the appendices. The collection system investigated is in relatively good condition, and with a few key upgrades, is poised to serve the Town's needs. It is recommended that the Town, in conjunction with the I&M program, continue to inspect the collection system and make minor repairs before small deficiencies become large problems. Also, the scope of the report was first limited and then expanded in an effort to assist the Town, and as such an I&I study was not able to be included. Limited flow monitoring and analysis was performed to allow for assessment of the pump stations. If additional flow monitoring is required, a separate report is recommended.

The report does not evaluate the collection system from the former Village of Port Henry. The Town did not acquire the Village's collection system until after the Order and report scope were defined.

One portion of the Order was to provide a Capital Improvement Plan, essentially a schedule of compliance through which the Town will complete the capital projects outlined in the 2015 AES report and this AES report. AES is prepared to submit such a schedule; however, it has been omitted from this report as we believe that the schedule for such a project schedule should not be established without care and without all involved parties having a say. The undertaking for these projects will cost an estimated \$10,000,000+. Like many of the communities in the area, the Town of Moriah has a small population and cannot simply afford to spend that sum without proper planning. AES respectfully asks that the Department allow the Town to develop a schedule that is workable and includes realistic funding scenarios. This is something that can now be completed as the full scope of work is known. It is suggested that a meeting between the Town, AES, the Department, EFC (and/or any other funding agencies), etc. be arranged to kick off this process. Once agreed to, a formal schedule can be submitted for approval.

If you have any questions, please feel free to contact me at your convenience.

Sincerely,



Gregory M. Swart, P.E.



## APPENDIX C: REFERENCES

**CERTIFICATION OF EXPERIENCE**

I, \_\_\_\_\_ HEREBY CERTIFY THAT (COMPANY \_\_\_\_\_  
\_\_\_\_\_ HAS PERFORMED THE FOLLOWING WORK WITHING THE LAST  
THREE YEARS UNLESS SPECIFIED DIFFERENTLY IN THE SPECIFICATION:

NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ EMAIL ADDRESS: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

## **APPENDIX D: CONFLICT OF INTEREST STATEMENT**

## APPENDIX D: CONFLICT OF INTEREST STATEMENT

\_\_\_\_\_ (“Respondent”)

### Conflict of Interest Statement

The owner(s), corporate members or employees of [Respondent], shall derive any personal profit or gain, directly or indirectly, by reason of his or her participation with the [the Town of Lewis]. Each individual shall disclose to the [the Town of Lewis] any personal interest or direct relationship which he or she may have and shall refrain from participation in any decision making in related manners.

Any owner, corporate member or employee of [Respondent] who is an officer, board member, a committee member or staff member of a related organization shall identify his or her affiliation with such agency or agencies; further, in connection with any policy committee or board action specifically associated with [the Town of Lewis], he/she shall not participate in the decision affecting that entity and the decision must be made and/or ratified by the full board. At this time, I am a Board member, a committee member, or an employee of the following organizations/companies:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Now this is to certify that I, except as described below, am not now nor at any time during the past year have been:

- 1) A participant, directly or indirectly, in any arrangement, agreement, investment, or other activity with any vendor, supplier, or other party; doing business with the [the Town of Lewis] which has resulted or could result in person benefit to me.
- 2) A recipient, directly or indirectly, of any salary payments or loans or gifts of any kind or any free service or discounts or other fees from or on behalf of any person or organization engaged in any transaction with the [the Town].

Any exceptions to 1 or 2 above are stated below with a full description of the transactions and of the interest, whether direct or indirect, which I have (or have had during the past year) in the persons or organizations having transactions with the [the Town of Lewis].

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Respondent:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Printed name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_



## **APPENDIX E: CERTIFICATE OF AUTHORITY**

**CERTIFICATE OF AUTHORITY**

I, \_\_\_\_\_  
(Officer other than officer executing proposal documents)

certify that I am the \_\_\_\_\_ of the \_\_\_\_\_  
(Title) (Name of Contractor)

\_\_\_\_\_ a corporation, duly organized and in good standing under the  
\_\_\_\_\_  
(Law under which organized, e.g., the New York Business Corporation Law)

named in the foregoing agreement; that \_\_\_\_\_  
(Person executing proposal documents)

who signed said agreement on behalf of the Contractor was, at the time of execution,  
\_\_\_\_\_ of the Contractor; that said agreement was duly signed for  
(Title of such person)

and in behalf of said Contractor by authority of its Board of Directors, thereunto duly authorized, and that  
such authority is in full force and effect at the date hereof.

\_\_\_\_\_  
Signature Corporate Seal

STATE OF NEW YORK ) SS.:  
COUNTY OF ESSEX )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_  
\_\_\_\_\_ to me known, and known to me to be the \_\_\_\_\_  
(Title) of \_\_\_\_\_ the corporation described in  
and which executed the above certificate, who being by me duly sworn did depose and say that he, the said \_\_\_\_\_  
\_\_\_\_\_ resides at \_\_\_\_\_, and that he is \_\_\_\_\_  
\_\_\_\_\_ of said corporation and knows the corporate seal of the said corporation; that the  
seal affixed to the above certificate is such corporate seal and that it was so affixed by order of the Board of  
Directors of said corporation, and that he signed his name thereto by like order.

\_\_\_\_\_  
Notary Public County

**APPENDIX F: VENDOR RESPONSIBILITY QUESTIONNAIRE**

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

You have selected the For-Profit Non-Construction questionnaire which may be printed and completed in this format or, for your convenience, may be completed online using the New York State VendRep System.

**COMPLETION & CERTIFICATION**

The person(s) completing the questionnaire must be knowledgeable about the vendor's business and operations. An owner or officer must certify the questionnaire and the signature must be notarized.

**NEW YORK STATE VENDOR IDENTIFICATION NUMBER (VENDOR ID)**

The Vendor ID is a ten-digit identifier issued by New York State when the vendor is registered on the Statewide Vendor File. This number must now be included on the questionnaire. If the business entity has not obtained a Vendor ID, contact the IT Service Desk at [ITServiceDesk@osc.state.ny.us](mailto:ITServiceDesk@osc.state.ny.us) or call 866-370-4672.

**DEFINITIONS**

All underlined terms are defined in the "New York State Vendor Responsibility Definitions List," found at [www.osc.state.ny.us/vendrep/documents/questionnaire/definitions.pdf](http://www.osc.state.ny.us/vendrep/documents/questionnaire/definitions.pdf). These terms may not have their ordinary, common or traditional meanings. Each vendor is strongly encouraged to read the respective definitions for any and all underlined terms. By submitting this questionnaire, the vendor agrees to be bound by the terms as defined in the "New York State Vendor Responsibility Definitions List" existing at the time of certification.

**RESPONSES**

Every question must be answered. Each response must provide all relevant information which can be obtained within the limits of the law. However, information regarding a determination or finding made in error which was subsequently corrected is not required. Individuals and Sole Proprietors may use a Social Security Number but are encouraged to obtain and use a federal Employer Identification Number (EIN).

**REPORTING ENTITY**

Each vendor must indicate if the questionnaire is filed on behalf of the entire Legal Business Entity or an Organizational Unit within or operating under the authority of the Legal Business Entity and having the same EIN. Generally, the Organizational Unit option may be appropriate for a vendor that meets the definition of "Reporting Entity" but due to the size and complexity of the Legal Business Entity, is best able to provide the required information for the Organizational Unit, while providing more limited information for other parts of the Legal Business Entity and Associated Entities.

**ASSOCIATED ENTITY**

An Associated Entity is one that owns or controls the Reporting Entity or any entity owned or controlled by the Reporting Entity. However, the term Associated Entity does not include "sibling organizations" (i.e., entities owned or controlled by a parent company that owns or controls the Reporting Entity), unless such sibling entity has a direct relationship with or impact on the Reporting Entity.

**STRUCTURE OF THE QUESTIONNAIRE**

The questionnaire is organized into eleven sections. Section I is to be completed for the Legal Business Entity. Section II requires the vendor to specify the Reporting Entity for the questionnaire. Section III refers to the individuals of the Reporting Entity, while Sections IV-VIII require information about the Reporting Entity. Section IX pertains to any Associated Entities, with one question about their Officials/Owners. Section X relates to disclosure under the Freedom of Information Law (FOIL). Section XI requires an authorized contact for the questionnaire information.

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

<b>I. LEGAL BUSINESS ENTITY INFORMATION</b>			
<u>Legal Business Entity Name*</u>		<u>EIN</u>	
Address of the <u>Principal Place of Business</u> (street, city, state, zip code)		<u>New York State Vendor Identification Number</u>	
		Telephone ext.	Fax
Email		Website	
Additional <u>Legal Business Entity</u> Identities: If applicable, list any other <u>DBA</u> , <u>Trade Name</u> , <u>Former Name</u> , Other Identity, or <u>EIN</u> used in the last five (5) years and the status (active or inactive).			
Type	Name	EIN	Status
1.0 <u>Legal Business Entity</u> Type – Check appropriate box and provide additional information:			
<input type="checkbox"/> <u>Corporation</u> (including <u>PC</u> )		Date of Incorporation	
<input type="checkbox"/> <u>Limited Liability Company</u> ( <u>LLC</u> or <u>PLLC</u> )		Date of Organization	
<input type="checkbox"/> <u>Partnership</u> (including <u>LLP</u> , <u>LP</u> or <u>General</u> )		Date of Registration or Establishment	
<input type="checkbox"/> <u>Sole Proprietor</u>		How many years in business?	
<input type="checkbox"/> Other		Date Established	
If Other, explain:			
1.1 Was the <u>Legal Business Entity</u> formed or incorporated in New York State?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If 'No,' indicate jurisdiction where <u>Legal Business Entity</u> was formed or incorporated and attach a <u>Certificate of Good Standing</u> from the applicable jurisdiction or provide an explanation if a <u>Certificate of Good Standing</u> is not available.			
<input type="checkbox"/> United States State _____			
<input type="checkbox"/> Other Country _____			
Explain, if not available:			
1.2 Is the <u>Legal Business Entity</u> publicly traded?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," provide <u>CIK Code</u> or Ticker Symbol			
1.3 Does the <u>Legal Business Entity</u> have a <u>DUNS</u> Number?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," Enter <u>DUNS</u> Number			

\*All underlined terms are defined in the "New York State Vendor Responsibility Definitions List," which can be found at [www.osc.state.ny.us/vendrep/documents/questionnaire/definitions.pdf](http://www.osc.state.ny.us/vendrep/documents/questionnaire/definitions.pdf).



**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

<b>I. LEGAL BUSINESS ENTITY INFORMATION</b>		
1.4 If the <u>Legal Business Entity's Principal Place of Business</u> is not in New York State, does the <u>Legal Business Entity</u> maintain an office in New York State? (Select "N/A," if <u>Principal Place of Business</u> is in New York State.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No  <input type="checkbox"/> N/A
If "Yes," provide the address and telephone number for one office located in New York State.		
1.5 Is the <u>Legal Business Entity</u> a New York State certified <u>Minority-Owned Business Enterprise (MBE)</u> , <u>Women-Owned Business Enterprise (WBE)</u> , <u>New York State Small Business (SB)</u> or a federally certified <u>Disadvantaged Business Enterprise (DBE)</u> ? If "Yes," check all that apply: <ul style="list-style-type: none"> <li><input type="checkbox"/> New York State certified <u>Minority-Owned Business Enterprise (MBE)</u></li> <li><input type="checkbox"/> New York State certified <u>Women-Owned Business Enterprise (WBE)</u></li> <li><input type="checkbox"/> <u>New York State Small Business (SB)</u></li> <li><input type="checkbox"/> Federally certified <u>Disadvantaged Business Enterprise (DBE)</u></li> </ul>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
1.6 Identify <u>Officials</u> and <u>Principal Owners</u> , if applicable. For each person, include name, title and percentage of ownership. Attach additional pages if necessary. If applicable, reference to relevant SEC filing(s) containing the required information is optional.		
Name	Title	Percentage Ownership <i>(Enter 0% if not applicable)</i>

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

<b>II. REPORTING ENTITY INFORMATION</b>	
<p>2.0 The <u>Reporting Entity</u> for this questionnaire is:</p> <p>Note: Select only one.</p> <p><input type="checkbox"/> <u>Legal Business Entity</u></p> <p><i>Note: If selecting this option, "Reporting Entity" refers to the entire Legal Business Entity for the remainder of the questionnaire. (SKIP THE REMAINDER OF SECTION II AND PROCEED WITH SECTION III.)</i></p> <p><input type="checkbox"/> <u>Organizational Unit within and operating under the authority of the Legal Business Entity</u></p> <p>SEE DEFINITIONS OF "<u>REPORTING ENTITY</u>" AND "<u>ORGANIZATIONAL UNIT</u>" FOR ADDITIONAL INFORMATION ON CRITERIA TO QUALIFY FOR THIS SELECTION.</p> <p><i>Note: If selecting this option, "Reporting Entity" refers to the Organizational Unit within the Legal Business Entity for the remainder of the questionnaire. (COMPLETE THE REMAINDER OF SECTION II AND ALL REMAINING SECTIONS OF THIS QUESTIONNAIRE.)</i></p>	
<b>IDENTIFYING INFORMATION</b>	
a) <u>Reporting Entity Name</u>	
Address of the <u>Primary Place of Business</u> (street, city, state, zip code)	Telephone  ext.
b) Describe the relationship of the <u>Reporting Entity</u> to the <u>Legal Business Entity</u>	
c) Attach an <u>organizational chart</u>	
d) Does the Reporting Entity have a <u>DUNS</u> Number?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," enter <u>DUNS</u> Number	
e) Identify the designated manager(s) responsible for the business of the <u>Reporting Entity</u> . <i>For each person, include name and title. Attach additional pages if necessary.</i>	
Name	Title

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

**INSTRUCTIONS FOR SECTIONS III THROUGH VII**

For each "Yes," provide an explanation of the issue(s), relevant dates, the government entity involved, any remedial or corrective action(s) taken and the current status of the issue(s). For each "Other," provide an explanation which provides the basis for not definitively responding "Yes" or "No." Provide the explanation at the end of the section or attach additional sheets with numbered responses, including the Reporting Entity name at the top of any attached pages.

<b>III. LEADERSHIP INTEGRITY</b>	
<i>Within the past five (5) years, has any current or former reporting entity official or any individual currently or formerly having the authority to sign, execute or approve bids, proposals, contracts or supporting documentation on behalf of the reporting entity with any government entity been:</i>	
3.0 <u>Sanctioned</u> relative to any business or professional permit and/or license?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other
3.1 <u>Suspended, debarred, or disqualified</u> from any government contracting process?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other
3.2 The subject of an <u>investigation</u> , whether open or closed, by any <u>government entity</u> for a civil or criminal violation for any business-related conduct?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other
3.3 Charged with a misdemeanor or felony, indicted, granted immunity, convicted of a crime or subject to a <u>judgment</u> for: a) Any business-related activity; or b) Any crime, whether or not business-related, the underlying conduct of which was related to truthfulness?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other
For each "Yes" or "Other" explain:	

<b>IV. INTEGRITY – CONTRACT BIDDING</b>	
<i>Within the past five (5) years, has the reporting entity:</i>	
4.0 Been <u>suspended or debarred</u> from any <u>government contracting process</u> or been <u>disqualified</u> on any government procurement, permit, license, concession, franchise or lease, including, but not limited to, <u>debarment</u> for a violation of New York State Workers' Compensation or Prevailing Wage laws or New York State Procurement Lobbying Law?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.1 Been subject to a denial or revocation of a government prequalification?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.2 Been denied a contract award or had a bid rejected based upon a <u>non-responsibility finding</u> by a <u>government entity</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.3 Had a low bid rejected on a <u>government contract</u> for failure to <u>make good faith efforts</u> on any <u>Minority-Owned Business Enterprise, Women-Owned Business Enterprise or Disadvantaged Business Enterprise goal or statutory affirmative action requirements</u> on a previously held contract?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.4 Agreed to a voluntary exclusion from bidding/contracting with a <u>government entity</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.5 Initiated a request to withdraw a bid submitted to a <u>government entity</u> in lieu of responding to an information request or subsequent to a formal request to appear before the <u>government entity</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
For each "Yes," explain:	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

<b>V. INTEGRITY – CONTRACT AWARD</b>	
<i>Within the past five (5) years, has the reporting entity:</i>	
5.0 Been <u>suspended</u> , cancelled or <u>terminated for cause</u> on any <u>government contract</u> including, but not limited to, a <u>non-responsibility finding</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.1 Been subject to an <u>administrative proceeding</u> or civil action seeking specific performance or restitution in connection with any <u>government contract</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.2 Entered into a formal monitoring agreement as a condition of a contract award from a <u>government entity</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
For each “Yes,” explain:	

<b>VI. CERTIFICATIONS/LICENSES</b>	
<i>Within the past five (5) years, has the reporting entity:</i>	
6.0 Had a revocation, <u>suspension</u> or <u>disbarment</u> of any business or professional permit and/or license?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6.1 Had a denial, decertification, revocation or forfeiture of New York State certification of <u>Minority-Owned Business Enterprise</u> , <u>Women-Owned Business Enterprise</u> or federal certification of <u>Disadvantaged Business Enterprise</u> status for other than a change of ownership?	<input type="checkbox"/> Yes <input type="checkbox"/> No
For each “Yes,” explain:	

<b>VII. LEGAL PROCEEDINGS</b>	
<i>Within the past five (5) years, has the reporting entity:</i>	
7.0 Been the subject of an <u>investigation</u> , whether open or closed, by any <u>government entity</u> for a civil or criminal violation?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.1 Been the subject of an indictment, grant of immunity, <u>judgment</u> or conviction (including entering into a plea bargain) for conduct constituting a crime?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.2 Received any OSHA citation and Notification of Penalty containing a violation classified as <u>serious or willful</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.3 Had a <u>government entity</u> find a willful prevailing wage or supplemental payment violation or any other willful violation of New York State Labor Law?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.4 Entered into a consent order with the New York State Department of Environmental Conservation, or received an enforcement determination by any <u>government entity</u> involving a violation of federal, state or local environmental laws?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.5 Other than previously disclosed: a) Been subject to fines or penalties imposed by <u>government entities</u> which in the aggregate total \$25,000 or more; or b) Been convicted of a criminal offense pursuant to any administrative and/or regulatory action taken by any <u>government entity</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
For each “Yes,” explain:	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

<b>VIII. FINANCIAL AND ORGANIZATIONAL CAPACITY</b>	
<p><b>8.0</b> Within the past five (5) years, has the <u>Reporting Entity</u> received any <u>formal unsatisfactory performance assessment(s)</u> from any <u>government entity</u> on any contract?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If "Yes," provide an explanation of the issue(s), relevant dates, the <u>government entity</u> involved, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</p>	
<p><b>8.1</b> Within the past five (5) years, has the <u>Reporting Entity</u> had any <u>liquidated damages</u> assessed over \$25,000?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If "Yes," provide an explanation of the issue(s), relevant dates, contracting party involved, the amount assessed and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</p>	
<p><b>8.2</b> Within the past five (5) years, have any <u>liens</u> or <u>judgments</u> (not including UCC filings) over \$25,000 been filed against the <u>Reporting Entity</u> which remain undischarged?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If "Yes," provide an explanation of the issue(s), relevant dates, the Lien holder or Claimant's name(s), the amount of the <u>lien(s)</u> and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</p>	
<p><b>8.3</b> In the last seven (7) years, has the <u>Reporting Entity</u> initiated or been the subject of any bankruptcy proceedings, whether or not closed, or is any bankruptcy proceeding pending?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If "Yes," provide the bankruptcy chapter number, the court name and the docket number. Indicate the current status of the proceedings as "Initiated," "Pending" or "Closed." Provide answer below or attach additional sheets with numbered responses.</p>	
<p><b>8.4</b> During the past three (3) years, has the <u>Reporting Entity</u> failed to file or pay any tax returns required by <u>federal</u>, state or local tax laws?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If "Yes," provide the taxing jurisdiction, the type of tax, the liability year(s), the tax liability amount the <u>Reporting Entity</u> failed to file/pay and the current status of the tax liability. Provide answer below or attach additional sheets with numbered responses.</p>	
<p><b>8.5</b> During the past three (3) years, has the <u>Reporting Entity</u> failed to file or pay any New York State unemployment insurance returns?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If "Yes," provide the years the <u>Reporting Entity</u> failed to file/pay the insurance, explain the situation and any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</p>	
<p><b>8.6</b> During the past three (3) years, has the <u>Reporting Entity</u> had any <u>government audit(s)</u> completed?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>a) If "Yes," did any audit of the <u>Reporting Entity</u> identify any reported significant deficiencies in internal control, fraud, illegal acts, significant violations of provisions of contract or grant agreements, significant abuse or any <u>material disallowance</u>?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If "Yes" to 8.6 a), provide an explanation of the issue(s), relevant dates, the <u>government entity</u> involved, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</p>	



**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

<p><b>IX. ASSOCIATED ENTITIES</b></p> <p><i>This section pertains to any entity(ies) that either controls or is controlled by the reporting entity. (See definition of “associated entity” for additional information to complete this section.)</i></p>	
<p>9.0 Does the <u>Reporting Entity</u> have any <u>Associated Entities</u>?</p> <p>Note: All questions in this section must be answered if the <u>Reporting Entity</u> is either:</p> <ul style="list-style-type: none"> <li>- An <u>Organizational Unit</u>; or</li> <li>- The entire <u>Legal Business Entity</u> which controls, or is controlled by, any other entity(ies).</li> </ul> <p>If “No,” SKIP THE REMAINDER OF SECTION IX AND PROCEED WITH SECTION X.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>9.1 Within the past five (5) years, has any <u>Associated Entity Official</u> or <u>Principal Owner</u> been charged with a misdemeanor or felony, indicted, granted immunity, convicted of a crime or subject to a <u>judgment</u> for:</p> <ul style="list-style-type: none"> <li>a) Any business-related activity; or</li> <li>b) Any crime, whether or not business-related, the underlying conduct of which was related to truthfulness?</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If “Yes,” provide an explanation of the issue(s), the individual involved, his/her title and role in the <u>Associated Entity</u>, his/her relationship to the <u>Reporting Entity</u>, relevant dates, the <u>government entity</u> involved, any remedial or corrective action(s) taken and the current status of the issue(s).</p>	
<p>9.2 Does any <u>Associated Entity</u> have any currently undischarged <u>federal</u>, New York State, New York City or New York local government <u>liens</u> or <u>judgments</u> (not including UCC filings) over \$50,000?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If “Yes,” provide an explanation of the issue(s), identify the <u>Associated Entity</u>’s name(s), <u>EIN</u>(s), primary business activity, relationship to the <u>Reporting Entity</u>, relevant dates, the Lien holder or Claimant’s name(s), the amount of the <u>lien</u>(s) and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</p>	
<p>9.3 Within the past five (5) years, has any <u>Associated Entity</u>:</p>	
<p>a) Been <u>disqualified</u>, <u>suspended</u> or <u>debarred</u> from any <u>federal</u>, New York State, New York City or other New York local <u>government contracting process</u>?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>b) Been denied a contract award or had a bid rejected based upon a <u>non-responsibility finding</u> by any <u>federal</u>, New York State, New York City, or New York local <u>government entity</u>?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>c) Been <u>suspended</u>, <u>cancelled</u> or <u>terminated for cause</u> (including for <u>non-responsibility</u>) on any <u>federal</u>, New York State, New York City or New York local <u>government contract</u>?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>d) Been the subject of an <u>investigation</u>, whether open or closed, by any <u>federal</u>, New York State, New York City, or New York local <u>government entity</u> for a civil or criminal violation with a penalty in excess of \$500,000?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>e) Been the subject of an indictment, grant of immunity, <u>judgment</u>, or conviction (including entering into a plea bargain) for conduct constituting a crime?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>f) Been convicted of a criminal offense pursuant to any administrative and/or regulatory action taken by any <u>federal</u>, New York State, New York City, or New York local <u>government entity</u>?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>g) Initiated or been the subject of any bankruptcy proceedings, whether or not closed, or is any bankruptcy proceeding pending?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>For each “Yes,” provide an explanation of the issue(s), identify the <u>Associated Entity</u>’s name(s), <u>EIN</u>(s), primary business activity, relationship to the <u>Reporting Entity</u>, relevant dates, the <u>government entity</u> involved, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</p>	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

**X. FREEDOM OF INFORMATION LAW (FOIL)**

<p>10. Indicate whether any information supplied herein is believed to be exempt from disclosure under the Freedom of Information Law (FOIL).                  Note: A determination of whether such information is exempt from FOIL will be made at the time of any request for disclosure under FOIL.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
---	--

If "Yes," indicate the question number(s) and explain the basis for the claim.

**XI. AUTHORIZED CONTACT FOR THIS QUESTIONNAIRE**

<b>Name</b>	<b>Telephone</b>	<b>Fax</b>
	ext.	
<b>Title</b>	<b>Email</b>	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

**Certification**

The undersigned: (1) recognizes that this questionnaire is submitted for the express purpose of assisting New York State government entities (including the Office of the State Comptroller (OSC)) in making responsibility determinations regarding award or approval of a contract or subcontract and that such government entities will rely on information disclosed in the questionnaire in making responsibility determinations; (2) acknowledges that the New York State government entities and OSC may, in their discretion, by means which they may choose, verify the truth and accuracy of all statements made herein; and (3) acknowledges that intentional submission of false or misleading information may result in criminal penalties under State and/or Federal Law, as well as a finding of non-responsibility, contract suspension or contract termination.

**The undersigned certifies that he/she:**

- is knowledgeable about the submitting Business Entity’s business and operations;
- has read and understands all of the questions contained in the questionnaire;
- has not altered the content of the questionnaire in any manner;
- has reviewed and/or supplied full and complete responses to each question;
- to the best of his/her knowledge, information and belief, confirms that the Business Entity’s responses are true, accurate and complete, including all attachments, if applicable;
- understands that New York State government entities will rely on the information disclosed in the questionnaire when entering into a contract with the Business Entity; and
- is under an obligation to update the information provided herein to include any material changes to the Business Entity’s responses at the time of bid/proposal submission through the contract award notification, and may be required to update the information at the request of the New York State government entities or OSC prior to the award and/or approval of a contract, or during the term of the contract.

Signature of Owner/Official \_\_\_\_\_

Printed Name of Signatory \_\_\_\_\_

Title \_\_\_\_\_

Name of Business \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_;

\_\_\_\_\_ Notary Public

**CERTIFICATION OF COMPLIANCE WITH THE IRAN DIVESTMENT ACT**

As a result of the Iran Divestment Act of 2012 (the "Act"), Chapter 1 of the 2012 Laws of New York, a new provision has been added to State Finance Law (SFL) § 165-a and New York General Municipal Law § 103-g, both effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law) (the "Prohibited Entities List"). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date at which time it will be posted on the OGS website.

By submitting a bid in response to this solicitation or by assuming the responsibility of a Contract awarded hereunder, each Bidder/Contractor, any person signing on behalf of any Bidder/Contractor and any assignee or subcontractor and, in the case of a joint bid, each party thereto, certifies, under penalty of perjury, that once the Prohibited Entities List is posted on the OGS website, that to the best of its knowledge and belief, that each Bidder/Contractor and any subcontractor or assignee is not identified on the Prohibited Entities List created pursuant to SFL § 165-a(3)(b).

Additionally, Bidder/Contractor is advised that once the Prohibited Entities List is posted on the OGS Website, any Bidder/Contractor seeking to renew or extend a Contract or assume the responsibility of a Contract awarded in response to this solicitation must certify at the time the Contract is renewed, extended or assigned that it is not included on the Prohibited Entities List.

During the term of the Contract, should the County receive information that a Bidder/Contractor is in violation of the above-referenced certification, the County will offer the person or entity an opportunity to respond. If the person or entity fails to demonstrate that he/she/it has ceased engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then the County shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages or declaring the Bidder/Contractor in default.

The County reserves the right to reject any bid or request for assignment for a Bidder/Contractor that appears on the Prohibited Entities List prior to the award of a contract and to pursue a responsibility review with respect to any Bidder/Contractor that is awarded a contract and subsequently appears on the Prohibited Entities List.

I, \_\_\_\_\_, being duly sworn, deposes and says that he/she is the \_\_\_\_\_ of the \_\_\_\_\_ Corporation and that neither the Bidder/Contractor nor any proposed subcontractor is identified on the Prohibited Entities List.

\_\_\_\_\_  
SIGNED

SWORN to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Public

**NON-COLLUSIVE BIDDING CERTIFICATION**

1. By submission of this bid, the undersigned bidder and each person signing on behalf of such bidder certifies and in the case of a joint bid each party thereto certifies as to its own organization — UNDER PENALTY OF PERJURY, that to the best of the undersigned’s knowledge and belief:

- (a) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
- (b) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
- (c) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

2. The undersigned acknowledges and agrees that a bid shall not be considered for award nor shall any award be made where any of the above have not been complied with; provided however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. Where one or more of the above has/have not been complied with, the bid shall not be considered for award nor shall any award be made unless the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

3. The undersigned also acknowledges and agrees that the fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of paragraph 1 above.

4. The undersigned further acknowledges and agrees that any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a bidder which is a corporation or a limited liability company for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in paragraph 1 of this certificate, shall be deemed to have been authorized by the board of directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation or limited liability company.

Name of Bidder: \_\_\_\_\_  
(print full legal name)

Date Signed: \_\_\_\_\_ Signature: \_\_\_\_\_

Name of Person Signing Certificate: \_\_\_\_\_  
(print full legal name of signer)

Bidder is (check one):  an individual,  a limited liability partnership,  a limited liability company,  
 other entity (specify): \_\_\_\_\_



## **APPENDIX G: W-9 FORM**

# Request for Taxpayer Identification Number and Certification

**Give Form to the  
requester. Do not  
send to the IRS.**

Print or type  
See Specific Instructions on page 2.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
2 Business name/disregarded entity name, if different from above	
3 Check appropriate box for federal tax classification: check only <b>one</b> of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <b>Note.</b> For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
6 City, state, and ZIP code	
7 List account number(s) here (optional)	

**Part I Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

**Note.** If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

<b>Social security number</b>								
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-	-	-	-					
<b>OR</b>								
<b>Employer identification number</b>								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> </table>					-	-	-	-
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**Part II Certification**

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶
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**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at [www.irs.gov/fw9](http://www.irs.gov/fw9).

**Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

*If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.*

By signing the filled-out form, you:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

**Note.** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

## What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

## Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Line 1

You must enter one of the following on this line; do not leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note. ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

**Line 2**

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

**Line 3**

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

**Limited Liability Company (LLC).** If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

**Line 4, Exemptions**

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

**Exempt payee code.**

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note.** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

**Line 5**

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

**Line 6**

Enter your city, state, and ZIP code.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.



**Part II. Certification**

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.

1. **Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.
2. **Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.
3. **Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.
4. **Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).
5. **Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee <sup>1</sup>
b. So-called trust account that is not a legal or valid trust under state law	The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor <sup>3</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records from Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

**Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.



## **APPENDIX H: NON-COLLUSION AFFIDAVIT**

NON-COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he/she has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He/She further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee gift, commission or thing of value on account of such sale.

OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated this \_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
(Name of Organization)

\_\_\_\_\_  
(Title of Person Signing)

\_\_\_\_\_  
(Signature)

ACKNOWLEDGEMENT

STATE OF \_\_\_\_\_ )  
 ) ss  
COUNTY OF \_\_\_\_\_ )

Before me, a Notary Public, personally appeared the above named and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public Signature

My Commission Expires: \_\_\_\_\_

## **APPENDIX I: IRAN DIVESTMENT ACT COMPLIANCE**

## IRAN DIVESTMENT ACT CERTIFICATION

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a new provision has been added to the State Finance Law (SFL), § 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list (prohibited entities list) of “persons” who are engaged in “investment activities in Iran” (both are defined terms in the law). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act’s effective date, at which time it will be posted on the OGS website.

By submitting a bid in response to this solicitation or by assuming the responsibility of a Contract awarded hereunder, Bidder/Contractor (or any assignee) certifies that once the prohibited entities list is posted on the OGS website, it will not utilize on such Contract any subcontractor that is identified on the prohibited entities list.

Additionally, Bidder/Contractor is advised that once the list is posted on the OGS website, any Contractor seeking to renew or extend a Contract or assume the responsibility of a Contract awarded in response to the solicitation, must certify at the time the Contract is renewed, extended or assigned that it is not included on the prohibited entities list.

During the term of the Contract, should the New York State Education Department (AGENCY) receive information that a person is in violation of the above-referenced certification, AGENCY will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then AGENCY shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

AGENCY reserves the right to reject any bid or request for assignment for an entity that appears on the prohibited entities list prior to the award of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the prohibited entities list after contract award.

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Name: \_\_\_\_\_

Date: : \_\_\_\_\_

## **APPENDIX J: NYS SEXUAL HARASSMENT REQUIREMENTS**



### Introduction

New York State is a national leader in the fight against sexual harassment and is partnering with employers across the state to further our commitment to ending sexual harassment in the workplace.

This toolkit will provide you step-by-step guidance to implementing the required training and sexual harassment policy, directing you to resources available through New York State and the relevant state agencies.

These resources are all available on the State's Combating Sexual Harassment in the Workplace website: [www.ny.gov/programs/combating-sexual-harassment-workplace](http://www.ny.gov/programs/combating-sexual-harassment-workplace).

### What are the New Requirements?

The 2019 New York State Budget includes the nation's strongest and most comprehensive sexual harassment package, including new resources and requirements for employers. There are two key components under this law:

#### Policy (see pages 2-4)

Under the new law, every employer in New York State is **required to establish a sexual harassment prevention policy**. The Department of Labor in consultation with the Division of Human Rights has established a model sexual harassment prevention policy for employers to adopt, available at [www.ny.gov/programs/combating-sexual-harassment-workplace](http://www.ny.gov/programs/combating-sexual-harassment-workplace). Or, employers may adopt a similar policy that meets or exceeds the minimum standards of the model policy ([www.ny.gov/combating-sexual-harassment-workplace/employers#model-sexual-harassment-policy](http://www.ny.gov/combating-sexual-harassment-workplace/employers#model-sexual-harassment-policy)).

#### Training (see pages 5-6)

In addition, every employer in New York State is **required to provide employees with sexual harassment prevention training**. The Department of Labor in consultation with the Division of Human Rights has established this model training for employers to use. Or, employers may use a training program that meets or exceeds the minimum standards of the model training ([www.ny.gov/combating-sexual-harassment-workplace/employers#training-requirements](http://www.ny.gov/combating-sexual-harassment-workplace/employers#training-requirements)).

## **Policy: Implementation**

All employers must adopt and provide a sexual harassment prevention policy to all employees by **October 9, 2018**.

### **If you want to adopt the State Model Policy:**

- The State Model Policy contains fields for you to list your business name and the name/contact information for the individual(s) you have designated to receive sexual harassment complaints. Fill in those fields and apply whatever branding (e.g., logos, etc.) you like. You may choose to modify the policy to reflect the work of your organization and industry specific scenarios or best practices.
- Distribute the policy to all employees in writing or electronically. Employers are also encouraged to have employees acknowledge receipt of the policy, and to post a copy of the policy where employees can easily access it.

### **If you already have a policy and do NOT want to adopt the State Model Policy:**

- Use the checklist on the next page to ensure your policy meets or exceeds the required minimum standards.
- If it already meets those standards, ensure it already has been or will be distributed to employees by October 9, 2018. All future new employees should receive the policy before commencing work.
- Ensure your complaint form and process are up to date and that employees are made aware of it as part of the policy.
- If you do not have a complaint form, a model is available online: [www.ny.gov/combating-sexual-harassment-workplace/employers#model-complaint-form](http://www.ny.gov/combating-sexual-harassment-workplace/employers#model-complaint-form)
- Review the online FAQs, which outline numerous common questions that may arise: [www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions](http://www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions)
- Distribute a copy of your finalized policy to all employees in writing. This may be done electronically, for example, by email. Employers are also encouraged to have employees acknowledge receipt of the policy, and to post a copy of the policy where employees can easily access it.
- You are also encouraged to provide the policy and training to anyone providing services in the workplace.

**If you do NOT yet have a policy:**

- Download the model policy, available online: [www.ny.gov/combating-sexual-harassment-workplace/employers#model-sexual-harassment-policy](http://www.ny.gov/combating-sexual-harassment-workplace/employers#model-sexual-harassment-policy)
- Customize the document by filling in the employer name, person or office designated to receive complaints and appropriate contact information, as highlighted throughout.
- You may choose to modify the policy to reflect the work of your organization and industry specific scenarios or best practices.
- Review the online FAQs, which outline numerous common questions that may arise: [www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions](http://www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions)
- Distribute a copy of your finalized policy to all employees in writing. This may be done electronically, for example, by email. Employers are also encouraged to have employees acknowledge receipt of the policy, and to post a copy of the policy where employees can easily access it.
- You are also encouraged to provide the policy and training to anyone providing services in the workplace.

## **Policy: Minimum Standards Checklist**

An employer that does not use the State model policy -- developed by the State Department of Labor and State Division of Human Rights -- must ensure their policy meets or exceeds the following minimum standards.

The policy **must**:

- Prohibit sexual harassment consistent with guidance issued by the Department of Labor in consultation with the Division of Human Rights;
- Provide examples of prohibited conduct;
- Include information concerning the federal and state statutory provisions concerning sexual harassment, remedies available to victims of sexual harassment, and a statement that there may be applicable local laws;
- Include a complaint form;
- Include a procedure for the timely and confidential investigation of complaints that ensures due process for all parties;
- Inform employees of their rights of redress and all available forums for adjudicating sexual harassment complaints administratively and judicially;
- Clearly state that sexual harassment is considered a form of employee misconduct and that sanctions will be enforced against individuals engaging in sexual harassment and against supervisory and managerial personnel who knowingly allow such behavior to continue; and
- Clearly state that retaliation against individuals who complain of sexual harassment or who testify or assist in any investigation or proceeding involving sexual harassment is unlawful.

## **Training: Instructions for Employers**

All employers are required to train current employees by October 9, 2019. New employees should be trained as quickly as possible. In addition, all employees must complete sexual harassment prevention training at least once per year. This may be based on calendar year, anniversary of each employee's start date or any other date the employer chooses.

### **If you already have a training:**

- Use the checklist on the next page to ensure your training meets or exceeds the required minimum standards.
- If your existing training does not, it should be updated to include all the listed elements. You may also provide supplemental training to employers who have already completed the training to ensure they have received training that meets or exceeds the minimum standards.
- Review the online FAQs, which outline numerous common questions that may arise: [www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions](http://www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions)

### **If you do NOT yet have a training:**

- Download the model training, available online: [www.ny.gov/combating-sexual-harassment-workplace/employers#training-requirements](http://www.ny.gov/combating-sexual-harassment-workplace/employers#training-requirements).
  - You may execute this training in a variety of ways, including live in person, via webinar or on an individual basis, with feedback as outlined in the training guidance document.
  - Depending on how you choose to present your training, you may utilize different available resources. For example, if you do a live presentation, you should download the PowerPoint and read the script that appears in the "Notes" of each slide.
  - If you choose to train employees with the video, you may direct them to watch it online or download it and show to a group, after which you would provide them a mechanism for feedback, as outlined in the training guidance document.
- Customize the training document(s) and modify them to reflect the work of your organization, including industry specific scenarios or best practices.
- The training should detail any internal process employees are encouraged to use to complain and include the contact information for the specific name(s) and office(s) with which employees alleging harassment should file their complaints.
- You may wish to include additional interactive activities as part of the training, including an opening activity, role playing or group discussion(s).
- Review the online FAQs, which outline numerous common questions that may arise: [www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions](http://www.ny.gov/combating-sexual-harassment-workplace/combating-sexual-harassment-frequently-asked-questions)



## **Training: Minimum Standards Checklist**

An employer that does not use this model training -- developed by the State Department of Labor and State Division of Human Rights -- must ensure their training meets or exceeds the following minimum standards.

The training **must**:

- Be interactive (*see the model training guidance document for specific recommendations*);
- Include an explanation of sexual harassment consistent with guidance issued by the Department of Labor in consultation with the Division of Human Rights;
- Include examples of unlawful sexual harassment;
- Include information concerning the federal and state statutory provisions concerning sexual harassment and remedies available to targets of sexual harassment;
- Include information concerning employees' rights of redress and all available forums for adjudicating complaints; and
- Include information addressing conduct by supervisors and additional responsibilities for supervisors.

## **BIDDER'S CERTIFICATION**

Name of Bid: \_\_\_\_\_

In submitting this Bid, BIDDER represents, as more fully set forth in this Bid, that:

- a) BIDDER acknowledges that they have read, understand, and agree to all aspects of the terms and specifications as presented without reservation or alteration.
- b) When awarded, the bid package becomes the "Contract Document".
- c) That the organization, its principals, and sub-recipients are not currently suspended or debarred from doing business with the Federal Government.
- d) The BIDDER has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees in accordance with New York State Labor Law §201-g.

Date: \_\_\_\_\_

Vendor: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Subscribed to and sworn to before me

this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Public

## **APPENDIX K: DELIVERABLES TABLE**

DELIVERABLES	LUMP SUM PROPOSED:	HOURS OF LABOR:
<b>GENERAL REQUIREMENTS</b>		
Task 1) Project Schedule		
Task 2) Project Management & Coordination Meetings ( <i>incl. MILEAGE</i> )		
Task 3) Project Permitting (Local, State, Federal)		
<b>MAP, PLAN &amp; REPORT</b>		
Task 4) Field Work / Surveys		
Task 5) Map, Plan & Report for District Consolidation		
<b>PRELIMINARY DESIGN PHASE</b>		
Task 6) Preliminary Designs		
Task 7) Environmental & Permitting Approval		
<b>FINAL DESIGN PHASE</b>		
Task 8) Basis of Design Report / Final Designs		
Task 9) Construction Documents (100% completion, Funding/Regulatory approved)		
<b>BIDDING PHASE</b>		
Task 10) Advertise for Bidding, provide Bid Response Services ( <i>incl. PUBLISHING</i> )		
Task 11) Bid Reviews & Recommendation		
<b>CONSTRUCTION ADMIN PHASE</b>		
Task 12) Preconstruction Conference		
Task 13) Construction Period Services: Technical Analysis & Contractor Payments/Submittals		
Task 14) Punch List with Contractor		
Task 15) Closeout (Codes & Compliance Review / Certification; <i>see Closeout Checklist</i> )		
Task 16) Engineer's Notice of Completion ( <i>Completion Certification</i> )		
<b>RPR SERVICES</b>		
Task 17) Approx. One Hundred Fifty (150) Days of RPR Services		
<i>*The actual construction term may vary; this figure is for budgetary purposes only*</i>		
<b>REIMBURSABLES</b>		
Task 18) Surveys & Base Mapping		
Task 19) Archaeological Evaluations (as required)		
Task 20) Geotechnical Evaluations (as required)		
<b>I&amp;M Plan</b>		
Task 21) Inspection & Maintenance Plan		

**APPENDIX L: DRAFT FORM OF CONTRACT (EJCDC)**



This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

# AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

Prepared by



Issued and Published Jointly by



This Agreement has been prepared for use with EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance on the completion and use of this Agreement, see EJCDC® E-001, Commentary on the EJCDC Engineering Services Agreements, 2013 Edition.

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1420 King Street, Alexandria, VA 22314-2794  
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American Council of Engineering Companies  
1015 15th Street N.W., Washington, DC 20005  
(202) 347-7474  
[www.acec.org](http://www.acec.org)

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**AGREEMENT  
BETWEEN OWNER AND ENGINEER  
FOR PROFESSIONAL SERVICES**

THIS IS AN AGREEMENT effective as of           TBA           (“Effective Date”) between

THE TOWN OF MORIAH, NY (“Owner”) and

TBA (“Engineer”).

Owner's Project, of which Engineer's services under this Agreement are a part, is generally identified as follows:

TOWN OF MORIAH SEWER DISTRICT #1 COLLECTION SYSTEM UPGRADES (“Project”).

Other terms used in this Agreement are defined in **Article 7**.

Engineer's services under this Agreement are generally identified as follows:

**Provide Map, Plan & Report for Sewer District expansion up Stone St. to the Port Henry Water Plant and consolidate sewer districts #1 & #2; Provide Survey, Basis of Design Report, Permitting, NYS DEC and NYS DOT compliant Project Plans & Specifications, Construction Administration, Construction Observation, to support completion of the Sewer District #1 Upgrades Project, generally consisting of collection system main and appurtenances, identified in recent engineering report, along Plank Rd., Screening Plant, Switchback Rd. Siphon, Joyce Rd., Republic St., Hospital Rd., Center Rd. as defined in the originating RFP; Provide an Inspection and Maintenance Program; Update GIS data of all affected infrastrucutre. Project must remain in funding compliance and all engineering Plans & Specifications accepted by regulatory and funding agencies no later than November 30, 2021, or as amended in writing and agreed by Owner.**

Owner and Engineer further agree as follows:

**ARTICLE 1 – SERVICES OF ENGINEER**

1.01 *Scope*

- A. Engineer shall provide, or cause to be provided, the services set forth herein, in **Exhibit A** and the originating RFP response, **and all revisions** included as **Exhibit P**.

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

2.01 *General*

- A. Owner shall have the responsibilities set forth herein and in **Exhibit B**.
- B. Owner shall pay Engineer as set forth in **Article 4 and Exhibit C**.
- C. Owner shall be responsible for all requirements and instructions that it furnishes to Engineer pursuant to this Agreement, and for the accuracy and completeness of all programs, reports, data, and other information furnished by Owner to Engineer pursuant to

this Agreement. Engineer may use and rely upon such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement, subject to any express limitations or reservations applicable to the furnished items.

- D. Owner shall give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of:
1. any development that affects the scope or time of performance of Engineer's services;
  2. the presence at the Site of any Constituent of Concern; or
  3. any relevant, material defect or nonconformance in: (a) Engineer's services, (b) the Work, (c) the performance of any Constructor, or (d) Owner's performance of its responsibilities under this Agreement.

### **ARTICLE 3 – SCHEDULE FOR RENDERING SERVICES**

#### **3.01 Commencement**

- A. Engineer is authorized to begin rendering services as of the Effective Date.
- B. **The term of this agreement shall commence on May 1<sup>st</sup>, 2020 through November 30th, 2021, time being of the essence.**

#### **3.02 Time for Completion**

- A. Engineer shall complete its obligations within a reasonable time. Specific periods of time for rendering services, or specific dates by which services are to be completed, are provided in **Exhibit A and Exhibit L**, and are hereby agreed to be reasonable.
- B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- C. If Owner authorizes changes in the scope, extent, or character of the Project or Engineer's services, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- D. Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services.
- E. If Engineer fails, through its own fault, to complete the performance required in this Agreement within the time set forth, as duly adjusted, then Owner shall be entitled, as its sole remedy, to the recovery of direct damages, if any, resulting from such failure.

### **ARTICLE 4 – INVOICES AND PAYMENTS**

#### **4.01 Invoices**

- A. *Preparation and Submittal of Invoices:* Engineer shall prepare invoices in accordance with its standard invoicing practices and the terms of **Exhibit C**. Engineer shall submit its



invoices to Owner on a monthly basis **prior to the Owners Town Board meeting for invoice approval, which is listed for public knowledge. The Town of Moriah Board meets on the second Thursday of each month.** Invoices are due and payable ~~within thirty (30) days of receipt after thirty (30) days of acceptance from the Town Board.~~

#### 4.02 *Payments*

- A. *Application to Interest and Principal:* Payment will be credited first to any interest owed to Engineer and then to principal.
- B. *Failure to Pay:* If Owner fails to make any payment due Engineer for services and expenses within **thirty (30) days** after receipt of Engineer's invoice, then:
  - 1. amounts due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day; and
  - 2. Engineer may, after giving **seven (7) days** written notice to Owner, suspend services under this Agreement until Owner has paid in full all amounts due for services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.
- 3. **Exceptions to this section apply when the Consultant fails to provide funding agency required reports and/or documents that are complete and on time; if these reports are not supplied as required and further specified in the Attachments hereto, the Owner reserves the right to withhold payment without penalty by the Consultant to ensure that project costs are compliant per the specified funding agency program requirements.**
- C. *Disputed Invoices:* If Owner disputes an invoice, either as to amount or entitlement, then Owner shall promptly advise Engineer in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion subject to the terms of **Paragraph 4.01.**
- ~~D. *Sales or Use Taxes:* If after the Effective Date any governmental entity takes a legislative action that imposes additional sales or use taxes on Engineer's services or compensation under this Agreement, then Engineer may invoice such additional sales or use taxes for reimbursement by Owner. Owner shall reimburse Engineer for the cost of such invoiced additional sales or use taxes; such reimbursement shall be in addition to the compensation to which Engineer is entitled under the terms of **Exhibit C.**~~

## ARTICLE 5 – OPINIONS OF COST

#### 5.01 *Opinions of Probable Construction Cost*

- A. Engineer's opinions (if any) of probable Construction Cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner requires greater assurance as to probable Construction Cost, then Owner agrees to obtain an independent cost estimate.

5.02 ~~Designing to Construction Cost Limit~~

- ~~A. If a Construction Cost limit is established between Owner and Engineer, such Construction Cost limit and a statement of Engineer's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F to this Agreement.~~

5.03 *Opinions of Total Project Costs*

- A. The services, if any, of Engineer with respect to Total Project Costs shall be limited to assisting the Owner in tabulating the various categories that comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

## ARTICLE 6 – GENERAL CONSIDERATIONS

6.01 *Standards of Performance*

- A. *Standard of Care:* The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer.
- B. *Technical Accuracy:* Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct deficiencies in technical accuracy without additional compensation, unless such corrective action is directly attributable to deficiencies in Owner-furnished information.
- C. *Consultants:* Engineer may retain such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner.
- D. *Reliance on Others:* Subject to the standard of care set forth in **Paragraph 6.01.A**, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
- E. *Compliance with Laws and Regulations, and Policies and Procedures:*
1. Engineer and Owner shall comply with applicable Laws and Regulations.
  2. Engineer shall comply with any and all policies, procedures, and instructions of Owner that are applicable to Engineer's performance of services under this Agreement and that Owner provides to Engineer in writing, subject to the standard of care set forth in **Paragraph 6.01.A**, and to the extent compliance is not inconsistent with professional practice requirements.
    - a. Articles 8 & 9 NYS Labor Law: Public Works Building & Service Contracts
    - b. Section 220-f of NYS Labor Law: International Boycotts
    - c. Debarment/Suspension:

- 1) Exec. Order 12549 & 12689
  - 2) 42 USC ss 1320a-7b(f)
- d. HIPA Act of 1996
3. This Agreement is based on Laws and Regulations and Owner-provided written policies and procedures as of the Effective Date. The following may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation:
- a. changes after the Effective Date to Laws and Regulations;
  - b. the receipt by Engineer after the Effective Date of Owner-provided written policies and procedures;
  - c. changes after the Effective Date to Owner-provided written policies or procedures.
- F. Engineer shall not be required to sign any document, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. Owner agrees not to make resolution of any dispute with the Engineer or payment of any amount due to the Engineer in any way contingent upon the Engineer signing any such document.
- G. **The general conditions for any construction contract documents prepared hereunder are to be EJCDC® C-700 "Standard General Conditions of the Construction Contract" (2013 Edition), prepared by the Engineers Joint Contract Documents Committee, unless expressly indicated otherwise in Exhibit J or elsewhere in this Agreement.**
- H. Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a Constructor to comply with Laws and Regulations applicable to that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.
- I. Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's, failure to furnish and perform the Work in accordance with the Construction Contract Documents.
- J. Engineer shall not be responsible for any decision made regarding the Construction Contract Documents, or any application, interpretation, clarification, or modification of the Construction Contract Documents, other than those made by Engineer or its Consultants.
- K. Engineer is not required to provide and does not have any responsibility for surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements.
- L. Engineer's services do not include providing legal advice or representation.

- M. Engineer's services do not include (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission, or (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances.
- N. While at the Site, Engineer, its Consultants, and their employees and representatives shall comply with the applicable requirements of Contractor's and Owner's safety programs of which Engineer has been informed in writing.
- O. The parties each acknowledge, covenant and agree that the relationship of the Consultant to the Owner shall be of an independent contractor. The Consultant, in accordance with its status as an independent contractor, further covenants and agrees that it
  - 1. will conduct itself in accordance with its status as an independent contractor;
  - 2. will neither hold itself out as nor claim to be an officer or employee of the Owner;
  - 3. will not make any claim, demand, or application for any right of privilege applicable to an officer or an employee of the Owner, including but not limited to workers' compensation benefits, unemployment insurance benefits, social security coverage or retirement membership or credits.
- P. The Consultant shall, during the term of this agreement, obtain and keep in full force and effect any and all licenses, permits and certifications required by any governmental authority having jurisdiction over the rendition and performance of the services to be furnished by the Consultant under this agreement.

6.02 ~~Design Without Construction Phase Services~~

- ~~A. Engineer shall be responsible only for those Construction Phase services expressly required of Engineer in **Exhibit A, Paragraph A1.05**. With the exception of such expressly required services, Engineer shall have no design, Shop Drawing review, or other obligations during construction, and Owner assumes all responsibility for the application and interpretation of the Construction Contract Documents, review and response to Contractor claims, Construction Contract administration, processing of Change Orders and submittals, revisions to the Construction Contract Documents during construction, construction observation and review, review of Contractor's payment applications, and all other necessary Construction Phase administrative, engineering, and professional services. Owner waives all claims against the Engineer that may be connected in any way to Construction Phase administrative, engineering, or professional services except for those services that are expressly required of Engineer in **Exhibit A**.~~

6.03 *Use of Documents*

- A. All Documents are instruments of service, and Engineer shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the Engineer) whether or not the Project is completed.

- B. The Consultant is to maintain all books, documents, papers, account records and other evidence pertaining to this work ***and to make such materials available*** at their respective offices at all reasonable times during the agreement and **for a period up to six (6) years from the date of final payment under the agreement.**
- C. All reports, documents, information and any materials or equipment furnished to the Engineer by the Owner shall remain the sole property of the Owner and except for the Engineer's limited possession of the purpose of carrying out each Agreement, shall be returned to the Owner at the conclusion of each Agreement. **Nothing written in this paragraph, however, will be interpreted to forbid the Engineer from retaining a single copy of the information for its files.**
- D. If Engineer is required to prepare or furnish Drawings and/or Specifications under this Agreement, Engineer shall deliver to Owner at least **two (2)** original printed record versions of such Drawings and Specifications, signed and sealed according to applicable Laws and Regulations, and further provide electronic copies (e.g., PDF.) upon completion of the project and upon payment in full to the Engineer.
- E. Owner may make and retain copies of Documents for information and reference in connection with the use of the Documents on the Project. Engineer grants Owner a limited license to use the Documents on the Project, extensions of the Project, and for related uses of the Owner, subject to receipt by Engineer of full payment due and owing for all services relating to preparation of the Documents, and subject to the following limitations: (1) Owner acknowledges that such Documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer; (2) any such use or reuse, or any modification of the Documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to its officers, directors, members, partners, agents, employees, and Consultants; (3) Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification of the Documents without written verification, completion, or adaptation by Engineer; and (4) such limited license to Owner shall not create any rights in third parties. **THIS PROVISION SHALL NOT APPLY TO SURVEY, MAPPING & GIS PRODUCTS THAT WILL REMAIN THE PROPERTY OF THE OWNER AT PROJECT COMPLETION.**
- F. If Engineer at Owner's request verifies the suitability of the Documents, completes them, or adapts them for extensions of the Project or for any other purpose, then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.

#### 6.04 *Electronic Transmittals*

- A. Owner and Engineer may transmit, and shall accept, Project-related correspondence, Documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol.
- B. If this Agreement does not establish protocols for electronic or digital transmittals, then Owner and Engineer shall jointly develop such protocols.



- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

#### 6.05 Insurance

- A. Engineer shall procure and maintain insurance as set forth in **Exhibit G**. Engineer shall cause Owner to be listed as an additional insured on any applicable general liability insurance policy carried by Engineer.
- B. Owner shall procure and maintain insurance as set forth in **Exhibit G**. Owner shall cause Engineer and its Consultants to be listed as additional insureds on any general liability policies carried by Owner, which are applicable to the Project.
- C. Owner shall require Contractor to purchase and maintain policies of insurance covering workers' compensation, general liability, motor vehicle damage and injuries, and other insurance necessary to protect Owner's and Engineer's interests in the Project. Owner shall require Contractor to cause Engineer and its Consultants to be listed as additional insureds with respect to such liability insurance purchased and maintained by Contractor for the Project.
- D. Owner and Engineer shall each deliver to the other certificates of insurance evidencing the coverages indicated in **Exhibit G**. Such certificates shall be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement.
- E. All policies of property insurance relating to the Project, including but not limited to any builder's risk policy, shall allow for waiver of subrogation rights and contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insured thereunder or against Engineer or its Consultants. Owner and Engineer waive all rights against each other, Contractor, the Consultants, and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by any builder's risk policy and any other property insurance relating to the Project. Owner and Engineer shall take appropriate measures in other Project-related contracts to secure waivers of rights consistent with those set forth in this paragraph.
- F. All policies of insurance shall contain a provision or endorsement that the coverage afforded will not be canceled or reduced in limits by endorsement, and that renewal will not be refused, until at least **ten (10) days** prior written notice has been given to the primary insured. Upon receipt of such notice, the receiving party shall promptly forward a copy of the notice to the other party to this Agreement.
- G. At any time, Owner may request that Engineer or its Consultants, at Engineers' sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in **Exhibit G**. If so requested by Owner, and if commercially available, Engineer shall obtain and shall require its Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods

of time as requested by Owner, and **Exhibit G** will be supplemented to incorporate these requirements.

#### 6.06 *Suspension and Termination*

##### A. *Suspension:*

1. *By Owner:* Owner may suspend the Project for up to **ninety (90) days** upon **seven (7) days** written notice to Engineer.
2. *By Engineer:* Engineer may, after giving **seven (7) days** written notice to Owner, suspend services under this Agreement if Owner has failed to pay Engineer for invoiced services and expenses, as set forth in **Paragraph 4.02.B**, or in response to the presence of Constituents of Concern at the Site, as set forth in **Paragraph 6.10.D**.

##### B. *Termination:* The obligation to provide further services under this Agreement may be terminated:

1. For cause,
  - a. by either party upon **thirty (30) days** written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
  - b. by Engineer:
    - 1) upon **seven (7) days** written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or
    - 2) upon **seven (7) days** written notice if the Engineer's services for the Project are delayed or suspended for more than **ninety (90) days** for reasons beyond Engineer's control, or as the result of the presence at the Site of undisclosed Constituents of Concern, as set forth in **Paragraph 6.10.D**.
    - 3) Engineer shall have no liability to Owner on account of such termination.
    - 4) **In the event of such termination, Engineer is still liable to provide copies of any project drawings, specifications, mapping and any other developed Work that the Owner has paid for in the period of performance.**
  - c. Notwithstanding the foregoing, this Agreement will not terminate under **Paragraph 6.06.B.1.a** if the party receiving such notice begins, within **seven (7) days** of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than **thirty (30) days** of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such **thirty (30) day** period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, **sixty (60) days** after the date of receipt of the notice.
2. For convenience, by Owner effective upon Engineer's receipt of notice from Owner.

- C. *Effective Date of Termination:* The terminating party under **Paragraph 6.06.B** may set the effective date of termination at a time up to **thirty (30) days** later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.
- D. *Payments Upon Termination:*
1. In the event of any termination under **Paragraph 6.06**, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all Reimbursable Expenses incurred through the effective date of termination. Upon making such payment, Owner shall have the limited right to the use of Documents, **other than survey and Mapping products for which the Owner will have unfettered use**, at Owner's sole risk, subject to the provisions of **Paragraph 6.03**.
  2. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in **Paragraph 6.06.D.1**, to invoice Owner and receive payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in **Exhibit C**.

#### 6.07 *Controlling Law*

- A. This Agreement is to be governed by the Laws and Regulations of the state in which the Project is located: **TOWN OF MORIAH, ESSEX COUNTY, NEW YORK, and any and all disputes shall be brought to the Essex County Supreme Court, Essex County, NY.**

#### 6.08 *Successors, Assigns, and Beneficiaries*

- A. Owner and Engineer are hereby bound and the successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by **Paragraph 6.08.B** the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise in this Agreement:
1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them.

2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.
3. Owner agrees that the substance of the provisions of this **Paragraph 6.08.C** shall appear in the Construction Contract Documents.

#### 6.09 *Dispute Resolution*

- A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of **thirty (30) days** from the date of notice ~~prior to invoking the procedures of Exhibit H~~ or other provisions of this Agreement or exercising their rights at law.
- B. **No Exhibit H is included.**
- C. **After the thirty (30) day period for mutual negotiation has expired or the process has failed, then disputes, including breach or alleged breach thereof, may not be submitted to binding arbitration. Instead, the dispute must be heard in the Essex County Supreme Court or any other court of competent jurisdiction within Essex County, NY**
- D. ~~If the parties fail to resolve a dispute through negotiation under Paragraph 6.09.A, then either or both may invoke the procedures of Exhibit H. If Exhibit H is not included, or if no dispute resolution method is specified in Exhibit H, then the parties may exercise their rights at law.~~

#### 6.10 *Environmental Condition of Site*

- A. Owner represents to Engineer that as of the Effective Date to the best of Owner's knowledge no Constituents of Concern, other than those disclosed in writing to Engineer, exist at or adjacent to the Site.
- B. If Engineer encounters or learns of an undisclosed Constituent of Concern at the Site, then Engineer shall notify (1) Owner and (2) appropriate governmental officials if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.
- C. It is acknowledged by both parties that Engineer's scope of services does not include any services related to unknown or undisclosed Constituents of Concern. If Engineer or any other party encounters, uncovers, or reveals an undisclosed Constituent of Concern, then Owner shall promptly determine whether to retain a qualified expert to evaluate such condition or take any necessary corrective action.
- D. If investigative or remedial action, or other professional services, are necessary with respect to undisclosed Constituents of Concern, or if investigative or remedial action beyond that reasonably contemplated is needed to address a disclosed or known Constituent of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until such portion of the Project is no longer affected.
- E. If the presence at the Site of undisclosed Constituents of Concern adversely affects the performance of Engineer's services under this Agreement, then the Engineer shall have the option of (1) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause on **seven (7) days'** notice.

- F. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and shall not be required to become an "owner," "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with Engineer's activities under this Agreement.

#### 6.11 Indemnification and Mutual Waiver

- ~~A. *Indemnification by Engineer:* To the fullest extent permitted by Laws and Regulations, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, members, partners, agents, consultants, and employees, from losses, damages, and judgments (including reasonable consultants' and attorneys' fees and expenses) arising from third party claims or actions relating to the Project, provided that any such claim, action, loss, damages, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Engineer or Engineer's officers, directors, members, partners, agents, employees, or Consultants. **This indemnification provision is subject to and limited by the provisions, if any, agreed to by Owner and Engineer in Exhibit I, "Limitations of Liability."**~~
- B. *Indemnification by Owner:* Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants as required by Laws and Regulations ~~and to the extent (if any) required in Exhibit I, "Limitations of Liability."~~
- C. *Environmental Indemnification:* To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from all claims, costs, losses, damages, actions, and judgments (including reasonable consultants' and attorneys fees and expenses) caused by, arising out of, relating to, or resulting from a Constituent of Concern at, on, or under the Site, provided that (1) any such claim, cost, loss, damages, action, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (2) nothing in this paragraph shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct.
- D. *No Defense Obligation:* The indemnification commitments in this Agreement do not include a defense obligation by the indemnitor unless such obligation is expressly stated.
- E. *Percentage Share of Negligence:* To the fullest extent permitted by Laws and Regulations, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, and all other negligent entities and individuals.
- F. *Mutual Waiver:* To the fullest extent permitted by Laws and Regulations, Owner and Engineer waive against each other, and the other's employees, officers, directors, members,



agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, from any cause or causes.

#### 6.12 *Records Retention*

- A. Engineer shall establish and maintain complete and accurate books, records, documents, accounts & other evidence directly pertinent to performance under this contract of the Consultant on file in legible form, for a period of **six (6) years** following completion or termination of its services under each Task Order **plus the year in which the Work was completed**; all Documents, records (including cost records), and design calculations related to Consultant's services or pertinent to Consultant's performance under this Agreement.
- B. Upon Owner's request, Consultant shall provide access to the Records during normal business hours at an office of the Consultant in the State of New York; if not such office is available, then at a mutually agreeable venue for the purposes of inspection, auditing and copying. Consultant will also ensure the ability to send and utilize electronic/digital files of the same of more efficient transference of Records, per **Paragraph 6.04**. a copy of any such item to Owner at cost.
- C. The Owner shall take reasonable steps to protect from public disclosure any of the records which are exempt from disclosure under Section 87 of the Public Officers Law (The "Statute") provided that: (1) the Consultant shall timely inform an appropriate Owner official, in writing, that said records should not be disclosed; and (2) said records shall be sufficiently identified and designation of said records as exempt under the statute is reasonable. Nothing contained herein shall diminish, or in any way affect, the Owners' right to discovery in any pending or future litigation.

#### 6.13 *Miscellaneous Provisions*

- A. *Notices:* Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.
- B. *Survival:* All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.
- C. *Severability:* Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Engineer, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- D. *Waiver:* A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- E. *Accrual of Claims:* To the fullest extent permitted by Laws and Regulations, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of Substantial Completion.

- F. *Discrimination Prohibited:* The services to be furnished and rendered under this agreement by the Consultant shall be available to any and all residents of Essex County without regard to race, color, creed, sex, religion, national or ethnic origin, handicap, or source of payment; and under no circumstances shall a resident's financial ability to pay for the services provided be considered unless such consideration is allowed by State and/or Federal law, rule, or regulation.
- G. *Non-Discrimination in Employment:* The consultant will not discriminate against any employee or applicant for employment because of race, color, creed, sex, religion, national or ethnic origin, disability, or marital status. In the event that this is a contract to be performed in whole or in part within the State of New York for (a) the construction, alteration or repair of any public building or public work, (b) for the manufacture, sale of distribution of materials, equipment of supplies, (c) for building service, the Consultant agrees that neither it nor its subcontractors shall, by any race, color, creed, sex, religion, national or ethnic origin, handicap, or marital status:
- a. Discriminate in hiring against any citizen who is qualified and available to perform the work; or
  - b. Discriminate against or intimidate any employee hired for the performance of work under the contract.

## ARTICLE 7 – DEFINITIONS

### 7.01 *Defined Terms*

- A. Wherever used in this Agreement (including the Exhibits hereto) terms (including the singular and plural forms) printed with initial capital letters have the meanings indicated in the text above, in the exhibits, or in the following definitions:
1. *Addenda*—Written or graphic instruments issued prior to the opening of bids which clarify, correct, or change the bidding requirements or the proposed Construction Contract Documents.
  2. *Additional Services*—The services to be performed for or furnished to Owner by Engineer in accordance with Part 2 of Exhibit A of this Agreement.
  3. *Agreement*—This written contract for professional services between Owner and Engineer, including all exhibits identified in Paragraph 8.01 and any duly executed amendments.
  4. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Construction Contract.
  5. *Basic Services*—The services to be performed for or furnished to Owner by Engineer in accordance with Part 1 of Exhibit A of this Agreement.
  6. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Construction Contract Price or the Construction Contract Times, or other revision to the Construction Contract, issued on or after the effective date of the Construction Contract.

7. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth in the Construction Contract, seeking an adjustment in Construction Contract Price or Construction Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Construction Contract Documents or the acceptability of Work under the Construction Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Construction Contract.
8. *Constituent of Concern*—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, State, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
9. *Construction Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
10. *Construction Contract Documents*—Those items designated as “Contract Documents” in the Construction Contract, and which together comprise the Construction Contract.
11. *Construction Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Construction Contract Documents.
12. *Construction Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve milestones, if any, in the Construction Contract; (b) achieve Substantial Completion; and (c) complete the Work.
13. *Construction Cost*—The cost to Owner of the construction of those portions of the entire Project designed or specified by or for Engineer under this Agreement, including construction labor, services, materials, equipment, insurance, and bonding costs, and allowances for contingencies. Construction Cost does not include costs of services of Engineer or other design professionals and consultants; cost of land or rights-of-way, or compensation for damages to property; Owner’s costs for legal, accounting, insurance counseling, or auditing services; interest or financing charges incurred in connection with the Project; or the cost of other services to be provided by others to Owner. Construction Cost is one of the items comprising Total Project Costs.
14. *Constructor*—Any person or entity (not including the Engineer, its employees, agents, representatives, and Consultants), performing or supporting construction activities relating to the Project, including but not limited to Contractors, Subcontractors, Suppliers, Owner’s work forces, utility companies, other contractors, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.

15. *Consultants*—Individuals or entities having a contract with Engineer to furnish services with respect to this Project as Engineer's independent professional associates and consultants; subcontractors; or vendors.
16. *Contractor*—The entity or individual with which Owner enters into a Construction Contract.
17. *Documents*—Data, reports, Drawings, Specifications, Record Drawings, building information models, civil integrated management models, and other deliverables, whether in printed or electronic format, provided or furnished in appropriate phases by Engineer to Owner pursuant to this Agreement.
18. *Drawings*—That part of the Construction Contract Documents that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date*—The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, the date on which this Agreement is signed and delivered by the last of the parties to sign and deliver.
20. *Engineer*—The individual or entity named as such in this Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Construction Contract Price or the Construction Contract Times.
22. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
23. *Owner*—The individual or entity named as such in this Agreement and for which Engineer's services are to be performed. Unless indicated otherwise, this is the same individual or entity that will enter into any Construction Contracts concerning the Project.
24. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the services to be performed or furnished by Engineer under this Agreement are a part.
25. *Record Drawings*—Drawings depicting the completed Project, or a specific portion of the completed Project, prepared by Engineer as an Additional Service and based on Contractor's record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications, as delivered to Engineer and annotated by Contractor to show changes made during construction.
26. *Reimbursable Expenses*—The expenses incurred directly by Engineer in connection with the performing or furnishing of Basic Services and Additional Services for the Project.
27. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site during the Construction Phase. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident

Project Representative. The duties and responsibilities of the Resident Project Representative, if any, are as set forth in Exhibit D.

28. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
29. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Construction Contract Documents.
30. *Site*—Lands or areas to be indicated in the Construction Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
31. *Specifications*—The part of the Construction Contract Documents that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
32. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
33. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Construction Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
34. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
35. *Total Project Costs*—The total cost of planning, studying, designing, constructing, testing, commissioning, and start-up of the Project, including Construction Cost and all other Project labor, services, materials, equipment, insurance, and bonding costs, allowances for contingencies, and the total costs of services of Engineer or other design professionals and consultants, together with such other Project-related costs that Owner furnishes for inclusion, including but not limited to cost of land, rights-of-way, compensation for damages to properties, Owner’s costs for legal, accounting, insurance counseling, and auditing services, interest and financing charges incurred in connection with the Project, and the cost of other services to be provided by others to Owner.
36. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Construction Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Construction Contract Documents.



37. *Work Change Directive*—A written directive to Contractor issued on or after the effective date of the Construction Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

B. *Day*:

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

## ARTICLE 8 – EXHIBITS AND SPECIAL PROVISIONS

### 8.01 *Exhibits Included:*

- A. Exhibit A, Engineer’s Services.
- B. Exhibit B, Owner’s Responsibilities.
- C. Exhibit C, Payments to Engineer for Services and Reimbursable Expenses.
- D. Exhibit D, Duties, Responsibilities and Limitations of Authority of Resident Project Representative.
- E. Exhibit E, EJCDC Notice of Acceptability of Work.
- ~~F. Exhibit F, Construction Cost Limit.~~
- G. Exhibit G, Insurance.
- ~~H. Exhibit H, Dispute Resolution.~~
- ~~I. Exhibit I, Limitations of Liability.~~
- J. **Exhibit J, Special Provisions – Additional Terms & Conditions to Agreement.**
- K. Exhibit K, EJCDC Amendment to Owner-Engineer Agreement.
- L. **Exhibit L, Project Schedule.**
- M. **Exhibit M, Funding Program Requirements.** (*See Request for Proposal Appendix A*)
- N. **Exhibit N, EJCDC Contractor Payment Application.** (*For Inclusion at Bidding*)
- O. **Exhibit O, Project Closeout Checklist.** (*For inclusion at Bidding*)
- P. **Exhibit P, Engineer’s Originating Proposal.**

### 8.02 *Total Agreement*

A. This Agreement, (together with the exhibits included above) constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or

canceled by a written instrument duly executed by both parties. Amendments should be based whenever possible on the format of **Exhibit K** to this Agreement.

#### 8.03 *Designated Representatives*

- A. With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer's and Owner's representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement. Such an individual shall have authority to transmit instructions, receive information, and render decisions relative to this Agreement on behalf of the respective party whom the individual represents.

#### 8.04 *Engineer's Certifications*

- A. Engineer certifies that it has not engaged in corrupt, fraudulent, or coercive practices in competing for or in executing the Agreement. For the purposes of this **Paragraph 8.04**:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the selection process or in the Agreement execution;
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the selection process or the execution of the Agreement to the detriment of Owner, or (b) to deprive Owner of the benefits of free and open competition;
  - 3. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or affect the execution of the Agreement.

**IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.**

Owner: **TOWN OF MORIAH**

Engineer: **TBA**

By: \_\_\_\_\_

By: \_\_\_\_\_

Print name: **HON. THOMAS SCOZZAFAVA**

Print name: \_\_\_\_\_

Title: **TOWN SUPERVISOR**

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Engineer License or Firm's Certificate No. (if required): \_\_\_\_\_

State of: **NEW YORK**

Address for Owner's receipt of notices:

Address for Engineer's receipt of notices:

**38 PARK PLACE, SUITE 1**

**PORT HENRY, NY 12974**

Designated Representative (**Paragraph 8.03.A**):

Designated Representative (**Paragraph 8.03.A**):

**Rob Wick, PMP**

Title: **Project Management Specialist**

Title: \_\_\_\_\_

Phone Number: **(518) 873-3426**

Phone Number: \_\_\_\_\_

E-Mail Address: **rwick@co.essex.ny.us**

E-Mail Address: \_\_\_\_\_

This is **EXHIBIT A**, consisting of **17** pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

## **Engineer's Services**

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Article 1 of the Agreement is supplemented to include the following agreement of the parties.

Engineer shall provide Basic and Additional Services as set forth below.

### **PART 1 – BASIC SERVICES**

#### *A1.01 General Requirements:*

A. Engineer shall provide:

1. *Project Schedule.*

- a. Produce a project schedule in Gantt chart format at the start of the project as a baseline and continue to keep the schedule updated throughout project.
- b. Provide updates to the Owner for any changes to the schedule that may impact the timely execution of the project per the terms of the contract.

2. *Project & Program Management:*

- a. Conduct **bi-weekly progress meetings**, a minimum of one (1) project meeting per month, through all phases of design and construction; Engineer will notify Owner of any additional meetings required, whether they be informal, formal or official Board Meetings to pass various Resolutions.
- b. Engineer will keep all meeting minutes and distribute to attendees.
- c. Engineer will coordinate with Owner (or Owner's Designated Representative) for necessary permits.
- d. Ensure Engineer's own contract is compliant by the Owners' funding program requirements, and produce all necessary reports required.
- e. Ensure that Owners' Contractors contracts are also compliant per the Owners' funding program requirements, and all necessary reports required are produced.

*Study and Report Phase (INCL: MPR for Sewer District Expansion to Stone St. & Consolidation, I&M Plan & GIS)*

B. Engineer shall:

1. Consult with Owner to define and clarify Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations, and identify available data, information, reports, facilities plans, and site evaluations.

- a. If Owner has already identified one or more potential solutions to meet its Project requirements, then proceed with the study and evaluation of such potential solutions:
  - b. If Owner has not identified specific potential solutions for study and evaluation, then assist Owner in determining whether Owner's requirements, and available data, reports, plans, and evaluations, point to a single potential solution for Engineer's study and evaluation, or are such that it will be necessary for Engineer to identify, study, and evaluate multiple potential solutions.
  - c. If it is necessary for Engineer to identify, study, and evaluate multiple potential solutions, then identify [ 2 ] alternative solutions potentially available to Owner, unless Owner and Engineer mutually agree that some other specific number of alternatives should be identified, studied, and evaluated.
2. Identify potential solution(s) to meet Owner's Project requirements, as needed.
  3. Study and evaluate the potential solution(s) to meet Owner's Project requirements.
  4. Visit the Site, or potential Project sites, to review existing conditions and facilities, unless such visits are not necessary or applicable to meeting the objectives of the Study and Report Phase.
  5. Advise Owner of any need for Owner to obtain, furnish, or otherwise make available to Engineer additional Project-related data and information, for Engineer's use in the study and evaluation of potential solution(s) to Owner's Project requirements, and preparation of a related report.
  6. After consultation with Owner, recommend to Owner the solution(s) which in Engineer's judgment meet Owner's requirements for the Project.
  7. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project to be designed or specified by Engineer, including but not limited to mitigating measures identified in an environmental assessment for the Project.
  8. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and Engineer's recommended solution(s). For each recommended solution Engineer will provide the following, which will be separately itemized: opinion of probable Construction Cost; proposed allowances for contingencies; the estimated total costs of design, professional, and related services to be provided by Engineer and its Consultants; and, on the basis of information furnished by Owner, a tabulation of other items and services included within the definition of Total Project Costs.
  9. Advise Owner of any need for Owner to provide data or services of the types described in Exhibit B, for use in Project design, or in preparation for Contractor selection and construction.
  10. When mutually agreed, assist Owner in evaluating the possible use of building information modeling; civil integrated management; geotechnical baselining of subsurface site conditions; innovative design, contracting, or procurement strategies; or other strategies, technologies, or techniques for assisting in the design, construction, and

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**Exhibit A – Engineer's Services**

**EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.**

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operation of Owner's facilities. The subject matter of this paragraph shall be referred to in Exhibit A and B as "Project Strategies, Technologies, and Techniques."

11. If requested to do so by Owner, assist Owner in identifying opportunities for enhancing the sustainability of the Project, and pursuant to Owner's instructions plan for the inclusion of sustainable features in the design.
  12. Use ASCE 38, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data" as a means to advise the Owner on a recommended scope of work and procedure for the identification and mapping of existing utilities.
  13. Develop a scope of work and survey limits for any topographic and other surveys necessary for design.
  14. Perform or provide the following other Study and Report Phase tasks or deliverables: **FACILITATE ANY REQUIRED SUPPORT FOR THE SEWER DISTRICT EXPANSION TO THE PORT HENRY WATER PLANT AND THE CONSOLIDATION OF SEWER DISTRICTS #1 & #2. PROVIDE COPIES ALL SURVEY AND MAPPING PRODUCTS TO THE TOWN (SURVEY WILL BE PROVIDED IN .DWG FORMAT).**
  15. Furnish [ 2 ] review copies of the Report and any other Study and Report Phase deliverables to Owner within [ 90 ] days of the Effective Date and review it with Owner. Within [ 30 ] days of receipt, Owner shall submit to Engineer any comments regarding the furnished items.
  16. Revise the Report and any other Study and Report Phase deliverables in response to Owner's comments, as appropriate, and furnish [ 2 ] copies of the revised Report and any other Study and Report Phase deliverables to the Owner within [ 30 ] days of receipt of Owner's comments.
- C. Engineer's services under the Study and Report Phase will be considered complete on the date when Engineer has delivered to Owner the revised Report and any other Study and Report Phase deliverables.

#### A1.02 *Preliminary Design Phase*

- A. After acceptance by Owner of the Report and any other Study and Report Phase deliverables; selection by Owner of a recommended solution; issuance by Owner of any instructions of for use of Project Strategies, Technologies, and Techniques, or for inclusion of sustainable features in the design; and indication by Owner of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner, (1) Engineer and Owner shall discuss and resolve any necessary revisions to Engineer's compensation (through application of the provisions regarding Additional Services, or otherwise), or the time for completion of Engineer's services, resulting from the selected solution, related Project Strategies, Technologies, or Techniques, sustainable design instructions, or specific modifications to the Project, and (2) upon written authorization from Owner, Engineer shall:
1. *Project Permitting (these are not inclusive; may vary or change during the project):*
    - a. Topographic Survey & Map
    - b. Boundary Survey & Map

- c. CONSULTANT shall provide technical support as needed to support any permitting process.
  - d. CONSULTANT has allocated fees to cover the creation of drawings, technical documents, review of permit related documents and revision as needed
2. Prepare Schematic Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project.
3. In preparing the Schematic Design Phase documents, use any specific applicable Project Strategies, Technologies, and Techniques authorized by Owner during or following the Study and Report Phase, and include sustainable features, as appropriate, pursuant to Owner's instructions.
4. Provide necessary field surveys and topographic and utility mapping for Engineer's design purposes. Comply with the scope of work and procedure for the identification and mapping of existing utilities selected and authorized by Owner pursuant to advice from Engineer **based on ASCE 38, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data,"** as set forth in **Paragraph A1.01.A.12** above. If no such scope of work and procedure for utility mapping has been selected and authorized, then at a minimum the utility mapping will include Engineer contacting utility owners and obtaining available information.
5. Visit the Site as needed to prepare the Schematic Design Phase documents.
6. Advise Owner if additional reports, data, information, or services of the types described in **Exhibit B** are necessary and assist Owner in obtaining such reports, data, information, or services.
7. Continue to assist Owner with Project Strategies, Technologies, and Techniques that Owner has chosen to implement.
8. Based on the information contained in the Schematic Design Phase documents, prepare a revised opinion of probable Construction Cost, and assist Owner in tabulating the various cost categories which comprise Total Project Costs.
9. Obtain and review Owner's instructions regarding Owner's procurement of construction services (including instructions regarding advertisements for bids, instructions to bidders, and requests for proposals, as applicable), Owner's construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Owner's bidding-related documents (or requests for proposals or other construction procurement documents), and Construction Contract Documents. Also obtain and review copies of Owner's design and construction standards, Owner's standard forms, general conditions (if other than EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition), supplementary conditions, text, and related documents or content for Engineer to include in the draft bidding-related documents (or requests for proposals or other construction procurement documents), and in the draft Construction Contract Documents, when applicable.
10. Perform or provide the following other Schematic Design Phase tasks or deliverables:

**COORDINATE WITH THE OWNER AND OWNER'S PROJECT TEAM TO  
SUPPORT EFFORTS IN ACHIEVING ANY AND ALL PERMITTING**

Exhibit A – Engineer's Services

EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.

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**NECESSARY FOR PROJECT TO REGULATORY AND FUNDING AGENCIES,  
PRIOR TO FINAL DESIGN AND IN TIME TO SUPPORT BIDDING OF  
CONSTRUCTION.**

11. Furnish **two [ 2 ]** review copies of the Schematic Design Phase documents, opinion of probable Construction Cost, and any other Schematic Design Phase deliverables to Owner within **thirty [ 30 ]** days of authorization to proceed with this phase, and review them with Owner. Within **ten [ 10 ]** days of receipt, Owner shall submit to Engineer any comments regarding the furnished items.
  12. Revise the Schematic Design Phase documents, opinion of probable Construction Cost, and any other Schematic Design Phase deliverables in response to Owner's comments, as appropriate, and furnish to Owner **two [ 2 ]** copies of the revised Schematic Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables within **fifteen [ 15 ]** days after receipt of Owner's **and any required Regulatory Agencies'** comments.
- B. Engineer's services under the Schematic Design Phase will be considered complete on the date when Engineer has delivered to Owner the revised Schematic Design Phase documents, revised opinion of probable Construction Cost, and any other Schematic Design Phase deliverables.

A1.03 *Final Design Phase (100% complete Design for Regulatory/Funding Agency reviews)*

- A. After acceptance by Owner of the Schematic Design Phase documents, revised opinion of probable Construction Cost as determined in the Schematic Design Phase, and any other Schematic Design Phase deliverables, subject to any Owner-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from Owner, Engineer shall:
1. Prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor.
  2. Visit the Site as needed to assist in preparing the final Drawings and Specifications.
  3. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design; assist Owner in consultations with such authorities; and revise the Drawings and Specifications in response to directives from such authorities, as appropriate.
  4. Advise Owner of any recommended adjustments to the opinion of probable Construction Cost.
  5. After consultation with Owner, include in the Construction Contract Documents any specific protocols for the transmittal of Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website. Any such protocols shall be applicable to transmittals between and among Owner, Engineer, and Contractor during the Construction Phase and Post-Construction Phase, and unless agreed otherwise shall supersede any conflicting protocols previously established for transmittals between Owner and Engineer.

6. Assist Owner in assembling known reports and drawings of Site conditions, and in identifying the technical data contained in such reports and drawings upon which bidders or other prospective contractors may rely.
  7. In addition to preparing the final Drawings and Specifications, assemble drafts of other Construction Contract Documents based on specific instructions and contract forms, text, or content received from Owner.
  8. Prepare or assemble draft bidding-related documents (or requests for proposals or other construction procurement documents), based on the specific bidding or procurement-related instructions and forms, text, or content received from Owner.
  9. Perform or provide the following other Final Design Phase tasks or deliverables: **PROVIDE A “FINAL APPROVABLE” SET OF PLANS & SPECS TO REGULATORY AND FUNDING AGENCIES IN SUCH TIME TO ALLOW FOR FORMAL REVIEW ACCEPTANCE PRIOR TO BIDDING CONSTRUCTION PROJECT; PROVIDE COPIES OF PLANS & SPECIFICATIONS TO OWNER UPON ACCEPTANCE BY REGULATORY & FUNDING AGENCIES (PLANS TO BE PROVIDED IN .SHP AND .PDF FILES TYPES).**
  10. Furnish for review by Owner, its legal counsel, and other advisors, **two [ 2 ] copies** of the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables, within **sixty [ 60 ] days** of authorization to proceed with the Final Design Phase, and review them with Owner. Within **fifteen [ 15 ] days** of receipt, Owner shall submit to Engineer any comments regarding the furnished items, and any instructions for revisions.
  11. Revise the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables in accordance with comments and instructions from the Owner, as appropriate, and submit **two [ 2 ] final copies** of such documents to Owner **and any required Regulatory Agencies** within **twenty [20] days** after receipt of Owner's/Agencies comments and instructions.
- B. Engineer's services under the Final Design Phase will be considered complete on the date when Engineer has delivered to Owner the final Drawings and Specifications, other assembled Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables.
- C. In the event that the Work designed or specified by Engineer is to be performed or furnished under more than one prime contract, or if Engineer's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), Owner and Engineer shall, prior to commencement of the Final Design Phase, develop a schedule for performance of Engineer's services during the Final Design, Bidding, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.
- D. The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is **[ 1 - GENERAL**

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Exhibit A – Engineer's Services

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**CONTRACTOR**. If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Agreement.

A1.04 *Bidding Phase (incl. Program Compliant "Construction Documents")*

A. After acceptance by Owner of the final Drawings and Specifications, other Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by Owner to proceed, Engineer shall:

1. **Conduct a Pre-Bidding Conference and ensure all potential Bidders are cognizant of any special considerations, to include Funding Agency requirements.**
2. Assist Owner in advertising for and obtaining bids or proposals for the Work, assist Owner in issuing assembled design, contract, and bidding-related documents (or requests for proposals or other construction procurement documents) to prospective contractors, and, where applicable, maintain a record of prospective contractors to which documents have been issued, attend pre-bid conferences, if any, and receive and process contractor deposits or charges for the issued documents.
3. Prepare and issue Addenda as appropriate to clarify, correct, or change the issued documents.
4. Provide information or assistance needed by Owner in the course of any review of proposals or negotiations with prospective contractors.
5. Consult with Owner as to the qualifications of prospective contractors.
6. Consult with Owner as to the qualifications of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors, for those portions of the Work as to which review of qualifications is required by the issued documents.
7. If the issued documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by prospective contractors, provided that such proposals are allowed by the bidding-related documents (or requests for proposals or other construction procurement documents) prior to award of contracts for the Work. Services under this paragraph are subject to the provisions of **Paragraph A2.02.A.2 of this Exhibit A**.
8. Attend the bid opening, prepare bid tabulation sheets to meet Owner's schedule, and assist Owner in evaluating bids or proposals, assembling final contracts for the Work for execution by Owner and Contractor, and in issuing notices of award of such contracts.
9. If Owner engages in negotiations with bidders or proposers, assist Owner with respect to technical and engineering issues that arise during the negotiations.
10. Perform or provide the following other Bidding Phase tasks or deliverables:

**ENSURE ALL FUNDING REQUIREMENTS THAT THE PROJECT MUST BE COMPLIANT TO ARE CLEARLY CITED IN THE CONTRACT DOCUMENTS, TO ENSURE CONTRACTOR(S) HAVE ALL NECESSARY AGENCY PLAN & REPORT FORMS TO POPULATE, PER EXHIBIT M.**

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Exhibit A – Engineer's Services

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- B. The Bidding Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective contractors (except as may be required if **Exhibit F** is a part of this Agreement).

A1.05 *Construction Phase*

- A. Upon successful completion of the Bidding Phase, and upon written authorization from Owner, Engineer shall:
1. *General Administration of Construction Contract:* Consult with Owner and act as Owner's representative as provided in the Construction Contract. The extent and limitations of the duties, responsibilities, and authority of Engineer shall be as assigned in EJCDC® C-700, Standard General Conditions of the Construction Contract (2013 Edition), prepared by the Engineers Joint Contract Documents Committee, or other construction general conditions specified in this Agreement. If Owner, or Owner and Contractor, modify the duties, responsibilities, and authority of Engineer in the Construction Contract, or modify other terms of the Construction Contract having a direct bearing on Engineer, then Owner shall compensate Engineer for any related increases in the cost to provide Construction Phase services. Engineer shall not be required to furnish or perform services contrary to Engineer's responsibilities as a licensed professional. All of Owner's instructions to Contractor will be issued through Engineer, which shall have authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement and the Construction Contract except as otherwise provided in writing.
  2. *Resident Project Representative (RPR):* Provide the services of an RPR at the Site to assist the Engineer and to provide more extensive observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth in **Exhibit D**. The furnishing of such RPR's services will not limit, extend, or modify Engineer's responsibilities or authority except as expressly set forth in **Exhibit D**.
  3. **Additionally, RPR will conduct Wage Rate Interviews for any applicable HUD funding per Exhibit M, as required.**
  - ~~4. *Selection of Independent Testing Laboratory:* Assist Owner in the selection of an independent testing laboratory to perform the services identified in **Exhibit B, Paragraph B2.01.**~~
  5. *Pre-Construction Conference:* Participate in a pre-construction conference prior to commencement of Work at the Site.
  6. *Electronic Transmittal Protocols:* If the Construction Contract Documents do not specify protocols for the transmittal of Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, then together with Owner and Contractor jointly develop such protocols for transmittals between and among Owner, Contractor, and Engineer during the Construction Phase and Post-Construction Phase.
  7. *Original Documents:* If requested by Owner to do so, maintain and safeguard during the Construction Phase at least one original printed record version of the Construction Contract Documents, including Drawings and Specifications signed and sealed by Engineer and other design professionals in accordance with applicable Laws and Regulations. Throughout the Construction Phase, make such original printed record

version of the Construction Contract Documents available to Contractor and Owner for review.

8. *Schedules:* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
9. *Baselines and Benchmarks:* As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.
10. *Visits to Site and Observation of Construction:* In connection with observations of Contractor's Work while it is in progress:
  - a. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe as an experienced and qualified design professional the progress of Contractor's executed Work. Such visits and observations by Engineer, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of the Work or to involve detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Construction Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment, as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Construction Contract Documents, and Engineer shall keep Owner informed of the progress of the Work.
  - b. The purpose of Engineer's visits to the Site, and representation by the Resident Project Representative, if any, at the Site, will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed Work will conform in general to the Construction Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Construction Contract Documents. Engineer shall not, during such visits or as a result of such observations of the Work, supervise, direct, or have control over the Work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to any Constructor's work in progress, for the coordination of the Constructors' work or schedules, nor for any failure of any Constructor to comply with Laws and Regulations applicable to furnishing and performing of its work. Accordingly, Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish or perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents.
11. *Defective Work:* Reject Work if, on the basis of Engineer's observations, Engineer believes that such Work is defective under the terms and standards set forth in the Construction Contract Documents. Provide recommendations to Owner regarding

whether Contractor should correct such Work or remove and replace such Work, or whether Owner should consider accepting such Work as provided in the Construction Contract Documents.

12. *Compatibility with Design Concept:* If Engineer has express knowledge that a specific part of the Work that is not defective under the terms and standards set forth in the Construction Contract Documents is nonetheless not compatible with the design concept of the completed Project as a functioning whole, then inform Owner of such incompatibility, and provide recommendations for addressing such Work.
13. *Clarifications and Interpretations:* Accept from Contractor and Owner submittal of all matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. With reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Construction Contract Documents.
14. *Non-reviewable Matters:* If a submitted matter in question concerns the Engineer's performance of its duties and obligations, or terms and conditions of the Construction Contract Documents that do not involve (1) the performance or acceptability of the Work under the Construction Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer will not provide a decision or interpretation.
15. *Field Orders:* Subject to any limitations in the Construction Contract Documents, Engineer may prepare and issue Field Orders requiring minor changes in the Work.
16. *Change Orders and Work Change Directives:* Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.
17. *Differing Site Conditions:* Respond to any notice from Contractor of differing site conditions, including conditions relating to underground facilities such as utilities, and hazardous environmental conditions. Promptly conduct reviews and prepare findings, conclusions, and recommendations for Owner's use.
18. *Shop Drawings, Samples, and Other Submittals:* Review and approve or take other appropriate action with respect to Shop Drawings, Samples, and other required Contractor submittals, but only for conformance with the information given in the Construction Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Construction Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.
19. *Substitutes and "Or-equal":* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor, but subject to the provisions of **Paragraph A2.02.A.2 of this Exhibit A.**
20. *Inspections and Tests:*

- a. Receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Construction Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Construction Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Construction Contract Documents. Engineer shall be entitled to rely on the results of such inspections and tests.
  - b. As deemed reasonably necessary, request that Contractor uncover Work that is to be inspected, tested, or approved.
  - c. Pursuant to the terms of the Construction Contract, require special inspections or testing of the Work, whether or not the Work is fabricated, installed, or completed.
21. *Change Proposals and Claims:* (a) Review and respond to Change Proposals. Review each duly submitted Change Proposal from Contractor and, within **ten (10) days** after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part **such that the Owner can pay the Contractor within a thirty (30) day term from invoice submission**. Such actions shall be in writing, with a copy provided to Owner and Contractor. If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer will not resolve the Change Proposal. (b) Provide information or data to Owner regarding engineering or technical matters pertaining to Claims.
22. *Applications for Payment:* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
- a. Determine the amounts that Engineer recommends Contractor be paid. Recommend reductions in payment (set-offs) based on the provisions for set-offs stated in the Construction Contract. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the Work is generally in accordance with the Construction Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Construction Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work. In the case of unit price Work, Engineer's recommendations of payment will include final determinations of quantities and classifications of the Work (subject to any subsequent adjustments allowed by the Construction Contract Documents).
  - b. By recommending payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this

Agreement. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control the Work, or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the money paid to Contractor by Owner; ~~to determine that title to any portion of the Work, including materials or equipment, has passed to Owner free and clear of any liens, claims, security interests, or encumbrances;~~ or that there may not be other matters at issue between Owner and Contractor that might affect the amount that should be paid.

23. *Contractor's Completion Documents:* Receive from Contractor, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Construction Contract Documents, certificates of inspection, tests and approvals, and Shop Drawings, **Record Drawings**, Samples, and other data approved as provided under **Paragraph A1.05.A.17**. Receive from Contractor, review, and transmit to Owner the annotated record documents which are to be assembled by Contractor in accordance with the Construction Contract Documents to obtain final payment. The extent of Engineer's review of record documents shall be to check that Contractor has submitted all pages. **Engineer shall ensure that all Project Closeout documents listed in Exhibit P, "Project Closeout Checklist", are secured prior to issuing the "Notice of Acceptability of Work". Provided in Exhibit E.**
24. *Substantial Completion:* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner and Contractor, visit the Site to review the Work and determine the status of completion. Follow the procedures in the Construction Contract regarding the preliminary certificate of Substantial Completion, punch list of items to be completed, Owner's objections, notice to Contractor, and issuance of a final certificate of Substantial Completion. Assist Owner regarding any remaining engineering or technical matters affecting Owner's use or occupancy of the Work following Substantial Completion.
25. *Other Tasks:* Perform or provide the following other Construction Phase tasks or deliverables: **ENSURE ALL DELIVERABLES THROUGH CONSTRUCTION ADMINISTRATION ARE COMPLIANT AND IN ACCORDANCE WITH FUNDING PROGRAM REQUIREMENTS, LISTED IN EXHIBIT M.**
26. *Final Notice of Acceptability of the Work:* Conduct a final visit to the Project to determine if the Work is complete and acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide a notice to Owner and Contractor in the form attached hereto as **Exhibit E ("Notice of Acceptability of Work")** that the Work is acceptable (subject to the provisions of the Notice and **Paragraph A1.05.A.21.b**) to the best of Engineer's knowledge, information, and belief, and based on the extent of the services provided by Engineer under this Agreement.
27. *Standards for Certain Construction-Phase Decisions:* Engineer will render decisions regarding the requirements of the Construction Contract Documents, and judge the



acceptability of the Work, pursuant to the specific procedures set forth in the Construction Contract for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

- B. *Duration of Construction Phase:* The Construction Phase will commence with the execution of the first Construction Contract for the Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If the Project involves more than one prime contract as indicated in **Paragraph A1.03.D**, then Construction Phase services may be rendered at different times in respect to the separate contracts. Subject to the provisions of **Article 3**, Engineer shall be entitled to an equitable increase in compensation if Construction Phase services (including Resident Project Representative services, if any) are required after the original date for completion and readiness for final payment of Contractor as set forth in the Construction Contract.

A1.06 ~~*Post-Construction Close Out Phase*~~

- A. Upon written authorization from Owner during the Post-Construction Phase, Engineer shall:
1. Together with Owner, visit the Project to observe any apparent defects in the Work, make recommendations as to replacement or correction of defective Work, if any, or the need to repair of any damage to the Site or adjacent areas, and assist Owner in consultations and discussions with Contractor concerning correction of any such defective Work and any needed repairs.
  - ~~2. Together with Owner, visit the Project within one month before the end of the Construction Contract's correction period to ascertain whether any portion of the Work or the repair of any damage to the Site or adjacent areas is defective and therefore subject to correction by Contractor.~~
  3. Perform or provide the following other ~~Post-Construction~~ Close Out Phase tasks or deliverables:  
  
**ENSURE ALL NECESSARY PROGRAM MANAGEMENT & DOCUMENTS ADDRESS FUNDING AGENCY REQUIREMENTS AS DEFINED IN EXHIBIT M.**
- B. The Post-Construction/Close Out Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate ~~twelve~~ **two** months after the commencement of the Construction Contract's correction period.

## PART 2 – ADDITIONAL SERVICES

A2.01 *Additional Services Requiring Owner's Written Authorization*

- A. If authorized in writing by Owner, Engineer shall provide Additional Services of the types listed below. These services are not included as part of Basic Services and will be paid for by Owner as indicated in **Exhibit C**.

1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
2. Services to make measured drawings of existing conditions or facilities, to conduct tests or investigations of existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.
3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer, or the Project's design requirements, including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Construction Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date or are due to any other causes beyond Engineer's control.
4. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those agreed to in **Paragraph A1.01.A.1 and 2.**
5. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.
6. Providing renderings or models for Owner's use, including services in support of building information modeling or civil integrated management.

**NOTE: A PRIMARY DELIVERABLE OF THIS CONTRACT IS TO PROVIDE OWNER AN ELECTRONIC SET OF PROJECT DESIGN DATA TO INCLUDE ANY MAPS, DESIGNS, SPECIFICATIONS, ETC. USED IN CONJUNCTION WITH ESTABLISHING CONSTRUCTION DOCUMENTS (.pdf & .shp file type); THIS ACTIVITY IS NOT SUBJECT TO INTERPRETATION AS AN "ADDITIONAL SERVICE".**

7. Undertaking investigations and studies including, but not limited to:
  - a. detailed consideration of operations, maintenance, and overhead expenses;
  - b. ~~the preparation of feasibility studies (such as those that include projections of output capacity, utility project rates, project market demand, or project revenues) and cash flow analyses, provided that such services are based on the engineering and technical aspects of the Project, and do not include rendering advice regarding municipal financial products or the issuance of municipal securities;~~
  - c. ~~preparation of appraisals;~~
  - d. ~~evaluating processes available for licensing, and assisting Owner in obtaining process licensing;~~
  - e. ~~detailed quantity surveys of materials, equipment, and labor; and~~

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~~f. audits or inventories required in connection with construction performed or furnished by Owner.~~

**NOTE: AS A PART OF THE CONSTRUCTION PHASE ADMINISTRATION SERVICES, THE ENGINEER IS EXPECTED TO PROVIDE ANALYSIS OF THE CONTRACTOR'S PAYMENT APPLICATIONS FOR ACCURACY REMITTED EACH MONTH, PER ATTACHED FORMS IN EXHIBITS, AND NOT SUBJECT TO INTERPRETATION AS AN "ADDITIONAL SERVICE".**

8. Furnishing services of Consultants for other than Basic Services.
9. Providing data or services of the types described in **Exhibit B**, when Owner retains Engineer to provide such data or services instead of Owner furnishing the same.
10. Providing the following services:
  - a. Services attributable to more prime construction contracts than specified in **Paragraph A1.03. D**.
  - b. Services to arrange for performance of construction services for Owner by contractors other than the principal prime Contractor and administering Owner's contract for such services.
11. Services during out-of-town travel required of Engineer, *other than for visits to the Site or Owner's office as required in Basic Services (Part 1 of Exhibit A)*.
- ~~12. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructibility review requested by Owner; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other documents as a result of such review processes.~~
13. Preparing additional bidding-related documents (or requests for proposals or other construction procurement documents) or Construction Contract Documents for alternate bids or cost estimates requested by Owner for the Work or a portion thereof.
14. Assistance in connection with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required to complete services required by **Paragraph 5.02.A and Exhibit F**.
15. Preparing conformed Construction Contract Documents that incorporate and integrate the content of all Addenda and any amendments negotiated by Owner and Contractor.
16. Providing Construction Phase services beyond the original date for completion and readiness for final payment of Contractor, but only if such services increase the total quantity of services to be performed in the Construction Phase, rather than merely shifting performance of such services to a later date.
17. Preparing Record Drawings, and furnishing such Record Drawings to Owner.

**NOTE: ENGINEER SHALL CITE IN CONSTRUCTION DOCUMENTS THAT THE CONTRACTOR IS RESPONSIBLE TO PROVIDE (2) SETS OF RECORD**

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Exhibit A – Engineer's Services

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**DRAWINGS, AND ENGINEER SHALL REVIEW FOR ACCURACY AND APPLY ANY NECESSARY MARKUPS, AS REQUIRED AS A NORMAL CONSTRUCTION PHASE SERVICES ACTIVITY, NOT SUBJECT TO INTERPRETATION AS “ADDITIONAL SERVICES”.**

18. Supplementing Record Drawings with information regarding the completed Project, Site, and immediately adjacent areas obtained from field observations, Owner, utility companies, and other reliable sources.
19. Conducting surveys, investigations, and field measurements to verify the accuracy of Record Drawing content obtained from Contractor, Owner, utility companies, and other sources; revise and supplement Record Drawings as needed.
20. Preparation of operation, maintenance, and staffing manuals.
21. Protracted or extensive assistance in refining and adjusting of Project equipment and systems (such as initial startup, testing, and balancing).
22. Assistance to Owner in training Owner’s staff to operate and maintain Project equipment and systems.
23. Assistance to Owner in developing systems and procedures for (a) control of the operation and maintenance of Project equipment and systems, and (b) related recordkeeping.
24. Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration, lien or bond claim, or other legal or administrative proceeding involving the Project.
25. Overtime work requiring higher than regular rates.
26. Providing construction surveys and staking to enable Contractor to perform its work other than as required under **Paragraph A1.05.A.8**; any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.
27. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.
28. Extensive services required during any correction period, or with respect to monitoring Contractor’s compliance with warranties and guarantees called for in the Construction Contract (except as agreed to under Basic Services).
29. Other additional services performed or furnished by Engineer not otherwise provided for in this Agreement.

*A2.02 Additional Services Not Requiring Owner’s Written Authorization*

- A. Engineer shall advise Owner that Engineer is commencing to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice to cease from Owner.

1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner.
2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or equal" items; services after the award of the Construction Contract in evaluating and determining the acceptability of a proposed "or equal" or substitution which is found to be inappropriate for the Project; evaluation and determination of an excessive number of proposed "or equals" or substitutions, whether proposed before or after award of the Construction Contract.

**NOTE: ENGINEER SHALL COMMUNICATE TO OWNER ANY CHANGES TO THE PLANS & SPECIFICATIONS THAT RESULT IN PRODUCT CHANGES THAT DO NOT MEET THE EXISTING CONFIGURATION MANAGEMENT OR PRODUCT STANDARDS, PER THE ORIGINATING RFP, APPENDIX J.**

3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.
4. Additional or extended services arising from (a) the presence at the Site of any Constituent of Concern or items of historical or cultural significance, (b) emergencies or acts of God endangering the Work, (c) damage to the Work by fire or other causes during construction, (d) a significant amount of defective, neglected, or delayed Work, (e) acceleration of the progress schedule involving services beyond normal working hours, or (f) default by Contractor.
5. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of the Work by Owner prior to Substantial Completion.
6. Evaluating unreasonable or frivolous requests for interpretation or information (RFIs), Change Proposals, or other demands from Contractor or others in connection with the Work, or an excessive number of RFIs, Change Proposals, or demands.
7. Reviewing a Shop Drawing or other Contractor submittal more than three times, as a result of repeated inadequate submissions by Contractor.
8. While at the Site, compliance by Engineer and its staff with those terms of Owner's or Contractor's safety program provided to Engineer subsequent to the Effective Date that exceed those normally required of engineering personnel by federal, State, or local safety authorities for similar construction sites.



This is **EXHIBIT B**, consisting of **4** pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

## **Owner's Responsibilities**

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**Article 2** of the Agreement is supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall at its expense:

- A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations.
- B. Give instructions to Engineer regarding Owner's procurement of construction services (including instructions regarding advertisements for bids, instructions to bidders, and requests for proposals, as applicable), Owner's construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Owner's bidding-related documents (or requests for proposals or other construction procurement documents), and Construction Contract Documents. Furnish copies (or give specific directions requesting Engineer to use copies already in Engineer's possession) of all design and construction standards, Owner's standard forms, general conditions (if other than EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition), supplementary conditions, text, and related documents and content for Engineer to include in the draft bidding-related documents (or requests for proposals or other construction procurement documents), and draft Construction Contract Documents, when applicable. Owner shall have responsibility for the final content of (1) such bidding-related documents (or requests for proposals or other construction procurement documents), and (2) those portions of any Construction Contract other than the design (as set forth in the Drawings, Specifications, or otherwise), and other engineering or technical matters; and Owner shall seek the advice of Owner's legal counsel, risk managers, and insurance advisors with respect to the drafting and content of such documents.
- C. Furnish to Engineer any other available information pertinent to the Project including reports and data relative to previous designs, construction, or investigation at or adjacent to the Site.
- D. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, obtain, furnish, or otherwise make available (if necessary through title searches, or retention of specialists or consultants) such additional Project-related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Such additional information or data would generally include the following:
  1. Property descriptions.
  2. Zoning, deed, and other land use restrictions.
  - ~~3. Utility and topographic mapping and surveys.~~
  4. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.

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**Exhibit B – Owner's Responsibilities**

**EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.**

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5. Explorations and tests of subsurface conditions at or adjacent to the Site; ~~geotechnical reports and investigations~~; drawings of physical conditions relating to existing surface or subsurface structures at the Site; hydrographic surveys, ~~laboratory tests and inspections of samples, materials, and equipment~~; with appropriate professional interpretation of such ~~information or data~~.
  6. Environmental assessments, audits, investigations, and impact statements, and other relevant environmental, historical, or cultural studies relevant to the Project, the Site, and adjacent areas.
  7. Data or consultations as required for the Project but not otherwise identified in this Agreement.
- E. Arrange for safe access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Agreement.
- F. Recognizing and acknowledging that Engineer's services and expertise do not include the following services, provide, as required for the Project:
1. Accounting, bond and financial advisory (including, if applicable, "municipal advisor" services as described in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) and the municipal advisor registration rules issued by the Securities and Exchange Commission), independent cost estimating, and insurance counseling services.
  2. Legal services with regard to issues pertaining to the Project as Owner requires, Contractor raises, or Engineer reasonably requests.
  3. Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the money paid.
- ~~G. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of samples, materials, and equipment required by the Construction Contract Documents (other than those required to be furnished or arranged by Contractor), or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof. Provide Engineer with the findings and reports generated by testing laboratories, including findings and reports obtained from or through Contractor.~~

**NOTE: THE ENGINEER SHALL PROVIDE AND/OR PROCURE AND NECESSARY TESTING THAT NEEDS TO OCCUR IN ORDER TO PRODUCE CONSTRUCTION DOCUMENTS. THE ENGINEER SHALL CITE IN CONSTRUCTION DOCUMENTS THE REQUISITE CONSTRUCTION PERMITTING, AND THAT THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONSTRUCTION PHASE TESTING THAT IS NECESSARY.**

- ~~H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.~~

**NOTE: THE ENGINEER IS RESPONSIBLE TO WORK WITH OWNER RESOURCES FROM COUNTY DEPARTMENTS TO SECURE ALL NECESSARY PERMITTING AND ENVIRONMENTAL APPROVALS FOR THE PROJECT.**

- I. Advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.
- J. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, define and set forth as an attachment to this **Exhibit B** the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.
- K. If more than one prime contract is to be awarded for the Work designed or specified by Engineer, then designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of Engineer as an attachment to this **Exhibit B** that is to be mutually agreed upon and made a part of this Agreement before such services begin.
- L. Inform Engineer in writing of any specific requirements of safety or security programs that are applicable to Engineer, as a visitor to the Site.
- M. Examine all alternative solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, risk manager, insurance counselor, financial/municipal advisor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.
- N. Inform Engineer regarding any need for assistance in evaluating the possible use of Project Strategies, Technologies, and Techniques, as defined in **Exhibit A**.
- O. Advise Engineer as to whether Engineer's assistance is requested in identifying opportunities for enhancing the sustainability of the Project.
- P. Place and pay for advertisement for Bids in appropriate publications.
- Q. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others (including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling, and legal advice) for Owner so that Engineer may assist Owner in collating the various cost categories which comprise Total Project Costs.
- R. Attend and participate in the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job-related meetings, and Site visits to determine Substantial Completion and readiness of the completed Work for final payment.
- S. Authorize Engineer to provide Additional Services as set forth in **Part 2 of Exhibit A** of the Agreement, as required.
- T. Perform or provide the following: (**SEE EXHIBIT J and EXHIBIT P**)

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This is **EXHIBIT C**, consisting of **2** pages, referred to in and part of the Agreement between Owner and Engineer for Professional Services dated **TBA**.

**Payments to Engineer for Services and Reimbursable Expenses**  
**COMPENSATION PACKET BC-1: Basic Services – Lump Sum**

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Article 2 of the Agreement is supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C2.01 Compensation for Basic Services (other than Resident Project Representative) – Lump Sum Method of Payment**

A. Owner shall pay Engineer for Basic Services set forth in **Exhibit A**, except for services of Engineer’s Resident Project Representative, if any, as follows:

1. A Lump Sum amount of **\$TBA** based on the following estimated distribution of compensation, **and per the cost proposal included in Exhibit P:**

- a. **General Requirements** **\$TBA**
- b. **Map, Plan & Report** **\$TBA**
- c. **Preliminary Design Phase** **\$TBA**
- d. **Final Design Phase** **\$TBA**
- e. **Bidding Phase** **\$TBA**
- f. **Construction Phase** **\$TBA**
- g. **Post-Construction Phase** **\$TBA**

2. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Lump Sum amount unless approved in writing by the Owner.

3. The Lump Sum includes compensation for Engineer’s services and services of Engineer’s Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor costs, overhead, profit, expenses (other than any expressly allowed Reimbursable Expenses), and Consultant charges.

4. In addition to the Lump Sum, Engineer is also entitled to reimbursement from Owner for the following **Reimbursable Expenses (to include fees for Resident Project Representative included in “Compensation Packet RPR-2”**. Also see **Appendix 1 for rates or charges): \$TBA**



5. The portion of the Lump Sum amount billed for Engineer's services will be based upon Engineer's estimate of the percentage of the total services actually completed during the billing period. If any Reimbursable Expenses are expressly allowed, Engineer may also bill for any such Reimbursable Expenses incurred during the billing period.
- B. *Period of Service:* The compensation amount stipulated in **Compensation Packet BC-1** is conditioned on a period of service **not exceeding December 31st, 2022**. If such period of service is extended, the compensation amount for Engineer's services shall be appropriately adjusted.

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## COMPENSATION PACKET RPR-2: Resident Project Representative – Standard Hourly Rates

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Article 2 of the Agreement is supplemented to include the following agreement of the parties:

### C2.04 *Compensation for Resident Project Representative Basic Services – Standard Hourly Rates Method of Payment*

#### A. *Owner shall pay Engineer for Resident Project Representative Basic Services as follows:*

1. *Resident Project Representative Services:* For services of Engineer's Resident Project Representative under **Paragraph A1.05.A of Exhibit A**, an amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all Resident Project Representative services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be **\$TBA** (*This figure includes projected travel fees: Labor is \$TBA and travel is projected at \$TBA*) based upon full-time RPR services on an eight-hour workday, Monday through Friday, **over an a projection of (40) hours per week, or approximately (1,200) hours of allocation during the approximate one hundred fifty (150) day** construction schedule.

#### B. *Compensation for Reimbursable Expenses:*

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under **Paragraph C2.01**, and are directly related to the provision of Resident Project Representative or Post-Construction Basic Services, Owner shall pay Engineer at the rates set forth in **Appendix 1 to this Exhibit C**.
2. Reimbursable Expenses include the expenses identified in **Appendix 1** and the following: transportation (including mileage), lodging, and subsistence incidental thereto; ~~providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and assistants; toll telephone calls, mobile phone charges, and courier charges;~~ reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be those internal expenses related to the Resident Project Representative Basic Services that are actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such services, the latter multiplied by a factor of **1.1, AND LIMITED TO THE DELIVERABLES LISTED IN PARAGRAPH C2.01 OF EXHIBIT C**.
4. ~~The Reimbursable Expenses Schedule will be adjusted annually (as of January 1<sup>st</sup>, 2019) to reflect equitable changes in the compensation payable to Engineer.~~

#### C. *Other Provisions Concerning Payment Under this Paragraph C2.04:*

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Exhibit C – Compensation Packet RPR-2: Resident Project Representative Services—  
Standard Hourly Rates Method of Payment.

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1. **Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants**, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of **1.1**, **AND LIMITED TO THE DELIVERABLES LISTED IN PARAGRAPH C2.01 OF EXHIBIT C**.
2. *Factors*: The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. *Estimated Compensation Amounts*:
  - a. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  - b. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that the total compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof, allowing Owner to consider its options, including suspension or termination of Engineer's services for Owner's convenience. Upon notice Owner and Engineer promptly shall review the matter of services remaining to be performed and compensation for such services. Owner shall either exercise its right to suspend or terminate Engineer's services for Owner's convenience, agree to such compensation exceeding said estimated amount, or agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Owner decides not to suspend Engineer's services during negotiations and Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, then Engineer shall be paid for all services rendered hereunder.
4. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

**COMPENSATION PACKET AS-1:  
Additional Services – Standard Hourly Rates**

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Article 2 of the Agreement is supplemented to include the following agreement of the parties:

**C2.05 Compensation for Additional Services – Standard Hourly Rates Method of Payment**

- A. Owner shall pay Engineer for Additional Services, if any, as follows:
1. *General:* For services of Engineer's personnel engaged directly on the Project pursuant to **Paragraph A2.01 or A2.02 of Exhibit A**, except for services as a consultant or witness under **Paragraph A2.01.A.20**, (which if needed shall be separately negotiated based on the nature of the required consultation or testimony) an amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any.
- B. *Compensation For Reimbursable Expenses:*
1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under **Paragraph C2.01** and are directly related to the provision of Additional Services, Owner shall pay Engineer at the rates set forth in **Appendix 1 to this Exhibit C**.
  2. Reimbursable Expenses include the expenses identified in **Appendix 1** and the following categories: transportation (including mileage), lodging, and subsistence incidental thereto; ~~providing and maintaining field office facilities including furnishings and utilities; toll telephone calls, mobile phone charges, and courier charges;~~ reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items; and Consultants' charges. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.
  3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such Additional Services, the latter multiplied by a factor of **ONE POINT ONE [ 1.1], AND LIMITED TO THE DELIVERABLES LISTED IN PARAGRAPH C2.01 OF EXHIBIT C**.
  4. ~~The Reimbursable Expenses Schedule will be adjusted annually (as of January 1<sup>st</sup>, 2019) to reflect equitable changes in the compensation payable to Engineer.~~
- C. *Other Provisions Concerning Payment for Additional Services:*
1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of **ONE POINT ONE [ 1.1 ], AND LIMITED TO THE DELIVERABLES LISTED IN PARAGRAPH C2.01 OF EXHIBIT C**.

2. *Factors:* The external Reimbursable Expenses and Engineer's Consultant's Factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

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This is **Appendix 1 to EXHIBIT C**, consisting of **1** pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

## **Reimbursable Expenses Schedule**

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Reimbursable Expenses are subject to review and adjustment per **Exhibit C**. Rates and charges for Reimbursable Expenses as of the date of the Agreement are:

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This is **Appendix 2 to EXHIBIT C**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

## **Standard Hourly Rates Schedule**

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A. *Standard Hourly Rates:*

1. Standard Hourly Rates are set forth in this **Appendix 2 to this Exhibit C** and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.
2. The Standard Hourly Rates apply only as specified in **Article C2**.

B. *Schedule:*

Hourly rates for services performed on or after the date of the Agreement are:

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This is **EXHIBIT D**, consisting of 5 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

## **Duties, Responsibilities, and Limitations of Authority of Resident Project Representative**

Article 1 of the Agreement is supplemented to include the following agreement of the parties:

### **ARTICLE 1 - SERVICES OF ENGINEER**

#### *D1.01 Resident Project Representative*

- A. Engineer shall furnish a Resident Project Representative (“RPR”) to assist Engineer in observing progress and quality of the Work. The RPR may provide full time representation or may provide representation to a lesser degree. RPR is Engineer’s representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR’s actions.
- B. Through RPR's observations of the Work, including field checks of materials and installed equipment, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the Work. However, Engineer shall not, as a result of such RPR observations of the Work, supervise, direct, or have control over the Work, nor shall Engineer (including the RPR) have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to the Work or any Constructor’s work in progress, for the coordination of the Constructors’ work or schedules, or for any failure of any Constructor to comply with Laws and Regulations applicable to the performing and furnishing of its work. The Engineer (including RPR) neither guarantees the performances of any Constructor nor assumes responsibility for any Constructor’s failure to furnish and perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents. In addition, the specific terms set forth in **Exhibit A, Paragraph A1.05**, of this Agreement are applicable.
- C. The duties and responsibilities of the RPR are as follows:
  1. *General:* RPR’s dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR’s dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.
  2. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, schedule of values, and other schedules prepared by Contractor and consult with Engineer concerning acceptability of such schedules.
  3. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor’s safety meetings), and as appropriate prepare and circulate copies of minutes thereof.

4. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
5. *Liaison:*
  - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Construction Contract Documents.
  - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-site operations.
  - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
6. *Clarifications and Interpretations:* Receive from Contractor submittal of any matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. Report to Engineer regarding such RFIs. Report to Engineer when clarifications and interpretations of the Construction Contract Documents are needed, whether as the result of a Contractor RFI or otherwise. Transmit Engineer's clarifications, interpretations, and decisions to Contractor. ,
7. *Shop Drawings and Samples:*
  - a. Record date of receipt of Samples and Contractor-approved Shop Drawings.
  - b. Receive Samples that are furnished at the Site by Contractor and notify Engineer of availability of Samples for examination.
  - c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal, if RPR believes that the submittal has not been received from Contractor or has not been approved by Contractor or Engineer.
8. *Proposed Modifications:* Consider and evaluate Contractor's suggestions for modifications to the Drawings or Specifications, and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit Engineer's response (if any) to such suggestions to Contractor.
9. *Review of Work; Defective Work:*
  - a. Report to Engineer whenever RPR believes that any part of the Work is defective under the terms and standards set forth in the Construction Contract Documents and provide recommendations as to whether such Work should be corrected, removed and replaced, or accepted as provided in the Construction Contract Documents.
  - b. Inform Engineer of any Work that RPR believes is not defective under the terms and standards set forth in the Construction Contract Documents, but is nonetheless not compatible with the design concept of the completed Project as a functioning whole, and provide recommendations to Engineer for addressing such Work; and

- c. Advise Engineer of that part of the Work that RPR believes should be uncovered for observation, or requires special testing, inspection, or approval.

10. *Inspections, Tests, and System Start-ups:*

- a. Consult with Engineer in advance of scheduled inspections, tests, and systems start-ups.
- b. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
- c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
- d. Observe whether Contractor has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public or other agencies having jurisdiction over the Work.
- e. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work, record the results of these inspections, and report to Engineer.

11. *Records:*

- a. Maintain at the Site orderly files for correspondence, reports of job conferences, copies of Construction Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Construction Contract, RFIs, Engineer's clarifications and interpretations of the Construction Contract Documents, progress reports, approved Shop Drawing and Sample submittals, and other Project-related documents.
- b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
- c. Upon request from Owner to Engineer, photograph or video Work in progress or Site conditions.
- d. Record and maintain accurate, up-to-date lists of the names, addresses, fax numbers, e-mail addresses, websites, and telephone numbers (including mobile numbers) of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
- e. Maintain records for use in preparing Project documentation.
- f. Upon completion of the Work, furnish original set of all RPR Project documentation to Engineer.



12. *Reports:*

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to Engineer-proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.
- d. Immediately inform Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, possible force majeure or delay events, damage to property by fire or other causes, or the discovery of any potential differing site condition or Constituent of Concern.

13. *Payment Requests:* Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

14. *Certificates, Operation and Maintenance Manuals:* During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

15. *Completion:*

- a. Participate in Engineer's visits to the Site regarding Substantial Completion, assist in the determination of Substantial Completion, and prior to the issuance of a Certificate of Substantial Completion submit a punch list of observed items requiring completion or correction.
- b. Participate in Engineer's visit to the Site in the company of Owner and Contractor, to determine completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
- c. Observe whether all items on the final punch list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work (**Exhibit E**).

D. Resident Project Representative shall not:

1. Authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of Engineer's authority as set forth in this Agreement.

3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers, or any Constructor.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the Work, by Contractor or any other Constructor.
5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

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This is **EXHIBIT E**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.



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**NOTICE OF ACCEPTABILITY OF WORK**

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**PROJECT: MORIAH SEWER DISTRICT #1 COLLECTION SYSTEM UPGRADES**

**OWNER: TOWN OF MORIAH, NY**

**CONTRACTOR: TBA**

**OWNER'S CONSTRUCTION CONTRACT IDENTIFICATION: P-1005-2019**

**EFFECTIVE DATE OF THE CONSTRUCTION CONTRACT: TBA**

**ENGINEER: TBA**

**NOTICE DATE:**

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**To: Town of Moriah  
Owner**

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**And To: TBA  
Contractor**

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**From: TBA  
Engineer**

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The Engineer hereby gives notice to the above Owner and Contractor that Engineer has recommended final payment of Contractor, and that the Work furnished and performed by Contractor under the above Construction Contract is acceptable, expressly subject to the provisions of the related Contract Documents, the Agreement between Owner and Engineer for Professional Services dated \_\_\_\_\_, and the following terms and conditions of this Notice:

**CONDITIONS OF NOTICE OF ACCEPTABILITY OF WORK**

The Notice of Acceptability of Work (“Notice”) is expressly made subject to the following terms and conditions to which all those who receive said Notice and rely thereon agree:

1. This Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. This Notice reflects and is an expression of the Engineer’s professional opinion.
3. This Notice is given as to the best of Engineer’s knowledge, information, and belief as of the Notice Date.
4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor’s work) under Engineer’s Agreement with Owner, and applies only to facts that are within Engineer’s knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Agreement.
5. This Notice is not a guarantee or warranty of Contractor’s performance under the Construction Contract, an acceptance of Work that is not in accordance with the related Contract Documents, including but not limited to defective Work discovered after final inspection, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Construction Contract Documents, or to otherwise comply with the Construction Contract Documents or the terms of any special guarantees specified therein.
6. This Notice does not relieve Contractor of any surviving obligations under the Construction Contract, and is subject to Owner’s reservations of rights with respect to completion and final payment.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Dated: \_\_\_\_\_

This is ~~EXHIBIT F~~, consisting of ~~1~~ pages, referred to in and part of the Agreement between Owner and Engineer for Professional Services dated [ ].

## Construction Cost Limit

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Paragraph 5.02 of the Agreement is supplemented to include the following agreement of the parties:

### ~~F5.02 — Designing to Construction Cost Limit~~

- ~~A. — Owner and Engineer hereby agree to a Construction Cost limit in the amount of \$[ ].~~
- ~~B. — A bidding or negotiating contingency of [ ] percent will be added to any Construction Cost limit established.~~
- ~~C. — The acceptance by Owner at any time during Basic Services of a revised opinion of probable Construction Cost in excess of the then established Construction Cost limit will constitute a corresponding increase in the Construction Cost limit.~~
- ~~D. — Engineer will be permitted to determine what types and quality of materials, equipment and component systems are to be included in the Drawings and Specifications. Engineer may make reasonable adjustments in the scope, extent, and character of the Project to the extent consistent with the Project requirements and sound engineering practices, to bring the Project within the Construction Cost limit.~~
- ~~E. — If the Bidding or Negotiating Phase has not commenced within three months after completion of the Final Design Phase, or if industry wide prices are changed because of unusual or unanticipated events affecting the general level of prices or times of delivery in the construction industry, the established Construction Cost limit will not be binding on Engineer. In such cases, Owner shall consent to an adjustment in the Construction Cost limit commensurate with any applicable change in the general level of prices in the construction industry between the date of completion of the Final Design Phase and the date on which proposals or Bids are sought.~~
- ~~F. — If the lowest bona fide proposal or Bid exceeds the established Construction Cost limit, Owner shall (1) give written approval to increase such Construction Cost limit, or (2) authorize negotiating or rebidding the Project within a reasonable time, or (3) cooperate in revising the Project's scope, extent, or character to the extent consistent with the Project's requirements and with sound engineering practices. In the case of (3), Engineer shall modify the Construction Contract Documents as necessary to bring the Construction Cost within the Construction Cost Limit. Owner shall pay Engineer's cost to provide such modification services, including the costs of the services of its Consultants, all overhead expenses reasonably related thereto, and Reimbursable Expenses, but without profit to Engineer on account of such services. The providing of such services will be the limit of Engineer's responsibility in this regard and, having done so, Engineer shall be entitled to payment for services and expenses in accordance with this Agreement and will not otherwise be liable for damages attributable to the lowest bona fide proposal or bid exceeding the established Construction Cost limit.~~

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### Exhibit F – Construction Cost Limit.

EJDC® E-500, Agreement Between Owner and Engineer for Professional Services.

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This is **EXHIBIT G**, consisting of 3 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

## **Insurance**

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**Paragraph 6.05** of the Agreement is supplemented to include the following agreement of the parties:

### G6.05 *Insurance*

A. The limits of liability for the insurance required by **Paragraph 6.05.A and 6.05.B** of the Agreement are as follows:

**1. By Engineer:**

- a. Workers' Compensation: Statutory
- b. Employer's Liability --
  - 1) Bodily injury, each accident: \$100,000.00
  - 2) Bodily injury by disease, each employee: \$50,000.00
  - 3) Bodily injury/disease, aggregate: \$100,000.00
- c. General Liability --
  - 1) Each Occurrence (Bodily Injury and Property Damage): \$1,000,000.00
  - 2) General Aggregate: \$2,000,000.00
- d. Excess or Umbrella Liability --
  - 1) Per Occurrence: \$1,000,000.00
  - 2) General Aggregate: \$1,000,000.00

Automobile Liability --Combined Single Limit (Bodily Injury and Property Damage): \$1,000,000.00
- e. Professional Liability --
  - 1) Each Claim Made \$1,000,000.00
  - 2) Annual Aggregate \$2,000,000.00
- f. Other (specify): \$[ ]

2. **By Owner:**

a. Workers' Compensation:	Statutory
b. Employer's Liability --	
1) Bodily injury, Each Accident	\$100,000.00
2) Bodily injury by Disease, Each Employee	\$500,000.00
3) Bodily injury/Disease, Aggregate	\$100,000.00
c. General Liability --	
1) General Aggregate:	\$2,000,000.00
2) Each Occurrence (Bodily Injury and Property Damage):	\$1,000,000.00
d. Excess Umbrella Liability	
1) Per Occurrence:	\$1,000,000.00
2) General Aggregate:	\$1,000,000.00
Automobile Liability – Combined Single Limit (Bodily Injury and Property Damage):	\$1,000,000.00
e. Other (specify):	[\$ ]

B. *Additional Insureds:*

1. The following individuals or entities are to be listed on Owner's general liability policies of insurance as additional insureds:

a. TBA  
Engineer

b. TBA  
Engineer's Consultant

c. TBA  
Engineer's Consultant

d. [REDACTED]  
  
[other]

2. During the term of this Agreement the Engineer shall notify Owner of any other Consultant to be listed as an additional insured on Owner's general liability policies of insurance.
3. The Owner shall be listed on Engineer's general liability policy as provided in **Paragraph 6.05.A.**

This is ~~EXHIBIT H~~, consisting of 2 pages, referred to in and part of the ~~Agreement between Owner and Engineer for Professional Services~~ dated ~~December 1st, 2018~~.

## Dispute Resolution

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Paragraph 6.09 of the Agreement is supplemented to include the following agreement of the parties:

*[NOTE TO USER: Select one of the two alternatives provided.]*

### ~~H6.08 – Dispute Resolution~~

~~A. *Mediation:* Owner and Engineer agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof (“Disputes”) to mediation by [here insert name of mediator, or mediation service]. Owner and Engineer agree to participate in the mediation process in good faith. The process shall be conducted on a confidential basis, and shall be completed within 120 days. If such mediation is unsuccessful in resolving a Dispute, then (1) the parties may mutually agree to a dispute resolution of their choice, or (2) either party may seek to have the Dispute resolved by a court of competent jurisdiction.~~

~~{or}~~

~~A. *Arbitration:* All Disputes between Owner and Engineer shall be settled by arbitration in accordance with the [insert the name of a specified arbitration service or organization here] rules effective at the Effective Date, subject to the conditions stated below. This agreement to arbitrate and any other agreement or consent to arbitrate entered into in accordance with this Paragraph H6.09.A will be specifically enforceable under prevailing law of any court having jurisdiction.~~

~~1. Notice of the demand for arbitration must be filed in writing with the other party to the Agreement and with the [specified arbitration service or organization]. The demand must be made within a reasonable time after the Dispute has arisen. In no event may the demand for arbitration be made after the date when institution of legal or equitable proceedings based on such Dispute would be barred by the applicable statute of limitations.~~

~~2. All demands for arbitration and all answering statements thereto which include any monetary claims must contain a statement that the total sum or value in controversy as alleged by the party making such demand or answering statement is not more than \$[ ] (exclusive of interest and costs). The arbitrators will not have jurisdiction, power, or authority to consider, or make findings (except in denial of their own jurisdiction) concerning any Dispute if the amount in controversy in such Dispute is more than \$[ ] (exclusive of interest and costs), or to render a monetary award in response thereto against any party which totals more than \$[ ] (exclusive of interest and costs). Disputes that are not subject to arbitration under this paragraph may be resolved in any court of competent jurisdiction.~~

~~3. The rules of any arbitration shall be supplemented to include the following: The award rendered by the arbitrators shall be in writing, and shall include (a) a precise breakdown of the award, and (b) a written explanation of the award specifically citing the Agreement provisions deemed applicable and relied on in making the award.~~

- ~~4. The award rendered by the arbitrators will be consistent with the Agreement of the parties and final, and judgment may be entered upon it in any court having jurisdiction thereof, and will not be subject to appeal or modification.~~
- ~~5. If a Dispute in question between Owner and Engineer involves the work of a Contractor, Subcontractor, or consultants to the Owner or Engineer (each a "Joinable Party"), and such Joinable Party has agreed contractually or otherwise to participate in a consolidated arbitration concerning this Project, then either Owner or Engineer may join such Joinable Party as a party to the arbitration between Owner and Engineer hereunder. Nothing in this Paragraph H6.09.A.5 nor in the provision of such contract consenting to joinder shall create any claim, right, or cause of action in favor of the Joinable Party and against Owner or Engineer that does not otherwise exist.~~

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This is ~~EXHIBIT I~~, consisting of [] pages, referred to in and part of the ~~Agreement between Owner and Engineer for Professional Services dated August 17<sup>th</sup>, 2018.~~

## Limitations of Liability

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Paragraph 6.11 of the Agreement is supplemented to include the following agreement of the parties:

~~A. *Limitation of Engineer's Liability*~~

~~1. *Engineer's Liability Limited to Stated Amount, or Amount of Engineer's Compensation:* To the fullest extent permitted by Laws and Regulations, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, members, partners, agents, employees, and Consultants, to Owner and anyone claiming by, through, or under Owner for any and all injuries, claims, losses, expenses, costs, or damages whatsoever arising out of, resulting from, or in any way related to the Project, Engineer's or its Consultants' services, or this Agreement, from any cause or causes whatsoever, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract, indemnity obligations, or warranty express or implied, of Engineer or Engineer's officers, directors, members, partners, agents, employees, or Consultants, shall not exceed the total amount of \$[ ] or the total compensation received by Engineer under this Agreement, whichever is greater. Higher limits are available for an additional fee.~~

~~2. *Exclusion of Special, Incidental, Indirect, and Consequential Damages:* To the fullest extent permitted by Laws and Regulations, and notwithstanding any other provision in the Agreement, consistent with the terms of Paragraph 6.11, the Engineer and Engineer's officers, directors, members, partners, agents, Consultants, and employees shall not be liable to Owner or anyone claiming by, through, or under Owner for any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, from any cause or causes, including but not limited to:~~

~~*[NOTE TO USER: List here particular types of damages that may be of special concern because of the nature of the project or specific circumstances, e.g., cost of replacement power, loss of use of equipment or of the facility, loss of profits or revenue, loss of financing, regulatory fines, etc.]*~~

~~B. *Indemnification by Owner:* To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death or to injury to or~~

~~destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Owner or Owner's officers, directors, members, partners, agents, employees, consultants, or others retained by or under contract to the Owner with respect to this Agreement or to the Project.~~

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This is **EXHIBIT J**, consisting of [ 1 ] pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

## **Special Provisions**

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**Paragraph(s) A. 1.03** of the Agreement is/are amended to include the following agreement(s) of the parties:

**SEE EXHIBIT(S) ATTACHED FOR ADDITIONAL TERMS & CONDITIONS FOR TOWN CONTRACTS.**

**ALSO SEE EXHIBIT P., "ENGINEER'S ORIGINATING PROPOSAL" FOR SCOPE AND COST PROPOSAL ELEMENTS, ALSO INCLUDED IN THIS CONTRACT.**

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This is **EXHIBIT K**, consisting of [ ] pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **TBA**.

**AMENDMENT TO OWNER-ENGINEER AGREEMENT**  
**Amendment No. \_\_\_\_\_**

**The Effective Date of this Amendment is: \_\_\_\_\_.**

Background Data

Effective Date of Owner-Engineer Agreement:

Owner: **TOWN OF MORIAH, NY**

Engineer: **TBA**

Project: **TOWN OF MORIAH SEWER DISTRICT #1 COLLECTION SYSTEM UPGRADES**

Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.]

- Additional Services to be performed by Engineer
- Modifications to services of Engineer
- Modifications to responsibilities of Owner
- Modifications of payment to Engineer
- Modifications to time(s) for rendering services
- Modifications to other terms and conditions of the Agreement

Description of Modifications:

*Here describe the modifications, in as much specificity and detail as needed. Use an attachment if necessary.*

Agreement Summary:

Original agreement amount:	\$ _____
Net change for prior amendments:	\$ _____
This amendment amount:	\$ _____
Adjusted Agreement amount:	\$ _____

Change in time for services (days or date, as applicable): \_\_\_\_\_

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in **Exhibit C**.

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect.

**OWNER: TOWN OF MORIAH, NY**

**ENGINEER: TBA**

\_\_\_\_\_  
**By:** \_\_\_\_\_

\_\_\_\_\_  
**By:** \_\_\_\_\_

**Print name:** HON. THOMAS SCOZZAFAVA

**Print name:** \_\_\_\_\_

**Title:** TOWN SUPERVISOR

**Title:** \_\_\_\_\_

**Date Signed:** \_\_\_\_\_

**Date Signed:** \_\_\_\_\_

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