

# Town of Elizabethtown, New York

## **Request for Engineering Services Proposal: Drinking Water Treatment Plant Upgrades**

**PROJECT NUMBER: C-0156-2018**

**DATE ISSUED: February 22<sup>th</sup>, 2019**

**UPDATED: TBA**

### **Program Requirements:**

- NYS Environmental Facilities Corporation (EFC) Drinking Water State Revolving Fund (DWSRF)
- <https://www.efc.ny.gov/sites/default/files/uploads/Bid%20Packets%202018/SRF%20Bid%20Packet%20-%20Non-Constr%20Treatment%20Works%20and%20Non-Treatment%20Works.pdf>

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# REQUEST FOR PROPOSALS – ENGINEERING SERVICES

NOTICE IS HEREBY GIVEN, that the Undersigned, on behalf of the Town of Elizabethtown, will accept proposals **until 2:00 P.M. on March 15<sup>th</sup>, 2019** for **Municipal Civil Engineering Services** for the **Town of Elizabethtown Drinking Water Treatment Plant 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. *For more information on the requirements associated with supplemental grant funds, please see their website for a complete list of documents & requirements relevant to this project and necessary for all consultants & contractors under this project:*

**<https://www.efc.ny.gov/sites/default/files/uploads/Bid%20Packets%202018/SRF%20Bid%20Packet%20-%20Non-Constr%20Treatment%20Works%20and%20Non-Treatment%20Works.pdf>**

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 except 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: “Elizabethtown Drinking Water Treatment Plant Upgrades”**

All proposals submitted in response to this notice shall be marked "**ELIZABETHTOWN DRINKING WATER PLANT UPGRADES**" clearly on email traffic and/or the outside of the envelope containing your electronic/digital response files.

**Published: February 22th, 2019**

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

## INTRODUCTION

### A. Overview

This Request for Proposals (“RFP”) is being issued by the TOWN OF ELIZABETHTOWN (“the Town”) for ENGINEERING SERVICES for a municipal project. The project will be funded by Drinking Water State Revolving Fund (DWSRF), administered locally 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 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 three (3) weeks to provide a response to this RFP. The Town and resources from Essex County will review the proposals and respond within two (2) weeks of RFP closure, after Town Board Meetings are held

- |                                |   |
|--------------------------------|---|
| 1. RFP Posted:                 | <b>Tuesday February 22th, 2019</b>                      |
| 2. Pre-Bid Meeting:            | <b>Thursday, February 28th, 2019 at 10:00 am.</b>       |
| 3. Statements Due:             | <b>Friday, March 15th, by 2:00 pm.</b>                  |
| 4. Town Board Proposal Review: | <b>March 15<sup>th</sup> – March 19th, 2019</b>         |
| 5. Contract Awarded estimated: | <b>Tuesday March 19th, 2019 (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 funding 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 **(2) years** and will expire upon completion of the projects' administrative close out. **Substantial completion of the construction of the project must be completed no later than 12/31/20, and administrative closeout must be complete no later than 6/01/21.**

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
- Service Disabled Veteran-Owned Businesses (SDVOB) Compliance
- Equal Employment Opportunity (EEO) Compliance
- Anti-Lobbying Policy
- American Iron & Steel Compliance
- *Others as required by 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 Elizabethtown owns and operates the Elizabethtown Water District water supply, treatment and distribution system. The water source includes two artesian wells that are located near the intersection of Route 9N and Scrabble Hollow Road. The water is piped to the treatment building that is located on the north side of NYS Route 9N approximately two miles west of the town center where it is chlorinated with sodium hypochlorite and then goes to a storage tank and then into the distribution system.

On January 16, 2019, the Saranac Lake District Office of the NYS Department of Health issued an inspection report (provided in **Appendix B-2**). Additionally, the DOH issued an Administrative Tribunal enforcement action (AT-10) for significant deficiencies in the water system. Based on the inspection report and the AT-10, the Town of Elizabethtown must develop a project to address the significant deficiencies identified in the inspection report.

The goal of this project is to develop a Water System Improvement Project to upgrade the Elizabethtown WD water system that addresses the deficiencies in the inspection report. It is expected that the project can be funded through the Drinking Water State Revolving Fund (DWSRF) program administered through New York State Environmental Facilities Corporation (NYS EFC). A limited preliminary engineering evaluation of the Elizabethtown water system was conducted by the Essex County DPW to develop a minimum scope of work for this proposed project; County DPW documentation for this project is also provided in **Appendix B-1**.

**Previous water system reports are included in Appendix B-3 for Respondents to utilize as a common basis for project assumptions such that all respondents can propose similar elements for Technical and Cost proposal, which should include all phases of project design & construction.**

Each proposer shall develop a detailed scope of work based on information provided in this Request for Proposals and on **the Pre-Bid Meeting which is scheduled for February 28<sup>th</sup>, 2019 at 11:00 am at the Elizabethtown Town Hall located at 7563 Court St. Elizabethtown, NY 12932.**

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

- **General Requirements – (Tasks 1 -4)** 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 DOH 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 to develop a funding application 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. 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.

- **Field Investigations – (Task 5, 19 - 21)** The consultant shall conduct such field work they deem necessary to obtain the required information to properly design the water 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 and digital format (.ship file, .pdf, etc.).
- **Basis of Design Report & Preliminary Design – (Tasks 6 & 7)** The consultant shall prepare a Facilities Planning Report, provide recommendations for system design, prepare preliminary plans for the system upgrade, and develop a Basis of Design Report, in accordance with DWSRF guidelines. Once the Basis of Design Report is approved by the Town and County, it will be submitted to the DOH for review and approval.
- **Final Design of Water Treatment System Upgrades – (Tasks 8 & 9)** Once the Basis of Design Report has been approved and funding has been secured for the project, the consultant will provide detailed design plans, specifications, and contract documents for the project. The design of the facilities shall be in conformance with 10-State Standards and approved by the NYS Department of Health and Department of Environmental Conservation.
- **Bidding Assistance – (Tasks 10 – 12)** The consultant shall provide bidding assistance for this project including 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 13 –18)** The consultant shall provide construction management services including, but not limited to, the following:
  1. Issuing a Notice to Proceed (NTP).
  2. Reviewing and approving all Submittals, shop drawings and substitutions, as necessary.
  3. Reviewing and making recommendations to the Town for any requested Change Orders
  4. Reviewing and certify contractor invoices and making recommendations to the Town for payment.
  5. Review and certify contractor Certified Payrolls.
  6. 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)
  7. Review of the final work and development of and punch list
  8. Provide a letter of construction compliance at the end of the project.
  9. Provide NYS DOH compliant Operations and Maintenance Manuals for the project.

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 MBE, WBE, 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. Qualifications and Experience**

This Request for Proposals 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 supplemental funding program provided in **Appendix A**. Consultants must provide a Qualifications and Experience Statement with this proposal that includes information described in Section B and C of the Submittal Requirements.

## **C. Cost Proposal**

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”.

## **D. 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.

## **E. 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, electronic 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 a single copy of the information for its files.**

## **F. 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

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

### 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: April 2019 – June 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 \* 15 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. 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:***      ***20 Points***
  - ***Public Funding Experience:***      ***15 Points***
- Respondents will be awarded up to **35 Points** for the **Technical Proposal**:
  - ***Project Management Plan:***      ***20 Points***
  - ***Detailed Schedule:***      ***15 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.

*Questions regarding the Town facilities* should be submitted by calling the **Town Water Operator, Kate Howard., at (518) 569-7808.**

## SUBMITTAL DUE DATE

**Responses to this RFP are due by 2:00pm on Friday, March 15th, by 2:00 pm.** RFP responses must be submitted via electronic PDF sent to the following web address:

**<https://app.smartsheet.com/b/form/8c112f5929fb4c5b928111ec4c444801>**

The Town will select a Respondent on **March 19th, 2019** 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, regardless of manner of RFP response. 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 3 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

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

- ☐ Signed 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)

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- 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.

Program	MWBE Combined Goal*
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 3            GUIDANCE FOR REQUIREMENTS REGARDING SUSPENSION AND DEBARMENT**

A list of debarred and suspended contractors, pursuant to 2 CFR Parts 180 and 1532 and 29 CFR § 5.12, is available on the US Department of Labor's website at <https://www.sam.gov/portal/public/SAM/>.

A list of contractors and subcontractors deemed ineligible to submit a bid on or be awarded a public contract or subcontract, pursuant to Article 8 of the State Labor Law, is available on the New York State Department of Labor's website at <http://labor.ny.gov/workerprotection/publicwork/PDFs/debarred.pdf>

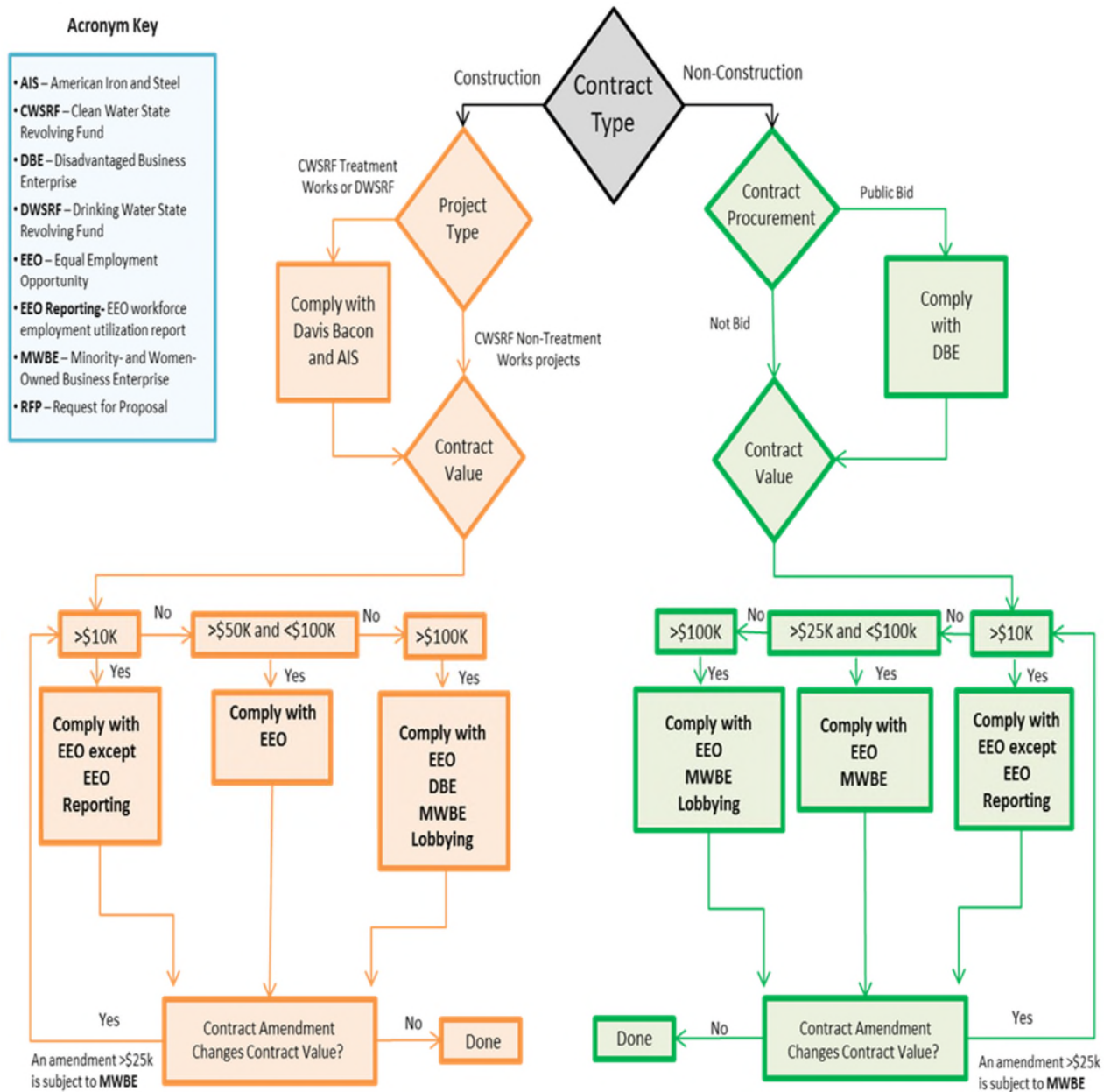
A list of contractors deemed ineligible to submit a bid is maintained by Empire State Development's Division of Minority and Women's Business Development.

## **SECTION 4            GUIDANCE FOR RESTRICTIONS ON LOBBYING**

Each Contractor and any Subcontractor that has a Contract or Subcontract exceeding \$100,000 shall provide to the Recipient a completed 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. The form provides a certification that the Contractor or Subcontractor will not expend appropriated federal funds to pay any person for influencing or attempting to influence an officer or employee of any agency, Member of Congress, officer or employee of Congress or any employee of any Member of Congress in accordance with the provisions of 40 CFR Part 34, and to maintain such certification for their own records. It is noted that disbursement of funds may be withheld until the Lobbying Certification form has been received by the Recipient.

## 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														

**Electronic Signature of Service Provider:** ☐ I certify that the information submitted herein is true, accurate and complete to the best of my knowledge.  
**Name** (Please Type):

**Date:**

**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.

NYSEFC EEO Workforce Utilization Report

Reporting Entity

☐ Contractor

☐ Subcontractor

FEIN

Contractor Name

Contractor Address

Contract Number

Reporting Period - Select One

☐ January 1 - March 31

☐ April 1 - June 30

☐ July 1 - September 30

☐ October 1 - December 31

Reporting Month - Select One

☐ January

☐ February

☐ March

☐ April

☐ May

☐ June

☐ July

☐ August

☐ September

☐ October

☐ November

☐ December

Workforce Identified in Report

☐ Workforce Utilized in Performance of Contract

☐ Contractor/Subcontractor's Total Workforce

Preparer's Name:

Preparer's Title:

Date:

☐

By checking this box, I certify that I personally completed this document and I adopt the name typed above as my electronic signature under the NYS Electronic Signatures and Records Act, with like legal force and effect as if I had physically signed the document.

Occupation Classifications (SOC Major Group)	SOC Job Title	EEO Job Title	SOC Job Code	Number of Employees and Hours Worked by Race/Ethnic Identification During Reporting Period																													
				White						Black/African American						Hispanic/Latino						Asian/Native Hawaiian or Other Pacific Islander						Native American/Alaskan Native					
				Male			Female			Male			Female			Male			Female			Male			Female			Male			Female		
				No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation	No. of Employees	No. of Hours	Total Compensation
		#N/A	#N/A																														
		#N/A	#N/A																														
		#N/A	#N/A																														
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**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 "*MReport – (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: \$ Revised 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> MBE: %      MBE Amt: \$ WBE: %      WBE Amt: \$ Total: %     Total Amt: \$		<b>Total Paid to Prime</b> Total Paid this Month: \$ Total Paid to Date: \$		
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#: <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					
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 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					
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")**

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:				
<b>Electronic Signature of MBO:</b> <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.				<b>Date:</b>
<b>Complete if applicable:</b>				
Authorized Representative:		Title:		
Authorized Rep. Company:		Email:	Phone #:	
<b>Electronic Signature of Authorized Rep.:</b> <input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.				<b>Date:</b>

SECTION 2: PRIME CONTRACTOR / SERVICE PROVIDER INFORMATION				
Firm Name:			Contract Type: <input type="checkbox"/> Construction <input type="checkbox"/> Other Services	
<b>Prime Firm is Certified as:</b> <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 <u>or</u> 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>
<b>Total Contract Amount: \$</b> <b>MWBE Eligible Contract Amount: \$</b> (MWBE Goals are applied to this amount and includes all change orders, amendments, & waivers)			<b>MBE:</b> %    \$	<b>MBE:</b> %    \$
			<b>WBE:</b> %    \$	<b>WBE:</b> %    \$
			<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 #:			
<b>NYS Certified M/WBE Subcontractor Info</b>		<b>Contract Amount:</b>		<b>For EFC Use:</b>
		<b>MBE (\$)</b>	<b>WBE (\$)</b>	
<b>Name:</b>	<b>Fed. Employer ID#:</b>			
<b>Address:</b>	<b>Phone #:</b>			
<b>Scope of Work:</b>	<b>Email:</b>			
<b>Select Only One:</b> <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>			
<b>Select Only One:</b> <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>			
<b>Select Only One:</b> <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>			
<b>Select Only One:</b> <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>				

**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>				
<b>SIGNATURE</b>				
<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>Name (Please Type):</b>				<b>Date:</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:	MBE:      %    \$	
Total Contract Amount: \$ MWBE Eligible Contract Amount: \$ (MWBE Goals are applied to this amount and includes all change orders, amendments, & waivers)			WBE:      %    \$	
			Total:      %    \$	

**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**

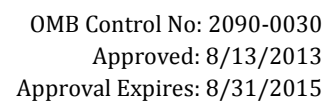
An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE<sup>1</sup> subcontractor<sup>2</sup> the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in 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.



Please use the space below to report any concerns regarding the above EPA-funded project:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.

<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 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 contractors 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:			
<b>Subcontractor Name/ Company Name</b>	<b>Company Address/ Phone/ Email</b>	<b>Est. Dollar Amt</b>	<b>Currently DBE Certified?</b>

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-1: PROJECT DWSRF SCORE SHEET**

## ELIZABETHTOWN DRINKING WATER TREATMENT PLANT RFP

### APPENDIX B-1

## Town of Elizabethtown Water System Evaluation

### Priority Ranking System Scoring Criteria

The Town of Elizabethtown owns and operates a water system, consisting of a groundwater source, gravity storage and distribution to the Elizabethtown water district, serving a population of approximately 800 people through 200 service connections, according to the Annual Water Quality Report. The Town has experienced periodic system failures due to inadequate reliability and redundancy summarized as follows:

#### **Non-treatment Sanitary Code Violations, Inadequate Source Capacity (Public Health Hazard) Category B1, 50 points.**

In 2018 the Town of Elizabethtown's sole well pump was out of service resulting in inadequate water supply, having no redundant supply to meet average day water system demands. The result was the use of abandoned wells previously disconnected due to the determination of Ground Water Under the Direct Influence (GWUDI) of service water. Reconnection was determined to be necessary to supplement the source of supply to meet average day demands. This has resulted in a notice of violation from NYS DOH.

#### **Inadequate Distribution System Pressure (Public Health Hazard), Category B2, 25 points**

The treated water main to the elevated storage tank is controlled by equipment that is prone to failure. The application of the hydraulically piloted valve that regulates flow to the storage tank does not have set point control measured from the existing chlorine contact tank resulting in the periodic dewatering of the water main from the treatment plant to elevated storage tank. Dewatering of the main occurs in areas of concern for potential contamination for the district as well as individual service connections along the line.

#### **System Reliability/Dependability Issues, Treatment Facility Complete Replacement, Category C1, 20 Points**

The current treatment plant, controls and hydraulic configuration of the facilities must be completely reconstructed to address reliable control of the water system hydraulic gradient and treatment issues. The malfunction of the hydraulically piloted control valves results in the pressure problems cited above as well as short cycling of the well pump delivery system to and through the treatment plant. This is further aggravated by the fact that the current chlorination system is not flow paced resulting in compliance issues for inadequate disinfection.

#### **System Reliability/Dependability Issues, Upgrade or replace major vulnerable systems, Category C2, 10 Points**

Non-compliance for the existing chlorine contact tank with 10 states ground level storage requirements exist. This includes but is not limited to general provisions for preventing contamination and vandalism.

## **ELIZABETHTOWN DRINKING WATER TREATMENT PLANT RFP**

### **APPENDIX B-1**

#### **Redundancy of Critical Components, Criteria C4, 5 points**

The most significant redundancy issue is the lack of capacity without the sole source well pump. Other treatment redundancy issues are the lack of redundant chemical feed pumping and controls for disinfection. Currently there is no automation that activates a redundant chemical feed pump or ensures a positive residual by shutting down artesian raw water flow to the tank in the event of a treatment failure.

#### **Control/automation for operational efficiency, Criteria C6, 5 points**

Currently the water system operates in a semi-manual condition due to the failure of the control valves at the well field, treatment plant and storage tank. The control system must be updated for positive set point control at the water storage tank, and control of treated water flow at the water treatment plant site. The addition of logging and trending to the control system would allow for identifying and fixing issues that have previously gone undetected leading to unreliable system operations and failures.

#### **Governmental Needs, System dependent on a Sole Source Aquifer, Criteria D3, 25 Points**

Due to the Town's tapping of a sole source aquifer with both the test well and production well located on a small lot, precluding additional drilling or rehabilitation on the same site, the Town will need to look to other areas for development, acquiring additional land upon the same aquifer or relocating to a different aquifer.

#### **Governmental Needs, Consistent with Water Resource Management Strategy, Criteria D5, 5 Points**

The proposed project is integral to the sustainability for the Town of Elizabethtown's water system as well as water conservation measures, consistent with the SRF Sustainability Initiative. Current practice of the water system results in artesian overflow waste, treated water waste and increased pumping costs. This project is focused on sustainability of the Town's source combined with providing adequate redundancy for the protection of public health.

#### **Governmental Needs, Operational changes to ensure technical, managerial and financial capacity, Criteria D6, 5 points**

Involved in the capital improvement project is the necessary instrumentation and reporting to implement water usage accountability from source to the town's recently installed water meter system.

#### **Financial Need, Category E, 10 points**

The town of Elizabethtown has and MHI of ( 52,000 ) per year per household according to the ( 2013 ) US Census data. With a statewide MHI of ( 59,269 ) the resulting NYS DWSRF scoring factor is ( 10 ). This is consistent with the economic need of the Town, facing a multimillion dollar capital improvement project. This qualification factor may change annually.

**Total: 160 points (Current funding line is 130 points on the IUP)**

## **APPENDIX B-2: PROJECT DOH CORRESPONDENCE**



## Department of Health

**ANDREW M. CUOMO**  
Governor

**HOWARD A. ZUCKER, M.D.,  
J.D.**  
Commissioner

**SALLY DRESLIN, M.S., R.N.**  
Executive Deputy Commissioner

January 16, 2019

Supervisor and Town Council  
Town of Elizabethtown  
P.O. Box 265  
Elizabethtown, NY 12932

Re: Annual Inspections  
Elizabethtown Water District - PWS NY 1500277  
New Russia Water District – PWS NY 1500289  
Elizabethtown T., Essex County

Dear Mr. Merrihew and Council Members:

On July 2, 2018, Susan Kennedy and I met with David Dickinson and Kate Howard for the annual inspection of the Elizabethtown and New Russia Water District water supply systems. We invited Todd Hodgson, P.E. from Essex County DPW to accompany us on our inspection. I have enclosed copies of the Water System Field Compliance Report and the SDWIS/State Public Water System Inventory Report for your review for your water system. Please let me know if any of the information on the forms is incorrect. Also enclosed is an Inspection Report Supplement with general information about operation of a community water supply system. The topics listed in the supplement were discussed during the inspection and are important elements of your water operator's responsibilities.

Please review this letter thoroughly as significant work is needed to upgrade the Elizabethtown WD water supply system.

### **Water System Descriptions**

#### **Elizabethtown Water District**

The water source for the Elizabethtown Water District includes two drilled artesian wells located in a low-lying area between NYS Route 9N and Scrabble Hollow Road. There is an eight-inch diameter primary well and a seven-inch diameter auxiliary well. The current artesian flow from both wells is approximately 103 gallons per minute (gpm) each of unassisted flow. The eight-inch

Saranac Lake District Office – 41 St. Bernard Street, Saranac Lake, New York 12983 – 518-891-1800 | [saranaclake@health.ny.gov](mailto:saranaclake@health.ny.gov)

primary well includes a pump, and the pump-assisted flow from this well was 260 gpm. The pumping rate has increased to approximately 300 gpm since the pump was replaced in early 2018. Based on the Final Hydrogeological Report prepared when the wells were installed, the unassisted artesian flow was 150 gpm and the documented safe yield of the wells was 250 gpm.

Water from the artesian wells is piped to a treatment building located at the Town's former well field on the north side of NYS Route 9N approximately two miles west of the town center. The water is disinfected with sodium hypochlorite (bleach). Water flows to a 3,000-gallon control tank after disinfection. The control tank is adjacent to the treatment building and contains level sensors, which regulate the flow of water from the artesian wells. The level sensors operate electrically actuated valves in a valve pit near the treatment building. The valves direct the flow of water either into the system or into a nearby stream depending on the water level in the control tank. Well production is measured with a master meter located inside the valve vault near the treatment building. The water volume and flow data is monitored and electronically recorded through a control panel inside the treatment building. Water flows via a six-inch transmission main from the control tank, across and down the south side of Route 9N, to a 350,000-gallon concrete storage tank. A separate transmission main conveys water from the storage tank to the distribution system.

The Elizabethtown Water District distribution system consists mostly of six and eight-inch ductile iron water mains. There are also areas outside the water district boundaries that are served with town water through a combination of smaller diameter pipes. All service connections to the system are metered. Customers are billed based on actual water use (meter readings). The Elizabethtown Water District serves approximately 800 people through 200 service connections. The system also serves water to the Essex County Office Complex, the Elizabethtown-Lewis Central School, the Elizabethtown Community Hospital, and the Horace Nye Nursing Home.

On May 29, 2018, DOH staff collected a bacteriological surveillance sample from the kitchen sink cold water tap at Bubs Pizza. There was low but adequate residual chlorine in the water when the sample was collected. The sample was analyzed by a NYSDOH certified laboratory and was negative for total coliform bacteria.

#### New Russia Water District

The New Russia Water District is a small, town-owned and operated community water system. It serves approximately 20 residential service connections. The water source is a drilled well located in a well house off of Simonds Hill Road near the center of the hamlet. The well is approximately 200 feet deep and is equipped with a submersible pump to deliver water to the distribution system. There are two, 100-gallon hydropneumatic bladder tanks that provide limited storage capacity, buffer system pressure and regulate the operation of the pump. Water enters the distribution system at the well house. The distribution system is comprised mostly of 3" diameter HDPE plastic pipe. The water is disinfected with sodium hypochlorite solution prior to entering the distribution system. The town maintains a replacement submersible pump at the highway garage to be used as a spare in the event of a pump failure.

### **Violations – Elizabethtown Water District**

On December 29, 2017, our office issued an Administrative Tribunal Enforcement Action (AT-10) against the Elizabethtown Water District. Three separate violations were issued as listed below:

1. Failure to inform our office that water from an emergency source was being used to supplement the primary and auxiliary water sources due to problems with the pump in the primary well.
2. Using the emergency source which included wells that were determined to be Groundwater Under the Direct Influence of Surface Water (GWUDI) without adequate treatment (filtration is required for a GWUDI water source).
3. Due care and diligence for the operation and maintenance of the water system.

The first two violations are related and have been partially resolved. A new well pump and transducer was installed at the primary well and the GWUDI source has been disconnected from the system. However, the primary well is currently pumping at a rate of approximately 300 gpm and is higher than 250 gpm which was determined to be the documented safe yield of well, as described in the Final Hydrogeological Report. This is a potential problem for the long-term sustainability of this well to serve the future water supply needs of the water district.

Based on the results of our July 2, 2018 inspection, we have decided to close out the existing AT-10 Enforcement Action and issue two violations of the New York State Sanitary Code Subpart 5-1.71, as described below. The information provided below is included in the enclosed AT-10 document.

### **Violation #1 – Due Care and Diligence - Maintenance and Supervision of Water Source**

**State Law, Sanitary Code, or Regulation (10NYCRR): 5-1:71(a)** *The supplier of water and the person or persons operating a public water system shall exercise due care and diligence in the maintenance and supervision of all sources of the public water systems to prevent, so far as possible, their pollution or depletion.*

The existing primary and auxiliary artesian wells do not provide the required redundancy of service, as required in Appendix 5-A.3.2.1 which indicates that “The total developed groundwater source capacity, unless otherwise specified by the reviewing authority, shall equal or exceed the design maximum day demand with the largest producing well out of service. The 103 gpm of unassisted flow from the auxiliary well is not sufficient to meet the peak water demand needs of the system, and therefore, does not meet the redundancy requirements of Subpart 5-1. Additionally, the primary well that is pump-assisted is being pumped at a rate of approximately 300 gpm which is significantly greater than the documented safe yield of the well of 250 gpm and is not sustainable over the long term.

As a result of this violation, the corrective actions listed below are required. These abatements are also included in the enclosed AT-10 Administrative Tribunal document.

- 1) On or before April 1, 2019: The Town shall hire an engineer to evaluate the peak daily

flow of the Water District. Once this value has been documented and approved by the Department of Health (DOH), the Town shall hire an engineer and hydrogeologist to evaluate the safe yields of both wells and prepare a report with recommendations for meeting peak flow demands, including redundancy.

- 2) On or before June 30, 2019: The Town shall replace or modify the 300 gpm pump in the primary well so that the pumping rate does not exceed the safe yield of the well.
- 3) On or before December 31, 2020: The Town shall provide a redundant water source for the Elizabethtown WD. The work required to meet this abatement, including engineering, permitting, etc. is related to Violation #2 (below) and should be included in the overall Water Supply Improvement Project that is developed to resolve Violation #2.

### **Violation #2 - Due Care and Diligence – Operation of Water System**

**State Law, Sanitary Code, or Regulation (10NYCRR): 5-1:71 (b)** *The supplier of water and the person or persons operating a public water plant or distribution system shall exercise due care and diligence in the operation and maintenance of these facilities and their appurtenances to ensure continued compliance with the provisions of this Subpart. Facilities approved by the State shall be operated in accordance with their design unless otherwise authorized under the provisions of sections 5-1.22, 5-1.23, or 5-1.24 of this subpart.*

This violation is being issued based on the following deficiencies that have been identified with the water system:

- The chlorine disinfection system is not flow-paced which makes operation difficult and inaccurate
- The master metering equipment has not been working properly for several years and has not been repaired, or replaced with updated equipment,
- The alarm system for the facility is not functioning properly,
- Flow to the distribution system is not being measured accurately,
- The backpressure valve that controls the well pump is not operating properly,
- The building includes a non-rated electric heater and a mix of rated and non-rated electrical devices,
- Inadequate separation and clearance of electrical panels exists within the building,
- The inside atmosphere of the building is highly corrosive due to the chlorine disinfection system and is not vented, and
- The water plant building needs to be replaced to bring it up to current standards.

The electrical code violations that were observed at the water plant and are listed above are a violation of Subpart 5-1, Appendix A, Section 2.22 of the Ten States Standards for Water Works. The corrective actions listed below are required to resolve this violation. These abatements are also included in the enclosed AT-10 Administrative Tribunal document.

- 1) On or before February 15, 2019: The Town shall submit a detailed Scope of Work to address the deficiencies identified at the water system to the Saranac Lake District Office of the DOH for our review and approval.
- 2) On or before March 1, 2019: The Town shall send out a Request for Proposals for qualified engineering firms to design water plant upgrades (including source upgrades), prepare construction plans and specifications, and develop a funding application, based on the detailed DOH-approved Scope of Work.
- 3) On or before April 1, 2019: The Town shall hire a consulting engineering firm to design upgrades to the water plant, including the water source, prepare construction plans, technical specifications, and contract documents, and prepare a funding application.
- 4) On or before May 15, 2019: The Town shall submit a DWSRF Listing Form for a Project to address, at a minimum, all of the deficiencies listed in this AT-10. The Listing Form should be submitted to the New York State Department of Health, Bureau of Water Supply Protection.
- 5) On or before June 10, 2019: The Town shall submit a Basis of Design report and application for DWSRF/NYS Water Infrastructure Improvement Act funding.
- 6) On or before December 31, 2019: The Town shall submit final engineering plans and specifications to the DOH for review and approval.
- 7) On or before December 31, 2020: The Town shall complete construction of the Elizabethtown WD water supply and treatment plant upgrades, in accordance with the approved plans.

**Inspection Discussion Topics – Elizabethtown WD**

1. Significant improvements to the Elizabethtown WD water supply system are required and are outlined above.
2. The controls at the storage tank should be moved inside the fence rather than outside of the old storage tank building.
3. Numerous building code violations exist inside the Water Treatment Plant building. The building should be inspected by the Code Enforcement Officer to specifically identify building code violations that can be incorporated into the water plant upgrade project.
4. The old storage tank in the should be properly decommissioned.
5. An emergency generator should be provided at the water plant.
6. Storage tanks must be inspected every 5 years. The Elizabethtown storage tank should have been inspected in 2018. If it was, please send a copy of the

inspection report to our office. If it has not been inspected, please schedule this work for 2019. If you need guidance on companies that can do this work, please call me.

**Inspection Discussion Topics – New Russia WD**

1. No deficiencies were noted during the inspection.
2. One year's worth of raw bacteriological water sampling has been completed for the New Russia WD water system and all results are negative for total coliform bacteria. We have received a disinfection waiver for the New Russia WD and are currently reviewing it.

We thank Dave and Kate for their assistance in completing the inspections. We look forward to working with the Town to develop a project to improve the water supply system that provides safe drinking water to the Town of Elizabethtown, the County Seat of Essex County.

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Marlene R. Martin". The script is cursive and fluid, with the first name being the most prominent.

Marlene R. Martin, P.E.  
Professional Engineer

cc: Mr. David Dickinson  
Ms. Kate Howard

## **APPENDIX B-3: PREVIOUS WATER SYSTEM REPORTS**

**ENGINEERING REPORT**

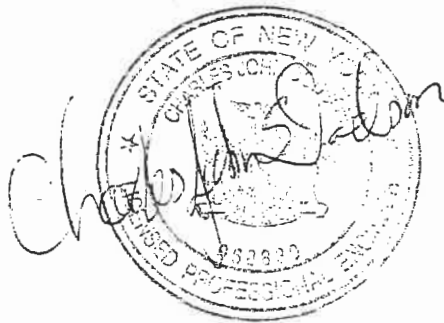
FOR

**BASIS OF DESIGN  
WATER SYSTEM IMPROVEMENTS**

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

Prepared for:

**TOWN OF ELIZABETHTOWN**



Prepared by:

**DODSON & ASSOCIATE, PLLC  
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SEPTEMBER 2001  
REVISED APRIL 2002

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## **1.0 INTRODUCTION**

### **1.1 Purpose and Scope**

The purpose of this report is to evaluate the Town of Elizabethtown's water system (Water District Nos. 2 and 3) and recommend a comprehensive water system capital improvement project to rectify source, storage and distribution system deficiencies. This report recommends Phase I – Water System Improvements and Phase II – Distribution System Improvements. Phase I - Water System Improvements are priority improvements scheduled to be completed as part of a \$1,680,000 funding package secured through the Drinking Water State Revolving Fund. Consolidation of Water District Nos. 2 and 3 is a prerequisite to implementing the Phase I Improvements. Phase II - Distribution System Improvements include a complete upgrade of the water distribution system and will be completed as funding is secured.

The recommended Phase I - Water System Improvement project would result in the following priority improvements:

- Development of a new 150 gallon per minute groundwater source at a separate site to provide water source redundancy and supplement the existing groundwater supply.
- A new 350,000-gallon concrete water storage tank to replace the existing deteriorated 130,000-gallon water storage reservoir.
- Looping of an eight (8)-inch diameter water main from Water Street to Park Street along Cross Street.
- Looping of an eight (8)-inch diameter water main from the intersection of NYS Routes 9/9N (Court Street) to Williams Street along Hand Avenue.
- Replacement of an antiquated 3-inch diameter water main on Noble Terrace with a new 8-inch diameter water main.
- Valve Control improvements to prevent: the new water storage tank from overflowing; the chlorine contact tank from overflowing/emptying; and the new pump (Kilburn site) from discharging flow beyond the optimum design point.

The Phase II - Distribution System Improvements include replacing the remainder of the antiquated distribution mains within Water District Nos. 2 and 3 with new ductile iron water mains sized to provide improved system pressures and flows. These improvements would include connections to the existing water services with new corporations, curb stops and copper pipe. New water meters would be installed as part of the Phase II - Distribution System Improvements. Property owners would be required to upgrade their water service from the curb stop to the meter within the building.

The Scope of Services for this report included performing the following major tasks: Data Gathering/Review; Water Demand Estimates; Water System Evaluation; Project Cost Estimate; Affordability Determination and Project Schedule.

### *Data Gathering/Review*

The Data Gathering/Review task included review of: previous engineering reports; New York State Department of Environmental Conservation (NYSDEC) water supply applications; NYSDOH correspondence; the existing well source water quantity data; chlorination facility data, existing well pump(s) data; existing water production data; water storage reservoir record information; water distribution system maps, topographic maps and tax maps. Site visits were conducted during the Data Gathering/Review Phase to gain a better understanding of the study area, observe system deficiencies and verify record drawing information. Files pertaining to the Elizabethtown water system were reviewed at the Saranac Lake District Office of the New York State Department of Health.

### *Water Demand Estimates*

Preparation of water demand estimates included evaluation of the existing and future water supply requirements for both Water District Nos. 2 and 3 through year 2020. Existing water demands, per capita consumption, existing population and projected population growth trends were considered in estimating water demands.

### *Water System Evaluation*

The Phase I - Water System Evaluation included performing an evaluation to determine a basis of design for the following: new groundwater source (Kiburn property) well construction details (by HydroSource Associates, Inc.); pump selection for the new groundwater source; the size/alignment of the new raw water transmission main interconnecting the new groundwater source with the existing groundwater source; the size, location and overflow elevation of the new water storage tank; and the size and alignment of new distribution mains. Electrical and instrumentation/control improvements were also evaluated.

The Phase II - Distribution System Evaluation consisted of determining the size of new distribution mains for Water District Nos. 2 and 3. Recommendation for Phase II - Distribution System Improvements provides the Town with a master plan to upgrade the remainder of the distribution mains.

Hydraulic calculations were performed for the following: sizing of the raw water transmission main interconnecting the new groundwater source with the existing groundwater source; confirming the hydraulic capacity of the existing 6-inch diameter main interconnecting the existing groundwater source with the new 350,000-gallon water storage tank; optimizing the overflow elevation and size of the new 350,000-gallon water storage tank; and sizing of the new pump for the new groundwater source. A hydraulic model was utilized to size the new distribution system improvements for Phase I and Phase II.

### *Project Cost Estimate*

The Project Cost Estimate task included preparing an opinion of probable project cost for the Phase I - Water System Improvements and Phase II - Distribution System Improvements based upon municipal bidding. The project cost estimates include costs for construction; construction contingency; survey/mapping; subsurface exploration; land/easement acquisition; engineering; approvals; administration, legal and miscellaneous items.

### *Affordability Determination*

The Affordability Determination task included documenting the funding offer from the Drinking Water State Revolving Fund (DWSRF). The user fees for the consolidated Water District Nos. 2 and 3 were determined based upon the DWSRF grant/loan offer, the estimated project cost to complete Phase I - Water System Improvements, and projected operation and maintenance costs and water consumption fee.

### *Project Schedule*

Development of the Project Schedule consisted of estimating the duration of time required to complete the various tasks of the Phase I - Water System Improvement project including: Preliminary Design; Survey; Subsurface Exploration; Design; Approvals; Advertisement/Bidding; Contract Award; Construction and Project Closeout. The schedule allows for prudent planning and implementation of the Phase I project. A project schedule has not been included for Phase II - Distribution System Improvements because funding has not been secured.

## **1.2 Authorization**

This report was authorized by Mr. William Farrell, Deputy Supervisor, Town of Elizabethtown in accordance with a March 19, 2001 Agreement.

## **2.0 BACKGROUND REVIEW**

### **2.1 Study Area**

The Town of Elizabethtown is located in Essex County, approximately 45 miles south of the City of Plattsburgh and 20 miles east of Lake Placid. Elizabethtown is the County Seat. Figure 2-1 "Study Area Location Map" depicts the location of the Town of Elizabethtown in New York State and includes a map of the study area. The study area consists of the area currently served by Water District Nos. 2 and 3, which predominately consists of the former Village of Elizabethtown (Water District No. 3) and a water system extension approximately 5,000 feet south along New York State Route 9 (Water District No. 2) from the boundary of Water District No. 3. The Town is bordered on the east by the Town Westport, on the west by the Town of Keene, on the north by the Town of Lewis and on the south by the Towns of Moriah and North Hudson. New York State (NYS) Routes 9 and 9N are the main transportation corridors through the Town. The population of the Town is estimated at 1,315 people based on the 2000 Census. The median household income of the area served by current Water District Nos. 2 and 3 is estimated at \$14,460 based on an income survey documented as part of the DWSRF funding offer. There are no major industries in the study area, however County Complexes, including the county courthouse and jail, hospital, nursing home and school are located within the study area. The land use is predominately residential and recreational. The Town of Elizabethtown is in the Adirondack Park.

The topography of the Town of Elizabethtown study area varies considerably. The elevation varies from a high of 875 feet USGS at the existing groundwater source to a low of 525 feet USGS where Maple Street crosses the Branch. Other critical elevation in the study area include elevation 580 feet USGS on High Meadows Road, elevation 690 feet USGS at Garondah Estates, elevation 720 feet USGS on Cobble Hill Road.

### **2.2 Water Supply Applications**

The history of the Elizabethtown water systems (Water District Nos. 2 and 3) are documented in NYSDEC-Water Supply Application (WSA) Nos. 3892, 5781, 7373 and 9089. Copies of the Water Supply Applications are included in Exhibit A – Water Supply Applications.

WSA No. 3892, dated November 1, 1960, documents the former Village of Elizabethtown acquiring the plant and property of the Elizabethtown Water Company and requesting continued operation of the water supply system as a municipal enterprise. The former Village acquired the water company's spring and impoundment sources of supply, treatment equipment, transmission mains, storage reservoir, distribution system and all other plant and property. No improvements to the water supply system were proposed at the time.

WSA No. 5781, dated December 4, 1969, documents the establishment of Water District No. 2 as a strip-type district lying along NYS Route 9 immediately south of the former Village of Elizabethtown. The source of water supply for Water District No. 2 is the water supply facilities (spring) of the former Village of Elizabethtown. The legal description of the district is included in Exhibit A – Water Supply Applications.

WSA No. 7373, dated August 24, 1983, documents the acquisition of approved existing water supply sources, storage and distribution system facilities formally owned by the Village of Elizabethtown (which was dissolved 1/1/81) by the Town of Elizabethtown.



**Dodson & Associate**  
Consulting Engineers, PLLC

**HAMLET OF ELIZABETHTOWN**  
**STUDY AREA LOCATION MAP**

**FIGURE 2-1**

WSA No. 9089, dated March 1994, documents the Town of Elizabethtown's attempt to secure the overflows from three (3) artesian well sources located on private property (NYS Route 9N) to supplement their existing water supplies (wells, springs). The overflow from these wells was estimated at forty (40) gallons per minute. In letters dated April 8 and 12, 1994 (Exhibit A), the NYSDEC requested additional information regarding the artesian wells and four unapproved wells installed as part of a Self-Help Project. To date, no further information has been provided to the NYSDEC and consequently the application has been considered withdrawn (Exhibit A, January 19, 2001, letter).

According to a January 28, 1992, Annual Inspection Report by the NYSDOH, the Town of Elizabethtown installed four groundwater wells and upgraded a treatment building as part of a Self-Help Project. The Self-Help improvement project, which was completed in 1990, included the development of four drilled wells, upgrading and repiping the treatment building, installation of a 3,000-gallon contact/control tank and installation of 1,500 feet of 6-inch diameter transmission main (Partial upgrade of transmission main to the water storage reservoir.). According to this Inspection Report, "the improvements greatly enhanced the overall reliability and efficiency of the system as well as achieved compliance with the new Surface Water Treatment Rule which would have required your stream impoundment (spring) source to be filtered". The Inspection Report further mentioned that the new drilled wells provide adequate quantity and good quality water; however, their capacity is marginal during peak summer demands. This Annual Inspection Report also recommended the Town pursue negotiations with property owners along NYS Route 9N to utilize the overflow from artesian wells. With this endorsement, the Town proceeded forward and submitted WSA No. 9089. The design of the connection to the artesian wells was completed and submitted to the NYSDOH, however, the project was never approved.

### **2.3     Existing Water System**

The Town of Elizabethtown currently has three water districts within the Town providing municipal water service to residents. Water District No. 1 is the New Russia Water District, which is not included as part of this study. Drawing 1 of 3 (Appendix A) depicts the boundaries of Water Districts Nos. 2 and 3 and tax parcels within the districts. Water District No. 2 is an approximately 5,000 feet long extension along New York State Route 9, south of the former Village of Elizabethtown. District No. 3 includes all users within the former Village of Elizabethtown.

Drawing 2 of 3 (Appendix B) presents a General Plan of the existing water systems for Water District Nos. 2 and 3. The source of supply for the water districts consists of four drilled wells and a spring located along New York State Route 9N, north of the intersection of Lord Road and New York State 9N. It is estimated the total yield of the four wells is about 90 gallons per minute (gpm). The wells are supplemented by a spring source (when authorized by the NYSDOH) in order to meet a daily water demand of about 120,000 – 150,000 gallons per day (gpd). The four well pumps convey water to a 3,000-gallon concrete chlorine contact tank. The well pumps operate 24-hours per day to meet water system demands. The current groundwater source has not approved by the New York State Department of Environmental Conservation (NYSDEC). A Water Supply Permit is required for the existing groundwater source. Treatment of the water from the groundwater wells and spring source consists of chlorination only.

Water is pumped from the groundwater source to a 3,000-gallon concrete chlorine contact tank. The chlorine contact tank is generally empty because the hydraulic capacity of the existing water transmission main (300 gpm) exceeds the pump capacities (total 90 gpm) and there are no controls to maintain water in the chlorine contact tank. Water flows by gravity (open channel flow) from the chlorine contact tank to a 130,000-gallon concrete water storage reservoir. The pumps operate off a level control system, which shuts the pumps off at a high (full) level in the chlorine contact tank. During the majority of the time, the pumps operate continuously, with pump production being offset by water system demands. The water storage reservoir has a float system to prevent the water storage tank from overflowing, however, it works poorly.

The distribution system consists of 2-inch diameter and less, and 3, 4, 6 and 8-inch diameter water mains and a few dead end mains. The mains are cast iron, asbestos cement and plastic. The water mains date back to the early 1900's. The majority of the mains are undersized and incapable of providing peak demands and fire flows. Pressures in the water distribution systems range between 20-115 psi due to significant elevation changes throughout the service area. Residents located outside the existing districts (typically at high points in the system) commonly complain about inadequate pressures during peak water demands.

Priority water distribution system improvements have been identified for the following: water storage tank connection (10-inch main) to Water Street (8-inch main); looping of water mains on Water Street (8-inch main) with Park Street (6-inch main) via Cross Street (8-inch main); looping of an eight (8) inch diameter water main from the intersection of NYS Routes 9/9N (Court Street) (6-inch main) to Williams Street (6-inch main) along Hand Avenue; and replacement of an existing 3-inch diameter main on Noble Terrace. Currently there is a 4-inch diameter water main connection from the water storage reservoir to the 8-inch diameter water main on Water Street. This bottleneck significantly reduces flow from the water storage reservoir during peak demands/fire flows. The existing 8-inch diameter water main on Water Street terminates at Cross Street. In order to improve flows to the higher water demand areas of the Town (Hospital, County Complex, School) the 8-inch diameter water main on Water Street requires looping with the 6-inch diameter main on Park Street. The water main on Hand Avenue should be looped between Court Street and Williams Avenue. The 3-inch water main on Noble Terrace should be upgraded to 8-inch diameter because it was installed cross lots through private property, breaks often and is grossly undersized.

Distribution storage consists of a 130,000-gallon concrete/wood structure water storage reservoir with an overflow elevation of 785 feet USGS. The water storage reservoir is located off of New York State 9N. The existing water storage reservoir is a concrete/cobblestone reservoir covered with a wood framed roof structure. The tank is accessible by rodents/birds, which could impact the quality of water and possibly contaminate the potable water supply. The existing water storage reservoir has deteriorated and requires replacement.

#### **2.4 New York State Department of Health (NYSDOH) Correspondence**

Recent correspondence from the NYSDOH includes a July 28, 2000, Annual Inspection Report and a July 13, 1999, Notice of Violation Letter. The letters highlight the following:

*July 28, 2000, Annual Inspection Report*

- The existing wells are not adequate to meet the water supply needs of the Districts. Well water is augmented by spring water, which cannot be directly chlorinated. Water from the springhouse must be mixed with chlorinated water from the wells in order to be disinfected. Both coliform and E-coli are present whenever the Town places the spring source on-line. A new source of water supply is necessary to alleviate water supply shortages and reliance on the spring source.
- The existing water storage reservoir is old and in desperate need of replacement.
- The Town should accept the DWSRF funding offer and complete the application process in an expeditious manner in order to prevent missed deadlines, which could jeopardize funding.

*July 13, 1999, Notice of Violation Letter*

- Sampling confirmed the presence of E-coli in the water system on July 7, 1999. A boil water order was issued and remained in effect until Monday, July 12, 1999. The probable cause of the E-coli was attributed to auxiliary springs, which were turned on without any increase in chlorination.

Additional correspondence was reviewed which documents the Self-Help Project to improve the source of supply for Water District Nos. 2 and 3. The following summarizes letters of August 5, 1987, September 21, 1988, and December 22, 1988.

*August 25, 1987 Letter*

- A screen and gravel pack was recommended at Well No. 1. The initial yield of Well No. 1 was estimated at 35 gallons per minute. With a screen it was expected the yield could double.
- A screen and gravel pack was being evaluated for Well No. 2. A decision would be made once Well No. 1 was completed. The desire was to pump Well Nos. 1 and 2 alternately.
- The yield of Well No. 3 was less than 5-gallons per minute. **It was recommended that a 2-inch pitless adapter be placed on the well casing 4 ½ feet below grade and a plastic pipe constructed from the casing to one of the springs as a supplemental source.**

*September 21, 1988 Letter*

This letter provides a chronological status report of the Self-Help Project.

- Three wells were drilled at the existing spring source site in August 1987. Preliminary pumping of Well Nos. 1 and 2 indicate substantial yields (>35gpm). Water quality sampling indicated the water is of high quality.

- Drought conditions result in the spring and brook sources not being able to meet system water demands in July 1988.
- A new cased well was drilled at the spring source (presumably well No. 4) in August 1988. The Town pursued development of Well No. 1.
- A pump test was conducted on Well No. 1 in September 1988. After pump testing the sustained yield was determined to be 50 gallons per minute. It was noted the yield was not adequate and a source yielding 75-100 gallons per minute is required to meet water demands. Development of the second and third well was considered.

December 22, 1988 Letter

A letter dated December 22, 1988, from Douglas Ferguson, NYSDOH documents improvements considered for the 1990 Self-Help Project. It was acknowledged in this letter that the water distribution system is 100 years old and should be replaced.

Copies of the above NYSDOH correspondence are included in Exhibit B – NYSDOH Correspondence.

## **2.5 Previous Engineering Reports**

Previous engineering reports pertaining to the Elizabethtown water system include:

- Village of Elizabethtown, Essex County, New York Water System Improvements Engineering Report, October 6, 1976, prepared by Ronald H. Laberge, PE.
- Water Source Transmission Line Extension Project, dated March 1994, prepared by Peter Gibbs, PE.

The primary recommendation of the October 1976 Report included:

- Replacing all existing 4-inch and 6-inch diameter water mains with new 8-inch diameter water mains.

The March 1994 Report included plans/specifications to connect three artesian wells (NYS Route 9N) to the existing source via a new transmission main. This project was never approved and was subsequently abandoned.

Copies of the above reports are included in Exhibit C – Engineering Reports.

## **2.6 District Consolidation**

Since the Phase I – Water System Improvements provide a direct benefit to users in Water District Nos. 2 and 3 the districts were consolidated. As a result, the benefited users of the consolidated district will be charged the same for the capital charge (repayment of principal for DWSRF loan).

A Public Hearing was held on November 27, 2001, to solicit public input. A copy of the Order calling for a Public Hearing is included as Exhibit D. There were no objections expressed by the public regarding consolidation of Water District Nos. 2 and 3.

A resolution was adopted on February 19, 2002, by the Town Board approving the consolidation of Water District Nos. 2 and 3 (to be known as the Consolidated Water District). A second resolution was adopted on the same date by the Town Board determining it to be in the public interest to consolidate Water District Nos. 2 and 3 (to be known as the Consolidated Water District).

A Public Hearing was held on March 19, 2002, in the matter of the proposed increase and improvements of the facilities of the Consolidated Water District. The public expressed no objections.

A Board Resolution was then adopted on March 19, 2002, by the Town Board authorizing the issuance of \$1,680,000 serial bonds of the Town of Elizabethtown, Essex County, New York, to pay the cost of the increase and improvement of the facilities of the Consolidated Water District in the Town of Elizabethtown, Essex County, New York. Copies of the above-mentioned district consolidation documents are included in Exhibit D – District Consolidation Documents.

### **3.0 WATER DEMAND ESTIMATES**

#### **3.1 Introduction**

This section evaluates the existing and future water supply requirements of the Town of Elizabethtown Water Districts 2 and 3 through year 2020. To determine the future water supply requirements of the Districts, it was necessary to evaluate the existing water demands, per capita consumption, existing population and population growth trends.

#### **3.2 Population Projections/Estimated Water Demands**

The Essex County Planning Department was contacted but indicated population projections for the Town of Elizabethtown through the year 2020 are not available. For purposes of this report, it was assumed that the population growth of the Town of Elizabethtown would increase about ten percent from year 2000 to year 2020. Based upon a 2000 Census population of 1,315 people, the projected population of the Town of Elizabethtown for the year 2020 is estimated at 1,445 people. A ten percent population increase is considered reasonable for water supply planning given the rural nature of this area and past population growth trends. The 2000 Census population is 1,315 people and the 1990 Census population was 1,314 people.

It is estimated that the existing Water District Nos. 2 and 3 serve 900 people, approximately 70 percent of the total population of the Town. It is assumed that 80 percent of the increased population will also be served by the Water Districts, which equates to about 1,156 people in the year 2020. Table 3-1 summarizes the population projections, estimated population served, existing water demands and estimated future water demands for the Town of Elizabethtown Water District Nos. 2 and 3 for the years 2001 and 2020.

The Town provided water production information for the period of January 2000 through February 2001. This information is recorded in Water System Operation Reports prepared by operation personnel. This water production information was tabulated and is included in Appendix C.

Based upon the water production data provided by the Town, the average day demand and maximum day demand are almost equal (126,000 gpd versus 132,000 gpd). The average day demand and maximum day demand for year 2000 are 130,000 gallons per day (gpd) and 142,000 gpd respectively. This is typical of water systems where water demands regularly exceed source capacity. As noted previously, the well pumps operate twenty-four (24) hours per day to meet water demands. As a result of this type of operation, the well source discharges its maximum pump capacity (90 gpm) (129,600 gpd), which is equivalent to the average day demand. To meet the maximum day demand, the Town utilizes the spring source to supplement the groundwater wells.

Water demands for year 2020 were estimated based on existing per capita consumption figures of 145 gallons per capita day (gpcd) for the average day and 160 gpcd for the maximum day. Based upon these figures and projected population served of 1156 people for year 2020, the estimated average day demand is 165,000 gpd (115 gpm) and the estimated maximum day demand is 185,000 gpd (130 gpm). The peak hour flows were estimated by multiplying the average day demand figures by a peaking factor of three (3).

Ten State Standards requires adequate source capacity to meet the maximum day demand. With a current source capacity of 130,000 gpd (90 gpm) the Town does not have source capacity to meet current demands nor water demands projected for year 2020. Given the existing pump operation, the Town cannot meet the average day demand with the largest well out of service. To meet current and future water demands, the Town should secure a 150 gpm groundwater source at a separate site from the existing groundwater source. A redundant source of supply is prudent given the unknown well construction details of the existing well site and the marginal supply from the existing site.

### **3.3     Fire Flows**

The Insurance Service Offices (ISO) requires fire flows ranging from 500 gpm to 3,500 gpm for durations up to three (3) hours for the types of building construction which exist in the Town of Elizabethtown. If these fire flows are available and other criteria are met, a reduction in insurance premiums may result. Given the small diameter water mains within the districts (6-inch diameter and less), fire flows in excess of 500 gpm are not available. An 8-inch diameter main on Water Street can provide fire flows in excess of 500 gpm, however, the 8-inch diameter main is connected to a 4-inch diameter main from the water storage reservoir. This 4-inch diameter connection significantly reduces flows to the 8-inch diameter main. The entire water distribution system infrastructure should be updated to provide fire flows to both districts.

**TABLE 3-1**  
**ESTIMATED WATER DEMANDS**

Year	Population Projection (Town)	Estimated Population Served	Average Day Demand		Maximum Day Demand		Peak Hour <sup>(4)</sup>
			(gpd)	(gpm)	(gpd)	(gpm)	(gpm)
2001	1315	900	130,000	90	142,000 <sup>(2)</sup>	100	270
2020	1445	1156 <sup>(1)</sup>	165,000 <sup>(3)</sup>	115	185,000 <sup>(3)</sup>	130	345

- 1) Population based on a projected population growth of 10% from the year 2000 to the year 2020 and an assumption that 80% of the total population increase will be served by the consolidated Water District Nos. 2 and 3.
- 2) The water demand(s) for the year 2001 was based on water production data provided by the Town. Since the pumps operate almost continually to offset system water demands, the average day and maximum day demands are almost equal.
- 3) The average and maximum day demands for the year 2020 were estimated based on per capita consumption figures of 145 gallons per capita day and 160 per capita day, respectively.
- 4) Peak hourly rates were estimated by multiplying the average day demand figures by a factor of three (3).

## **4.0 WATER SYSTEM EVALUATION**

### **4.1 Hydraulic Evaluation**

A hydraulic evaluation was performed to determine a basis of design for the Phase I - Water System Improvements and Phase II - Distribution System Improvements. The hydraulic evaluation consisted of the following:-

#### **Phase I – Water System Improvements**

- New groundwater source (Kilburn Property) well construction details.
- Pump selection for the new groundwater source.
- Size and alignment of the new raw water main interconnecting the new groundwater source with the existing groundwater source.
- Hydraulic capacity analysis of the existing 6-inch diameter transmission main interconnecting the existing groundwater source with the new water storage tank.
- Size and overflow elevation determination for the new water storage tank.
- Size and alignment of new distribution mains as follows: water main interconnecting the new water storage tank with the existing 8-inch diameter water main on Water Street, distribution system loop of the 8-inch diameter water main on Water Street with the 6-inch diameter water main on Park Avenue via Cross Street; distribution system loop of the existing 6-inch diameter main on Court Street with the 6-inch diameter water main on Williams Street via Hand Avenue; water main replacement on Noble Terrace.

#### **Phase II – Distribution System Improvements**

- Size of the new distribution mains to replace the antiquated mains throughout Water District Nos. 2 and 3.

#### **4.1.1 *New Groundwater Source (Kilburn Property)***

HydroSource Associates (HSA) has been working in cooperation with the Town and Dodson & Associate, PLLC to explore, develop and construct a new 150-gallon per minute groundwater source for the Town. HSA identified several Favorable Zones that possess potential for developing a new groundwater source. Geophysical surveys were conducted and three well drilling targets were identified in Favorable Zones along NYS Route 9N. The highest priority target was identified on the Kilburn property between Scrabble Hollow Road and NYS Route 9N. The Town has secured an agreement with the property owner for this site. Test drilling at the site confirmed the presence of an artesian groundwater source. A 7-inch diameter well was installed and the casing was perforated at depths between 63 and 72 feet below ground surface. Total artesian flow from the well was estimated at about 100 gpm. Preliminary water quality results from the test well indicate excellent quality water. Bacteria and organic chemicals were not detected.

HSA recommended the installation of a properly grouted 8-inch diameter screened well which is subjected to proper well development techniques. After well development, it is expected the groundwater source will yield between 150-300 gallons per minute. The new well will be screened with 10 to 15 feet of stainless steel telescoping screen. Sieve results of samples collected during drilling of the test well indicate that a 100 to 120-slot screen is appropriate. It is expected the borehole will be screened from 63 to 78 feet below ground surface. The actual safe yield and screen settings will be determined after well construction.

The existing 7-inch diameter test well will also be used as a production well. The 7-inch diameter well will be over-reamed and grouted to at least 20 feet below ground surface, per NYSDOH requirements.

The design for the new groundwater source at the Kilburn property includes provisions for a pumped well and an artesian flowing well. It is expected the 7-inch diameter well will have an artesian flow of 100-150 gpm after well development. The new 8-inch diameter well will be equipped with a 300 gpm pump in the event the artesian flow conditions change due to seasonal water table fluctuations. Both wells will be equipped with pitless units.

Exhibit E – Hydrogeologic Report includes a March 27, 2002, Technical Memorandum from HSA. This Technical Memorandum includes a site location map, test drilling logs, proposed 8-inch diameter well design schematic, and aquifer and water quality testing protocols for the new groundwater source at the Kilburn property. The final production well(s) will be drilled and developed mid-April 2002.

#### *4.1.2 Well Pump Selection*

A Goulds Model 6DHLC single stage submersible pump rated at 300 gpm at 40 feet total dynamic head has been selected for the new 8-inch diameter production well. The 40 feet of total dynamic head provides a contingency in the event the well water level fluctuates. A back-pressure sustaining valve will be installed near the production well to ensure the well pump operates within its pump curve.

#### *4.1.3 New Raw Water Transmission Main*

A new raw water transmission main is required to connect the new groundwater source to the existing groundwater source. Due to a significant elevation difference between the location of new groundwater source and the location of the existing groundwater source it is possible to maintain gravity flow between the two sites. A 6-inch diameter ductile iron raw water transmission main has been designed which is capable of conveying open channel flow at 300 gpm.

A new valve control vault will be required at the existing groundwater source site. This valve control vault will be equipped with two electric control valves and a 3-inch turbine meter. The chlorine contact tank level will actuate the electric control valves. When the chlorine contact tank is full an electric control valve will close which will cease flow into the chlorine contact tank. During the closure of this electric valve, the second electric valve will open to allow the artesian flow from the new source to discharge to waste. The artesian flow will not be chlorinated at this point and will discharge directly into a tributary stream at the site. The 3-inch turbine meter will measure flow into the chlorine contact tank. The water from the new

groundwater source will be chlorinated independently of the existing groundwater source. The chlorination pump(s) will be actuated by flow through the turbine meter.

Appendix D – Hydraulic Information provides a plan and profile of the route of the new 6-inch diameter raw water transmission main and a schematic of the valve control vault.

#### 4.1.4 *Existing Water Transmission Main (6-Inch)*

The hydraulic capacity of the existing 6-inch diameter water transmission main was evaluated. This existing transmission main will convey flow from the existing groundwater source to the new water storage tank. Based upon our analysis, this transmission main has a hydraulic capacity of 270 gpm when the chlorine contact tank is empty (1 foot of water) and the new water storage tank is near the overflow (elevation 815 USGS). Appendix D – Hydraulic Information includes a hydraulic profile of the existing 6-inch diameter water transmission main.

A backpressure sustaining/altitude valve control manhole is required at the water storage tank site. The backpressure-sustaining valve will ensure the chlorine contact tank remains near full and provides the required chlorine contact. The altitude valve will prevent the new water storage tank from overflowing. Appendix D – Hydraulic Information includes a schematic of the backpressure sustaining/altitude valve control manhole.

#### 4.1.5 *Overflow Elevation – New Water Storage Tank*

Due to the topography and limited acreage of the existing water storage site, the overflow elevation of the new 350,000 gallon concrete water storage tank was selected at 813 feet USGS. The overflow elevation of the existing water storage reservoir is 785 feet USGS. The difference in elevation between the existing and new water storage tank is twenty-eight (28) feet. Despite a twenty-eight (28) feet elevation increase, the existing 6-inch diameter water transmission main should convey about 270 gpm to the new water storage tank based upon hydraulic calculations. Because the new water storage tank will be constructed at a higher elevation a 12 psi increase in distribution system pressure will be experienced.

#### 4.1.6 *Phase I – New Distribution Mains*

The size of the Phase I - Water Distribution Mains were selected as follows:

- Water Storage Tank connection to 8-inch diameter water main on Water Street. A 10-inch diameter main was selected for this connection to supplement flow from the existing 6-inch diameter transmission main, which connects to Court Street. Once the water distribution systems are upgraded, it is imperative that flows of 500-2000 gpm can discharge from the new water storage tank without excessive headloss. A hydraulic model confirmed the size of this 10-inch diameter main.
- Cross Street Water Main – Water Street/Park Street Loop. An 8-inch diameter main was selected for this loop. This is the minimum diameter main required and it will provide a significant increase in fire flows to Court Street once the remaining water distribution system is upgraded. A hydraulic model confirmed the size of this 8-inch diameter loop.

- Hand Avenue Water Main –Court Street/Williams Avenue Loop. An 8-inch diameter water main was selected for this loop. This is the minimum diameter main required and it will improve flows, pressure and chlorine residuals along Hand Avenue. This loop will also provide increased fire flows near the school once the water distribution system is upgraded. A hydraulic model confirmed the size of this 8-inch diameter loop.
- Noble Terrace Water Main. An 8-inch diameter water main was selected to replace an existing 3-inch diameter water main. This is the minimum diameter main required and it will improve pressure and chlorine residuals along Noble Terrace. A hydraulic model confirmed the size of this 8-inch diameter main.

Figure 4-1 “Phase I Improvements” presents a schematic of the Phase I – Water System Improvements.

#### 4.1.7 *Phase II –Distribution System Improvements*

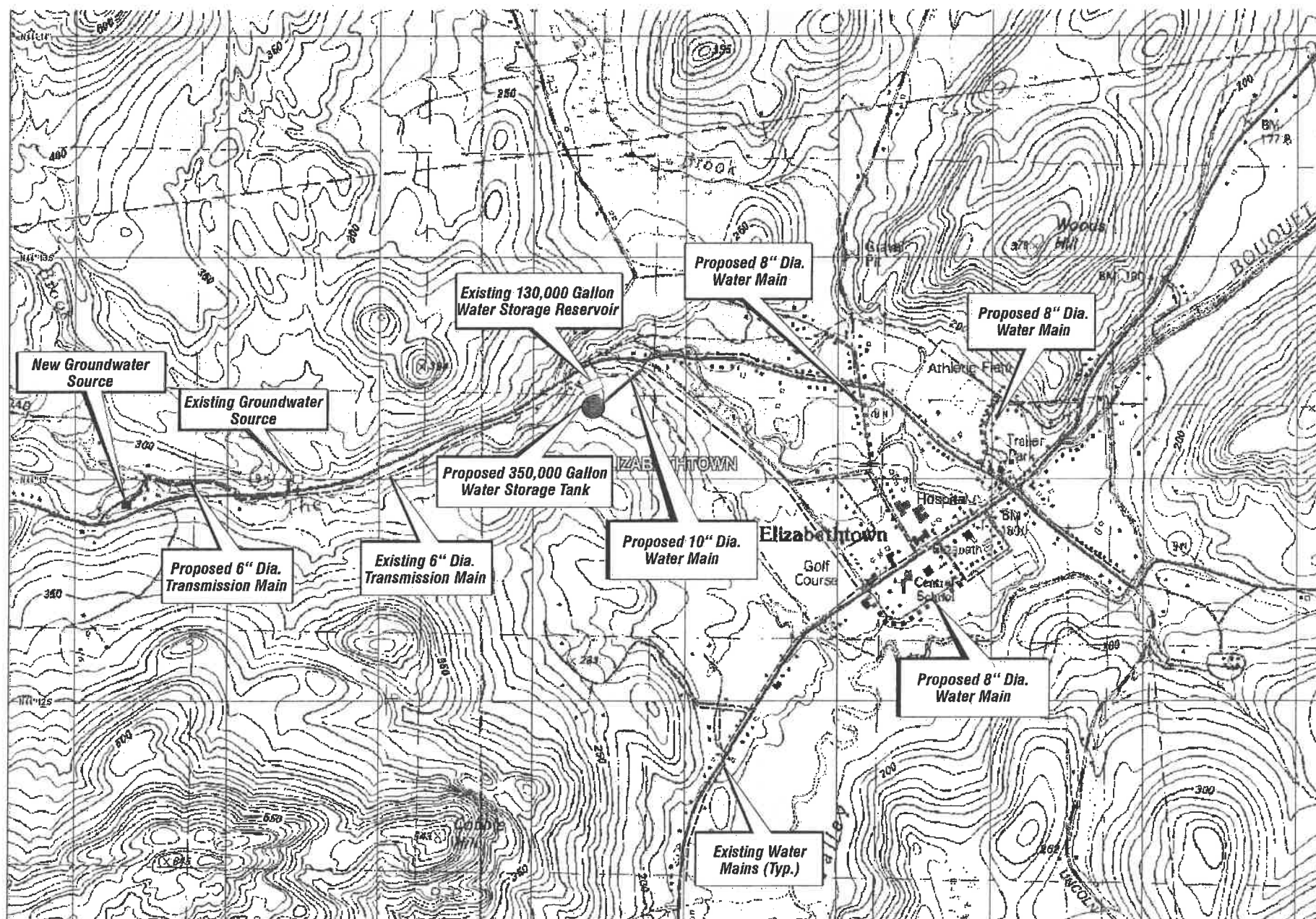
A hydraulic model was developed to select the sizes of the water mains to upgrade the water distribution system for Water District Nos. 2 and 3. The hydraulic model was developed using Cybernet Software (by Haestad Methods). The hydraulic model allows simulation of improvement scenarios based upon various demand requirements.

Typical information required for the hydraulic model includes physical data and flow demand data. Physical data includes: water storage tank overflow elevation; pump curves; grade elevations throughout the water distribution system; diameter, length and roughness coefficient (C-value) for water mains; settings of the back pressure sustaining/altitude valve. Flow demand data consisted of the average day demand, maximum day demand, peak hour demand and fire flow. The Hazen-Williams equation was selected in the Cybernet Software to compute friction losses. A C-value of 120 was used for new ductile iron pipe.

In order to determine the basis of design for the Phase II – Distribution System Improvements required to upgrade the antiquated distribution systems, several improvement scenarios were simulated with the hydraulic model. These improvement scenarios were simulated under various demand scenarios by modifying the physical characteristics of the water system (water storage tank overflow elevation, pipe diameter, pipe roughness coefficient, piping configuration).

A demand envelope ranging between 60 gpm - 300 gpm was utilized for this hydraulic evaluation. This demand envelope approximates the demand requirements of the system; minimum demand (60 gpm); maximum day demand (130 gpm); and peak hour demand (345 gpm). These water demands are presented in Table 3-1 “Estimated Water Demands”. Peak hour demand was utilized in the hydraulic model because low water demands (60-130 gpm) result in negligible headloss within the water system and mirror static pressures under no flow conditions. Higher water demands (peak hour, fire flows) provide a better indication of residual pressures throughout the water system. Improvement scenarios were simulated by stressing the upgraded distribution system with fire flows at the outer limits of the districts.

Table 4-1 “Basis of Design” presents the preferred improvement scenario based upon the results of the hydraulic model for upgrading the District Nos. 2 and 3 water systems.



**Dodson & Associate**  
Consulting Engineers, PLLC

**HAMLET OF ELIZABETHTOWN**  
Phase I Improvements  
Proposed Water Storage Tank Located at Existing Reservoir Site

**FIGURE 4-1**

Improvements presented include: Source of Supply; Distribution Storage; and Distribution Mains.

Table 4-2 "Estimated System Pressure" presents hydraulic model results for estimated system pressures and existing system pressures at noteworthy locations within the water system for the maximum day demand. System pressures exceed the minimum requirement of 35 psi and are about 12 psi higher than existing system pressures within Water District Nos. 2 and 3.

Table 4-3 "Estimated Fire Flows" presents the hydraulic model results for estimated fire flows for the preferred improvement scenario at noteworthy locations within the water systems. Estimated fire flows exceed 1,000 gpm for the upgraded distribution system.

**TABLE 4-1**

**TOWN OF ELIZABETHTOWN  
WATER SYSTEM IMPROVEMENTS**

**BASIS OF DESIGN**

<b>Description</b>	<b>Comments</b>	<b>Recommended Size</b>
<b>Water Storage Tank (New)</b>	Site of Existing Water Storage Reservoir, Town Property – NYS Route 9N	350,000-gallon Precast Prestressed Concrete Water Storage Tank Overflow Elevation 813 feet USGS
Backpressure Sustaining / Altitude Valve (New)	Water Storage Tank Site	2 ½-Inch Ross Model 23 AWR-R
<b>Existing Groundwater Source</b>		
Supply (Existing)	Four Groundwater Wells	Yield 90 gpm (total)
Pumps (Existing)	Four (4) Submersible Well Pumps (25 gpm @ 50 ft TDH)	Grundfos Model 25S05-3 (1/2-Hp, Single Phase, 230V)
Meter/Valve Vault (New)	New groundwater source metering/control	3-Inch Sensus Turbine Meter 2½-Inch Ross Electric Valve 42WR
Chlorine Contact Tank (Existing)	Existing Clear Well - Concrete Tank	3,000 gallons
<b>Proposed Groundwater Source (Kilburn site)</b>		
Supply (New)	Proposed Wells – 8-Inch & 7-Inch	Yield 150gpm (Artesian) Yield 300 gpm (Pumped)
Pumps (New)	Proposed Submersible Well Pump (300 gpm @ 40 ft TDH)	Gould Model 6DHLC (5Hp, Single Phase, 230V)
Backpressure Sustaining Valve (New)	8-Inch Diameter Production well equipped with pump	2½-Inch Ross Model 20WR

**TABLE 4-1 (Cont'd.)****TOWN OF ELIZABETHTOWN  
WATER SYSTEM IMPROVEMENTS****BASIS OF DESIGN**

<b>Description</b>	<b>Comments</b>	<b>Recommended Size</b>
<b>Distributing Mains</b>		
NYS Route 9N <sup>(1)</sup>	Raw Water Main Connecting the New Source to the Existing Source	6-Inch Ductile Iron Class 52
NYS Route 9N	From the New Water Storage Tank to the Intersection of NYS Rte. 9N/Court Street (In parallel with the existing 6-Inch Water Main)	10-Inch Ductile Iron Class 52
Court Street	From the Southern End of District No. 2 to Mason Partridge Road	8-Inch Ductile Iron Class 52
(NYS Route 9/9N)	From Mason Partridge Road (District No. 2) to Water Street From Water Street to the End of District No. 3 (NYS Route 9N North)	10-Inch Ductile Iron Class 52 8-Inch Ductile Iron Class 52
Park Street		8-Inch Ductile Iron Class 52
Water Street	From Cross Street to Court Street	8-Inch Ductile Iron Class 52
Cross Street <sup>(1)</sup>	From Water Street to Park Street	8-Inch Ductile Iron Class 52
Rosco Road	From Cross Street to Dougan Street	8-Inch Ductile Iron Class 52
Dougan Street		8-Inch Ductile Iron Class 52
Noble Terrace <sup>(1)</sup>	From Water Street to End	8-Inch Ductile Iron Class 52
Maple Street	To End of District No. 3	8-Inch Ductile Iron Class 52
River Road	From Court Street to the end of District No.3	10-Inch Ductile Iron Class 52
Woodruff Street	Lowest priority	8-Inch Ductile Iron Class 52
Church Street		8-Inch Ductile Iron Class 52
Hand Avenue <sup>(1)</sup>	From Court Street to William Street	8-Inch Ductile Iron Class 52
William Street		8-Inch Ductile Iron Class 52
Cobble Hill Road	From Court Street to the end of District No. 2	8-Inch Ductile Iron Class 52
Mason Partridge Road	From Court Street to Cobble Hill Road	8-Inch Ductile Iron Class 52

<sup>(1)</sup> Phase I – Water System Improvements.

**TABLE 4-2**  
**TOWN OF ELIZABETHTOWN**  
**WATER SYSTEM IMPROVEMENTS**  
**PREDICTED SYSTEM PRESSURE**

LOCATION	GROUND ELEVATION FEET	SYSTEM PRESSURES	
		EXISTING (PSI)	PREDICTED (PSI)
350,000-gallon Water Storage Tank (Tank Overflow 813')	800	---	---
NYS Route 9N/Water Street Intersection	685	43	55
Water Street/Cross Street Intersection	585	87	98
Dougan Street - End of District	650	58	70
Noble Terrace - End of District	590	84	96
Water Street/Maple Street/River Street Intersection	555	100	112
River Street - End of District	690	41	53
Maple Street - End of District	530	110	122
Court Street North (NYS Rte. 9N) - End of District	530		122
Park Street/Court Street Intersection	595	82	94
Hand Avenue/William Street Intersection	590	84	96
High Street/Court Street Intersection	590	84	96
NYS Rte. 9/Cobble Hill Road Intersection	625	69	81
NYS Rte. 9 – End of District No. 2	625	69	81

(1) System pressures are predicted based upon a water level of 813 feet USGS (tank full).

(2) Pressure based on Maximum Day Demand of 130 gpm.

**TABLE 4-3**  
**TOWN OF ELIZABETHTOWN**  
**WATER SYSTEM IMPROVEMENTS**  
**ESTIMATED FIRE FLOWS\***

Location	Model Node	Fire Flow (GPM)
Court Street/High Street Intersection	J-6	2000
River Street - End of District	J-13	1200
Roscoe Road/Cross Street Intersection	J-18	1700
NYS Route 9/Cobble Hill Road Intersection (District No. 2)	J-37	1400
NYS Route 9 – End of District No. 2	J-39	1,500
Noble Terrace – End of District	J-23	1,600
Court Street/Park Street	J-14	2,000
Maple Street – End of District	J-26	1,700

\* Upgraded System – Phase I/II – Distribution System Improvements.

#### 4.1.8 *Conclusions*

Based upon the results of the hydraulic evaluation, the following conclusions are made:

- With proper well construction and development, it is expected a safe yield between 150-300 gpm should be obtained at the new groundwater source location (Kilburn site). An artesian flow of 100-150 gpm may exist after well development of the 7-inch diameter well. The new 8-inch diameter well will be equipped with a 300 gpm pump in the event the artesian flow conditions change due to season water table fluctuations.
- Gravity flow of about 300 gpm is possible between the new groundwater source site and the existing groundwater source site if the 6-inch diameter transmission main is constructed at the proper grades and alignment.
- Valve control is required on the 6-inch diameter raw water transmission main due to the possibility of artesian flow from the new groundwater source. Electric valves will be controlled by the water level of the chlorine contact tank.
- Metering is required to measure the flow from the new groundwater source and to provide proper chlorination.
- The existing transmission main between the existing groundwater source site and the water storage tank site has a hydraulic capacity of about 270 gpm when the chlorine contact tank is near empty and the water storage tank is near full.
- Due to the elevation difference between the existing groundwater source site and the water storage tank site a backpressure sustaining/altitude valve is required at the water storage tank site. This valve will ensure the chlorine contact tank remains near full and provides the required chlorine contact. The altitude will prevent the water storage tank from overflowing.
- Distribution main improvements will replace antiquated water mains, which leak and often break. The new distribution system will provide fire flows of 750-2000 gpm throughout the water system.
- Placing a new water storage tank with an overflow elevation of 813 feet USGS off New York State Route 9N on Town property (existing water reservoir site) will provide adequate pressures throughout the water distribution system under average day, maximum day, peak hour and fire flow demand conditions. Pressures in the water distribution system will increase 10-15 psi because the overflow elevation of the new water storage tank is twenty-eight (28) feet higher than the overflow elevation of the existing water storage reservoir.

#### 4.2 Water Storage

The capacity of the proposed water storage tank was determined based upon selecting the larger volume computed from two accepted methodologies to size a water storage tank:

- **Ten State Standards**

Requires that distribution storage be sized to provide a minimum of an average day water demand. Based upon this method, a 165,000-gallon water storage tank would be required for the Water Districts. This volume is the minimum capacity required and doesn't include storage for fire protection.

- **Fire Flow and Peak Hour Demand**

This method assumes that a peak hour demand could occur during a fire flow event. Based upon the hydraulic evaluation and an upgraded distribution system, a 1,500 gpm fire flow can be conveyed to the intersection of NYS Route 9N (High Street) and Court during a peak hour demand of 345 gpm. Based upon a three (3) hour duration, a 332,000-gallon water storage tank would be required.

Based upon our experience and standard capacity tanks provided by tank manufacturers, we recommend the Town construct a 350,000-gallon concrete water storage tank to replace the existing 130,000-gallon water storage reservoir. The new water storage tank will provide two days of storage to meet average day demands.

#### **4.3 Distribution Mains/Water Services**

Water distribution system improvements consist of installation of about 12,000 feet of 10-inch diameter, 21,500 feet of 8-inch diameter and 3,100 feet of 6-inch diameter Class 52 ductile iron pipe. In accordance with Ten State Standards, fire hydrants will be located every 600 feet and isolation gate valves every 1,200 feet along the proposed water main routes. All water mains will be installed in the street/highway right-of-way. All state highway and selected County highway road crossings will require road borings. Twenty-four (24)-inch diameter steel casing pipe is proposed at all road bores.

Crossing of streams will be required at the following locations:

- The Branch – between Cross Street and Park Street.
- The Branch – near the intersection of Hurricane Road and NYS 9N.
- The Branch – near the intersection of Water Street and Court Street.
- The Branch – Maple Street.
- Tributary of the Bouquet River – New York State Route 9N South near the boundaries of Water Districts No. 2 and No.3.

In accordance with Ten State Standards, stream crossings shall include: a minimum of two (2) feet of cover; valves at both ends of the stream crossing so that the section can be isolated for testing and repair; provisions to allow insertion of a small meter to determine leakage and for sampling.

Copper water services will be pushed under the roads to provide water service to users located on the side opposite the water main. A polyethylene sleeve will be required at all state highway water service crossings. A curb stop will be placed at the right-of-way/property line for each water service. Water meters will be installed within buildings; however, the property owner will be responsible for the cost of the service from the curb stop to the water meter located within

the building. Property owners will be required to provide a release to allow the installation of the water meter on private property. Water meters will include touch read features. A billing software package will be procured for invoicing water consumption based upon metered usage.

Meter pits will be provided for buildings without basements. Individual pressure reducing valves will be provided for all services which exceed 75 – 80 psi.

#### **4.4 Instrumentation/Controls**

Instrumentation/Control improvements consist primarily to start/stop pumps or gravity flow based upon water level(s) in the chlorine contact tank. Instrumentation/Control devices will be installed at the Existing Groundwater Well Source, New Groundwater Well Source and Water Storage Tank Site.

The Existing Groundwater Well Source, New Groundwater Well Source and Water Storage Tank Site instrumentation/control improvements include Remote Terminal Units (RTU) with modems, installed in fiberglass enclosures. The water storage tank site improvements consist of a level sensor/pulse duration transmitter installed in the control manhole. The level sensor will also be upgraded in the chlorine contact tank at the Existing Groundwater Source site.

The RTU is the “electronic processor” of the instrumentation/control system. Each RTU will be programmed with software that allows the RTU to receive and transmit programmed data via modem and perform programmed operations. The RTU at the Existing Groundwater Well Source communicates with the RTU at the New Groundwater Well Source and the RTU at the Water Storage Tank site.

The RTU at the Existing Groundwater Well Source will be programmed to automatically start/stop the submersible pumps at the existing site and submersible pump at the New Groundwater Well Source site based upon the chlorine contact tank level. The RTU is programmable so the set point levels (to start/stop pumps) can be easily adjusted.

The RTU at the Existing Groundwater Well Source will display the following information:

- Water Storage Tank level.
- Chlorine Contact Tank level.
- Metered water production (both sources).
- Alarms- high and low water storage tank levels; high and low chlorine contact tank levels; and telephone signal loss.
- Water level in the 7-inch diameter production well at the Kilburn site.

#### **4.5 Subsurface Evaluation**

A subsurface investigation was conducted by Atlantic Testing Laboratories (ATL), Limited on March 20, 2002. ALT performed five (5) hollow stem auger borings and ten (10)

rock probes along the route of the proposed Phase I – Distribution Main Improvements to determine existing rock elevations. The subsurface evaluation also included soil testing to determine the corrosivity of the soil. Test results confirmed the soil is not corrosive to ductile iron pipe and polyethylene encasement of the pipe is not required. Three soil borings will be advanced at the water storage tank site. A separate report prepared by ALT will document the results of the subsurface evaluation, provide bearing capacity and settlement information, and recommend suitable foundation designs for construction of the new water storage tank. The subsurface report documenting the March 20, 2002, investigation is included as Exhibit F.

## **5.0 WATER SYSTEM IMPROVEMENT SUMMARY**

### **5.1 Phase I Water System Improvement Summary**

The following is a summary of the recommended Phase I - Water System Improvements and Construction Contracts:

#### **Water Source (Contract No. 1 – Water Source/Distribution Mains)**

- ◆ Development of two new groundwater production wells at the Kilburn site including submersible pump, pitless units, chain link fence, access road, new electrical and telephone service, instrumentation and control improvements (both sources) and restoration.
- ◆ Installation of 3,100 feet of 6-inch diameter raw water transmission main extending from the new groundwater source site to the existing groundwater source site including road bores, a stream crossing of the Branch, flushing hydrants, isolation valves and restoration.
- ◆ Installation of a backpressure sustaining valve manhole for the 8-inch diameter production well.

#### **Water Storage Tank (Contract No. 2 – 350,000 gallon Concrete Water Storage Tank)**

- ◆ Construction of a new 350,000 - gallon concrete water storage tank and drainage structure on Town owned land near the Town's existing water storage reservoir, including site work, control valve vault, chain link fence, instrumentation and control improvements, new telephone service and restoration.

#### **Priority Distribution System Improvements (Contract No. 1 – Water Source/Distribution Mains)**

- ◆ Installation of 1,500 feet of 10-inch diameter transmission main extending from the new water storage tank to the existing 8-inch diameter main located at the intersection of Water Street and New York State Route 9N.
- ◆ Installation of 1,400 feet of 8-inch diameter water main along Cross Street from the intersection with Water Street to Park Street, including a stream crossing of the Branch.
- ◆ Installation of 1,800 feet of 8-inch diameter water main along Hand Avenue from the intersection with Court Street to the intersection with William Street.
- ◆ Installation of 1,200 feet of 8-inch diameter water main along Noble Terrace from the intersection with Water Street to the end of the street including a stream crossing of Tannery Brook.

The above distribution system improvements shall include required road bores, creek crossings, fire hydrants and isolation valves. Water services shall consist of a new corporation stop at the main, type K copper piping from the corporation to each new curb stop located at the respective owner's property line. A connection will be made at the curb stop to the existing

water service at the property line. Drawing 3 of 3 – Appendix E provides an overview of the proposed Phase I – Water System Improvements.

### **Electrical (Contract No. 3)**

No electrical improvements are proposed at the existing water storage tank site and existing groundwater site. The existing electrical services will be utilized to provide 120-volt power for the instrumentation and control equipment and control valves. A new telephone service will be installed at both sites.

The new groundwater source (Kilburn site) site electrical improvements include the installation of an underground electrical service, underground telephone service and connections to the instrumentation and control equipment. A manual transfer switch and generator receptacle will be installed.

## **5.2 Phase II - Distribution System Improvement Summary (Contract No. 4 – Distribution Mains)**

The following is a summary of the recommended Phase II - Water System Improvements:

### **Distribution System Improvements**

- ◆ 10,500 feet of 10-inch diameter water main(s) extending along NYS Route 9N from the 10-inch main installed in Phase I (Water Storage Tank Site) to the intersection with Court Street, NYS Route 9/Court Street from Cobble Hill Road to Water Street and River Road from Court Street to the end of District No. 3.
- ◆ 17,000 feet of 8-inch diameter water main(s) along NYS Route 9 from the end of District No. 2 to Cobble Hill Road, Court Street from Water Street to the end of District No. 3, Park Street, Water Street from Cross Street to Court Street, Cross Street from Water Street to the end of District No. 2, Roscoe Road from Cross Street to Dougan Street, Dougan Street, Maple Street, Woodruff Street, Church Street, Hand Avenue from Williams Street to Church Street, and Williams Street.

The above distribution improvements shall include required road bores, creek crossings, fire hydrants and isolation valves. Water services shall consist of a new corporation stop at the main, type K copper piping from the corporation to each new curb stop located at the respective owner's property line. A connection would be made at the curb stop to the existing water service at the property line. Drawing 3 of 3 – Appendix E provides an overview of the proposed Phase II – Distribution System Improvements.

### **Meters – (Contract No. 4 – Distribution Mains)**

- ◆ Contract No. 4 will also consist of the procurement of 400 - 5/8 by 3/4-inch water meters to replace existing antiquated meters. Meters will be installed in pits for buildings, which have slab-on-grade foundations; otherwise meters will be installed in the basement of buildings. The meters will be equipped with touch read features. A water billing software program will be procured.

## **6.0 COST ASSESSMENT**

### **6.1 Project Cost Estimate**

The estimated total project cost to complete the Phase I - Water System Improvements as outlined in Section 5.0 is \$1,680,000.00. The estimated total project cost to complete Phase II - Distribution System Improvements as outlined in Section 5.0 is \$3,770,000.00. Summaries of the estimated project costs are provided in Table 6-1 "Project Cost Estimates". A detailed cost estimate for each contract is provided in Appendix F. The project cost estimates assumes municipal bidding and includes: materials; equipment; labor; mobilization/demobilization; survey; subsurface exploration; engineering; construction observation; land acquisition; legal; and miscellaneous costs. The cost estimates are based on Manufacturer's quotations, Means Construction Cost Data and review of bids from construction of similar projects.

### **6.2 Affordability**

#### **6.2.1 *Funding***

Funding for the Phase I – Water System Improvements has been secured through the Drinking Water State Revolving Fund (DWSRF). The New York State Environmental Facilities Corporation (EFC) and the New York State Department of Health (NYSDOH) jointly provide program administration for this funding.

Based upon a May 2, 2000, letter, the Town is eligible for a grant of \$608,953.00 and an interest-free loan of \$1,070,228.00 with a thirty- (30) year amortization schedule. The Town is required to close on financing within two years of the funding offer. A copy of May 2, 2000, funding letter is included as Exhibit G.

Funding for the Phase II – Distribution System Improvements has not been secured. Funding is available through the United States Department of Agriculture – Rural Utilities Services (Rural Development), Drinking Water State Revolving Fund (DWSRF) and Small Cities Community Development Block Grant program (CDBG). It is recommended the Town submit funding applications to the above agencies.

#### **6.2.2 *Projected User Cost***

Prior to proceeding with a comprehensive capital improvement project, it is imperative project affordability be considered, so that benefited users aren't burdened by excessive user costs. For purposes of this report, projected user costs have only been calculated for the Phase I – Water System Improvements and not the Phase II – Distribution System Improvements because funding has not been secured.

The projected user costs consists of two components: Water Consumption fee/Operation and Maintenance (O & M) charge and the capital charge. Because District No. 2 and District No. 3 users benefit equally from the proposed project, benefited users within each district will be assessed their proportionate share for the capital charge. The water consumption fee/ O & M will be charged based upon the existing water rate schedule.

### *Water Consumption Fee/O&M Charge*

The total water consumption fee and operation and maintenance (O&M) budget for Water District Nos. 2 and 3 is currently \$45,000 per year. Based on 494 total EDUs, the average water consumption fee/O&M charge a typical user pays is approximately \$90 per year.

### *Capital Charge – Water District Nos. 2 and 3*

Each District User will be assessed an Equivalent Dwelling Unit (EDU) charge to repay the loan principal balance over thirty- (30) years. Based upon 494 EDUs, an owner of a single family home will be assessed \$75/year. Owners of multi-family homes will be assessed one EDU for each unit. Large water users (schools, car washes) will be assessed EDUs based upon their metered water usage.

Table 6-2 “Projected User Costs” presents the total annual charge for an owner of a single-family residence by implementing the Phase I – Water System Improvement project.

**TABLE 6-1**  
**TOWN OF ELIZABETHTOWN**  
**WATER SYSTEM IMPROVEMENTS**  
**PROJECT COST ESTIMATE**

<u><b>Contract</b></u>		<i>Total Cost</i>
<b>Phase I – Water System Improvements</b>		
	New Groundwater Source (Contract No. 1)	\$415,000.00
	Distribution Mains (Contract No. 1)	\$516,500.00
	Water Storage Tank (Contract No. 2)	\$520,000.00
	Electrical (Contract No. 3)	\$35,000.00
<b>Total Phase I Construction Cost</b>		<b>\$1,486,500.00</b>
	Survey/Mapping	\$20,000.00
	Subsurface Exploration	\$7,000.00
	Engineering	\$131,500.00
	Administration, Legal and Miscellaneous	\$35,000.00
<b>Total Phase I Project Cost</b>		<b>\$1,680,000.00</b>
<b>Phase II – Distribution System Improvements</b>		
	Distribution Mains	\$3,135,000.00
	Water Meters	\$70,000.00
<b>Total Phase II Construction Cost</b>		<b>\$3,205,000.00</b>
	Survey/Mapping	\$60,000.00
	Subsurface Exploration	\$25,000.00
	Engineering	\$380,000.00
	Administration, Legal and Miscellaneous	\$100,000.00
<b>Total Phase II Project Cost</b>		<b>\$3,770,000.00</b>
<b>TOTAL PROJECT COST (PHASE I AND II)</b>		<b>\$5,450,000.00</b>

**TABLE 6-2**  
**TOWN OF ELIZABETHTOWN**  
**PHASE I - WATER SYSTEM IMPROVEMENTS**

**PROJECTED USER COSTS**

Benefited Users	Water Consumption Fee/ O&M Charge	Capital Cost		Projected User Cost Per Year
		Existing Debt	Proposed Project	
District No. 2	\$90.00	N/A	\$75.00	\$165.00
District No. 3	\$90.00	N/A	\$75.00	\$165.00

Notes:

- (1) Based upon the funding offer outlined in Section 6.2.1.
- (2) Water District Nos. 2 and 3 have a combined total of 494 Equivalent Dwelling Units (EDUs).
- (3) The annual O&M budget is estimated to be \$45,000 per year.

## **7.0 REGULATORY APPROVALS**

### **7.1 New York State Department of Health (NYSDOH)**

Review and approval of the water system improvement project is required by the NYSDOH. Initially, NYSDOH reviews the Basis of Design Report. This includes review of design concepts and compliance to design standards, including Ten State Standards and Subpart 5-1 of the State Sanitary Code.

Endorsement of the Basis of Design Report by the NYSDOH is generally required prior to proceeding with final design and preparation of construction plans and specifications. Submittal of construction plans and specifications for review and approval by the NYSDOH is also required. At the time of this submittal, application is made " For Approval of Plans For Public Water Supply Improvements". Once approved, NYSDOH issues an " Approval of Plans For Public Water Supply Improvements". Construction can't commence until NYSDOH approval is obtained.

Once construction has been completed, the design engineer of record must provide written confirmation to the NYSDOH that the Project was constructed substantially in accordance with the contract documents. The NYSDOH will then authorize operation of the public water system in accordance with Subpart 5-1 of the State Sanitary Code.

### **7.2 New York State Department of Environmental Conservation (NYSDEC)**

The following permits will be required by the NYSDEC:

- Protection of Waters Permit
- Application for Public Water Supply Permit

The Protection of Waters Permit is required for disturbance of streams as a result of pipes crossing streams. A Water Supply Permit is required for the new groundwater source at the Kilburn site and for the four wells at the existing groundwater source site.

### **7.3 New York State Department of Transportation (NYSDOT)**

Review of contract drawings is required by the NYSDOT. Upon approval, the NYSDOT shall issue a highway work permit. The NYSDOT shall require the Town/Contractor to provide bonds/insurance to work within the State highway right of way.

### **7.4 Adirondack Park Agency (APA)**

Since the Town of Elizabethtown is located in the Adirondack Park, the APA requires review and approval of all water system improvements outside the hamlet area. Preliminary meetings have been held with the APA and APA personnel have indicated a permit will be required for this Project.

#### **7.5 Army Corp of Engineers (ACOE)**

An ACOE permit is required to work within streams during the construction of water mains.

#### **7.6 State Environmental Quality Review (SEQRA)**

A SEQRA review is required as part of this project in order to determine environmental impacts. In addition to the above agencies, the following agencies also require review of this project: State Historic Preservation Office (SHPO), Fish and Wildlife; and Critical Habitat/Protected Species.

#### **7.7 Local**

Review of contract drawings is required by the Essex County Department of Public Works to work within the right-of-way of County roads. Upon approval, the Essex County Department of Public Works shall issue a highway work permit. The Essex County Department of Public Works shall require the Town to provide bonds/insurance to work within the County highway right of way.

## **8.0 RECOMMENDED PLAN**

### **8.1 Improvement Summary**

The Town should pursue the construction of all of the proposed Phase I - Water System Improvements as described in Section 5.0. The total estimated project cost to construct all of these proposed water system improvements is \$1,680,000.00.

### **8.2 Implementation Steps**

In order for the Town to implement the proposed Phase I – Water System Improvements, a number of steps require completion in a timely manner. The following actions are recommended to implement the proposed water system improvements.

- Accept the Basis of Design Report by resolution and authorize its submittal to the local Department of Health and to the New York State Department of Health.
- Proceed with consolidating Water District Nos. 2 and 3.
- Commence the SEQRA process and obtain approvals for the Phase I – Water System Improvements.
- Prepare DWSRF final application and supporting documentation.
- Following successful completion of the SEQRA process and approval by governmental agencies, proceed with the final design of the proposed improvements.
- Submit DWSRF application and Contract Documents to Environmental Facilities Corporation and NYSDOH for review and approval.
- Following the approval phase, proceed with municipal bidding/ award of the Phase I - Water System Improvements.
- Proceed with construction of the Phase I – Water System Improvements.

### **8.3 Project Schedule**

A project schedule has been provided in Appendix G to allow for prudent planning of the proposed project based upon funding secured through the New York State Drinking Water Revolving Fund (DWSRF).

## **Appendix A**

### **Drawing 1 – Boundaries of Water Districts Nos. 2 and 3**

## **Appendix B**

### **Drawing 2 – General Plan – Existing Water System**

# **Town of Elizabethtown Water Production Summary\***

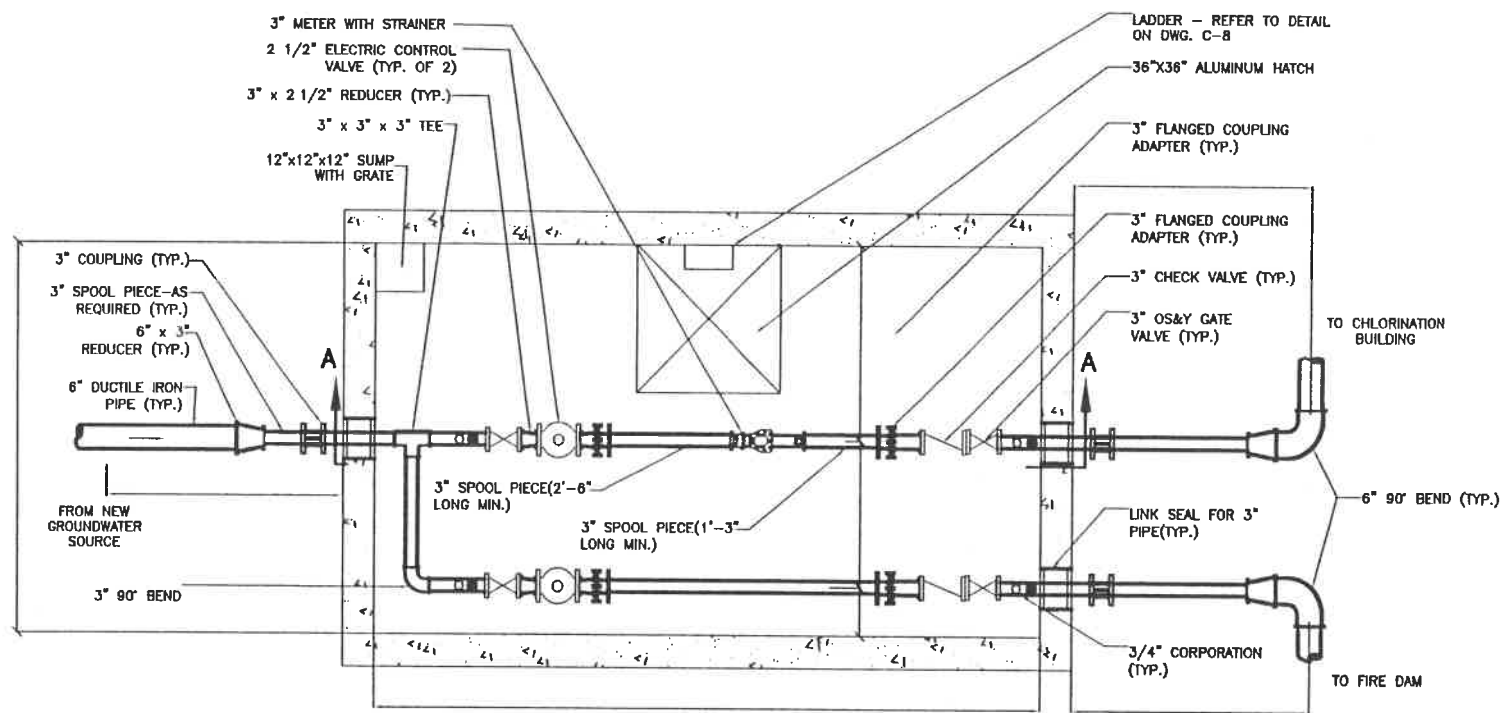
2000					2001			
Reporting Month	Total Gallons per Month	Average Day Gallons per Day	Maximum Day Date	Maximum Day Gallons per Day	Total Gallons per Month	Average Day Gallons per Day	Maximum Day Date	Maximum Day Gallons per Day
January	NO DATA PROVIDED				3,943,000	127,000	5-Jan	140,000
February	NO DATA PROVIDED				3,522,000	126,000	22-Feb	132,000
March	3,706,000	120,000	24-Mar	138,000	NO DATA PROVIDED			
April	3,815,000	127,000	3-Apr	139,000				
May	4,036,000	130,000	14-May	139,000				
June	3,914,000	131,000	29-Jun	140,000				
July	4,043,000	130,000	8-Jul	138,000				
August	4,117,000	133,000	31-Aug	141,000				
September	3,980,000	133,000	7-Sep	142,000				
October	4,095,000	132,000	30-Oct	139,000				
November	3,972,000	132,000	3/10-Nov	139,000				
December	4,043,000	130,000	17-Dec	137,000				

Date	Maximum Day Gallons per Day
1. 09/07/00	142,000
2. 01/05/01	140,000

\* INFORMATION COMPILED FROM NYSDOH WATER SYSTEM OPERATION REPORTS.

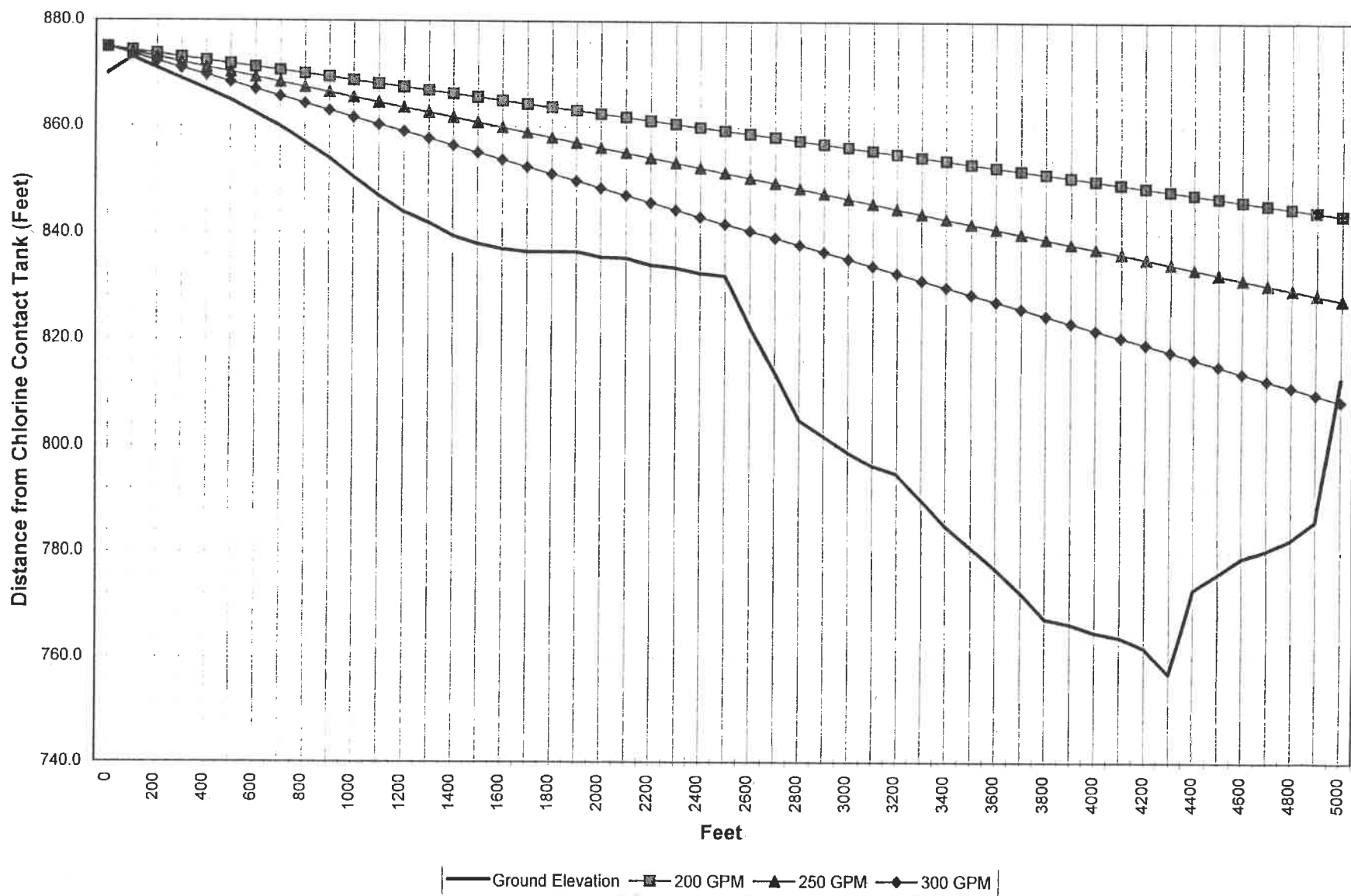
**Appendix D**

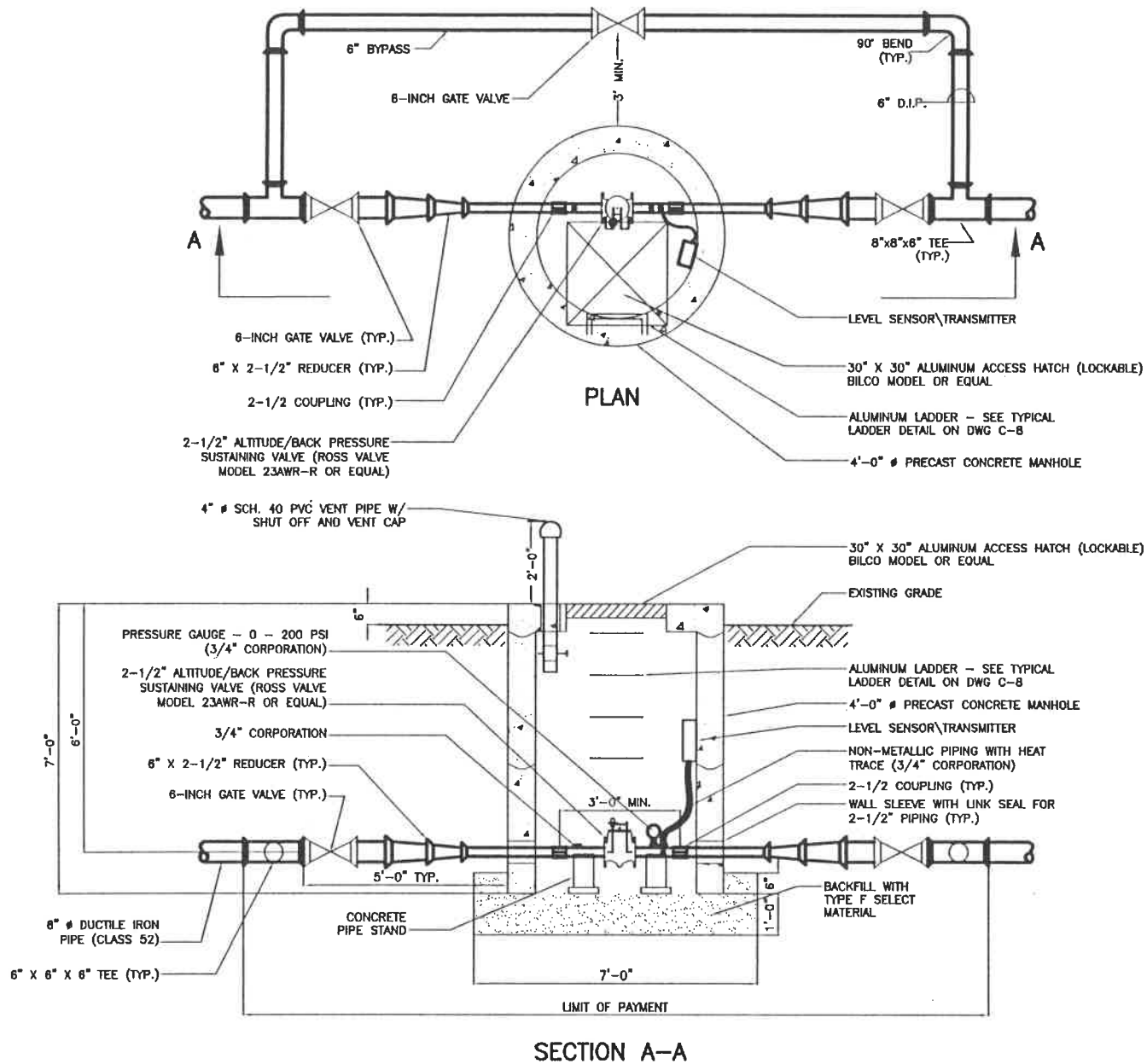
**Hydraulic Information**



Town of Elizabethtown  
Water System Improvements

Figure  
Hydraulic Profile - Chlorine Contact Tank to Water Storage Tank





# Physical Alternative Change Summary Report

## Phase I-II Piping

Pipes					
Label	Material	Diameter (in)	Hazen- Williams C	Minor Loss Coefficient	Check Valve?
P-1	Ductile Iron	10	120.0	0.00	false
P-2	Ductile Iron	6	100.0	0.00	false
P-3	Ductile Iron	6	100.0	0.00	false
P-4	Ductile Iron	6	100.0	0.00	false
P-5	Ductile Iron	10	120.0	0.00	false
P-6	Ductile Iron	10	120.0	0.00	false
P-7	Ductile Iron	10	120.0	0.00	false
P-8	Ductile Iron	8	100.0	0.00	false
P-9	Ductile Iron	8	100.0	0.00	false
P-10	Ductile Iron	8	120.0	0.00	false
P-11	Ductile Iron	8	120.0	0.00	false
P-12	Ductile Iron	10	120.0	0.00	false
P-13	Ductile Iron	10	120.0	0.00	false
P-14	Ductile Iron	10	120.0	0.00	false
P-15	Ductile Iron	10	120.0	0.00	false
P-16	Ductile Iron	10	120.0	0.00	false
P-17	Ductile Iron	10	120.0	0.00	false
P-18	Ductile Iron	10	120.0	0.00	false
P-19	Ductile Iron	8	120.0	0.00	false
P-20	Ductile Iron	8	120.0	0.00	false
P-21	Ductile Iron	8	120.0	0.00	false
P-22	Ductile Iron	8	120.0	0.00	false
P-23	Ductile Iron	8	120.0	0.00	false
P-24	Ductile Iron	8	120.0	0.00	false
P-25	Ductile Iron	8	120.0	0.00	false
P-26	Ductile Iron	8	120.0	0.00	false
P-27	Ductile Iron	8	120.0	0.00	false
P-28	Ductile Iron	8	120.0	0.00	false
P-29	Ductile Iron	8	120.0	0.00	false
P-30	Ductile Iron	2	100.0	0.00	false
P-31	Ductile Iron	2	100.0	0.00	false
P-32	Ductile Iron	8	120.0	0.00	false
P-33	Ductile Iron	8	120.0	0.00	false
P-34	Ductile Iron	8	120.0	0.00	false
P-35	Ductile Iron	8	120.0	0.00	false
P-36	Ductile Iron	8	120.0	0.00	false
P-37	Ductile Iron	8	120.0	0.00	false
P-38	Ductile Iron	8	120.0	0.00	false
P-39	Ductile Iron	8	120.0	0.00	false
P-40	Ductile Iron	10	120.0	0.00	false
P-41	Ductile Iron	10	120.0	0.00	false
P-42	Ductile Iron	8	120.0	0.00	false
P-43	Ductile Iron	8	120.0	0.00	false
P-44	Ductile Iron	8	120.0	0.00	false
P-46	Ductile Iron	8	120.0	0.00	false
P-49	Ductile Iron	8	100.0	0.00	false
P-54	Ductile Iron	8	120.0	0.00	false
P-55	Ductile Iron	8	120.0	0.00	false
P-56	Ductile Iron	2	100.0	0.00	false
P-57	Ductile Iron	8	120.0	0.00	false

No Pump Physical Properties Changed for this Alternative

No Control Valve Physical Properties Changed for this Alternative

## Physical Alternative Change Summary Report

Junctions		
Label	Elevation (ft)	Zone
J-1	777.00	Zone-1
J-2	685.00	Zone-1
J-3	630.00	Zone-1
J-4	590.00	Zone-1
J-5	630.00	Zone-1
J-6	590.00	Zone-1
J-7	625.00	Zone-1
J-8	585.00	Zone-1
J-9	555.00	Zone-1
J-10	555.00	Zone-1
J-11	555.00	Zone-1
J-12	560.00	Zone-1
J-13	690.00	Zone-1
J-14	595.00	Zone-1
J-15	590.00	Zone-1
J-16	590.00	Zone-1
J-17	590.00	Zone-1
J-18	600.00	Zone-1
J-19	600.00	Zone-1
J-20	625.00	Zone-1
J-21	650.00	Zone-1
J-22	600.00	Zone-1
J-23	590.00	Zone-1
J-24	580.00	Zone-1
J-25	560.00	Zone-1
J-26	530.00	Zone-1
J-27	530.00	Zone-1
J-28	590.00	Zone-1
J-29	530.00	Zone-1
J-30	590.00	Zone-1
J-31	590.00	Zone-1
J-32	590.00	Zone-1
J-33	590.00	Zone-1
J-34	590.00	Zone-1
J-35	630.00	Zone-1
J-36	590.00	Zone-1
J-37	625.00	Zone-1
J-38	625.00	Zone-1
J-39	625.00	Zone-1
J-40	625.00	Zone-1
J-41	625.00	Zone-1
J-43	560.00	Zone-1
J-46	580.00	Zone-1
J-47	740.00	Zone-1

No Reservoir Physical Properties Changed for this Alternative

Tanks						
Label	Elevation (ft)	Base Elevation (ft)	Minimum Elevation (ft)	Maximum Elevation (ft)	Section	Zone
T-1	793.00	793.00	794.00	813.00	Constant Area	Zone-1

# Demand Alternative Change Summary Report

## Max Day-120gpm

Label	Type	Demand (gpm)	Pattern	Demand Summary
J-1	Demand	0.00	Fixed	Simple
J-2	Demand	2.60	Fixed	Simple
J-3	Demand	2.60	Fixed	Simple
J-4	Demand	2.60	Fixed	Simple
J-5	Demand	2.60	Fixed	Simple
J-6	Demand	2.60	Fixed	Simple
J-7	Demand	2.60	Fixed	Simple
J-8	Demand	2.60	Fixed	Simple
J-9	Demand	2.60	Fixed	Simple
J-10	Demand	2.60	Fixed	Simple
J-11	Demand	2.60	Fixed	Simple
J-12	Demand	2.60	Fixed	Simple
J-13	Demand	2.60	Fixed	Simple
J-14	Demand	2.60	Fixed	Simple
J-15	Demand	2.60	Fixed	Simple
J-16	Demand	2.60	Fixed	Simple
J-17	Demand	2.60	Fixed	Simple
J-18	Demand	2.60	Fixed	Simple
J-19	Demand	2.60	Fixed	Simple
J-20	Demand	2.60	Fixed	Simple
J-21	Demand	2.60	Fixed	Simple
J-22	Demand	2.60	Fixed	Simple
J-23	Demand	2.60	Fixed	Simple
J-24	Demand	2.60	Fixed	Simple
J-25	Demand	2.60	Fixed	Simple
J-26	Demand	2.60	Fixed	Simple
J-27	Demand	2.60	Fixed	Simple
J-28	Demand	2.60	Fixed	Simple
J-29	Demand	2.60	Fixed	Simple
J-30	Demand	2.60	Fixed	Simple
J-31	Demand	2.60	Fixed	Simple
J-32	Demand	2.60	Fixed	Simple
J-33	Demand	2.60	Fixed	Simple
J-34	Demand	2.60	Fixed	Simple
J-35	Demand	2.60	Fixed	Simple
J-36	Demand	2.60	Fixed	Simple
J-37	Demand	2.60	Fixed	Simple
J-38	Demand	2.60	Fixed	Simple
J-39	Demand	2.60	Fixed	Simple
J-40	Demand	2.60	Fixed	Simple
J-41	Demand	2.60	Fixed	Simple
J-43	Demand	2.60	Fixed	Simple
J-46	Demand	0.00	Fixed	Simple
J-47	Demand	2.60	Fixed	Simple

# Demand Alternative Change Summary Report

## Fire Flow at j6 (Court/High)

Label	Type	Demand (gpm)	Pattern	Demand Summary
J-1	Demand	0.00	Fixed	Simple
J-2	Demand	2.20	Fixed	Simple
J-3	Demand	2.20	Fixed	Simple
J-4	Demand	2.20	Fixed	Simple
J-5	Demand	2.20	Fixed	Simple
J-6	Demand	2,002.20	Fixed	Simple
J-7	Demand	2.20	Fixed	Simple
J-8	Demand	2.20	Fixed	Simple
J-9	Demand	2.20	Fixed	Simple
J-10	Demand	2.20	Fixed	Simple
J-11	Demand	2.20	Fixed	Simple
J-12	Demand	2.20	Fixed	Simple
J-13	Demand	2.20	Fixed	Simple
J-14	Demand	2.20	Fixed	Simple
J-15	Demand	2.20	Fixed	Simple
J-16	Demand	2.20	Fixed	Simple
J-17	Demand	2.20	Fixed	Simple
J-18	Demand	2.20	Fixed	Simple
J-19	Demand	2.20	Fixed	Simple
J-20	Demand	2.20	Fixed	Simple
J-21	Demand	2.20	Fixed	Simple
J-22	Demand	2.20	Fixed	Simple
J-23	Demand	2.20	Fixed	Simple
J-24	Demand	2.20	Fixed	Simple
J-25	Demand	2.20	Fixed	Simple
J-26	Demand	2.20	Fixed	Simple
J-27	Demand	2.20	Fixed	Simple
J-28	Demand	2.20	Fixed	Simple
J-29	Demand	2.20	Fixed	Simple
J-30	Demand	2.20	Fixed	Simple
J-31	Demand	2.20	Fixed	Simple
J-32	Demand	2.20	Fixed	Simple
J-33	Demand	2.20	Fixed	Simple
J-34	Demand	2.20	Fixed	Simple
J-35	Demand	2.20	Fixed	Simple
J-36	Demand	2.20	Fixed	Simple
J-37	Demand	2.20	Fixed	Simple
J-38	Demand	2.20	Fixed	Simple
J-39	Demand	2.20	Fixed	Simple
J-40	Demand	2.20	Fixed	Simple
J-41	Demand	0.00	Fixed	Simple
J-43	Demand	2.20	Fixed	Simple
J-46	Demand	0.00	Fixed	Simple
J-47	Demand	2.20	Fixed	Simple

## Initial Settings Alternative Change Summary Report

### Tank Full Source Off

Pipes	
Label	Status
P-1	Open
P-2	Open
P-3	Open
P-4	Open
P-5	Open
P-6	Open
P-7	Open
P-8	Open
P-9	Open
P-10	Open
P-11	Open
P-12	Open
P-13	Open
P-14	Open
P-15	Open
P-16	Open
P-17	Open
P-18	Open
P-19	Open
P-20	Open
P-21	Open
P-22	Open
P-23	Open
P-24	Open
P-25	Open
P-26	Open
P-27	Open
P-28	Open
P-29	Open
P-30	Open
P-31	Open
P-32	Open
P-33	Open
P-34	Open
P-35	Open
P-36	Open
P-37	Open
P-38	Open
P-39	Open
P-40	Open
P-41	Open
P-42	Open
P-43	Open
P-44	Open
P-46	Open
P-49	Open
P-54	Open
P-55	Open
P-56	Open
P-57	Open

No Pump Initial Settings Changed for this Alternative

Tanks	
Label	Hydraulic Grade (ft)
T-1	813.00

Title: Town of Elizabethtown

c:\temp\cybernet\le-town-hydraulic-model.wcd

04/11/02 04:06:47 PM © Haestad Methods, Inc.

**Dodson & Associate, PLLC**

37 Brookside Road Waterbury, CT 06708 USA

+1-203-755-1666

Project Engineer: Dodson & Associate

WaterCAD v4.5 [4.5015a]

Page 1 of 2

## Initial Settings Alternative Change Summary Report

No Pressure Control Valve Initial Settings Changed for this Alternative

No Flow Control Valve Initial Settings Changed for this Alternative

No Throttle Control Valve Initial Settings Changed for this Alternative

# Scenario Summary Report

## Scenario: MDD-Phase I-II Piping

Scenario Summary			
Physical Alternative	Phase I-II Piping		
Demand Alternative	Max Day-120gpm		
Initial Settings Alternative	Tank Full Source Off		
Operational Alternative	Base-Operational		
Age Alternative	Base-Age Alternative		
Constituent Alternative	Base-Constituent		
Trace Alternative	Base-Trace Alternative		
Fire Flow Alternative	Base-Fire Flow		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Hydraulic Analysis Summary			
Analysis	Steady State		
Friction Method	Hazen-Williams Formula		
Accuracy	0.001000		
Trials	40		
Quality Analysis Summary			
Analysis	Constituent	Maximum Pipe Segments	100
Quality Time Step	N/A hr	Minimum Pipe Travel Time	2.78e-5 hr
Calibration			
Demand Operation	<None>	Roughness Operation	<None>
Demand	0.00	Roughness	0.00

Town of Elizabethtown  
Water System Improvements

Created: 04/03/02 01:12:34 PM

By: Dodson and Associate, PLLC  
Jason T. McCormick, PE

Maximum Day Demand = 120 gpm spread across all nodes

Phase I and II Piping Improvements

**Scenario: MDD-Phase I-II Piping  
Steady State Analysis  
Junction Report**

Label	Elevation (ft)	Zone	Type	Demand (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	777.00	Zone-1	Demand	0.00	Fixed	0.00	812.99	15.57
J-2	685.00	Zone-1	Demand	2.60	Fixed	2.60	812.83	55.30
J-3	630.00	Zone-1	Demand	2.60	Fixed	2.60	812.76	79.07
J-4	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.74	96.37
J-5	630.00	Zone-1	Demand	2.60	Fixed	2.60	812.82	79.10
J-6	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.74	96.37
J-7	625.00	Zone-1	Demand	2.60	Fixed	2.60	812.78	81.24
J-8	585.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	98.53
J-9	555.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	111.50
J-10	555.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	111.50
J-11	555.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	111.50
J-12	560.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	109.34
J-13	690.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	53.09
J-14	595.00	Zone-1	Demand	2.60	Fixed	2.60	812.73	94.20
J-15	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	96.36
J-16	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	96.36
J-17	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	96.36
J-18	600.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	92.03
J-19	600.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	92.03
J-20	625.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	81.22
J-21	650.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	70.40
J-22	600.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	92.03
J-23	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	96.36
J-24	580.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	100.68
J-25	560.00	Zone-1	Demand	2.60	Fixed	2.60	812.70	109.33
J-26	530.00	Zone-1	Demand	2.60	Fixed	2.60	812.70	122.31
J-27	530.00	Zone-1	Demand	2.60	Fixed	2.60	812.70	122.31
J-28	590.00	Zone-1	Demand	2.60	Fixed	2.60	809.60	95.01
J-29	530.00	Zone-1	Demand	2.60	Fixed	2.60	809.23	120.81
J-30	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	96.36
J-31	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	96.36
J-32	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.73	96.36
J-33	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.73	96.36
J-34	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	96.36
J-35	630.00	Zone-1	Demand	2.60	Fixed	2.60	812.72	79.06
J-36	590.00	Zone-1	Demand	2.60	Fixed	2.60	812.74	96.37
J-37	625.00	Zone-1	Demand	2.60	Fixed	2.60	812.73	81.22
J-38	625.00	Zone-1	Demand	2.60	Fixed	2.60	812.73	81.22
J-39	625.00	Zone-1	Demand	2.60	Fixed	2.60	812.73	81.22
J-40	625.00	Zone-1	Demand	2.60	Fixed	2.60	812.73	81.22
J-41	625.00	Zone-1	Demand	2.60	Fixed	2.60	812.62	81.18
J-43	560.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	109.34
J-46	580.00	Zone-1	Demand	0.00	Fixed	0.00	812.70	100.68
J-47	740.00	Zone-1	Demand	2.60	Fixed	2.60	812.71	31.46

**Scenario: MDD-Phase I-II Piping**  
**Steady State Analysis**  
**Pipe Report**

Label	Length (ft)	Diameter (in)	Material	Hazen- Williams C	Control Status	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-1	125.00	10	Ductile Iron	120.0	Open	109.20	813.00	812.99	0.01	0.12
P-2	520.00	6	Ductile Iron	100.0	Open	39.62	812.99	812.83	0.16	0.31
P-3	2,600.00	6	Ductile Iron	100.0	Open	9.99	812.83	812.76	0.06	0.02
P-4	1,800.00	6	Ductile Iron	100.0	Open	7.39	812.76	812.74	0.02	0.01
P-5	3,145.00	10	Ductile Iron	120.0	Open	69.58	812.99	812.82	0.16	0.05
P-6	1,735.00	10	Ductile Iron	120.0	Open	66.98	812.82	812.74	0.08	0.05
P-7	60.00	10	Ductile Iron	120.0	Open	31.30	812.74	812.74	7.32e-4	0.01
P-8	1,340.00	8	Ductile Iron	100.0	Open	27.04	812.83	812.78	0.05	0.04
P-9	1,740.00	8	Ductile Iron	100.0	Open	24.44	812.78	812.72	0.05	0.03
P-10	2,040.00	8	Ductile Iron	120.0	Open	10.62	812.72	812.71	0.01	4.67e-3
P-11	525.00	8	Ductile Iron	120.0	Open	2.82	812.71	812.71	2.44e-4	4.65e-4
P-12	115.00	10	Ductile Iron	120.0	Open	28.60	812.71	812.71	1.1e-3	0.01
P-13	1,310.00	10	Ductile Iron	120.0	Open	10.40	812.71	812.71	2.01e-3	1.54e-3
P-14	545.00	10	Ductile Iron	120.0	Open	5.20	812.71	812.71	2.44e-4	4.48e-4
P-15	930.00	10	Ductile Iron	120.0	Open	36.09	812.74	812.73	0.01	0.02
P-16	280.00	10	Ductile Iron	120.0	Open	26.50	812.73	812.72	2.38e-3	0.01
P-17	815.00	10	Ductile Iron	120.0	Open	22.82	812.72	812.72	0.01	0.01
P-18	480.00	10	Ductile Iron	120.0	Open	28.38	812.72	812.71	4.7e-3	0.01
P-19	660.00	8	Ductile Iron	120.0	Open	0.82	812.72	812.72	0.00	0.00
P-20	555.00	8	Ductile Iron	120.0	Open	10.40	812.72	812.72	2.5e-3	4.51e-3
P-21	225.00	8	Ductile Iron	120.0	Open	2.60	812.72	812.72	6.1e-5	2.71e-4
P-22	435.00	8	Ductile Iron	120.0	Open	5.20	812.72	812.72	5.49e-4	1.26e-3
P-23	640.00	8	Ductile Iron	120.0	Open	2.60	812.72	812.72	1.83e-4	2.86e-4
P-24	545.00	8	Ductile Iron	120.0	Open	5.20	812.71	812.71	6.71e-4	1.23e-3
P-25	675.00	8	Ductile Iron	120.0	Open	2.60	812.71	812.71	2.44e-4	3.62e-4
P-26	530.00	8	Ductile Iron	120.0	Open	15.60	812.71	812.71	0.01	0.01
P-27	370.00	8	Ductile Iron	120.0	Open	13.00	812.71	812.70	2.5e-3	0.01
P-28	835.00	8	Ductile Iron	120.0	Open	2.60	812.70	812.70	3.05e-4	3.65e-4
P-29	660.00	8	Ductile Iron	120.0	Open	7.80	812.70	812.70	1.77e-3	2.68e-3
P-30	2,070.00	2	Ductile Iron	100.0	Open	5.20	812.70	809.60	3.10	1.50
P-31	900.00	2	Ductile Iron	100.0	Open	2.60	809.60	809.23	0.37	0.41
P-32	565.00	8	Ductile Iron	120.0	Open	-8.16	812.72	812.72	1.65e-3	2.92e-3
P-33	760.00	8	Ductile Iron	120.0	Open	-10.76	812.72	812.72	3.6e-3	4.74e-3
P-34	590.00	8	Ductile Iron	120.0	Open	-1.08	812.72	812.72	6.1e-5	1.03e-4
P-35	585.00	8	Ductile Iron	120.0	Open	-12.28	812.72	812.73	3.6e-3	0.01
P-36	100.00	8	Ductile Iron	120.0	Open	-14.88	812.73	812.73	8.54e-4	0.01
P-37	1,090.00	8	Ductile Iron	120.0	Open	17.48	812.74	812.73	0.01	0.01
P-38	1,185.00	8	Ductile Iron	120.0	Open	6.98	812.73	812.72	2.56e-3	2.16e-3
P-39	1,295.00	8	Ductile Iron	120.0	Open	2.60	812.72	812.72	4.27e-4	3.3e-4
P-40	920.00	10	Ductile Iron	120.0	Open	15.60	812.74	812.74	2.99e-3	3.25e-3
P-41	1,325.00	10	Ductile Iron	120.0	Open	13.00	812.74	812.73	3.05e-3	2.3e-3
P-42	715.00	8	Ductile Iron	120.0	Open	4.77	812.73	812.73	7.32e-4	1.02e-3
P-43	1,330.00	8	Ductile Iron	120.0	Open	2.60	812.73	812.73	4.88e-4	3.67e-4
P-44	520.00	8	Ductile Iron	120.0	Open	5.63	812.73	812.73	7.32e-4	1.41e-3
P-46	735.00	8	Ductile Iron	120.0	Open	0.43	812.73	812.73	0.00	0.00
P-49	670.00	8	Ductile Iron	100.0	Open	2.60	812.71	812.71	3.05e-4	4.55e-4
P-54	170.00	8	Ductile Iron	120.0	Open	2.60	812.71	812.71	6.1e-5	3.59e-4
P-55	565.00	8	Ductile Iron	120.0	Open	-1.78	812.72	812.72	6.1e-5	1.08e-4
P-56	265.00	2	Ductile Iron	100.0	Open	2.60	812.73	812.62	0.11	0.41
P-57	1,990.00	8	Ductile Iron	120.0	Open	5.1e-4	812.70	812.70	0.00	0.00

**Scenario: MDD-Phase I-II Piping**  
**Steady State Analysis**  
**Tank Report**

Label	Zone	Base Elevation (ft)	Minimum Elevation (ft)	Initial HGL (ft)	Maximum Elevation (ft)	Inactive Volume (ft³)	Tank Diameter (ft)	Inflow (gpm)	Current Status	Calculated Hydraulic Grade (ft)	Calculated Percent Full (%)
T-1	Zone-1	793.00	794.00	813.00	813.00	0.00	55.00	-109.20	Draining	813.00	100.0

## Scenario Summary Report

### Scenario: FF in Hamlet J6

Scenario Summary			
Physical Alternative	Phase I-II Piping		
Demand Alternative	Fire Flow at j6 (Court/High)		
Initial Settings Alternative	Tank Full Source Off		
Operational Alternative	Base-Operational		
Age Alternative	Base-Age Alternative		
Constituent Alternative	Base-Constituent		
Trace Alternative	Base-Trace Alternative		
Fire Flow Alternative	Base-Fire Flow		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Hydraulic Analysis Summary			
Analysis	Steady State		
Friction Method	Hazen-Williams Formula		
Accuracy	0.001000		
Trials	40		
Quality Analysis Summary			
Analysis	Constituent	Maximum Pipe Segments	100
Quality Time Step	N/A hr	Minimum Pipe Travel Time	2.78e-5 hr
Calibration			
Demand Operation	<None>	Roughness Operation	<None>
Demand	0.00	Roughness	0.00

Town of Elizabethtown  
Water System Improvements

Created: 05/21/01

By: Dodson and Associate, PLLC  
Jason T. McCormick, PE

Fire Flow of 2000 gpm at J6 (In Hamlet Court/High Intersection)

Average Day Demand = 100 gpm spread across all nodes

Alternative 1 Piping Improvements

**Scenario: FF at J6**  
**Steady State Analysis**  
**Pipe Report**

Label	Length (ft)	Diameter (in)	Material	Hazen- Williams C	Control Status	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-1	125.00	6	Ductile Iron	120.0	Open	690.20	800.00	794.59	5.41	43.29
P-2	520.00	6	Ductile Iron	100.0	Open	689.10	794.59	763.13	31.46	60.50
P-3	2,600.00	6	Ductile Iron	100.0	Open	224.00	763.13	743.50	19.63	7.55
P-4	1,800.00	6	Ductile Iron	100.0	Open	221.80	743.50	730.16	13.34	7.41
P-5	3,145.00	10	Ductile Iron	120.0	Closed	0.00	794.59	-244,319.50	0.00	0.00
P-6	1,735.00	10	Ductile Iron	120.0	Closed	0.00	-244,319.50	728.47	0.00	0.00
P-7	60.00	6	Ductile Iron	120.0	Open	-547.60	728.47	730.16	1.69	28.20
P-8	1,340.00	8	Ductile Iron	100.0	Open	462.89	763.13	753.57	9.56	7.13
P-9	1,740.00	8	Ductile Iron	120.0	Open	460.70	753.57	744.80	8.77	5.04
P-10	2,040.00	8	Ductile Iron	120.0	Open	176.79	744.80	743.05	1.75	0.86
P-11	525.00	8	Ductile Iron	120.0	Open	170.19	743.05	742.64	0.42	0.80
P-12	115.00	6	Ductile Iron	120.0	Open	24.20	742.64	742.63	0.01	0.09
P-13	1,310.00	6	Ductile Iron	120.0	Open	8.80	742.63	742.61	0.02	0.01
P-14	545.00	6	Ductile Iron	120.0	Open	4.40	742.61	742.61	2.01e-3	3.7e-3
P-15	930.00	6	Ductile Iron	120.0	Open	-328.00	730.16	740.31	10.15	10.91
P-16	280.00	6	Ductile Iron	120.0	Open	-63.89	740.31	740.46	0.15	0.53
P-17	815.00	6	Ductile Iron	120.0	Open	-103.06	740.46	741.50	1.04	1.28
P-18	480.00	6	Ductile Iron	120.0	Open	-143.79	741.50	742.64	1.14	2.37
P-19	660.00	8	Ductile Iron	120.0	Open	272.91	744.80	743.54	1.26	1.91
P-20	555.00	8	Ductile Iron	120.0	Open	8.80	744.80	744.80	1.83e-3	3.3e-3
P-21	225.00	8	Ductile Iron	120.0	Open	2.20	744.80	744.80	6.1e-5	2.71e-4
P-22	435.00	8	Ductile Iron	120.0	Open	4.40	744.80	744.80	3.66e-4	8.42e-4
P-23	640.00	8	Ductile Iron	120.0	Open	2.20	744.80	744.80	1.83e-4	2.86e-4
P-24	545.00	8	Ductile Iron	120.0	Open	4.40	743.05	743.05	4.88e-4	8.96e-4
P-25	675.00	8	Ductile Iron	120.0	Open	2.20	743.05	743.05	1.83e-4	2.71e-4
P-26	530.00	3	Ductile Iron	120.0	Open	13.20	742.63	742.18	0.44	0.83
P-27	370.00	3	Ductile Iron	120.0	Open	11.00	742.18	741.96	0.22	0.59
P-28	835.00	6	Ductile Iron	120.0	Open	2.20	741.96	741.96	8.54e-4	1.02e-3
P-29	660.00	2	Ductile Iron	120.0	Open	6.60	741.96	740.87	1.10	1.66
P-30	2,070.00	2	Ductile Iron	100.0	Open	4.40	740.87	738.59	2.27	1.10
P-31	900.00	2	Ductile Iron	100.0	Open	2.20	738.59	738.32	0.27	0.30
P-32	565.00	4	Ductile Iron	120.0	Open	38.52	741.50	740.66	0.84	1.49
P-33	760.00	4	Ductile Iron	120.0	Open	36.32	740.66	739.64	1.02	1.34
P-34	590.00	4	Ductile Iron	120.0	Open	-36.97	739.64	740.46	0.81	1.38
P-35	585.00	3	Ductile Iron	120.0	Open	71.09	739.64	728.63	11.01	18.82
P-36	100.00	8	Ductile Iron	120.0	Open	68.89	728.63	728.62	0.01	0.15
P-37	1,090.00	8	Ductile Iron	120.0	Open	-66.69	728.47	728.62	0.15	0.14
P-38	1,185.00	8	Ductile Iron	120.0	Open	-266.31	740.31	742.47	2.17	1.83
P-39	1,295.00	2	Ductile Iron	120.0	Open	2.20	742.47	742.19	0.28	0.22
P-40	920.00	6	Ductile Iron	120.0	Open	11.00	728.47	728.45	0.02	0.02
P-41	1,325.00	6	Ductile Iron	120.0	Open	8.80	728.45	728.43	0.02	0.01
P-42	715.00	2	Ductile Iron	120.0	Open	3.19	728.43	728.12	0.31	0.43
P-43	1,330.00	2	Ductile Iron	120.0	Open	2.20	728.12	727.83	0.29	0.22
P-44	520.00	2	Ductile Iron	120.0	Open	3.41	728.43	728.17	0.26	0.49
P-46	735.00	2	Ductile Iron	120.0	Open	1.21	728.17	728.12	0.05	0.07
P-49	670.00	2	Ductile Iron	100.0	Open	2.20	742.61	742.40	0.20	0.30
P-54	170.00	2	Ductile Iron	120.0	Open	2.20	742.61	742.57	0.04	0.22
P-55	565.00	8	Ductile Iron	120.0	Open	270.71	743.54	742.47	1.06	1.88
P-56	265.00	2	Ductile Iron	100.0	Open	0.00	728.17	728.17	0.00	0.00
P-57	1,990.00	8	Ductile Iron	120.0	Open	0.00	741.96	741.96	0.00	0.00

# Scenario: FF in Hamlet J6

## Steady State Analysis

### Junction Report

Label	Elevation (ft)	Zone	Type	Demand (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	777.00	Zone-1	Demand	0.00	Fixed	0.00	809.50	14.06
J-2	685.00	Zone-1	Demand	2.20	Fixed	2.20	776.13	39.43
J-3	630.00	Zone-1	Demand	2.20	Fixed	2.20	758.48	55.59
J-4	590.00	Zone-1	Demand	2.20	Fixed	2.20	746.49	67.71
J-5	630.00	Zone-1	Demand	2.20	Fixed	2.20	768.77	60.04
J-6	590.00	Zone-1	Demand	2,002.20	Fixed	2,002.20	746.37	67.65
J-7	625.00	Zone-1	Demand	2.20	Fixed	2.20	765.20	60.66
J-8	585.00	Zone-1	Demand	2.20	Fixed	2.20	751.12	71.87
J-9	555.00	Zone-1	Demand	2.20	Fixed	2.20	748.24	83.61
J-10	555.00	Zone-1	Demand	2.20	Fixed	2.20	747.54	83.30
J-11	555.00	Zone-1	Demand	2.20	Fixed	2.20	747.54	83.30
J-12	560.00	Zone-1	Demand	2.20	Fixed	2.20	747.54	81.14
J-13	690.00	Zone-1	Demand	2.20	Fixed	2.20	747.54	24.89
J-14	595.00	Zone-1	Demand	2.20	Fixed	2.20	747.23	65.86
J-15	590.00	Zone-1	Demand	2.20	Fixed	2.20	747.24	68.03
J-16	590.00	Zone-1	Demand	2.20	Fixed	2.20	747.37	68.09
J-17	590.00	Zone-1	Demand	2.20	Fixed	2.20	750.03	69.24
J-18	600.00	Zone-1	Demand	2.20	Fixed	2.20	751.12	65.38
J-19	600.00	Zone-1	Demand	2.20	Fixed	2.20	751.12	65.38
J-20	625.00	Zone-1	Demand	2.20	Fixed	2.20	751.12	54.57
J-21	650.00	Zone-1	Demand	2.20	Fixed	2.20	751.12	43.75
J-22	600.00	Zone-1	Demand	2.20	Fixed	2.20	748.24	64.14
J-23	590.00	Zone-1	Demand	2.20	Fixed	2.20	748.24	68.46
J-24	580.00	Zone-1	Demand	2.20	Fixed	2.20	747.54	72.48
J-25	560.00	Zone-1	Demand	2.20	Fixed	2.20	747.53	81.14
J-26	530.00	Zone-1	Demand	2.20	Fixed	2.20	747.53	94.12
J-27	530.00	Zone-1	Demand	2.20	Fixed	2.20	747.53	94.12
J-28	590.00	Zone-1	Demand	2.20	Fixed	2.20	745.26	67.17
J-29	530.00	Zone-1	Demand	2.20	Fixed	2.20	744.98	93.01
J-30	590.00	Zone-1	Demand	2.20	Fixed	2.20	747.28	68.05
J-31	590.00	Zone-1	Demand	2.20	Fixed	2.20	747.17	68.00
J-32	590.00	Zone-1	Demand	2.20	Fixed	2.20	746.89	67.88
J-33	590.00	Zone-1	Demand	2.20	Fixed	2.20	746.85	67.86
J-34	590.00	Zone-1	Demand	2.20	Fixed	2.20	749.10	68.84
J-35	630.00	Zone-1	Demand	2.20	Fixed	2.20	749.10	51.53
J-36	590.00	Zone-1	Demand	2.20	Fixed	2.20	746.36	67.65
J-37	625.00	Zone-1	Demand	2.20	Fixed	2.20	746.36	52.51
J-38	625.00	Zone-1	Demand	2.20	Fixed	2.20	746.36	52.51
J-39	625.00	Zone-1	Demand	2.20	Fixed	2.20	746.36	52.51
J-40	625.00	Zone-1	Demand	2.20	Fixed	2.20	746.36	52.51
J-41	625.00	Zone-1	Demand	0.00	Fixed	0.00	746.36	52.51
J-43	560.00	Zone-1	Demand	2.20	Fixed	2.20	747.54	81.14
J-46	580.00	Zone-1	Demand	0.00	Fixed	0.00	747.53	72.48
J-47	740.00	Zone-1	Demand	2.20	Fixed	2.20	747.54	3.26

← AT TANK

← AT GARONDAH ESTATES / END OF DISTRICT

← AT GARONDAH ESTATES (OUT OF DISTRICT)

**Scenario: FF in Hamlet J6**  
**Steady State Analysis**  
**Tank Report**

Label	Zone	Base Elevation (ft)	Minimum Elevation (ft)	Initial HGL (ft)	Maximum Elevation (ft)	Inactive Volume (ft³)	Tank Diameter (ft)	Inflow (gpm)	Current Status	Calculated Hydraulic Grade (ft)	Calculated Percent Full (%)
T-1	Zone-1	793.00	794.00	813.00	813.00	0.00	55.00	-2,090.20	Draining	813.00	100.0

## **Appendix E**

### **Drawing 3 – Proposed Water System Improvements**

**Appendix F**

**Detailed Project Cost Estimates**

**Town of Elizabethtown**  
**Phase I - Water System Improvements**  
**Preliminary Project Cost Estimate**

Item	Quantity	Unit	Unit Cost	Total Cost	Comments
<b>New Groundwater Source</b>					
Hydrogeologic Evaluation	1	LS	\$100,000.00	\$100,000.00	
Production Wells	2	EA	\$35,000.00	\$70,000.00	
Submersible Pump & Pitless Units	2	EA	\$20,000.00	\$40,000.00	
Valve Manhole	1	LS	\$10,000.00	\$10,000.00	
6-Inch Ductile Iron Water Main	3100	LF	\$20.00	\$62,000.00	Connect to existing source
Compact Ductile Iron Fittings	3000	LBS	\$2.00	\$6,000.00	
6-Inch Gate Valves	4	EA	\$500.00	\$2,000.00	
NYS Route 9N Road Bore	160	LF	\$300.00	\$48,000.00	
Flushing Hydrants	4	EA	\$2,000.00	\$8,000.00	
Pressure Test & Disinfection	1	LS	\$3,000.00	\$3,000.00	
Site Work/Restoration	1	LS	\$10,000.00	\$10,000.00	
Access Road	1	LS	\$5,000.00	\$5,000.00	Assumed 500 feet long
Creek Crossing (The Branch)	100	LF	\$120.00	\$12,000.00	
Fencing (100'x100')	400	LF	\$25.00	\$10,000.00	
Electrical Service	1	LS	\$35,000.00	\$35,000.00	
Instrumentation and Control	1	LS	\$20,000.00	\$20,000.00	
Land Acquisition	1	LS	\$10,000.00	\$10,000.00	
<b>Subtotal New Groundwater Source</b>				<b>\$451,000.00</b>	
<b>Water Storage Tank Site</b>					
Mobilization/Miscellaneous Work	1	LS	\$18,000.00	\$18,000.00	
Exploratory Excavation	100	CY	\$15.00	\$1,500.00	
Excavation Below Tank Subgrade	100	CY	\$10.00	\$1,000.00	
Mass Concrete	20	CY	\$100.00	\$2,000.00	
Type "F" Crusher Run Stone	100	CY	\$20.00	\$2,000.00	
Type "B" Select Backfill	100	CY	\$15.00	\$1,500.00	
Rock Removal	50	CY	\$120.00	\$6,000.00	
Site Work	1	LS	\$80,000.00	\$80,000.00	
Access Road	1	LS	\$0.00	\$0.00	Utilize existing access road
0.35MG Concrete Water Storage Tank	1	LS	\$370,000.00	\$370,000.00	
Fence (100'x100')	400	LF	\$20.00	\$8,000.00	
Valve Control Vault	1	LS	\$20,000.00	\$20,000.00	
Electrical Service	1	LS	\$0.00	\$0.00	Existing Service is Adequate
Telephone Service	1	LS	\$7,500.00	\$7,500.00	
Land Acquisition	1	LS	\$0.00	\$0.00	Tank at Reservoir Site
<b>Subtotal Water Storage Tank</b>				<b>\$517,500.00</b>	

**Town of Elizabethtown**  
**Phase I - Water System Improvements**  
**Preliminary Project Cost Estimate**

Item	Quantity	Unit	Unit Cost	Total Cost	Comments
<b>Transmission Main</b>					
Mobilization/Miscellaneous Work	1	LS	\$5,000.00	\$5,000.00	
Exploratory Excavation	100	CY	\$5.00	\$500.00	
Excavation Below Pipe Subgrade	50	CY	\$5.00	\$250.00	
Mass Concrete	25	CY	\$100.00	\$2,500.00	
Type "F" Crusher Run Stone	55	CY	\$20.00	\$1,100.00	
Type "B" Select Backfill	50	CY	\$15.00	\$750.00	
Rock Removal	150	CY	\$150.00	\$22,500.00	
10-Inch Ductile Iron Main	1500	LF	\$32.00	\$48,000.00	From Tank to Water St 8"
Compact Ductile Iron Fittings	1500	LBS	\$2.00	\$3,000.00	
10-Inch Gate Valves	2	EA	\$1,500.00	\$3,000.00	
Route 9N Road Bore	80	LF	\$300.00	\$24,000.00	
Flushing Hydrants	1	EA	\$3,500.00	\$3,500.00	
Connection to Existing System	2	EA	\$3,000.00	\$6,000.00	
Pressure Test & Disinfection	1	LS	\$500.00	\$500.00	
Final Cleanup & Site Restoration	1	LS	\$5,000.00	\$5,000.00	
<b>Subtotal Transmission Main</b>				<b>\$125,600.00</b>	
<b>Water Main Replacement</b>					
Mobilization/Miscellaneous Work	1	LS	\$15,000.00	\$15,000.00	
Exploratory Excavation	60	CY	\$5.00	\$300.00	
Excavation Below Pipe Subgrade	30	CY	\$5.00	\$150.00	
Mass Concrete	25	CY	\$100.00	\$2,500.00	
Type "F" Crusher Run Stone	30	CY	\$20.00	\$600.00	
Type "B" Select Backfill	50	CY	\$15.00	\$750.00	
Rock Removal	150	CY	\$150.00	\$22,500.00	
<i>Cross St (From Water St to Park St - Includes Crossing the Branch)</i>					
8-Inch Ductile Iron Water Main	1400	LF	\$25.00	\$35,000.00	
8-Inch Gate Valves	4	EA	\$800.00	\$3,200.00	
The Branch Crossing	70	LF	\$120.00	\$8,400.00	
Compact Ductile Iron Fittings	1400	LBS	\$2.00	\$2,800.00	
Fire Hydrants	3	EA	\$3,500.00	\$10,500.00	
Connection to Existing System	2	EA	\$3,000.00	\$6,000.00	
3/4" Copper Water Service (Open Cut)	50	LF	\$15.00	\$750.00	5 Services @ 10 feet each
3/4" Copper Water Service (Drive)	120	LF	\$25.00	\$3,000.00	2 Services @ 60 feet each
3/4" Corp. Curb Stop w/ Box&Connection	7	EA	\$300.00	\$2,100.00	
Pavement Replacement	8	SY	\$35.00	\$280.00	2*6'x6'
Driveway Replacement	40	SY	\$25.00	\$1,000.00	5*(10'x6')
Pressure Test & Disinfection	1	LS	\$1,100.00	\$1,100.00	Cost per foot (incl service)
Final Cleanup & Site Restoration	1	LS	\$5,000.00	\$5,000.00	\$56.52
<b>SUBTOTAL</b>					<b>\$79,130.00</b>
<i>Hand Street (From Court Street to William Street)</i>					
8-Inch Ductile Iron Water Main	1800	LF	\$25.00	\$45,000.00	

**Town of Elizabethtown**  
**Phase I - Water System Improvements**  
**Preliminary Project Cost Estimate**

Item	Quantity	Unit	Unit Cost	Total Cost	Comments
8-Inch Gate Valves	4	EA	\$800.00	\$3,200.00	
Route 9N Road Bore	70	LF	\$300.00	\$21,000.00	
Compact Ductile Iron Fittings	1800	LBS	\$2.00	\$3,600.00	
Fire Hydrants	3	EA	\$3,500.00	\$10,500.00	
Connection to Existing System	2	EA	\$3,000.00	\$6,000.00	
3/4" Copper Water Service (Open Cut)	50	LF	\$15.00	\$750.00	5 Services @ 10 feet each
3/4" Copper Water Service (Drive)	240	LF	\$25.00	\$6,000.00	4 Services @ 60 feet each
3/4" Corp, Curb Stop w/ Box&Connection	9	EA	\$300.00	\$2,700.00	
Pavement Replacement	8	SY	\$35.00	\$280.00	2*6'x6'
Driveway Replacement	40	SY	\$25.00	\$1,000.00	5*(10'x6')
Sidewalk Replacement	300	LF	\$20.00	\$6,000.00	
Curb Replacement	50	LF	\$25.00	\$1,250.00	
Pressure Test & Disinfection	1	LS	\$1,200.00	\$1,200.00	Cost per foot (incl service)
Final Cleanup & Site Restoration	1	LS	\$4,000.00	\$4,000.00	\$62.49
SUBTOTAL					\$112,480.00
<i>Noble Terrace (Including Bridge Crossing)</i>					
8-Inch Ductile Iron Water Main	1200	LF	\$25.00	\$30,000.00	
8-Inch Gate Valves	6	EA	\$800.00	\$4,800.00	
Bridge Crossing	100	LF	\$300.00	\$30,000.00	
Compact Ductile Iron Fittings	1200	LBS	\$2.00	\$2,400.00	
Fire Hydrants	5	EA	\$3,500.00	\$17,500.00	
Connection to Existing System	1	EA	\$3,000.00	\$3,000.00	
3/4" Copper Water Service (Open Cut)	140	LF	\$15.00	\$2,100.00	14 Services @ 10 feet each
3/4" Copper Water Service (Drive)	900	LF	\$25.00	\$22,500.00	15 Services @ 60 feet each
3/4" Corp, Curb Stop w/ Box&Connection	21	EA	\$300.00	\$6,300.00	
Pavement Replacement	10	SY	\$35.00	\$350.00	2*6'x6'
Driveway Replacement	100	SY	\$25.00	\$2,500.00	14*(10'x6')
Sidewalk Replacement	250	LF	\$20.00	\$5,000.00	
Pressure Test & Disinfection	1	LS	\$2,000.00	\$2,000.00	Cost per foot (incl service)
Final Cleanup & Site Restoration	1	LS	\$5,000.00	\$5,000.00	\$111.21
SUBTOTAL					\$133,450.00
<b>Subtotal Water Main Replacement</b>				<b>\$366,860.00</b>	
SUBTOTAL				\$1,460,960.00	
Contingency				\$25,540.00	
<b>TOTAL CONSTRUCTION COST</b>				<b>\$1,486,500.00</b>	
Survey and Mapping				\$20,000.00	
Subsurface Exploration				\$7,000.00	
Engineering Fees					
Design\Bidding\Award Phase				\$76,500.00	
Construction Phase				\$55,000.00	
Administration, Legal and Miscellaneous				\$35,000.00	
<b>TOTAL PROJECT COST</b>				<b>\$1,680,000.00</b>	

**Dodson & Associate**

By: \_\_\_\_\_

**Project Cost Estimate**

Town of Elizabethtown  
Water System Improvements

D&A Project No. 11101

**Phase II - Distribution System Improvements**  
April 10, 2002 Update

Item No.	Bid Item Description	Estimated Quantities	Units	Engineer's Estimate		Comments
				Rate	Total	
CONTRACT NO. 4 - Distribution Mains						
1	Mobilization/Miscellaneous Work	1	LS	160,000.00	160,000.00	Approx. 5.00 % of Total Construction Cost = 148,710.00
2	Exploratory Excavation	400	CY	5.00	2,000.00	Contingent Bid Item
3	Excavation Below Pipe Subgrade	200	CY	5.00	1,000.00	Contingent Bid Item
4	Mass Concrete	100	CY	100.00	10,000.00	Contingent Bid Item
5	Type "F" Crusher Run Stone	250	CY	20.00	5,000.00	Contingent Bid Item
6	Type "B" Select Backfill	300	CY	15.00	4,500.00	Contingent Bid Item
7A	Rock Removal (w/o Explosives)	250	CY	120.00	30,000.00	Assumed
7B	Rock Removal (w/ Explosives)	250	CY	120.00	30,000.00	Assumed
8	Concrete Encased Water Main	350	LF	40.00	14,000.00	
9	Polyethylene Encased Water Main	1,000	LF	1.00	1,000.00	Contingent Bid Item
10A	4-Inch Ductile Iron Water Main	0	LF	20.00	0.00	
10B	6-Inch Ductile Iron Water Main	0	LF	22.00	0.00	
10C	8-Inch Ductile Iron Water Main	17,000	LF	30.00	510,000.00	
10D	10-Inch Ductile Iron Water Main	10,500	LF	35.00	367,500.00	
10E	12-Inch Ductile Iron Water Main	0	LF	36.00	0.00	
10F	16-Inch Ductile Iron Water Main	0	LF	42.00	0.00	
11	Compact Ductile Iron Fittings	27,500	LB	2.00	55,000.00	
12A	4-Inch Gate Valve/ Box and Cover	0	EA	400.00	0.00	Valves placed every 400 feet
12B	6-Inch Gate Valve/ Box and Cover	0	EA	425.00	0.00	Valves placed every 400 feet

**Dodson & Associate**

By: \_\_\_\_\_

**Project Cost Estimate**

Town of Elizabethtown  
Water System Improvements

D&A Project No. 11101

**Phase II - Distribution System Improvements**  
April 10, 2002 Update

Item No.	Bid Item Description	Estimated Quantities	Units	Engineer's Estimate		Comments
				Rate	Total	
12C	8-Inch Gate Valve/ Box and Cover	43	EA	600.00	25,800.00	Valves placed every 400 feet
12D	10-Inch Gate Valve/ Box and Cover	26	EA	900.00	23,400.00	Valves placed every 400 feet
12E	12-Inch Gate Valve/ Box and Cover	0	EA	1,000.00	0.00	Valves placed every 400 feet
12F	16-Inch Gate Valve/ Box and Cover	0	EA	3,200.00	0.00	Valves placed every 400 feet
13	Wet Connection (TS & V)	10	EA	3,000.00	30,000.00	
14	Road Boring	840	LF	300.00	252,000.00	Assumed 12 bores at 70' each
14A	Stream Crossing	300	LF	300.00	90,000.00	
15	Hydrant Connection	69	EA	2,500.00	172,500.00	Hydrants placed every 400 feet
16	Blow-Off/Air Release Connection	5	EA	1,500.00	7,500.00	
17	1-1/2-Inch Copper Water Service Connection	10	EA	1,500.00	15,000.00	
18	3/4-Inch Copper Water Service (Open Cut from Corp to Curb Stop)	3,000	LF	15.00	45,000.00	50 % of new services same side as main 15.00 feet ave.
19	3/4-Inch Copper Water Service (Drive from Corp to Curb Stop)	16,000	LF	25.00	400,000.00	50 % of new services opposite side as main 80.00 feet ave.
20	3/4-Inch Corp. Curb Stop w/ Box & Connection	400	EA	300.00	120,000.00	Assumed 400 new curb stops would be installed/also assumed to be number of new services
21	Water Meter Installation (Bldg)	315	EA	300.00	94,500.00	Assumed 78 % of total services are located within building
22	Water Meter Pit Installation	85	EA	500.00	42,500.00	Assumed 22 % of total services are located in meter pit
23	3/4-Inch Pressure Reducing Valve	200	EA	100.00	20,000.00	
24	Temporary Paving	1,000	SY	15.00	15,000.00	
25	Pavement Replacement	2,000	SY	30.00	60,000.00	
26	Cement Concrete Curb Replacement	5,000	LF	30.00	150,000.00	Contingent Bid Item
27	Sidewalk Replacement	10,000	LF	15.00	150,000.00	May Become Self Help

**Dodson & Associate**

By: \_\_\_\_\_

**Project Cost Estimate**

Town of Elizabethtown

Water System Improvements

D&amp;A Project No.

11101

**Phase II - Distribution System Improvements**

April 10, 2002 Update

Item No.	Bid Item Description	Estimated Quantities	Units	Engineer's Estimate		Comments
				Rate	Total	
28	Gravel/Stone Driveways & Parking Areas	1,000	SY	10.00	10,000.00	
29	Asphalt Concrete Driveways & Parking Areas	1,500	SY	26.00	39,000.00	
30	15-Inch CMP Drainage Pipe	100	LF	20.00	2,000.00	Contingent Bid Item
31	4-Inch Diameter PVC Pipe	100	LF	25.00	2,500.00	Contingent Bid Item
32	Pressure Test & Disinfection	1	LS	27,500.00	27,500.00	\$1 per foot of pipe
33	Final Cleanup & Site Restoration	1	LS	150,000.00	150,000.00	\$5 per foot of pipe
<b>Total Base Bid</b>				<b>\$3,134,200.00</b>		
<b>WATER METERS</b>				<b>\$70,000.00</b>		400 meters x \$90/meter plus Software Billing Package
<b>Total Construction Cost</b>				<b>\$3,204,200.00</b>		

**Appendix G**

**Project Schedule**

## Town of Elizabethtown Phase I - Water System Improvements Project Schedule

		2002																																		
		Jan				Feb				Mar					April				May					June				July				August				
		1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5
Preliminary Report Phase																																				
District Consolidation																																				
Contract Nos. 1 and 3																																				
Survey																																				
Subsurface Exploration																																				
Design																																				
Approvals																																				
Advertisement\Bidding																																				
Award of Contract																																				
Construction																																				
Project Close-Out																																				
Contract No. 2																																				
Survey																																				
Subsurface Exploration																																				
Design																																				
Approvals																																				
Advertisement\Bidding																																				
Award of Contract																																				
Construction																																				
Project Close-Out																																				

**Town of Elizabeth  
Phase I - Water System Improvements  
Project Schedule**

	2002																2003												
	Sept				Oct				Nov				Dec				Jan					Feb				Mar			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4
Preliminary Report Phase																													
District Consolidation																													
Contract Nos. 1 and 3																													
Survey																													
Subsurface Exploration																													
Design																													
Approvals																													
Advertisement\Bidding																													
Award of Contract																													
Construction																													
Project Close-Out																													
Contract No. 2																													
Survey																													
Subsurface Exploration																													
Design																													
Approvals																													
Advertisement\Bidding																													
Award of Contract																													
Construction																													
Project Close-Out																													

## **Exhibit A**

### **Water Supply Applications**

Mr. Philip G. Hutchins, Supervisor

Page 2

January 19, 2001

Also, please note that Rich Speidel is the Department's Region 5 Environmental Permits contact person for Bond Act projects. If the Town of Elizabethtown is pursuing Bond Act funding to accomplish the water supply upgrade, the completed permit application should be sent to Rich, in our Environmental Permits, Region 5 sub-office, P.O. Box 220, Warrensburg, NY 122885-0220.

If you have any questions, please feel free to contact Rich at (518) 623-1281.

Sincerely,

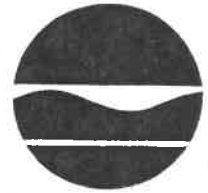


Denise M.. Wagner  
Environmental Analyst-1 - Trainee

DMW:slq  
enclosures

cc: R. Speidel  
V. Kavanagh  
K. Scheuer, DOH ✓

New York State Department of Environmental Conservation  
Environmental Quality Office  
PO Box 296  
Ray Brook, NY 12977-0296



(518) 897-1243  
(518) 897-1245 FAX

Langdon Marsh  
Acting Commissioner

April 12, 1994

Peter E. Gibbs, P.E.  
26 South Main Street  
Westport, New York 12993

Re: Elizabethtown W.D. #3  
WSA #9089  
UPA #5-1524-00044/00001-0  
Elizabethtown (T), Essex Co.

Dear Peter:

The Department has reviewed your Water Supply Permit application for a new source of supply to the Elizabethtown Water District. The following questions were developed which must be addressed prior to my recommending issuance of the necessary WSA:

1. When were existing wells 1 through 4 installed? Were they in place when the town acquired the system from the village? The Department needs more information on these wells. Also, are any of the original springs or small reservoirs still in use?
2. The three new wells appear to be on three separate pieces of private property. They are also located fairly close to existing residences. The Department will require purchase or lease agreements before issuing a permit. Proper protection of the wellhead area must be shown.
3. All three of the new wells reportedly have artisan flows of approximately 50 gpm. Is there any data (age, depths, well logs, etc.) available on them?
4. A Water Conservation Program Form (WCPF) must be completed and signed by a town official. There appears to be one existing meter (aka: gpm sensor) for all four existing wells. Please provide available production data on the wells.

Peter E. Gibbs, P.E.

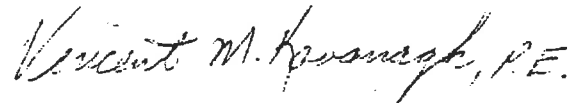
Page 2

April 12, 1994

5. Provide a town resolution authorizing the project or a project justification as to why these additional wells are needed.
6. During our review of this project, it was discovered that the town's New Russia W.D. (aka: W.D. No. 1) was never issued the necessary WSA. Please provide your timetable for submitting the necessary water supply application to ratify the New Russia W.D.

Feel free to call me if you have any questions.

Sincerely,



Vincent M. Kavanagh, P.E.  
Environmental Engineer 2

VMK:bf

cc: C. Gardephe  
M. Holt  
W. Amberman ✓  
Allen L. Dickerson, Super.



# STATE OF NEW YORK DEPARTMENT OF HEALTH

Center for Environmental Health

2 University Place

Albany, New York 12203-3399

Mark R. Chassin, M.D., M.P.P., M.P.H.  
*Commissioner*

Paula Wilson  
*Executive Deputy Commissioner*

## OFFICE OF PUBLIC HEALTH

Lloyd F. Novick, M.D., M.P.H.  
*Director*

Diana Jones Ritter  
*Executive Deputy Director*

William N. Stasiuk, P.E., Ph.D.  
*Center Director*

April 8, 1994

Mr. Peter E. Gibbs  
P.O. Box 91  
26 South Main Street  
Westport, NY 12993

RE: Log No. 9640-5; Plans & Specs  
WSA No. 9089  
Application ID 5-1524-0044/00001-0  
Additional Groundwater Source  
(T) Elizabethtown, Essex County

Dear Mr. Gibbs:

We are in receipt of the above referenced Water Supply Application, plans and specifications. We have reviewed the submitted material, our files and discussed the application with our Saranac Lake District Office. We are unable to endorse the application for the following reasons:

1. A full contaminant analysis of the sources needs to be provided. We note that Mr. Callaghan collected an inorganic sample on October 21, 1991. New regulations have expanded the list of contaminants that require analysis. All the contaminants listed in Part 5 of the State Sanitary Code should be analyzed.
2. Normally we require extended yield tests of proposed sources to insure their development potential. An inspection report by Mr. Callaghan dated January 28, 1992 indicates at that time the existing wells provided adequate quantity with marginal capacity during the summer months. The WSA does not indicate how the estimated flow rates in the proposed wells were determined. Actual flow rates need to be determined and documented.
3. Present and future water use figures need to be provided. Our database in Albany presently lists the following:  

Population:	800 capita
Service Connections:	200 connections
Average Day Consumption:	80,000 gallons per day
4. Easements or formal agreements with the private property owners for the use of the well sites must be obtained.
5. The wells must be developed in accordance with the Recommended Standards For Water Works, 1992 Edition. Documentation that the wells are properly developed or plans for redevelopment need to be submitted.



# STATE OF NEW YORK DEPARTMENT OF HEALTH

District Office 11-15 St. Bernard Street  
(518) 891-1800 FAX (518) 891-5895

Saranac Lake, New York 12983-1834

Lorna McBarnette  
Executive Deputy Commissioner

OFFICE OF PUBLIC HEALTH  
Sue Kelly  
Executive Deputy Director  
William R. Amberman, P.E.  
District Director

January 28, 1992

Supervisor and Town Board  
Town of Elizabethtown  
Elizabethtown, New York 12932

Re: Annual Inspection  
Elizabethtown WD and New Russia WD  
Elizabethtown T., Essex Co.

Dear Mr. Dickerson and Board Members:

An annual inspection was conducted of the Elizabethtown and New Russia water systems on December 10, 1991, when Susan Kennedy, Senior Engineer and I met with Warren Haseltine, Water Plant Operator.

## Elizabethtown WD

The water system consists of a series of four drilled wells and the treatment building at a site along Route 9N approximately two miles west of Elizabethtown. Disinfection is accomplished with electric hypochlorinators before the water discharges into a 3,000 gallon concrete tank adjacent to the plant. The well pumps operate either manually or automatically, controlled by the water level in the 3,000 gallon tank. Water is gravity fed through the 6" transmission main to the 130,000 gallon concrete reservoir. The distribution system consists of 8" and 6" ductile iron mains as well as a series of smaller diameter pipe. The springs, which were the town's primary source of water for many years, act as an auxiliary supply of water.

The self-help improvement project, which was completed in 1990, included the development of the four drilled wells, upgrading and repiping most of the treatment building, installation of the 3,000 gallon contact/control tank and installation of 1,500 feet of 6" transmission main. These improvements greatly enhanced the overall reliability and efficiency of the system as well as achieved compliance with the new Surface Water Treatment Rule which would have required your stream impoundment source to be filtered. The Town Board and particularly the town employees who participated in the construction project can be proud of their water system. The project was the result of a lot of hard work by those individuals involved, which was often above and beyond the scope of their regular duties.

At the time of our inspection the water system was found to be operating properly and Warren is doing a fine job maintaining it. A few items were noted during my inspection that should be attended to.

There was evidence of rodent infestation in the reservoir structure. The cover and venting screens of the reservoir should be thoroughly inspected and repaired as necessary to prevent any possible contamination problems of your water supply. It takes a constant, tedious effort to rodent proof a large structure like the reservoir cover. Future plans for the water system should include the construction of a water tank which would provide for improved domestic flow and fire flow capabilities. A water tank would require much less labor intensive maintenance.

Even though the new drilled wells provide an adequate quantity and good quality water for the water system, their capacity is marginal during peak summer demands. The only backup source of water is the old spring reservoirs. There are two domestic wells located west of the well site along Route 9N which are artesian and overflow an average of approximately 40 gpm each. This situation has actually been a nuisance for these homeowners who have had to pipe the water to a nearby river. The town should pursue negotiations with these individuals to acquire the excess water from their wells. Your engineer could evaluate the feasibility of extending a water main to these areas for the transmission of available water. On October 21, 1991, I collected a water sample from the most westerly of the two wells for inorganic chemical analysis. The results were within acceptable levels for all parameters and are indicative of an excellent quality water. Copies of the results are enclosed for your records.

While much of the water district has individual meters, there are many customers still not metered. The town should continue to install new meters where necessary and properly maintain the existing ones so that eventually all consumers are metered. It is important to be consistent with a metering policy. Metering is a very effective means of promoting water conservation and curtailing misuse.

#### New Russia WD

The water system serving New Russia consists of a drilled well, 200 feet deep, a hydropneumatic storage tank and the distribution system. The system has a waiver from the disinfection requirement which is renewable every three years.

The cover over the well pit and tank was replaced with a nicely constructed building since our last inspection. The new building now allows easy access to the well pit and will facilitate maintenance of the well, tank and controls.

January 28, 1992

The system was operating properly during our visit and no problems were noted.

As I discussed with Warren at the time of the inspection, I recommend a test tap be installed on the main line as it leaves the well pit so necessary water samples can be collected from this point.

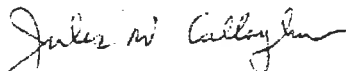
Water samples were collected from both the Elizabethtown and New Russia water systems for microbiological and inorganic chemical analysis. The results of the microbiological samples indicated the water was of a satisfactory sanitary quality for both systems. The result of the chemical samples were within acceptable levels for all parameters. Copies of the results are enclosed for your records.

I recently reviewed some of the town's options with Mr. Dickerson in regards to having a certified operator in responsible charge of the water system. In the last election Warren lost his Superintendent of Highways position so his future as water operator is now uncertain. As I explained to Mr. Dickerson, the person in charge of operating a community water supply must be certified. The certification required for the operator of the Elizabethtown water systems is a Grade IIB. In order to become certified a prospective water treatment plant operator would need to successfully complete the Grade IIB operator course, possess a high school diploma or equivalency and have at least one year of operating experience at a water treatment plant. A list of available courses is enclosed along with information on correspondence courses that are offered through the New York State Rural Water Association. If the town has someone in mind who will eventually assume the duties of operation of the water systems, then they should begin training with Warren immediately.

I thank Warren for his time necessary to complete the inspections. He is a very dedicated and conscientious operator and his efforts to assure a safe quality water is provided to Elizabethtown and New Russia residents are always appreciated.

If you have any questions at all regarding this inspection, please contact me.

Very truly yours,



Jules W. Callaghan  
Senior Sanitarian

Enc.

cc: Warren Haseltine

Bureau of Public Water Supply Protection

WSA No. 7373

DEC No. 52-2

Filed Date

**PERMIT**UNDER THE ENVIRONMENTAL CONSERVATION LAW  
ARTICLE 15, TITLE 15 (WATER SUPPLY)

PERMIT ISSUED TO

Town of Elizabethtown Water District #3

ADDRESS OF PERMITTEE

Town of Elizabethtown, Elizabethtown, New York 12932

LOCATION OF PROJECT

WD #3 (former water supply for Village of Elizabethtown)

DESCRIPTION OF PROJECT

Acquisition of approved existing water supply sources, storage and distribution system formally owned by Village of Elizabethtown [which is now dissolved (1/1/81)] under WSA 3892 approved 11/1/60.

COMMUNITY NAME (City, Town, Village)

Elizabethtown (H)

TOWN

Elizabethtown

COUNTY

Essex

FIA COMMUNITY NO.

DAM NO.

PERMIT ISSUE DATE

August 24, 1983

**GENERAL CONDITIONS**

1. Prior to starting work on any construction authorized herein, detailed plans of the structures proposed to be built and specifications for such work shall have been submitted to and approved by the Department. Thereafter, such construction work shall be entirely completed in full accordance with the plans and specifications which have been so submitted and approved.

The Department reserves the right to rescind this permit or to take whatever action it may deem suitable and proper if the works authorized to be constructed herein are not initiated by

Section 15-1529 of the Environmental Conservation Law forbids the construction of any of these works until, as constructed, they have been approved by the Department. Such final approval will be given only on the applicant's request. In general, such approval will not be given until all projects affecting quality of the water and safety of the works have been approved in full.

4. The Department reserves the right to reconsider this permit at any time and after due notice and hearing at that time to continue, rescind or modify this permit in such a manner as may be found to be just and equitable.

5. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval which may be required.

6. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomsoever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.

7. By acceptance of this permit the permittee agrees that the permit is contingent upon strict compliance with the special conditions following.

NOTE: Only those special conditions following which have been marked ☒ apply.

**SPECIAL CONDITIONS**

All land within \_\_\_\_\_ feet of any well shall be protected and controlled in order to prevent pollution of the ground or groundwater by direct ownership of the land or by the acquisition of protective easements or other appropriate measures.

This area shall further be protected from pollution by surface water originating outside thereof by the construction of suitable diversion ditches or embankments and the development of the water sources shall be so carried out that there shall be no opportunity for pollution from the water sources.

10. The physical pumping facilities and controls shall be protected against damage or tampering either by a fence or other suitable enclosure and their manner of construction and installation.

☐ 11. Before any water from the well(s) may be used for any purpose other than prolonged pumping test(s), the applicant shall have caused a sample of the water from each to be collected and analyzed, shall have submitted the results of such analyses to the Department and shall have advised by the Department either that the water is of a satisfactory quality or that certain specified treatment or purification is necessary. In this last case such water shall be used only after compliance with all of the requirements of the Department.

☐ 12. Nothing contained in this permit and approval shall authorize the applicant to supply, sell or distribute water for use of supply for any purpose unless all such water shall first be treated and purified by disinfection (and filtration) in a laboratory to the Department.

(SEE REVERSE SIDE)

STATE OF NEW YORK  
CONSERVATION DEPARTMENT



WATER RESOURCES COMMISSION

Water Supply Application No. 5781

ELIZABETHTOWN WATER DISTRICT NO. 2

DECISION

OFFICIAL RECORD

State of New York  
Conservation Department  
WATER RESOURCES COMMISSION  
Water Supply Application No. 5781

In the Matter of the Application

- of -

the Town of Elizabethtown, Essex  
County, New York, for the approval  
of its establishment of a Water  
District to be designated "Water  
District No. 2, etc."

ELIZABETHTOWN WATER DISTRICT NO. 2

D E C I S I O N

Application filed      October 15, 1969

Decision                December 4, 1969

# DECISION ON WATER SUPPLY APPLICATION NO. 5781

## PROCEEDINGS

Carl Huttig, Supervisor of the Town of Elizabethtown, Essex County, acting in the name of said town and on behalf of Elizabethtown Water District No. 2, on September 26, 1969, made application to the Water Resources Commission for approval of the plans of the town to construct a water supply and distribution system within the boundaries of the recently created Elizabethtown Water District No. 2 and for the taking of a supply of water for this District from the facilities of the Village of Elizabethtown. This application was filed in the office of the Commission on October 15, 1969.

Due notice of the proposed hearing on this application was published in the Valley News and was served by mail upon municipalities in which the applicant seeks to supply water and in which the source of water supply is located. No objections having been filed, the Commission dispensed with the hearing on this application as permitted by statute and proceeded to consider the petition, maps, plans and proofs submitted in support of the proposed project. The papers in the proceedings were prepared by Harlan G. Carson, Esq., attorney for the applicant, and were reviewed for the Commission by Fiero F. DeMasi, Senior Engineer.

## PROJECT

The Town of Elizabethtown now proposes to construct a water supply system within the boundary of Elizabethtown Water District No. 2 and to take a supply of water for this District from the water supply facilities of the Village of Elizabethtown. Approximately 1,850 feet of 6-inch diameter main together with two fire hydrants and appurtenances will be installed within the District. Water will be taken from a connection to the existing 6-inch main of the Village of Elizabethtown in Route 9 near the village line. The estimated cost of the project is \$30,000.

After due study of the petition, maps, plans and proofs submitted in support of the application, and after study of prior decisions of the Commission pertaining to the Village of Elizabethtown, the Commission finds as follows:

## FINDINGS OF FACT

1. Elizabethtown Water District No. 2 is a strip-type district lying along New York State Highway Route No. 9 immediately south of the Village of Elizabethtown. The District boundaries extend some 500 feet east and west of Route 9 and from Deep Hollow Road southerly to a line some 6,000 feet south of the Village of Elizabethtown.

2. The establishment of the present District was initiated by a taxpayers' petition to the Town Board, and that Board, following a public hearing held on July 16, 1969, to consider the proposition, adopted a resolution approving the formation of the District and authorizing an application to the State Comptroller requesting permission of that official for the establishment of the District. The Comptroller, to date, has taken no action on the matter.

3. The area of the proposed District is predominantly residential in character, and presently has some 35 to 40 residences and small commercial buildings within its boundary. The estimated population of the District is presently about 200 and it is anticipated that the maximum future population will increase to some 500 people.

4. The total existing valuation of all taxable property within the Town of Elizabethtown was reported as being approximately \$1,873,280 by the last tax roll. The town presently has a bonded indebtedness in the amount of \$28,000, none of which was issued for water supply purposes.

5. As its engineer in connection with this project, the applicant has retained Ronald H. LaBerge, an engineer duly licensed under the laws of the State. The plans and specifications for the proposed District were prepared by Mr. LaBerge, and the works, if built, will be constructed under his direction and supervision.

6. The area of the proposed Elizabethtown Water District No. 2 is presently served by a private water supply known as the Campe Water Supply. Water for this system is taken from a surface source of supply which is reported to be of an unsatisfactory quality. The system is made up of small diameter pipe and is considered to be inadequate to meet current needs. The location of the pipelines is not known and the system is reputed to be in a deteriorated condition.

7. The operators of the Campe Water Supply have never come before this Commission or any of its predecessors to seek approval to develop the existing source of supply or to serve the area now under consideration.

8. The water supply requirements of the present residents in this proposed Water District is expected to be 20,000 gallons per day. The average future use within the District is estimated to be 50,000 gallons per day with peak demands of 130 percent of the average.

9. The Village of Elizabethtown acquired its present source of water supply when it purchased the plant and property of the Elizabethtown Water Company under an approval granted by this Commission in a decision dated November 1, 1960, on Water Supply Application No. 3892.

10. The primary supply of water for the village system is taken from some five springs located near a tributary of the Little Bouquet River on the north side of New York State Highway Route No. 9N west of the village.

11. The village also acquired from the Elizabethtown Water Company small impounding reservoirs located near the springs forming the main supply for the village. Water is taken from these impoundments only in the event that the water supply from the springs is inadequate to meet the demands.

12. Water from the springs flows by gravity to a covered concrete reservoir having a capacity of some 140,000 gallons located on high ground at the westerly end of the village. The water from the reservoir then flows to the village's distribution system.

13. The applicant's engineer places the average water demand of the Village of Elizabethtown at 54,000 gallons per day and reports that the yield of the village water system exceeds the consumption requirements of the present users of the village system.

14. The water to be supplied to the consumers of the present District will be of a similar satisfactory quality as that now supplied to consumers in the Village of Elizabethtown.

15. It may be necessary for the town to acquire rights-of-way for portions of this proposed system.

16. The carrying out of this project will have no adverse effect on the water supply interests of any other municipality or civil division of the State.

17. The legal damages which may be caused by the execution of the plans of the petitioner are not such as to require any special consideration or legislative enactment in order that they equitably may be determined and paid.

#### CONDITIONS

The Commission finds it necessary, in order to protect the water supply and the interests of the applicant and of the inhabitants of the territory supplied by it with water and to protect the water supply and interests of any other municipal corporation or other civil division of the State and the inhabitants thereof, that the application, maps and plans submitted should be modified to conform to the following:

- A. This decision and approval shall have no force or effect unless and until the applicant has obtained the permission of the State Comptroller for the establishment of this District and furnishes evidence thereof to the Commission.
- B. Unless the works authorized by this decision shall have been fully completed by December 1, 1972, or within such extended time as may have been applied for and granted by the Commission, then and on that date this decision shall be deemed to have lapsed and to be of no further force and effect.
- C. Nothing in this decision and approval contained shall be held to abrogate the provisions of Section 480 of the Conservation Law, which forbid the operation

of any of these works until as constructed they have been approved by the Commission. Such final approval will be given only on due petition therefor. In general such approval will not be given except for a fully completed system, and it never will be given until all provisions affecting the quality of the water or the safety of the works fully have been complied with.

#### STATUTORY DETERMINATIONS

The Water Resources Commission, having given due consideration to the said petition and its exhibits and the proofs and arguments submitted, determines and decides as follows:

First. That the application, maps and plans submitted are modified as set forth above and, as so modified, are the plans hereinafter mentioned.

Second. That the plans proposed are justified by public necessity.

Third. That said plans provide for the proper and safe construction of all work connected therewith.

Fourth. That said plans provide for the proper protection of the supply and the watershed from contamination and for the proper treatment of such supply.

Fifth. That said plans are just and equitable to the other municipalities and civil divisions of the State affected thereby and to the inhabitants thereof, particular consideration being given to their present and future necessities for sources of water supply.

Sixth. That said plans make fair and equitable provisions for the determination and payment of any and all legal damages to persons and property, both direct and indirect, which will result from the execution of said plans or the acquiring of said lands.

DECISION

WHEREFORE, the Water Resources Commission does hereby approve the said application, maps and plans of the Town of Elizabethtown on behalf of Elizabethtown Water District No. 2 as thus modified.

IN WITNESS WHEREOF, the Water Resources Commission has caused this determination and approval to be signed and has caused its official seal to be affixed hereto and has filed the same with all maps, plans, reports, and other papers relating thereto in its office in the City of Albany this 4th day of December, 1969.

WATER RESOURCES COMMISSION

W. M. Lawrence

Deputy Commissioner, Conservation  
Dept., Alternate - Acting Chairman

Attest:

Robert S. Drew  
Secretary



State of New York  
Department of Conservation  
WATER RESOURCES COMMISSION

Water Supply Application No. 3892

In the Matter of the Application

- of the -

VILLAGE OF ELIZABETHTOWN,

Essex County, for approval of acquisition of the works, property, land, franchise, et al, of the Elizabethtown Water Company.

D E C I S I O N

Application filed      September 12, 1960

Hearing held in  
Elizabethtown      October 14, 1960

Decision      November 1, 1960

(u)  
b.

DECISION ON WATER SUPPLY APPLICATION NO. 3892

PROCEEDINGS

Lee Phinney, Mayor of the incorporated village of Elizabethtown in Essex County, acting in the name and on behalf of that village, on August 15, 1960 made application to the Water Resources Commission for approval of the plans of that village for the purchase of the plant and property of the Elizabethtown Water Company, including its spring and reservoir sources of supply and its transmission and distribution facilities and for the future operation of the plant as a municipal enterprise. This application was filed in the office of the Commission on September 12, 1960.

After due notice published in the Valley News of Elizabethtown, the hearing on this application was held before Robert A. Cook, Assistant Engineer of the Commission, in the Town Board office in Elizabethtown on October 14, 1960 at 1:00 o'clock in the afternoon. At this hearing the Commission considered the petition and maps submitted, examined witnesses and heard arguments in favor of the project. The petitioner was represented by Harlan G. Carson, Esq., its attorney. The Elizabethtown Water Company was represented at the hearing by W. H. Hubbard, its President. No objections were filed and no one appeared at the hearing in opposition to approval of the project.

On October 14, 1960 the Commission caused an engineering inspection to be made of the site of the existing sources of water supply.

PROJECT

Applicant now asks the Commission's approval of its plans to acquire the plant and property of the Elizabethtown Water Company and to continue operation of this water supply system as a municipal enterprise. The village proposes to acquire the water company's spring and impoundment sources of supply, treatment equipment, transmission mains, storage reservoir, distribution system and all other plant and property. No improvements to the water supply system are proposed at this time. The total cost of the acquisition of this property is expected to be \$46,500.

After due study of this petition and its exhibits and of the evidence and arguments given at the hearing, the Commission finds as follows:

FINDINGS OF FACT

1. The village of Elizabethtown is an incorporated village situated in the northerly portion of the town of Elizabethtown

in Essex County. The village is located at the intersection of United States Highway Route No. 9 and New York State Highway Route No. 9-N and is the county seat for Essex County.

2. The village was incorporated in 1871, is primarily residential in character and has a normal population of some 700 persons. It is, in many respects, a typical Adirondack Mountain community. While there are few outstanding tourist attractions in the immediate vicinity of the village, many vacationers are attracted to the area during the summer months.

3. There are no sizeable industrial water users within the village. Two hotels and a golf course are the largest water consumers. There are no public sanitary sewers within the area.

4. A public water supply was first installed in the village by the Elizabethtown Water Company in 1885. The water supply for this company then and now was primarily obtained from spring sources located near a tributary of the Little Bouquet River on the north side of New York State Highway Route No. 9-N, west of the village.

5. The water company has over the years developed auxiliary water supply sources by the construction of small impoundments near the springs. These sources are reportedly used only in the event that the water supply obtainable from the springs is of inadequate quantity.

6. The water company has never been before this Commission nor any of its predecessors for approval of any water supply project.

7. The company's springs all appear to obtain their water from the same general source, an aquifer from which the water seeps near the foot of an extensive hillside. There are presently five springs in use.

8. Water from the springs flows to a covered concrete reservoir of 126,000 gallons capacity through two transmission mains, one three inches and the other four inches in diameter. The water is distributed from the reservoir through a network of mains 6 inches and smaller in diameter which have been installed throughout the village.

9. There are presently three small impoundment reservoirs on the brook at the spring site and these are used for auxiliary or emergency purposes. Water impounded by dam No. 1, the uppermost structure, has not recently been used. Water from this pond, when used, flows through a 3-inch transmission main to the distribution reservoir. Provisions have been made for the chlorination of the water in the 3-inch transmission main when the surface supply from dam No. 1 is in use.

10. Water from the middle impoundment, dam No. 2, flows to the distribution system through a 4-inch transmission main. No treatment equipment is installed on this main although provisions have been made for the installation of chlorinating equipment.

11. The lower impoundment, dam No. 3, is not used except in times of extreme emergency. No provisions have been made for treatment of the supply of water taken from this source.

12. Nearly all of the water services on the company's system are equipped with individual meters. There is no master meter on this system, however, and no accurate data is available on average or peak demands. It is estimated that the average demand for water in the summer months is approximately 50,000 gallons per day. The auxiliary surface sources are used nearly every summer. Few extreme shortages have been experienced.

13. The water company also owns an extensive area in the Barton Brook watershed adjacent to, but over the hill from, the watershed presently developed. Title to the land in this second watershed will pass to the village as part of the water company property. The village has no plans at this time for the development of new sources in this area and the Commission must require that at such time as the village does wish to take a water supply from the new watershed, a further application for permission to do so, including detailed plans for such development, must be filed requesting approval of such a project.

14. The water company reportedly now supplies some 20 consumers outside the village corporate limits. The water company has made a supply of water available at the village limits and the various consumers outside of those limits have installed their own small diameter pipes as distribution systems. These small pipes have remained the property of the individual consumers.

15. In acquiring the plant and property of the water company, the village will not acquire any distribution system outside of its corporate limits. The village must be required, however, to continue to make a supply of water available to these consumers at the village line. The maintenance of the private distribution lines outside of the village would not appear to be a village responsibility.

16. The Village Board of the village of Elizabethtown, at a regular meeting held March 7, 1960, adopted a resolution to purchase the plant and property of the Elizabethtown Water Company and authorized a bond issue of \$46,500 to finance the acquisition. The electors of the village ratified the Village Board's action at a special election held on April 6, 1960.

17. The total assessed valuation of all taxable real property in the village of Elizabethtown is about \$1,135,000. The village has total outstanding bonded indebtedness in an amount of \$7,800.

18. No lands other than those presently owned by the water company will be acquired by the applicant in connection with this project.

19. The carrying out of this project will have no adverse effect on the water supply interests of any other municipality or civil division of the State.

20. The legal damages which may be caused by the execution of the plans of the petitioner are not such as to require any special consideration or legislative enactment in order that they equitably may be determined and paid.

#### CONDITIONS

The Commission finds it necessary in order to protect the water supply and the interests of the applicant and of the inhabitants of the territory supplied by it with water and to protect the water supply and interests of any other municipal corporation or other civil division of the State and the inhabitants thereof, that the application, maps and plans submitted should be modified to conform to the following:

- A. The village of Elizabethtown is hereby authorized, insofar as the jurisdiction of this Commission is concerned, to acquire the plant and property of the Elizabethtown Water Company and to operate said plant as a municipal enterprise.
- B. As the source of supply for this water system, the said village is authorized to continue the use of the existing spring and surface sources except that no water from any of the surface impoundments shall be introduced into the transmission or distribution system without first having been sterilized in a manner satisfactory to this Commission.
- C. Water from the impoundment formed by dam No. 3 shall be used only in times of emergency with the consent and approval of the district engineer of the New York State Department of Health.

- D. The Commission reserves the right to require the taking of further sanitary precaution or the further treatment or purification of the water from any of these sources should conditions in the future indicate a need for such action.
- E. The village of Elizabethtown may as a part of this project acquire the watershed property now owned by the water company in the Barton Brook Watershed. The village is not authorized to develop this watershed as a future source of water supply without the further prior consent and approval of this Commission.
- F. The village shall continue to make a supply of water available at the village line to those consumers now served by the water company who reside outside of the village corporate limits. Inasmuch as the distribution mains outside of the village limits are owned by the individual property owners and will not be acquired by the village, the responsibility for maintenance and upkeep of these mains rests with the owners thereof.

#### STATUTORY DETERMINATIONS

The Water Resources Commission, having given due consideration to the said petition and its exhibits and the proofs and arguments submitted at the hearing, determines and decides as follows:

First. That the application, maps and plans submitted are modified as set forth above and, as so modified, are the plans hereinafter mentioned.

Second. That the plans proposed are justified by public necessity.

Third. That said plans provide for the proper and safe construction of all work connected therewith.

Fourth. That said plans provide for the proper protection of the supply and the watershed from contamination and that filtration is at the present time unnecessary.

Fifth. That said plans are just and equitable to the other municipalities and civil divisions of the State affected thereby and to the inhabitants thereof, particular consideration being given to their present and future necessities for sources of water supply.

Sixth. That said plans make fair and equitable provisions for the determination and payment of any and all legal damages to persons and property, both direct and indirect, which will result from the execution of said plans or the acquiring of said lands.

(u)  
D.

DECISION:

WHEREFORE, the Water Resources Commission does hereby approve the said application, maps and plans of the village of Elizabethtown as modified and does also approve of the waterworks system as constructed and authorizes the operation thereof by the officials of the said village.

IN WITNESS WHEREOF, the Water Resources Commission has caused this determination and approval to be signed and has caused its official seal to be affixed hereto and has filed the same with all maps, plans, reports, and other papers relating thereto in its office in the city of Albany, this 1st day of November, 1960.

WATER RESOURCES COMMISSION

\_\_\_\_\_  
Commissioner of Agriculture and  
Markets, Acting Chairman

\_\_\_\_\_  
Assistant Attorney General,  
Alternate

\_\_\_\_\_  
Secretary to the Conservation Dept.,  
Alternate

\_\_\_\_\_  
Assistant Director, Division of  
Environmental Health Services,  
Dept. of Health, Alternate

\_\_\_\_\_  
Chief Engineer, Dept. of Public  
Works, Alternate

Attest:

\_\_\_\_\_  
Secretary to the Commission

**Exhibit B**

**NYSDOH Correspondence**



# STATE OF NEW YORK DEPARTMENT OF HEALTH

Saranac Lake District Office

11 - 15 St. Bernard Street

Saranac Lake, New York 12983-1834  
(518) 891-1800 FAX (518) 891-5895

Antonia C. Novello, M.D., M.P.H.  
*Commissioner*

Dennis P. Whalen  
*Executive Deputy Commissioner*

July 28, 2000

Supervisor and Town Board  
Town of Elizabethtown  
P.O. Box 265  
Elizabethtown, NY 12932

Re: Annual Inspection  
Elizabethtown Water District  
Elizabethtown (T), Essex County.

Dear Mr. Hutchins and Board Members:

I conducted an annual inspection of the Elizabethtown Water District on June 28, 2000. I met with Mr. David Dickinson during my visit to the facilities. Mr. Dickinson assists Mr. Dennis Aubin with the maintenance and operation of the water system. What follows is a report of my findings and recommendations.

## Description of System

The Elizabethtown Water District consists of four drilled wells located along the north side of NYS Route 9N approximately two miles west of the town center. Each well is equipped with a submersible pump that pumps the water to a treatment building at the well field. Well production is measured with a master meter located inside the treatment building. The water is disinfected at the treatment building with electrical hypochlorinators. Water enters a 3,000-gallon control tank after it is disinfected. The control tank is adjacent to the treatment building and contains a series of float switches. The switches automatically control the operation of the well pumps. The controls can be manually overridden if necessary. Two wells are typically in operation during periods of low demand. All four wells will operate when demand is high.

Water flows via a six-inch transmission main from the control tank, across and down the south side of Route 9N, to a 130,000-gallon concrete storage reservoir. The reservoir was constructed during the early half of the 1900s. It is old and in desperate need of replacement. There are small openings along the sides and roof that allow small rodents and bats to enter the reservoir. These have been known to get into the reservoir in the past and are a potential source of contamination. Town employees routinely clean the reservoir during the spring of each year. Town residents are notified to conserve water prior to and during the spring reservoir cleaning.

Water flows from the reservoir in a transmission main to the distribution system located within the former village. The distribution system consist of predominantly six and eight-inch ductile iron water mains. There are also some areas with smaller diameter distribution pipes.

Town employees routinely flush the distribution system every six months. This includes a flushing period after the storage reservoir has been cleaned in the spring. All service connections to the system are metered. Customers are billed based on actual water use.

While there were no violations noted with the system during my inspection, there are serious problems with the existing wells to supply the water district with sufficient amounts of water. The water system has an existing springhouse at the well field that is used infrequently as an auxiliary water source. Water from the springhouse is used to augment the well supply during periods of high demand and dry weather. Water flows by gravity from the springhouse to the storage reservoir. There is no means to directly chlorinate water from the springhouse. Water from the springhouse must be mixed with chlorinated water from the wells in order to be disinfected.

The springhouse is not a reliable source. It has been identified as a source of contamination in the past. Routine bacteriological samples taken on July 2, 1999 were positive for total coliform and E. coli bacteria. These tests were taken shortly after the springhouse was placed in service. Two of five repeat bacteriological samples taken on July 6, 1999 were also positive for total coliform and E. coli bacteria. As a result of these tests, the NYSDOH issued the water system a Boil Water Order (BWO) and a maximum contaminant level violation. The BWO was lifted on July 12, 1999 when chlorine residual levels and further bacteriological testing proved satisfactory.

Coliform and E. coli bacteria were also detected in the water system on November 5, 1998. The water system was issued a notice of violation for failure to report a positive bacteriological sample to the NYSDOH in a timely manner. Subsequent repeat bacteriological sampling in December 1998 was negative.

A bacteriological surveillance sample was taken from the distribution system at the Town highway garage during my inspection. The sample was analyzed by the NYSDOH Wadsworth Laboratory and found to be negative for the presence of coliform bacteria. A copy of the test result is enclosed with this report.

The water system was operating properly at the time of my visit. It was noted that Dave and Dennis are keeping the water facilities clean and orderly. The Town recently installed an emergency eyewash and two new LMI hypochlorinators during 1999 – 2000. The Town has also installed new water mains on sections of Park Street and River Street to eliminate deadends and improve service pressure.

#### **Drinking Water State Revolving Fund**

The New York State Environmental Facilities Corporation (EFC) issued a Drinking Water State Revolving Fund (DWSRF) financial assistance commitment letter to the Town on May 2, 2000. Under the terms of the commitment letter, the Town is eligible for a grant of \$608,953 and a 30-year interest-free loan of \$1,070,228 for a project to construct a new groundwater supply, transmission mains and a new storage tank. The commitment letter requires the Town to submit a complete DWSRF application to EFC by October 20, 2001.

We strongly encourage the Town to accept this funding arrangement. It is extremely important that the Town direct its efforts toward completing the DWSRF application process if it decides to pursue this funding. It has been our experience that the time frame for completing a DWSRF application is short. Major delays or procrastination will likely result in missed deadlines and may ultimately jeopardize funding.

### **Lead and Copper Rule**

Sections 5-1.40 through 5-1.49 of the State Sanitary Code (SSC) apply to the control of lead and copper in drinking water. In accordance with the SSC, the Elizabethtown Water District was required to begin monitoring its water quality for lead and copper levels beginning in 1993.

The Elizabethtown Water District completed the initial lead and copper monitoring rounds in 1993 and 1994. Subsequent monitoring was performed in 1999. The monitoring showed that the water supply serving the Elizabethtown Water District did not exceed the action levels for lead and copper (0.015 mg/l for lead and 1.30 mg/l for copper).

The Elizabethtown Water District must continue to monitor for lead and copper by sampling once per year. The next lead and copper monitoring requirement for the Elizabethtown Water District shall comprise 10 first draw samples to be taken between June 1 and September 30, 2000. Monitoring samples will also be required in 2001.

### **Other Items**

The following items were also identified during the inspection:

1. The Elizabethtown Water District is required to submit a monthly water system operation report to the NYSDOH - Saranac Lake District Office (SLDO) within 10 days of the close of each month. Operation reports for 1999 were submitted to the SLDO in a timely fashion.
2. The Town was required to have sent a copy of the 1998/1999 Annual Water Quality Report for the Elizabethtown Water District to each of its bill-paying customers by July 1, 2000. The Town was also required to complete and submit a Certification Form to the SLDO by July 1, 2000 indicating how the report was distributed. The SLDO faxed a copy of the 1998/1999 Annual Water Quality Report for the Elizabethtown and New Russia Water Districts to the Supervisor's office on May 11, 2000 (see enclosed copy). As of this date, the SLDO has not yet received a Certification Form from the Town.
3. The Elizabethtown Water District is required to sample for total coliform in their water distribution system in accordance with the Subsection 5-1.52, Tables 6 and 11, of the SSC. The Town is also required to develop a written total coliform sample site plan. This plan must be available for review by the NYSDOH.

Samples for total coliform in the water distribution system are routinely taken in accordance with procedures established by the system operator. Although the Town does not have a written site sampling plan at this time, the established procedures for total coliform sampling are adequate. The Town must develop a written site sampling plan for

review by the NYSDOH (see page 15 of the enclosed NYSDOH document titled, *Coliform Bacteria and the Total Coliform Rule*).

4. The Town should develop an Emergency Management Plan for handling emergencies that could effect its water supply. Although Dennis and Dave are personally familiar with the steps necessary to handle water system emergencies, this information should be kept in written form for future reference and regularly updated. This plan should be developed in accordance with the *NYSDOH Guidelines for the Preparation of an Emergency Plan for Community Water Supplies*, December 1990 (copy enclosed).
5. The Elizabethtown Water District does not have a cross connection control program to protect the water supply from potential contamination sources located within the premises of their customers. The Town should develop a cross connection control program to be in conformance with section 5-1.31 of the SSC.
6. We encourage Dave Dickinson to pass the water system operator course and to obtain certification as a grade IIB water operator.
7. Chemical feed lines should be fitted with calibration columns in order to calibrate the chemical feed rate of metering pumps. Metering pumps should be calibrated on a weekly or bi-weekly basis.
8. The springhouse should be properly abandoned and demolished.

I would like to thank Dave Dickinson for his assistance in completing this inspection. Please feel free to contact me at 891-1800 if you have any questions regarding this inspection.

Sincerely,



Kevin C. Scheuer, P.E.  
Senior Sanitary Engineer

Enc.

cc: Elizabethtown Water District, Attn. Mr. Aubin, Mr. Dickerson  
NYSDOH-BPWSP, Attn. Ms. Sayers



# STATE OF NEW YORK DEPARTMENT OF HEALTH

Saranac Lake District Office

11-15 St. Bernard Street

Saranac Lake, New York 12983-183  
(518) 891-1800 FAX (518) 891-588

Antonia C. Novello, M.D., M.P.H.  
*Commissioner*

Dennis Whalen  
*Executive Deputy Commissioner*

July 13, 1999

Supervisor and Town Board  
Town of Elizabethtown  
Court Street  
P O Box 265  
Elizabethtown, NY 12932

Re: Notice of Violation  
Elizabethtown W.D.  
Elizabethtown T., Essex Co.

Dear Mr. Hutchins and Board Members:

Enclosed is a Notice of Violation and Required Notification for an acute MCL violation of the Total Coliform Rule. This violation occurred because repeat samples collected on July 7, 1999, confirmed the presence of E. coli in the water system. An initial positive total coliform sample result prompted the collection of five repeat samples, two of which were E. coli positive. Specific information regarding dates and required notifications are found on the Notice of Violation form.

We were first notified of the positive results on July 6, 1999. A boil water order was issued at that time and was in effect until Monday, July 12, 1999. The boil water order was lifted because free chlorine residuals were reportedly being properly maintained throughout the distribution system and satisfactory coliform samples were obtained from the system on July 8<sup>th</sup> and 9<sup>th</sup>.

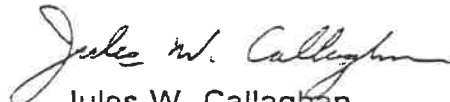
On July 8, 1999, I conducted a field visit with Philip Hutchins, Supervisor, to look at the water system and determine a possible cause for the incident. The problem can most likely be attributed to the fact that the auxiliary springs were turned on into the system without any increase in the chlorination. The extra water depleted the chlorine and the free chlorine residual in the system was probably lost. There was evidence that the springhouses and the distribution reservoir cover are not vermin proof so the most likely cause of the E. coli contamination was small rodents in these areas.

Supervisor and Town Board  
July 13, 1999  
Page 2

You should be aware that the presence of E. coli in your drinking water is a serious health concern. E. coli are not necessarily harmful themselves but the presence of E. coli in drinking water is serious because this bacteria is associated with sewage or animal wastes. The presence of E. coli bacteria in drinking water indicates problems with the water treatment process and also shows the water has the potential of being contaminated with organisms that can cause disease.

We will be addressing needed improvements to the Elizabethtown W.D. in the near future, which would alleviate these contamination problems. If you have any questions at all regarding this Notice of Violation, please contact me.

Very truly yours,

  
Jules W. Callaghan  
Senior Sanitarian

Enc.  
cc: BPWSP



STATE OF NEW YORK  
DEPARTMENT OF HEALTH

District Office

P.O. Box 389, 11-15 St. Bernard Street

Saranac Lake, New York 12983  
(518) 891-1800

David Axelrod, M.D.  
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.  
Director

William R. Amberman, P.E.  
District Director

Ian T. Loudon, M.D., D.P.H.  
Regional Health Director  
Albany Regional Office

August 25, 1987

Mr. Walter Marvin, Supervisor  
Town of Elizabethtown  
Elizabethtown, New York 12932

Re: Water District Source Development  
Work - Elizabethtown Water District  
Elizabethtown T., Essex Co.

Dear Mr. Marvin:

After analyzing Mr. Ralph Carpenter's findings, I have the following conclusions:

1. Place a screen and gravel pack at well #1 so an evaluation can be made on a yield with a well screen. This information will enable us to determine whether well #2 should also be screened and packed.
2. Well #3 with a yield of less than 5 gpm should be scrapped for the time being.
3. The yield on well #1 was 35 gallons/minute, with a well screen it could more than double which is what we are hoping for. If it does we will then develop well #2 in the same fashion and alternately pump each well.
4. Mr. Carpenter instructed Mr. Haseltine on how to obtain costs from the drillers for a gravel pack with well screen - believed to be about 20 hours/well with 14" casing on hand. Mr. Carpenter wants to instruct the driller with this process and as I have no experience in this area think you should authorize him to do said work.
5. As for well #3 - we can place a 2" pitless adapter on the well casing about 4 1/2' down and run plastic pipe from the casing to one of the springs as a supplemental source. If 1 gpm is obtained this will be 1440 gallons/day and if 2 gpm then 2880 gallons/day will result. At the present time we have no way of knowing what rate it will be, but it should be in this vicinity.

Mr. Walter Marvin

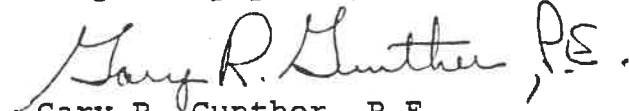
- 2 -

August 25, 1987

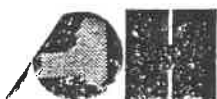
In conclusion we should follow this source improvement plan until we definitely know the well capacities (singly and together). With this information we can then start phasing in the 6" PVC water main to the reservoir, distribution main replacement program and reservoir reconstruction. Perhaps a grant can be applied for showing the money spent and efforts already made under a self-help phasing program.

Please feel free to contact me if you have any questions.

Very truly yours,

  
Gary R. Gunther, P.E.  
Senior Engineer

cc: Mr. Warren Haseltine  
Mr. Ed White, Department of State



# STATE OF NEW YORK DEPARTMENT OF HEALTH

District Office

P.O. Box 389, 11-15 St. Bernard Street

Saranac Lake, New York 12983  
(518) 891-1800

David Axelrod, M.D.  
Commissioner

## OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.  
Director

William R. Amberman, P.E.  
District Director

Ian T. Loudon, M.D., D.P.H.  
Regional Health Director  
Albany Regional Office

September 21, 1988

Supervisor and Town Board  
Town of Elizabethtown  
Elizabethtown, New York 12932

Re: Elizabethtown Water District  
Elizabethtown T., Essex Co.

Dear Mrs. Brien and Board Members:

I would like to take this opportunity to outline some of the recent developments with the Elizabethtown self-help water system improvement project.

### August 1987

Three wells were drilled in the area of the spring sources located adjacent to Route 9N west of Elizabethtown. Preliminary pumping of the wells indicated wells #1 and #2 along the old road bed have substantial yields with well #3 only producing one gallon per minute or less. The services of Mr. Ralph Carpenter of Pearson and Timmerman, Inc., Watertown, New York, were obtained to further pump test the wells and evaluate options for proper development. Bacteriological, physical and inorganic chemical sample results from well #1 indicate that the water is of a high quality similar to that of the spring sources.

### July 1988

Drought conditions result in the spring and brook sources barely supplying enough water to meet demands especially during the hot, dry periods. Again the water system runs at full capacity with no consideration for a main break or major fire.

### August 1988

Kenneth Brown Well Drillers drilled a new cased well on the site in hopes of developing a high yield well. After the well screen was installed the well casing broke off while being retracted resulting in the loss of the screen and use of this well. This was a most unfortunate incident for all those involved. I was pleased to see little discouragement over this mishap as the town quickly pursued development of well #1.

September 21, 1988

September 1988

Mr. Ralph Carpenter and Mr. Warren Haseltine, water superintendent, along with other town employees developed well #1. The deep portion of the well which was non-water bearing strata was filled in. A well screen was then installed and the casing retracted to expose the screen. The well was then extensively washed and pumped as part of the development process. After pump testing the sustained yield was determined to be 50 gpm with the expected production from the desired pumping level at approximately 30 gpm. Although this is a substantial yield, it is not enough to meet the demands of water system. A well with a yield of 75-100 gpm is needed to adequately supply the community. If a second well does not have this capacity it may be necessary to develop a third well. At a meeting between Mrs. Brien, Mr. Carpenter, Mr. Haseltine and myself it was agreed to go ahead with the drilling and development of the second well before this winter season.

The water system serving Elizabethtown has been in need of major improvements for quite a while. The system is barely able to supply enough water to its customers, particularly during the summer months. This is also without any consideration for expansion or development in the community. An emergency situation is very likely should a main break or major fire occur.

The major problem with the system is a lack of source capacity. This is being resolved with the installation of the wells. The use of drilled wells as a source of water is much more desirable than use of the springs or brook source because the water quality and quantity are generally much more reliable. Great progress has been made on the installation and development of the drilled well sources and they will probably be operational by next summer. Another incentive for the development of well sources is the recent Environmental Protection Agency mandate for filtration of all surface water sources which would require the installation of filtration facilities on the brook source by 1992. The capital costs and operation and maintenance expenses would far exceed those realized for wells.

Another deficiency of the water system is the transmission main leading from the treatment plant to the reservoir is undersize. This main needs to be replaced with a larger one or an additional main added so adequate quantities of water can be delivered to the reservoir and distribution system. This improvement can be completed as a later phase of the self-help project. Additional improvements that could be considered in the future are

September 21, 1988

upgrading the existing storage reservoir or an added storage facility along with the replacement of some of the old and undersize mains in the distribution system.

As the town has now begun major water system improvements, water revenues come to light. After inquiring, I was quite surprised to find the flat water rate is only \$11.50/six months. This is a very low figure and the town should give serious consideration to raising the rate. Mr. Edward White of the New York State Department of State could assist you in establishing an updated rate schedule that would reflect current capital and operational costs. I have already contacted Mr. White regarding this matter.

I would like to commend the town and particularly those employees who have participated in the self-help improvement project because it has taken lots of hard work that was often above and beyond the scope of their regular duties. A construction project like this using many of your own resources and minimizing costs is very rewarding.

Warren is doing a fine job in coordinating and supervising the work. His extensive knowledge of the water system and many years experience operating it are very valuable to the project and much of the smooth and timely progress that has been made so far can be attributed to his efforts. The town is fortunate to have him in this capacity.

Mr. Ralph Carpenter has also played a key role in the positive progress of this project. His knowledge and many years of experience in ground water hydraulics and well development are very impressive. It is a pleasure working with Ralph on this project and his efforts to keep us updated as developments occur are greatly appreciated.

I recently talked with Mr. Edward White, NYS Department of State and he expressed interest in meeting with Mrs. Brien, Mr. Doug Ferguson, NYS Department of Health and me. The purpose of the meeting will be to reiterate the self-help program's objectives and techniques for Mrs. Brien's benefit because she came into office in 1988 with the improvement project already well underway. Particular questions and financial considerations will also be addressed at this meeting. Ed expects to arrange the meeting for the first week of October.

0760

NEW YORK STATE DEPARTMENT OF HEALTH  
KAESWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1

## RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: R74112 SAMPLE RECEIVED: 87/09/03/ CHARGE: 10.80  
PROGRAM: 100: MUNICIPAL WATER SUPPLIES  
SOURCE ID: 409000 DRAINAGE BASIN: 10 GAZETTEER CODE: 1552  
POLITICAL SUBDIVISION: ELIZABETH TOWN COUNTY: ESSEX  
LATITUDE: LONGITUDE: Z DIRECTION:  
LOCATION: ELIZABETH TOWN WATER DISTRICT #2  
DESCRIPTION: COURT HOUSE DMV RESTROOM SINK TAP  
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY  
TEST PATTERN: PEST: INSECTICIDES AND HERBICIDES  
SAMPLE TYPE: 020: FINISHED WATER - CHLORINATED  
TIME OF SAMPLING: 87/09/01 12:00 DATE PRINTED: 87/09/15

ANALYSIS: ELMT INSECTICIDES (DES 310-4)  
DATE PRINTED: 87/09/15

FINAL REPORT

-----PARAMETER-----	-----RESULT-----
HCH, GAMMA (LINDANE)	< 0.04 MCG/L
ENDRIN	< 0.02 MCG/L
METHOXYCHLOR	< 1.0 MCG/L
TOXAPHENE	< 1.0 MCG/L

ANALYSIS: HERB HERBICIDES (DES 310-3)  
DATE PRINTED: 87/09/15

FINAL REPORT

-----PARAMETER-----	-----RESULT-----
2,4-D	< 0.5 MCG/L
SILVEX (2,4,5-TP)	< 0.1 MCG/L

\*\*\* END OF REPORT \*\*\*

**RECEIVED**  
SEP 21 1987NYS DEPT. OF HEALTH  
SARANAC LAKE DISTRICT

COPIES SENT TO: CO(1), RO(1), LPHE(2), FED( ), INFO-PC( ), INFO-L( )

NEW YORK STATE DEPARTMENT OF HEALTH  
SARANAC LAKE DISTRICT OFFICE  
P.O. BOX 389 11-15 ST. BERNARD STREET  
SARANAC LAKE, N.Y. 12983

SUBMITTED BY: CALLAGHAN ✓

**P. E. GIBBS, P.E.**

**CIVIL ENGINEER**

P.O BOX 91  
26 SOUTH MAIN STREET  
WESTPORT, NEW YORK 12993  
(518) 962-8705

March 4, 1994

Mr. Jules Callaghan, Senior Sanitarian  
New York State Department of Health  
Saranac Lake District Office  
11-15 St Bernard Street  
Saranac Lake, New York, 12983

Re: Elizabethtown Water District source extension project, NYS  
RTE 9N, Town of Elizabethtown, Essex County

Dear Mr. Callaghan:

Enclosed please find engineering plans and specifications for the installation of a potable water transmission main from three new source wells to the treatment station for the Elizabethtown Water District. The line will be installed on Town owned property, NYSDOT property and on the properties of the landowners that currently are using the wells. The three private wells and true artisan wells with overflows volumes at the top of the well casing of 40 to 50 gpm. Legal agreements between the landowners and the Town of Elizabethtown for the use of these wells are presently being perused.

The overflow of the three wells will be collected into one transmission line. The flow of each well into the transmission line will be regulated by the use of varying pipe sizes, gate valves and check valves. The system will work entirely by gravity. Also attached to this letter please find a brief engineering report with calculations pertaining to the hydraulic conditions that will act on the system.

The route of the transmission line will take it from the treatment station to the NYSDOT RTE R.O.W., past a concrete crib retaining wall, over a stream via the hanging of the line from the bridge deck, and onto the private landowners property.

If you have any-questions please do not hesitate to contact me.

Sincerely,

  
Peter E. Gibbs, P.E.

cc: Robert Forester, NYSDEC, Article 15, Title 15 Water Supply  
Permit  
Robert Bolsen, NYSDOT, Regional Office, Highway Work Permit  
For Utility Work  
Alan Dickerson, Supervisor

**WATER SOURCE TRANSMISSION  
LINE EXTENSION PROJECT**

**TOWN OF ELIZABETHTOWN**

**COUNTY OF ESSEX**

**NEW YORK STATE DEPARTMENT OF HEALTH  
PUBLIC WATER SUPPLY IMPROVEMENT PERMIT**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
ARTICLE 15, TITLE 15 WATER SUPPLY PERMIT**

**NEW YORK STATE DEPARTMENT OF TRANSPORTATION  
HIGHWAY WORK PERMIT FOR UTILITY WORK**

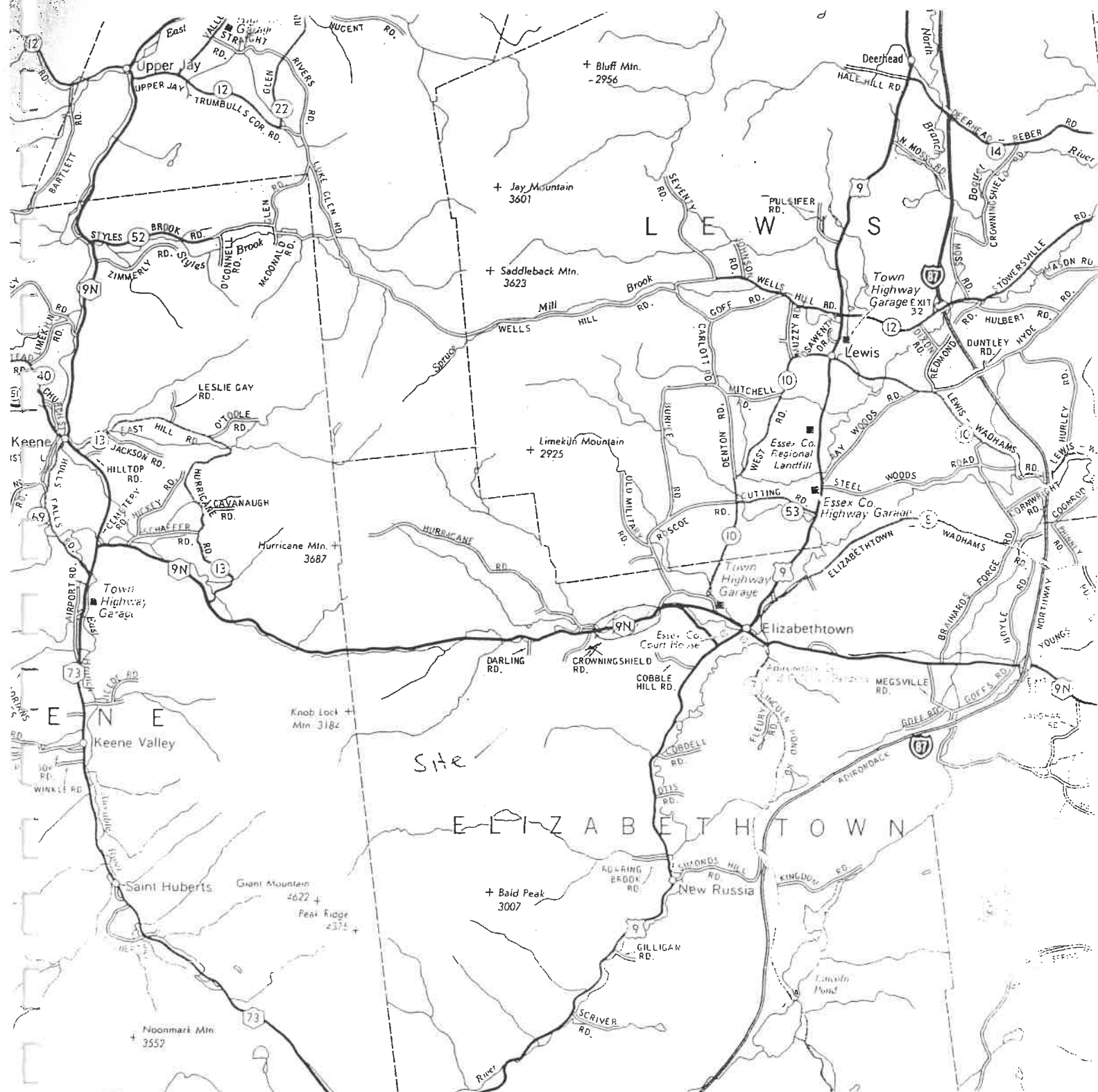
**MARCH 1994**

**PETER E. GIBBS, P.E.  
26 SOUTH MAIN STREET  
P.O. BOX 91  
WESTPORT, NY 12993**

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Proposed route of water main extension	
Control and Chlorination	
Calculations	
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Appendix 2 - NYSDOT -> Application for Highway Work Permit for Utility Work	
Appendix 3 - NYSDOH -> Application for Approval of Plans for Public Water Supply Improvement	
Appendix 4 - Specifications	

**FIGURE 2 - Location Map With Respect to Highways, Elizabethtown Water Source Transmission Line, Map From Highway Map of Essex County, New York, 1988, Scale 1" = 2 miles**



West of the bridge the line will split into two 4" diameter lines. One will be from the first well on the Fred Sunn property, the other will be from the remaining two wells. The line is split for hydraulic purposes. For the remainder of the run the line will intersect a number of shallow drainage culverts. The horizontal location of the line will be approximately 2' North of the location of the present guide rails for the West bound lane of NYS RTE 9N.

### Control and Chlorination

The hydraulic control of the system will be maintained by the action of gravity and pipe friction. Obviously if all three wells were hooked together on the same line (with all three wells being at different elevations) the water from one high well would "bleed-out" of the lower well connection. To overcome this the connection of the individual well source pipe will be connected to the transmission line at a point where the internal pipe pressures are similar.

The upper two wells are at a similar elevation (1,000' and 990' respectively) and horizontally close to each other (less than 300' apart). These two wells will be hooked directly to the transmission line. The size of the transmission line will be 4" at this point. The water of these two wells will travel down the 4" diameter line to a point where the water from the Fred Sunn well can safely be incorporated into the transmission line. This will be at a point where the elevation and friction losses in the pipe from the upper two wells approximately equates to the elevation and friction losses of the water to be introduced from the lower well (elevation 935'). Gate valves will be installed at strategic locations to fine tune the system.

The raw water collected in the proposed transmission line will be chlorinated via a separate piping and chlorination system. The electronic control of the system will be as described below. Please note that the present control system is very similar to the one described below and only minor adjustment in the system are required.

<u>Situation</u>	<u>Four Pumped Wells</u>	<u>New Transmission Line</u>
no demand reservoir full	all 4 wells are off their associated chlorinators are off	solenoid valve to waste is open, solenoid valve to chlorination

## Introduction

The purpose of this project is to provide three additional dependable low cost sources of high quality potable water to the Elizabethtown water system. Presently the water district receives its raw water from four drilled wells located on the North side of NYS RTE 9N. These wells are being pumped continuously to provide an adequate volume to meet daily demand. The water that is pumped from the existing well field is chlorinated and sent to a chlorine contact chamber. From the chlorine contact chamber, the treated water is transferred via a gravity line to a reservoir for storage and ultimate distribution to the residents and businesses of Elizabethtown.

Due West of the present well field described above are three artesian wells that are owned by private individuals. They all appear to be from the same aquifer, and produce an overflow at the top of the well casing of 40 to 50 gpm. The overflow of these wells is presently piped to the Branch River via gravity lines. The goal of this project is to capture the overflow from these three wells, and transport it to the chlorination station for treatment.

The first of the three wells is located approximately 2,200 feet east of existing chlorination station. The remaining two wells are located another 2,000 feet (for a total of 4,200') east of the chlorination station. The overflow from the three wells will be piped via a gravity transmission main.

## Proposed Route

The collection of the overflow water will be made via a gravity line that will be installed on the North side of NYS RTE 9N. A 6" diameter line will leave the existing chlorination station and travel West to a point where the line will enter the NYSDOT R.O.W. for RTE 9N. From this point the line will remain entirely within the RTE 9N R.O.W. until it is required to attach to the private well casings. There are two obstacles that will be encountered along this route. First is a concrete crib retaining wall, and the second is a NYSDOT bridge. The proposed water transmission line will be placed between the concrete crib wall and the West bound travel lane in the shoulder of the road. This will place the proposed line at or near the base of the retaining wall. Once past the wall, the next obstacle will be a stream crossing. The crossing will be made by hanging the line from the concrete bridge deck. This will be done by pipe hangers and an insulated water line pipe.

West of the bridge the line will split into two 4" diameter lines. One will be from the first well on the Fred Sunn property, the other will be from the remaining two wells. The line is split for hydraulic purposes. For the remainder of the run the line will intersect a number of shallow drainage culverts. The horizontal location of the line will be approximately 2' North of the location of the present guide rails for the West bound lane of NYS RTE 9N.

### Control and Chlorination

The hydraulic control of the system will be maintained by the action of gravity and pipe friction. Obviously if all three wells were hooked together on the same line (with all three wells being at different elevations) the water from one high well would "bleed-out" of the lower well connection. To overcome this the connection of the individual well source pipe will be connected to the transmission line at a point where the internal pipe pressures are similar.

The upper two wells are at a similar elevation (1,000' and 990' respectively) and horizontally close to each other (less than 300' apart). These two wells will be hooked directly to the transmission line. The size of the transmission line will be 4" at this point. The water of these two wells will travel down the 4" diameter line to a point where the water from the Fred Sunn well can safely be incorporated into the transmission line. This will be at a point where the elevation and friction losses in the pipe from the upper two wells approximately equates to the elevation and friction losses of the water to be introduced from the lower well (elevation 935'). Gate valves will be installed at strategic locations to fine tune the system.

The raw water collected in the proposed transmission line will be chlorinated via a separate piping and chlorination system. The electronic control of the system will be as described below. Please note that the present control system is very similar to the one described below and only minor adjustment in the system are required.

<u>Situation</u>	<u>Four Pumped Wells</u>	<u>New Transmission Line</u>
no demand reservoir full	all 4 wells are off their associated chlorinators are off	solenoid valve to waste is open, solenoid valve to chlorination

station is closed  
associated chlorinator  
is off

pump #1 on  
first float  
at reservoir  
is activated

""

solenoid valve to  
waste is closed, solenoid  
valve to chlorination  
station is open, associated  
chlorinator is on

pump #2 on      2 wells come on  
second float    with their associated  
at reservoir    chlorinators  
is activated

""

pump #3 on      2 remaining wells come on  
third float     with their associated  
at reservoir    chlorinators  
is activated

""

demand decreased -> reverse order of the above

## Calculations

The Attached calculation show the designers method of determining pipe sizes and location of connections.

## APPENDIX

Well #3  
Elev = 1900'

Well #2  
Elev = 490'

Well #1  
Elev 935'  
Sta 635

2200'

3400'

4200'

Elev = 870'

Pump House

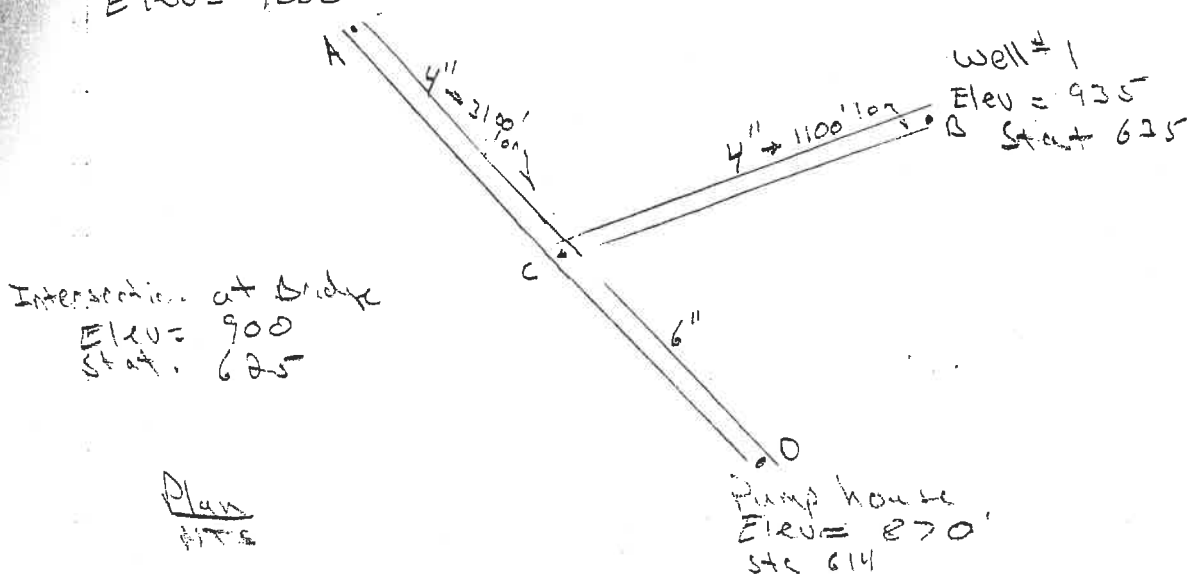
Sta 614

$$\frac{2200'}{4200'}$$

Well #3 and Well #2

Elev = 1000'

Assume the wells are like reservoirs that produce  $\uparrow$  50 gpm each up to



We want pressure head at point "C" to be the same for the "AC" and "BC" pipes

1. Look at 4" pipe from well #1

4" pipe 1100' long

$$Q = 50 \text{ gpm} \left( \frac{1}{7.48} \right) \left( \frac{1}{60} \right) = 0.11 \text{ ft}^3/\text{sec}$$

$$Q = V \cdot A \quad A_{4"} = \frac{\pi \cdot 4^2}{4} = 0.09 \text{ ft}^2$$

$$V = \frac{Q}{A} = 1.22 \text{ ft/sec}$$

$$h_f = \frac{V^{1.85} \cdot L}{1.318 \cdot C^{1.85} \cdot R^{1.17}}$$

$$C = 100 \quad C^{1.85} = 5011.87$$

$$R = \frac{4/12}{4} = 0.833 \quad R^{1.17} = 0.5462$$

$$h_{f-BC} = 4.4'$$

②

Pressure head at point "C" from line "BC"  
 $(935 - 900) - 4.4 \approx 30'$   
 Elev. Dist.      friction loss

$$30' \left( 62.4 \frac{\text{lb}}{\text{ft}^3} \right) \left( \frac{1}{144 \text{ in}^2} \right) \approx 13 \text{ psi}$$

II need to look at pressure head in pipe from line "AC". Try to match match pressure at point "C"

$$Q = 100 \text{ gpm} \left( \frac{1}{7.48} \right) \left( \frac{1}{60} \right) = 0.22 \text{ cfs/sec}$$

$$V = 2.14 \text{ ft/sec}$$

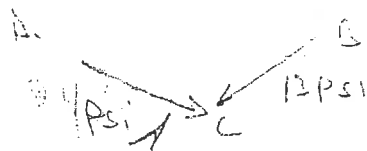
$$L = 3600$$

$$f = 44.75'$$

Pressure head at point "C" from line "AC"

$$(1000 - 900) - 44.75 = 55.25' \Rightarrow 23.9 \text{ psi}$$

Need difference between line BC and line AC



need to PRV in line to  
 drop down line "AC" 11 psi  
 or line restriction  
 to 11 psi or add pump

Appendix I

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## JOINT APPLICATION FOR PERMIT

DEC APPLICATION NUMBER

U.S. ARMY CORPS OF ENGINEERS APPLICATION NO.

Read ALL instructions on back before completing this application. Please type or print clearly in ink. Attach additional information as needed.

ARTICLE 9, TITLE 1, ARTICLE 43 6NYCRR 646 (LAKE GEORGE RECREATION ZONE)

ARTICLE 15, TITLE 3 (AQUATIC PESTICIDES CONTROL) ☐ 6NYCRR 327 (AQUATIC VEGETATION) ☐ 6NYCRR 328 (FISH) ☐ 6NYCRR 329 (INSECTS)

ARTICLE 15, TITLE 5 6NYCRR 608 (PROTECTION OF WATERS)

☐ For the construction, reconstruction, or repair of a DAM or other impoundment structure.☐ For the disturbance of a STREAM BED OR BANKS or excavation in or fill of NAVIGABLE WATERS. ☐ 401 WATER QUALITY CERTIFICATION☒ ARTICLE 15, TITLE 15 ☒ 6NYCRR 601 (WATER SUPPLY) ☐ 6NYCRR 602 (LONG ISLAND WELL)☐ ARTICLE 15, TITLE 27 6NYCRR 666 (WILD, SCENIC AND RECREATIONAL RIVERS)☐ ARTICLE 24 6NYCRR 662, 663 (FRESHWATER WETLANDS) ☐ ARTICLE 36 6NYCRR 500 (FLOODPLAIN MANAGEMENT)☐ ARTICLE 25 6NYCRR 667 (TIDAL WETLANDS) ☐ ARTICLE 34 6NYCRR 505 (COASTAL EROSION)☐ SECTION 10 (RIVER AND HARBOR ACT OF 1899) for structures and work in navigable waters of the U.S. ☐ COASTAL CONSISTENCY CERTIFICATION.☐ SECTION 404 (CLEAN WATER ACT OF 1977) for disposal of dredged or fill material in waters of the U.S.☐ SECTION 103 (MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT) for the transportation of dredged materials for dumping into ocean waters.

1. LIST PREVIOUS PERMIT/APPLICATION NUMBERS AND DATES (If any)

2. APPLICANT IS A/AN ☒ Owner ☐ Operator ☐ Lessee ☒ Municipality/Governmental Agency (Check as many as apply)

3. NAME OF APPLICANT (Use Full Name)

Town of Elizabethtown

MAILING ADDRESS

Town Hall

POST OFFICE

Elizabethtown, NY

TELEPHONE (Where can be reached during day)

518 873-6555

STATE

NY

ZIP CODE

12932

4. NAME OF ☐ Owner ☒ Agent/Contact Person (Check one)

Peter E. Gibbs P.E.

MAILING ADDRESS

26 South Main Street

POST OFFICE

Westport

TELEPHONE (Where can be reached during day)

518 962-8705

STATE

NY

ZIP CODE

12993

5. PROJECT/FACILITY LOCATION (Mark location on map, see Number 1B on reverse side)

County Essex Town or city Elizabethtown Village

STREET ADDRESS (If different from applicant)

NYS RTE 9N

POST OFFICE

STATE

ZIP CODE

6. NAME OF STREAM OR BODY OF WATER

7. HAS WORK BEGUN ON PROJECT? If YES, attach explanation on starting work without permit, includes dates.

☐ Yes ☒ No

Show work on map and/or drawings

8. WILL PROJECT UTILIZE STATE LAND?

☒ Yes ☐ No9. PROPOSED USE: ☐ Private ☒ Public ☐ Commercial

10. PROPOSED STARTING DATE

Spring 94

11. APPROXIMATE COMPLETION DATE

Fall 94

12. FEE OF (NYS Permit Only)

\$ — Enclosed

13. PROJECT DESCRIPTION: (e.g. quantity and type of material to be excavated, dredged or used for fill or rip rap, location of disposal sites, type of structure to be installed; height of dam, size of impoundment, capacities of proposed water sources; extent of distribution system, etc.)

"Hook-up" of three Artesian wells to existing water system  
privately owned

14. WILL THIS PROJECT REQUIRE ADDITIONAL FEDERAL, STATE AND/OR LOCAL PERMITS?

NYS DOH  
NYS DOT☒ Yes ☐ No If yes, please list

15. CERTIFICATION:

I hereby affirm that under penalty of perjury that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C. Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than five years, or both, where an applicant knowingly and willfully falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

☒ I hereby authorize the agent named in Number 4, above to submit this application on my behalf.

x 3/9/94

x Allen DickersonSupervisor

APPLICATION FOR PUBLIC WATER SUPPLY PERMIT  
Supplement W-1

Read instructions on reverse side of last sheet before completing this application.  
PLEASE TYPE OR PRINT CLEARLY IN INK.

FOR DEPARTMENT USE ONLY
APPLICATION NUMBER
WSA NUMBER

PROJECT DESCRIPTION

TYPE OF PROJECT

New subsurface source of water supply, by taking/acquiring partial ownership on lease of three private wells

PROJECT PURPOSE

To improve the quantity of water to supply the Elizabethtown Water District

3. THIS PROJECT INVOLVES: (Check appropriate items)

- ☒ ACQUISITION of existing facilities. ☒ INSTALLATION of new facilities. ☐ CHANGES in capacities of existing facilities.  
☐ ABANDONMENT of existing facilities.

For items checked, provide BRIEF description or identification:

Hook-up overflow from 3 existing Artesian wells to a main transmission line - transmit water to C12 station

4. This project will involve the taking of up to 150 gallons of water (per minute) (per day) from Artesian wells  
Figure given represents ☐ increase in taking or ☐ total taking. (proposed source)

5. If certain exhibits are omitted or reduced in scope by incorporation of files on prior applications, identify such applications and exhibits: (If more than 3, use 3 most recent or 3 most significant.)

WSA No.

NAME

EXHIBITS

6. PROJECT AUTHORIZATION

List all exhibits documenting the project authorization, such as resolutions, certificates of incorporation, contracts, referendum results, etc. (See special instructions accompanying this form)

Contracts for use of water from private wells being developed at this time

7. PROJECT JUSTIFICATION

By the act of signing this application, the applicant certifies that each of the following statutory conditions is or will be satisfied, AND that a proper justification for each is given in exhibits attached to this application

- A The plans proposed by the applicant are justified by public necessity
- B The plans take proper consideration of other sources of supply which are or may become available
- C The plans provide for proper and safe construction of all work connected therewith
- D The plans provide for the proper sanitary control of the watershed and proper protection of the supply
- E The plans provide for an adequate water supply
- F The plans are just and equitable to the other municipal corporations and civil divisions of the state affected thereby and to the inhabitants thereof, particular consideration being given to their present and future necessities for sources of water supply
- G The plans make fair and equitable provisions for the determination and payment of any and all damages to persons and property, both direct and indirect, which will result from the acquisition of said lands or the execution of said plans
- H The plans, in accordance with local water resources needs and conditions, include a description of an adequate near term and long range water conservation program.

8. SEQR STATUS:

Unlisted Action

9. SIGNATURE

X Allen Dickerson

10. DATE

X 3/19/94

617.21

## Appendix C

State Environmental Quality Review

SHORT ENVIRONMENTAL ASSESSMENT FORM  
For UNLISTED ACTIONS Only

PROJECT INFORMATION (To be completed by Applicant or Project sponsor)

1. PROJECT SPONSOR Town of Elizabethtown	2. PROJECT NAME Water Source Transmission Line Extension
PROJECT LOCATION: Municipality Elizabethtown	County Essex
PRECISE LOCATION (Street address and road intersections, prominent landmarks, etc., or provide map) NYS RTE 9W - West of the existing Town of Elizabethtown well field	

5. IS PROPOSED ACTION:

☒ New ☐ Expansion ☐ Modification/alteration

6. DESCRIBE PROJECT BRIEFLY:

Hook up of three existing private artesian wells to a proposed transmission main from the wells to the existing chlorination station

7. AMOUNT OF LAND AFFECTED:

Initially 2 acres Ultimately \_\_\_\_\_ acres

8. WILL PROPOSED ACTION COMPLY WITH EXISTING ZONING OR OTHER EXISTING LAND USE RESTRICTIONS?

☒ Yes ☐ No If No, describe briefly

WHAT IS PRESENT LAND USE IN VICINITY OF PROJECT?

☒ Residential ☐ Industrial ☐ Commercial ☐ Agriculture ☒ Park/Forest/Open space ☐ Other

Describe:

10. DOES ACTION INVOLVE A PERMIT APPROVAL, OR FUNDING NOW OR ULTIMATELY FROM ANY OTHER GOVERNMENTAL AGENCY (FEDERAL, STATE OR LOCAL)?

☒ Yes ☐ No If yes, list agency(s) and permit approvals

NYS DEC  
NYS DOT

11. DOES ANY ASPECT OF THE ACTION HAVE A CURRENTLY VALID PERMIT OR APPROVAL?

☐ Yes ☒ No If yes, list agency name and permit/approval

12. AS A RESULT OF PROPOSED ACTION WILL EXISTING PERMIT/APPROVAL REQUIRE MODIFICATION?

☐ Yes ☒ No

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Alon Dickerson, Supervisor, Town of Elizabethtown Date \_\_\_\_\_

X Signature: Allen Packer

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment

OVER

**APPLICATION  
FOR APPROVAL OF PLANS  
FOR PUBLIC WATER SUPPLY IMPROVEMENT**

Town of Elizabethtown	2. Location of Works (C, V, <input checked="" type="checkbox"/> T) Elizabethtown	3. County: Essex	4. Water District (Specific Area Served) Elizabethtown
Nature of Ownership: <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Municipal  <input type="checkbox"/> Industrial         </div> <div> <input type="checkbox"/> Commercial  <input type="checkbox"/> 9 Water Works Corp.         </div> <div> <input type="checkbox"/> 68 Private - Other  <input type="checkbox"/> Private - Institutional  <input type="checkbox"/> 26 Board of Education         </div> <div> <input type="checkbox"/> 1 Authority  <input type="checkbox"/> 19 Federal  <input type="checkbox"/> 20 State         </div> <div> <input type="checkbox"/> 30 Interstate  <input type="checkbox"/> 40 International  <input type="checkbox"/> 18 Indian Reservation         </div> </div>			
Is project related to a concurrent Water Resources Commission application? <div style="float: right;"> <input type="checkbox"/> Yes  <input checked="" type="checkbox"/> No         </div>		7. Drainage Basin: Boquet / Lake Champlain	
If yes, give number _____			
Nature of Project: <input checked="" type="checkbox"/> New Works <input type="checkbox"/> Modifications		9. Is Federal Aid Applied For? <input type="checkbox"/> Yes Agency _____ <input type="checkbox"/> No	
11. Type of Project: <input checked="" type="checkbox"/> Source <input checked="" type="checkbox"/> Transmission		10. Is project related to a Comprehensive Water Study? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Distribution <input type="checkbox"/> Storage <input type="checkbox"/> Other	
REMARKS: Hook-up of three Artesian wells to a transmission main			
12. Estimated Cost of Project. Source \$ <u>100,000</u> Treatment \$ <u>      </u> Distribution \$ <u>      </u>			
13. Population. Total population of service area: _____		% Population actually served: <u>100</u> % Population served affected by project: <u>100</u>	
14. Latest Total Consumption Data (in MGD): Avg. Day _____ Year _____ Max. Day _____ Year _____ Peak Hr. _____ Year _____		15. Approved Plans are to be returned to: <input checked="" type="checkbox"/> Engineer <input type="checkbox"/> Applicant	
16. Name of Design Engineer: <u>Peter E. Gibbs, P.E.</u>		N. Y. State License No. <u>064870-1</u>	
Address <u>26 South Main Street Westport</u>		Telephone No. <u>12993 962-8705</u>	
17. Name and Title of Applicant or Designated Representative: <u>Alan Dickerson, Supervisor</u>			
Mailing Address: <u>Town Hall, Elizabethtown NY 12932</u>			

x Alan Dickerson  
Date

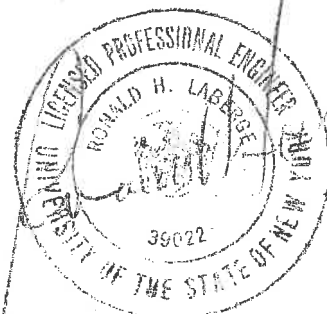
x 3/9/94

Signature of Applicant

NOTE: All applications must be accompanied by plans, specifications and an engineer's report describing the project in detail. The project must first be discussed with the appropriate City, County, District or Regional Public Health Engineer. Signature by a designated representative must be accompanied by a letter of authorization.

207 10/10/76  
VILLAGE OF ELIZABETHTOWN  
ESSEX COUNTY, NEW YORK  
WATER SYSTEM IMPROVEMENTS

VILLAGE OF ELIZABETHTOWN  
ESSEX COUNTY, NEW YORK  
WATER SYSTEM IMPROVEMENTS  
ENGINEERING REPORT  
OCTOBER 6, 1976



VILLAGE OF ELIZABETHTOWN

ESSEX COUNTY, NEW YORK

WATER SYSTEM IMPROVEMENTS

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## GENERAL DESCRIPTION

The Village of Elizabethtown, the county seat of Essex County, is situated in the Adirondack Mountain resort center of New York State. The Village is located in the Town of Elizabethtown, approximately 40 miles southerly of the City of Plattsburgh.

The principal industry of the Village is tourist orientated, most notable of which is the Adirondack Center, Colonial Garden, Nature Walk, Split Rock Falls and the Old Mill Art School. Recreation facilities include the Cobble Hill Golf Course, hunting and fishing, mountain climbing and hiking, swimming and water sports and numerous nearby public campsites.

The Village enjoys excellent highway service, being situated at the crossroads of New York State Route 9 and 9N as shown on Drawing No. 1 "Location Plan". The Greyhound Bus Company and Adirondack Trailways provide regular bus service. Railroad service is provided at Westport by the Delaware and Hudson Railroad and airline service is available at Plattsburgh, Lake Placid and Glens Falls.

There are two hotels and four motels within the Village in addition to accommodations available in private homes.

The major shopping center is located on Water Street and embraces all necessary commercial and service establishments. Churches within the Village are the Catholic, Episcopal, United Congregations, Congregational, Methodist and Baptist.

Within the Village is located the Elizabethtown Community Hospital. Plans are now underway for the construction of a new 60-bed Essex County Infirmary and a new 25-bed Community Hospital. It is expected that the hospital facilities will be a significant source of employment as are the County offices and the modern Central School.

#### GROWTH AND POPULATION:

The first permanent settlement of Pleasant Valley, in which the Village is situated, occurred in the early 1790's by pioneers from Vermont. Fertile soil and great timber stands, together with the potential water power offered by the Bouquet River and "The Branch" attracted further growth. Sawmills, grist mills, tanneries and iron forges soon developed.

In 1875, the Village was incorporated under the laws of New York State. As indicated in Table No. 1 "Population", the population in 1800 was 445. The continuance of the lumber

TABLE NO. 1  
VILLAGE OF ELIZABETHTOWN  
ESSEX COUNTY, NEW YORK  
POPULATION

1880 . . . . .	445
1890 . . . . .	573
1900 . . . . .	491
1910 . . . . .	505
1920 . . . . .	518
1930 . . . . .	636
1940 . . . . .	640
1950 . . . . .	665
1960 . . . . .	779
1970 . . . . .	607
1975 (estimated) . . . . .	750

industry and its location on the major north-south route was responsible for the increase in population in 1890. Construction of the railroad along the Lake shore in the 1890's and corresponding shift to rail transportation resulted in the decline of Village population to 491 in 1900. The 1920-30 decade, during which the population increased to 636, was the age of the of the "permanent" summer resident with their attendant staffs and service requirements. The depression and change in the social order minimized this activity and the Village population grew to only 665 by 1950 . . . due principally to the re-settling of rural residents in the Village. The subsequent increase in population to 779 by 1960 is due to the re-vitalization of the tourist industry, together with progressive policies of the Village Board, business and social leaders. The 1970 census data indicating a population of 607 has since been overcome by new employment opportunities in the Village with a current population estimated at 750.

It is estimated that the permanent resident population will be 1,100 in the year 2020. This prediction is dependent upon continued progressive policies of Village officials and Chamber of Commerce, the continuance of the Essex County facilities in the Village, together with the application of effective steps to attract and hold both residential and commercial growth.

The design of water facilities, as with other municipal works, must be sufficient to serve peak usage. Thus, an evaluation of summer population is necessary. Although no actual count is available, it has been estimated that the present summer population is approximately 900-950. In our prediction of future population, we have allowed for an additional 200 summer residents (or equivalent tourists) making a total combined permanent and summer population of approximately 1,300 in the year 2020.

#### CLIMATOGRAPHY:

Elizabethtown and vicinity is in the cooler part of the temperate zone and is marked by comparatively short mild summers and rather severe long winters. The mean temperature for the year is 45°F with a maximum mean monthly temperature, in July, of 84°F. The minimum mean monthly temperature is 8°F and occurs in January. Maximum and minimum temperatures of record are 100°F in July and -33°F in January. These minimum temperatures are a factor in determining the required capacity of units to treat the solids removed from sewage. The maximum temperatures are a factor in determining the waste assimilation capacity of the receiving waters.

The precipitation is fairly well distributed throughout the year, being slightly greater during the last half of the year. Total annual precipitation averages 34-inches. From year to year, there is some variation in the amount of precipitation with occasional wet periods in the growing season and in some years, short periods of drought. The mean annual snowfall is approximately 70-inches and is usually sufficient to form a permanent cover over the ground from December to March, this preventing deep penetration of frost.

#### GENERAL GEOLOGY AND SOIL CONDITIONS:

The Village of Elizabethtown and surrounding area is underlain by a metamorphic rock of anorthosite and anorthositic gneiss. These rocks are the original Adirondack Mountain base material resulting from a huge upswelling of molten rock, approximately 700 to 800 million years ago. This rock is extremely durable as evidenced by the difficulty encountered in rock excavation for the new New York State Route 9N on upper Water Street.

The area was covered by a continental glacier which scraped the mountains and ground up much of the bed rock into glacial till. This till is a heterogeneous mixture of stones, gravel, sands, silts and some clays. It is this glacial till

which covers most bedrock in the area, the exception being the huge sand deltas which underlie the major portion of the Village. This deposit caused by the melting of the glacier some 10-15,000 years ago resulted when large volumes of water carrying gravels and sands rushed to lower elevation.

The principal soil type classification overlaying the Village is designated as being of the Hinckley Association. This association is composed of soils somewhat excessively to well drained material. The plow layers is a grayish brown sand and often gravelly. This soil is strongly acid, very low in available plant nutrients and droughty.

Data obtained from the soils investigations over the line of proposed sewers confirm the preponderance of sandy and gravelly soils. The soils encountered have been determined to be adequate for good pipe support using conventional bedding procedures. Due to the instability of the sand materials, wide trenches will be required to assure safety during construction. Protective sheeting will be required wherever narrow trenches are necessary, due either to the proximity of existing structures or other facilities.

Ground water does not appear to be a major problem in the construction of the collecting sewers as it was noted above

the ten (10) feet depth only once. Installation of the intercepting sewers, however, near the river will require pumping and dewatering to maintain trench stability and to facilitate pipe installation. It should be noted the soil borings were taken in September and may not represent ground water conditions which would be expected at the time of construction.

Soil borings for the proposed sewage treatment plant were taken behind the Village garage. Although, the site was subsequently moved to comply with the recommendations of the New York State Department of Health, the subsurface data collected should also be applicable to the revised site. This assumption should, however, be verified before proceeding with construction. The compact sand and gravel material encountered will provide an excellent foundation structure. At the time of the soil investigations, the ground water table was found to be at elevation 530-1. Inasmuch as the sub-soil is highly porous, the ground water table will be directly influenced by the stage of the river. In designing the proposed facility, we have held the lowest invert to elevation 531 so as to preclude the necessity of costly dewatering. The influent pumping station must, however, be installed below the ground water table and special

consideration has been given to the selection and design of this station.

Allowance has, therefore, been made in the design and cost estimated for incorporating sheeting, shoring and pumping in critical areas. The need for such facilities can be positively determined by excavation during construction. It is advisable to anticipate these additional costs at this time and most particularly, to include in the contract specifications provisions for separate items covering the sheeting, shoring and pumping. In the event that actual excavation indicates that sheeting or shoring is required only in part, payment, therefor would be made accordingly. Data obtained from the soil investigations is included in the appendix under the heading "Soil and Foundation Study".

#### WATER SUPPLY:

The water supply of the Village is obtained from springs located 4000 feet west of the Village, immediately adjacent to New York State Route 9N on the watershed of "The Branch". A number of spring houses and small dams have been constructed to intercept the ground water flow. The water is of high quality with an alkalinity of 56 ppm and a hardness of 54 ppm. The Village controls the major portion of the watershed

which is heavily wooded and uninhabited. A small tributary of "The Branch" serves as an auxiliary supply of water and is chlorinated before delivery to the water distribution system.

The water works system was originally installed in 1876 by the Elizabethtown Water Company. Water from the springs is delivered through a 6-inch cast iron main by gravity to a 140,000 gallon wood covered concrete distribution reservoir situated on high ground near the most westerly end of the Village. Water is then transmitted to Village consumers through a system of 2, 4 and 6-inch mains.

In terms of adequacy of supply, it is reported that the yield of the Village water system far exceeds the water consumption demands of Village users. In terms of fire protection, however, a large scale improvement to the storage capacity and size of mains will be required by the New York Fire Insurance Rating Organization if optimum fire insurance rates are to be continued. These rates are to be increased unless fire flows are substantially increased.

#### WATER CONSUMPTION:

Recent analyses indicate an average usage of 65,000 gallons per day. It should be noted, however, that individual

monthly, weekly or daily consumption is variable. Peak monthly usage occurs in July and August, corresponding to the tourist season, which is marked by heat and drought during which larger quantities of water are drawn for lawns, air conditioning and other uses. Peak monthly consumption is estimated to approximate 130% of the average.

The per capita water consumption, based upon an average daily usage of 65,000 gallons and a population of 800, (including the Town Water District #2 to the south of the Village) is computed to be 81 gallons per day. This quantity includes the Essex County facilities but does not include leakage from the mains, flushing and other municipal uses but does include the golf course non-consumptive use. The per capita consumption is low and represents conservative water use on the part of the Village residents with minimal waste. Normal per capita consumption in similar communities would approximate 100 gallons per day and current designs are being based on higher consumption - in some cases, 150 gallons per day.

Contributing factors to the low per capita usage are: (1) the installation of meters on all water services in the Village; (2) repair of leaks immediately upon their discovery.

#### PROPOSED FACILITIES:

The proposed water facilities to be constructed under the

current program are as follows:

All existing 4" and 6" water mains will be replaced by new 8" water mains.

It is proposed to utilize cement line cast iron (or ductile) pipe with "push on" joints. All water mains will be installed with a minimum ground cover of five (5) feet, so as to preclude the possibility of freezing. All the distribution mains will be a 8 inch diameter. This will meet the "Water System Design Standard" set by Insurance Services of New York.

Hydrants and main line valves will be installed throughout the length of the distribution mains and elsewhere in accordance with the recommendations of the New York State Insurance Service Office, to provide adequate fire protection and thus insurance premium savings.

The purpose of the above is as follows:

- (1) To increase the capacity of the distribution system for domestic use;
- (2) To increase fire protection.

ESTIMATE OF COST:

The total estimated cost of the proposed facilities identified

herein is in the amount of \$745,000. The details of this estimate are more particularly shown on Table No. 2 "Preliminary Estimate of Cost". These estimates are based upon 1976-77 construction.

GOVERNMENTAL ASSISTANCE:

The proposed project is eligible for financial grant assistance under the Federal Public Works Employment Act, application for which should be made at this time.

The Economic Development Administration of the U. S. Department of Commerce administers this program and provides 100% grant-in-aid. This program, for which \$2,000,000,000 has been appropriated is to be expended in 1976 and is directed at alleviating unemployment, either as a temporary expedient or as developing industrial and/or long term economic growth.

In the event that a grant is not received under this program, a reduced project should be undertaken consistent with available Village funds. In this eventuality grant assistance should be sought through the "normal" Economic Development Administration grant program and through the Farmers Home Administration.

FUTURE IMPROVEMENT:

Implementation of the construction program involving the storage tank, water supply and treatment improvement is planned for 1977-78, subject to receipt of grant funds from the Department of Housing and Urban Development. Applications for such construction was made in 1976. Funding was not approved, but the Village was advised that funding was likely in 1977, due to the impact of the new federal prison.

TABLE NO. 2

VILLAGE OF ELIZABETHTOWN

ESSEX COUNTY, NEW YORK

WATER SYSTEM IMPROVEMENT

CONTRACT NO. 1

PRELIMINARY ESTIMATE OF COST

<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
8" C.I. C.L. Water Main	30,000 L. F.	12.00	\$360,000
6" C.I. C. L. Water Main	300 L. F.	10.00	3,000
8" Gate Valves	60 Ea.	350.00	21,000
6" Gate Valves	60 Ea.	250.00	15,000
Hydrants	60 Ea.	600.00	36,000
R.O.B. Gravel	500 C.Yd.	5.00	2,500
Type 'D' Gravel	2,000 C.Yd.	5.00	10,000
Top Course Asphaltic Pavement	1,000 S.Yd.	3.00	3,000
Binder Course Asphaltic Pavement	1,000 S.Yd.	3.00	3,000
Base Course Asphaltic Pavement	500 S.Yd.	5.00	2,500
Rock Excavation		L.S.	25,000
Highway Crossing		L.S.	20,000
Stream Crossing		L.S.	15,000
Timber Sheet Left In Place	1,000 S.Ft.	1.00	1,000
Class 'A' Concrete	50 C.Yd.	75.00	3,750
Class 'C' Concrete	50 C.Yd.	50.00	2,500
Concrete Sidewalks	500 S.Yd.	10.00	5,000
12" C.M.P.	200 C.Ft.	10.00	2,000
18" C.M.P.	200 C.Ft.	12.00	2,400
House Services	200 Ea.	150.00	30,000
Maintenance and Protection Of Traffic		L.S.	22,000
Miscellaneous			35,350
		SUB TOTAL	\$620,000
Engineering, Legal and Administrative Costs			125,000
		TOTAL	\$745,000

## **Exhibit D**

### **District Consolidation Documents**

At a regular meeting of the Town Board of the Town of Elizabethtown, Essex County, New York, held at the Town Hall, in Elizabethtown, New York, in said Town, on the 16th day of October, 2001, at 7:00 o'clock P.M., Prevailing Time.

PRESENT:

Philip A. Watkins  
Supervisor

Joseph E. Martin  
Councilman

John A. Brown  
Councilman

William F. Kelly  
Councilman

Allen Fisherson  
Councilman

\_\_\_\_\_  
In the Matter  
of  
The Consolidation of Water Districts Nos. 2  
and 3 in the Town of Elizabethtown, Essex  
County, New York  
\_\_\_\_\_

ORDER CALLING  
PUBLIC HEARING

WHEREAS, the Town Board of the Town of Elizabethtown, Essex County, New York, has duly caused to be prepared a map showing the boundaries of a proposed Consolidated Water District in said Town, consolidating present Water No. 2 and Water No. 3 to be known as the Consolidated Water District in the Town of Elizabethtown (hereinafter, the "Consolidated Water

District” or simply, the “District”) a general plan to serve said District, and a report of the proposed method of operation thereof; and

WHEREAS, said map, plan and report, including an estimate of the cost, were prepared by Dodson & Associate Consulting Engineer PLLC, a competent engineer duly licensed by the State of New York, and have been filed in the office of the Town Clerk of said Town, where the same are available during regular office hours for examination by any persons interested in the subject matter thereof, including estimate of cost; and

WHEREAS, the boundaries of said District shall be as described in Exhibit A attached hereto and hereby incorporated herein; and

WHEREAS, the proposed method of financing the cost of future improvements in said District consists of the issuance of serial bonds of said Town maturing in annual installments over a period not exceeding forty years, which will be payable in the first instance from water consumption fees and the annual assessment on the taxable real property in said District at the same time and in the same manner as other Town charges in the manner provided by law, of an amount sufficient to pay the principal and interest on said bonds as the same become due, but if not paid from such source, all the taxable real property in said Town shall be subject to the levy of ad valorem taxes without limitation as to rate or amount sufficient to pay the principal of and interest on said bonds as the same shall become due and payable; and

WHEREAS, the proposed basis of the future assessment of all costs of operation and maintenance also shall remain on an ad valorem basis as is presently the case in Water District Nos. 2 and 3; and

WHEREAS, Water District No. 2 and Water District No. 3 each have no debt presently outstanding and it is proposed that the property of Water District No. 2 and Water District No. 3 shall, upon consolidation thereof, become the property of the Consolidated Water District; and

WHEREAS, it is further desired, pursuant to Section 206-a of the Town Law that all expenses of said Consolidated Water District, including all extensions heretofore or hereafter established, shall be a charge against the entire area of said Consolidated Water District, as extended; and

WHEREAS, said consolidation and the future capital project for said Consolidated Water District has been determined to be an Unlisted Action pursuant to the regulations of the New York State Department of Environmental Conservation promulgated pursuant to the State Environmental Quality Review Act, the implementation of which as proposed, the Town Board has determined will not result in any significant environmental effects; and

WHEREAS, it is now desired to call a public hearing upon the question of the consolidation of said Water District No. 2 and 3, all pursuant to Sections 206 and 206-a of the Town Law; NOW, THEREFORE, BE IT

ORDERED, by the Town Board of the Town of Elizabethtown, Essex County, New York, as follows:

Section 1. A meeting of the Town Board of the Town of Elizabethtown, Essex County, New York, shall be held at the Town Hall, Court Street, in Elizabethtown, New York, in said Town, on the ~~16th~~<sup>27th</sup> day of ~~October~~<sup>NOVEMBER</sup>, 2001, at 7:00 o'clock P.M., Prevailing Time, for the purpose of holding a public hearing to consider the consolidation of Water Districts Nos. 2 and 3 in said Town as described in the preambles hereof, to be known as to the Consolidated Water District, and to consider the map, plan and report filed in relation thereto, and to hear all

persons interested in the subject matter thereof concerning the same, and for such other action on the part of said Town Board as may be required by law or shall be proper in the premises.

Section 2. It is hereby determined that all expenses of the Consolidated Water District, including all extensions heretofore or hereafter established, shall be a charge against the entire area of said Consolidated Water District, as extended.

Section 3. The Town Clerk is hereby authorized and directed to cause a copy of this order to be published once in Valley News, the official newspaper of said Town, the first publication thereof to be not less than ten nor more than twenty days before the day set herein for the hearing as aforesaid, and said Town Clerk shall also cause a copy thereof to be posted on the sign-board of the Town maintained pursuant to subdivision 6 of Section 30 of the Town Law not less than ten nor more than twenty days before the day set for the hearing as aforesaid.

Section 3. This order shall take effect immediately.

<u>Philip G. Hutchins</u>	VOTING	<u>Aye</u>
<u>Joseph E. Martin</u>	VOTING	<u>Aye</u>
<u>John G. Brien</u>	VOTING	<u>Aye</u>
<u>William Farrell</u>	VOTING	<u>Aye</u>
<u>Allen Dickerson</u>	VOTING	<u>Aye</u>

The resolution was thereupon declared duly adopted.

**Exhibit A**

Boundaries of Proposed  
Consolidated Water District in the  
Town of Elizabethtown, Essex County, New York  
Consolidating  
Water Districts Nos. 2 and 3

**Exhibit A**  
**Boundaries of Proposed**  
**Consolidated Water District in the**  
**Town of Elizabethtown, Essex County, New York**  
**Consolidating**  
**Water District Nos. 2 and 3**

**Town of Elizabethtown**  
**Water District No. 2 Description**

The boundary of Water District No. 2 was compiled from a property line survey and from State Highway No. 5183 (US Route 9) maps, Contract RC 69-72, Sheets 15 to 18 from Base Line Station 438+00 to 487+00. Water District No. 2 can be general described as extending 500 feet easterly and 500 feet westerly of said Base Line from the southerly boundary of the former Village of Elizabethtown, Base Line Station 504+20, to Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patent), Base Line Station 474+56, thence extending 500 feet easterly and 250 feet westerly of said Base Line from Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patent), Base Line Station 474+56, to the end of Water District No. 2, Base Line Station 448+78.

AND

**Town of Elizabethtown**  
**Water District No. 3 Description**

The boundary of Water District No. 3 consists of the area described as the former Village of Elizabethtown as dissolved in January 1, 1981 and as shown in map, plan and report documents which are on file in the office of the Town Clerk, where the same are available during regular office hours for examination by any persons interested in the subject matter.

STATE OF NEW YORK     )  
  ) ss.:  
COUNTY OF ESSEX     )

I, the undersigned Clerk of the Town of Elizabethtown, Essex County, New York (the "Issuer"), DO HEREBY CERTIFY:

1. That a meeting of the Issuer was duly called, held and conducted on the 16th day of October, 2001.
2. That such meeting was a **special** regular (circle one) meeting.
- 3) That attached hereto is a proceeding of the Issuer which was duly adopted at such meeting by the Board of the Issuer.
- 4) That such attachment constitutes a true and correct copy of the entirety of such proceeding as so adopted by said Board.
- 5) That all members of the Board of the Issuer had due notice of said meeting.
- 6) That said meeting was open to the general public in accordance with Section 103 of the Public Officers Law, commonly referred to as the "Open Meetings Law".
- 7) That notice of said meeting (the meeting at which the proceeding was adopted) was given PRIOR THERETO in the following manner:

**PUBLICATION** (here insert newspaper(s) and date(s) of publication)

Valley News  
October 23, 2001

**POSTING** (here insert place(s) and date(s) of posting)

Valley News  
3rd. Tuesday of each month

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Issuer  
this 16th day of October, 2001.



Town Clerk

(CORPORATE  
SEAL)

NOTICE OF ADOPTION OF ORDER CALLING A PUBLIC HEARING  
ON THE CONSOLIDATION OF  
WATER DISTRICTS NOS. 2 AND 3 IN THE TOWN OF ELIZABETHTOWN

PLEASE TAKE NOTICE that the Town Board of the Town of Elizabethtown, Essex  
County, New York on the 16th day of October, 2001, duly adopted the Order  
published herewith calling a Public Hearing on the Consolidation of Water District Nos. 2 and 3.

Dated: Elizabethtown, New York  
October 16, 2001



Town Clerk

AFFIDAVIT OF POSTING

STATE OF NEW YORK     )  
                                  ) ss.:  
COUNTY OF ESSEX     )

I, the undersigned Clerk of the Town of Elizabethtown, Essex County, New York, depose and say:

That on the 16th day of October, 2001, I caused to be posted on the official signboard maintained by me pursuant to subdivision 6 of Section 30 of the Town Law, an order, certified by me, duly adopted by said Town Board on the 16th day of October, 2001. A true and correct copy of such order in the exact form in which the same was actually posted is attached hereto and made a part hereof.

  
\_\_\_\_\_  
Town Clerk

Subscribed and sworn to before me  
this 18<sup>th</sup> day of October, 2001.

  
\_\_\_\_\_  
Notary Public

MARILYN A. SCHULTZ  
Notary Public, State of New York  
Qualified in Essex County  
No. 4906687  
Commission Expires January 25, 2002

ORDER CALLING PUBLIC  
Allen Dickerson, Councilman  
William Farrell, Councilman  
John G. Breen, Councilman  
Joseph E. Martin, Councilman  
Philip G. Hutchins, Supervisor  
PRESEN  
at 7:00 o'clock P. M.  
Prevailing Time.

AFFIDAVIT OF PUBLICATION  
State of New York } ss:  
COUNTY OF ESSEX

SHANNON CHRISTIAN

being duly sworn says that SHE resides in the Town of  
WESTPORT County of ESSEX  
New York, and that SHE is the Agent of the

VALLEY NEWS

a weekly newspaper published at ELIZABETHTOWN  
in the County of ESSEX, and that the notice,  
a printed copy of which is hereto attached, was printed in  
said VALLEY NEWS on the following  
dates: 11/14

Signed this 15<sup>th</sup> day of  
November 20 01  
Shannon Christian  
Agent

Sworn to before me this 15<sup>th</sup> day of  
November 20 01  
Gayle M. Alexander  
Notary Public

GAYLE M. ALEXANDER  
Notary Public, State of New York  
No. 01AL4977709  
Qualified in Essex County  
Commission Expires 4/1/03

AT A REGULAR MEETING of the Town Board of the Town of Elizabethtown, Essex County, New York, held at the Town Hall, in Elizabethtown, New York, in said Town, on the 16th day of October 2001.

at 7:00 o'clock P. M. Prevailing Time.

PRESENT: Philip G. Hutchins, Supervisor  
Joseph E. Martin, Councilman  
John G. Brien, Councilman  
William Farrell, Councilman  
Allen Dickerson, Councilman

#### ORDER CALLING PUBLIC HEARING

In the Matter of The Consolidation of Water Districts Nos. 2 and 3 in the Town of Elizabethtown, Essex County, New York

WHEREAS, the Town Board of the Town of Elizabethtown, Essex County, New York, has duly caused to be prepared a map showing the boundaries of a proposed Consolidated Water District in said Town, consolidating present Water No. 2 and Water No. 3 to be known as the Consolidated Water District in the Town of Elizabethtown (hereinafter, the "Consolidated Water District" or simply, the "District") a general plan to serve said District, and a report of the proposed method of operation thereof; and

WHEREAS, said map, plan and report, including an estimate of the cost, were prepared by Dodson & Associate Consulting Engineer PLLC, a competent engineer duly licensed by the State of New York, and have been filed in the office of the Town Clerk of said Town, where the same are available during regular office hours for examination by any persons interested in the subject matter thereof, including estimate of cost; and

WHEREAS, the boundaries of said District shall be as described in Exhibit A attached hereto and hereby incorporated herein; and

WHEREAS, the proposed method of financing the cost of future improvements in said District consists of the issuance of serial bonds of said Town maturing in annual installments over a period not exceeding forty years, which will be payable in the first instance from water consumption fees and the annual assessment on the taxable real property in said District at the same time and in the same manner as other Town charges in the manner provided by law, of an amount sufficient to pay the principal and interest on said bonds as the same become due, but if not paid from such source, all the taxable real property in said Town shall be subject to the levy of ad valorem taxes without limitation as to rate or amount sufficient to pay the principal of and interest on said bonds as the same shall become due and payable; and

WHEREAS, the proposed basis of the future assessment of all costs of operation and maintenance also shall remain on an ad valorem basis as is presently the case in Water District Nos. 2 and 3; and

WHEREAS, Water District No. 2 and Water District No. 3 each have no debt presently outstanding and it is proposed that the property of Water District No. 2 and Water District No. 3 shall, upon consolidation thereof, become the property of the Consolidated Water District; and

WHEREAS, it is further desired, pursuant to Section 206-a of the Town Law that all expenses of said Consolidated Water District, including all extensions heretofore or hereafter established shall be a charge against the entire area of said Consolidated Water District, as extended.

Consolidated Water District, including all extensions heretofore or hereafter established shall be a charge against the entire area of said Consolidated Water District, as extended.

Section 3. The Town Clerk hereby authorized and directed to cause a copy of this order to be published once in Val News, the official newspaper of said Town, the first publication thereof to be not less than nor more than twenty days before the day set herein for hearing as aforesaid, and said Town Clerk shall also cause a copy thereof to be posted on the sign-board of the Town maintained pursuant to subsection 6 of Section 30 of the Town Law not less than ten nor more than twenty days before the day set for the hearing aforesaid.

Section 3. This order shall take effect immediately.

Philip G. Hutchins VOTING Aye  
Joseph E. Martin VOTING Aye

John G. Brien VOTING Aye  
William Farrell VOTING Aye

Allen Dickerson VOTING Aye  
The resolution was thereupon declared duly adopted.

Exhibit A  
Boundaries of Proposed Consolidated Water District

the Town of Elizabethtown, Essex County, New York

Consolidating Water Districts Nos. 2 and 3

Exhibit A  
Boundaries of Proposed Consolidated Water District

the Town of Elizabethtown, Essex County, New York

Consolidating Water Districts Nos. 2 and 3

Town of Elizabethtown Water District No. 2 Description

The boundary of Water District No. 2 was compiled from property line survey and from State Highway No. 5183 (U.S. Route 9) maps, Contract No. 69-72, Sheets 15 to 18 from Base Line Station 438+00 to 487+00. Water District No. 2 can be generally described as extending 500 feet easterly and 500 feet westerly of said Base Line from the southerly boundary of the former Village of Elizabethtown. Base Line Station 504+20, to Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patient), Base Line Station 474+56, thence extending 500 feet easterly and 250 feet westerly of said Base Line from Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patient), Base Line Station 474-56, to the end of Water District No. 2, Base Line Station 448-78.

AND

Town of Elizabethtown Water District No. 3 Description

The boundary of Water District No. 3 consists of the area described as the former Village of Elizabethtown as dissolved in January 1, 1981 and as shown in map, plan and report documents which are on file in the office of the Town Clerk, where the same are available during regular office hours for examination by any persons interested in the subject matter.

VN-11/14/01-1TC-38058

WHEREAS, it is further desired, pursuant to Section 206-a of the Town Law that all expenses of said Consolidated Water District, including all extensions heretofore or hereafter established, shall be a charge against the entire area of said Consolidated Water District, as extended; and

WHEREAS, said consolidation and the future capital project for said Consolidated Water District has been determined to be an Unlisted Action pursuant to the regulations of the New York State Department of Environmental Conservation promulgated pursuant to the State Environmental Quality Review Act, the implementation of which as proposed, the Town Board has determined will not result in any significant environmental effects; and

WHEREAS, it is now desired to call a public hearing upon the question of the consolidation of said Water District No. 2 and 3, all pursuant to Sections 206 and 206-a of the Town Law.

NOW, THEREFORE, BE IT ORDERED, by the Town Board of the Town of Elizabethtown, Essex County, New York, as follows:

Section 1. A meeting of the Town Board of the Town of Elizabethtown, Essex County, New York, shall be held at the Town Hall, Court Street, in Elizabethtown, New York, in said

Town, on the 27th day of November, 2001, at 7:00 o'clock P.M., Prevailing Time, for the purpose of holding a public hearing to consider the consolidation of Water Districts Nos. 2 and 3 in said Town as described in the preambles hereof, to be known as the Consolidated Water District, and to consider the map, plan and report filed in relation thereto, and to hear all persons interested in the subject matter thereof concerning the same, and for such other action on the part of said Town Board as may be required by law or shall be proper in the premises.

Section 2. It is hereby determined that all expenses of the

RESOLUTION DATED FEBRUARY 19, 2002.

A RESOLUTION APPROVING THE CONSOLIDATION OF WATER DISTRICT NOS. 2 AND 3 TO BE KNOWN AS THE CONSOLIDATED WATER DISTRICT AND THE IMPROVEMENTS IN CONNECTION THEREWITH.

WHEREAS, the Town Board of the Town of Elizabethtown, Essex County, New York, has duly caused to be prepared a map showing the boundaries of a proposed Consolidated Water District in said Town, to be known as the Consolidated Water District, and a plan and report in connection therewith; and

WHEREAS, said map, plan and report were prepared by Dodson & Associate, Consulting Engineers, PLLC, competent engineers, duly licensed by the State of New York, and have been filed in the office of the Town Clerk of said town, where the same is available during regular office hours for examination by any persons interested in the subject matter thereof; and

WHEREAS, said establishment has been determined to be an Unlisted Action pursuant to the regulations of the New York State Department of Environmental Conservation promulgated pursuant to the State Environmental Quality Review Act, the implementation of which as proposed, the Town Board has determined will not result in any significant environmental effects; and

WHEREAS, an order was duly adopted by said Town Board on October 16, 2001, reciting a description of the boundaries of said proposed the Consolidated Water District, the improvements proposed, the maximum amount proposed to be expended for said improvements, the proposed method of financing to be employed, the fact that said petition, map, plan and report were on file in the Town Clerk's office for public inspection and specifying the 27th day of November, 2001, at 7:00 o'clock P.M., local time, at the Town Hall, in Elizabethtown, New York, in said Town, as the time when and the place where said Town Board would meet for the

purpose of holding a public hearing to consider the establishment of said Consolidated Water District and said map, plan and report filed in relation thereto and to hear all persons interested in the subject thereof concerning the same; and

WHEREAS, notice of the aforesaid public hearing was duly published and posted in the manner and within the time prescribed by Section 209-d of the Town Law, and proof of publication and posting have been duly presented to said Town Board; and

WHEREAS, said public hearing was duly held at the time and place in said order as aforesaid, at which all persons desiring to be heard were duly heard; and

WHEREAS, said Town Board has duly considered said map, plan and report and the evidence given at said public hearing; and

WHEREAS, said Town Board has adopted a resolution on FEBRUARY 19<sup>th</sup>, 2002 making the findings and determinations required pursuant to Section 209-e(1) of the Town Law; NOW, THEREFORE, BE IT

RESOLVED, by the Town Board of the Town of Elizabethtown, Essex County, New York, as follows:

Section 1. The establishment of Consolidated Water District in the Town of Elizabethtown, Essex County, New York, to be bounded and described as hereafter set forth, including all extensions heretofore or hereafter established, at a maximum estimated cost of \$0, is hereby approved. Future financings of improvements shall be by the issuance of serial bonds of said Town maturing in annual installments over a period not exceeding 40 years, which will be payable in the first instance from annual consumption fees and an annual levy on all the taxable real property in said District at the same time and manner as other Town charges as provided by law of an amount sufficient to pay the principal and interest on said bonds as the same become due, but if

not paid from such source, all the taxable real property in said Town shall be subject to the levy of ad valorem taxes without limitation as to rate or amount sufficient to pay the principal of and interest on said bonds as the same shall become due and payable. The proposed basis of the future assessment of all costs of operation and maintenance also shall remain on an ad valorem basis as is presently the case in Water District Nos. 2 and 3.

Section 2. Said District shall be bounded and described as set forth in Exhibit A attached hereto and hereby made a part hereof.

Section 3. The Town Clerk shall, within ten (10) days after this resolution takes effect, being the date thirty days from the date hereof should no petition for referendum be filed relating hereto, file certified copies of this resolution in duplicate in the office of the State Department of Audit and Control at Albany, New York.

Section 4. This resolution is adopted subject to permissive referendum.

The question of the adoption of the foregoing resolution was duly put to a vote on roll call, which resulted as follows:

<u>James E. Minto</u>	VOTING <u>Aye</u>
<u>Paul H. Davis</u>	VOTING <u>Aye</u>
<u>Allen D. Brown</u>	VOTING <u>Aye</u>
<u>Harold M. Baker</u>	VOTING <u>Aye</u>
_____	VOTING _____

The resolution was thereupon declared duly adopted.

\* \* \*

Exhibit A

*Boundaries of Proposed*

*Consolidated Water District*

*in the Town of Elizabethtown, Essex County, New York*

**Exhibit A**  
**Boundaries of Proposed**  
**Consolidated Water District in the**  
**Town of Elizabethtown, Essex County, New York**  
**Consolidating**  
**Water District Nos. 2 and 3**

**Town of Elizabethtown**  
**Water District No. 2 Description**

The boundary of Water District No. 2 was compiled from a property line survey and from State Highway No. 5183 (US Route 9) maps, Contract RC 69-72, Sheets 15 to 18 from Base Line Station 438+00 to 487+00. Water District No. 2 can be general described as extending 500 feet easterly and 500 feet westerly of said Base Line from the southerly boundary of the former Village of Elizabethtown, Base Line Station 504+20, to Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patent), Base Line Station 474+56, thence extending 500 feet easterly and 250 feet westerly of said Base Line from Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patent), Base Line Station 474+56, to the end of Water District No. 2, Base Line Station 448+78.

AND

**Town of Elizabethtown**  
**Water District No. 3 Description**

The boundary of Water District No. 3 consists of the area described as the former Village of Elizabethtown as dissolved in January 1, 1981 and as shown in map, plan and report documents which are on file in the office of the Town Clerk, where the same are available during regular office hours for examination by any persons interested in the subject matter.

## CERTIFICATION FORM

STATE OF NEW YORK                    )  
  ) ss.:  
COUNTY OF ESSEX                    )

I, the undersigned Clerk of the Town of Elizabethtown, Essex County, New York (the "Issuer"), DO HEREBY CERTIFY:

- 1) That a meeting of the Issuer was duly called, held and conducted on the 19th day of February, 2002.
- 2) That such meeting was a special regular (circle one) meeting.
- 3) That attached hereto is a proceeding of the Issuer which was duly adopted at such meeting by the Board of the Issuer.
- 4) That such attachment constitutes a true and correct copy of the entirety of such proceeding as so adopted by said Board.
- 5) That all members of the Board of the Issuer had due notice of said meeting.
- 6) That said meeting was open to the general public in accordance with Section 103 of the Public Officers Law, commonly referred to as the "Open Meetings Law".
- 7) That notice of said meeting (the meeting at which the proceeding was adopted) was given PRIOR THERETO in the following manner:

**PUBLICATION** (here insert newspaper(s) and date(s) of publication)

*VALLEY NEWS  
FEBRUARY 26, 2002*

**POSTING** (here insert place(s) and date(s) of posting)

*VALLEY NEWS  
3<sup>rd</sup> Tuesday of each month*

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Issuer this 19<sup>th</sup> day of February, 2002.

*Lo Ann E. Leach*

Town Clerk

(CORPORATE SEAL)

At a regular meeting of the Town Board of the Town of Elizabethtown, Essex County, New York, held at the Town Hall, in Elizabethtown, New York, in said Town, on the 19th day of February, 2002, at 7:00 o'clock P.M., Prevailing Time.

The meeting was called to order by SUPERVISOR NOEL HERDINER, and upon roll being called, there were

PRESENT: NOEL HERDINER - SUPERVISOR  
JOSEPH MARTIN - COUNCILMAN  
PATRICK (HARVEY) JOYNT - COUNCILMAN  
ALLEN DICKERSON - COUNCILMAN

ABSENT: JOHN BRIEN - COUNCILMAN

The following resolution was offered by Councilman DICKERSON, who moved its adoption, seconded by Councilman MARTIN, to-wit:

RESOLUTION DATED FEBRUARY 19, 2002.

A RESOLUTION MAKING CERTAIN DETERMINATIONS IN RELATION TO AND FINDING IT TO BE IN THE PUBLIC INTEREST TO CONSOLIDATE WATER DISTRICTS NOS. 2 AND 3 IN THE TOWN OF ELIZABETHTOWN, ESSEX COUNTY, NEW YORK, TO BE KNOWN AS THE CONSOLIDATED WATER DISTRICT.

WHEREAS, the Town Board of the Town of Elizabethtown, Essex County, New York, has duly caused to be prepared a map showing the boundaries of a proposed Consolidated Water District in said Town, to be known as the Consolidated Water District, and a plan and report in connection therewith; and

WHEREAS, said map, plan and report were prepared by Dodson & Associate, Consulting Engineers, PLLC, competent engineers, duly licensed by the State of New York, and have been filed in the office of the Town Clerk of said town, where the same is available during regular office hours for examination by any persons interested in the subject matter thereof; and

WHEREAS, said establishment thereof has been determined to be an Unlisted Action pursuant to the regulations of the New York State Department of Environmental Conservation promulgated pursuant to the State Environmental Quality Review Act, the implementation of which as proposed, the Town Board has determined will not result in any significant environmental effects; and

WHEREAS, an order was duly adopted by said Town Board on October 16, 2001, reciting a description of the boundaries of said proposed Consolidated Water District, the improvements proposed, the maximum amount proposed to be expended for said improvements, the proposed method of financing to be employed, the fact that said petition, map, plan and report were on file in the Town Clerk's office for public inspection and specifying the 27th day of November, 2001, at 7:00 o'clock P.M., local time, at the Town Hall, in Elizabethtown, New

York, in said Town, as the time when and the place where said Town Board would meet for the purpose of holding a public hearing to consider the establishment of said Consolidated Water District and said map, plan and report filed in relation thereto and to hear all persons interested in the subject thereof concerning the same; and

WHEREAS, notice of the aforesaid public hearing was duly published and posted in the manner and within the time prescribed by Section 209-d of the Town Law, and proof of publication and posting have been duly presented to said Town Board; and

WHEREAS, said public hearing was duly held at the time and place in said order as aforesaid, at which all persons desiring to be heard were duly heard; and

WHEREAS, said Town Board has duly considered said map, plan and report and the evidence given at said public hearing; NOW, THEREFORE, BE IT

RESOLVED, by the Town Board of the Town of Elizabethtown, Essex County, New York, as follows:

Section 1. Upon the evidence given at the aforesaid public hearing, it is hereby found and determined as follows:

- a) The notice of hearing was published and posted as required by law and is otherwise sufficient;
- b) All the property and property owners within said proposed Consolidated Water District, as described in the preambles hereof, are benefited thereby;
- c) All the property and property owners benefited are included within the limits of said proposed Consolidated Water District; and
- d) The establishment of said proposed Consolidated Water District is in the public interest.

Section 2. This resolution shall take effect immediately.

The question of the adoption of the foregoing resolution was duly put to a vote on roll call, which resulted as follows:

<u>John E. Martin</u>	VOTING <u>AYE</u>
<u>Paul H. Lewis</u>	VOTING <u>aye</u>
<u>Allen Dickson</u>	VOTING <u>aye</u>
<u>Val H. H. H.</u>	VOTING <u>Aye</u>
_____	VOTING _____

In addition, at such meeting, the following resolution was offered by <sup>SUPERVISOR</sup> ~~Councilman~~

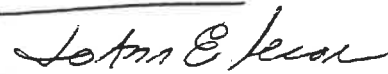
MERRITT, who moved its adoption, seconded by Councilman  
MARTIN, to-wit:

## NOTICE OF ADOPTION

NOTICE IS HEREBY GIVEN that the Town Board of the Town of Elizabethtown, Essex County, New York, at a meeting held on the 19th day of February, 2002, duly adopted the resolution published herewith **subject to a permissive referendum**.

Dated: Elizabethtown, New York,

February 19, 2002.



Town Clerk

RESOLUTION DATED FEBRUARY 19, 2002.

A RESOLUTION APPROVING THE ESTABLISHMENT OF THE CONSOLIDATED WATER DISTRICT AND THE IMPROVEMENTS IN CONNECTION THEREWITH.

WHEREAS, the Town Board of the Town of Elizabethtown, Essex County, New York, has duly caused to be prepared a map showing the boundaries of a proposed Consolidated Water District in said Town, to be known as the Consolidated Water District, and a plan and report in connection therewith; and

WHEREAS, said map, plan and report were prepared by Dodson & Associate, Consulting Engineers, PLLC, competent engineers, duly licensed by the State of New York, and have been filed in the office of the Town Clerk of said town, where the same is available during regular office hours for examination by any persons interested in the subject matter thereof; and

WHEREAS, said establishment has been determined to be an Unlisted Action pursuant to the regulations of the New York State Department of Environmental Conservation promulgated

pursuant to the State Environmental Quality Review Act, the implementation of which as proposed, the Town Board has determined will not result in any significant environmental effects; and

WHEREAS, an order was duly adopted by said Town Board on October 16, 2001, reciting a description of the boundaries of said proposed the Consolidated Water District, the improvements proposed, the maximum amount proposed to be expended for said improvements, the proposed method of financing to be employed, the fact that said petition, map, plan and report were on file in the Town Clerk's office for public inspection and specifying the 27th day of November, 2001, at 7:00 o'clock P.M., local time, at the Town Hall, in Elizabethtown, New York, in said Town, as the time when and the place where said Town Board would meet for the purpose of holding a public hearing to consider the establishment of said Consolidated Water District and said map, plan and report filed in relation thereto and to hear all persons interested in the subject thereof concerning the same; and

WHEREAS, notice of the aforesaid public hearing was duly published and posted in the manner and within the time prescribed by Section 209-d of the Town Law, and proof of publication and posting have been duly presented to said Town Board; and

WHEREAS, said public hearing was duly held at the time and place in said order as aforesaid, at which all persons desiring to be heard were duly heard; and

WHEREAS, said Town Board has duly considered said map, plan and report and the evidence given at said public hearing; and

WHEREAS, said Town Board has adopted a resolution on February 19, 2002 making the findings and determinations required pursuant to Section 209-e(1) of the Town Law; NOW, THEREFORE, BE IT

RESOLVED, by the Town Board of the Town of Elizabethtown, Essex County, New York, as follows:

Section 1. The establishment of Consolidated Water District in the Town of Elizabethtown, Essex County, New York, to be bounded and described as hereafter set forth, including all extensions heretofore or hereafter established, at a maximum estimated cost of \$0, is hereby approved. Future financings of improvements shall be by the issuance of serial bonds of said Town maturing in annual installments over a period not exceeding forty years, which will be payable in the first instance from annual consumption fees and an annual levy on all the taxable real property in said District at the same time and manner as other Town charges as provided by Law of an amount sufficient to pay the principal and interest on said bonds as the same become due, but if not paid from such source, all the taxable real property in said Town shall be subject to the levy of ad valorem taxes without limitation as to rate or amount sufficient to pay the principal of and interest on said bonds as the same shall become due and payable. The proposed basis of the future assessment of all costs of operation and maintenance also shall remain on an ad valorem basis as is presently the case in Water District Nos. 2 and 3.

Section 2. Said Extension shall be bounded and described as set forth in Exhibit A attached hereto and hereby made a part hereof.

Section 3. The Town Clerk shall, within ten (10) days after this resolution takes effect, being the date thirty days from the date hereof should no petition for referendum be filed relating hereto, file certified copies of this resolution in duplicate in the office of the State Department of Audit and Control at Albany, New York.

Section 4. This resolution is adopted subject to permissive referendum.

**Exhibit A**  
**Boundaries of Proposed**  
**Consolidated Water District in the**  
**Town of Elizabethtown, Essex County, New York**  
**Consolidating**  
**Water District Nos. 2 and 3**

**Town of Elizabethtown**  
**Water District No. 2 Description**

The boundary of Water District No. 2 was compiled from a property line survey and from State Highway No. 5183 (US Route 9) maps, Contract RC 69-72, Sheets 15 to 18 from Base Line Station 438+00 to 487+00. Water District No. 2 can be general described as extending 500 feet easterly and 500 feet westerly of said Base Line from the southerly boundary of the former Village of Elizabethtown, Base Line Station 504+20, to Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patent), Base Line Station 474+56, thence extending 500 feet easterly and 250 feet westerly of said Base Line from Lot 9 (Platt/Rodgers) and Lot 7 (Road/Patent), Base Line Station 474+56, to the end of Water District No. 2, Base Line Station 448+78.

AND

**Town of Elizabethtown**  
**Water District No. 3 Description**

The boundary of Water District No. 3 consists of the area described as the former Village of Elizabethtown as dissolved in January 1, 1981 and as shown in map, plan and report documents which are on file in the office of the Town Clerk, where the same are available during regular office hours for examination by any persons interested in the subject matter.

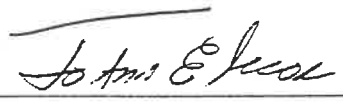
CERTIFICATION OF POSTING

STATE OF NEW YORK                    )  
  ) ss.:  
COUNTY OF ESSEX                    )

I, the undersigned Clerk of the Town of Elizabethtown, Essex County, New York, DO  
HEREBY CERTIFY:

That on the ~~17th~~ day of FEBRUARY, 2002, I caused to be posted on the official  
signboard maintained by me pursuant to subdivision 6 of Section 30 of the Town Law, a Notice  
of Adoption of a resolution adopted by the Town Board of said Town on the 13th day of  
February, 2002.

A true and correct copy of such Notice of Adoption is attached hereto.

  
\_\_\_\_\_  
Town Clerk

Sworn to before me this 22<sup>nd</sup> day  
of February, 2002.

  
\_\_\_\_\_  
Notary Public

MARCY J. EICHEN  
Notary Public State of New York  
No. 01EI6060923  
Qualified in Essex County  
Commission Expires 7/2/03

PRESENT:

Councilman

WHEREAS, the Town Board of the Town of Elizabethtown, Essex County, New York, has duly caused to be prepared a map, plan and report including an estimate of cost, pursuant to Section 202-b of the Town Law, relating to the proposed increase and improvement of the facilities of the Consolidated Water District, in the Town of Elizabethtown, Essex County, New York, consisting of water source, storage and distribution system improvements, including

original furnishings, machinery, equipment, apparatus, appurtenances, and incidental improvements and expenses in connection therewith, and

WHEREAS, at a meeting of said Town Board duly called and held on February 19, 2002, an Order was duly adopted by it and entered in the minutes specifying the said Town Board would meet to consider the proposed improvement of facilities of the Consolidated Water District in said Town at a maximum estimated cost of \$1,680,000 and to hear all persons interested in the subject thereof concerning the same at the Town Office, in Elizabethtown, New York, in said Town, on March 19, 2002, at 6:00 o'clock P.M., Prevailing Time; and

WHEREAS, said order duly certified by the Town Clerk was duly published and posted as required by law; and

WHEREAS, a public hearing was duly held at the time and place set forth in said notice, at which all persons desiring to be heard were duly heard; and

WHEREAS, said capital project hereinafter described has been determined to be an Unlisted Action pursuant to the regulations of the New York State Department of Environmental Conservation promulgated pursuant to the State Environmental Quality Review Act, which, it has been determined, the implementation of such capital project, as proposed, will not result in any significant environmental effects; NOW, THEREFORE, BE IT

ORDERED, by the Town Board of the Town of Elizabethtown, Essex County, New York, as follows:

Section 1. Upon the evidence given at the aforesaid public hearing, it is hereby found and determined that it is in the public interest to make the increase and improvement of the facilities of the Consolidated Water District, in the Town of Elizabethtown, Essex County, New York, consisting of water source, storage and distribution system improvements, including

original furnishings, machinery, equipment, apparatus, appurtenances, and incidental improvements and expenses in connection therewith, at a maximum estimated cost of \$1,680,000.

Section 2. This order shall take effect immediately.

The question of the adoption of the foregoing order was duly put to a vote on roll, which resulted as follows:

<u>Allen Diefen</u>	VOTING <u>AYE</u>
<u>Paul Pelton</u>	VOTING <u>Aye.</u>
<u>Joseph E. Marks</u>	VOTING <u>Aye.</u>
<u>Art Nelson</u>	VOTING <u>Aye</u>
_____	VOTING _____

The order was thereupon declared duly adopted.

\* \* \* \* \*

STATE OF NEW YORK                    )  
  ) ss.:  
COUNTY OF ESSEX                    )

I, the undersigned Clerk of the Town of Elizabethtown, Essex County, New York (the "Issuer"), DO HEREBY CERTIFY:

1. That a meeting of the Issuer was duly called, held and conducted on the 19th day of March, 2002.
2. That such meeting was a special regular (circle one) meeting.
3. That attached hereto is a proceeding of the Issuer which was duly adopted at such meeting by the Board of the Issuer.
4. That such attachment constitutes a true and correct copy of the entirety of such proceeding as so adopted by said Board.
5. That all members of the Board of the Issuer had due notice of said meeting.
6. That said meeting was open to the general public in accordance with Section 103 of the Public Officers Law, commonly referred to as the "Open Meetings Law".
7. That notice of said meeting (the meeting at which the proceeding was adopted) was given PRIOR THERETO in the following manner:

**PUBLICATION** (here insert newspaper(s) and date(s) of publication)

Valley News  
3/6/2002

**POSTING** (here insert place(s) and date(s) of posting)

Valley News  
3rd. Tuesday of each month

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Issuer  
this 19 day of March, 2002.



Town Clerk

(CORPORATE  
SEAL)

BOND RESOLUTION

At a regular meeting of the Town Board of the Town of Elizabethtown, Essex County, New York, held at the Town Office, in Elizabethtown, New York, in said Town, on March 19, 2002, at 7:00 o'clock P.M., Prevailing Time.

The meeting was called to order by Supervisor Merrihew, and upon roll being called, the following were

PRESENT: Councilman Joseph Martin  
Councilman Patrick Putnam  
Councilman Allen Dickerson

ABSENT: Councilman John Brien

The following resolution was offered by Councilman Putnam who moved its adoption, seconded by Councilman Dickerson to-wit:

BOND RESOLUTION DATED MARCH 19, 2002.

A RESOLUTION AUTHORIZING THE ISSUANCE OF \$1,680,000 SERIAL BONDS OF THE TOWN OF ELIZABETHTOWN, ESSEX COUNTY, NEW YORK, TO PAY THE COST OF THE INCREASE AND IMPROVEMENT OF THE FACILITIES OF THE CONSOLIDATED WATER DISTRICT, IN THE TOWN OF ELIZABETHTOWN, ESSEX COUNTY, NEW YORK.

WHEREAS, the capital project hereinafter described, as proposed, has been determined to be an Unlisted Action pursuant to the regulations of the New York State Department of Environmental Conservation promulgated pursuant to the State Environmental Quality Review Act, which, it has been determined, will not have a significant effect on the environment; and

WHEREAS, pursuant to the provisions heretofore duly had and taken in accordance with the provisions of Section 202-b of the Town Law, and more particularly an order dated March 19, 2002, said Town Board has determined it to be in the public interest to improve the facilities of the Consolidated Water District, in the Town of Elizabethtown, Essex County, New York, at a maximum estimated cost of \$1,680,000; and

WHEREAS, it is now desired to provide funding for such capital project; NOW, THEREFORE, BE IT

RESOLVED, by the Town Board of the Town of Elizabethtown, Essex County, New York, as follows:

Section 1. For the specific object or purpose of paying the cost of the increase and improvement of the facilities of the Consolidated Water District, in the Town of Elizabethtown, Essex County, New York, consisting of water source, storage and distribution system improvements, including original furnishings, machinery, equipment, apparatus, appurtenances, and incidental improvements and expenses in connection therewith, at a maximum estimated cost

of \$1,680,000, there are hereby authorized to be issued \$1,680,000 serial bonds of said Town pursuant to the provisions of the Local Finance Law.

Section 3. It is hereby determined that the period of probable usefulness of the aforesaid specific object or purpose is forty years pursuant to subdivision 1 of paragraph a of Section 11.00 of the Local Finance Law. It is hereby further determined that the maximum maturity of the serial bonds herein authorized will exceed five years.

Section 4. Subject to the provisions of the Local Finance Law, the power to authorize the issuance of and to sell bond anticipation notes in anticipation of the issuance and sale of the serial bonds herein authorized, including renewals of such notes, is hereby delegated to the Supervisor, the chief fiscal officer. Such notes shall be of such terms, form and contents, and shall be sold in such manner, as may be prescribed by said Supervisor, consistent with the provisions of the Local Finance Law.

Section 5. The faith and credit of said Town of Elizabethtown, Essex County, New York, are hereby irrevocably pledged to the payment of the principal of and interest on such obligations as the same respectively become due and payable. An annual appropriation shall be made in each year sufficient to pay the principal of and interest on such obligations becoming due and payable in such year.

Section 6. Such bonds shall be in fully registered form and shall be signed in the name of the Town of Elizabethtown, Essex County, New York, by the manual or facsimile signature of the Supervisor and a facsimile of its corporate seal shall be imprinted or impressed thereon and may be attested by the manual or facsimile signature of the Town Clerk.

Section 7. The powers and duties of advertising such bonds for sale, conducting the sale and awarding the bonds, are hereby delegated to the Supervisor, who shall advertise such

bonds for sale, conduct the sale, and award the bonds in such manner as he shall deem best for the interests of said Town, including, but not limited to, the power to sell said bonds to the New York State Environmental Facilities Corporation; provided, however, that in the exercise of these delegated powers, the Supervisor shall comply fully with the provisions of the Local Finance Law and any order or rule of the State Comptroller applicable to the sale of municipal bonds. The receipt of the Town shall be a full acquittance to the purchaser of such bonds, who shall not be obliged to see to the application of the purchase money.

Section 8. All other matters, except as provided herein relating to such bonds, including determining whether to issue such bonds having substantially level or declining debt service and all matters related thereto, prescribing whether manual or facsimile signatures shall appear on said bonds, prescribing the method for the recording of ownership of said bonds, appointing the fiscal agent or agents for said bonds, providing for the printing and delivery of said bonds (and if said bonds are to be executed in the name of the Town by the facsimile signature of its Supervisor, providing for the manual countersignature of a fiscal agent or of a designated official of the Town), the date, denominations, maturities and interest payment dates, place or places of payment, and also including the consolidation with other issues, shall be determined by the Supervisor.

Section 9. The Supervisor is hereby further authorized, at the Supervisor's sole discretion, to execute a project financing and loan agreement, and any other agreements with the New York State Department of Health and/or the New York State Environmental Facilities Corporation, including amendments thereto, and including any instruments (or amendments thereto) in the effectuation thereof, in order to effect the financing or refinancing of the class of objects or purposes described in Section 1 hereof, or a portion thereof, by a serial bond issue of

said Town in the event of the sale of same to the New York State Environmental Facilities Corporation.

Section 10. The power to issue and sell notes to the New York State Environmental Facilities Corporation pursuant to Section 169.00 of the Local Finance Law is hereby delegated to the Supervisor. Such notes shall be of such terms, form and contents as may be prescribed by said Supervisor consistent with the provisions of the Local Finance Law.

Section 11. The validity of such bonds and bond anticipation notes may be contested only if:

- 1) Such obligations are authorized for an object or purpose for which said Town is not authorized to expend money, or
- 2) The provisions of law which should be complied with at the date of publication of this resolution are not substantially complied with,

and an action, suit or proceeding contesting such validity is commenced within twenty days after the date of such publication. or

- 3) Such obligations are authorized in violation of the provisions of the Constitution.

Section 12. This resolution shall constitute a statement of official intent for purposes of Treasury Regulations Section 1.150-2. Other than as specified in this resolution, no monies are, or are reasonably expected to be, reserved, allocated on a long-term basis, or otherwise set aside with respect to the permanent funding of the object or purpose described herein.

Section 13. This resolution, which takes effect immediately, shall be published in full in the Valley News, the official newspaper, together with a notice of the Town Clerk in substantially the form provided in Section 81 of the Local Finance Law.

STATE OF NEW YORK )

) ss.:

COUNTY OF ESSEX )

I, the undersigned Clerk of the Town of Elizabethtown, Essex County, New York (the "Issuer"), DO HEREBY CERTIFY:

1. That a meeting of the Issuer was duly called, held and conducted on the 19th day of March, 2002.
2. That such meeting was a **special** regular (circle one) meeting.
3. That attached hereto is a proceeding of the Issuer which was duly adopted at such meeting by the Board of the Issuer.
4. That such attachment constitutes a true and correct copy of the entirety of such proceeding as so adopted by said Board.
5. That all members of the Board of the Issuer had due notice of said meeting.
6. That said meeting was open to the general public in accordance with Section 103 of the Public Officers Law, commonly referred to as the "Open Meetings Law".
7. That notice of said meeting (the meeting at which the proceeding was adopted) was given PRIOR THERETO in the following manner:

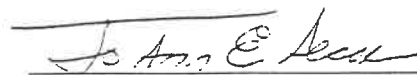
**PUBLICATION** (here insert newspaper(s) and date(s) of publication)

Valley News  
3/6/2002

**POSTING** (here insert place(s) and date(s) of posting)

Valley News  
3rd. Tuesday of each month

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Issuer  
this 19 day of March, 2002.



Town Clerk

(CORPORATE  
SEAL)

**Exhibit E**

**Hydrogeologic Report**



## HydroSource Associates, Inc.

26 Winter Street • Ashland, NH 03217

telephone (603) 968-3733 • fax (603) 968-7605

e-mail: [info@teamhydrosources.com](mailto:info@teamhydrosources.com) • website: [www.teamhydrosources.com](http://www.teamhydrosources.com)

# TECHNICAL MEMORANDUM

TO: Kevin Scheuer, NYSDOH; Vince Kavanagh, NYSDEC  
CC: Noel Merrihew, Supervisor – Town of Elizabethtown, NY  
Jack Dodson, Dodson & Associate Consulting Engineers, PLLC  
FROM: Christine Bowman, HydroSource Associates  
RE: New Groundwater Source for the Town of Elizabethtown, NY  
DATE: March 27, 2002

Enclosed, please find for your review, the accompanying text and appropriate figures including a site location map, test drilling logs, proposed well design schematic, and aquifer and water quality testing protocols for the Town of Elizabethtown's new water supply project.

## Background

HydroSource Associates (HSA) has been working in cooperation with the Town and Dodson & Associate, PLLC to develop recommendations regarding construction of a new water source for the Town that will meet the requirements of the New York State Department of Health (NYSDOH) and New York State Department of Environmental Conservation (NYSDEC). The Town of Elizabethtown currently utilizes two sources of water: a series of springs and four wells all located on a Town-owned parcel of land approximately 2 miles west of the Town on Route 9N (see attached *Site Location Map*). Approximately ten years ago, Elizabethtown initiated the development of the wells in the vicinity of the Town's springs. These wells were intended to replace the springs as the Town's primary water source. To date, the wells have not proved adequate to meet daily system demands and the Town continues to utilize the springs. The total yield of the Town's four wells, which all pump on a continuous 24-hour schedule, is estimated at approximately 90 gallons per minute (gpm). Construction specifications (type of well – i.e., whether screened/gravel-pack or bedrock, total depth, screening parameters, etc.) were not known for these wells.

Since project initiation (June 2001), HSA has conducted hydrogeologic investigations to assess local and regional surficial and bedrock geology in regard to groundwater potential. HSA's investigations have included a recharge assessment, geological mapping, geophysical surveys, and test drilling. The following is a brief summary of our test drilling results and our recommendations for developing a new water source that will meet the requirements of the State regulatory agencies.

## **Field Evaluations & Test Drilling Results**

In the initial stage of the project, HSA identified several Favorable Zones that possess potential for developing a new groundwater source. Geophysical surveys were conducted and three test well drilling targets were identified in Favorable Zones along Route 9N. The highest priority target was located on Lot # 055.80-03-6 (Kilburn property) between Scrabble Hollow Road and Route 9N (see attached *Site Location Map*).

The presence of artesian wells located west and east of this site at homes on Route 9N indicated the presence of a laterally extensive confining unit overlying a potentially prolific aquifer. However, geologic logs of local wells reviewed by HSA as part of the Phase I hydrogeologic investigation did not indicate the specific type of confined aquifer (i.e., a sand and gravel or fractured bedrock aquifer).

Due to the economic advantage of existing water system infrastructure on the Town's property (Lot # 055.04-01-2), HSA recommended that the Town further test their existing spring/well site prior to test drilling on privately owned land. Test well TW-1 was drilled on the Town's property on January 8, 2002. Ron Gill Well Drilling of Chestertown, New York was contracted for test drilling services. Test drilling at this location revealed a thick (approximately 22 feet) deposit of low permeability glaciofluvial sediments consisting primarily of clay and silty sand immediately overlying bedrock. Bedrock occurs at roughly 41 feet below ground surface. This thick deposit of low permeability sediments was consistent with HSA's geologic and depositional model. Unfortunately, a thick section of sand and gravel, capable of producing enough groundwater to meet the Town's water supply demands, was not encountered. The well was continued through 514 feet of bedrock to a total depth of 560 feet. Further well development work at this site was not recommended.

Subsequently, HSA recommended that the Town proceed with test drilling at the Kilburn property. On February 19, 2002, one test well was installed and logged on the Kilburn property (see attached *Well Log* and *Site Location Map*). Ron Gill Well Drilling of Chestertown, New York, was contracted for test drilling services. To successfully penetrate the cobble and boulder laden gravels that were expected in the subsurface without reaching "refusal", and to obtain high quality formation samples, 7-inch diameter Concentrix drilling was employed. Since steel casing is advanced with the drill bit, this method does not require the introduction of drilling mud into the aquifer subsequently minimizing well development time and maximizing the quality of drill cutting samples. This method was also chosen for its ability to penetrate anticipated boulder zones at depth, which other small-diameter drilling methods cannot usually penetrate.

As noted on the enclosed well log, test well TW-2 intersected approximately 21 feet of alluvial and glaciofluvial sediments (mixed sands, silts, gravels, and clays) before encountering a massive, varved glaciolacustrine clay which continued to 31 feet below ground. Below 31 feet, test drilling indicated mixed glaciofluvial sediments composed primarily of glaciolacustrine deltaic deposits (sand and gravel) with some silt. The primary water bearing zone was encountered at approximately 60 feet and continued to approximately 78 feet below ground where drilling was discontinued. This zone contained coarse sand and fine to medium gravel with minor silt. A boulder was encountered between 71 and 72 feet. Upon completion of the hole, the well was free flowing at approximately 75 gpm. Due to the artesian conditions, the driller was unable to weld an additional casing length and the hole was not completed to bedrock. A down-hole perforation tool was used to increase the total open area in the well, and approximately 40, 1 3/8" x 3/16" perforations between 63 and 72 feet below ground surface were made. Total artesian flow from the well increased to approximately 100 gpm after perforations were complete.

## Site Description

The well site is located in an open, grassy area on the Kilburn property. This area is separated from Route 9N and Scrabble Hollow Road by narrow stands of trees. At the closest point, the well site is located within 100 feet of the north side of Route 9N and within 50 feet of the south side of Scrabble Hollow Road. The nearest surface water body, the Branch River, is within 200 feet of the well site at the closest point. Two small flood-control channels exist within roughly 25 feet of TW-2 to the north and south. The nearest residences, assumed to possess wells and septic systems, occur within 250 feet of the well. The nearest observed potential contaminant threat mapped during HSA's Phase I assessment is an asphalt dump located on the south side of Route 9N approximately 350 feet west of Scrabble Hollow Road (see attached *Site Location Map*). Other potential sources of contamination, excluding residences, private septic systems, and Route 9N have not been observed in the general area. Despite the well site's proximity to the Branch River and several cultural features, HSA feels that the presence of a thick, laterally extensive confining layer (see detailed discussion in *Well Drilling* section below) will reduce the risk of potential contamination from these sources.

## Recommendations

Test drilling results indicate that very coarse, water-bearing, permeable sand and gravel are present at the location of TW-2. Test well drilling results also suggest that there is likely sufficient yield to obtain the water required by the Town.

To maximize aquifer potential and well efficiency, we propose installing one new water supply well in the immediate vicinity of TW-2. Well TW-2 currently has minimal open area and is not grouted. Due to the minimal open area, seasonal fluctuations in groundwater recharge may affect the yield. Additionally, well development methods were not employed in this well, and, ultimately, casing perforations may become clogged with aquifer material, severely reducing the already minimal open area of the well. To maximize free flow and aquifer potential and assist in alleviating or minimizing the effects of seasonal fluctuations in flow, we recommend installing a properly

grouted, screened well that is to be subjected to proper well development techniques. The new well will also be properly grouted to meet the requirements of the NYSDOH.

Preliminary water quality results obtained from TW-2 after well completion indicate excellent quality water with a very low TDS (Total Dissolved Solids) of 62. Iron and hardness were slightly elevated but well below the Maximum Contaminant Levels (MCLs) established by the EPA. Bacteria and organic chemicals were not detected (ND) (see attached *Drinking Water Analysis Results*).

## Well Drilling

The new well will be a screened, 8-inch diameter well with 10 to 15 feet of stainless steel telescoping screen. Sieve results of samples collected during drilling of TW-2 indicate that a 100 to 120-slot screen should be appropriate. These results combined with observations made during test drilling suggest that screening should be appropriate over a roughly 15 foot interval of borehole from 63 to 78 feet below ground surface (see attached *Proposed Gravel Well Design*).

At least 20 feet of grout will also be installed, per NYSDOH regulations, in a 2-inch annular space to properly seal the well to avoid direct infiltration of surface water (see attached *Proposed Gravel Well Design*). Grouting will be accomplished by first installing a temporary, 12-inch diameter surface casing (to at least 20 feet in depth). An 8-inch diameter well will be drilled to the desired depth inside the 12-inch diameter surface casing, and the screen will then be installed. Grout will be then be emplaced between the temporary, 12-inch surface casing and 8-inch steel well casing and the 12-inch temporary casing will be removed. The new well will also undergo proper well development to remove the fines (very fine sands and silts) from the aquifer near the well screen.

Although the influence of surface water can be a concern with shallow sand and gravel wells located near surface water bodies, we feel that the geologic and hydraulic conditions present at this site are sufficient to not warrant a concern. During test drilling, approximately 10 feet of dense, varved, lacustrine clay was encountered between 21 feet and 31 feet below ground surface. This very low-permeability deposit confines the underlying aquifer from the overlying sediments hindering hydraulic communication between the overlying sediments and the aquifer and resulting in high hydraulic head in the aquifer. Given the free flow conditions present in residential wells further east and west of the well site and results of test well drilling, we firmly believe that this confining unit is laterally extensive resulting in the high pressure head in the aquifer (see attached *Site Location Map* illustrating the minimum lateral extent of the confining unit). Based on the elevation of the confining unit in wells TW-1 and TW-2, the potential lateral extent of the confining unit was determined. The bottom and top of the confining layer were projected up-dip (assuming that the direction of maximum dip is east and the dips of the bottom and top contacts are constant) and the elevation where the two contacts intersect was determined. The dashed, red line on the *Site Location Map* coincides with this elevation. Although this method is imprecise due to the limited number of control points, we feel that the results represent a conservative estimate of the lateral extent of the confining unit. The eastern-most limit of the confining layer, occurring directly east of the Town's existing spring/well site, is controlled by a prominent bedrock outcrop. The northerly and southerly boundaries should be fairly well-controlled by the prominent mountainside slopes.

The westerly boundary of the clay should at least extend past the farthest outlying artesian wells in this direction.

In order for infiltration to occur from the ground surface or overlying sediments into the confined aquifer, the hydraulic gradient (presently upward) would have to be reversed by pumping the water level (piezometric surface) in the underlying confined aquifer below the water table in the overlying unconfined sediments. Preliminary observations during and after test well drilling indicate that this situation is not likely to occur at the yield required by the Town. In fact, the test well, which has limited open area (i.e., the perforations and bottom open-hole of the casing), is flowing at a rate approaching the Town's requirements. Furthermore, if the hydraulic gradient was reversed, surface water would have to travel through 63 feet of overlying material, including 10 feet of clay, to reach the top of the well screen. The travel time from the ground surface to the top of the well screen would have to be less than the time the hydraulic gradient was reversed. Given the history of the residential flowing wells, and typical vertical hydraulic conductivity rates through clay, this situation is also not likely. Therefore, HSA proposes that these factors should be taken into account when considering the typical 200-foot protective radius that is normally required, particularly those related to setbacks from roads and abutting property boundaries, and that the 200-foot protective radius requirement therefore be waived.

Based on these factors, we anticipate that a safe yield capable of meeting the Town's water supply needs may be developed from a new well designed to these specifications at this location and that such a well will be adequately protected from surface water influence and other potential sources of contamination.

## **Well and Aquifer Testing Protocols**

Following well installation, appropriate aquifer testing (pumping tests) will be conducted to calculate aquifer parameters, safe yield, and to collect water quality samples for Part V analyses required for source approval.

Although the new (8" diameter) well may free flow at a rate meeting or exceeding the Town's water supply needs, a pumping test will be conducted to determine the safe yield of the aquifer and determine a safe pumping rate if pumping is required during low flow periods caused by seasonal variations in groundwater recharge. We do not propose to conduct a pumping test on the existing 7" diameter well, as the Town proposes to only use free flow from this well. The 7" diameter well will be over-reamed and grouted to at least 20 feet below ground surface, per State requirements.

Aquifer testing of the new 8" diameter well may present a host of atypical situations only encountered when dealing with artesian flow. Note that during typical pumping tests, the starting time of the pumping test represents the starting time of water withdrawal from the well. In the case of the Town's new well, the starting time of the pumping test does not represent the starting time of water withdrawal from the well since the well will have been freely flowing.

Free flowing conditions also introduce difficulty in determining the static water level in the aquifer. HSA proposes that after well construction, shut-in pressures for the test well and new well

be determined, if possible, using a friction clamp and necessary appurtenances including a pressure gauge with a maximum reading of 50 psi (approximate maximum measurement range of up to 115.5 feet of head). To obtain an accurate measure of shut-in pressure, an attempt will be made to shut-in both wells simultaneously. The pressure will then be allowed to build-up and stabilize. The final shut-in pressure readings should allow for determination of the static water level in each well (1 psi = 2.31 feet).

In addition to determining the shut-in pressure in both wells, the free flow from each well will be measured by channeling the flow and timing how long it takes to fill a bucket of known volume (bucket and stop watch method). Free flow will be measured from both wells (existing 7" and new 8"). Once the static water level and free flow is determined, pumping tests will be conducted.

In order to accurately calculate aquifer parameters and determine the safe pumping yield of the new 8" well, we recommend conducting two separate sets of pumping tests (step and constant rate pumping tests) on the new 8" well. During these pumping tests, HSA will monitor water levels in the pumping well. Additionally, during the constant rate pumping test, HSA will regularly measure artesian flow from and/or water levels in the test well. *No additional monitoring wells will be constructed.* We will also monitor water levels in the Branch River and a small spring (upgradient of the well site) with staff gauges.

In addition to these monitoring points, we will also monitor flow from the privately-owned artesian wells located west (Carlson residence) and east (McDougal residence) of the site, for as long as these wells continue to flow (see attached Site Location Map). We do not plan on monitoring water levels in homeowner wells. Although monitoring water levels may seem a simple task, setting up monitoring equipment in these wells is risky and presents unwarranted liability. The nearby private wells have been in use for a significant number of years and little could be ascertained regarding their construction other than recollections by the owners of their presumed total depths. As such, the integrity of the pumping equipment, well caps, drop pipes, pipe threading, etc. in these private wells is in questionable condition. To properly monitor the water levels in private wells would require installation of monitoring tubes so that true water level measurements could be made that were not erroneously affected by cascading water conditions in the wells. Insertion of water level probes without the use of a tube is not recommended due to the likelihood of lodging the probe in the well or wrapping the tape around the pump wires. Thus, to install the monitor tubes in private wells, existing well pumps would need to be removed, which could potentially cause damage to older existing pumps, drop pipes, etc., and with considerable risk and liability of interrupting or damaging these current sources of water. This, combined with the fact that private wells are normally cycling (pumping) on and off upon demand, and therefore normally show wildly fluctuating water levels due to random pumping intervals, typically makes use of water level data from private wells useless for analytical purposes.

## **Water Quality Sampling & Analyses**

Water quality samples will be collected from the original test well prior to drilling the new well. Since test well drilling (February 19, 2002), the test well has been free flowing. Typically,

water quality samples are obtained after a 72-hour constant rate pumping test. However, since this well has been free flowing since drilling, water quality samples should accurately represent the water quality in the aquifer after long-term pumping. Essentially, the well has been "pumping" since drilling was completed. As approved by the NYSDOH, final water quality samples will not be obtained from the new well and samples obtained from the test well will be considered representative of aquifer water quality. Additionally, water quality samples from the original test well will not include tests for Endothall, Glyphosate, Diquat, Asbestos, and Dioxin; and, a test for Radium 226 and 228, will only be performed if Gross Alpha exceeds 5pCi/l. Water quality samples will include a Microscopic Particulate Analysis (MPA) obtained from the new well toward the end of the constant rate pumping test. As approved by the NYSDOH, an MPA analysis will not be conducted on the test well and the sample obtained from the second well will be considered representative of both wells.

## **Schedule**

Note that these activities are scheduled to be conducted in the coming 2 to 3 weeks. As the Town is currently under a very tight time frame to complete this project, your prompt response is greatly appreciated. Please contact me at your earliest convenience with any questions or comments.

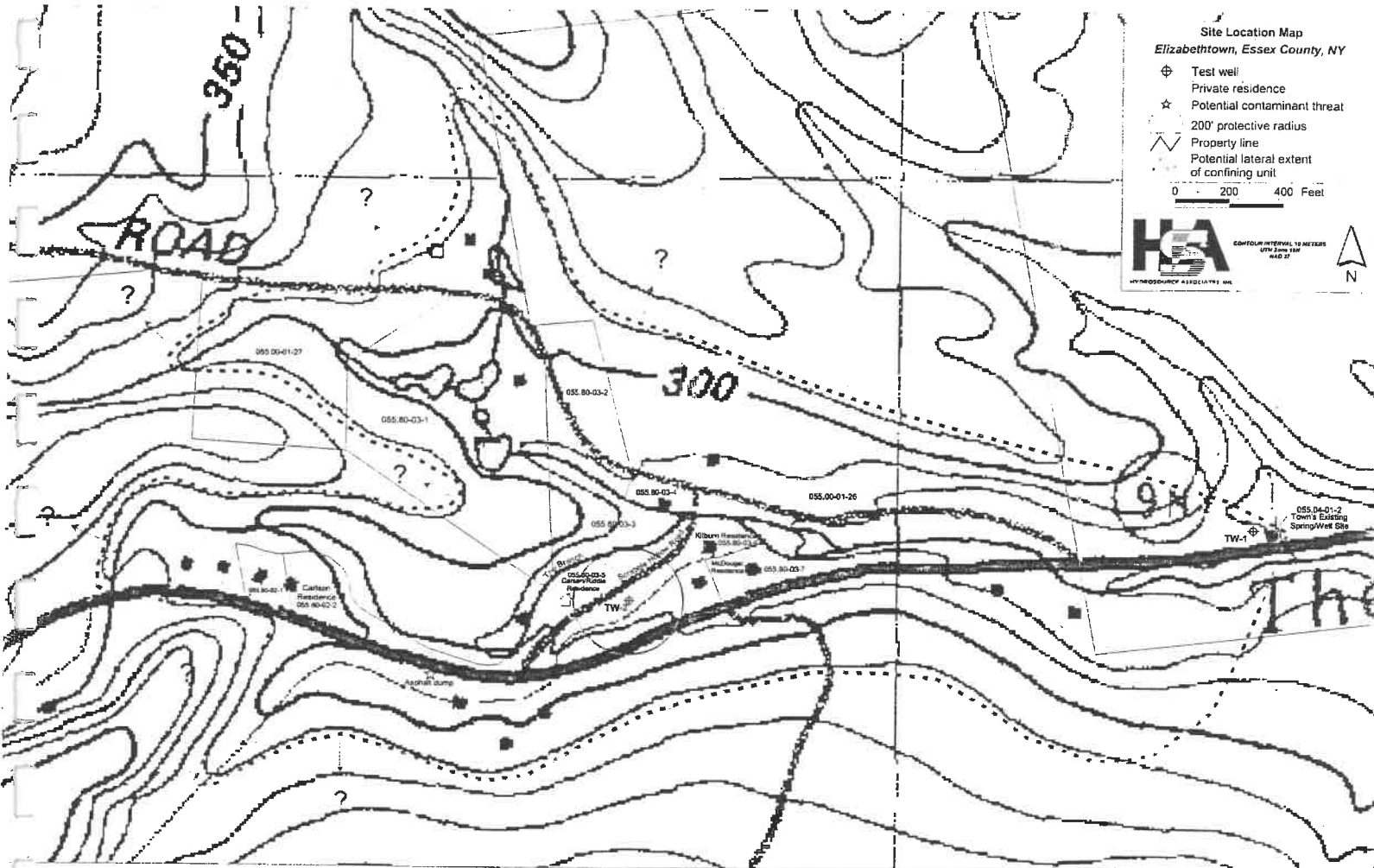
Site Location Map  
 Elizabethtown, Essex County, NY

- ⊕ Test well
- Private residence
- ☆ Potential contaminant threat
- 200' protective radius
- Property line
- Potential lateral extent of confining unit

0 200 400 Feet



CONTOUR INTERVAL: 10 METERS  
 328 FEET / 107 FEET



# W E L L L O G

<b>CLIENT: TOWN OF ELIZABETHTOWN KILBURN PROPERTY</b>  <b>WELL: TW-2</b>	<b>Driller</b> : Ron Gill Well Drilling <b>Logged By</b> : C.Cormier/C.Bowman, HSA <b>Date</b> : 2/19/02 <b>Casing</b> : 7" Diam. to 78', plus 2' of stick-up <b>Drilling Method:</b> Concentrix

DEPTH IN FEET	DESCRIPTION
0' - 0.5'	Brown, loamy gravel
0.5' - 7'	Brown, medium to coarse gravel with sand and silt (organic material/twigs)
7' - 12'	Cobble gravel
12' - 14'	Gray fine to medium sand with fine to medium gravel; trace cobbles
14' - 21'	Gray very-fine to fine sand and silt
21' - 31'	Gray varved (dense) clay
31' - 33'	Fine to very-fine gray sand and silt
33' - 35'	Medium to coarse sand and gravel
35' - 46'	Very-fine to medium sand; trace gravel
46' - 50'	Medium gravel and sand; some silt
50' - 59.5'	Silt and very fine sand
59.5' - 62'	Coarse sand and fine to medium gray gravel; artesian flow
62' - 75'	Brown, coarse sand and fine to medium gravel
71' - 72'	Boulder
75' - 78'	Brown, coarse sand and fine gravel -- ~75 to 80 gpm artesian flow
NOTES:	Well casing perforated (40, 1 3/8" x 3/16" slots) from 63' to 72' below ground. Well flows at 100+ gpm.

DATE COLLECTED	DATE RECEIVED	DATE COMPLETED	SAMPLE CODE
02/21/02	02/27/02	03/07/02	44774



**NATIONAL  
TESTING  
LABORATORIES LTD.**  
6555 Wilson Mills Road  
Cleveland, OH 44143  
(440) 449-2525

CUSTOMER ADDRESS

DEALER ADDRESS
HYDROSOURCE 26 WINTER STREET ASHLAND, NH 03217-

## DRINKING WATER ANALYSIS RESULTS

ID: ENY S1 (ELIZABETHTOWN, NY S1)  
WELL WATER

NOTE: "\*" The MCL (Maximum Contaminant Level) or an established guideline has been exceeded for this contaminant.  
 "\*\*" Bacteria results may be invalid due to lack of collection information or because the sample has exceeded the 30-hour holding time.  
 "ND" This contaminant was not detected at or above our stated detection level.  
 "NBS" No bacteria submitted. "NBR" No Bacteria Required.  
 "P" = PRESENCE "A" = ABSENCE  
 "EP" = E. COLI PRESENCE "EA" = E. COLI ABSENCE  
 "NA" Not Analyzed  
 Analysis Performed

MCL (mg/l)	Det. Level	Level Detected
---------------	---------------	-------------------

Total coliform	P	P	A**
----------------	---	---	-----

### Inorganic chemicals - metals:

Aluminum	0.2	0.1	ND
Arsenic	0.05	0.010	ND
Barium	2	0.30	ND
Cadmium	0.005	0.002	ND
Chromium	0.1	0.010	ND
Copper	1.3	0.004	ND
Iron	0.3	0.020	0.13
Lead	0.015	0.002	ND
Manganese	0.05	0.004	ND
Mercury	0.002	0.001	ND
Nickel	0.1	0.02	ND
Selenium	0.05	0.020	ND
Silver	0.1	0.002	ND
Sodium	---	1.0	3
Zinc	5	0.004	ND

### Inorganic chemicals - other, and physical factors:

Alkalinity (Total as CaCO3)	---	20	52
Chloride	250	5.0	ND
Fluoride	4	0.5	ND
Nitrate as N	10	0.5	ND
Nitrite as N	1	0.5	ND
Sulfate	250	5.0	8
Hardness (suggested limit = 100)		10	55
pH (Standard Units)	6.5-8.5	---	8.2
Total Dissolved Solids	500	20	62
Turbidity (Turbidity Units)	1.0	0.1	0.4

### Organic chemicals - trihalomethanes:

Bromoform	---	0.004	ND
Bromodichloromethane	---	0.002	ND
Chloroform	---	0.002	ND
Dibromochloromethane	---	0.004	ND
Total THMs	0.080	0.002	ND

Organic chemicals - volatiles:

Benzene	0.005	0.001	ND
Vinyl Chloride	0.002	0.001	ND
Carbon Tetrachloride	0.005	0.001	ND
1,2-Dichloroethane	0.005	0.001	ND
Trichloroethene (TCE)	0.005	0.001	ND
1,4-Dichlorobenzene	0.075	0.001	ND
1,1-Dichloroethene	0.007	0.001	ND
1,1,1-Trichloroethane	0.2	0.001	ND
Bromobenzene	---	0.002	ND
Bromomethane	---	0.002	ND
Chlorobenzene	0.1	0.001	ND
Chloroethane	---	0.002	ND
Chloromethane	---	0.002	ND
2-Chlorotoluene	---	0.001	ND
4-Chlorotoluene	---	0.001	ND
Dibromochloropropane (DBCP)	---	0.001	ND
Dibromomethane	---	0.002	ND
1,2-Dichlorobenzene	0.6	0.001	ND
1,3-Dichlorobenzene	0.6	0.001	ND
Dichlorodifluoromethane	---	0.002	ND
1,1-Dichloroethane	---	0.002	ND
Trans-1,2-Dichloroethene	0.1	0.002	ND
cis-1,2-Dichloroethene	0.07	0.002	ND
Dichloromethane	0.005	0.002	ND
1,2-Dichloropropane	0.005	0.002	ND
trans-1,3-Dichloropropene	---	0.002	ND
cis-1,3-Dichloropropene	---	0.002	ND
2,2-Dichloropropane	---	0.002	ND
1,1-Dichloropropene	---	0.002	ND
1,3-Dichloropropene	---	0.002	ND
Ethylbenzene	0.7	0.001	ND
Ethylenedibromide (EDB)	---	0.001	ND
Styrene	0.1	0.001	ND
1,1,1,2-Tetrachloroethane	---	0.002	ND
1,1,2,2-Tetrachloroethane	---	0.002	ND
Tetrachloroethene (PCE)	0.005	0.002	ND
1,2,3-Trichlorobenzene	---	0.002	ND
1,2,4-Trichlorobenzene	0.07	0.002	ND
1,1,2-Trichloroethane	0.005	0.002	ND
Trichlorofluoromethane	---	0.002	ND
1,2,3-Trichloropropane	---	0.002	ND
Toluene	1	0.001	ND
Xylene	10	0.001	ND
Methyl-Tert-Butyl-Ether	---	0.004	ND

I certify that the analyses performed for this report are accurate, and that the laboratory tests were conducted by methods approved by the U.S. Environmental Protection Agency or variations of these EPA methods.

These test results are intended to be used for informational purposes only and may not be used for regulatory compliance.

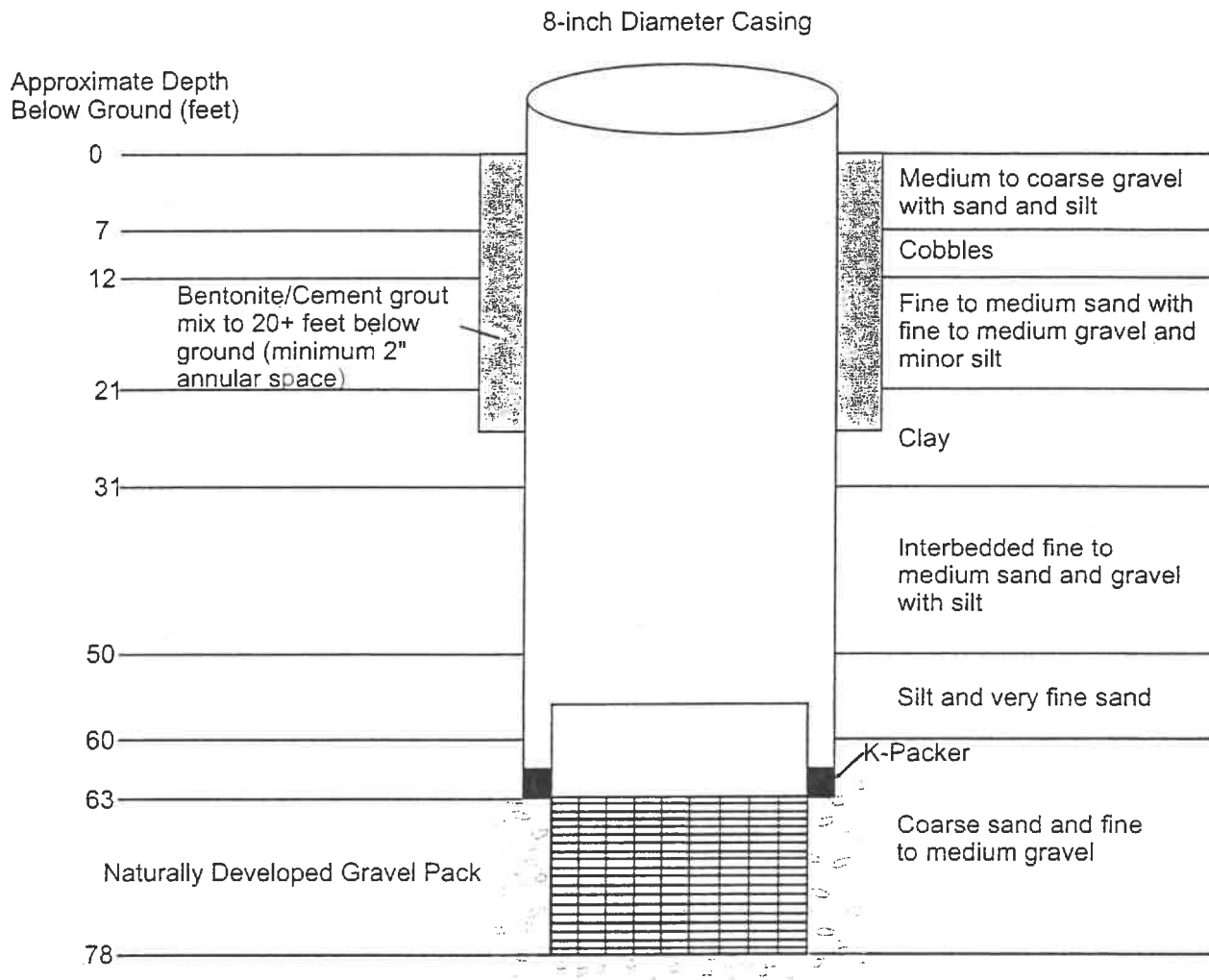
*Deborah J. Slusher*

DEBORAH J. SLUSHER  
VICE PRESIDENT, NATIONAL TESTING LABORATORIES, LTD.

# Elizabethtown, New York

## Proposed Gravel Well Design

(not to scale)



8-inch diameter casing from 2 feet above ground to 63 feet below ground

8-inch diameter, telescoping stainless steel screen exposed from 63 to 78 feet (estimated) below ground surface

2+ inches of annular space around 8-inch casing filled with grout from 20+ feet below ground to ground surface

Lithologic log determined from TW-2 test well drilling.

Well design based on geologic conditions encountered during test well drilling.



HydroSource Associates, Inc.  
Groundwater Exploration, Development, and Protection

## **Exhibit F**

### **Subsurface Evaluation**

6431 U.S. Hwy 11  
P.O. Box 29  
Canton, NY 13617  
T: (315) 386-4578  
F: (315) 386-1012

**ATLANTIC TESTING  
LABORATORIES, Limited**

# Memo

**To:** Mr. C. Jack Dodson, P.E.  
**From:** Adam J. Schneider, I.E.  
**Date:** 04/02/2002  
**Re:** Elizabethtown Borings

---

Enclosed are the draft soil borings, a rock probe schedule, and the corrosion test results. The final report will be submitted when the remaining soil borings are complete.

Thank you

## ATLANTIC TESTING LABORATORIES, Limited

## Subsurface Investigation

**DRAFT**

Client: Dodson & Associates  
 Project: Subsurface Investigation  
Water System Improvements  
Elizabethtown, New York

Report No.: CD2132-03-02Boring Location: As StakedBoring No.: SB-1 Sheet 1 of 1

Casing Hammer Weight: \_\_\_\_\_ lbs. Fall: \_\_\_\_\_ in.  
 Sampler Hammer Weight: \_\_\_\_\_ lbs. Fall: \_\_\_\_\_ in.

Ground Elev.: \_\_\_\_\_ Boring Advance By: \_\_\_\_\_  
 \_\_\_\_\_ Spoon Sample

Start Date: 3/20/2002 Finish Date: 3/20/2002

Groundwater Observations  
 Date Time Depth Casing at  
3/20/2002 PM 9.2' OUT

Based on soil moisture content the water table  
 appears to be about 2 feet below the ground  
 surface

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (inches)
			From	To					
1	S P L I T S P O O N S A M P L E	1	0.0	2.0	SS	3 5 12 14	0.1	1" TOPSOIL & ORGANIC MATERIAL Brown cmf SAND; and cmf GRAVEL; trace SILT (moist, non-plastic)	10"
2		2	2.0	4.0	SS	14 20 17 17		Brown cmf GRAVEL; some cmf SAND; trace SILT (saturated, non-plastic)	13"
3									
4		3	4.0	6.0	SS	14 14 10 10		Brown cmf SAND; and cmf GRAVEL; trace SILT (saturated, non-plastic)	8"
5	S P L I T S P O O N S A M P L E						6.0		
6		4	6.0	8.0	SS	23 23 12 12		Brown f SAND; some SILT (saturated, non-plastic)	11"
7							7.0		
8		5	8.0	10.0	SS	13 17 13 14		Brown cmf SAND; some mf GRAVEL; trace SILT (saturated, non-plastic)	9"
9	S P L I T S P O O N S A M P L E								
10							10.0	Boring terminated at 10.0 feet.	
11									
12									
13	S P L I T S P O O N S A M P L E								
14									
15									
16									
17	S P L I T S P O O N S A M P L E								
18									
19									
20									
21	S P L I T S P O O N S A M P L E								
22									
23									
24									
25	S P L I T S P O O N S A M P L E								

SS Split Spoon Sample  
 NX Rock Core  
 SH Undisturbed Sample (Shelby Tube)  
 Estimated Groundwater

Drillers: Corey Murray; Paul McAloon  
 Inspector: \_\_\_\_\_

## ATLANTIC TESTING LABORATORIES, Limited

## Subsurface Investigation

**DRAFT**

Client: Dodson & Associates  
 Project: Subsurface Investigation  
Water System Improvements  
Elizabethtown, New York

Report No.: CD2132-03-02  
 Boring Location: Relocated 34.0 feet Northeast due  
to powerlines and waterlines.

Boring No.: SB-2 Sheet 1 of 1

Start Date: 3/20/2002 Finish Date: 3/20/2002

Casing Hammer Weight: \_\_\_\_\_ lbs.  
 Fall: \_\_\_\_\_ in.  
 Sampler Hammer Weight: 140 lbs.  
 Fall: 30 in.

Groundwater Observations  
 Date Time Depth Casing at  
3/20/2002 AM 15.5' 14.0'  
3/20/2002 PM 9.1' OUT

Ground Elev.: \_\_\_\_\_ Boring Advance By: 3-1/4" Auger

Borehole caved at 9.9 feet. Based on soil moisture  
content the water table appears to be about 6 feet  
below the ground surface

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER				DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL  f - fine m - medium c - coarse  and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	RECOVERY (Inches)
			From	To								
1	A C C U R E D	1	0.0	2.0	SS	5	8	8	9	0.1	1" TOPSOIL & ORGANIC MATERIAL Brown c-mf SAND; some mf GRAVEL; trace SILT (moist, non-plastic) Similar Soil	10"
2		2	2.0	4.0	SS	6	4	5	4			7"
3												
4		3	4.0	6.0	SS	4	3	2	2		Brown mf GRAVEL; some cmf SAND; trace SILT (wet, non-plastic)	7"
5										6.0		
6		4	6.0	8.0	SS	2	2	2	2		Grey mf+ SAND; trace SILT (saturated, non-plastic)	10"
7												
8		5	8.0	10.0	SS	2	3	8	17		Similar Soil	9"
9										10.0		
10		6	10.0	12.0	SS	33	81	26	21		Brown cmf SAND; and cmf GRAVEL; trace SILT (saturated, non-plastic)	13"
11												
12		7	12.0	14.0	SS	13	29	10	22		Similar Soil; some mf GRAVEL (saturated, non-plastic)	12"
13												
14		8	14.0	16.0	SS	18	16	19	20		Similar Soil	8"
15										16.0		
16											Boring terminated at 16.0 feet.	
17												
18											Note: 1. Borehole backfilled upon completion with on-site soils.	
19												
20												
21												
22												
23												
24												
25												

SS Split Spoon Sample  
 NX Rock Core  
 SH Undisturbed Sample (Shelby Tube)  
 Estimated Groundwater

Drillers: Corey Murray; Paul McAloon  
 Inspector: \_\_\_\_\_

## ATLANTIC TESTING LABORATORIES, Limited

DRAFT

## Subsurface Investigation

Client: Dodson & Associates  
 Project: Subsurface Investigation  
Water System Improvements  
Elizabethtown, New York

Report No.: CD2132-03-02  
 Boring Location: Relocated 12.5 North due to  
Utilities (16.0 W of Hydrant; 18.0' NE of Power Pole)

Boring No.: SB-3 Sheet 1 of 1

Start Date: 3/19/2002 Finish Date: 3/19/2002

Casing Hammer Weight: \_\_\_\_\_ lbs.  
 Fall: \_\_\_\_\_ in.  
 Sampler Hammer Weight: \_\_\_\_\_ lbs.  
 Fall: \_\_\_\_\_ in.

Groundwater Observations  
 Date Time Depth Casing at  
3/19/2002 PM DRY OUT

Ground Elev.: \_\_\_\_\_ Boring Advance By:  
Spoon Sample

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (Inches)
			From	To					
1	SPOON SAMPLE	1	0.0	2.0	SS	3 3 3 6	0.7	6" TOPSOIL & ORGANIC MATERIAL	14"
2		2	2.0	4.0	SS	8 12 12 21	2.0	Dark Brown mf+ SAND; some SILT; trace f GRAVEL; trace ORGANIC MATERIAL (roots); (moist, non-plastic)	
3								Brown c-mf SAND; some mf GRAVEL; trace SILT (moist, non-plastic)	13"
4		3	4.0	6.0	SS	22 25 25 19		Similar Soil	16"
5									
6	SPOON SAMPLE	4	6.0	8.0	SS	15 15 18 14		Brown cmf SAND; and mf GRAVEL; trace SILT (moist, non-plastic)	14"
7									
8		5	8.0	10.0	SS	21 20 16 13		Brown c-mf SAND; some mf GRAVEL; trace ROCK FRAGMENTS; trace SILT (moist, non-plastic)	17"
9									
10							10.0	Boring terminated at 10.0 feet.	
11								Note:	
12								1. Borehole backfilled upon completion.	
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

SS Split Spoon Sample  
 NX Rock Core  
 SH Undisturbed Sample (Shelby Tube)  
 Estimated Groundwater

Drillers: Corey Murray; Paul McAloon

Inspector: \_\_\_\_\_

ATL-LOG1 CD2132.GPJ ATL-WELL.GDT 4/2/02

DRAFT

## ATLANTIC TESTING LABORATORIES, Limited

## Subsurface Investigation

Client: Dodson & Associates  
 Project: Subsurface Investigation  
Water System Improvements  
Elizabethtown, New York

Report No.: CD2132-03-02  
 Boring Location: Relocated 4.0 E., Due to Fiber Line

Boring No.: SB-4 Sheet 1 of 1  
 Casing Hammer Sampler Hammer  
 Weight: \_\_\_\_\_ lbs. Weight: 140 lbs.  
 Fall: \_\_\_\_\_ in. Fall: 30 in.

Start Date: 3/20/2002 Finish Date: 3/20/2002

Groundwater Observations			
Date	Time	Depth	Casing at
<u>3/20/2002</u>	<u>AM</u>	<u>DRY</u>	<u>3.5'</u>
<u>3/20/2002</u>	<u>AM</u>	<u>DRY</u>	<u>OUT</u>
_____	_____	_____	_____
_____	_____	_____	_____

Ground Elev.: \_\_\_\_\_ Boring Advance By: \_\_\_\_\_  
3-1/4" Auger

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (inches)
			From	To					
1	A	1	0.0	2.0	SS	5 6 10 39	0.2	2' TOPSOIL & ORGANIC MATERIAL	9"
2	G	2	2.0	2.4	SS	100/4"	2.5	Brown c-mf SAND; some mf GRAVEL; trace SILT (moist, non-plastic) Similar Soil	4"
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

## CLASSIFICATION OF MATERIAL

f - fine  
 m - medium  
 c - coarse

and - 35-50%  
 some - 20-35%  
 little - 10-20%  
 trace - 0-10%

## Note:

1. Borehole backfilled upon completion with on-site soils.

ATL-LOG1 CD2132.GPJ ATL-WELL.GDT 4/2/02

SS Split Spoon Sample  
 NX Rock Core  
 SH Undisturbed Sample (Shelby Tube)  
 Estimated Groundwater

Drillers: Corey Murray; Paul McAloon

Inspector: \_\_\_\_\_

## ATLANTIC TESTING LABORATORIES, Limited

**DRAFT**

## Subsurface Investigation

Client: Dodson & Associates  
 Project: Subsurface Investigation  
Water System Improvements  
Elizabethtown, New York

Report No.: CD2132-03-02Boring Location: As StakedBoring No.: SB-5 Sheet 1 of 1

Casing Hammer Sampler Hammer  
 Weight: \_\_\_\_\_ lbs. Weight: 140 lbs.  
 Fall: \_\_\_\_\_ in. Fall: 30 in.

Ground Elev.: \_\_\_\_\_ Boring Advance By:  
3-1/4" Auger

Start Date: 3/19/2002 Finish Date: 3/19/2002

Groundwater Observations  
 Date Time Depth Casing at  
3/19/2002 PM DRY 5.0'  
3/19/2002 PM DRY OUT  
 \_\_\_\_\_  
 \_\_\_\_\_

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL  f - fine m - medium c - coarse  and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	RECOVERY (Inches)
			From	To					
1	A	1	0.0	2.0	SS	4 5 14 19	0.3	3" TOPSOIL & ORGANIC MATERIAL	13"
2	G	2	2.0	4.0	SS	20 26 31 53	2.0	Brown cmf SAND; some mf GRAVEL; trace SILT (moist, non-plastic)	15"
3								Dark Brown mf+ SAND; some mf GRAVEL; little SILT (moist, non-plastic)	
4		3	4.0	4.9	SS	36 100/5"	5.0	Similar Soil	9"
5								Boring terminated at 5.0 feet, due to auger refusal on possible BEDROCK or Large BOULDER.	
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

SS Split Spoon Sample  
 NX Rock Core  
 SH Undisturbed Sample (Shelby Tube)  
 Estimated Groundwater

Drillers: Corey Murray; Paul McAloon  
 Inspector: \_\_\_\_\_

ATL-LOG1 CD2132.GPJ ATL-WELL.GDT 4/2/02

# DRAFT

**Rock Probe Schedule**  
Water System Improvements  
Elizabethtown, New York  
ATL Number CD2132

Boring	Termination Depth (Feet)	Location
RP-1	8.0	Moved 34.0 to Northwest Due to Power lines and Waterline
RP-2	3.5*	Moved 6.0 East in Roadway Due to Ditch
RP-3	6.5*	As Staked
RP-4	8.0	Moved 10.0 West Due to Waterline
RP-5	5.0*	Moved 6.0 West Due to Waterline
RP-6	8.0	As Staked
RP-7	8.0	Moved 4.0 South Due to Ditch
RP-8	8.0	Moved 5.0 East Due to Trees
RP-9	3.5*	As Staked
RP-10	8.0	As Staked

\*Rock probe terminated due to auger refusal on possible bedrock or boulder.



CLIENT: Dodson &amp; Associates Consulting Engineers, PLLC

REPORT NO.: CD2132

PROJECT: Water System Improvements, Elizabethtown, New York

DATE: April 1, 2002

Boring No.	Resistivity (ohm-cm)	Points*	pH	Points*	Redox	Points*	Sulfides	Points*	Moisture Points	Total Points**
RP-1	8400	0	7.08	0	250	0	Negative	0	1	1
RP-2	10000	0	8.24	0	274	0	Negative	0	2	2
RP-3	64000	0	8.79	3	305	0	Negative	0	2	5
RP-4	2600	1	8.33	0	323	0	Negative	0	2	3
RP-5	4600	0	8.37	0	295	0	Negative	0	1	1
RP-6	2600	1	8.40	0	276	0	Negative	0	1	2
RP-7	12000	0	8.90	3	278	0	Negative	0	1	4
RP-8	36000	0	8.06	0	303	0	Negative	0	1	1
RP-9	3900	0	8.88	3	282	0	Negative	0	1	4
RP-10	6200	0	8.70	3	275	0	Negative	0	1	4

- Points are based on AWWA Specification C105/A21.5-99 Appendix A, Polyethylene Encasement for Ductile-Iron Pipe Systems, see attached table

\*\* Ten points indicate that soil is corrosive to ductile-iron pipe and protection is recommended.

## AWWA Specification C105/A21.5-99 – Polyethylene Encasement for Ductile-Iron Pipe Systems

Table A.1 Soil-test Evaluation

Soil Characteristics Based on Samples Taken Down to Pipe Depth	Points*
Resistivity – ohm-cm (based on water saturated soil box)	
< 1,500	10
> 1,500 to 1,800	8
> 1,800 to 2,100	5
> 2,100 to 2,500	2
> 2,500 to 3,000	1
> 3,000	0
pH:	
0 to 2	5
2 to 4	3
4 to 6.5	0
6.5 to 7.5	0**
7.5 to 8.5	0
>8.5	3
Redox Potential:	
> +100 mV	0
+50 to +100 mV	3.5
0 to +50 mV	4
Negative	5
Sulfides:	
Positive	3.5
Trace	2
Negative	0
Moisture:	
Poor drainage, continuously wet	2
Fair drainage, generally moist	1
Good drainage, generally dry	0

\* Ten points indicates that soil is corrosive to ductile-iron pipe and protection is recommend.

\*\* If sulfides are present and low or negative redox potential results are obtained, add three points for this range.

**Exhibit G**

**DWSRF Funding Letter**

# New York State Environmental Facilities Corporation

(800) 882-9721 Within NY State

(518) 457-4100

FAX: (518) 485-8773

www.nysefc.org



MAY 02 2000

The Honorable Philip Hutchins  
Supervisor, Town of Elizabethtown  
PO Box 265  
Elizabethtown, NY 12932

Re: Drinking Water State Revolving Fund (DWSRF)  
DWSRF Project No. 16044  
Town of Elizabethtown  
Essex County

Dear Supervisor Hutchins :

The New York State Environmental Facilities Corporation (EFC) and the Department of Health (DOH) are committed to helping protect public drinking water supplies while providing low-cost funding to communities through the New York State Drinking Water State Revolving Fund (DWSRF). This dynamic program was made possible by Governor George E. Pataki's \$1.75 billion 1996 Clean Water/Clean Air Bond Act.

EFC and DOH have completed an initial evaluation of the proposed financing for the Town of Elizabethtown's new ground water supply, transmission main, and storage tank replacement. We are pleased to inform you that the Town of Elizabethtown qualifies for a DWSRF grant and interest-free loan for this project.

Our determination is based on the following:

- 494 equivalent dwelling units (EDUs) within the service area;
- A target annual service charge per EDU of \$145;
- A median household income of \$14,460 based on an income survey;
- Projected annual operation and maintenance costs of \$42,893; and,
- A total project cost of \$1,679,180.

Based on the factors above and other information provided by the Town, the Town is eligible for a grant of \$608,953 and an interest-free loan of \$1,070,228 with a 30 year amortization schedule. This confirmation letter is effective for two years from the date of this letter, and requires the Town to submit a *completed* application by October 20, 2001 in order to close on this financing within this two year period. Please contact

our Program Services Representative III, David Morseman, at (800) 882-9721 (in NYS), (518) 457-9201 or email to Morseman@nysefc.org, if you need an application packet.

Upon receipt of the Town's complete application, EFC and DOH will evaluate the project and then make a recommendation to its Board of Directors regarding the proposed DWSRF funding package. The actual funding package will take into consideration any significant changes in the determination factors listed above (including the availability of grant monies from other sources).

Please note, however, that EFC may only finance a project after receiving a *completed* application, and its Board of Directors and the New York State Public Authorities Control Board have approved the funding.

Under Governor Pataki's stewardship, New York State's Drinking Water State Revolving Fund is providing low-cost funds to ensure that all of New York has clean, safe water to drink. We look forward to working with you on this project to accomplish the important goal of safeguarding your drinking water supply.

If you should have any questions, please do not hesitate to contact Ms. Tracey Hitchen Boyd of my staff at (518) 457-0886 or (800) 882-9721.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Sterman", with a stylized flourish extending to the right.

David Sterman  
Acting President

THB/yk

cc: Senator Ronald B. Stafford  
Assemblywoman Elizabeth O'C. Little  
Mr. Ronald Tramontano, NYSDOH

## APPENDIX C: REFERENCES

## CERTIFICATION OF EXPERIENCE

I, \_\_\_\_\_ HEREBY CERTIFY THAT (COMPANY \_\_\_\_\_  
\_\_\_\_\_ HAS PERFORMED THE FOLLOWING WORK WITHIN 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:

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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].

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**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**

**I. LEGAL BUSINESS ENTITY INFORMATION**

- 1.4 If the Legal Business Entity's Principal Place of Business is not in New York State, does the Legal Business Entity maintain an office in New York State? ☐ Yes ☐ No  
☐ N/A  
(Select "N/A," if Principal Place of Business is in New York State.)

If "Yes," provide the address and telephone number for one office located in New York State.

- 1.5 Is the Legal Business Entity a New York State certified Minority-Owned Business Enterprise (MBE), Women-Owned Business Enterprise (WBE), New York State Small Business (SB) or a federally certified Disadvantaged Business Enterprise (DBE)? ☐ Yes ☐ No
- If "Yes," check all that apply:
- ☐ New York State certified Minority-Owned Business Enterprise (MBE)
- ☐ New York State certified Women-Owned Business Enterprise (WBE)
- ☐ New York State Small Business (SB)
- ☐ Federally certified Disadvantaged Business Enterprise (DBE)

- 1.6 Identify Officials and Principal Owners, 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 (Enter 0% if not applicable)

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

**II. REPORTING ENTITY INFORMATION**

2.0 The Reporting Entity for this questionnaire is:

Note: Select only one.

☐ Legal Business Entity

*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.)*

☐ Organizational Unit within and operating under the authority of the Legal Business Entity

SEE DEFINITIONS OF "REPORTING ENTITY" AND "ORGANIZATIONAL UNIT" FOR ADDITIONAL INFORMATION ON CRITERIA TO QUALIFY FOR THIS SELECTION.

*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.)*

**IDENTIFYING INFORMATION**

a) Reporting Entity Name

Address of the Primary Place of Business (street, city, state, zip code)

Telephone

ext.

b) Describe the relationship of the Reporting Entity to the Legal Business Entity

c) Attach an organizational chart

d) Does the Reporting Entity have a DUNS Number?

☐ Yes ☐ No

If "Yes," enter DUNS Number

e) Identify the designated manager(s) responsible for the business of the Reporting Entity.

*For each person, include name and title. Attach additional pages if necessary.*

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.

**III. LEADERSHIP INTEGRITY**

*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:*

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:

**IV. INTEGRITY – CONTRACT BIDDING**

*Within the past five (5) years, has the reporting entity:*

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</u> goal or <u>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**

**V. INTEGRITY – CONTRACT AWARD***Within the past five (5) years, has the reporting entity:*

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:

**VI. CERTIFICATIONS/LICENSES***Within the past five (5) years, has the reporting entity:*

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:

**VII. LEGAL PROCEEDINGS***Within the past five (5) years, has the reporting entity:*

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>	
<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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	
<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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	
<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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	
<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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	
<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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	
<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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	
<b>8.6</b> During the past three (3) years, has the <u>Reporting Entity</u> had any <u>government audit(s)</u> completed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

<b>IX. ASSOCIATED ENTITIES</b> <i>This section pertains to any entity(ies) that either controls or is controlled by the <u>reporting entity</u>.          (See definition of "<u>associated entity</u>" for additional information to complete this section.)</i>	
<b>9.0</b> Does the <u>Reporting Entity</u> have any <u>Associated Entities</u> ? Note: All questions in this section must be answered if the <u>Reporting Entity</u> is either: – An <u>Organizational Unit</u> ; or – The entire <u>Legal Business Entity</u> which controls, or is controlled by, any other entity(ies). If "No," SKIP THE REMAINDER OF SECTION IX AND PROCEED WITH SECTION X.	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>9.1</b> 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: 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
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).	
<b>9.2</b> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," provide an explanation of the issue(s), identify the <u>Associated Entity's</u> name(s), <u>EIN(s)</u> , 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(s)</u> and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.	
<b>9.3</b> Within the past five (5) years, has any <u>Associated Entity</u> :	
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 government contracting process?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
g) Initiated or been the subject of any bankruptcy proceedings, whether or not closed, or is any bankruptcy proceeding pending?	<input type="checkbox"/> Yes <input type="checkbox"/> No
For each "Yes," provide an explanation of the issue(s), identify the <u>Associated Entity's</u> name(s), <u>EIN(s)</u> , 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.	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT BUSINESS ENTITY**

**X. FREEDOM OF INFORMATION LAW (FOIL)**

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.

☐ Yes ☐ No

If "Yes," indicate the question number(s) and explain the basis for the claim.

**XI. AUTHORIZED CONTACT FOR THIS QUESTIONNAIRE**

Name	Telephone ext.	Fax
Title	Email	

**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"/> 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.

Social security number										
				-						
or										
Employer identification number										
				-						

## 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.

Sign Here	Signature of U.S. person ▶	Date ▶

## 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 alien 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 V-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>4</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>1</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: <INTENTIONALLY LEFT BLANK>**

## **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		
<i>Task 3.1) Local Agency Permitting: County Highway, Zoning, etc.</i>		
<i>Task 3.2) State Agency Permitting: NYS DOT, NYS DEC, NYS DOH, NYS DOL, APA, SHPO, THPO, etc.</i>		
<i>Task 3.3) Federal Agency Permitting: ACOE, EPA, HUD/OCR, NEPA, USFWS, etc.</i>		
Task 4) Program Management: Consultant & Contractor Funding Program Requirements & Reporting		
<b>PRELIMINARY DESIGN PHASE</b>		
Task 5) Data Collection & Review (not Surveys)		
Task 6) Basis of Design Report & Prelim Estimates ( <i>Owner &amp; Regulatory approval</i> )		
Task 7) Schematic Designs ( <i>30% Designs to support permitting</i> )		
<b>FINAL DESIGN PHASE</b>		
Task 8) Final Designs ( <i>100% completion for Funding/Regulatory approval</i> )		
Task 9) Regulatory Agency Coordination for Plans & Specs		
<b>BIDDING PHASE</b>		
Task 10) Provide Funding Agency Compliant Construction Documents ( <i>incl. PRINTING</i> )		
Task 11) Advertise for Bidding, provide Bid Response Services ( <i>incl. PUBLISHING</i> )		
Task 12) Tabulate Bid Results		
<b>CONSTRUCTION ADMIN PHASE</b>		
Task 13) Preconstruction Conference		
Task 14) Construction Period Services: Technical Analysis & Contractor Payments/Submittals		
<b>POST CONSTRUCTION PHASE</b>		
Task 15) Punch List with Contractor		
Task 16) Codes & Compliance Review / Certification ( <i>see Closeout Checklist</i> )		
Task 17) Engineer's Notice of Completion ( <i>Completion Certification</i> )		
<b>ALTERNATE: RPR SERVICES</b>		
Task 18) Approx. 120 Days of RPR Services		
<b>REIMBURSABLES</b>		
Task 19) Surveys & Base Mapping		
Task 20) Archaeological Evaluations		
Task 21) Geotechnical Evaluations		

## **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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THIS IS AN AGREEMENT effective as of   (“Effective Date”) between

\_\_\_\_\_ (“Engineer”).

**TOWN OF ELIZABETHTOWN WATER SYSTEM UPGRADES** ("Project").

Engineer's services under this Agreement are generally identified as follows:

Owner and Engineer further agree as follows:

## 1.01 Scope

- A. Engineer shall provide, or cause to be provided, the services set forth herein, ***in the originating Proposal*** and in **Exhibit A**.

## 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.

#### 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. Invoices are due and payable within **thirty (30) days** of receipt.

#### 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 (30) 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 seven (7) years from the date of final payment under the agreement.**
- C. **All reports, documents, information, presentations, electronic drawings, and other materials prepared by Engineer and its' subconsultants in connection with this Agreement are the Owner's sole property in which the Engineer has no proprietary or other rights or interests.** 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 of the appropriate file type (e.g., PDF, JPEG, DWG, etc.) 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~~ **unmitigated** 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 AND MAPPING 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) **In the event of such termination, Engineer is still liable to provide any project drawings, specifications, mapping and any other developed Work that the Owner has paid for in the period of performance.**
    - 4) ~~Engineer shall have no liability to Owner on account of such termination.~~
  - 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 up to~~ the effective date of termination. Upon making such payment, Owner shall have the ~~limited~~ **unmitigated** right to the use of Documents, 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 ELIZABETHTOWN, ESSEX COUNTY, NEW YORK.**

#### 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. **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.**
- ~~C. 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 or 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.
- K. Exhibit K, EJCDC Amendment to Owner-Engineer Agreement.
- L. **Exhibit L, Project Schedule**
- M. **Exhibit M, Funding Program Requirements**
- N. **Exhibit N, EJCDC Contractor Payment Application (*For use in Bidding*)**

O. **Exhibit O, Project Closeout Checklist** (*For use in 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 ELIZABETHTOWN**

Engineer: 

By: \_\_\_\_\_

By:  \_\_\_\_\_

Print name: **HON. NOEL MERRIHEW**

Print name: \_\_\_\_\_

Title: **TOWN SUPERVISOR**

Title:  \_\_\_\_\_

Date Signed: \_\_\_\_\_

Date  
Signed: \_\_\_\_\_

Engineer License or Firm's Certificate No. (if required):  


State of:  \_\_\_\_\_

Address for Owner's receipt of notices:

Address for Engineer's receipt of notices:

**P. O. Box 265**

**Elizabethtown, NY 12932**

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:  \_\_\_\_\_

## **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 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. Produce all necessary documents for supporting the permitting necessary for the project.
- d. Engineer will coordinate with Owner (or Owner's Designated Representative) for necessary permits.
- e. Ensure Engineer's own contract is compliant by the Owners' funding program requirements, and produce all necessary reports required.
- f. Ensure that Owners' Contractors contracts are also compliant per the Owners' funding program requirements, and all necessary reports required are produced.

3. *Project Permitting (these are not inclusive; may vary or change during the project):*

- a. Local Agency Permitting: County Highway, Zoning, etc.
- b. State Agency Permitting: APA, NYS DEC, NYS DOH, NYS DOL, NYS DOT, SHPO, THPO, SEQ, etc.

- c. Federal Permitting Agencies: ACOE, EPA, FEMA, HUD, NEPA, USFWS, etc.

### *Study and Report Phase*

#### 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 **THREE (3)** 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

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#### Exhibit A – Engineer's Services

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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 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:  
**PROVIDE ALL SURVEY AND MAPPING PRODUCTS TO THE TOWN;  
PROVIDE A REGULATORY AND FUNDING AGENCY COMPLIANT BASIS  
OF DESIGN REPORT NO LATER THAN 06/10/2019.**
  15. Furnish **three (3)** review copies of the Report and any other Study and Report Phase deliverables to Owner within **approximately sixty (60) days** of the Effective Date and review it with Owner. Within **thirty (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 **three (3)** copies of the revised Report and any other Study and Report Phase deliverables to the Owner within **thirty (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 Schematic Design Phase (30% completion to completely support permitting processes)*

- 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

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**Exhibit A – Engineer's Services**

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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. Prepare Schematic Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project.
2. 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.
3. 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.
4. Visit the Site as needed to prepare the Schematic Design Phase documents.
5. 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.
6. Continue to assist Owner with Project Strategies, Technologies, and Techniques that Owner has chosen to implement.
7. 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.
8. 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.
9. 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 NECESSARY FOR PROJECT TO REGULATORY AND FUNDING AGENCIES,**

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**Exhibit A – Engineer's Services**

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**PRIOR TO FINAL DESIGN AND IN TIME TO SUPPORT BIDDING OF CONSTRUCTION, PER EXHIBIT L, "PROJECT SCHEDULE".**

**FINAL DESIGN SHALL NOT COMMENCE UNTIL ALL DOCUMENTS ARE PROVIDED TO OWNER FOR ALL NECESSARY PERMITTING.**

10. 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.
  11. 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 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 & approvable 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.

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**Exhibit A – Engineer's Services**

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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 IS SUCH TIME TO ALLOW FOR FORMAL REVIEW ACCEPTANCE PRIOR TO BIDDING CONSTRUCTION PROJECT.**

**ENGINEER WILL ACCOUNT FOR A MINIMUM OF SIX (6) WEEKS FOR REGULATORY / FUNDING AGENCIES TO REVIEW CONSTRUCTION DOCUMENTS IN THE PROJECT SCHEDULE.**

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 **forty-five [ 45 ] 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 within **twenty [ 20 ] days** after receipt of Owner's 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 or Negotiating, 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 CONTRACTOR**. If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Agreement.

A1.04 *Bidding or Negotiating Phase (incl. Funding 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 the Work that is to be Bid, and 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 or Negotiating Phase tasks or deliverables:

**ENSURE ALL CONSTRUCTION DOCUMENTS ARE COMPLIANT WITH FUNDING REQUIREMENTS, PER EXHIBIT M, "FUNDING PROGRAM REQUIREMENTS".**

- B. The Bidding or Negotiating 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 and Negotiating 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. *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**.
  4. *Pre-Construction Conference:* Participate in a pre-construction conference prior to commencement of Work at the Site. **ENGINEER WILL BE EXPECTED TO CITE ALL FUNDING REQUIREMENTS THE PROJECT MUST BE COMPLIANT TO ENSURE CONTRATOR(S) HAVE ALL NECESSARY AGENCY PLAN & REPORT FORMS TO POPULATE, PER EXHIBIT N.**
  5. *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.
  6. *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

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**Exhibit A – Engineer's Services**

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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.

7. *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.
8. *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.
9. *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.

10. *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.
11. *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.
12. *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.
13. *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.
14. *Field Orders:* Subject to any limitations in the Construction Contract Documents, Engineer may prepare and issue Field Orders requiring minor changes in the Work.
15. *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.
16. *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.
17. *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.

18. *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**.
19. *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.
20. *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.
21. *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). **Further, the Engineer will review Contractor Submittals for any funding agency plans or**

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Exhibit A – Engineer's Services

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**reports that are due on monthly/quarterly deliverables for compliance and acceptability, so ensure that all project costs are funding agency compliant.**

- 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.~~
22. *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.**
23. *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.
24. *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.**
25. *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.

26. *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 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 Phase tasks or deliverables:  
  
**ENSURE ALL NECESSARY DOCUMENTS ADDRESS FUNDING AGENCY REQUIREMENTS AS DEFINED IN EXHIBIT M.**
- B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate twelve 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. OWNER WILL ESTABLISH THE FILE TYPE PREFERABLE; 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;~~

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- ~~e. 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~~
- ~~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 MATERIALS AND QUANTITIES USAGE TO SUPPORT EACH PAYMENT APPLICATION REMITTED EACH MONTH 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

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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 RECORD 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.

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**Exhibit A – Engineer's Services**

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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 **3** pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [REDACTED].

## **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.

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 TO SECURE ALL NECESSARY PERMITTING AND ENVIRONMENTAL APPROVALS FOR THE PROJECT. SUCH RESOURCES MAY BE THIRD PARTY GOVERNMENT AGENCIES.**

- 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 constructibility 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:

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**Exhibit B – Owner's Responsibilities**

**EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.**

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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 [REDACTED].

## **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 \$ [REDACTED] based on the following estimated distribution of compensation:
  - a. **General Requirements** \$ [REDACTED]
  - b. **Schematic Design Phase** \$ [REDACTED]
  - c. **Final Design Phase** \$ [REDACTED]
  - d. **Bidding and Negotiating Phase** \$ [REDACTED]
  - e. **Construction Phase** \$ [REDACTED]
  - f. **Post-Construction Phase** \$ [REDACTED]
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 (see Appendix 1 for rates or charges)**: [REDACTED]
  - a. **GEOTECHNICAL EVALUATIONS:** \$ \_\_\_\_\_
  - b. **ARCHAEOLOGICAL EVALUATIONS:** \$ \_\_\_\_\_
  - c. **SURVEYS:** \$ \_\_\_\_\_

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, 2020**. 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]** based upon full-time RPR services on an eight-hour workday, Monday through Friday, over an approximate **one hundred twenty (120) 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:*

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**.

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Exhibit C – Compensation Packet RPR-2: Resident Project Representative Services—  
Standard Hourly Rates Method of Payment.

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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 .

### **Reimbursable Expenses Schedule**

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:

**(AS REFERENCED IN "GENERAL CONDITIONS" AND "BIDDING SERVICES")**

<b>BLACK AND WHITE PRODUCTION:</b>	
8"x11" Prints/Copies	\$ TBA /page
11"x17" Prints/Copies	\$ TBA /page
24"X36" Prints/Copies	\$ TBA /page
Larger than 24"x36"	\$ TBA /page
<b>COLOR PRODUCTION</b>	
8"x11" Prints/Copies	\$ TBA /page
11"x17" Prints/Copies	\$ TBA /page
24"X36" Prints/Copies	\$ TBA /page
Larger than 24"x36"	\$ TBA /page
<b>MISCELLANEOUS</b>	
Subconsultant Fees	Cost — 10%
Postage	Cost
Mileage (auto)	\$ /mile (per current GSA Rates)

This is **Appendix 2 to EXHIBIT C**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [REDACTED].

## **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:

<b>Billing Class VIII</b>	\$[REDACTED]/hour
<b>Billing Class VII</b>	[REDACTED]/hour
<b>Billing Class VI</b>	[REDACTED]/hour
<b>Billing Class V</b>	[REDACTED]/hour
<b>Billing Class IV</b>	[REDACTED]/hour
<b>Billing Class III</b>	[REDACTED]/hour
<b>Billing Class II</b>	[REDACTED]/hour
<b>Billing Class I</b>	[REDACTED]/hour
<b>Non-administrative Support Staff</b>	[REDACTED]/hour

This is **EXHIBIT D**, consisting of 5 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [REDACTED].

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## **Duties, Responsibilities, and Limitations of Authority of Resident Project Representative**

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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 [REDACTED].



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### NOTICE OF ACCEPTABILITY OF WORK

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**PROJECT:** ELIZABETHTOWN WATER SYSTEM UPGRADES

**OWNER:** TOWN OF ELIZABETHTOWN, NY

**CONTRACTOR:** TBA

**OWNER'S CONSTRUCTION CONTRACT IDENTIFICATION:** TBA

**EFFECTIVE DATE OF THE CONSTRUCTION CONTRACT:** TBA

**ENGINEER:**

**NOTICE DATE:**

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**To:**

Owner

**And To:**

Contractor

**From:**

Engineer

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 [REDACTED], and the following terms and conditions of this Notice:

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Exhibit E – Notice of Acceptability of Work.

EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.

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Page 1

### **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.~~

This is **EXHIBIT G**, consisting of 3 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [REDACTED].

## **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): \$ [REDACTED]

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.  \_\_\_\_\_  
Engineer
- b.  \_\_\_\_\_  
Engineer's Consultant
- c.  \_\_\_\_\_  
Engineer's Consultant
- d.  \_\_\_\_\_  
\_\_\_\_\_  
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 [REDACTED].

## **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 [REDACTED] pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [REDACTED].

## **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 \$[REDACTED] 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.~~

DRAFT

This is **EXHIBIT J**, consisting of [REDACTED] pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [REDACTED].

### **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:

**NONE**

DRAFT

This is **EXHIBIT K**, consisting of [ ] pages,  
referred to in and part of the **Agreement**  
**between Owner and Engineer for**  
**Professional Services** dated [ ].

**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 NEWCOMB, NY**

Engineer:

Project: **TOWN OF NEWCOMB SALT STORAGE SHED**

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 NEWCOMB, NY**

**ENGINEER: (TBA)**

**By:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Print name:** HON. NOEL MERRIHEW

**Print name:** \_\_\_\_\_

**Title:** TOWN SUPERVISOR

**Title:** \_\_\_\_\_

**Date Signed:** \_\_\_\_\_

**Date Signed:** \_\_\_\_\_

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