

DRAFT

WATER INFRASTRUCTURE IMPROVEMENT ACT
MUNICIPAL APPLICATION FORM

TOWN OF GUILDERLAND
Water WELL FILTRATION PROJECT

Prepared for:

The Town of Guilderland

PO Box 339
5209 Western Turnpike
Guilderland, NY 12084

Prepared by:



Delaware Engineering, D.P.C.

28 Madison Avenue Extension
Albany, New York 12203
518-452-1290

November 2021

Guilderland Water Well Filtration Project (Greensand)
WIIA/DWSRF Applications
2021

WIIA Application Form

List of Attachments:

1. Service Area Map
2. Planning Excerpts
 - *AWQR 2020*
 - *Comprehensive Plan Excerpts*
 - *WTP Capacity Evaluation 2018*
3. Water Violation Letter 2018
4. Environmental Justice Area Map
5. Detailed Project Schedule
6. Engineering Report
7. Smart Growth Assessment Form
8. SEQR Coordinated Review Documentation
9. SHPO Letter of No Effect
10. Board/Authorizing Resolution
11. Title Certification
12. Professional Engineering Agreement
13. 202b Proceedings
14. DWSRF IUP Listing Form



GRANT APPLICATION
NYS WATER INFRASTRUCTURE IMPROVEMENT ACT (WIIA)
&
NYS INTERMUNICIPAL WATER INFRASTRUCTURE GRANTS (IMG) PROGRAM
DRINKING WATER

A. APPLICANT

Name of Applicant: Town of Guilderland County: Albany
Federal I.D. Number: 14-6002220 DUNS Number: 089113682
Municipality(ies) Served (Water Authorities Only): N/A
Cooperating Municipality(ies) (IMG Only): N/A

Highest Elected Official: Peter Barber Phone: (518) 356-1980
Title: Supervisor Email: barberp@townofguilderland.org
Mailing Address: PO Box 339
Guilderland, NY 12084

Authorized Representative: Peter Barber Phone: (518) 356-1980
Title: Supervisor Email: barberp@townofguilderland.org
Mailing Address: PO Box 339
Guilderland, NY 12084

Daily Contact Name: Don Csaposs Phone: (518) 356-1980
Title: CEO Guilderland IDA Email: csapossd@togny.org
Company: Town of Guilderland

Engineering Consultant: Michael Aiello, P.E. Phone: (518) 452-1290
Title: Senior Project Manager Email: bjuulosa@delawareengineering.com
Company: Delaware Engineering, DPC

B. GRANT CATEGORY

Identify the grant program(s) for which you are applying by checking the appropriate box or boxes below.

- [X] New York Water Infrastructure Improvement Act (WIIA) grant
[] Intermunicipal Water Infrastructure Grants (IMG) Program grant



C. GENERAL INFORMATION

Project Name: Well Water Filtration Project

Project Location: 6011 State Farm Road, Guilderland, NY (DPW Office Site)

42.689751 Latitude -73.900616 Longitude Provide in decimal format.

District Name/

Project Service Area: Town of Guilderland Water District

Submit a water district or service area map with your application if applicable.

Population of Project Service Area: 27,546

Table with 2 columns: Municipalities Served, Users Served. Row 1: Town of Guilderland, 27,546 persons.

Attach a list if more space is needed. Users Served can be provided by %, population, EDUs, or flow allocation.

Public Water Supply ID Number: NY0100205

Design Start Date: 12/01/2021 (T / A)

Construction Start Date: 09/01/2022 (T / A)

Check "T" for a target date and "A" for an actual date

Construction End Date: 01/31/2023 (T / A)

Legislative Districts (include multiple districts if applicable) NY Senate 46 NY Assembly 109 To help identify your districts, visit: https://www.elections.ny.gov/district-map.html

D. PROJECT INFORMATION

1. Provide a brief description of your project.

The Town of Guilderland (Town) owns and operates the Guilderland Water District (District) which supplies potable water to approx. 27,000 people in the Town. To meet the overall water demands generated within the system the District utilizes multiple permanent water sources, including the Town of Rotterdam, with a large portion of their water supplied by the Albany Water Board (City of Albany). The current Town-owned water sources are not enough to meet seasonal peak demands. The primary source of supply is the Town's WTP, which draws and treats water from the Watervliet Reservoir. The reservoir's water quality is typically degraded each summer by algae blooms and aquatic weed growth that affect WTP performance and reduces treatment capacity. Subsequently, the quality of water from the Town wells is currently not high enough to rely upon it during peak demands. Iron and manganese levels within these wells are both above the MCL and high enough to affect customer water quality without adequate treatment. Combined, these water quality issues reduce the Town's source capacity during peak seasonal demands. As such, the addition of green sand filtration is warranted to make these wells a more dependable source of water for the Town. The intent of this project is for the Town to better utilize its own existing groundwater resources to supplement the potable water supply from its WTP and to build increased redundancy to its current dependency on water purchased from Albany and Rotterdam. A new filtration building will be constructed at the Town DPW office and existing well site. Connective piping will be added to connect all three wells to the new filtration system and then to the distribution system along NYS Route 155/State Farm Road.



- 2. If applying for an IMG Grant, describe the relationship between the municipalities undertaking the joint project, how the joint project benefits the cooperating municipalities and is the best solution for an identified water quality problem.

Not Applicable

- 3. Which of the following categories does the project scope address?

Source Treatment Storage Distribution

- 4. Has any portion of your source, treatment, or distribution system been compromised or created a situation where the system users were without water?

No Yes If yes, please explain.

Not Applicable

- 5. Is the project required through an enforcement action, such as a DOH violation, DOH and/or EPA consent order, judicial order, compliance schedule?

No Yes If yes, indicate the type, date of execution and reason for the enforcement action as it relates to the project. Please submit a copy of the executed enforcement action or compliance order with the grant application.

Although the project is not the result of an enforcement action, the green sand filters would allow the Town of Guilderland to use its existing wells which contain high levels of iron, above the MCL level, while relying less on purchased surface water. Additionally, in 2018, the Town detected disinfection byproducts in the water system. The system was found to have an average concentration of 83.5 ug/L of total Trihalomethanes for the previous four quarters of sampling. This exceeds the maximum contaminant level (MCL) established by the US EPA and NYSDOH.

- 6. Describe the project's community impacts, including but not limited to, public support for the project, critical community resources served by this project, economic development impacts, or any negative/positive effects on a designated Environmental Justice (EJ) area. Information on EJ areas can be found on DEC's [website](#) and [DECInfoLocator mapper](#).

There is a large EJ Area in the Town. The proposed project will help the Town supply better quality and quantity water at a lower price to customers, better serving the needs of the EJ area. The project could positively impact a large number of persons within many water service areas in Albany & Schenectady Co. The project is a regional economic priority because it will support revitalization in the Town of Guilderland and improve water service. The Town has water interconnects with City of Albany, Town of Bethlehem, Village of Voorheesville, Town of Rotterdam and City of Schenectady.



7. Is the project identified in any regional planning initiatives (e.g. a Comprehensive Plan, Regional Planning document, Waterfront Revitalization Plan, Watershed Plan or Estuary Plan)?

No Yes If yes, describe below and attach applicable documents:

One of the Town Comp. Plan Goals is providing infrastructure (including water) that meets current demands and supports future growth. Based on survey results, residents of the Town support efforts to protect the Town's drinking water supply. The Town's 2018 Water Treatment Supply Capacity Evaluation indicates that there would be significant savings to water users in the Town as a result of using its own supply water rather than relving on purchased surface water.

8. Does the project require easements or land acquisition?

No Yes If yes, describe the status of obtaining the easements and/or land. If the process has been completed, attach the Title Certification and/or proof of easement acquisition.

Not Applicable - A Title Certification is attached to this funding application.

9. Describe the current status of the project and your ability to demonstrate readiness to proceed including, but not limited to, an executed engineering agreement for design services, executed professional services agreements, detailed project schedule, and plans and specifications.

A detailed engineering report has been prepared and adopted by the Town and an engineering agreement has been executed. SEQR and SHPO reviews are complete. A detailed Project Schedule is attached to this application package along with a Title Certification. The Town is ready to move expeditiously to complete this very important project.

10. Does the project require a debt exclusion approval from the Office of the State Comptroller (OSC)?

No Yes If yes, describe the status. If the debt exclusion has been approved, attach the OSC approval letter.

Not Applicable

11. Has the applicant submitted timely Annual Financial Report Update Documents (AUD) to OSC for each of the last three years?

No Yes If no, please explain.

Not Applicable



E. TOTAL PROJECT BUDGET

Please add line items to the budget as needed. If you have additional questions, please call EFC or refer to the Intended Use Plan. All costs must be based on estimates that are not more than 6 months old.

Category	Estimated Costs
1. Construction Costs	
Contract 1	\$ 2,933,000.00
Contract 2	\$
Contract 3	\$
Contract 4	\$
2. Engineering Costs	
a. Planning	\$ 15,000.00
b. Design	\$ 350,000.00
c. Construction	\$ 163,000.00
d. Other	\$ 0.00
3. Other Expenses	
a. Local Counsel	\$ 20,000.00
b. Bond Counsel	\$ 20,000.00
c. Work Force	\$0
- Technical	\$ 0.00
- Administrative	\$ 0.00
d. Fiscal Services	\$ 20,000.00
e. Net Interest	\$ 0.00
f. Miscellaneous (please describe)	\$
Mailings, Newspaper, etc.	\$ 5,000.00
	\$
	\$
4. Equipment	\$ 0.00
5. Land Acquisition	\$ 0.00
6. Contingencies	\$ 733,000.00
7. Total Project Costs (sum lines 1-6)	\$ 4,259,000.00
Date cost estimate was developed:	10/29/2021

F. PLAN OF FINANCE

If awarded a grant, please identify all applicable sources of funding available that will be used to pay project costs not covered by the grant being applied for. Please provide as much detail as possible for the source of funds in the plan of finance.

Note: Projects that are not using SRF financial assistance for the balance of their project:

- will not be added to the SRF Intended Use Plan and
- must be prepared to fund the balance of the project with funding similarly low cost to SRF financial assistance

Type	Amount	Details	Not Applicable
DWSRF Financial Assistance SRF No. _____ <i>List project number if project is currently on the IUP</i>	\$		<input checked="" type="checkbox"/>
Municipal Contributions	\$ 1,703,600.00	Source: <u>ARPA</u>	<input type="checkbox"/>
Municipal Interfund Borrowing	\$	Source: _____	<input checked="" type="checkbox"/>
Non-EFC Debt (BAN, Bonds, other) <i>Debt instruments not provided by EFC</i> <i>If a BAN is callable, provide a call date</i>	\$	Type: _____ Issue Date: _____ Call Date: _____	<input checked="" type="checkbox"/>
	\$	Type: _____ Issue Date: _____ Call Date: _____	<input checked="" type="checkbox"/>
	\$	Type: _____ Issue Date: _____ Call Date: _____	<input checked="" type="checkbox"/>
	\$	Type: _____ Issue Date: _____ Call Date: _____	<input checked="" type="checkbox"/>
Non-EFC Grants <i>Indicate grant program and status of application/award</i> <i>Submit grant award letter if received</i>	\$	Program: _____ <input type="checkbox"/> Applied <input type="checkbox"/> Awarded	<input checked="" type="checkbox"/>
	\$	Program: _____ <input type="checkbox"/> Applied <input type="checkbox"/> Awarded	<input checked="" type="checkbox"/>
	\$	Program: _____ <input type="checkbox"/> Applied <input type="checkbox"/> Awarded	<input checked="" type="checkbox"/>
Other Funding	\$	Please Describe: _____	<input checked="" type="checkbox"/>

G. REQUIRED DOCUMENTS

1. The following documents are **required and must be submitted with all applications** if not previously submitted to DOH/EFC. If any of these items are unavailable, do not continue with the application at this time.

Enclosed	Previously Submitted to EFC	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Engineering Report
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Smart Growth Assessment Form
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Environmental Review Determination
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SHPO Project Review Determination Letter
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Board Resolution Authorization to submit grant application
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Authorizing Resolution (Certified) <i>(Bond Resolution or Board Resolution describing Plan of Finance)</i>

2. The following documents are **required as indicated and must be submitted with the application** if not previously submitted to EFC. If any of these items apply to your project and are unavailable, do not continue with the application at this time.

Enclosed	Previously Submitted to EFC	Not Applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Project Intermunicipal Agreement (Valid and Binding) <i>(Required if applying for IMG)</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DWSRF Financing Application <i>(Required if applying for WIIA or IMG grants with DWSRF Financing)</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water District Documentation, including any OSC Approvals <i>(Required for WIIA or IMG if applicable to your project)</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Award letter for any awarded grant related to project <i>(Required for projects that have received co-funding)</i>



H. ACKNOWLEDGEMENTS

1. Upon submission of this application, you acknowledge your responsibility to comply with New York State Executive Law, Article 15-A with respect to Minority and Women’s Business Enterprise (MWBE) participation and Equal Employment Opportunity (EEO) requirements, and Article 17-B with respect to Service-Disabled Veteran-Owned Business (SDVOB). By checking this box, you acknowledge that you are aware of these obligations and that you are authorized to make this acknowledgement on behalf of the applicant.

MWBE goals for WIIA or IMG with CWSRF financial assistance - 20%

MWBE goals for WIIA or IMG without CWSRF financial assistance - 30%

EEO goals for all applicants - % varies by County (<http://www.efc.ny.gov/mwbe>)

SDVOB goals without DWSRF financial assistance – 6%

SDVOB goals are not required, but encouraged, with DWSRF financial assistance

Acknowledged

2. Upon submission of this application, you acknowledge that to receive financial assistance through the CWSRF, you will need to meet federal requirements and appropriate language must be included in the recipient’s contracts. These requirements include, but are not limited to, Davis-Bacon and related acts, and American Iron and Steel. Recipients of financial assistance will be required to perform certain actions to verify compliance and ensure certain provisions are contained in all contracts and subcontracts. By checking this box, you acknowledge that you are aware of these requirements and that you are authorized to make this acknowledgement on behalf of the Applicant.

Please refer to the current IUP for additional detail regarding your responsibilities under these programs.

Acknowledged

3. Upon submission of this application, you acknowledge that if you are not using SRF financial assistance to fund the balance of your project that you will be prepared to fund the balance of the project with funding similarly low cost to SRF financial assistance.

Acknowledged



I. SIGNATURE FOR GRANT APPLICATION

CERTIFICATION: On behalf of the Applicant, and in accordance with the board resolution by

Town of Guilderland
(Governing Body of Municipal Applicant)

authorizing me to do so, I apply for a WIIA grant and/or IMG grant for the project described in this application. By signing this application, I certify and agree on behalf of the Applicant and its governing body that all of the information contained in this application, in other statements and exhibits attached hereto or referenced herein, and in all statements, data and supporting documents which have been made or furnished for the purpose of receiving a WIIA grant or IMG grant for the project described herein, are true, correct and complete to the best of my knowledge and belief.

I further agree on behalf of the Applicant that, if DWSRF assistance is provided for the project described in this application, the Applicant shall comply with all applicable provisions of the Federal Safe Drinking Water Act, 42 U.S.C. §§ 300f, et seq., and applicable provisions of state law, codified under Chapter 413 of the Laws of New York of 1996, 10 NYCRR Part 53, and 21 NYCRR Part 2604, as amended, regarding DWSRF assistance.

I further agree that the Applicant will comply with the provisions of the Minority and Women’s Business Enterprise – Equal Employment Opportunity requirements of Article 15-A of the New York State Executive Law and will maintain such records and take such actions necessary to demonstrate such compliance throughout the construction of the project.

Further, I acknowledge that offering a written instrument knowing that the written instrument contains a false statement or false information, with the intent to defraud the State or any political subdivision, public authority or public benefit corporation of the State, with the knowledge or belief that it will be filed with or recorded by the State or any political subdivision, public authority or public benefit corporation of the State, constitutes a crime under New York State Law.

	11/19/2021
(Signature of Authorized Representative)	(Date)
Peter Barber, Supervisor	
(Name and Title)	
Town of Guilderland	
(Municipal Applicant)	

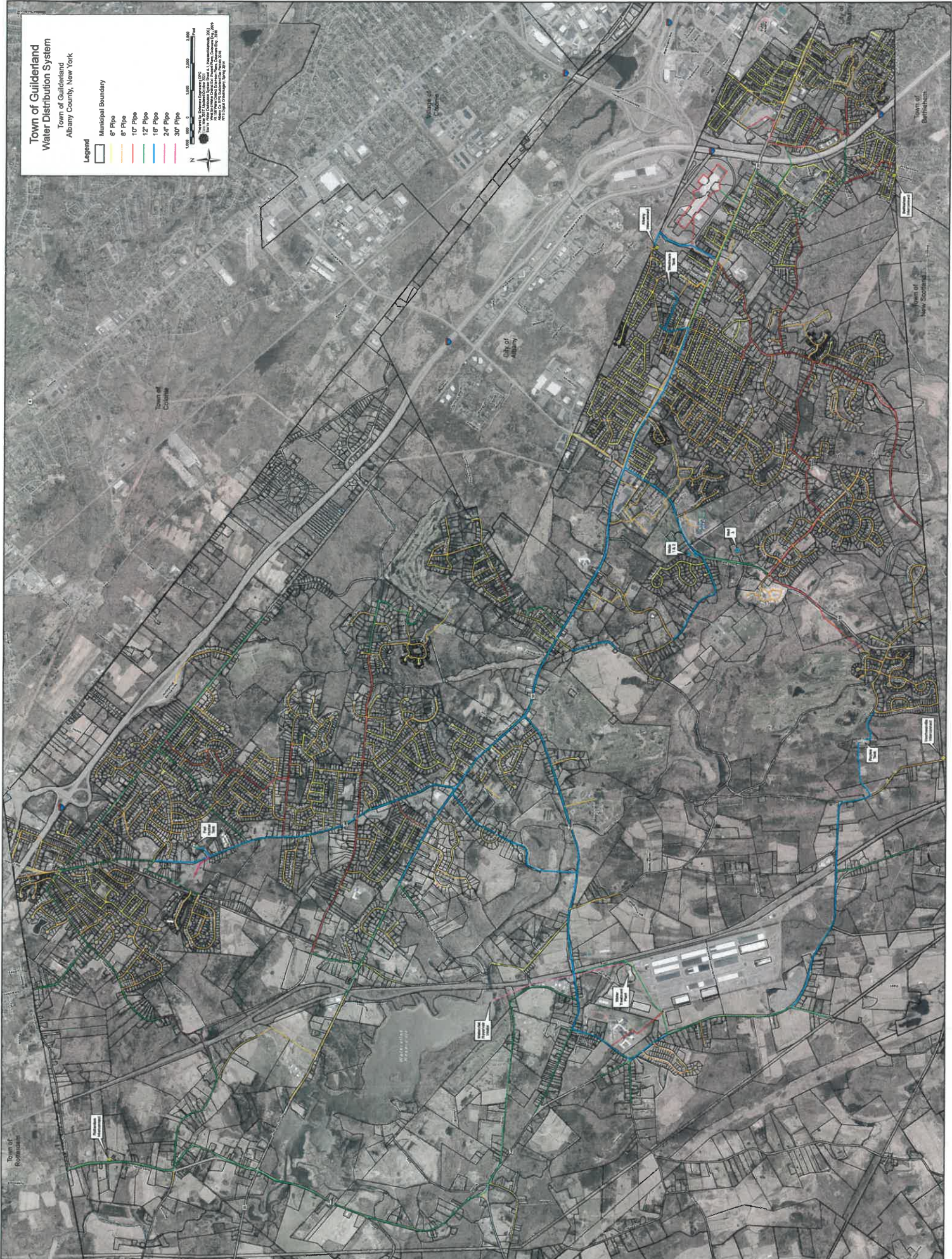
Town of Guilderland Water Distribution System

Town of Guilderland
Albany County, New York

- Legend**
- Municipal Boundary
 - 6" Pipe
 - 8" Pipe
 - 10" Pipe
 - 12" Pipe
 - 15" Pipe
 - 24" Pipe
 - 30" Pipe



Source: GIS Data from Guilderland
Map Date: 10/15/2019
Scale: 1" = 1000'
Projection: NAD 83
Datum: NAD 83
Units: Feet
Author: [Redacted]
Reviewer: [Redacted]

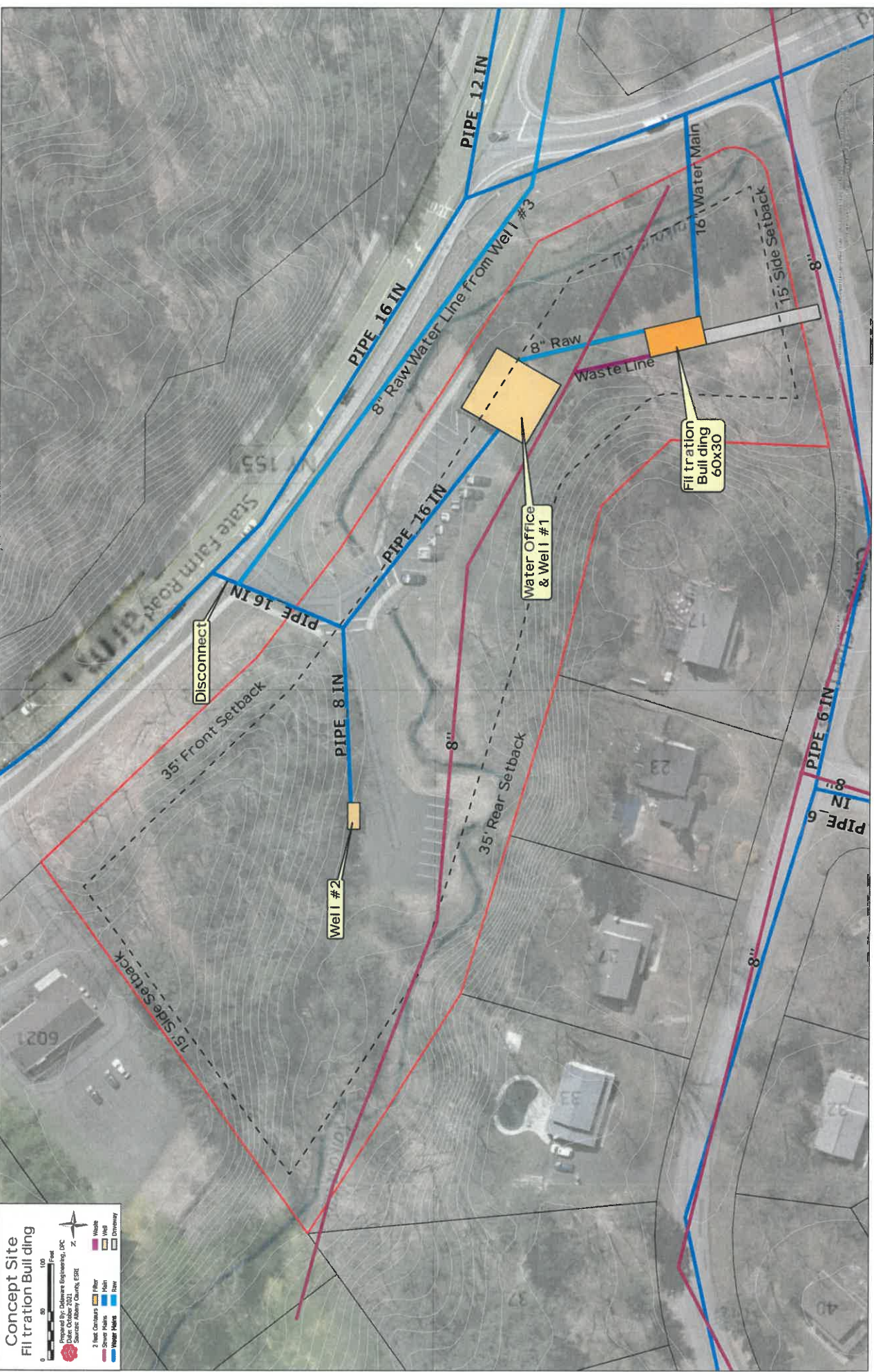


**Concept Site
Filtration Building**

Prepared by: **DiDomeno Engineering, LLC**
 10000 Old Forge Road, Suite 100
 Saratoga Springs, NY 12158
 Phone: 518-584-1111
 Website: www.didomenoeng.com



- 2 Feet Centars
- Filter
- Waste
- Server Halls
- Main
- Well
- Water Poles
- Sewer
- Driveway



Guilderland Water Well Filtration Project (Greensand)
WIIA/DWSRF Applications
2021

2. Planning Excerpts

Guilderland Water Well Filtration Project (Greensand)
WIIA/DWSRF Applications
2021

AWQR 2020

Town of Guilderland

Department of Water and Wastewater Management

2020
Annual Report

Town of Guilderland's Wells Source Water Assessment Summary

The NYS DOH has completed a Source Water Assessment for the Watervliet Reservoir and Guilderland's well. The assessments are summarized below. The assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how likely contaminants could enter the reservoir or the well's aquifer. The susceptibility rating is an estimate of the potential for contamination. It does not mean the water delivered to your home is or will become unsafe to drink. See section: "Are there contaminants in our water?" of this report for information concerning low levels of contaminants in your water.

Guilderland Wells

The potential impact of a chemical or microbes on a well (Susceptibility) is based on aquifer characteristics, proximity of potential contaminant sources and chemical and biological characteristics of the contaminant.

The assessment has determined that Well's # 1 & 2 are susceptible to nitrates. In the past, levels of nitrates in these two wells have been very low to non-detectable. Well # 3 is located in a more remote area. Due to this, the assessment has determined that this well has low susceptibility to all contaminant types.

Watervliet Reservoir

The assessment found the amount of agricultural lands in our Reservoir assessment area results in a potential for protozoa contamination. Other facilities such as landfills and golf courses could release other contaminants, such as pesticides and phosphorus.

Guilderland's water treatment plant performs multi level treatment to ensure you receive safe drinking water. Additionally, as the annual report shows, your water is routinely monitored for a great number of potential contaminants.

Water Treatment Plant

Volatile Organic Compounds (VOC/POC) (53 Solvents and Petroleum Products) tests were completed in the first quarter of 2020. All results were below the associated MCL's. Synthetic Organic Chemicals were collected in the second quarter of 2020. All results were below the MCL's. Inorganic Compounds (IOC + Nitrate) analyses were completed in the first quarter of 2020 for NEIP. Synthetic Organic Chemical (SOC) analysis was completed in the fourth quarter of 2020. All results were below the MCLs. PFOA, PFOS and 1,4-Dioxane were not detected in the 3rd and 4th quarters.

Well #1

Nitrate analysis was completed in the third quarter of 2020. All results were below the MCLs. Volatile Organic Compounds (VOC/POC) (53 Solvents and Petroleum Products) tests were completed in the third quarter of 2020. Synthetic Organic Chemical (SOC) analysis was completed in the fourth quarter of 2020. All results were below the associated MCL's.

Well # 2

Nitrate analysis was completed in the third quarter of 2020. Volatile Organic Compounds (VOC/POC) (53 Solvents and Petroleum Products) tests were completed in the third quarter of 2020. Synthetic Organic Chemical (SOC) analysis was completed in the fourth quarter of 2020. All results were below the associated MCL's. PFOA, PFOS and 1,4-Dioxane were not detected in the 3rd and 4th quarters.

Well # 3

Nitrate analysis was completed in the third quarter of 2020. Volatile Organic Compounds (VOC/POC) (53 Solvents and Petroleum Products) tests were completed in the third quarter of 2020. Synthetic Organic Chemical (SOC) analysis was completed in the fourth quarter of 2020. All results were below the associated MCL's

Transmission and Distribution

Total Trihalomethane (TTHM) testing was done at 4 sites quarterly in 2020. Stage 2 Monitoring requires a Locational Running Annual Average (LRAA) to be calculated for each individual site. Haloacetic Acid (HAA5) testing was done at 4 sites quarterly in 2020. The test included average, high and low levels. Similarly, this is also Stage 2 Monitoring. The MCL was exceeded for the THMs at one site in the first quarter of 2020 while the HAA5 MCL was not exceeded at any sites in 2020. Analysis for (Total Coliform/ *E. coli*) was conducted on a weekly basis. We collect 30 samples per month. All samples were and *E. coli* negative in 2020. We had 1 positive total coliform sample in August 2020 and September 2020. Resamples were collected the following day of the positive sample and shown to be negative for total coliform.

Albany Interconnect

The water purchased from the City of Albany is tested in accordance with Part 5, New York Sanitary Code. A summary of the Albany testing is available at the Guilderland Water Office and the Guilderland Public Library.

Rotterdam Interconnect

The Town of Rotterdam is served by five drilled wells located off Rice Road. The permitted pumping capacity is 10,000,000 gpd; the maximum peak day averages 9,100,000 gallons. Pumping capacity is capable of providing up to 7,000 gallons per minute. Guilderland has an interconnect with the Town of Rotterdam to purchase water if needed. To view their report go to; <http://www.rotterdamny.org>

Unregulated Contaminant Monitoring 4 was conducted during 2018. This is a requirement of the 1996 Safe Drinking Water Act amendments. This monitoring provides a basis for future regulatory action to protect the public health. The number in parentheses refers to the number of measures for a total of 32 analytes. The breakdown of analytes is as follows: semi volatile organic chemicals (3), pesticides and pesticide manufacturing byproduct (9), metals (2), alcohols (3), cyanotoxin chemical contaminants (10), brominated haloacetic acid groups (3) and indicator compounds (2). We have listed those compounds that were detected in the table of Detected Contaminants for the Guilderland NEIP. There are no associated MCL's for these compounds at this time with the exception of Manganese

Summary

During 2020 our system was in compliance with applicable state drinking water operating, monitoring and reporting requirements. Within the Guilderland Water District, all tests for compounds as required by Part 5, New York Sanitary Code and National Primary Drinking Water Regulations were completed although no compounds were above the MCLs.

A complete set of analytical tests performed in 2020 can also be reviewed at the Guilderland Water Office and the Guilderland Public Library, and on the Town Website at www.TownofGuildebrand.org.

Thank you for allowing us to continue providing your family with clean, quality water this year. We ask that all our customers help us protect our water system. For further information, contact the Guilderland Water Office (518) 456-6474, or the Albany County Department of Health (518) 447-4625.

Health Effects Information

Additionally we are required to furnish the following information:

THM Health Effects

Some studies suggest that people who drink chlorinated water (which contains trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, miscarriages and birth defects. However, in each of the studies, how long and how frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other health effects are due to trihalomethanes or some other factor. The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.

Information on Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. During September 2016 through August 2018, as part of our sampling plan, 24 samples of our Raw Reservoir source water were collected and analyzed for Cryptosporidium oocysts. One sample of the 24 samples collected was presumed positive for Cryptosporidium, and was confirmed positive. Therefore, our monitoring indicates the presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. 23 additional source water samples did not show the presence of Cryptosporidium. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection.

Information on Giardia

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During September 2016 through August 2018, as part of our sampling plan, 24 samples of our Raw Reservoir source water were collected and analyzed for Giardia cysts. Of these samples 5 were confirmed positive for Giardia cysts. Therefore, our monitoring indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should

Guilderland Water Well Filtration Project (Greensand)
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Comprehensive Plan Excerpts

Chapter III: Community Vision

The foundation of a good comprehensive plan is public input, early and often throughout the planning process

Visualizing the future of the Town of Guilderland is an intensive and very important component of the Comprehensive Plan. It requires the input of Town leaders and residents and the knowledge of Town resources that provide opportunities and constraints on land use and services. Individual visions are biased by personal goals and preferences. To limit these biases, good comprehensive planning seeks public input early in the process. Therefore, it is no coincidence that the first step of the comprehensive planning process is the initiation of a community survey. Survey results provide a clearer picture of community opinion on town-wide services and the quality of life. Recognizing the importance of public involvement, the Town of Guilderland sought methods of community outreach beyond the traditional survey. A Community Outreach Program was initiated with the intent of continuing public involvement throughout the planning process. Combined with the results of the inventory and analysis (opportunities and constraints), the various components of the Community Outreach Program allowed the future picture of the Town to materialize. This was further refined into a vision statement that dictated the goals and objectives and the elements of the Comprehensive Plan.

It is easy to see why "visioning" is such an important component of the Comprehensive Plan. Without it there is no guidance for composing the goals and objectives that ultimately formulate the Plan. The Plan to follow is deep-rooted in community involvement, guided by a well-conceived Community Outreach Program, a Vision Statement that captures the essence of the Town's future form and function, and concise goals and objectives that frame the Plan.

A. Community Outreach

The Community Outreach Program was spearheaded by the Public Participation Subcommittee. Several opportunities for community outreach were identified along with the means by which the outreach programs would be implemented. They included: community surveys, study circles, focus group workshops, neighborhood meetings, Advisory Board/community work sessions, public hearings, and fact-finding outreach. Each are described and discussed below:

A.1 Community Survey

A community survey was distributed to every household in the Town (12,007 mailings). The purpose of the broad distribution was to afford the majority of people in the Town the opportunity to participate in the planning process. It was also a means of informing everyone about the comprehensive plan process, a process that relies on input from the community in order to be successful. In addition to the mailed surveys, a random sample of 100 phone surveys was conducted.

The survey also indicates that the current pattern of residential development involving the development of single-family homes in standard subdivisions and the development of apartments, condominiums and townhouses in general is unfavorable. Approximately 64-67% of the respondents indicated that there is enough of this type of development with another 18-25% indicating there is too much. However, the idea of creating village or hamlet style neighborhoods appears to be more appealing. Although the majority of respondents (53%) feel there is enough village or hamlet style development, 42% feel there is not enough. There also appears to be a perceived deficiency in senior housing with almost 60% of the respondents indicating there is not enough.

When asked if the Town should encourage or discourage residential development in undeveloped areas, the majority of respondents (60%) indicated that the Town should discourage development. This relates well to the previous results. It is likely that a portion of the respondents who would like to encourage residential development are those who responded favorably to the development of village/hamlet neighborhoods and senior housing.

Recreational resources are valued amenities in most communities, especially those that are residentially based. The survey results indicate that the majority of respondents (51%) believe there are enough outdoor recreational opportunities related to ball fields, swimming and picnic areas. However, almost 47% indicated that there are not enough of these facilities. Very few (2%) indicated that there are too many facilities. The majority shifts slightly when asked the same question regarding neighborhood parks and playgrounds with 56% indicating that there are not enough of these facilities. Combined, the results suggest a need for additional recreational facilities with a priority on neighborhood parks and playgrounds. Given that in both questions only 2% of the respondents indicated that there are too many of these resources suggests that there will be a perceived deficiency in recreational resources as the community grows over the next 20 years, providing that no new facilities are constructed.

The survey was also designed to identify resident's perception of the future of Guilderland in terms of some key issues that effect land use and transportation. Based on the survey results, residents overwhelmingly (80%) support efforts to protect the Town's drinking water supply. They also afford a high priority to the preservation of open space (64%). However, a later question regarding the willingness of residents to pay an increase in taxes to protect open space resulted in a split between those willing to pay and those not willing. A slight majority (43%) identifies the expansion of town water and sewer distribution lines as a moderate priority with another 40% identifying this issue as a high priority.

Residents appear to be divided on transportation issues. The majority of respondents (41%) identified the expansion of mass transit as a high priority with 21% identifying this issue as a low priority. Likewise,

wildlife corridors, and significant ecosystems (Pine Bush). In their opinions, the short-term administrations make it very difficult to conduct long-term and meaningful planning. They note that small impacts from individual developments result in cumulative, significant impacts. Therefore, as a solution, they propose allowing the Town's natural limits on water supply to limit future growth. They point to the recent permanent Albany interconnect as an artificial means of providing water to allow residents to water their lawns during dry periods.

The final major issue discussed in Study Circles was that of the impact government policies have on growth. An obvious example has been the construction of roads and highways which has ultimately led to the suburban phenomena. Local land use regulations intended to prevent certain types of growth have resulted in greater land use impacts. Participating residents cite the use of 1-acre zoning as a means of eliminating denser development. However, the result has been the development of much larger areas of land, limiting open space and other land uses, such as recreation and farming. The residents also believe that there is a lack of long-range planning for growth and that the average resident has been left out of the process. Most planning appears to be reactive vs. proactive.

This short synopsis of the results of Study Circles does not do their work justice. Their efforts have been reviewed and incorporated into the planning process and recommendations. Full minutes/meeting notes were taken for each of the sessions. This work is available for public review. The results of their discussions has provided greater insight into the issues touched on more briefly in the community survey and other community outreach meetings. The issues discussed and the potential solutions proposed show a sophisticated understanding of land use, environmental and social issues.

A.3 Focus Group Workshops

The Focus Group Workshops were public forums where information was presented on specific topics and the public was afforded the opportunity to discuss opportunities, issues and the desired state or condition. The first workshop focused on economic development and housing. After a facilitated process of defining problems, issues and solutions, statements regarding the current and desired state of the economy and housing were formulated. Beginning with the current state, residents in attendance identified a need to diversify the employment and tax base through various incentives. At the same time, residents recognize a need to protect the Town from business that result in adverse impacts to the environment and community character.

Under the desired state, residents in attendance envision Guilderland as a place with suitable and appropriate development, which contributes to the tax base and aesthetics of the community.

(providing connections), and the development of a multi-use, multi-generation facility.

A.4 Neighborhood Meetings

Four neighborhood meetings were conducted to provide residents throughout the Town the opportunity to voice their opinions and suggestions in their own neighborhoods. It gave them an opportunity to discuss issues with fellow neighbors that are specific to their location. Meetings were held at the Fort Hunter Fire House on September 28, 1999, the McKownville Fire House on September 30, O'Connor's Antiques & Auctions on October 19, and Guilderland Center Fire House on October 21. At each of these meetings, residents in attendance were asked what they liked about where they live, what they dislike, what they would like to change, how they see the Town in 20 years, and their primary issues of concern. Although similar issues were raised at each meeting, there were some important differences that reflected location. The following primary issues are provided for each meeting:

Fort Hunter

- Traffic plan coordinated with the State
- **Water distribution plan**
- Growth management tools/plan
- Maintaining residential community character
- Protection of unique resources and the preservation of open space
- Agricultural land preservation
- Balancing the tax base
- Recognition and preservation of historic/cultural resources
- Increased cooperation/communication at a regional level.

McKownville

- Decrease traffic on Route 20 and Fuller Road and improve the pedestrian environment
- Improve the aesthetics of the area by reducing the visual impact of utilities
- Growth management that focuses on controlling commercial growth, strengthening community centers, and allowing a diversity of housing in a planned manner
- Diversification of the tax base
- Provide job opportunities in other areas of Town to reverse the traffic pattern
- Provide stormwater management to deal with the quantity and quality
- Watershed management
- Intermunicipal cooperation
- Preserve open space

O'Connor's

- Extension of water and sewer to western portion of Town
- Manage commercial growth along Route 20
- Manage growth rather than prevent it
- Maintain rural character and historic land use patterns and aesthetics
- Enforce land use regulations
- Intermunicipal cooperation to prevent land use conflicts
- Protect Watervliet Reservoir and groundwater resources
- Develop a Town-wide vision or theme
- Promote equitable application of rules and regulations
- Provide a pedestrian friendly environment
- Maintain high quality police and fire protection
- Provide recreational opportunities for children

Guilderland Center

- Volume and speed of traffic through Guilderland Center
- Improved pedestrian environment and mass transit opportunities
- Managed growth
- Preservation of open space
- **Protect water quality**
- Intermunicipal cooperation in planning
- Inventory resources
- Implement the Comprehensive Plan and establish time frames for each implementation item
- Institute a moratorium on development until plan is completed

Several issues were repeated in each neighborhood such as traffic, preservation of the Town's water supply, intermunicipal cooperation in planning efforts, and growth management. These issues are generally consistent with the results of the survey. Issues that differed appear to be a result of locational differences, further supporting the allocation of resources to conduct these neighborhood meetings. Folks in Fort Hunter focused on community character, the preservation of open space and unique habitat, presumably influenced by their neighbor the Pine Bush. Folks in McKownville are concerned about the aesthetics of their neighborhoods and the impacts associated with commercial development along Route 20. They are highly influenced by traffic congestion and changes within the Route 20 and Fuller Road corridors.

Folks in the rural areas of Guilderland would like to have some, if not all, of the same services provided in the eastern portion of Town. Traffic is less of an issue, while the extension of municipal sewer and water is important. They are looking to develop a unified Guilderland and recommended a Town-wide theme or vision to begin to address the apparent distinctions between east and west.

8. Reduce the impact of truck traffic on the community through careful siting of any future truck generating enterprises, promoting enhanced rail options, and seeking solutions to existing conflicts
9. Carefully locate any future large traffic generators (neighborhood, community and regional destinations) to reduce trip lengths through Guilderland
10. Explore ideas for traffic calming and pedestrian safety

B.3 Public Utilities

Goal:

Provide a utility infrastructure system that meets the demands of current residents, maintains the Town's existing investments, and supports the future land use plan.

Objectives:

Water

1. Assure an adequate supply, treatment, distribution, and fire-fighting capacity, of potable water to meet current and planned future needs
2. Establish Town policies for any proposed service area extensions that consider and address cost, revenue, and potential impacts on the future land use plan

Storm Water Management

3. Develop a plan to address storm water management issues (retention and detention basins, sump pumps, flooding of roads)

Sewer

4. Assure adequate collection and treatment capacity of sewer to meet current and planned future needs
5. Establish Town policies for any proposed service area extensions that consider and address cost, revenue, and potential impacts on the future land use plan

Communications, Electricity, and Natural Gas

6. Support coordinated facility development with public utilities to meet community desires, advance the future land use plan, maintain community character and support economic development objectives

Guilderland Water Well Filtration Project (Greensand)
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2021

WTP Capacity Evaluation 2018

TOWN OF GUILDERLAND

WATER TREATMENT PLANT
SUPPLY CAPACITY
EVALUATION



Town of Guilderland
Albany County, New York



Adirondack Mountain Engineering, PC
PO Box 1376 - 313 Ushers Road
Ballston Lake, NY 12019

March 2018

EXECUTIVE SUMMARY

As the community of Guilderland has continued to grow, public demand for high quality drinking water has also continued to increase. The increasing demand for water combined with water quality issues in the Watervliet Reservoir has resulted in the existing system being overburdened during Summer months when water demands reach their peaks. The town has successfully managed these events through the use of regulations limiting irrigation and water use along with the use of interconnections with other community water systems. Managing these events, however, has become increasingly difficult as the system reaches its water supply capacity and the number of peak demand events continues to increase. The purpose of this evaluation is to review current capacity constraints within the town water treatment plant and system and review opportunities for increasing these supplies. The current cost of obtaining and treating the water from the Watervliet Reservoir is approximately \$1.72 per 1,000 gallons. The cost of purchasing treated water from the City of Albany is \$3.75 per 1,000 gallons.

The report particularly focuses on addressing current water demand constraints through improvements at the Guilderland Water Treatment Facility and includes an evaluation of existing and anticipated water demand. The existing production at the water treatment plant is limited to 2.0 mgd during periods of high color and algae in the Watervliet Reservoir and is limited to approximately 3.0 mgd during other periods. Several options were evaluated for improving the capacity and performance of the existing water treatment plant serving the Town of Guilderland. These included upgrades to the plant, the addition of new treatment processes and the treatment of water quality within the Watervliet Reservoir. Based on the options reviewed, the recommended system improvements needed to fully utilize the existing 5.0 mgd design capacity of the treatment plant is a combination of upgrades with dissolved air flotation (DAF) and completing repairs to the existing flocculation and sedimentation basins. It is also recommended that aeration/mixing be provided to the reservoir to improve the quality of raw water to be treated at the water plant. Estimated costs for these combined options are summarized below:

<i>Project Costs of Combined Upgrades</i>	<i>\$4,509,000</i>
<i>Annual Debt Service (30 yrs, 3%)</i>	<i>\$230,025</i>
<i>Estimated increase in water rates at 5 mgd*</i>	<i>\$0.131</i>
<i>Estimated increase in water rates at current ADF (3.2 mgd) *</i>	<i>\$0.204</i>
<i>Estimated increase in water rates without Albany Purchase (3.2 mgd) *</i>	<i>\$0.026</i>
	<i>*Cost are per 1,000 gallons</i>

In 2016 and 2017, the town purchased water in the amount of \$212,647.06 and \$273,533.84, respectively, from the City of Albany. In 2015 the town purchased over \$350,000 of water from the city. In 2018, the cost of supplying and treating water is anticipated to be approximately \$2.00 less than purchasing water. **If the town were to supply all of its own water instead of purchasing these amounts from the city, then the water rate costs of the improvements would drop to less than 3 cents per 1,000 gallons. It is anticipated that with the improvements the amount of water required from the City would be eliminated in most years.**

The recommended improvements are anticipated to increase the available water sources to the community by up to 3.0 mgd and are anticipated to address water demand and supply concerns as growth continues over the next 20 years.

1.0 INTRODUCTION

1.1 History

The Town of Guilderland formed the Westmere Water District in 1967 to supply 6700 residents in the central portion of the town. This district was extended, and several smaller districts were consolidated in the 1970's. The Westmere Water District was initially served by three ground water wells, a one-million-gallon water tower and a one million gallon per day (mgd) water treatment plant supplied by the Watervliet reservoir built in 1971.

Water districts were further consolidated in 1984 and the Westmere/Mckownville Water District was renamed to the Guilderland Water District. The water treatment plant was expanded to 3 mgd in 1988, and again to its maximum capacity of 5 mgd in 1995. In 2001 a permanent interconnection with the City of Albany, for the purchase of up to 2 MGD of finished water, was completed. The location of the interconnection is on Rapp Road at the Town and City line. A 5 mgd Granulated Activated Carbon Filtration System was added to the water plant in 2005 to assist in the removal of total organic contaminants (TOCs) and disinfection byproducts (DBPs) to comply with new regulations.

1.2 Water Issues

As the community has continued to grow, water demand has increased. The increasing demand for water combined with water quality issues in the Watervliet reservoir has resulted in the system being overburdened during Summer months when water demands reach their peaks. The town has successfully managed these events through the use of regulations limiting irrigation and water use along with the use of interconnections with other community water systems. Managing these events, however, has become increasingly difficult as the system reaches its water supply capacity and the number of peak demand events continues to increase. The purpose of this report is to review current capacity constraints within the town water treatment plant and review opportunities for increasing these supplies. The report particularly focuses on addressing current operating constraints at the Guilderland Water Treatment Facility.

a 113-square mile basin drained by the Normans Kill, Bozen Kill and Black Creek. The volumetric capacity of the reservoir is approximately 1.4 billion gallons.

The water treatment plant is located at the north end of the Northeastern Industrial Park and is accessible from State Route 146. The plant was designed as a fully automated facility to operate at a capacity of 5.0 MGD. Water from the Watervliet Reservoir is processed into potable water through coagulation, flocculation, sedimentation, filtration, pH adjustment, fluoridation and disinfection.

Polyaluminum Chloride (PAC), which is used as a primary coagulant, is added to the raw water as it enters the plant. The coagulant allows contaminant particles to neutralize and stick together. The water then flows into a flocculation tank with paddles that provide slow mixing and bring the small particles together to form larger particles called flocs. The water with flocculated particles then flows on to a tank with high rate settling tubes for sedimentation of the particles. After sedimentation, water is then filtered through the mixed media filter and finally through the Granulated Activated Carbon (GAC) system. Final treatment of filtered water includes disinfection with chlorine, pH adjustment with caustic soda and the addition of sodium fluoride for dental protection.

2.4 Ground Water Wells

Three wells are currently in use to supplement the water treatment plant and the associated reservoir supply. Wells No. 1 and No. 2 are located adjacent to Kaikout Kill near the intersection of State Farm Road and Nott Road at the Water Department Offices. These two wells are separated by approximately 340 feet. Well No. 3 is located adjacent to Blockhouse Creek south of the other two wells.

Well No. 1 is twelve inches in diameter and is screened from 58 to 121 feet in depth. Well No. 1 can be pumped at 750 gpm but has poor water quality due to high levels of iron, manganese and sulfates. Well No. 2 is ten inches in diameter and is screened from 90 to 122 feet. This well is pumped periodically at a rate of 300 gpm. Well No. 3 is sixteen inches in diameter and can be pumped safely at 600 gpm.

The New York State Department of Environmental Conservation (NYSDEC) permit limits the total withdrawal rate from the wells to 0.5 MGD on an annual basis. A copy of the NYSDEC permit is in Appendix C. This average maximum withdrawal rate is necessary to maintain the aquifer piezometric surface at current levels. The rate has been periodically exceeded to meet short term peak demands and emergencies.

2.5 Albany Interconnect

The Town of Guilderland currently utilizes a permanent interconnection with the City of Albany to meet excess demand during the peak summer period. The interconnection is near the intersection of Gipp and Rapp Roads. The original contract with the City dates back to June of 1997. The contract required the Town to pay an initial fee of \$2.3 million to the City in order to access up to 2.0 mgd of water through the interconnect. Water rates in the contract were set at \$1.25 per 1,000 gallons. The water purchase rate was set to increase at a percentage rate equal to the same increase in rates that the City established for its own direct customers within the City's corporate limits. The term of the agreement was established at 20 years which resulted in an expiration date in 2017. The Town is currently in negotiations with the City to renew a water purchase contract.

The Town has obtained water through the interconnect at flow rates are between 200 and 1500 GPM through gravity feed. Town staff indicates that flow rates can be increased to 2,200 GPM with pumping. If a power failure occurs, the water will continue to flow by gravity.

2.6 Emergency Interconnections

Three additional emergency water sources are currently in place. These consist of an interconnect with the Town of Bethlehem and the Village of Voorheesville and a secondary interconnect with the City of Albany. A fourth, temporary interconnect, could also potentially be established between the Town of Rotterdam and Guilderland. The Town is currently pursuing a permanent interconnect with the Town of Rotterdam.

In addition to the distribution storage tanks, the Town has a clear well storage tank that is located at the water treatment plant. The clear well storage tank has a 1.0-million-gallon capacity that creates a buffer between treatment and distribution to allow for disinfection of the water and control of throughput through the treatment process.

2.8 Existing and Anticipated Water Demands

Water demand for the last five years is shown on the following table.

Year	WTP (gallons)	Wells (gallons)	Albany (gallons)	Total (gallons)	Average Daily Flow (MGD)	Max Daily Flow (MGD)
2012	994,942,000	147,925,000	87,413,000	1,230,280,000	3.370	7.489
2013	1,163,033,000	167,175,000	50,627,000	1,380,835,000	3.783	6.416
2014	913,642,000	109,284,000	65,034,000	1,087,960,000	2.980	5.260
2015	859,325,000	110,749,000	146,614,000	1,116,688,000	3.059	6.341
2016	938,887,000	119,618,000	79,097,000	1,137,602,000	3.117	6.187
2017	916,840,000	102,672,000	27,278,000	1,046,790,000	2.868	5.396

Population in the Town of Guilderland was 34,045 according to the 2000 census and 35,303 according to the 2010 census. Population estimates in 2016 were 35,745. This is a growth rate of approximately 0.3% per year. Assuming that this rate will continue into the future, water demand is expected to increase as shown in the following table:

Year	Average Annual Flow (gallons)	Average Daily Flow (MGD)	Max Monthly Daily Flow ¹ (MGD)	Max Daily Flow ¹ (MGD)
2020	1,180,755,937	3.235	4.548	5.866
2025	1,198,573,864	3.284	4.617	5.954
2030	1,216,660,668	3.333	4.686	6.044
2035	1,235,020,406	3.384	4.757	6.135
2040	1,253,657,198	3.435	4.829	6.228

¹Maximum Monthly Average Daily Flow (MMADF) and Max Daily Flow (MDF) are estimated based on historical town ratios of MMADF/ADF and MDF/ADF for the prior five years.

3.0 RAW WATER QUALITY IN WATERVLIET RESERVOIR

The following section includes data on the raw water from the Watervliet Reservoir. Contaminants in the raw water impact the treatment efficiency and capability of the water treatment plant. **Operations staff has indicated that a combination of high color and high**

algae content in the reservoir during Summer months has limited the capacity of the treatment plant to supply water during the highest demand periods in the town. A review of the data will be used to evaluate alternatives for improving throughput of water at the plant.

3.1 Color & Turbidity

Typical color and turbidity results for the raw water from the Watervliet reservoir are presented in Appendix B. Raw water data shows an average range for turbidity between 1.4 and 45.9 ntu between 2012 and 2016. In 2017, raw water color ranged between 25 and 100 cu, with higher values seen during the spring months of April and May.

3.2 Algae

Plant staff complete an analysis of algae in the raw water entering the plant in June of 2015. Algae laboratory results are included in Appendix B. Data shows a predominance of Asterionella and Dinobryon algae with some Green Algae (Chlorophyta) present. Both Asterionella and Dinobryon algae are members of the Chrysophyta Group also known as Yellow-Green or Golden-Brown algae and are identified in the American Water Works Association Manual of Practice M7 titled "Problem Organisms in Water: Identification and Treatment, 3rd Ed." Dinobryon is a type of microscopic algae and is commonly associated with taste and odor issues in drinking water. It is one of the 33 genera of Chrysophyceae (Golden Algae) and is a common algae found in reservoirs. Asterionella is a diatom commonly found in reservoirs and is noted as a potential filter clogger in the AWWA Manual of Practice. The manual identifies the use of copper sulfate, an algaecide, as the most commonly used control strategy.

Guilderland Water Well Filtration Project (Greensand)
WIIA/DWSRF Applications
2021

3. Water Violation Letter 2018

TOWN OF GUILDERLAND
DEPARTMENT OF WATER
6011 STATE FARM RD.
GUILDERLAND, NY 12084

518-456-6474
Fax 518-456-4508

Peter Barber
Supervisor

Jean Cataldo
Town Clerk

Timothy McIntyre
Superintendent

December 20, 2018

Dear Guilderland Water Customer:

The letter is provided as notice regarding the presence of a disinfection byproduct in our water system. The Town of Guilderland water system was found to have an average concentration of 83.5 micrograms per liter (ug/L) of total Trihalomethanes (TTHMs) for the previous four quarters of sampling. This exceeds the maximum contaminant level (MCL) established by the United States Environmental Protection Agency (USEPA) and the New York State Department of Health (NYSDOH) for TTHMs of 80 ug/L on a quarterly rolling average basis. We are required to notify consumers when an MCL is exceeded.

TTHMs are a group of chemicals that are formed in drinking water during disinfection when chlorine reacts with naturally occurring organic materials in surface water sources. TTHMs are considered disinfection byproducts which include the individual chemicals chloroform, bromoform, bromodichloromethane and chlorodibromomethane. The amount of TTHMs formed in drinking water during disinfection can change from day to day, depending on temperature, the amount of organic material in the reservoir, the amount of chlorine added, and a variety of other factors.

Disinfection of drinking water by chlorination is highly beneficial to public health. We disinfect our drinking water to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in water supplies in New York State. All public water supply systems that use a surface water source with chlorine for disinfection contain TTHMs to some degree.

Some studies suggest that people who drank water containing very high levels of TTHMs over the course of 20 to 30 years may have an increased risk of certain health effects including the risk for cancer and low birth weights, miscarriages and birth defects. However, these studies could not rule out the role of other factors that could have resulted in the observed increased risks and other similar studies do not show an increased risk for these health effects. Some animal studies with very high exposure show that some TTHMs may increase risks for these health effects, but the exposure in these studies was much greater than could result from the normal use of drinking water.

The USEPA reviewed these studies and concluded that while there is no causal relationship between disinfection byproducts including TTHMs and human health effects, the balance of the information warranted stronger regulations to limit the amount of TTHMs in drinking water while still allowing for adequate disinfection. The risks for adverse health effects from TTHMs in drinking water are very small compared to the risks for waterborne illness such as cholera, dysentery, typhoid and other ailments from drinking inadequately disinfected water. If you have specific personal health concerns, please consult your doctor.

The Town of Guilderland water treatment plant operations staff is actively working to reduce TTHMs in the water system through changes in the water treatment process as well as the storage and distribution of water. At present, the water is suitable to drink, cook with and bathe in. Although we do not consider the following measures necessary to avoid health effects, you may use water pitchers containing an activated carbon filter or install a tap-mounted activated carbon filter for water. For additional information, you may wish to review the following resources:

<https://www.epa.gov/dwreginfo/stage-1-and-stage-2-disinfectants-and-disinfection-byproducts-rules>

<https://www.cdc.gov/safewater/chlorination-byproducts.html>

We take our responsibility to provide safe drinking water very seriously and will continue to work to ensure the quality of our water. If you have any questions or need additional information, please contact Tim McIntyre, Superintendent of the Guilderland Water District at 518-456-6474; Dean Sim, Chief Water Plant Operator at 518-861-6510 or the Albany County Health Department at 518-447-4620.

4. Environmental Justice Area Map

5. Detailed Project Schedule

Guilderland Water Well Filtration Project (Greensand)
WIA/DWSRF Applications
2021

6. Engineering Report

OCTOBER 28, 2021

ENGINEERING REPORT

TOWN OF GUILDERLAND

WELL WATER FILTRATION



DELAWARE ENGINEERING, D.P.C.

CIVIL AND ENVIRONMENTAL ENGINEERING
ALBANY • ONEONTA • RED HOOK • MONTICELLO • GOSHEN

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APPENDIX 1: Filter Building Conceptual Layout

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APPENDIX 7: Guilderland Water Distribution System

APPENDIX 8: Filtration Building Conceptual Floor Plan

7. Smart Growth Assessment Form



Smart Growth Assessment Form

This form should be completed by an authorized representative of the applicant, preferably the project engineer or other design professional.¹

Section 1 – General Applicant and Project Information

Applicant: Town of Guilderland

Project No.:

Project Name: Well Water Filtration Project

Is project construction complete? Yes, date: No

Please provide a brief project summary in plain language including the location of the area the project serves:

The addition of green sand filtration is warranted to make the existing wells a more dependable source of water for the Town of Guilderland. The intent of this project is for the Town to better utilize its own existing groundwater resources to supplement the potable water supply from its WTP and to build increased redundancy to its current dependency on water purchased from surrounding municipalities. A new filtration building will be constructed at the Town DPW office and existing well site. Connective piping will be added to connect all three wells to the new filtration system and then to the distribution system along NYS Route 155/State Farm Road.

Section 2 – Screening Questions

A. Prior Approvals

- Has the project been previously approved for Environmental Facilities Corporation (EFC) financial assistance? Yes No
- If yes to A(1), what is the project number(s) for the prior approval(s)? Project No.:
- If yes to A(1), is the scope of the previously-approved project substantially the same as the current project? Yes No

If your responses to A(1) and A(3) are both yes, please proceed to Section 5, Signature.

B. New or Expanded Infrastructure

- Does the project involve the construction or reconstruction of new or expanded infrastructure? Yes No

Examples of new or expanded infrastructure include, but are not limited to:

- (i) The addition of new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant where none existed previously;
- (ii) An increase of the State Pollutant Discharge Elimination System (SPDES) permitted flow capacity for an existing wastewater treatment system; and OR

¹ If project construction is complete and the project was not previously financed through EFC, an authorized municipal representative may complete and sign this assessment.

- (iii) An increase of the permitted water withdrawal or the permitted flow capacity for the water treatment system such that a Department of Environmental Conservation (DEC) water withdrawal permit will need to be obtained or modified, or result in the Department of Health (DOH) approving an increase in the capacity of the water treatment plant.

If your response to B(1) is no, please proceed to Section 5, Signature.

Section 3 –Smart Growth Criteria

Your project must be consistent with all relevant Smart Growth criteria. For each question below please provide a response and explanation.

- 1. Does the project use, maintain, or improve existing infrastructure?
 Yes No

Explain your response:

The project will use existing municipal wells and will connect to the existing town of Guilderland water distribution system.

- 2. Is the project located in a (1) municipal center, (2) area adjacent to a municipal center, or (3) area designated as a future municipal center, as such terms are defined herein (please select one response)?

Yes, my project is located in a municipal center, which is an area of concentrated and mixed land uses that serves as a center for various activities, including but not limited to: central business districts, main streets, downtown areas, brownfield opportunity areas (see www.dos.ny.gov for more information), downtown areas of local waterfront revitalization program areas (see www.dos.ny.gov for more information), areas of transit-oriented development, environmental justice areas (see www.dec.ny.gov/public/899.html for more information), and hardship areas (projects that primarily serve census tracts or block numbering areas with a poverty rate of at least twenty percent according to the latest census data).

Yes, my project is located in an area adjacent to a municipal center which has clearly defined borders, is designated for concentrated development in the future in a municipal or regional comprehensive plan, and exhibits strong land use, transportation, infrastructure, and economic connections to an existing municipal center.

Yes, my project is located in an area designated as a future municipal center in a municipal or comprehensive plan and is appropriately zoned in a municipal zoning ordinance

No, my project is not located in a (1) municipal center, (2) area adjacent to a municipal center, or (3) area designated as a future municipal center.

Explain your response and reference any applicable plans:

The proposed project is located in a developed part of the Town of Guilderland on Town owned-land on NYS Route 155 (State Farm Road), a major roadway in the Town. The project is also located in an Environmental Justice Area. The project is in close proximity to Route 20, which is a major roadway in Albany County and the location of many businesses. It is considered a municipal center in the Town of Guilderland.

3. Is the project located in a developed area or an area designated for concentrated infill development in a municipally-approved comprehensive land use plan, local waterfront revitalization plan, and/or brownfield opportunity area plan?

Yes No

Explain your response and reference any applicable plans:

The proposed project is located in a developed part of the Town of Guilderland on Town owned-land. Areas around the project site a primarily residential in nature. There is also a middle school nearby. The project is also located in an Environmental Justice Area.

4. Does the project protect, preserve, and enhance the State's resources, including surface and groundwater, agricultural land, forests, air quality, recreation and open space, scenic areas, and significant historic and archaeological resources?

Yes No

Explain your response:

Yes, the proposed project will protect, preserve and enhance the State's resources. The project will have a positive impact on the environment through water and energy conservation. All applicable agencies will be coordinated with and permits/approvals will be obtained prior to construction to ensure preservation of existing natural and historic resources.

5. Does the project foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development, and the integration of all income and age groups?

Yes No

Explain your response:

The improvement of public water services can have far reaching benefits and indirect impacts on economic development which leads to downtown revitalization. The project will indirectly foster mixed land use/compact development, downtown revitalization, enhancement of public spaces, diversity and affordability of housing in proximity to employment, recreation and commercial development, and the integration of all income and age groups. The Town will use improved water technology to deliver better services to customers, regardless of race, age and income, while using less water. Water savings will lead to equity for Town residents.

6. Does the project provide mobility through transportation choices including improved public transportation and reduced automobile dependency?

Yes No N/A

Explain your response:

Not Applicable - the project is a municipal water project

7. Does the project involve coordination between State and local government, intermunicipal planning, or regional planning?

Yes No

Explain your response and reference any applicable plans:

The project will involve coordination between the Town of Guilderland, NYSEFC, NYSDOH, NYSDOT, NYSDEC, Albany County DOH, NY SHPO and various other agencies as appropriate.

8. Does the project involve community-based planning and collaboration?

Yes No

Explain your response and reference any applicable plans:

Yes, the Town holds monthly public meetings where residents are able to voice their comments, concerns, opinions, acceptance of undertakings such as the proposed project. The Town will continue to utilize the Town's web site for the promotion of existing and forthcoming programs, initiatives and community events. For projects such as this, the Town will notify all water customers of the changes to be made through mail, email, phone and word of mouth.

9. Does the project support predictability in building and land use codes?

Yes No N/A

Explain your response:

N/A - the project will not directly support building or land use code predictability

10. Does the project promote sustainability by adopting measures such as green infrastructure techniques, decentralized infrastructure techniques, or energy efficiency measures?

Yes No

Explain your response and reference any applicable plans:

The proposed project will promote sustainability by installing new energy efficient equipment and processes and green infrastructure where appropriate. The project will enable the Town to better use local water resources. The project will align with NYSDEC, NYSDOH and NYSEFC energy efficient design guidelines for water treatment projects.

11. Does the project mitigate future physical climate risk due to sea-level rise, storm surges, and/or flooding, based on available data predicting the likelihood of future extreme weather events, including hazard risk analysis data, if applicable?

Yes No

Explain your response and reference any applicable plans:

As with all projects undertaken by the Town of Guilderland, the proposed project will be designed with future climate risk and flooding in-mind. All recommendations from applicable agencies to implement the proposed project with little to no impact on the environment and climate change will be adhered to.

Section 4 – Miscellaneous

1. Is the project expressly required by a court or administrative consent order? Yes No

If yes, and you have not previously provided the applicable order to EFC/DOH, please submit it with this form.

Section 5 – Signature

By signing below, you agree that you are authorized to act on behalf of the applicant and that the information contained in this Smart Growth Assessment is true, correct and complete to the best of your knowledge and belief.

Applicant: Town of Guilderland	Phone Number: 518-452-1290
Name and Title of Signatory: Lindsay Allen, Delaware Engineering, DPC on Behalf of the Town of Guilderland	
Signature:	Date:

8. SEQR Documentation

**Full Environmental Assessment Form
Part 1 - Project and Setting**

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Town of Guilderland Well Filtration Project		
Project Location (describe, and attach a general location map): 6011 State Farm Road, Guilderland, NY 12084		
Brief Description of Proposed Action (include purpose or need): The Town of Guilderland, Albany County, NY, owns and operates three wells (#1, #2 and #3). However, only Well #2 is currently in service, as the other wells either have iron in excess of the maximum contaminant level (MCL) or at concentrations that result in customer complaints. As such, the addition of greensand filtration is warranted to make these wells a more dependable source of water for the Town. And with the addition of adequately sized filters, the Town will pursue an increase to its permitted groundwater withdrawal. The Town has a need to better utilize its own existing groundwater resources to supplement the potable supply from its WTP to build increased redundancy and reduce its current dependency on water purchased from the City of Albany. A new greensand filtration system and building enclosure will be constructed on the Town of Guilderland's DPW site (6011 State Farm Road). The entire site is owned and operated by the Town of Guilderland. Wells #1 and #2 are also located on the DPW site. Water and sewer piping will be installed from the new filter building to the existing municipal infrastructure on Route 155/State Farm Road. Piping will be installed from the DPW site along State Farm Road to Well #3 in order to connect it to the new filtration system.		
Name of Applicant/Sponsor: Peter Barber, Supervisor, Town of Guilderland	Telephone: 518-356-1980	E-Mail: barberp@townofguilderland.org
Address: 5209 Western Turnpike		
City/PO: PO Box 339/Town of Guilderland	State: NY	Zip Code: 12084
Project Contact (if not same as sponsor; give name and title/role):	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Town Board Project Approval & Bond Resolution	October 19, 2021 (A)
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input type="checkbox"/> No		
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDOH; NYSDEC; NYSEFC; NYSDOT SHPO	TBD Applied: October 15, 2021
h. Federal agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ACOE	TBD
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, identify the plan(s): NYS Heritage Areas: Mohawk Valley Heritage Corridor	

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
 If Yes, what is the zoning classification(s) including any applicable overlay district?
R-10 Single Family Residential

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No
 If Yes,
 i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Guilderland Central School District

b. What police or other public protection forces serve the project site?
Town of Guilderland, New York State Police, Albany County Sheriff

c. Which fire protection and emergency medical services serve the project site?
Guilderland Fire Department

d. What parks serve the project site?
None

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Municipal Water Treatment/Filtration

b. a. Total acreage of the site of the proposed action? _____ 4 acres
 b. Total acreage to be physically disturbed? _____ 0.28 acres
 c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ 4 acres

c. Is the proposed action an expansion of an existing project or use? Yes No
 i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % ~10 Units: Water Treatment Buildings

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
 If Yes,
 i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) _____
 ii. Is a cluster/conservation layout proposed? Yes No
 iii. Number of lots proposed? _____
 iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? Yes No
 i. If No, anticipated period of construction: _____ 12 months
 ii. If Yes:
 • Total number of phases anticipated _____
 • Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
 • Anticipated completion date of final phase _____ month _____ year
 • Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,

i. Total number of structures _____ 1

ii. Dimensions (in feet) of largest proposed structure: _____ 20 height; _____ 30 width; and _____ 60 length

iii. Approximate extent of building space to be heated or cooled: _____ 600 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No
 If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source. _____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? Yes No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No*
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

*A tributary of the Norman's Kill runs through the DPW property although the filtration building and associated piping will not impact the Class C(T) stream. This stream is also classified as an NWI Riverine Wetland. All construction work will take place outside of these waterways and all applicable permits will be obtained prior to commencement of construction activities.

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No
 If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No
 If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No
 If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No
 If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No
 If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No
 If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No
 If Yes:

i. Total anticipated liquid waste generation per day: _____ 10,000 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____
 liquid waste anticipated from greensand filtration process _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No
 If Yes:

- Name of wastewater treatment plant to be used: Guiderland WWTP
- Name of district: Guiderland Sewer District
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

• Do existing sewer lines serve the project site? Yes No
 • Will a line extension within an existing district be necessary to serve the project? Yes No
 If Yes:
 • Describe extensions or capacity expansions proposed to serve this project: _____
 N/A

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:
 • Applicant/sponsor for new district: _____
 • Date application submitted or anticipated: _____
 • What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):
 N/A

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____
 N/A - liquid waste will be directed to the existing Guilderland WWTP

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No
 If Yes:
 i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or <0.3 acres (impervious surface)
 _____ Square feet or 4 acres (parcel size)
 ii. Describe types of new point sources. N/A

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?
 Sediment and erosion control will be utilized during construction

• If to surface waters, identify receiving water bodies or wetlands: _____
 N/A

• Will stormwater runoff flow to adjacent properties? Yes No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No
 If Yes, identify:
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)
 N/A
 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)
 N/A
 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)
 On-Site Emergency Generator

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No
 If Yes:
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No
 ii. In addition to emissions as calculated in the application, the project will generate:
 • _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)
 • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? Yes No

l. Hours of operation. Answer all items which apply.

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ 7AM to 4PM • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ Water System Runs 24/7 • Saturday: _____ Water System Runs 24/7 • Sunday: _____ Water System Runs 24/7 • Holidays: _____ Water System Runs 24/7
---	---

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No

If yes:

i. Provide details including sources, time of day and duration:
 During construction, noise levels will increase. Heavy construction equipment will periodically operate during construction, typically 7 AM to 5 PM weekdays and not continuous. Post construction, noise levels will return to ambient conditions.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: N/A - It is not anticipated that noise levels will rise above normal ambient levels outside of working construction hours

n. Will the proposed action have outdoor lighting? Yes No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:
Outdoor lighting already exists at the DPW site. Any additional outdoor lighting will be added as needed and permitted by Town of Guilderland code.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: N/A

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No

If Yes:

i. Describe proposed treatment(s):
N/A - This is a municipal water treatment project.

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

Urban Industrial Commercial Residential (suburban) Rural (non-farm)

Forest Agriculture Aquatic Other (specify): Municipal

ii. If mix of uses, generally describe: _____

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.45	0.5	+.05
• Forested	3.05	3	-.05
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.4	0.4	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	.1	.1	0
• Wetlands (freshwater or tidal)	(see surface water features)		
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:
Farnsworth Middle School

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ >6.67 feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ 0 %

c. Predominant soil type(s) present on project site: HuE - Hudson Silt Loam _____ 100 %
 _____ %
 _____ %

d. What is the average depth to the water table on the project site? Average: _____ 1.75 feet

e. Drainage status of project site soils: Well Drained: _____ % of site
 Moderately Well Drained: _____ 100 % of site
 Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ % of site
 10-15%: _____ % of site
 15% or greater: _____ 100 % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: N/A

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 863-661 Classification C(T)
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, Federal Waters, Federal Waters,... Approximate Size 0.2651 Acres
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____
N/A

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100-year Floodplain? Yes No

k. Is the project site in the 500-year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: N/A

<p>m. Identify the predominant wildlife species that occupy or use the project site: _____ Typical suburban wildlife _____ _____</p>	
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: i. Describe the habitat/community (composition, function, and basis for designation): _____ ii. Source(s) of description or evaluation: _____ iii. Extent of community/habitat: • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres</p>	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: i. Species and listing (endangered or threatened): _____ _____</p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: i. Species and listing: _____ _____</p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, give a brief description of how the proposed action may affect that use: _____ _____</p>	
<p>E.3. Designated Public Resources On or Near Project Site</p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide county plus district name/number: _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No i. If Yes: acreage(s) on project site? _____ ii. Source(s) of soil rating(s): _____</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: i. CEA name: _____ ii. Basis for designation: _____ iii. Designating agency and date: _____</p>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? Yes No

If Yes:

i. Nature of historic/archaeological resource: Archaeological Site Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based: _____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? Yes No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? Yes No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? Yes No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? Yes No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? Yes No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

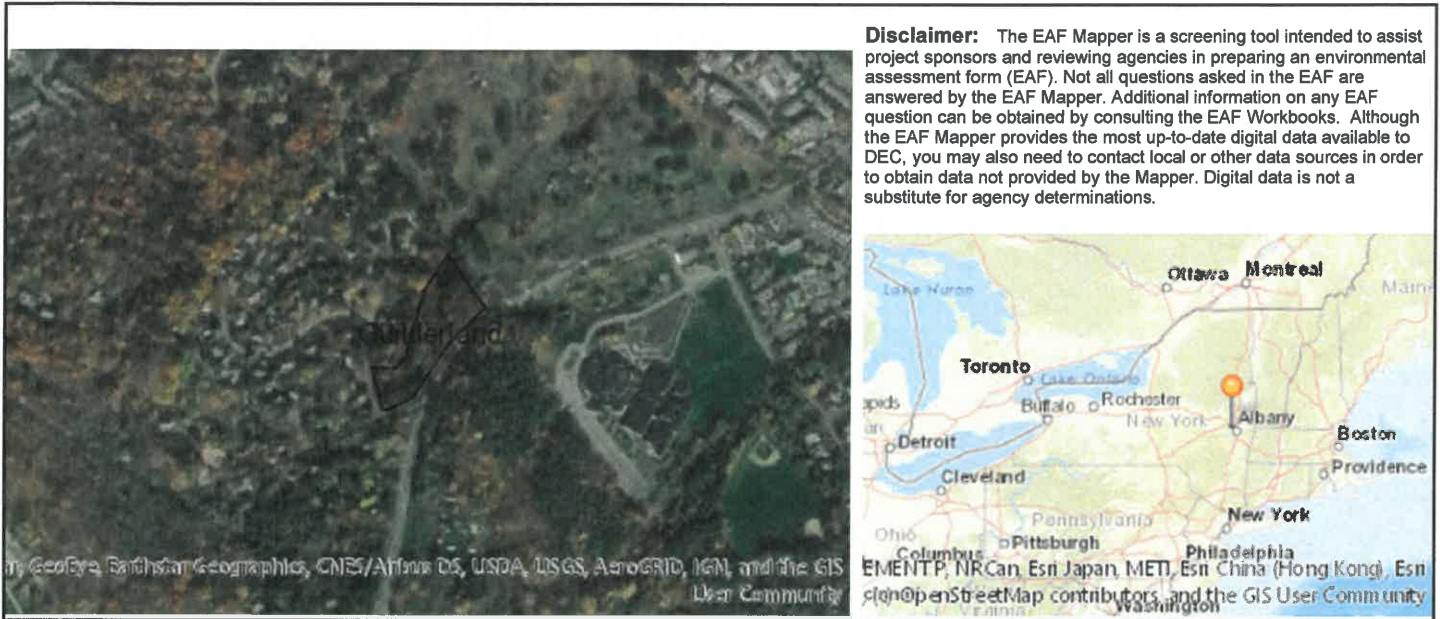
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Peter Barber Date 10/19/2021

Signature  Title Supervisor



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas: Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	863-661
E.2.h.iv [Surface Water Features - Stream Classification]	C(T)
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No

E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Agency Use Only [If applicable]

Project :

Date :

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “Yes” to a numbered question, please complete all the questions that follow in that section.
- If you answer “No” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) <i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i>				<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
h. Other impacts: _____ _____		<input checked="" type="checkbox"/>	<input type="checkbox"/>		

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

NO

YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

NO

YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>

I. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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4. Impact on groundwater
 The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "Yes", answer questions a - h. If "No", move on to Section 5.

NO YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

5. Impact on Flooding
 The proposed action may result in development on lands subject to flooding. (See Part 1. E.2)
If "Yes", answer questions a - g. If "No", move on to Section 6.

NO YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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6. Impacts on Air The proposed action may include a state regulated air emission source. <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO ₂) ii. More than 3.5 tons/year of nitrous oxide (N ₂ O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF ₆) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflouorocarbons (HFCs) emissions vi. 43 tons/year or more of methane	D2g D2g D2g D2g D2g D2h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

7. Impact on Plants and Animals The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	<input type="checkbox"/>	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

8. Impact on Agricultural Resources			
The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.)		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i>			
		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i>			
		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input checked="" type="checkbox"/>	<input type="checkbox"/>

d. Other impacts: _____ _____		<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	<input checked="" type="checkbox"/>	<input type="checkbox"/>

11. Impact on Open Space and Recreation			
The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If "Yes", answer questions a - e. If "No", go to Section 12.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

12. Impact on Critical Environmental Areas			
The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If "Yes", answer questions a - c. If "No", go to Section 13.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

13. Impact on Transportation
 The proposed action may result in a change to existing transportation systems. NO YES
 (See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input checked="" type="checkbox"/>	<input type="checkbox"/>

14. Impact on Energy
 The proposed action may cause an increase in the use of any form of energy. NO YES
 (See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light
 The proposed action may result in an increase in noise, odors, or outdoor lighting. NO YES
 (See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input checked="" type="checkbox"/>	<input type="checkbox"/>

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input checked="" type="checkbox"/>	<input type="checkbox"/>

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)

NO

YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input checked="" type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input checked="" type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____		<input checked="" type="checkbox"/>	<input type="checkbox"/>

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans.
(See Part 1. C.1, C.2. and C.3.)

NO

YES

If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character.
(See Part 1. C.2, C.3, D.2, E.3)

NO

YES

If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

Project : Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

No impacts have been identified that will have a moderate to large impact on the environment. See NEGATIVE DECLARATION, NOTICE OF DETERMINATION OF SIGNIFICANCE, adopted on November 19, 2021 by the Town of Guilderland Town Board.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: Type 1 Unlisted

Identify portions of EAF completed for this Project: Part 1 Part 2 Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the
Town of Guilderland _____ as lead agency that:

A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Town of Guilderland Well Filtration Project

Name of Lead Agency: Town of Guilderland

Name of Responsible Officer in Lead Agency: Peter Barber

Title of Responsible Officer: Supervisor

Signature of Responsible Officer in Lead Agency:

Date: 11/19/2021

Signature of Preparer (if different from Responsible Officer)

Date:

For Further Information:

Contact Person: Lindsay Allen, Delaware Engineering, DPC

Address: 28 Madison Avenue Extension, Albany, NY 12203

Telephone Number: 518-452-1290

E-mail: lallen@delawareengineering.com

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)

Other involved agencies (if any)

Applicant (if any)

Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>

PRINT FULL FORM

NOTICE OF INTENT TO SERVE AS LEAD AGENCY UNDER SEQRA
Lead Agency Must Be Designated within Thirty (30) Calendar Days

This Notice is issued pursuant to Part 617, Article 8 of the Environmental Conservation Law (State Environmental Quality Review Act) for the purpose of designating a Lead Agency for coordinated environmental quality review of the following Proposed Action:

Date: October 20, 2021
Project Name: Guilderland Greensand Filter Project
Location: Town of Guilderland, Albany County
SEQRA Status: Type I Action

Project Description: The project involves the construction of a greensand filter system at the Town of Guilderland's DPW site (6011 State Farm Road). Wells #1 and #2 are also located on the DPW site. Water and sewer piping will be installed from the new filter building to the existing municipal infrastructure on Route 155/State Farm Road. Piping will be installed from the DPW site along State Farm Road to Well #3 in order to connect it to the new filtration system.

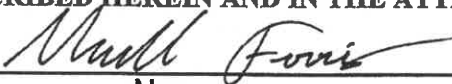
Declaration of Intent to Serve as Lead Agency: Please take notice that, under the applicable standards of Title 6 Part 617.6 NYCRR, the Guilderland Town Board has concluded that this action requires a coordinated environmental review. The Town Board passed a resolution on October 19, 2021 stating their willingness to serve as lead agency.

This Notice, accompanied by the Part 1 of the Full EAF and a copy of the project description and site map, is being sent to you and all other identified involved agencies with a request for consent in writing to the Town Board serving as Lead Agency in writing for SRF documentation purposes. Copies of all subsequent environmental documents will be distributed to all involved agencies along with notification of the scheduling of any related proceedings and hearings, and of any subsequent SEQRA determination.

Should you not agree with the Town Board's designation as Lead Agency, please follow the procedures outlined in Title 6 Part 617.6(b) NYCRR. In addition to your consideration of Lead Agency designation, the Town Board welcomes any comments you may have regarding the Proposed Action.

To assist the Town with timely action to meet grant deadlines, return of this document to Lindsay Allen and any comments prior to the Town's Board Meeting on November 19, 2021 is requested.

THE Albany County Health Department (agency name), HAS NO OBJECTION TO THE TOWN OF GUILDERLAND ACTING AS LEAD AGENCY FOR THE REVIEW OF THE PROJECT DESCRIBED HEREIN AND IN THE ATTACHED EAF.

 (authorized signature)
None

COMMENTS: _____

Contact: Lindsay Ostrander Allen
Delaware Engineering, D.P.C
28 Madison Avenue Ext.
Albany, New York 12203

(518) 452-1290 (Telephone)
(518) 452-1335 (Facsimile)
lallen@delawareengineering.com (Email)

NOTICE OF INTENT TO SERVE AS LEAD AGENCY UNDER SEQRA
Lead Agency Must Be Designated within Thirty (30) Calendar Days

This Notice is issued pursuant to Part 617, Article 8 of the Environmental Conservation Law (State Environmental Quality Review Act) for the purpose of designating a Lead Agency for coordinated environmental quality review of the following Proposed Action:

Date: October 20, 2021
Project Name: Guilderland Greensand Filter Project
Location: Town of Guilderland, Albany County
SEQRA Status: Type I Action

Project Description: The project involves the construction of a greensand filter system at the Town of Guilderland's DPW site (6011 State Farm Road). Wells #1 and #2 are also located on the DPW site. Water and sewer piping will be installed from the new filter building to the existing municipal infrastructure on Route 155/State Farm Road. Piping will be installed from the DPW site along State Farm Road to Well #3 in order to connect it to the new filtration system.

Declaration of Intent to Serve as Lead Agency: Please take notice that, under the applicable standards of Title 6 Part 617.6 NYCRR, the Guilderland Town Board has concluded that this action requires a coordinated environmental review. The Town Board passed a resolution on October 19, 2021 stating their willingness to serve as lead agency.

This Notice, accompanied by the Part 1 of the Full EAF and a copy of the project description and site map, is being sent to you and all other identified involved agencies with a request for consent in writing to the Town Board serving as Lead Agency in writing for SRF documentation purposes. Copies of all subsequent environmental documents will be distributed to all involved agencies along with notification of the scheduling of any related proceedings and hearings, and of any subsequent SEQRA determination.

Should you not agree with the Town Board's designation as Lead Agency, please follow the procedures outlined in Title 6 Part 617.6(b) NYCRR. In addition to your consideration of Lead Agency designation, the Town Board welcomes any comments you may have regarding the Proposed Action.

To assist the Town with timely action to meet grant deadlines, return of this document to Lindsay Allen and any comments prior to the Town's Board Meeting on November 19, 2021 is requested.

THE NYS Department of Health (agency name), HAS NO OBJECTION TO THE TOWN OF GUILDERLAND ACTING AS LEAD AGENCY FOR THE REVIEW OF THE PROJECT DESCRIBED HEREIN AND IN THE ATTACHED EAF.



(authorized signature)

COMMENTS: None

Contact: Lindsay Ostrander Allen
Delaware Engineering, D.P.C
28 Madison Avenue Ext.
Albany, New York 12203

(518) 452-1290 (Telephone)
(518) 452-1335 (Facsimile)
lallen@delawareengineering.com (Email)

**RESOLUTION OF THE BOARD OF TRUSTEES
OF THE TOWN OF GUILDERLAND**

WELL FILTRATION PROJECT

SEQR LEAD AGENCY, CLASSIFICATION & DETREMINATION OF SIGNIFICANCE

November 19, 2021

WHEREAS, by resolution dated October 19, 2021, the Town of Guilderland Town Board declared its intention to act as Lead Agency for the conduct of the State Environmental Quality Review (SEQR) process and to undertake a Coordinated Review for the Greensand Filter Project (hereafter, the “Project”); and

WHEREAS, each involved agency was notified by letter of the Town’s intent to act as lead agency and provided with Part I of the Long Environmental Assessment Form (EAF); and

WHEREAS, no other agency has requested in writing to act as lead agency; **NOW**

THEREFORE, in consideration of the foregoing:

1. The Town Board is the lead agency for the environmental review of the Project.
2. The Project is a Type I action under SEQR per 6 NYCRR Part 617 and as a requirement of the Water Infrastructure Improvement Act funding policy.
3. Review of Part II of the Long EAF results in the determination that the Project will not have a significant negative effect on the environment and therefore, a Negative Declaration is hereby adopted along with Part II and III of the Long EAF as documented in the narrative attached hereto and part hereof.
4. Filing of this Negative Declaration is hereby ordered in accordance with 6 NYCRR Part 617.11.
5. This resolution will take effect immediately.

Motion: _____

Second: _____

Resolution is hereby _____ (adopted or failed)

Attest: _____, Town Clerk

**NEGATIVE DECLARATION
NOTICE OF DETERMINATION OF SIGNIFICANCE
State Environmental Quality Review (SEQR)**

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 of the Environmental Conservation Law (SEQR).

The Town of Guilderland, as lead agency, has determined that the proposed Action described herein will not have a significant effect on the environment and that an Environmental Impact Statement will not be prepared.

DATE: November 20, 2021
NAME OF ACTION: Greensand Well Filtration Project
LOCATION: Town of Guilderland, Albany County, New York
SEQR STATUS: Type I
LEAD AGENCY: Town of Guilderland

DESCRIPTION OF ACTION:

The project involves the construction of a greensand filter system at the Town of Guilderland's DPW site (6011 State Farm Road). Wells #1 and #2 are also located on the DPW site. Water and sewer piping will be installed from the new filter building to the existing municipal infrastructure on Route 155/State Farm Road. Piping will be installed from the DPW site along State Farm Road to Well #3 in order to connect it to the new filtration system. The Project will decrease the amount of surface water bought through the Albany/Guilderland interconnect and will allow the Town to rely more on local water resources.

Reasons Supporting This Determination:

The Town Board has reviewed the FEAF and the criteria contained in 6 NYCRR §617.7 and has determined that the Project will not have a significant impact on the environment for the following reasons:

As required by §617.7(b), the Town has:

- Considered the Action as defined in subdivision 617.4
- Reviewed the FEAF, the criteria identified in Subdivision (c) of this section and other documentation to identify relevant areas of environmental concern.
- Analyzed the identified relevant areas of environmental concern to determine whether the action will have a significant adverse impact.
- Set forth herein its written Finding of No Significant Environmental Impact

The following indicators of significant adverse impacts on the environment, as listed in 617.7(c)(1), were considered:

1. Will the Proposed Action result in a physical change to the Project site?
Small to moderate impact. Construction of the project will disturb less than 1 acre of land and work will be completed mostly in an areas which have previously been disturbed.

2. Will there be an effect to any unique or unusual land forms found on the site?
No impact. No such land forms exist in the Project area.
3. Impacts on Surface Waters:
 - a. Will Proposed Action affect any water body designated as protected? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL)?
Small to moderate impact. Construction will take place in the vicinity of the Kaikout Kill (Class C(T) Stream) and DEC and NWI wetland. No waterbodies will be disturbed by the proposed Project.

Sediment and erosion control will be utilized during construction. Work will be completed under terms of ACOE and NYSDEC permits (if required) to mitigate the potential environmental impacts.
 - b. Will Proposed Action affect any non-protected existing or new body of water?
No impact has been identified.
4. Will Proposed Action affect surface or groundwater quality or quantity?
No impact has been identified.
5. Will Proposed Action alter drainage flow or patterns, or surface water runoff?
No impact has been identified.
6. Will Proposed Action affect air quality?
No impact has been identified.
7. Impacts on Plants and Animals:
 - a. Will Proposed Action affect any threatened or endangered species?
No impact has been identified. No such species are located on the project site.
 - b. Will Proposed Action substantially affect non-threatened or non-endangered species?
No impact has been identified.
8. Will Proposed Action affect agricultural land resources?
No impact has been identified.
9. Will Proposed Action affect aesthetic resources?
No impact has been identified.
10. Will Proposed Action impact any site or structure of historic, prehistoric or paleontological importance?
Small to moderate impact. The Project is within an archaeologically sensitive area. SHPO has issued a Letter of No Effect.
11. Will proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?
No impact has been identified.
12. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)?

No impact has been identified. No such areas have been designated in the Project area.

13. Will there be an effect to existing transportation systems?
Small to moderate impact. Heavy equipment will be used during construction which may periodically cause a change in the normal traffic levels.
14. Will Proposed Action affect the community's sources of fuel or energy supply?
No impact has been identified.
15. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action?
Small to moderate impact. Heavy equipment will be used during construction which may periodically cause noise and vibration above those usually experienced in the area.
16. Will Proposed Action affect public health and safety?
No impact has been identified. The project site is within 1,500 feet of the Farnsworth Middle School but will have no impacts on this resource.
17. Will Proposed Action affect the character of the existing community?
No impact has been identified.
18. Is there, or is there likely to be, public controversy related to potential adverse environment impacts?
No impact has been identified.

617.7(c)(2) – For the purpose of determining significant adverse impacts on the environment of those factors listed above, the long-term, short-term, direct, indirect and cumulative impacts, including simultaneous or subsequent actions, to the extent reasonable, as included in any long-range plan for the action, any action that is a result of the reviewed action or is dependent on the action were reviewed.

617.7(c)(3) – The significance of any likely consequences were assessed in connection with the setting of the action, the likelihood of occurrence, duration, irreversibility, geographic scope, magnitude and the number of people affected as a consequence of the action.

Based on this review, no adverse environmental impacts would result from this Action.

Contact:

**Lindsay Ostrander Allen
Delaware Engineering, D.P.C
28 Madison Avenue Ext.
Albany, New York 12203**

**(518) 452-1290 (Telephone)
(518) 452-1335 (Facsimile)
lallen@delawareengineering.com (Email)**

9. SHPO Letter of No Effect



**Parks, Recreation,
and Historic Preservation**

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

October 27, 2021

Lindsay Ostrander Allen
Project Engineer
Delaware Engineering, DPC
28 Madison Avenue Ext.
Albany, NY 12203

Re: NYSEFC
Town of Guilderland Greensand Well Filtration Project
6011 State Farm Rd, Guilderland, NY 12084
21PR06962

Dear Lindsay Ostrander Allen:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay
Deputy State Historic Preservation Officer
Division for Historic Preservation

10. Board/Authorizing Resolution

**Resolution # _____ Adopted November 19, 2021
TOWN OF GUILDERLAND**

GUILDERLAND WELL WATER FILTRATION PROJECT

Board Resolution – WIIA Funding Application

WHEREAS, The Town of Guilderland, New York (hereinafter the “Town”) has established the public benefit of the Well Water Filtration Project (hereinafter the “Project”); and

WHEREAS, the Town plans to construct a filtration system to treat high concentration of iron and manganese in water from the Town’s wells including greensand filtration, backwash equipment and connection to the sewer system, emergency generator, yard piping, connection to the water main, and pump and control improvements, as well as site work located on Town owned land along NYS Route 155 to improve reliability and protect public health; and

WHEREAS, the Town has the opportunity to apply for grant funds from the NYS Water Infrastructure Improvement Act (WIIA) which may fund up to \$3 million or 60% of the total project costs; and,

WHEREAS, the total Project cost is estimated at \$4,259,000; and,

WHEREAS, the Town is prepared to contribute matching funds of \$1,703,600; and,

THEREFORE, BE IT RESOLVED THAT

1. The Town of Guilderland is authorized to submit the WIIA grant application.
2. The Supervisor of the Town of Guilderland is authorized to sign the WIIA grant application.
3. The Town agrees to provide the matching funds required for WIIA projects through local appropriation.

11. Title Certification



New York State Revolving Fund (Not Applicable for Municipal Land Acquisition Projects)

Certification as to Title to Project Site

I, Peter Barber, do hereby certify on behalf of the Applicant named below in connection with its application to the New York State Environmental Facilities Corporation:

1. That I have investigated and ascertained the location of, and am familiar with the legal description of, the site(s) being provided by the Applicant for all elements of the water pollution control project for which financial assistance has been requested under the State Revolving Fund ("SRF"), identified as SRF Project No. _____ (the "Project").
2. As to all sites to be provided by the Applicant for the Project:
 - a. The Applicant has a legal and valid fee simple title or other estate or interest in the site(s) of the Project, including all the necessary easements and rights-of-way, as are necessary to the Applicant's undisturbed use and possession during construction, and for the estimated operational life of the Project; or
 - b. The Applicant has initiated formal condemnation proceedings and has filed an acquisition map to acquire the necessary interest or estate in such site or sites and has right of entry to the property. (Attach proof of filing of the acquisition map.)
3. That any deeds or documents required to be recorded in order to protect the title of the owner and the interest of the Applicant have been duly recorded or filed.

Dated this 27 day of October, 2021
(month) (year)

Town of Guilderland

(Applicant)

By: *Peter Barber*
(Signature of Authorized Officer)

Peter Barber, Supervisor

(Print or Type Name and Title)

12. Professional Engineering Agreement



Delaware Engineering, D.P.C.

28 Madison Avenue Extension
Albany, New York 12203

Tel: 518.452.1290
Fax: 518.452.1335

November 1, 2021

Hon. Peter Barber, Supervisor
Town of Guilderland
P.O. Box 339
Guilderland, NY 12084

Subject: Water Improvement Project
Groundwater Wells - Greensand Filtration
WIIA Application
Preliminary Engineering Report

Dear Supervisor Barber:

Attached is a Professional Services Agreement authorizing Delaware Engineering to develop a Preliminary Engineering Report (PER) in support of a Water Infrastructure Improvement Act (WIIA) grant application to NYSDEC/NYSEFC. This PER will be prepared consistent with the NYSEFC DWSRF outline.

We are hopeful that this grant application will be successful and we look forward to working with the Town Board to continue to build a safe, resilient, and cost-effective water system for the residents of Guilderland.

Please do not hesitate to call me if you have any questions or comments about this matter.

Sincerely,

John K. Brust
Principal

PROFESSIONAL SERVICES AGREEMENT

**Town of Guilderland Water Project
Preliminary Engineering Report
("PROJECT")**

This Agreement is by and between

**Town of Guilderland ("CLIENT")
PO Box 399
5209 Western Turnpike
Guilderland, NY 12084**

and,

**Delaware Engineering, D.P.C. ("ENGINEER")
28 Madison Avenue Extension
Albany, New York 12203**

Who agree as follows:

The CLIENT hereby engages the ENGINEER to perform the services described in Part I ("Services") and the ENGINEER agrees to perform the Services for the compensation set forth in Part II. Work shall be conducted pursuant to the Standard Terms and Conditions and State Revolving Fund (SRF) Terms and Conditions Minority and Women Owned Business Enterprise provided in Parts III and IV. The ENGINEER shall be authorized to commence the Services upon execution of this Agreement. The CLIENT and the ENGINEER agree that this signature page, together with Parts I-IV and any attachments referred to therein, constitute the entire agreement between them relating to continuing Project assignments (Agreement).

APPROVED FOR CLIENT

APPROVED FOR ENGINEER

By: _____

By:  _____

Printed Name: _____

Printed Name: _____ **John Brust**

Title: _____

Title: _____ **Principal**

Date: _____

Date: _____ **November 1, 2021**

PROJECT BACKGROUND

A Preliminary Engineering Report, following the NYSEFC DWSRF outline, will be prepared by ENGINEER at the directive of the CLIENT for submission of a Water Infrastructure Improvement Act (WIIA) application that will fund the installation of a green-sand filtration system to better utilize the Town's existing groundwater wells. The intent of this project is for the Town of Guilderland to better utilize its own existing groundwater resources to further supplement the potable supply from the Watervliet Reservoir water treatment plant and to build increased redundancy to its current alternative sources from the City of Albany and Town of Rotterdam.

PART I ENGINEER'S RESPONSIBILITIES

The ENGINEER shall prepare Preliminary Engineering Report in conformance with the DWSRF Engineering Report Template.

PART II COMPENSATION, BILLING AND PAYMENT

Delaware Engineering will conduct the scope of work described in Part I for a not-to-exceed fee of \$15,000 including labor and expenses. Delaware Engineering shall submit invoices to the CLIENT based upon actual hours accrued according to our 2021 hourly rate schedule.

**DELAWARE ENGINEERING, D.P.C.
ENGINEERING RATE SCHEDULE
2021**

Billing Category	Rate/Hour
Technical Typist / Administration	\$85 - \$95
Designer, Technician, Construction Inspector	\$105 - \$130
Senior Designer, Technician, Construction Inspector	\$125 - \$145
Senior Construction Manager	\$150 - \$180
Senior Project Manager	\$145 - \$170
GIS Specialist	\$125 - \$145
Engineer / Scientist / Planner I	\$105 - \$145
Engineer / Scientist / Planner II	\$145 - \$160
Engineer / Scientist / Planner III	\$150 - \$165
Senior Engineer / Scientist / Planner I	\$155 - \$170
Senior Engineer / Scientist / Planner II	\$165 - \$180
Senior Engineer / Scientist / Planner III	\$180 - \$200
Principal Engineer / Scientist / Planner	\$195 - \$215

Reimbursable Expenses:

- | | |
|-------------------------------------|--|
| 1. Mileage | @ Federal Rate |
| 2. Travel Expenses (Lodging, Meals) | @ Federal Per Diem Rate |
| 3. Telecommunications | @ Cost |
| 4. FedEx, UPS, US Postal, Courier | @ Cost |
| 5. Subcontract Management | @ Cost plus 10% |
| 6. Other allowable costs | @ Cost (Plan Reproductions, Photographs, etc.) |

1. STANDARD OF CARE. Services shall be performed in accordance with the standard of professional practice ordinarily exercised by the applicable profession at the time and within the locality where the Services are performed. Professional services are not subject to, and ENGINEER can not provide, any warranty or guarantee, express or implied, including warranties or guarantees contained in any uniform commercial code. Any such warranties or guarantees contained in any purchase orders, requisitions or notices to proceed issued by CLIENT are specifically objected to.

2. CHANGE OF SCOPE. The scope of Services set forth in this Agreement is based on facts known at the time of execution of this Agreement, including, if applicable, information supplied by CLIENT. For some projects involving conceptual or process development services, scope may not be fully definable during initial phases. As the Project progresses, facts discovered may indicate that scope must be redefined.

3. SAFETY. ENGINEER has established and maintains corporate programs and procedures for the safety of its employees. Unless specifically included as a service to be provided under this Agreement, ENGINEER specifically disclaims any authority or responsibility for general job site safety and safety of persons other than ENGINEER employees.

4. DELAYS. If events beyond the control of CLIENT or ENGINEER, including, but not limited to, fire, flood, explosion, riot, strike, war, process shutdown, act of God or the public enemy, and act or regulation of any government agency, result in delay to any schedule established in this Agreement, such schedule shall be amended to the extent necessary to compensate for such delay. In the event such delay exceeds 60 days, ENGINEER shall be entitled to an equitable adjustment in compensation.

5. TERMINATION/SUSPENSION. Either party may terminate this Agreement upon 30 days written notice to the other party. CLIENT shall pay ENGINEER for all Services, including profit relating thereto, rendered prior to termination, plus any expenses of termination. In the event either party defaults in its obligations under this Agreement (including CLIENT'S obligation to make the payments required hereunder), the non-defaulting party may, after 7 days written notice stating its intention to suspend performance under the Agreement if cure of such default is not commenced and diligently continued, and failure of the defaulting party to commence cure within such time limit and diligently continue, suspend performance under this Agreement.

6. OPINIONS OF CONSTRUCTION COST. Any opinion of construction costs prepared by ENGINEER is supplied for the general guidance of the CLIENT only. Since ENGINEER has no control over competitive bidding or market conditions, ENGINEER cannot guarantee the accuracy of such opinions as compared to contract bids or actual costs to CLIENT.

7. RELATIONSHIP WITH CONTRACTORS. ENGINEER shall serve as CLIENT'S professional representative for the Services, and may make recommendations to CLIENT concerning actions relating to CLIENT'S contractors, but ENGINEER specifically disclaims any authority to direct or supervise the means, methods, techniques, sequences or procedures of construction selected by CLIENT'S contractors.

8. CONSTRUCTION REVIEW. For projects involving construction, CLIENT acknowledges that under generally accepted professional practice, interpretations of construction documents in the field are normally required, and that performance of construction-related services by the design professional for the project permits errors or omissions to be identified and corrected at a comparatively low cost. CLIENT agrees to hold ENGINEER harmless from any claims resulting from performance of construction-related services by persons other than ENGINEER.

9. INSURANCE. ENGINEER will maintain insurance coverage for Professional, Comprehensive General, Automobile, Worker's Compensation, and Employer's Liability in amounts in accordance with legal, and ENGINEER'S business requirements. Certificates evidencing such coverage will be provided to CLIENT upon request. For projects involving construction, CLIENT agrees to require its construction contractor, if any, to include ENGINEER as an additional insured on its policies relating to the Project. ENGINEER'S coverages referenced above shall, in such case, be excess over contractor's primary coverage.

10. HAZARDOUS MATERIAL. Hazardous materials may exist at a site where there is no reason to believe they could or should be present. ENGINEER and CLIENT agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work. ENGINEER agrees to notify CLIENT as soon as practically possible should unanticipated hazardous materials or suspected hazardous materials be encountered. CLIENT acknowledges and agrees that it retains title to all hazardous material existing on the site and shall report to the appropriate federal, state or local public agencies, as required, any conditions at the site that may present a potential danger to the public health, safety or the environment. CLIENT shall execute any manifests or forms in connection with transportation, storage and disposal of hazardous materials resulting from the site or work on the site or shall authorize ENGINEER to execute such documents as CLIENT'S agent. CLIENT waives any claim against ENGINEER and agrees to defend, indemnify, and save ENGINEER harmless from any claim or liability for injury or loss arising from ENGINEER'S discovery of unanticipated hazardous materials or suspected hazardous materials.

11. INDEMNITIES. To the fullest extent permitted by law, ENGINEER shall indemnify and save harmless CLIENT from and against loss, liability, and damages sustained by CLIENT, its agents, employees, and representatives by reason of injury or death to persons or damage to tangible property to the extent caused directly by the willful misconduct or failure to adhere to the standard of care described in Paragraph 1 above of ENGINEER, its agents or employees.

To the fullest extent permitted by law, CLIENT shall defend, indemnify, and save harmless ENGINEER from and against loss, liability, and damages sustained by ENGINEER, its agents, employees, and representatives by reason of claims for injury or death to persons, damages to tangible property, to the extent caused directly by any of the following: (a) any substance, condition, element, or material or any combination of the foregoing (I) produced, emitted or released from the Project or tested by ENGINEER under this Agreement, or (b) operation or management of the Project. CLIENT also agrees to require its construction contractor, if any, to include ENGINEER as an indemnitee under any indemnification obligation to CLIENT.

12. LIMITATIONS OF LIABILITY. No employee or agent of ENGINEER shall have individual liability to CLIENT. CLIENT agrees that, to the fullest extent permitted by law, ENGINEER'S total liability to CLIENT for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to the Project or this Agreement from any causes including, but not limited to, ENGINEER'S negligence, errors, omissions, strict liability, or breach of contract and whether claimed directly or by way of contribution shall not exceed the limits of insurance under this Agreement. If CLIENT desires a limit of liability greater than that provided above, CLIENT and ENGINEER shall include in Part III of this Agreement the amount of such limit and the additional compensation to be paid to ENGINEER for assumption of such additional risk. IN NO EVENT AND UNDER NO CIRCUMSTANCES SHALL ENGINEER BE LIABLE TO CLIENT FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES.

13. ACCESS. CLIENT shall provide ENGINEER safe access to any premises necessary for ENGINEER to provide the Services.

14. REUSE OF PROJECT DELIVERABLES. Reuse of any documents or other deliverables, including electronic media, pertaining to the Project by CLIENT for any purpose other than that for which such documents or deliverables were originally prepared, or alteration of such documents or deliverables without written verification or adaptation by ENGINEER for the specific purpose intended, shall be at the CLIENT'S risk. Further, all title blocks and the engineer's seal, if applicable, shall be removed if and when CLIENT provides deliverables in electronic media to another entity. CLIENT agrees that relevant analyses, findings and reports provided in electronic media shall also be provided in "hard copy" and that the hard copy shall govern in the case of a discrepancy between the two versions, and shall be held as the official set of drawings, as signed and sealed. CLIENT shall be afforded a period of 30 days in which to check the hard copy against the electronic media. In the event that any error or inconsistency is found as a result of this process, ENGINEER shall be advised and the inconsistency shall be corrected at no additional cost to CLIENT. Following the expiration of this 30-day period, CLIENT shall bear all responsibility for the care, custody and control of the electronic media. In addition, CLIENT represents that it shall retain the necessary mechanisms to read the electronic media, which CLIENT acknowledges to be of only limited duration. CLIENT agrees to defend, indemnify, and hold harmless ENGINEER from all claims, damages, and expenses, (including reasonable litigation costs), arising out of such reuse or alteration by CLIENT or others acting through CLIENT.

15. AMENDMENT. This Agreement, upon execution by both parties hereto, can be amended only by a written instrument signed by both parties.

16. ASSIGNMENT. Except for assignments (a) to entities which control, or are controlled by, the parties hereto or (b) resulting from operation of law, the rights and obligations of this Agreement cannot be assigned by either party without written permission of the other party. This Agreement shall be binding upon and inure to the benefit of any permitted assigns.

17. STATUTES OF LIMITATION. To the fullest extent permitted by law, parties agree that, except for claims for indemnification, the time period for bringing claims under this Agreement shall expire one year after Project completion.

18. DISPUTE RESOLUTION. Parties shall attempt to settle disputes arising under this agreement by discussion between the parties senior representatives of management. If any dispute can not be resolved in this manner, within a reasonable length of time, parties agree to attempt non-binding mediation or any other method of alternative dispute resolution prior to filing any legal proceedings. In the event any actions are brought to enforce this Agreement, the prevailing party shall be entitled to collect its litigation costs from the other party.

19. NO WAIVER. No waiver by either party of any default by the other party in the performance of any particular section of this Agreement shall invalidate any other section of this Agreement or operate as a waiver of any future default, whether like or different in character.

20. NO THIRD-PARTY BENEFICIARY. Nothing contained in this Agreement, nor the performance of the parties hereunder, is intended to benefit, nor shall inure to the benefit of, any third party, including CLIENT'S contractors, if any.

21. SEVERABILITY. The various terms, provisions and covenants herein contained shall be deemed to be separate and severable, and the invalidity or unenforceability of any of them shall not affect or impair the validity or enforceability of the remainder.

22. AUTHORITY. The persons signing this Agreement warrant that they have the authority to sign as, or on behalf of, the party for whom they are signing.

PART IV

**STATE REVOLVING FUND (SRF) TERMS AND CONDITIONS
MINORITY AND WOMEN OWNED BUSINESS ENTERPRISE**



Program Requirements and Bid Packet for Contracts Funded with the NYS Clean Water State Revolving Fund or Drinking Water State Revolving Fund

Recipient to Identify Contract Type:

- Construction**
 - Treatment Works and Drinking Water Projects**
 - Non-Treatment Works**

 - Non-Construction**
-

Effective October 1, 2020

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

Guilderland Water Well Filtration Project (Greensand)
WIIA/DWSRF Applications
2021

13.202b Proceedings

RESOLUTION NO. 13 of 2021

RESOLUTION AND ORDER CALLING PUBLIC NOTICE REGARDING THE INCREASE AND IMPROVEMENT OF FACILITIES OF THE GUILDERLAND WATER DISTRICT PURSUANT TO TOWN LAW §202-b

WHEREAS, the Town Board of the Town of Guilderland ("Town Board" and/or "Town"), on behalf of its Water District, requested Delaware Engineering, D.P.C., engineers duly licensed by the State of New York ("Engineer") to prepare a map, plan and report for the increase and improvement of facilities of the Water District; and

WHEREAS, the increase and improvement consists of design, permitting and construction of a filtration system to treat high concentration of iron and manganese in water from the Town's wells including greensand filtration, backwash equipment and connection to the sewer system, emergency generator, yard piping, connection to the water main, and pump and control improvements, as well as site work and appurtenances; and,

WHEREAS, the Engineer has completed and filed with the Town Board an engineering report for the increase and improvement of facilities of its Water District entitled "Well Water Filtration," dated October 28, 2021; and,

WHEREAS, the Engineer has provided a total maximum estimated cost of \$4,259,000, for the increase and improvement of the facilities;

NOW, THEREFORE, BE IT RESOLVED

1. A public hearing of the Town Board of the Town shall be held at the Town Hall, 5209 Western Turnpike, Guilderland, New York on November 19th at 12:00 o'clock p.m., to consider the increase and improvement of facilities of the Water District as described in the Report pursuant to Town Law §202-b, and to hear all persons interested in the subject and for the Town Board to conduct any actions related to this proceeding as may be required by law;

2. The Town Clerk shall publish at least once in the Altamont Enterprise, a newspaper having a general circulation in the Town and hereby designated as the official newspaper of the Town for such publication, and post on the signboard and or website of the Town maintained pursuant to Town Law §30(6), a notice of hearing, with the first publication and posting to be not less than ten (10) days or more than twenty (20) days before the date of such public hearing.

3. This Resolution shall take effect immediately.

The Resolution was adopted at a meeting of the Town Board of the Town of Guilderland duly conducted on November 4, 2021.


Lynne Buchanan, Town Clerk

**LEGAL NOTICE
SPECIAL MEETING OF THE
GUILDERLAND TOWN BOARD
NOTICE OF HEARING FOR THE
INCREASE AND IMPROVEMENT
OF THE TOWN OF GUILDERLAND
WATER DISTRICT**

Notice is hereby given that the Town Board of the Town of Guilderland, Albany County, will meet virtually via Zoom on November 19th at 12:00 p.m. to consider the increase and improvement of facilities of the Water District as described in the report prepared by Dalawana Engineering, D.P.C. pursuant to Section 202-b of the Town Law, and to hear all persons interested in the subject and for the Town Board to conduct any actions related to this proceeding as may be required by law.

The increase and improvement consists of design, permitting and construction of a filtration system to treat high concentration of iron and manganese in water from the Town's wells including greensand filtration, backwash equipment and connection to the sewer system, emergency generator, yard piping, connection to the water main, and pump and control improvements, as well as site work and appurtenances with a total maximum estimated cost of \$4,259,000, for the increase and improvement of the facilities.

Pursuant to legislation which suspended the Open Meetings Law, the public may listen and view the meeting on Verizon channel 34, Spectrum channel 1303, and Town website (<https://www.townofguilderland.org/town-meeting-videos>) and may also provide comment during the meeting by dialing (929)205-6099, and entering Meeting ID: 823 6555 8334 and Passcode: 422153. The meeting will be transcribed and posted on the Town's website.

DATED: November 4, 2021
BY ORDER TOWN BOARD OF
THE TOWN OF GUILDERLAND,
Lynne M. Buchanan
Town Clerk
16-11

14.DWSRF IUP Listing Form

Drinking Water State Revolving Fund (DWSRF) Listing Form
Preliminary Project Schedule And Cost Estimate
 For Intended Use Plan (IUP) Listing Purposes
 (Instructions on Back)

Date Prepared: ___/___/___

DOH Use Only

PWS I.D. No. _____
 Project Tracking No. _____
 Date Received: ___/___/___

PROJECT INFORMATION

Name of Water System: Town of Guilderland Water District
 Municipality: Town of Guilderland County: Albany
 Legislative Districts - Congressional: 20 NYS Senate: 46 NYS Assembly: 109
 Project Description/Location: The Town is proposing the construct a Greensand filtration system at 6011 State Farm Road, Guilderland, NY (DPW Office Site & Well Site) in order to better utilize existing wells.
If an engineering report has not been provided with this form, please attach a narrative description including details with respect to the issues the project will be solving as related to the priority ranking system (see Attachment 1 in the IUP available at www.efc.ny.gov/dwtiup).
 Population Served by Water System: 27,543 Population Served by Project: 27,543

Has this project been listed in a DWSRF Intended Use Plan (IUP)? **Yes or No.**
 If yes, please indicate the DWSRF project tracking number: N/A

Are there other funding sources anticipated for the project? **Yes or No.**
 If yes, list funding source here: Town ARPA funds

And attach a separate sheet with details about the source of funding, amount of funding, type of funding, and letter of confirmation.

CONTACT INFORMATION

Name of Borrower: Town of Guilderland Consulting Engineer: Delaware Engineering, DPC
 Contact Person, Title: Peter Barber, Supervisor Contact Person, Title: Michael Aiello
 Address: PO Box 339 Address: 28 Madison Avenue Extension
Guilderland, NY 12084 Albany, NY 12203
 Phone #: 518-356-1980 Phone #: 518-452-1290
 E-Mail Address: barberp@townofguilderland.org E-Mail Address: maiello@delawareengineering.com

If applicable, provide a separate sheet with contact information for additional parties who should be included on project mailing/emailing lists, including system owner (if different than borrower) and person responsible for completing subsequent application package.

PROJECT SCHEDULE

DATES

(T) TARGET OR (A) ACTUAL

1. Submit Engineering Report. (A) 11/22/2021 (Date)
2. When will all Technical Submittals be completed? (T) 9/1/2022 (Date)
3. Start of construction date (date Notice to Proceed was issued)? (T) 4/3/2023 (Date)
4. Is this project being submitted for Refinancing? **Yes or No?**
 If yes, Construction Completion Date (actual date)? (T) 12/29/2023 (Date)

Project Cost Estimate	
Construction Costs	\$ 2,933,000
Engineering Fees	\$ 528,000
Other Expenses	\$ 65,000
Equipment Costs	\$ 0
Land Acquisition	\$ 0
Contingencies (25 % used)	\$ 733,000
Subtotal Project Costs	\$ 4,259,000
Deduct other funding sources (HUD, RD, etc.)	\$ None at this time
Add Est. Issuance Costs (Estimated issuance costs are approximately 3% of project costs)	\$ 127,770
Total Amount to Finance	\$ 4,386,770

Please return completed form to:

New York State Department of Health
 Bureau of Water Supply Protection
 Corning Tower, Room 1135
 Empire State Plaza
 Albany, New York 12237
 Phone: (518) 402-7650

Or Email to: bpwsp@health.ny.gov