
FINAL ENVIRONMENTAL IMPACT STATEMENT

WESTCHESTER JOINT WATER WORKS RYE LAKE WATER FILTRATION PLANT Purchase Street, Harrison, New York

September 28, 2022

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1. INTRODUCTION AND DESCRIPTION OF PROPOSED ACTION

A. STATE ENVIRONMENTAL QUALITY REVIEW ACT

This Final Environmental Impact Statement (FEIS) has been prepared pursuant to the standards and requirements of the New York State Environmental Quality Review Act (SEQRA) and its implementing regulations contained in part 617, Title 6 of the New York State Code of Rules and Regulations (6 NYCRR 617). The FEIS responds to comments received regarding the Draft Environmental Impact Statement for the Proposed Action – the construction and operation of a Dissolved Air Flotation/Filtration Plant in the Town/Village of Harrison, NY. The Lead Agency pursuant to SEQRA is Westchester Joint Water Works.

The FEIS is organized as follows:

- This initial chapter of the FEIS includes a summary of the Project, including a timeline of the environmental review process.
- The second chapter of the FEIS contains the indices of comments and responses.
- The third chapter of the FEIS contains all substantive comments regarding the Project received at the DEIS public hearing and during the DEIS comment period, and a response to each comment. Comments have been organized by topic area.
- The Appendices include the public hearing transcripts, copies of all written comments received regarding the DEIS, as well as technical reports and data referenced in the responses.

The accepted DEIS in its entirety is incorporated by reference into this FEIS.

B. HISTORY OF THE SEQRA REVIEW FOR THE PROJECT

The DEIS was prepared based on a scoping document that was adopted after a public scoping session. Chronology of the SEQRA review of the Project (to date) is as follows:

1/12/21	Lead Agency Declared/Positive Declaration Issued
3/23/21	Draft Scope Adopted
4/13/21	Public Scoping Session Held on Draft Scope
5/10/21	Public Comment Period Closed on Draft Scope
10/26/21	Final Scope Adopted
4/12/22	DEIS Accepted as Adequate and Complete for Public Review
5/26/22	Public Hearing Held on DEIS
6/6/22	Public Comment Accepted on DEIS

C. DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action (Project) includes the construction and operation of a 30 million gallon per day (MGD) Dissolved Air Flotation/Filtration (DAFF) plant (filtration plant or plant) for the Westchester Joint Water Works' (WJWW) nearby Rye Lake (Kensico Reservoir) water source. The Proposed Action is necessary to maintain the health and safety of WJWW customers and to comply with a United States Environmental Protection Agency (USEPA) Administrative Order, a New York State Supreme Court Order, and the USEPA and New York State Sanitary Code surface water filtration requirements. The filtration plant would use enhanced coagulation to remove disinfection byproduct precursors of total trihalomethanes (TTHM) and

haloacetic acids (HAA5) and would give WJWW more control over the removal of these chemicals to routinely comply with the USEPA's Stage 2 Disinfectants and Disinfection Byproducts Rule Maximum Contaminant Levels (MCLs).

The proposed plant would have the capacity to filter the maximum day water supply demand of WJWW's entire water distribution system. The Proposed Action would include the construction of a filtration plant building, driveway, parking lot, installation of supporting ancillary facilities, utilities including water and sewer, and stormwater management features on 13.4-acres of land (Project Site) currently owned by Westchester County and managed by the Westchester County Airport (**Figure 1-1, Site Location**). The sewer line for the Project would tie into the airport collection system on Westchester County Airport property pursuant to an easement that would be granted by the County. As proposed, the filtration plant would be designed to treat water pumped from the Rye Lake Pump Station (RLPS) and to supply finished water to the Purchase Street Storage Tanks. The Project Site would be accessed from Purchase Street, also known as Route 120 and would require relocation of the existing Airport secondary fence line separating the Project Site and Westchester County Airport. The filtration plant building would be less than one (1) acre. Proposed impervious features, including the plant building, a driveway, parking lot, walkways and supporting utilities and ancillary facilities, would total approximately 2.4 acres.

As part of the Proposed Action, WJWW would acquire the 13.4-acre Project Site, which is currently part of the Westchester County Airport property, from Westchester County. The County has advised WJWW that the best course of action would be a proposed equal land swap to result in no net loss of airport property. The 13.4-acre parcel of land for the filtration plant would be apportioned from the County Airport property and deeded to WJWW in exchange for WJWW deeding a contiguous 13.4-acre parcel (Parcel ID 0961.1 and Exchange Parcel) in its ownership to the County for incorporation into the airport property (**Figure 1-2, Land Swap Properties**).

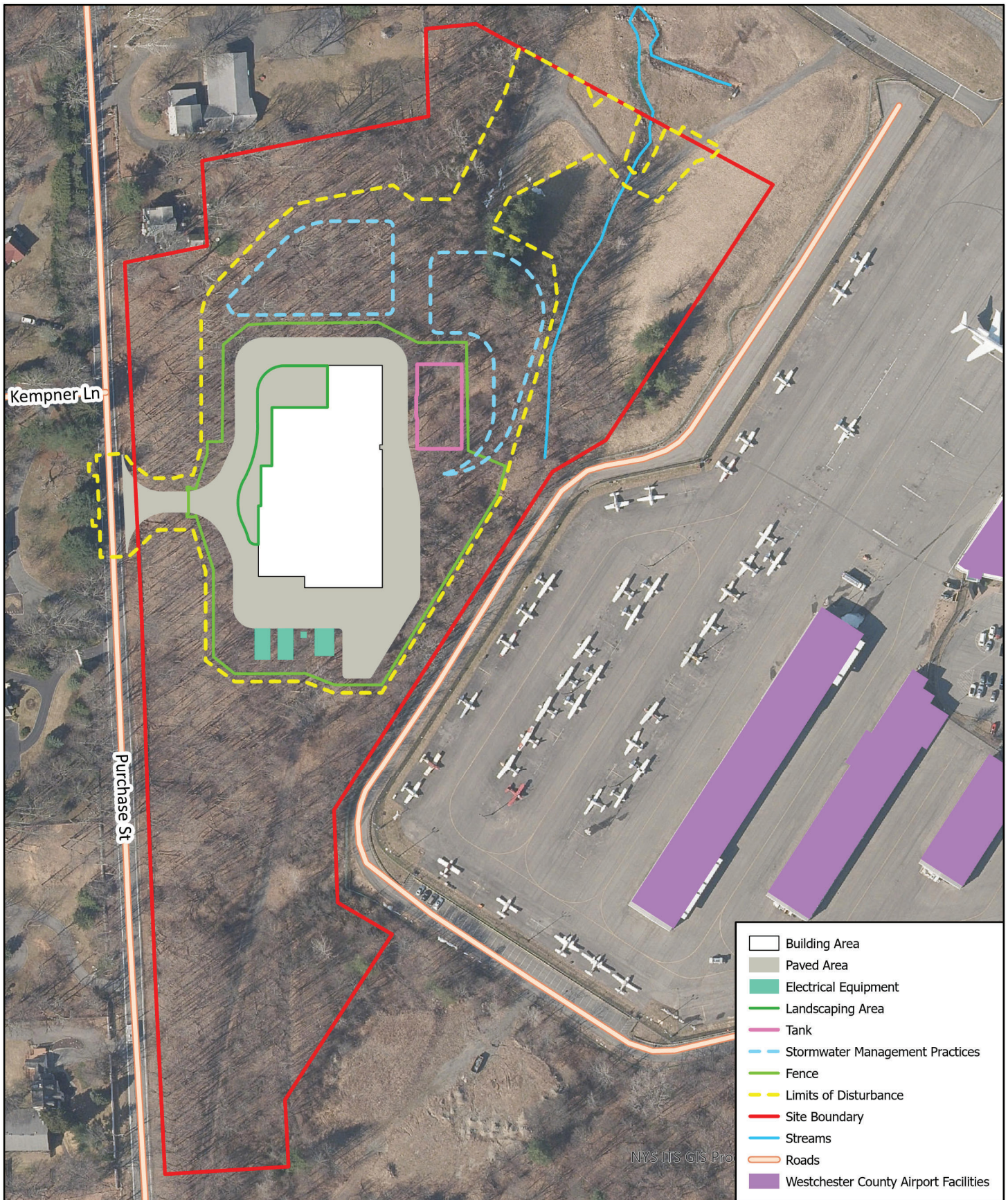


Figure 1-1: Site Location

Sources: Westchester County GIS, 2020
Scale: 1 inch equals 170 feet



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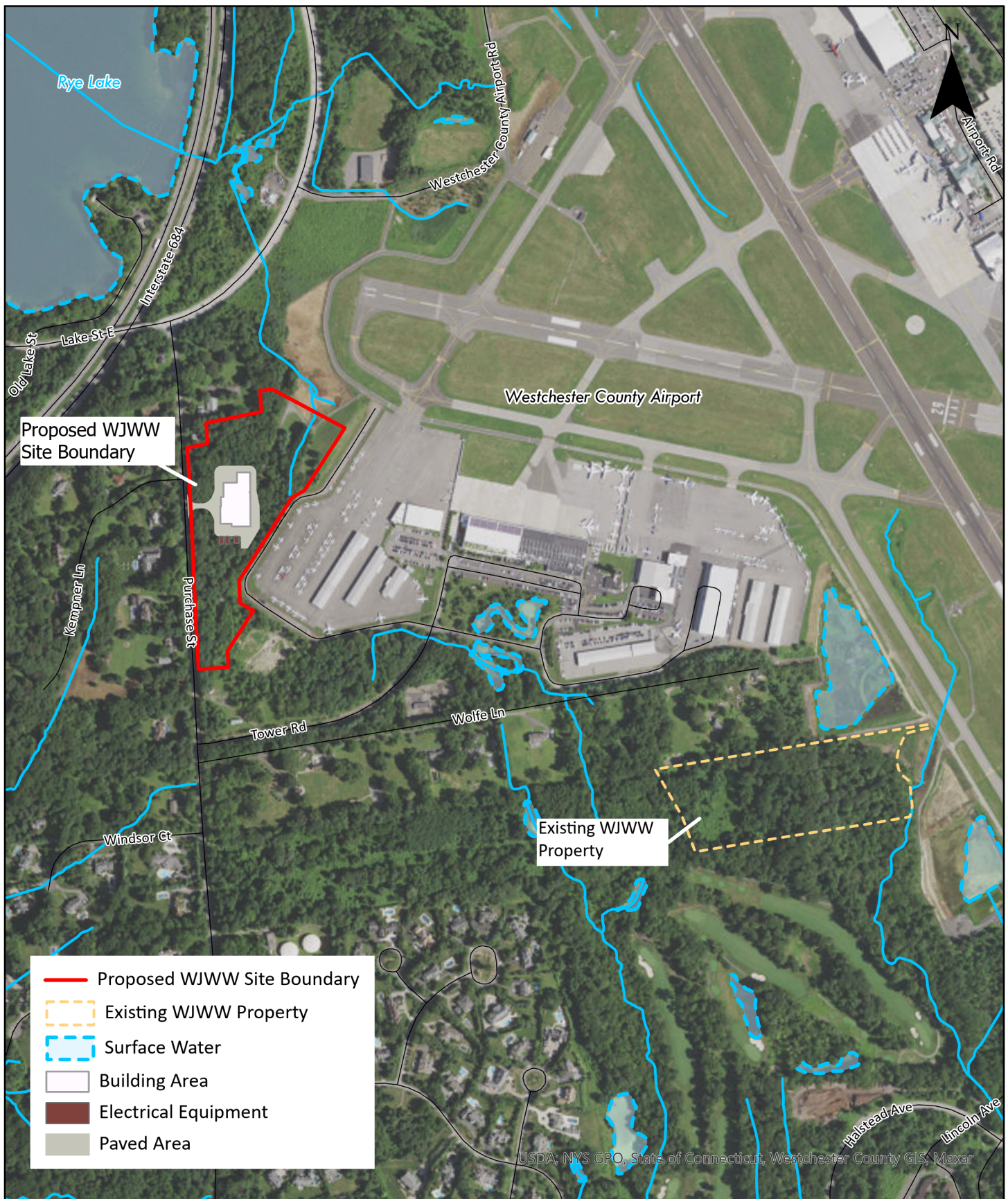


Figure 1-2: Land Swap Properties

Sources: Westchester County GIS 2020;
Scale: 1 inch equals 700 feet

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D. PROJECT BACKGROUND, NEED, OBJECTIVES AND BENEFITS

Project Background

Westchester Joint Water Works is a non-profit public benefit corporation formed by an Act of the NYS Legislature¹ at the request of the three member municipalities of the Village of Mamaroneck, the Town of Mamaroneck, and the Town/Village of Harrison for the purpose of cooperatively operating a public water works system. WJWW supplies water to its member municipalities for retail sale to their resident consumers and to portions of the City of Rye and the City of New Rochelle, serving a total retail population of over 59,000 persons from over 14,600 service connections. WJWW provides water on a wholesale basis to the for-profit water company Veolia Water New York, Rate District 2 (formerly known as Suez Water Westchester), which sells water to the City of Rye, Village of Rye Brook, and Village of Port Chester. WJWW also supplies water to the Village of Larchmont on a wholesale basis. In all, WJWW provides drinking water to up to 100,000 residents and other consumers in Westchester County.

The water supply for the WJWW system is obtained from the upstate Catskill and Delaware watersheds of the New York City (NYC) water system. WJWW draws its water from two connections to the NYC system: (i) Shaft 22 of the NYCDEP Delaware Aqueduct in Yonkers and (ii) Rye Lake WJWW water source, the eastern portion of Kensico Reservoir, in Harrison. The Proposed Action is related to the water drawn from Rye Lake WJWW water source.

The Rye Lake WJWW water source is currently treated with chlorine, fluoride, corrosion inhibitor, and ultraviolet (UV) light treatment at the Rye Lake Pump Station (RLPS) site. The water is pumped from the RLPS to the Purchase Street Storage Tanks where pH adjustment occurs via the addition of sodium hydroxide. The water transmission main from the RLPS to the Purchase Street Storage Tanks runs beneath Purchase Street, adjacent the Project Site.

In 1993, New York State Department of Health determined that WJWW's source from Rye Lake does not meet the criteria established by the State for filtration avoidance. In response to this determination, WJWW moved its raw water intake farther into Rye Lake and placed the intake at a greater depth to access higher quality water from the lake. WJWW also installed a turbidity curtain where stormwater runoff from Interstate 684 and the County Airport enters Rye Lake in an effort to protect the raw water quality at the intake. In addition, WJWW made improvements to its chlorination disinfection system and constructed additional water storage tanks to provide additional disinfection contact time.

In an action brought by New York State Department of Health (NYSDOH) pursuant to section 12 of the Public Health Law, the State Supreme Court for Westchester issued an Order, entered on January 23, 2002, that granted NYSDOH's motion for summary judgment, holding that WJWW violated the State Sanitary Code by failing to construct and operate a water filtration plant. The State Supreme Court's Order was affirmed on appeal in 2003. Upon remand, on June 9, 2004, the Supreme Court issued a Court Order requiring WJWW to construct a filtration plant (Judgment and Order of New York State Supreme Court Index No. 13364-99, Justice Louis A. Barone). The Order was upheld on appeal in 2005. It remains

¹ Chapter 654 of the Laws of New York, 1927 entitled "An Act to authorize two or more municipalities, excepting cities but including water districts, jointly to acquire, construct, lease and maintain a water works system, to provide for the method of financing therefor, to provide for the management, operation, sale and disposition thereof, and otherwise to act jointly concerning the obtaining and distributing of a supply of water."

in effect today. To comply with the Court Order, which established a schedule and milestones toward compliance with the mandatory filtration requirement, WJWW prepared to proceed with construction of a membrane filtration plant. The plant was proposed to be located on a 13.4-acre parcel of property it had acquired in the Town of Harrison adjacent to the County Airport. The project was identified as a Type II action under the Type II category that is today codified at 6 N.Y.C.R.R. § 617.5(c)(35) (“a particular course of action specifically required to be undertaken pursuant to a judgment or order”). WJWW determined that it would submit for local approvals and follow the Town/Village of Harrison Planning Board process. Applications for local site plan and special exception use permits were submitted to the Planning Board, which issued a negative declaration under SEQRA and granted approvals on June 21, 2005. The final design of WJWW’s original water treatment plant was completed and approved by NYSDOH and the County Department of Health in 2006.

As a result of lawsuits brought by a third party challenging certain permits and approvals for the facility, the Planning Board rescinded its prior approvals and, notwithstanding the prior classification of the action as Type II and negative declaration, issued a positive declaration on June 11, 2007. In accordance with a scope adopted by the Planning Board, WJWW proceeded to prepare a DEIS, which the Planning Board certified as complete on September 25, 2007. A public hearing was conducted on November 15, 2007, and WJWW prepared and submitted a draft Final Environmental Impact Statement (FEIS) to the Planning Board in July 2008.

As part of the EIS process, WJWW explored alternatives to filtration including regional water treatment and conveyance options. After submission of the draft FEIS, there was significant interest among the Planning Board and other project stakeholders in a County-lead regional water treatment and conveyance alternative. These options were further evaluated by WJWW, but ultimately, the regional water utilities pursued treatment options that did not provide any option for WJWW to obtain treated water. With regional water treatment and conveyance options no longer available, WJWW then investigated the viability of another alternative to filtration of Rye Lake consisting of the construction of a pipeline for conveyance of treated water directly from New York City’s Shaft 20 in Greenburgh. In 2016, the alternative was rejected due to its exorbitant cost and the identified potential significant impacts.

During this time period, the United States Environmental Protection Agency (USEPA) adopted on January 4, 2006, a Stage 2 Disinfectants and Disinfection Byproducts (DBPs) Rule to provide increased public health protection against the potential risks associated with these compounds. DBPs are formed when natural organic matter in the raw water source interacts with disinfectants such as chlorine. Stage 2 DBP byproduct chemicals include haloacetic acids and trihalomethanes. Because WJWW serves a retail population of between 50,000 to 99,999 people, compliance with these new provisions is mandatory. Starting October 1, 2012, WJWW was required to monitor the maximum contaminant levels (MCL) for total trihalomethanes (TTHM) and haloacetic acids (HAA5). The MCLs for TTHM and HAA5 are 0.080 milligram per liter (mg/L) and 0.060 mg/L, respectively, on a Locational Running Annual Average (LRAA) basis. The results submitted for the first, second, and third quarters of 2019 exceeded the MCL for HAA5.

On November 26, 2019, the USEPA issued a superseding Administrative Order (Index No. SDWA-02-2020-8001) which now, in addition to the Corrective Action Plan for the violation of the DBPs Rule, included an obligation to commence design of the proposed Rye Lake Water Filtration Plant and

begin the SEQRA process by January 31, 2020, with the Filtration Plant to be operational by October 15, 2024. By letter dated April 29, 2021, the U.S. Department of Justice (DOJ) notified WJWW that the USEPA had referred “certain violations of the Safe Drinking Water Act” to the “U.S. Attorney’s Office for the Southern District of New York for litigation in the U.S. District Court for the Southern District of New York.” The letter stated that the “violations relate to the failure of Westchester Joint Water Works and its constituent municipalities, the Town/Village of Harrison, the Town of Mamaroneck, and the Village of Mamaroneck ... to comply with the SDWA and an administrative order issued by EPA dated November 26, 2019. WJWW failed to comply with the ... MCL ... for ... HAA5 ... and, in particular, exceeded the MCL for HAA5 during the first, second, and third quarters of 2019. While WJWW has implemented interim measures to prevent HAA5 MCL exceedances in the short term, it is presently in violation of the SDWA and the AO, including the requirement that it construct a filtration plant at Rye Lake.” DOJ sent a similar notification letter dated May 26, 2021, directly to each of the member municipalities, the Town/Village of Harrison, the Town of Mamaroneck, and the Village of Mamaroneck. Appendix B of the DEIS, Legal Documentation, includes the AO issued, the State Court Order, and the Department of Justice letters discussed above.

Public Need and Objectives

Ensuring WJWW has effective infrastructure to comply with State and Federal regulations is imperative, as the organization is responsible for providing safe and reliable drinking water to its customers. The Proposed Action is designed for the protection of public health and safety along with compliance with the AO issued by the USEPA and the Court Order issued by the New York State Supreme Court.

As population and human activity continue to increase surface water sources can be adversely affected by increasing levels of organic matter. Disinfection Byproducts (DBPs) are formed when natural organic matter in the raw water source, such as leaf fall and aquatic vegetation, interact with disinfectants such as chlorine. Examples of DBP byproduct chemicals include haloacetic acids (HAA5) and trihalomethanes (TTHM). While the presence of these HAA5 and TTHM that have been detected in WJWW’s water system are at concentrations that do not constitute an immediate health hazard, the USEPA warns that long-term exposure to HAA5 and TTHM above federal regulatory standards may lead to an increased risk of cancer and pose liver, kidney, or central nervous system problems².

The USEPA adopted a Stage 2 Disinfectants and DBPs Rule on January 4, 2006. The rule requires more stringent regulations to provide for better public health protection against the risks associated with DBPs. The USEPA’s Stage 2 Rule is mandatory for public water systems serving between 50,000 and 99,999 retail customers, which includes WJWW. Starting October 1, 2012, WJWW was required to monitor the maximum contaminant levels (MCL) for total TTHM and HAA5. The results submitted for the first, second, and third quarters of 2019 exceeded these MCLs. In response, the USEPA issued two administrative orders³, resulting in an obligation to commence design of the proposed Rye Lake Filtration Plant and a Corrective Action Plan that outlines provisions to be taken to achieve compliance with MCLs standards. The Proposed Action would address the health concerns posed by DBPs through the construction and operation of a water filtration plant.

² See <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>.

³ See superseding Administrative Order No. SDWA-02-2020-8001

In addition to the USEPA Administrative Orders, on January 23, 2002, the New York State Supreme Court issued a Court Order requiring WJWW to construct a filtration plant. The Court found WJWW in violation of 10 N.Y.C.R.R. § 5-1.30 “by failing to construct and operate a filtration plant to filter the potable water that it sells to its customers from the Rye Lake System”. Upon remand, on June 9, 2004, the Supreme Court issued a Court Order requiring WJWW to construct the filtration plant (Judgment and Order of New York State Supreme Court Index No. 13364-99, Justice Louis A. Barone). The Order was upheld on appeal in 2005. It remains in effect today.

Construction of the 30-MGD DAFF water filtration plant is designed to meet obligations now required of WJWW by the New York State Supreme Court and the EPA. Additionally, the Proposed Action would benefit the public by decreasing the risks of long-term exposure to DBPs. The filtration plant would include enhanced coagulation to remove disinfection byproduct precursors to TTHM and HAA5, which would give WJWW a greater ability to routinely comply with the MCLs for TTHM and HAA5 as required by the USEPA Stage 2 Disinfectants and Disinfection Byproducts Rule.

Benefits of Proposed Action

The Proposed Action fulfills legal requirements with the USEPA and the State of New York regarding the construction of a filtration plant. WJWW was issued two administrative orders from the USEPA requiring the construction of a water filtration plant and the implementation of a Corrective Action Plan ensuring strict compliance with the USEPA’s Stage 2 Disinfectants and Disinfection Byproducts Rule. Construction of the 30-MGD Dissolved Air Flotation/Filtration (DAFF) water filtration plant is designed to comply with these regulations. In addition, the Proposed Action fulfills the requirement outlined in the Judgement and Order issued by New York State Supreme Court (Index No. 13364-99), dated June 9, 2004, to construct a water filtration plant. The Proposed Action would address both requirements for the USEPA and New York State.

In addition to satisfying existing legal obligations, the Proposed Action is a long-term solution to remove organic matter naturally occurring in Rye Lake which are precursors for disinfection by-products, including HAA5. The construction of a water filtration plant provides a vital safeguard for WJWW’s water source at Rye Lake and its residents and other consumers in Westchester County that WJWW serves.

The Proposed Action is the most economical solution to fulfilling the legal requirements with the USEPA and the State of New York without posing significant disruptions to its service during construction and providing safe drinking water to its current and future customers. Due to the filtration plant’s proximity to the Rye Lake Pump Station and Purchase Street Storage Tanks, the current proposal avoids the need for additional infrastructure and therefore excessively high project cost and significant community disruptions during construction and impacts to the natural environment.

E. LOCATION AND SITE CONDITIONS

The proposed Project Site is 13.4 acres located on the east side of Purchase Street and west of the Westchester County Airport (**Figure 1-1, Site Location**). Access to the Project Site would be directly from Purchase Street. The Project Site of the proposed filtration plant is currently undeveloped and composed of trees and vegetation. The grade of the site slopes from south to north at an approximate 2.5 percent slope. There are 1.4 acres of wetland under New York State Department of Conservation (NYSDEC) jurisdiction, surrounding an unnamed and unclassified stream. The northeastern portion of the exterior footprint of the

Filtration Plant would be located within the 100-foot regulated adjacent area of the wetland; however, no construction is proposed within the actual wetland.

The Project Site is currently owned by Westchester County and managed by Westchester County Airport. The Project Site is in an area that is adjoining single-family residences and the Purchase Friends Meeting House directly to the north and west along Purchase Street and is surrounded by Westchester County Airport to the south, east, and northeast. The Project Site is also located approximately 500 feet south and east of Interstate 684 and Rye Lake (**Figure 1-3, Regional Location**).

F. PROJECT DESIGN AND LAYOUT

Overall Site Layout

The Project Site is located adjacent to the Westchester County Airport, and site access would be obtained from Purchase Street. The proposed building footprint would be less than one (1) acre in area (**Figure 1-4, Site Plan**). The proposed impervious features, including the filtration plant building, a driveway, parking lot, walkways, and supporting utilities and ancillary facilities, would total approximately 2.4 acres. The plant would be set back approximately 155 feet from Purchase Street and 288 feet from its northern neighboring property. The plant would be setback at a minimum of 100 feet from the airport property, meeting the local rear and side yard setback zoning requirements. A six (6)-foot retaining wall would be located on the southern side of the plant. An eight (8)-foot-high fence, as required by NYSDOH, would surround the filtration plant and separate the plant from the airport property. The approximate location of the fence is depicted on **Figure 1-1, Site Location**. Since the publication of the DEIS, the portion of the security fence on the north side of the facility has been moved closer to the facility and further away from the northern property line to minimize the visual impacts of the fence. To minimize any potential visual impact of the security fence, an effort has been made to set back the security fence from the property line. Along Purchase Street, the fence is setback from the property line by approximately 100 feet. Along the northern property boundary facing the House of Worship property, the fence is setback by approximately 230 feet from the property line. Area variances for the height of the fence and encroachment of the access gate into the 100-foot buffer along Purchase Street would need to be obtained from the Town of Harrison Zoning Board of Appeals.

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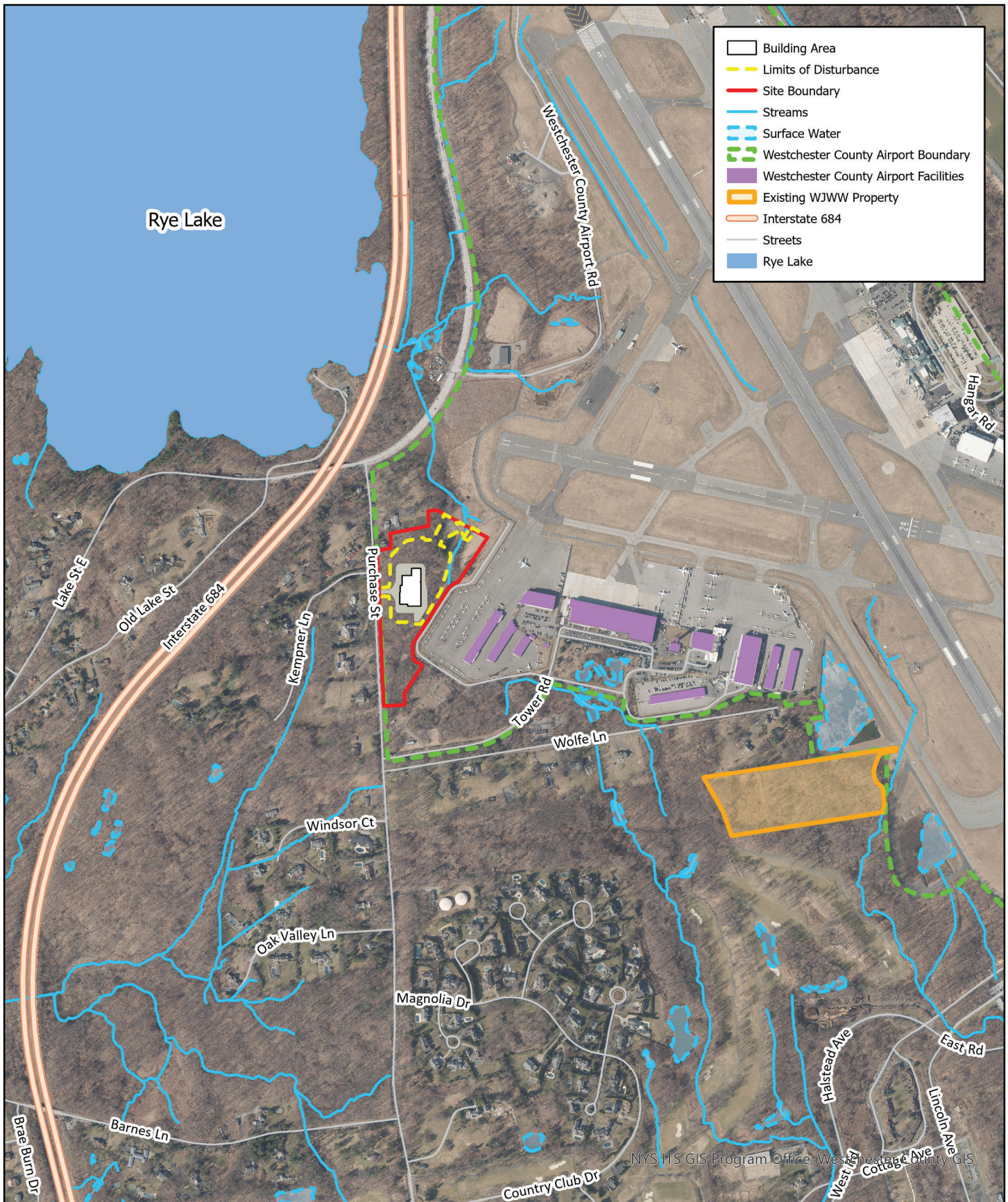


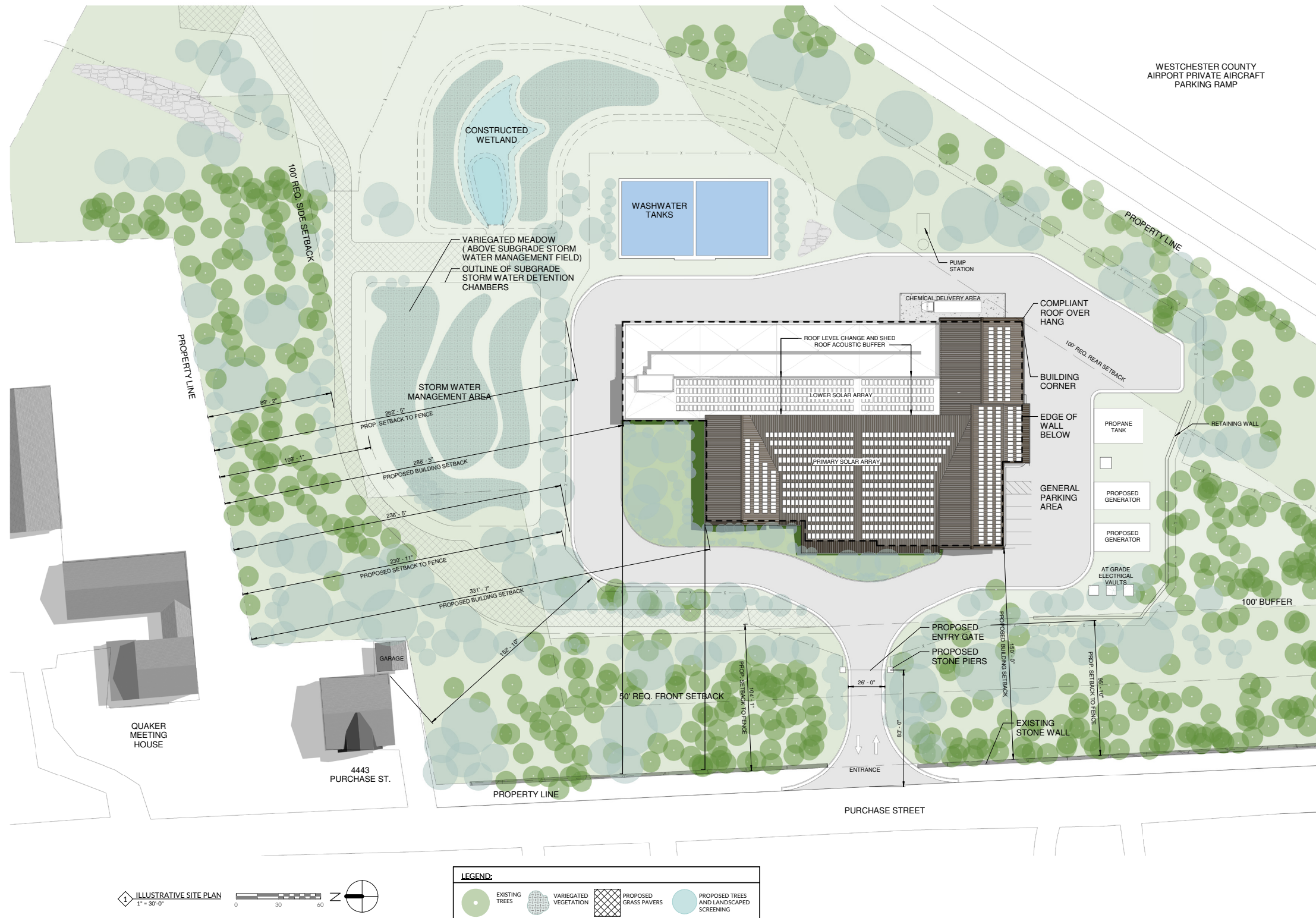
Figure 1-3: Regional Location

Sources: Westchester County GIS, 2020
Scale: 1 inch equals 1,000 feet



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EYE LAKE WATER FILTRATION PLANT
WEST HARRISON, NY
WESTCHESTER JOINT WATER WORKS
HARRISON, NY
NEXUS NX-1
creative 09.09.2022

Figure 1-4: Site Plan

Source: Nexus Creative Design, 2022
Not to scale.

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Water Works**



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Land Apportionment and Property Transfer Process

The proposed filtration plant would be constructed on land now owned by Westchester County. It is anticipated that the County would convey the 13.4 acres to WJWW in exchange for another property of equal size, Exchange Parcel (Parcel ID 0961.1) from WJWW, resulting in no net loss of airport property. The Exchange Parcel would benefit the County because it is adjacent to the Westchester County Airport and would be left in its existing condition or used for airport stormwater management or wetland restoration projects undertaken by the County.

Clearing, Grading and Drainage

While the grade of the Project Site slopes from south to north at an approximate 2.5 percent slope, regrading would primarily need to take place on the central portion of the site. Grading would occur within the limits of disturbance at the Project Site, which generally includes the footprint of the plant itself, stormwater management practices, associated paving, and ancillary equipment structures. Within the limits of disturbance, the Project Site would be leveled off to provide appropriate roadway slopes ranging from approximately three (3) feet of cut to five (5) feet of fill.

Reuse of excavated soils on site would take place to the maximum extent practicable. However, approximately 49,900 cubic yards of fill would be removed from the Project Site. Stormwater runoff and site drainage would include the installation of a dry swale and bioretention cell. Both stormwater management practices would be sized to treat stormwater runoff for water quality and volume reduction generated from the Project Site's impervious area for the 100-year storm. Stormwater would be collected from the developed area via drain inlets and directed to a diversion structure. The diversion structure would direct the water quality volume to the stormwater management practice area for quality treatment and bypasses the larger storms to an underground detention system for quantity control.

Parking, Vehicle Access, and Road System

Driveway access would be provided from Purchase Street and located along the western property line. There are four proposed parking spaces located on porous pavement, which would be located in the Project Site's southern side yard. The driveway would consist of asphalt material, and an access drive would surround the plant to meet Appendix D of the New York State Fire Code access regulations.

Water Supply and Sanitary System

The proposed plant would have the capacity to filter the maximum day water supply demand of WJWW's entire water distribution system. Potable water for the operation of the plant would be provided by WJWW and connected to the 20-inch upper high service pipeline in Purchase Street. A new sewer line for the plant would be constructed and tied into the airport collection system on Westchester County Airport property pursuant to an easement that would be granted by the County. As proposed, the filtration plant would be designed to treat water pumped from the Rye Lake Pumping Station and supply filtered water to the existing Purchase Street Storage Tanks.

Site Lighting, and Landscaping

All site lighting would remain within the property boundary and not encroach onto the neighboring properties. All site lighting would be limited to securing the plant and plant operations. The landscaping has been designed to assist with the visual screening of the filtration plant, replace some of the existing trees that would be removed during construction of the plant, and provide visual enhancement to the Project Site.

Construction Schedule and Operations

Construction is estimated to span 36 months and include 12 phases, some of which would take place concurrently. **Table 1-1, Construction Schedule**, shows a breakdown of each phase and how many months each phase would take. The estimated duration of each phase is weather dependent and subject to change.

Construction Phase	Month	Truck Trips (~#/day)
Procurement	1-2	0
Mobilization	3-4	1
Site Work	5-8	17
Site Work, Filtration Building Excavation	9-11	70
Site Work, Filtration Building Substructure, Waste Washwater Tank Excavation	12-13	10
Site Work, Filtration Building and Waste Washwater Tank Substructure	14-19	6-7
Site Work, Filtration Building Superstructure and Interior, Waste Washwater Tank Substructure	20-21	9
Site Work, Filtration Building Superstructure and Interior	22-31	2-8
Site Work, Filtration Building Interior, Startup and Commissioning	32	4
Site Work, Startup and Commissioning	33-34	3
Startup and Commissioning	35-36	1
Procurement	1-2	0

Notes: Number of months are subject to change

All construction staging and workers' parking would take place on the Project Site. Construction vehicles would access the site from Purchase Street, and no queuing of construction vehicles would occur on Purchase Street. Construction traffic would access Purchase Street from Interstate-684, reducing the use of local roads to access the Project Site. As required by Chapter 177, Noise, of the Town Code, no construction would take place after 8:00 p.m. or before 7:30 a.m. on weekdays or before 10:00 a.m. on weekends and national and state holidays. Further, no construction would occur on Sundays.

Design Changes Since Publication of the DEIS

Since the publication of the DEIS, the security fence on the north side of the facility has been moved closer to the facility and further away from the northern property line to minimize the visual impacts of the fence. Along the northern property boundary facing the House of Worship property, the fence is set

back by approximately 240 feet from the property line (see **Figure 1-4, Site Plan**). There have been no other changes to the design of the proposed project.

While there are no anticipated changes to stormwater management facilities at this time, WJWW is currently coordinating with New York State Department of Conservation (NYSDEC), the Watershed Inspector General (WIG) and New York City Department of Environmental Protection (NYCDEP) for approval of the Stormwater Pollution Prevention Plan (SWPPP). Any changes to stormwater management facilities or the SWPPP would be completed in accordance with conditions agreed upon by the regulators.

G. RYE LAKE WATER FILTRATION PLANT OVERVIEW

As noted in Sections A and B, dissolved air flotation/filtration (DAFF) is proposed as the appropriate technology for WJWW's water filtration plant. The recommended treatment process is similar to existing DAFF water treatment plants that have been approved by the Westchester County Department of Health (WCDOH) as well as DAFF water treatment plants throughout the Northeast. An overview of the proposed treatment process is provided in **Figure 1-5**.



Figure 1-5. Overview of Proposed WJWW Plant Treatment Process

Raw water from the Rye Lake Pump Station would be conveyed to the filtration plant, where static mixers disperse chemicals uniformly into the flow stream. Chemicals added to the process flow stream would include a pH adjustment chemical and a coagulant. The enhanced coagulation process uses a chemical to neutralize the negative charge of dissolved and suspended particles in the water, allowing the particles to bind together and form larger particles. The coagulated water then enters the flocculators, which provide the mixing energy and time necessary to produce even larger particles, or floc, which are more readily removed by the clarification process.

The clarification process used at RLWFP is called dissolved air flotation (DAF), where floc is floated to the surface of the water by using nano-sized air bubbles. Air bubbles are created by combining air and water in a pressurized vessel and then injecting that highly pressurized and highly oxygenated water into the process stream using specialized nozzles. The small air bubbles attach to the solids and float the solids to the surface where they can be mechanically skimmed from the top of the tank. The floated solids from DAF clarification would be dewatered using a centrifuge and hauled away for disposal in accordance with all applicable rules and regulations.

The clarified water would then move through the gravity filter composed of anthracite and sand to remove remaining particles. At RLWFP, the DAF clarification process occurs in the same tank as filtration, allowing for a smaller footprint and direct conveyance through the filter.

The filters would be periodically backwashed using a reverse flow of filtered water to remove accumulated solids. After backwash, the water used to clean and reset the filters, known as waste washwater and filter-to-wastewater, would be routed to the combined waste washwater tanks, where it is held temporarily before being gradually mixed in with raw water at the head of the plant for treatment.

All treatment processes except the temporary holding of the combined waste washwater will occur inside of the filtration plant. The waste washwater tanks are located outdoors to the east (behind) the filtration plant.

Following filtration, water would be disinfected. Corrosion control would be achieved through the addition of a corrosion inhibitor and a pH adjustment chemical. The treated water would then be conveyed to the Purchase Street Storage Tanks for distribution to WJWW customers.

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Alternatives	Letter #6	Pg. 1	Linda Heineman Keil, Member of Purchase Meeting Friends	30.1
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Alternatives	Letter #7	Pgs. 8-9	Peter Close, Trustee, Purchase Meeting Friends	30.4

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3. COMMENTS AND RESPONSES

A. EXECUTIVE SUMMARY

Comment 3A.1:

Table 1-1: Permits and approvals should be revised to include DEP review and approval of a sewer extension.
(Memo #1, pg. 1, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3A.1:

Comment noted. The Project will require New York City Department of Environmental Protection review and approval of a sewer extension.

Comment 3A.2:

The DEIS [page 1-4, paragraph C] states that a 6' high retaining wall will be located on the southern side of the plant. Additionally, a 10' high fence will surround the filtration plant. Please set forth the purpose of the 6' high retaining wall and why it is not redundant to the 10' high fence.

Please state the nature of the 10' high fence and whether it is a chain-link fence or not. Please provide alternatives to having an industrial-style chain-link fence. Please consider making efforts to have this fence conform to the Town of Harrison zoning laws which require fences no higher than 4'/6' rather than applying for a variance from the Town of Harrison Planning Board and any other town, county and state boards to increase the height of the 4'/6' chain-link fence to 10'. Please explain to us, as your prospective new neighbors, why we should have to stare at several hundred feet of 10' high chain-link fence built 80' from our playground, meeting house and graveyard next door. Please explain why our neighbor Joe Billone's house will be 75 feet from this 10' tall chain-link fence. Please explain why our caretaker's apartment at the corner of our meeting house will be 100' from this 10' tall chain-link fence.

Please apply for a waiver from the NYSDOH and any other involved town, county and state boards to reduce the height of the 10' high chain-link fence to 6' or lower or to eliminate the need for such a fence altogether.

(Letter #7, pg. 3, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Presently, the Proposed site is bordered on two sides by old stone walls. We believe that similarly constructed stone walls would blend in more with the existing stone walls and better integrate the filtration plant site with the character of the surrounding neighborhood. Please explain why constructing a new similarly sized stone walls could not serve the same purpose as a 10' high chain-link fence.

(Letter #7, pg. 4, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.2:

The six (6)-foot high retaining wall will be located on the southern side of the plant by the emergency generators and is necessary as a result of the regrading of the southern portion of the site to level the area for the loop road and the electrical equipment. The fence is required by the New York State Department of Health (NYSDOH) for security purposes. NYSDOH recommends an eight (8)-foot chain link fence with three (3) feet of barbed wire for security fencing for all filtration plants. The Project proposes to install an eight (8)-foot spiked anti-climb ornamental fence along the northern and western portions of the facility in lieu of the barb wire. A request has been submitted to NYSDOH to install this ornamental fence as a substitute for the recommended eight (8)-foot

chain link fence with three (3) feet of barbed wire. **Figures 3A-1 and 3A-2** provide information on the proposed fence details and an example of it already installed at another WJWW facility.

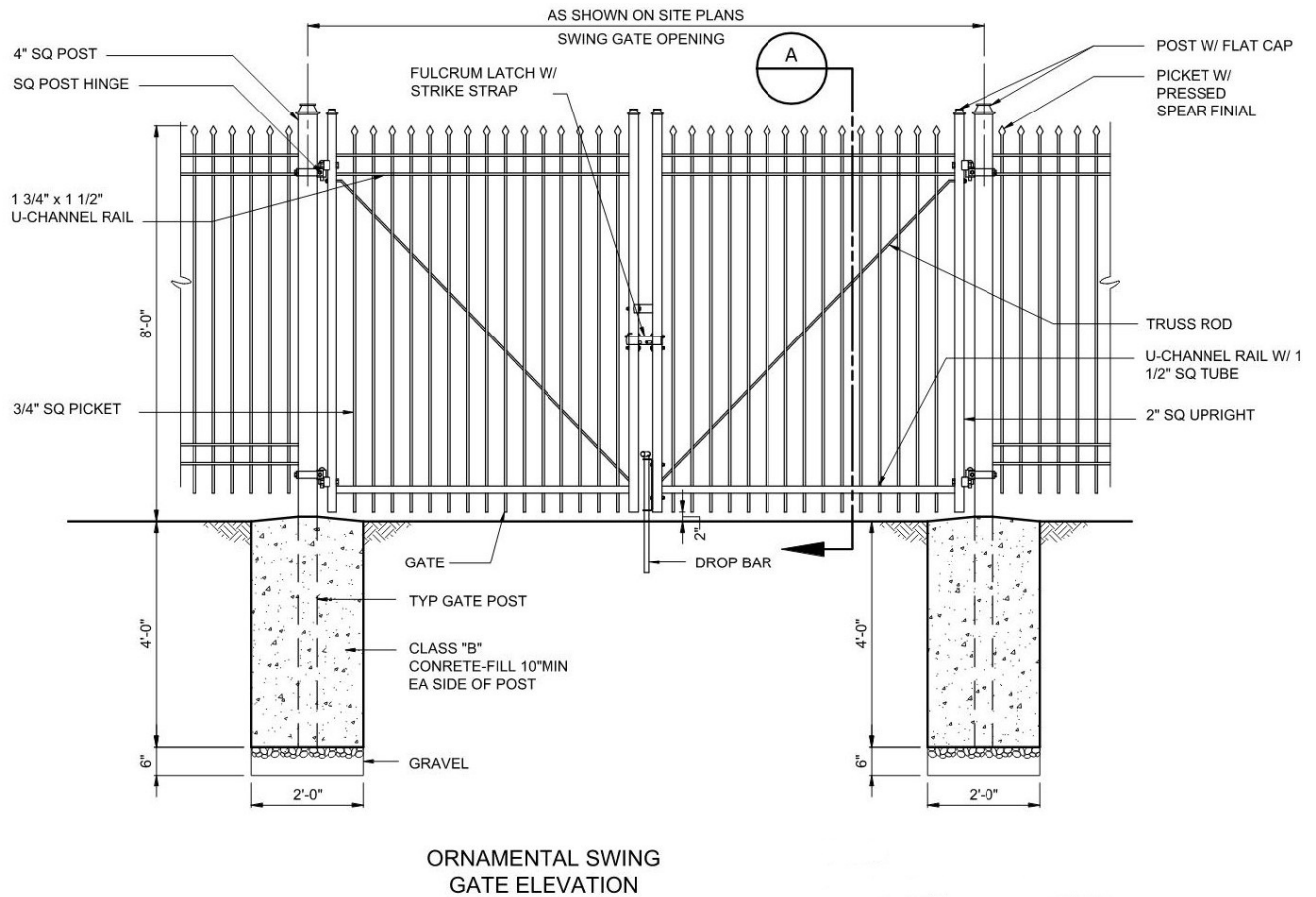


Figure 3A-1 Details of proposed ornamental fence and gate

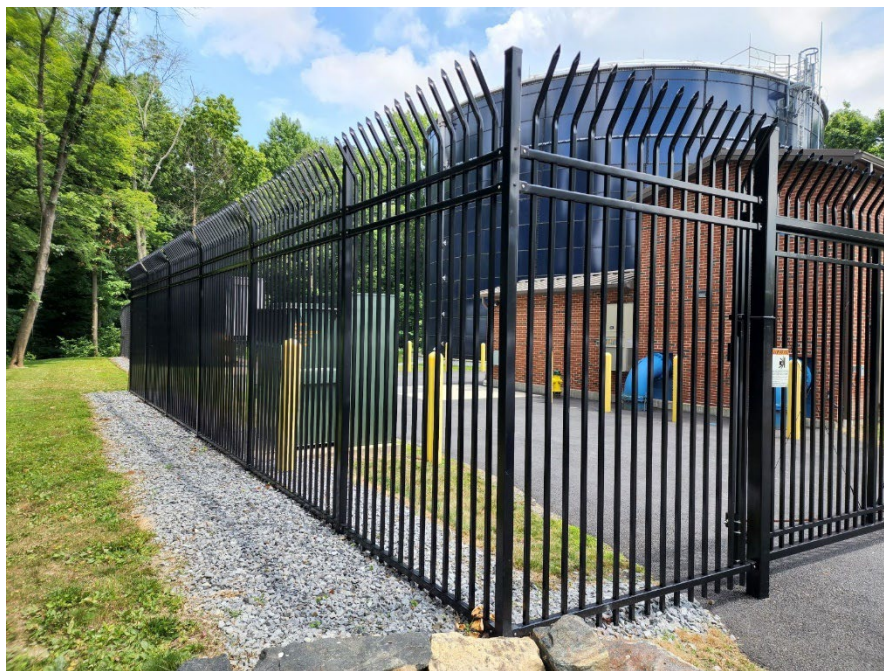


Figure 3A-2 Photographs of a similar fence to the proposed fence

Comment 3A.3:

Please explain why a berm could not be built in place of this 10' tall perimeter fence. We believe an earthen berm will provide a much more effective sight and sound attenuation barrier than a chain-link fence. We believe that a chain-link fence will have no impact on sound and sight attenuation. We believe that the use of a large chain-link fence creates a view that worsens the visual impact of the filtration plant rather than improves it. Please explain how many more trees may need to be cleared to allow for the construction of a berm. Please explain if the Proposed Site is of sufficient size to allow the building of a 10' tall berm around the filtration plant.

(Letter #7, pg. 4, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.3:

An eight (8)-foot high fence, as required by NYSDOH, would surround the filtration plant and separate the plant from the airport property. The approximate location of the fence is depicted on **Figure 1-1, Site Location**. To mitigate any potential negative visual impact of the security fence along Purchase Street, the fence is setback from the property line by approximately 100 feet. Along the northern property boundary facing the Purchase Friends Meeting House property, the fence is setback approximately 230 feet from the property line. The creation of a berm would not replace the NYSDOH security fence requirements (**see Response 3A.2**). This is a mandatory requirement. In addition, depending on the length and width of the berm, additional tree removal and ground disturbance would be required which would increase the environmental impacts of the Project.

Comment 3A.4:

Page 1-4, paragraph D states that maximum contaminant levels for HAA5s and TTHMs were exceeded in the first 3 quarters of 2019. Please state whether MCLs for these two contaminants have been exceeded since the third quarter of 2019 and, if so, on what dates. Please state whether the MCL's for these two contaminants had been exceeded prior to the first quarter of 2019 and, if so, on what dates.

(Letter #7, pgs. 4-5, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.4:

There have been no HAA5 MCL exceedances since the third quarter of 2019. There were no HAA5 MCL exceedances prior to 1st quarter of 2019. There have been no TTHM exceedances to date.

Comment 3A.5:

Please set forth the actual steps that were taken to bring the MCLs down to safe levels such as back-washing and flushing of lines plus what chemicals were part of the treatment process. Please set forth how the annual cost of these corrective measures would compare to the annual increase in the WJWW budget if said increase was spread over 100 years. Please explain why it is unfeasible to rely on the current methods of water treatment which have resolved the issue of unacceptable levels of MCLs for the last two years.

(Letter #7, pg.5, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.5:

WJWW implemented a rigorous water main flushing program in an attempt to maintain levels of HAA5 below the Maximum Contaminant Level (MCL), which has been successful to date. However, there is no guarantee that this success will continue indefinitely, and further, the flushing program serves as only an interim measure (not a current method of treatment) until the Rye Lake Water Filtration Plant is constructed to remove organic matter naturally occurring in Rye Lake which are precursors for disinfection by-products, including HAA5. Further, the U.S. Environmental Protection Agency (USEPA) has only accepted the water main flushing

program as an interim measure until the Rye Lake Water Filtration Plant is constructed in accordance with an USEPA Administrative Order issued to WJWW dated November 26, 2019. In addition, the USEPA has asserted that the construction of a water filtration plant could have prevented WJWW's violations of the MCL for HAA5 in 2019. The flushing program results in approximately 85 million gallons of water wasted annually at an approximate cost of up to \$425,000 annually to WJWW customers. No chemicals are used to reduce the amount of HAA5 in the water.

Comment 3A.6:

Please explain if the current MCL predicament was caused by the bringing online of new underground water storage tanks on the grounds of the Morgan Stanley property located northwest of the intersection of Purchase Street and Route 287. Rather than build a new water filtration plant, please explain what alternative water treatment methods can be utilized to resolve the issues of unsafe levels of MCLs caused by the increased aging time of the treated water stored in the Morgan Stanley storage tanks. If the Morgan Stanley storage tanks have been the cause of the dangerous rise in the level of MCLs in our drinking water, please explain whether taking these underground water storage tanks offline might bring the MCL's down to a safe level thus eliminating the need for the construction of a water filtration plant and the continuing backwashing and flushing of water lines.

(Letter #7, pg. 5, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.6:

Please see **Response 3A.5**. WJWW does not have any underground water storage tanks on the grounds of Morgan Stanley property or anywhere else within the distribution system. WJWW does own and operate a 2.1-MG above ground water storage tank on property owned by WJWW, which is encompassed within the Morgan Stanley campus. This 2.1-MG tank, put into service in 2020, replaced a previously existing 0.45 MG standpipe. The 2.1-MG ground water storage tank came online after the HAA5 exceedances in 2019 and therefore could not have been a contributing factor to the 2019 exceedances.

Comment 3A.7:

Regarding Page 1-10, paragraph G, state whether the County/Airport has any current plans to develop this Exchange Site for wetland restoration or storm management and, if so, what are those plans.

(Letter #7, pg.5, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.7:

The Exchange Parcel, currently vacant and contiguous to the Westchester County Airport, would become part of the Westchester County Airport property. There are no plans by Westchester County to develop this parcel for any land use beyond wetland restoration or stormwater management. No further plans have been developed by Westchester County at this time.

Comment 3A.8:

Please explain why it makes sense to combine a water-use utility's operations with a public transportation utility's operations/an airport which has a history of water pollution incidents? Is that consistent with WJWW's mission to provide clean water? Would it be better to move a water filtration plant as far away as possible from an airport?

(Letter #7, pg. 5, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.8:

The filtration plant operations would be completely separate from the Westchester County Airport operations. WJWW draws its water from two sources: Shaft 22 of the NYCDEP Delaware Aqueduct in Yonkers and Rye Lake, which is the eastern portion of the Kensico Reservoir, in the Town/Village of Harrison. The filtration plant would only take in the water drawn from the Rye Lake water source. No water would be drawn from groundwater under Westchester County Airport or from groundwater that is contaminated.

Comment 3A.9:

Regarding page 1-11, state whether the gate at the entrance to the site can be pushed back to the eastern limit of the 100' front yard buffer and, if so, please place it there. Also please state whether there are alternative gate designs to the standard industrial-looking gate designs that WJWW uses at its other properties that would be more in line with the security gates used by residences in the Purchase Community so as to blend in with the gates used by neighbor's homes on Purchase Street. If so, please explain why one of those alternatives, less-industrial-looking gate design could not be used.

(Letter #7, pg. 6, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.9:

The entrance gate would be approximately 85 feet from Purchase Street. The encroachment of the gate into the 100-foot buffer area is a minor encroachment and only for a short section by the access driveway. The entrance gate cannot be moved further east, away from Purchase Street, because of the required truck turning radius, the required fire code access road dimensions, and the gate swing dimensions. The gate and fencing are proposed to be ornamental.

Comment 3A.10:

Regarding page 1-12, explain how completion of the Master Airport Plan would encroach on the Proposed Site. Describe the location of the encroachment and the nature of the encroachment and include a map showing the boundaries of the encroachment.

(Letter #7, pg. 6, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Regarding page 1-10, the potential impact is incomplete since it does not include the current status of the Westchester County Airport (WCA). According to the local newspapers and newsfeeds, the County of Westchester is in the process of updating the 2017 master plan for the Airport. Included in this plan is the potential to increase hangar space adjacent to the Million Air terminal and hangar. In fact, Million Air has stated that they want to expand their operation at the Airport.

While Westchester County has stated that they do not plan to build anything but stormwater retention basins on the exchange parcel, the question should be asked why they need to increase the basins. The only reason is that there will be development adjacent to the exchange parcel which will require these basins. The DEIS must include the impact of any future development at the Airport and its impact on the environment. There should also be discussions as deed restrictions specifically preventing any change to the exchange parcel, including the construction of detention basins.

(Letter #8, pg. 2, Richard Ruge, 6/5/22)

Response 3A.10:

The 2017 Airport Master Plan reviews the Airport layout and assesses the need for future improvements to the airport facilities. Phase 1 of the Master Plan includes the expansion of General Aviation Hangars, and parking in the area adjacent to the Project Site. As depicted in the 2017 Master Plan, the expansion of these facilities would slightly encroach into the proposed Project Site. No expansion is proposed for the area adjacent to the Exchange Parcel. The exchange parcel is being acquired by Westchester County so that the transfer of the Project Site from the County to WJWW would not result in a net change to the acreage of the airport.

Westchester County submitted a letter on July 6, 2018, to the Federal Aviation Administration stating that the County is undertaking a supplemental Airport Master Plan process. There are currently no drafts of this supplemental plan available for public review. Westchester County is an Involved Agency and is aware of this project and has received copies of all SEQR documents. The Project Site is not currently involved in any airport operations and consists of 13.4 acres of undeveloped land composed of trees and vegetation.

Comment 3A.11:

Regarding page 1-13, state how the planting of 302 new trees will improve the visual impact of the filtration plant including the height of the trees that will be planted, their circumference at 4.5' of height at the time of their planting, the estimated 2-year survival rate of the trees planted and number of years it will take each tree to reach a height of 37' which is the height of the filtration plant. Also, indicate the number of years replacement of dead trees is guaranteed from the date of their planting.

(Letter #7, pg. 6, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.11:

The proposed planting plan includes understory trees (<37 feet) around the foundation and canopy trees (>37 feet) within the landscaped buffer area. The foundation trees are planted at a larger size to give them presence immediately. The canopy trees are planted at smaller sizes to assist with survivability. The tree types and locations were selected so that when combined with the existing trees, the buffer and foundation plantings will start to fill in and buffer most views. **Figures 3A-3 and 3A-4, Proposed Understory and Canopy Tree Locations**, highlights where understory (<37') and canopy (>37') trees are to be installed on the Project Site. **Table 3A-1** identifies the tree species, size at installation and the time it will take to reach maximum height or 37 feet. Replacement of dead trees is guaranteed two years from the date of their planting.

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Table 3A-1: Tree Planting Sizes and Maximum Height

	Common Name	Scientific Name	Size at Installation	Time to Reach 37 ft (years)	Maximum Height (ft)	Canopy Spread at Planting (ft) Estimated at 4.5 ft High
Symbol						
PS	Eastern white pine	<i>Pinus strobus</i>	7 ft tall	10	80	5
IO	American holly	<i>Ilex opaca</i>	#15 (4 ft)	33	50	4
IOJ	Jersey Princess American holly	<i>Ilex opaca</i> 'Jersey Princess'	#65 (9 ft)	21* [30 ft]	30	5.5
JV	eastern red cedar	<i>Juniperus virginiana</i>	6.5 ft tall	31	50	2
JVC	Emerald Sentinel™ red cedar	<i>Juniperus virginiana</i> 'Corcorcor'	#65 (9 ft)	10* [20 ft]	20	3.5
AA	downy serviceberry	<i>Amelanchier arborea</i>	#7 (8 ft)	17* [25 ft]	25	6
CC	Eastern Redbud	<i>Cercis canadensis</i>	#20 (10 ft)	25* [35 ft]	35	8
CFA	Appalachian Spring flowering dogwood	<i>Cornus florida</i> 'Appalachian Spring'	#10 (8 ft)	21* [30 ft]	30	6
LS	American sweetgum	<i>Liquidambar styraciflua</i>	1.5" cal (11 ft)	13	100	5
QA	white oak	<i>Quercus alba</i>	1.5" cal (11 ft)	26	80	5
CP	American hornbeam	<i>Carpinus caroliniana</i>	#10 (8 ft)	22* [30 ft]	30	4

*Time to reach max height of tree [max height shown in brackets]

Comment 3A.12:

Regarding page 1-14, state whether the \$108,000,000.00 cost of the filtration plant is based upon today's cost of construction or is \$108,000,000.00 the final cost of construction assuming completion of the project in 2027 at 2027 cost projections. If it is the current cost of the project, please give an estimate of the final cost of the project when completed in 2027. Without the use of the water fund surplus, what would be the cost if completed today and the cost if completed in 2027? Without the use of the water fund surplus, how much would rates increase between today and 2027.

(Letter #7, pg. 6, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Explain whether any of the costs of construction will be included in water bills for 2028 and beyond and, if so, what would be the yearly amount of those costs?

(Letter #7, pgs. 6-7, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Regarding page 1-14, the proposed WTP is estimated to cost \$108 million dollars. This is the same amount that was stated in numerous documents provide by WJWW over the past 2-3 years. With the rise of inflation this past year, what is the new cost?

Also, does this cost include the millions of dollars spent on the original 2008 WTP? Does this also include the costs to design the new WTP? The true cost of the WTP must be provided in the DEIS.

(Letter #8, pgs. 2-3, Richard Ruge, 6/5/22)

Response 3A.12:

The original total project cost of \$108 million was based upon escalation factors taking into consideration the original construction timeline which anticipated completion of the project by 2025. Now that the timeline for construction has been pushed out to early 2027 and assumptions regarding inflation, etc. have changed significantly, the new estimated total cost of the project is \$138 million. This cost includes all costs associated with the current project: design, permitting, engineering, legal, environmental consulting, construction, etc. Water Fund surplus may potentially be used to spread out and flatten retail water rate increases but will not affect the total project cost.

It is anticipated that the total estimated cost of the Rye Lake Filter Plant project of \$138 million will ultimately be financed with 30-year bonds. Based on expectations regarding interest rates, the annual debt service is expected to be about \$9 million annually. The annual debt service amount will carry forward for the duration of the term of the bonds and will be part of the billing for water service.

Retail water rates would need to increase by approximately 50 percent over the next five (5) years to cover the incremental debt service cost directly associated with the project, all other factors kept constant. This would increase the current retail treated water cost per gallon from \$0.00944 to \$0.01416 in five (5) years. When factoring in expected increases in NYC water rates, WJWW operating costs, and debt service on other capital projects along with the debt service associated with the Rye Lake Filtration Plant, retail water rates are expected to rise by approximately 75 percent over the next five (5) years. This would increase the current retail treated water cost per gallon from \$0.00944 to \$0.01652 in five (5) years.

For a household using water primarily for domestic purposes with minimal irrigation (approximately 100 thousand gallons annually), the current average annual billing is approximately \$944.00. In five (5) years, the amount of this average annual billing would increase to approximately \$1,652.00. There are potential grant opportunities available that could provide in excess of \$30 million to offset project costs. If the full grant amount were to be realized, the total increase in retail water rates over a five (5)-year period would be reduced from approximately 75 percent to about 60 percent.

It should be noted that similar project cost assumptions, such as regarding inflation, could also be applied to alternatives considered in the DEIS such as Alternative 9: Connection to NYCDEP Shaft 20 in the DEIS, which would now have an estimated adjusted project cost of \$214 million.

Comment 3A.13:

Regarding page 1-20, 0.7 acre of the Project Site is covered by impervious/compacted surfaces. Upon completion of the project, how many total acres will be covered with impervious/compacted surfaces resulting both from the construction process as well as what remains of the original impervious/compacted surfaces?

(Letter #7, pg. 7, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.13:

The proposed impervious features, including the filtration plant building, a driveway, parking lot, walkways, and supporting utilities and ancillary facilities, would total approximately 2.4 acres.

Comment 3A.14:

Regarding page 1-22, 49,000 cubic yards of net material to be removed from the site, give or take 20%. Maximum depth of excavation is 35 feet. Height of the filtration plant is 37 feet. In order to better understand the full environmental, physical, visual and noise impact of the structure/construction process, please provide the total volume of the excavation being carried off-site, the total volume of the portion of the finished building structure above ground, the total volume of the entire filtration plant from the bottom of the excavated cavity to the highest part of the of the roof of the filtration plant as well as the total square footage of the building footprint.

Further, please provide the total number of trucks needed to carry away that portion of the 49,000.00 cubic yards of net material/net excavated material to be removed from the site, the number of cement trucks needed to pour the foundation, the total cubic yards of cement needed to be transported by those trucks and the total number of trucks needed to deliver the construction materials to the filtration plant site. Also, please estimate the number of daily visits to the site of construction workers and tradesmen during the period of construction. Without this information, it will be impossible to determine the full environmental, physical, visual and noise impact of the construction of this water filtration plant on our neighbors, our Friends Meeting and the flow of traffic on Purchase Street and Lake Street.

(Letter #7, pg. 7, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.14:

The maximum depth of excavation would be 35 feet in the area in which the wastewater tanks would be installed. The maximum depth of excavation would be 30 feet in the area in which the plant would be installed. The total volume of net material anticipated to be removed from the Project Site would be approximately 49,900 cubic yards. This estimate has a 20 percent uncertainty factor applied to it. Chapter 3.O, Construction in the DEIS documents the general schedule, phases, and activities that would be involved in constructing the Project. It also identifies potential adverse environmental impacts and the available strategies and techniques to prevent or mitigate impacts to the maximum extent practicable.

Construction activities would take place during typical work hours and fully comply with § 177-2(F) of the Town/Village of Harrison Noise chapter, which limits construction activities to the hours of 7:30 a.m. to 8:00 p.m. Monday through Friday and after 10:00 a.m. on weekends and national and state holidays unless the Town/Village Building Inspector determines that there is an imminent danger to life or property. No work would be conducted on Sundays.

The proposed construction schedule includes 12 phases spanning a period of 36 months from notice to proceed (NTP) to completion once all permits and approvals are granted. The three-month period when excavation work would occur for the filtration building is the most active phase in terms of the daily average number of trucks required at the Project Site. The reasonable worst case scenario estimate is that a daily average of 70 truck trips would be needed for the three-month phase. The next-most intensive phase, the site work and site preparation phase, would involve clearing, grubbing, stump extraction, removal of materials from the Project Site, and preliminary grading. This phase would last four months and require a daily average of 17 truck trips. The remainder of the phases would not require more than a daily average of five (5) trucks.

Comment 3A.15:

Regarding page 1-25, the DEIS states that "(t)here would be no direct disturbance to any wetland on or adjacent to the Project Site". Upon information and belief, one of the WJWW architects at the 5/25/22 DEIS hearing at the Mamaroneck Town Center stated that a small part of the Project Site was in the wetlands. Assuming this is correct, please provide a sketch showing the location and size of this direct disturbance to said wetlands.

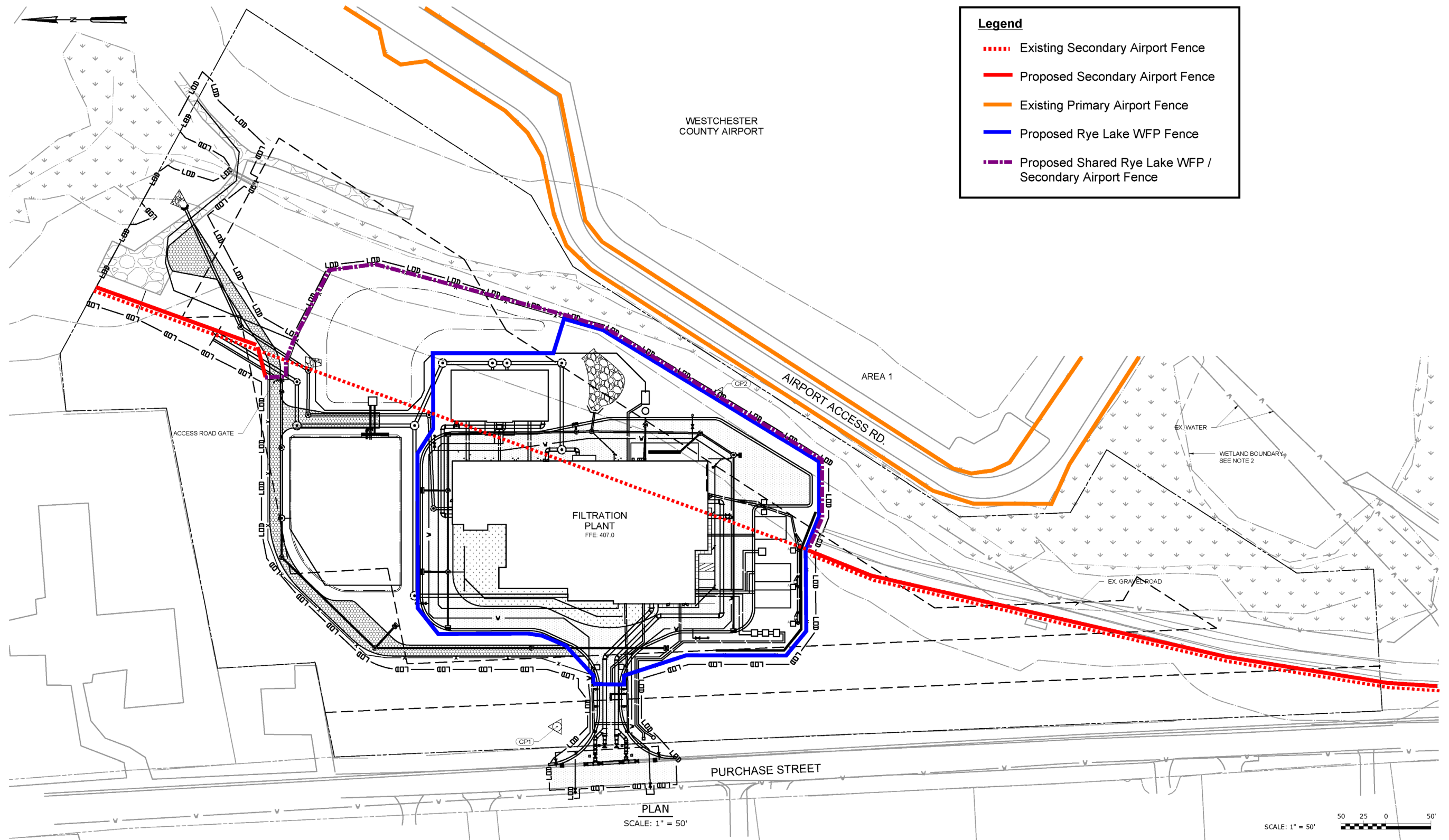
Upon information and belief another WJWW representative stated that the Airport perimeter fence would need to be moved in order to accommodate the Project Site. Assuming this is correct, please provide a sketch showing the location and size of the Airport perimeter fence as it exists and the proposed new location of the moved Airport perimeter fence.

(Letter #7, pg. 8, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.15:

As detailed in Chapter 3.I, Wetlands, Waterbodies, Watercourses, and Floodplains, in the DEIS, there would be no direct disturbance to any wetland on or adjacent to the Project Site. The proposed limits of clearing for construction of the Project would result in temporary disturbance to approximately 1.7 acres of wetland adjacent area (i.e., within 100 feet of regulated wetlands). Disturbance would be associated with construction of the facility building, installation of Project Site utilities including the installation of the sewer line, paving around the facility, and grassed walkways (to reduce impervious cover where practical). Proposed impervious features on the property, including the plant building, a driveway, parking lot, walkways and supporting utilities and ancillary facilities, would total approximately 2.4 acres. Permanent impervious areas (building, equipment pad, and paving) within the freshwater wetland adjacent area would cover approximately 0.26 acres. Another 0.4 acres within the wetland adjacent area that would be permanently disturbed would be used to construct a green stormwater management practice, such as a constructed wetland or bioretention area to provide the required water quality volume needed to treat the projected stormwater runoff from the requisite design storm.

The Project would require that the secondary airport fence to be partially removed, then shared with the east side of the filtration plant fence (**Figure 3A.4, Location of Secondary Fence**). The primary fence would be unchanged.



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Comment 3A.16:

Regarding page 1-17, what will be the size of the dumpsters used to remove solid wastes during construction? How many cubic yards of solid waste will each dumpster accommodate? How many dumpsters will be used each month? What will be the size of the dumpsters used to remove solid wastes during operation? How many cubic yards of solid waste will each dumpster accommodate? How many dumpsters will be used each month?

(Letter #7, pg. 7, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Regarding page 1-38, please provide the total number of trucks needed to remove all non-excavated material such as demolition waste, construction waste, trees and tree stumps from the Project Site during the construction process.

(Letter #7, pg. 8, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3A.16:

Upon operations, the average solids produced would be less than 6 cubic yards (CY) per day, with a maximum of 22 CY per day. The maximum level of production would only occur temporarily and could occur up to a week at a time. However, the maximum solid generation would be directly dependent on intake water quality. The solids would consist of 40 percent alum and polymer; 60 percent naturally total suspended solids and total organic carbon from raw water; and 0.12 percent solids. The average solids collected would be equivalent to two (2) to three (3) dumpster per week. This solid waste would consist of 67 percent alum and polymer, 33 percent natural total suspended solids and total organic carbon from raw water, and 0.08 percent solids. During operations, solids produced from the treatment process would be stored in the residuals room until trucked off at the residuals bay. Both the residuals room and the residuals bay are located within the southeast portion of the plant. A dumpster for all other types of solid waste generated at the facility (e.g., worker-generated waste) would be located near the paved turnaround area near the southeast corner of the plant.

During construction, the three-month period when excavation work would occur for the filtration building is the most active phase in terms of the daily average number of trucks required at the Project Site. The reasonable worst case scenario estimate is that a daily average of 70 truck trips would be needed for the three-month phase. The site work and site prep phase, would involve clearing, grubbing, stump extraction, removal of materials from the Project Site, and preliminary grading. This phase would last four months and require a daily average of 17 truck trips.

Chapter 3.O Construction and Chapter 3.D Community Services in the DEIS detail the construction impacts and the anticipate solid waste disposal amounts and methods of the Project.

Comment 3A.17:

Regarding page 1-4, the Project Site Layout details the setback of the fencing surrounding the WTP and other sections of the DEIS detail the landscaping and lighting that will be used to lessen the impact of the buildings to the neighborhood. It also states that the 10-foot high fence is required by the NYSDOH. There is no mention in the DEIS if the plan was given to the US Department of Homeland Security (DHS) for their review and comments. At a meeting given by the New York Section of the American Water Works Association this past April, the DHS gave a presentation on WTP security. They touched on physical security which includes fencing, cameras, landscaping, etc. I also did an internet search and found draft proposals for physical security which includes no plantings within 30 feet inside or outside of a fence.

The DEIS should include comments and recommendations from the DHS, and also address what the views would look like to the neighbors if the 30 foot “no planting buffer” is adopted by the NYSDOH and if the 30 foot rule is increased in the future.

(Letter #8, pgs. 1-2, Richard Ruge, 6/5/22)

Response 3A.17:

Department of Homeland Security is not required to be notified nor is it required to approve the Project. Section 1.E of the DEIS lists all required approvals and permits that are required for the Project. The proposed planting plan is comparable to other drinking water facilities. There are no Department of Homeland Security or NYSDOH regulations regarding plantings.

Comment 3A.18:

Regarding page 1-6, the DEIS states that the WJWW serves nearly 120,000 residents in Westchester County. This is not factual. According to the USEPA, the population served by the WJWW is 58,691 as stated on page 3-33 of the DEIS. The WTP is designed, as stated in the DEIS, to treat the max day demand of the WJWW.

Besides the 58,691 residents of the 3 member municipalities, the WJWW wholesales water to Suez Westchester for their customers in the City of Rye, Village of Port Chester and the Village of Rye Brook. The Village of Larchmont is also a wholesale customer. If one adds up the population of these municipalities, (from the Annual Water Quality Report) and add it to the WJWW residents, the total is 122,622 residents.

However, the WJWW only sells Suez 3 mgd for their customers in Port Chester, Rye Brook and the City of Rye. This represents only 33% of their average demand. With a population of 57,301 the WJWW may supply 19,000 residents (1/3 total population).

The Village of Larchmont purchases their entire water needs (approximately 900,000 gpd for a population of 6,630) from the WJWW. However, their water does not come from the Rye Lake source. Per their Annual Water Quality Report, they get their water from Shaft 22 through WJWW’s Larchmont Plant. As stated previously, WJWW cannot send Rye Lake water to the Town of Mamaroneck which includes the Village of Larchmont.

The Rye Lake WTP will only provide water to 1/3 of Suez’s customers, none to the Village of Mamaroneck, Town of Mamaroneck or the Village of Larchmont. The 120,000 population is not germane to this document and all references should be removed so as not to confuse the public.

(Letter #8, pg. 2, Richard Ruge, 6/5/22)

Response 3A.18:

Page 3-33 of the DEIS identifies 58,691 as the Member Municipality Population Count and states:

“In addition, WJWW supplies water on a retail basis to portions of the City of Rye and the City of New Rochelle. WJWW also provides water on a wholesale basis to the Village of Larchmont and to the for-profit water company Suez Water Westchester. In all, WJWW provides drinking water to some 120,000 consumers in Westchester County.”

“The Project would include the construction of a 30-MGD Dissolved Air Flotation/Filtration plant to serve the WJWW’s water source from Rye Lake. The filtration plant would have the capacity to meet the maximum day water supply-demand of the WJWW’s entire water distribution system.”

WJWW's distribution system includes interconnections with the Village of Larchmont and Veolia Water New York, Rate District 2 (formally known as Suez Water Westchester). However, upon further review the estimate of 120,000 residents has been found to be inaccurate. WJWW provides drinking water to up to 100,000 residents and other consumers in Westchester County.

WJWW routinely supplies Veolia Water New York, Rate District 2 in excess of 3 MGD.

Over the past seven years, WJWW has invested in a number of major capital improvement projects to the distribution system specifically designed to facilitate the transmission of water within all service zones. This includes the ability for WJWW to transmit water from its Rye Lake source to its low service zone which includes the Village of Mamaroneck, Town of Mamaroneck and Village of Larchmont.

Comment 3A.19:

Regarding page 1-7, Table 1-1: Permits and Approvals list the 3 member municipalities as approving the funding of the project. As I understand the laws written by the New York State Legislature in 1929, the member municipalities must also approve the exchange of property with Westchester County. This includes a resolution from each of the Town or Village Boards to transfer the property. The DEIS should include this step, if it's legally required.

(Letter #8, pg. 2, Richard Ruge, 6/5/22)

Response 3A.19:

The member municipalities are aware of the land exchange and have been involved in the SEQR process from its onset. They voted to commence the SEQR process with a Proposed Action that includes the property land swap between WJWW and the County. Further, the member municipalities will vote on final approval of the land swap after the SEQR process is completed as required by SEQR regulations. The DEIS identifies the member municipalities as Involved Agencies under SEQR.

Comment 3A.20:

Regarding page 1-50, as stated, the "WJWW has undertaken a detailed, comparative analysis of IMF versus DAFF". Does this comparison include which WTP is better suited to remove PFAS and any other emerging contaminants? This report should be included in the DEIS so the public can review its contents and conclusions before the adoption of the DEIS.

(Letter #8, pg. 3, Richard Ruge, 6/5/22)

Response 3A.20:

The report evaluated Immersed Membrane Filtration (IMF) and Dissolved Air Flotation stacked over Filtration (DAFF). Filter plant building footprints and lifecycle cost estimates were developed for these treatment alternatives. The evaluation concluded that both filtration treatment processes would be effective in treating Rye Lake water to meet all State and Federal drinking water regulations to its entire service area.

This report does not address the removal of PFAS or other emerging contaminants. Membrane Filtration (MF)/ Ultrafiltration (UF) is not anticipated to remove PFAS because the compounds are an order of magnitude smaller than the pore size used in MF/UF. DAF would be effective for some removal of PFAS. As PFAS are weak acids, it is possible that there would be minimal removal through one of the processes (i.e., coagulation) used in DAF.

The 2019 Westchester Joint Water Works Rye Lake Filtration Plant Tower Road Site Viability report which provides a comparative analysis of the IMF versus DAFF can be found in Appendix Q of the DEIS.

Comment 3A.21:

Regarding page 1-51, there is a discussion on the increase on organic carbon levels in the source water, but no data is provided in the DEIS to validate the increase. This data should be included in the DEIS before the adoption of the DEIS.

(Letter #8, pg. 3, Richard Ruge, 6/5/22)

Response 3A.21:

While there is limited organic carbon data available, the increase in disinfection byproducts is a direct result of more organic material in the source water reacting with chlorine. The proposed Dissolved Air Flotation would consistently provide organics removal under all treatment conditions and is the preferred option of WJWW.

Comment 3A.22:

Regarding page 1-57, the process described in the DEIS for the DAFF plant does not indicate that UV is needed to pretreat the water and I was unable to find a reference to the use of UV for pretreatment in a DAFF plant. Is there a need for the UV facility or will it be mothballed so to save on the enormous electrical cost of operation?

(Letter #8, pg. 3, Richard Ruge, 6/5/22)

Response 3A.22:

The DAF plant (water filtration plant) and the UV facility (ultraviolet treatment facility) are two independent projects intended to address separate water-quality issues. Each project is intended to improve drinking water quality by addressing distinct rules for the treatment of surface water. WJWW's surface water supply from Rye Lake had been the only public surface water supply in Westchester that was not treated for the organism cryptosporidium as required by the U.S. Environmental Protection Agency's Long Term 2 Enhanced Surface Water Treatment Rule. WJWW has constructed a UV facility at Rye Lake to address a potential public health risk by treating for cryptosporidium, which has been detected at Rye Lake. UV treatment is a proven technology to control cryptosporidium. Cryptosporidium has been detected at Rye Lake and, if left untreated, can cause gastrointestinal illnesses and other health risks, especially in vulnerable individuals. Construction of the UV facility was completed in December 2021 and was placed into service January 2022. UV facility use following construction of the DAF plant has not been determined at this time.

B. PROJECT DESCRIPTION

Comment 3B.1:

Please state whether or not it is correct that it was WJWW which first approached Westchester County about acquiring/purchasing the Proposed water filtration plant site on Airport property next to our Friends Meeting house. Please state the name of the WJWW representative who first approached the County about acquiring the Proposed Site. Please state the name of the representative of the County who responded to WJWW's request to purchase the Proposed Site. Please state whose idea it was to transfer the "Exchange Site" already owned by WJWW for the County-owned Proposed Site next to our Friends Meeting House. Please state the date upon which a non-binding Memorandum of Understanding was signed by WJWW and the County to facilitate the sale

of the Proposed Site to WJWW. As the memorandum of Understanding sets forth the transfer of the Proposed Site to be facilitated as an exchange of "equal sized and valued parcels of property", and the Proposed Site has never had an assessed value, please state how was it determined that the Proposed Site and the Exchange Site were of "equal value".

(Letter #7, pg. 2, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3B.1:

The WJWW and Westchester County representatives who initially discussed the land exchange is not relevant to evaluating the environmental impacts of the Proposed Action. Approval from the Westchester County Board of Legislators will be required for the land transfer of the Airport property to WJWW, but the land transfer cannot take place until the SEQR process is complete. Westchester County is an Involved Agency and is aware of this project and has received copies of all SEQR documents. Westchester County has provided a Memorandum of Understanding dated November 30, 2021, which can be found in Appendix B of the DEIS.

Comment 3B.2:

We believe that the Proposed Site with 1,000 feet of frontage on Purchase Street may have a market value as much as three times that of the Exchange Site which is 1/4 mile off Purchase Street thus making it highly unlikely that the Proposed Site and Exchange Site are of "equal value". Please state if an appraisal of the Proposed Site was obtained, who obtained it, the date of the appraisal and state the appraised value of the Proposed Site.

(Letter #7, pg. 3, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3B.2:

The properties are of equal size. Appraisals of both properties may be undertaken in the future and are not necessary to evaluate the environmental impacts of the Proposed Action. Chapter 3.C, Fiscal and Economic Impacts of the DEIS analyzes the tax implications of the property exchange. The Proposed Action would not result in a material change in taxation for Westchester County Airport property as a result of the land swap because the land swap would entail an equal exchange of land, and both properties involved in the swap do not currently contain any on-site structures or infrastructure. Therefore, the Westchester County Airport property's assessed value and taxes owed would not materially change as a result of the Proposed Action. Once developed, the Project Site would increase in its assessed value beyond what WJWW is currently paying on the Exchange Parcel because the Exchange Parcel is now assessed as vacant land. The Exchange parcel is currently undeveloped, and it is anticipated that it will remain undeveloped when it is owned by Westchester County.

Comment 3B.3:

Please provide a map delineating the boundaries of any temporary disturbance of any areas of the Proposed Site that lie outside the limits of disturbance of the filtration plant site as shown on Figure 2-1 of the DEIS.

(Letter #7, pg. 8, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3B.3:

Figure 2-1 of the DEIS identifies the limits of disturbance on the Project Site including all temporary limits of disturbance that would be required to construct the filtration plant.

C. LAND USE, ZONING AND PUBLIC POLICY

Comment 3C.1:

The Zoning Map designates this entire section of Purchase, Town of Harrison, R1-Single Family Residential, so why would we allow a non-approved use to be permitted.

(Letter #5, pg. 1, Joseph M. Billone, Resident, 5/25/22)

Response 3C.1:

As discussed in Chapter 3.A of the DEIS, the Project is located within the Special Business District (SB-O), regulated in Chapter 235, Zoning, of the Town/Village of Harrison Code. Lands directly south and west of the Project Site are zoned R-2, One-Family Residence. Remaining lands within ½ mile of the site are zoned R-1 and R-2A, all One-Family Residence districts.

Comment 3C.2:

Please explain all perceived conflicts and concerns regarding project consistency with surrounding land uses such as nearby residential development.

(Letter #7, pg. 9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3C.2:

Consistency with the surrounding land use is discussed in Chapter 3.A, Land Use, of the DEIS, as well as in Chapter 3.B, Community Character and Visual Impacts of the DEIS. Section 3.A.I of the DEIS states:

“Within the ½-mile study area, there are several water supply facilities including the Rye Lake Pump Station and UV facility, and Purchase Street Water Storage Tanks, all owned and managed by WJWW. Rye Lake WJWW water source is also within the ½ mile study area. Interstate 684, a major transportation corridor, runs north and southwest, approximately 500 feet from the Project Site, and Westchester County Airport, a transportation utility, is contiguous to the Project Site. Therefore, the Proposed Action is consistent with the surrounding utility land uses or land associated with utility land uses, which encompasses 58 percent (432 acres) of the ½ mile study area (735 acres). There are residential and religious uses within the study area and are located adjacent to or in close proximity to the existing Westchester County Airport, Interstate 684, WJWW’s Rye Lake Pump Station and UV facility, and the water storage tanks. While the Project Site would include a water supply utility, the development of the Proposed Action with such use would minimally alter the existing land use adjacent to or near the current religious or residential properties within the ½ mile study area. The Proposed Action would convert land categorized as a transportation utility (Airport) to a water utility use.”

Comment 3C.3:

As part of the transfer of title of the Exchange Parcel to the County, we would ask that a conservation easement be placed on the property such that the wetlands, Oak-Tulip Forest, and the remainder of a wooded parcel may be protected for future generations.

(Letter #11, pg. 2, David Naidu, K&L Gates, representing a property owner, 6/4/22)

Response 3C.3:

Comment noted. The negotiation of a conservation easement for the Exchange Parcel is not within the scope of the DEIS or part of the site plan and special exception use permit application for the project. Whether or not to place a conservation easement on the Exchange Parcel would be up to the County when it assumes ownership.

D. COMMUNITY CHARACTER AND VISUAL IMPACTS

Comment 3D.1:

The negative impact on our community in terms of ... the disruption of our residential life is unconscionable and totally irresponsible. Building a huge industrial plant in a residential area and visible from Purchase Street can only serve to discourage potential buyers from wanting to live in what has always been a very desirable bucolic community. Existing homeowners will also suffer from a decrease in the property values of the homes they have chosen as ideal for themselves and for raising their families.

(Letter #2, pg. 1, Fran Klingenstein, Resident and Board Member of Purchase Environmental Protective Association, 6/5/22)

Response 3D.1:

Chapter 3.B of the DEIS discusses Community Character and Visual Impacts, including a Visual Impact Analysis in Appendix D. Chapter 3.K discusses Traffic and Transportation Impacts and Chapter 3.L discusses Noise. Impacts to community character are mitigated by limiting clearing, planting approximately 300 trees and screening man-made structures from the street and other public vantage points with landscaping and the use of carefully considered architecture and building materials that draw from and are sensitive to the surrounding community character. As concluded in the DEIS, significant adverse traffic and noise impacts are not anticipated during construction or operation of the facility.

Comment 3D.2:

This is a huge building, it is oversized for the site, it is way too big ... And you can fix it up as much as you want, it's still a gigantic building, so it's way out of proportion.

(Public Hearing #1, pg. 33, Peter Close, Trustee, Purchase Meeting Friends, 5/24/22)

Response 3D. 2:

As discussed in Chapter 3.A.II of the DEIS, the proposed action complies with the bulk requirements for the Special Business District per the Town/Village of Harrison Zoning Code. Per comment response 3.D.1, an effort has been made to ensure that the facility entrance and building are designed to fit contextually into the community.

E. FISCAL AND ECONOMIC IMPACTS

Comment 3E.1:

What also isn't stated in the DEIS is the cost to upgrade the WJWW transmission and distribution system to deliver water to all of its customers. Currently, the WJWW cannot deliver water from the Rye Lake to customers in the Village and Town of Mamaroneck. The DEIS does not detail the cost of the improvements needed to deliver the WTP water to these municipalities. My guesstimate is that the cost will exceed 20 million dollars for the necessary pipes, valves, PRV's and possible pump stations.

With this in mind, why not construct a 20 mgd WTP and expand it once the infrastructure is in place to deliver the water from the WTP to the Village and Town of Mamaroneck?

(Letter #8, pg. 1, Richard Ruge, 6/5/22)

Response 3E.1:

Consideration of a smaller-capacity water treatment plant was not identified in the scoping process as an alternative to be considered in the DEIS. In any event, a 20-MGD water filtration plant would not meet the needs of the applicant per 6 NYCRR 617.9(5)(v) which requires an evaluation of “the range of reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor.” In addition to satisfying existing legal obligations the 30-MGD filtration plant would have the capacity to meet the maximum day water supply-demand of the WJWW’s entire water distribution system with a margin to account for the potential growth in demand over time.

Over the past seven years, WJWW has invested in a number of major capital improvement projects to the distribution system specifically designed to facilitate the transmission of water within all service zones. This includes the ability for WJWW to transmit water from its Rye Lake source to its low service zone which includes the Village of Mamaroneck, Town of Mamaroneck and Village of Larchmont. This functionality provides an important redundancy in the event of an unexpected disruption in the water supplied by the Delaware Aqueduct Shaft 22 source.

Comment 3E.2:

One should also ask why there a need to send water from the WTP to the Mamaronecks, especially since the water they currently receive from the Shaft 22 connection is much less expensive to WJWW (minimal pumping/electric costs, lower chemical costs and no need to filter the water). In fact, the WJWW probably maximizes the use of the Shaft 22 water in an attempt to keep expenses in check.

(Letter #8, pg. 1, Richard Ruge, 6/5/22)

Response 3E.2:

Over the past seven years WJWW has invested in a number of major capital improvement projects to the distribution system, specifically designed to facilitate the transmission of water within all service zones. This includes the ability for WJWW to transmit water from its Rye Lake source to its entire system, including the low service zone that includes the Village of Mamaroneck, Town of Mamaroneck, and Village of Larchmont. The design capacity of the proposed water filtration plant considers the water demand needs of the Mamaronecks as well as provides redundancy for WJWW’s Delaware Aqueduct Shaft 22 source.

Comment 3E.3:

It potentially puts the County and Westchester Joint Water Works at financial risk because there's already so much money that's being spent on monitoring flows and discharges in stormwater into the Kensico Reservoir.

(Public Hearing #1, pg. 26, Anne Gold, Executive Director, Purchase Environmental Protective Association, 5/24/22)

Response 3E.3:

The monitoring that is being undertaken adhere to State and federal requirements for all drinking water supply systems. Monitoring of drinking water does not put WJWW at any financial risk.

F. STORMWATER

Comment 3F.1:

The DEIS should provide a detailed description of the existing and proposed drainage areas chosen for the project. Table 5-6 provided in Appendix G compares the post development runoff rates from the subbasin plus the offsite area draining to the subbasins to the pre-development runoff rates at the design point ... this approach fails to identify and assess any localized impacts associated with peak runoff rates. To properly analyze the peak flows at the design points, the peak times should also be provided to demonstrate that there will not be any downstream impacts.

(Memo #1, pg. 1, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.1:

The Stormwater Pollution Prevention Plan (SWPPP) has been revised to include drainage area descriptions and these areas have been further defined to better quantify the impacts of development at three (3) different points. An analysis of localized impacts, including peak runoff rates to demonstrate any downstream impacts, is also provided (see **Appendix B, July 2022 SWPPP**).

Comment 3F.2:

Runoff volumes for the existing and proposed condition for each storm event should also be evaluated at each local design analysis points/design line. The base flow conditions and bank full conditions of the receiving waterbodies should also be evaluated so that it can be determined whether the increase in runoff volume will cause or exacerbate erosion and any existing flooding conditions. Note that peak flow rate reduction and volume reduction are mutually exclusive, and that stormwater volume reduction (RRv) is a requirement of DEP's 2019 stormwater requirements.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.2:

The SWPPP meets all NYCDEP 2019 stormwater requirements including the stormwater volume reduction (RRv) by application of green infrastructure and stormwater management practices to replicate pre-development hydrology. A new provision, Section 5.2.2.3, has been added to the SWPPP, which discusses the receiving water body (see **Appendix B, July 2022 SWPPP**).

Comment 3F.3:

Although two stormwater practices are proposed in series, the FEIS should include a discussion regarding removal of dissolved phosphorous and how any increases in loading will be mitigated. Additionally, a total nitrogen, total suspended solids and biological oxygen demand (TN, TSS, BOD) are pollutants of concern that should be assessed.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.3:

Pollutant loading calculations have been added to Appendix F of the SWPPP (see **Appendix B, July 2022 SWPPP**). However, according to Davis and McCuen (2005), "Organic carbon is usually a minor pollutant of concern for urban runoff... The values for [biological oxygen demand] are all less than 30mg/l, which is usually the standard for discharge of treated municipal wastewater. Overall, urban runoff is not expected to contribute a major

oxygen demand to water from biodegradable organic compounds.” Additionally, proposed mitigation practices, such as the constructed wetland, have been rated as moderate for removing any organic matter present in stormwater runoff (Schueler 1987, Schueler et al. 1992, U.S. EPA 1990⁴). Therefore, biological oxygen demand (BOD) has not been identified as a pollutant of concern for the proposed development and a numerical loading analysis has not been performed.

Comment 3F.4:

DEP previously requested that the applicant provide a coliform analysis. The DEIS states that no new point sources are created resulting from this project and as such, fails to provide the analysis. This response is unacceptable. As Kensico reservoir is a terminal reservoir basin of the New York City Water supply, this analysis must be included in accordance with Section 18-39(c)(1) regardless of whether a septic system is proposed as part of the project. Demonstrate whether the chosen stormwater practices can effectively remove the coliform. (Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.4:

Appendix F of the SWPPP has been revised to include pollutant loading calculations. Section 5.1.2.2 has been expanded to include a discussion of the coliform analysis (see **Appendix B, July 2022 SWPPP**).

Comment 3F.5:

The curve number assigned for modeling the bioretention practice per Table 5-1 of Appendix G is 61. Stormwater practices with open surface that holds water are generally assigned a curve number value of 98. This should be corrected in the next submission.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.5

The SWPPP has been updated to reflect these changes and the revised modeling can be found in Appendix C of the SWPPP (see **Appendix B, July 2022 SWPPP**).

Comment 3F.6:

The one-year storm volume (EOH WQv) from the modelling software must be compared to the 90% (standard WQv) volume and the greater of those two volumes must be utilized for sizing all proposed stormwater management practices.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

⁴ Scheuler, T.R. (1987) *Controlling Urban Runoff: A Practical Manual for the Planning and Design of Urban BMPs*, Publication number 87703, Metropolitan Washington Council of Governments, Washington D.C.

Scheuler, T.R., Kumble P.A., and Heraty, M.A. (1992) *A Current Assessment of Urban Best Management Practices: Techniques for Reducing Non-point Source Pollution in the Coastal Zone*, Publication number 92705, Metropolitan Washington Council of Governments, Washington D.C.

U.S. Environmental Protection Agency (1990) “Urban Targeting and BMP Selection. Information and Guidance Manual for State Nonpoint Source Pollution Program Staff Engineers and Managers.” The Terrence Institute. EPA-68--8-0034.

Response 3F.6:

As described in Section 5.1.1.1 of the SWPPP, the 90 percent storm event produced a smaller WQv and therefore was not used for the sizing of the stormwater management practices. Calculations are provided in Appendix F of the July 2022 SWPPP (see **Appendix B**).

Comment 3F.7:

The DEIS should better explain how the component outlet structure on wetland described in Appendix G will split the flow of higher storms effectively. Alternatively, consider investigating whether a flow splitter device would be more appropriate for this purpose.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.7:

The SWPPP has been updated to include design details of the wetland outlet structure showing how flow is effectively split between the bioretention cell and detention chambers (see **Appendix B, July 2022 SWPPP**).

Comment 3F.8:

Appendix G and A notes the overall disturbance as 6.1 acres which is not consistent with the information provided in the EAF.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.8:

Comment noted. The overall disturbance is anticipated to be 6.1 acres. The DEIS contains the most accurate estimate of overall disturbance.

Comment 3F.9:

Clarification should be provided regarding the proposed purpose and function of porous pavement for certain parking spaces. The DEIS should indicate whether the porous pavement is intended to meet the strict infiltration requirements of the NYS Stormwater Design Manual or is simply intended to minimally reduce runoff volumes. Due to the project site's shallow groundwater table, it is unclear that adequate separate distance is available to meet infiltration standards or for the practice to function as intended.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.9:

There are four (4) proposed parking spaces located on porous pavement, which would be located in the Project Site's southern side yard. Porous pavement is not needed to accommodate the required WQv and RRV associated with the design.

Comment 3F.10:

It is unclear how much area will be disturbed during each of the 12 phases mentioned in the DEIS as neither erosion control plans or phasing plans are included in the circulated materials. Though EAF notes that the projects will result in up to 8 acres of overall disturbance, Section 3.0 of the DEIS and Appendix G, do not make clear where a description of construction sequencing/phasing is included.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.10:

The 12 phases described in the DEIS were delineated to estimate truck trips; these phases do not correlate to construction phasing related to erosion and sediment control. The erosion control design has been separated into four phases. Erosion and sediment control drawings showing these four phases (including limit of disturbance and proposed erosion and sediment control measures) are provided in Appendix D-1 of the SWPPP (see **Appendix B, July 2022 SWPPP**). The overall disturbance is anticipated to be 6.1 acres; however, the erosion control design is phased so that no more than five (5) acres of soil will be disturbed at any one time.

Comment 3F.11:

In Appendix J, overall disturbance is noted as 6.4 acres - this must be corrected. Considering the planned amount of soil disturbance, all efforts must be made to satisfy the New York State Department of Environmental Conservation GP-0-20-002 rule that " ... construction activity shall not disturb greater than five (5) acres of soil at any one time." The purpose of this standard is to minimize the potential for erosion and sedimentation by reducing the time period wherein large areas of disturbed soils may remain exposed, inactive, and susceptible to erosion.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.11:

The erosion control design has been separated into four (4) phases, and design drawings are provided in the SWPPP (see **Appendix B, July 2022 SWPPP**). Although 6.1 acres of total area will be disturbed, the erosion control design is phased so that no more than five (5) acres of soil will be disturbed at any one time, in compliance with NYSDEC General Permit-0-20-002. Appendix J in the DEIS refers to a study that was produced prior to the issuance of the DEIS. The overall disturbance is anticipated to be 6.1 acres. The DEIS contains the most accurate estimate of overall disturbance.

Comment 3F.12:

Cut and fill balances for each phase of construction must be shown on the plans and each phase should be designed in such a way that the construction is reasonable, manageable, efficient, and protective of water quality.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.12:

Erosion and sediment control design drawings, construction sequencing, and cut and fill balances for each phase of construction are included in **Appendix B, July 2022 SWPPP Appendix D-1**.

Comment 3F.13:

Although general sequencing has been included, a more detailed construction sequence and associated plan is critical to effective mitigation of potential water quality impacts posed by construction. The construction sequence provided in the DEIS should be expanded and specifically keyed to phasing and appropriate erosion and sediment control measures.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.13:

Erosion control design drawings and sequencing are included in Appendix B, July 2022 SWPPP. The SWPPP will be submitted to applicable regulatory review agencies, including NYCDEP for SWPPP approval.

Comment 3F.14:

The drainage area maps provided are too small to effectively review and assess whether each of the drainage basins is modeled reasonably or not. Without full scale drawings for a project of this size, the peak flows, runoff volumes, and attenuation values provided cannot be properly evaluated.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.14:

The drainage area maps provided are full scale drawings to a standard engineering size and scale. The revised SWPPP also provides grading and drainage plans at 1:30 scale to provide a more detailed view of the stormwater design (see **Appendix B, July 2022 SWPPP**)

Comment 3F.15:

In general, the circulated SWPPP does not include enough information such as supporting details, design data, or engineering details for DEP to be able to evaluate whether the proposed practices are adequate to mitigate or eliminate potential adverse water quality impacts associated with the proposed project.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.15:

A revised SWPPP including all supporting documentation, including drawings, design data, details, and calculations has been provided with the FEIS as **Appendix B, July 2022 SWPPP**. WJWW is currently coordinating with regulatory agencies, including NYCDEP, for SWPPP approval.

Comment 3F.16:

The proposed action is proposed on NRCS soil types where seasonal wetness and high groundwater are of concern (i.e., Paxton, Woodbridge, and Udorthents). Cutting and regrading of these soils typically results in significant adverse impacts to land and water due to filling, excess surface flow, erosion, and downstream sedimentation during construction. Daylighting of groundwater in the post construction condition is not uncommon and can impact permanent stormwater practices. As such, a detailed dewatering procedure should be included with the erosion control plans and impacts associated with dewatering excavations, groundwater leaching from cut sections, and construction during freeze/thaw conditions, should be fully addressed in the FEIS.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3F.16:

Specification 31-00-01 in Section 3.2.1 of the revised SWPPP includes detailed dewatering standards and procedures. The revised SWPPP requires the contractor to provide portable sediment tanks before the discharge of dewatering effluent. In addition, the construction phasing proposes to install the stormwater conveyances and stormwater management practices from downstream to upstream across the site. This will help mitigate any potential daylighting of groundwater. An extensive test pit program was conducted that identified seasonal high groundwater. The stormwater management practices were designed with the appropriate separation from groundwater (see **Appendix B, July 2022 SWPPP**).

Comment 3F.17:

Soil restoration is not addressed in the SWPPP and is missing from the site drawings. Soil restoration is required by the November 2016 New York State Standards and Specifications for Erosion and Sediment Control (aka "Bluebook"). Table 4.6 in the Bluebook, "Soil Restoration Requirements", needs to be incorporated in the SWPPP and placed on site drawings C-141 and C-142.

(Memo #2, pg. 6, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.17:

The revised SWPPP now addresses soil restoration issues. Drawings C-141 and C-142 now designate areas required for soil restoration. In addition, a soil restoration requirements table has been added to drawing C-301 (see **Appendix B, July 2022 SWPPP**)

Comment 3F.18:

The proposed site is heavily wooded. Site clearing activities will include the removal or grubbing of stumps. A new note needs to be added to the notes on drawings C-102 and C-103, indicating how this woody material will be disposed or used onsite.

(Memo #2, pg. 6, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.18:

These issues are addressed in the revised SWPPP in Section 31.10.00 (Clearing, Grubbing, and Site Preparation), in addition to being included in Appendix C-1 of the revised SWPPP. The contractor is required to dispose of all materials offsite and is prohibited from disposing materials onsite or the directly surrounding lands of the project site. Drawings C-102 and C-103 have been revised to include "Note 1", which references specification section 31.10.00 directly (see **Appendix B, July 2022 SWPPP**).

Comment 3F.19:

Drawing C-301, Erosion and Sediment Control Notes, note #4 should have "Permanent" inserted in the last sentence. Detail C-31-0403, Stabilized Outlet for Silt Fence, needs to include the apron depth and rock gradation.

(Memo #2, pg. 6, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.19:

The updated SWPPP includes a revised Note 4 on Drawing C-301. In addition, Detail C-31-0403 has been removed from the drawing set (see **Appendix B, July 2022 SWPPP**).

Comment 3F.20:

Design calculations for the sizing of the Temporary Sediment Basin do not appear in the SWPPP. Also, on drawing C-303, no specific data or dimensions for the temporary sediment basin or the skimmer outlet is provided. These deficiencies need to be addressed. The Dewatering Device Standard on page 5.10 of the Bluebook shows the design procedure for determining sizing and the details needed to install the skimmer. The Sediment Basin Standard beginning on page 5.19 of the Bluebook shows the criteria and information to design the temporary sediment basin. The design calculations for the 10-year discharge for the drainage area, the volumes for the sediment storage and dewatering zones, and the infrastructure sizing of the system appurtenances need to be added to the SWPPP. The storage volumes with their corresponding elevations, the dimensions of the basin, and the sizes of the pipes, riser, and dewatering orifice, all need to be added to drawing C-303.

(Memo #2, pg. 6, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.20:

A revised SWPPP has been prepared and is included as **Appendix B, July 2022 SWPPP**. Design calculations for the sizing of the Temporary Sediment Basin, as well as calculations for the 10-year discharge for the drainage area, the volumes for sediment storage and dewatering zones, and the infrastructure sizing of the system appurtenances are provided in Appendix F of the **Appendix B, July 2022 SWPPP**. Drawing C-303 has been revised to include data and dimensions for both the temporary sediment basin and the skimmer outlet (see **Appendix B, July 2022 SWPPP Appendix D-1**).

Comment 3F.21:

Gradation for the rock riprap used in the riprap outlet protection needs to be added to drawing C-303.

(Memo #2, pg. 6, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.21:

Drawing C-303 includes gradation of the rock riprap under the D50 column of the “Schedule of Dimensions”. The revised SWPPP includes a d-max column to the Schedule of Dimensions to indicate the maximum stone size. In addition, a note was added to the detail providing clarity on the gradation of the material (see **Appendix B, July 2022 SWPPP**).

Comment 3F.22:

Drawings C-302 and C-303 are titled “Erosion and Sedimentation Control Details”. They contain language and references to practices from other states. “Sedimentation” should be changed to “Sediment” and all details and notes should utilize the nomenclature used in the Bluebook. For drawing C-302 that means changing Detail C-31-0490 and replacing “Gravel Entrance/Exit” with “Stabilized Construction Access” (Bluebook page 2.31) and deleting the reference to North Carolina. Also, Detail C-31-0400 should be labeled as “Reinforced Silt Fence” as shown in the silt fence standard on page 5.56 of the Bluebook. In addition, the Concrete Truck Washout detail

should add a 10-mil (0.01 inch) minimum thickness for the plastic liner and note that this facility must be located 100 feet from drainage swales or storm drain inlets (Bluebook page 2.24). For Drawing C-301, the generic schematic of a temporary sediment basin needs to be replaced with design details noted in technical comment number 3 above.

(Memo #2, pgs. 6-7, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.22:

An updated SWPPP with revised drawings C-302 and C-303 to reflect NYS nomenclature and details have been provided. The temporary sediment basin details have been revised for drawing C-303 (see **Appendix B, July 2022 SWPPP**).

Comment 3F.23:

Page 3-19 of the SWPPP indicates that storm drain inlet protection will be provided. Page 5.59 of the Bluebook requires a minimum of 50% open space be provided for any insert practice used as a storm drain sediment practice to allow for overflow, so the drainage capacity of the inlet is not lost. This note and detail should be added to drawing C-302.

(Memo #2, pg. 7, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.23:

An updated SWPPP includes a detail with notes responsive to this comment to the detail drawing of C-302 (see **Appendix B, July 2022 SWPPP**).

Comment 3F.24:

Drawing C-111, Erosion and Sediment Control Phasing Plan – Phase 1, change “Entrance” to “Access” in note 2 and the drive off Purchase Street. Specify “Reinforced” silt fence on the plan view. Delineate what type of “Construction Ditch” (Bluebook page 3.4) will be used instead of a temporary diversion swale. Are two sediment basins needed, or is one to be relocated? This needs to be clarified.

(Memo #2, pg. 7, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.24:

An updated SWPPP includes revisions to drawing C-111 for the access and silt fence. The construction ditches have been given ID's and the detail has been revised to provide a schedule for the ditches. Two sediment basins are provided to mitigate disturbances and re-grading during the final installation of the bioretention cell and stormwater wetland. Having the separate sediment basins helps construct the Storm Management Plans (SMP) independently of one another. In addition, further detail of the sequencing of the installation from sediment basin and SMP's is provided on drawing C-113 (see **Appendix B, July 2022 SWPPP**).

Comment 3F.25:

Drawing C-113, Erosion and Sediment Control Phasing Plan – Phase 3, note #1, states: “Transition sediment basins to bioretention cell with subsurface detention cells and stormwater wetland.” A construction sequence

needs to be added describing how this work will be accomplished, without risking the release of sediment-laden runoff.

(Memo #2, pg. 7, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.25:

The updated SWPPP and revised drawing C-113 includes an expanded sequence of construction (see **Appendix B, July 2022 SWPPP**).

Comment 3F.26:

SWPPP, Page 3-20, change the name “Diversion Swales” to “Construction Ditch” to conform with the Bluebook and move it from the permanent category to the temporary category.

(Memo #2, pg. 7, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.26:

An updated SWPPP includes changing the name on page 3-20 from Diversion Swales to Construction Ditch. It has also been changed from the permanent category to the temporary category (see **Appendix B, July 2022 SWPPP**).

Comment 3F. 27:

Using the topographic information from Figure 3G-2 of Section G of the DEIS and Figure 1- Existing Drainage Area Map of Appendix D of the SWPPP, recalculate the existing condition hydrology to the analysis point (AP). See the attached HydroCad schematic (Attachment #1). The east and west subareas should have their Tc calculated to the AP while the Site drainage area should have its Tc calculated to the property line stormwater outlet. From there, the flow should be routed through a channel reach to the AP. This system will allow for a fuller summation of flows at the AP as well as define the existing condition discharge at the proposed stormwater outlet location on site.

(Memo #2, pg. 7, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.27:

Three (3) Analysis Points are now used for the site and are consistent in both pre- and post-development (see **Appendix B, July 2022 SWPPP**). The July 2022 SWPPP includes a HydroCAD model that has been updated to divide the site into multiple drainage areas. A description of each drainage area has been added to the SWPPP.

Comment 3F.28:

The Tt, travel time, for the shallow concentrated flow (SCF) regime of the total Tc, should be based on the U.S. Department of Agriculture Soil Conservation Service National Engineering Handbook Section 4, Hydrology, Chapter 15, “Time of Concentration”. There are eight different land surface conditions evaluated for shallow concentrated flow (aka overland flow). The SWPPP only utilized the two conditions published in TR-55, those being “Paved” or “Unpaved”. To be consistent with the sub-area curve numbers, the SCF coefficient for Forest with heavy litter should be used rather than Unpaved. This reduces the velocity vector of 16.1 feet per second for Unpaved to 2.5 feet per second, thus increasing the Tt and the overall Tc, which reduces the peak discharge.

All eight land surface coefficients are included in the HydroCAD model. This model should be re-run with these changes to summarize the existing condition discharges at both the site stormwater outlet and at the AP.

(Memo #2, pg. 8, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.28:

The SWPPP has been updated with new time of concentration calculations. The shallow concentrated land cover designations were revised. For the Hydro CAD model, “Woodland” and “Short Grass Pasture” were used in applicable areas, rather than “Unpaved”. Based on site investigations, “Woodland” more accurately depicts the land cover of the site than “Forest with heavy litter.” “Woodland” is a more conservative land cover designation and more closely resembles the successional forest with remnants of prior disturbance present at the site (see **Appendix B, July 2022 SWPPP**).

Comment 3F.29:

The developed site stormwater analysis should show all components of the system, including the split of flows within the system. Attachment #2 is an example of the type of schematic that should be used. The final graded contour lines need to be shown on all drawings to show the differences in the disturbed areas.

(Memo #2, pg. 8, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.29:

A revised Hydro CAD model divides the site into multiple drainage areas and the updated SWPPP includes a description of each drainage area. The site now includes three (3) Analysis Points, which are consistent in both pre- and post-development. In addition, contour lines have been added to all relevant drawings (see **Appendix B, July 2022 SWPPP**).

Comment 3F.30:

The curve number for the site drainage area should be adjusted from 92 to 94 to account for the permanent water surface of the stormwater wetland (0.373 acres).

(Memo #2, pg. 8, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.30:

A Curve Number (CN) is a parameter used in hydrology to characterize properties for a particular soil and ground cover; this number takes land use, land treatment, hydrological condition, and hydrological soil group (HSG) into consideration to estimate direct runoff or infiltration. A higher curve number indicates a larger potential for runoff. For example, a paved road would have a curve number of 98 whereas woods in good condition would have a curve number of 77 for a HSG D soil. The revised Hydro CAD model includes a wetland surface that has been added as a separate node. In addition, a curve number of 98 was applied and a time of concentration of zero (0) minutes, which represents direct rainfall as the permanent water surface of the stormwater wetland would allow for minimal infiltration (see **Appendix B, July 2022 SWPPP**).

Comment 3F.31:

Drawing C-101 shows the Gallery Drain outlet pipe at the northeast boundary of the site to be 36 inches. However, drawing C-122 labels the same outlet pipe as 30 inches. This inconsistency needs to be resolved. Also, rock outlet protection should be provided at this location to prevent scour erosion from the flow at the pipe outlet.

(Memo #2, pg. 8, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.31:

Drawing C-101 has been revised to include a gallery drain outlet of 30 inches. The outlet protection has been added to the outlet of the pipe to mitigate erosion (see **Appendix B, July 2022 SWPPP**).

Comment 3F.32:

Drawing C-121, the lawn area drainage system on the west side of the facility has three dome grate inlets. The drainage system's 12" diameter PVC pipe transports flow to the north to a connector line and to manhole MH-01. This line is disconnected and needs to be connected to the storm drain system at MH-01.

(Memo #2, pg. 8, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.32:

Drawing C-121 has been revised to show the connector line connected to the storm drain system at MH-01 (see **Appendix B, July 2022 SWPPP**).

Comment 3F.33:

Drawing C-212 is missing the profile section from station 3+00 to 3+50. This deficiency needs to be addressed.

(Memo #2, pg. 8, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.33:

Drawing C-212 has been updated to include profile sections from station 3+00 to 3+50 (see **Appendix B, July 2022 SWPPP**).

Comment 3F.34:

For projects within the New York City watershed, the water quality treatment volume, WQv, is the larger of either the 90% storm runoff shown in Chapter 4, Unified Sizing Criteria of the NYS Stormwater Management Design Manual, or the runoff from the 1-year, 24-hour storm. In this case, the WQv is the 1-year, 24-hour storm is identical to the channel protection volume (Cpv). The SWPPP, Section 5.2.1.1 on page 69 uses obsolete shortcut routing curves for the SCS Types II & III storm distributions, which are no longer valid in New York. These routing curves are also not compatible with the discharges calculated from the SWPPP HydroCAD routings, which used the proper NRCC rainfall tables and resulting rainfall distributions. Since the 1-year storm is routed in the HydroCAD model, it already calculates the WQv. Therefore, the above calculations are unnecessary and need to be deleted from the SWPPP.

(Memo #2, pgs. 8-9, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.34

The July 2022 SWPPP contains updated calculations using HydroCAD instead of utilizing shortcut CSC routing graphs that are referenced in the current NYS Stormwater Management Design Manual. Redevelopment credit has been taken for the existing impervious area for water quality treatment volume (WQv) for calculation purposes and is independent of the HydroCAD model. Redevelopment credit is not taken in the water quantity calculations using HydroCAD.

Comment 3F.35:

When the runoff curve number for FDA-1A is adjusted for the wetland pond to 94, the resulting WQv becomes approximately 26,350 cubic feet. It is this volume in combination with storage area, outlet orifice control and bypass flows that needs to be balanced to detain a portion of the WQv and all the Cpv for the required 24 hours. A revised analysis should be provided to demonstrate the detention criteria is met.

(Memo #2, pg. 9, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.35:

The revised HydroCAD model includes the wetland surface added as a separate node. For water quality purposes the wetland surface will not contribute to pollutant loading the same way a parking lot or roof will. Therefore, the WQv has not been adjusted to consider the wetland as an impervious surface. As stated in Response 3F.30, the wetland surface was given a curve number of 98 for water quantity modeling purposes (see **Appendix B, July 2022 SWPPP**).

Comment 3F.36:

The design calculations for the area of the bioretention cell, shown on SWPPP page 84, used an average head above the bioretention cell (hf) equal to 0.5 feet. This would mean that the total free depth above the surface would be 1.0 feet. Since the designed bioretention cell is only 0.5 feet deep, an hf equal to 0.25 feet needs to be used. This will increase the existing area by approximately 9% to 21,307 square feet from the current calculation of 19,531 square feet. Consideration should be made for increasing the depth to 1.0 foot, to retain the current configuration with appropriate routings and confirm the storage and detention capabilities.

(Memo #2, pg. 9, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.36:

The weir elevation of the overflows in the bioretention was raised to provide a total water depth of 1 foot, which equates to an average head above the cell (hf) of 0.5 feet (see **Appendix B, July 2022 SWPPP**).

Comment 3F.37:

Consideration should be given to using a surface sand filter as the second practice in series to meet the NYC Department of Environmental Protection WQv requirements for two stormwater management practices in series when the impervious area within the drainage area exceeds 20 percent. Preliminary calculations show that with a filter layer of 1.5 feet, a k coefficient of 3.5 feet per day, and a maximum depth of 1.5 feet, the required filter area is approximately 2,674 square feet, which is over 87% smaller than the bioretention area. A storage area above the surface elevation of the sand filter may still be needed for detention. Benefits for

substituting bioretention with a surface sand filter include less maintenance costs, a smaller footprint, and less total suspended solid load, while obtaining a moderate to high fecal coliform removal rating. However, runoff reduction credit is not currently assigned to sand filter systems. SWPPP Appendix C, Design Calculations on page 82 shows the minimum required runoff reduction requirement to be 3,835 cubic feet. This requirement can be met with a sand filter, by utilizing a 6-inch stone reservoir below the bottom of the Cultec chambers and 10-inch outlet orifice at elevation 389.79. This configuration provides 3,906 cubic feet of permanent storage due to its 40% void ratio.

(Memo #2, pgs. 9-10, Philip Bein, Watershed Inspector General; Charles Silver, Ph.D., Watershed Inspector General, 6/6/22)

Response 3F.37:

A sand filter was evaluated and investigated during the design process. It was ultimately not implemented into the final design because it did not provide the necessary total volume reduction credits required to obtain NYCDEP approval, in addition to not meeting compliance with NYSDEC General Permit standards. Furthermore, the geotechnical site investigations showed very poor infiltration and high groundwater. Thus, the site conditions do not allow for the receipt of infiltration credits, per NYSDEC.

In addition, a sand filter and bioretention in series were investigated, however, NYC Watershed regulations require that two treatment practices in series must be two different types of practices. Bioretention and a sand filter are both considered filtering system practice types. These features were not incorporated into the final design.

G. GEOLOGY- SOILS AND TOPOGRAPHY

Comment 3G.1:

According to the DEIS, a significant amount of excavated material/fill will be generated during or after construction and may need to be hauled away from the site. It is not clear whether topsoil and subsoil will be stored separately which should be discussed in the FEIS.

(Memo #1, pg. 1, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3G.1:

The revised SWPPP includes staging plans (drawings C-111 to C-113) associated with the construction activities (see **Appendix B, July 2022 SWPPP**). As described in the DEIS, the net earthwork for the project site is a cut because a sizeable portion of the facility (washwater tanks and filtration building substructure) is below grade and requires a large volume of excavation. The contractor will have limited space to store soils onsite; therefore, a majority of excavated soils will be hauled offsite. If site conditions allow for soil to be stored onsite, topsoil would be stored separately from subsoil.

H. VEGETATION AND WILDLIFE

Comment 3H.1:

The negative impact on our community in terms of ... deforestation of property on Purchase Street ... is unconscionable and totally irresponsible.

(Letter #2, pg.1, Fran Klingenstein, Resident and Purchase Environmental Protective Association, 6/5/22)

Response 3H.1:

Several site inspections and review of available published reports and databases show the site contains no rare trees, plants, or significant natural communities. Additionally, 56 percent of the tree species surveyed on site are invasive. The Proposed Action meets all local and state regulations pertaining to tree clearing and makes a concerted effort to replace cleared land with ecologically valuable landscape plantings. Chapter 3.H, Vegetation and Wildlife, of the DEIS provides additional details on the vegetation of the Project Site. Approximately 300 native trees are proposed to be planted. The landscape plan would introduce to the formerly disturbed Project Site over 55 native and site appropriate plant species to rebuild the local ecosystem, which would begin to restore the habitat and soil health and outcompete invasive and noxious vegetation.

Comment 3H.2:

On information and belief, there was an actual tree count performed on the Proposed Site. However, the area of the actual tree count is not contiguous with the area/limits of disturbance for the filtration plant on the Proposed Site as delineated on many maps in the DEIS. Since WJWW is using a count of an actual number of trees on the Proposed Site in its comparisons in this DEIS, please do an actual tree count to obtain the actual number of trees that are within the area/limits of disturbance on the Proposed Site.

(Letter #7, pg. 11, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3H.2:

Figure 2, Appendix I of the DEIS displays where the Tree Survey was performed. This area matches substantially with the limits of disturbance associated with the Proposed Action. The Tree Survey was performed in accordance with the Town/Village of Harrison zoning code as described in Chapter 3H, Vegetation and Wildlife.

Comment 3H.3:

We are so concerned about the hundred-foot buffer, but yet you are taking down close to 600 but only putting up 300 trees. That doesn't seem to equate for me.

(Public Hearing #1, pgs. 45-46, Diana Schusterhoff, Resident, 5/24/22)

Response 3H.3:

Due to the construction of the filtration plant, associated access drive, stormwater controls, and ancillary facilities there is no additional available area to plant additional trees that would thrive. The landscaping plan includes as many replacements trees as possible.

Several site inspections and review of available published reports and databases show the site contains no rare trees, plants, or significant natural communities. Additionally, 56 percent of the tree species on site are invasive. The proposed action complies with the Town/Village of Harrison Tree Clearing ordinance. In addition, as outlined in Chapter 3.H, Vegetation and Wildlife, of the DEIS there will be approximately 300 native trees are proposed to be planted.

Comment 3H.4:

The trees today provide just about enough cover for the historic and beautiful location of the Quaker Meeting House in that area of Purchase, New York. With the removal of further trees honestly we are really concerned about what this is going to do to the nature of the community.

(Public Hearing #1, pgs. 47-48, Nicole Sceko, Resident, 5/24/22)

Response 3H.4:

Please see **Response 3H.1**. Chapter 3B, Community Character and Visual Impacts, of the DEIS provides a detailed analysis of the visual impacts and proposed landscaping of the Project Site, including a landscaping plan that can be found in Appendix C of the DEIS. The Project Site would be planted with 300 native trees. Extensive vegetative screening is proposed to increase the density of vegetation between the Project and the adjacent home and Purchase Friends Meeting House.

I. WETLANDS, WATERBODIES, WATERCOURSES AND FLOODPLAINS

Comment 3I.1:

The project will risk damaging a watershed that delivers water each day to 9 million people.

(Letter #1, pg. 1, Anne Gold, Executive Director, Purchase Environmental Protective Association 6/6/22)

This is an extremely disruptive project in a corner of the airport that drains into the Kensico Reservoir. It risks damaging a watershed that delivers water to over nine million people a day.

(Public Hearing #1, pg. 26, Anne Gold, Executive Director, Purchase Environmental Protective Association, 5/24/22)

Opposed to the location because it is being built in a protected watershed.

(Public Hearing #1, pg. 48, Nicole Sceko, Resident, 5/24/22)

Response 3I.1:

The Proposed Action is necessary to maintain the health and safety of WJWW customers and to comply with a United States Environmental Protection Agency (USEPA) Administrative Order, a New York State Supreme Court Order, and the USEPA and New York State Sanitary Code surface water filtration requirements. The Project complies with all local and State stormwater management regulations to protect the health of the Kensico watershed.

There are other examples of surface water treatment plants located within a NYC watershed. They are as follows:

- Carmel Water Treatment Plant
 - Water Source: Lake Gleneida
 - Watershed Location: Croton Watershed
 - Location: Carmel, NY
- Bedford Water Treatment Plant (Cross River Reservoir)
 - Water Source: Delaware Aqueduct, Backup: Cross River Reservoir
 - Watershed Location: Croton Watershed
 - Location: Katonah, NY
- Amawalk Water Treatment Plant (Amawalk Reservoir)
 - Water Source: Amawalk Reservoir
 - Watershed Location: Croton Watershed
 - Location: Katonah, NY

- Shaft 18 Chemical Addition Facilities
 - Watershed Location: Kensico Reservoir
 - Location: Valhalla, NY
- Rye Lake Pump Station
 - Water Source: Kensico Reservoir
 - Watershed Location: Rye Lake (Kensico Reservoir)
 - Location: Purchase, NY
- Town of New Castle Millwood Water Treatment Plant
 - Water Sources: Catskill Aqueduct, Backup: New Croton Aqueduct
 - Watershed Location: Outside of Watershed
 - Location: Millwood, NY
- Northern Westchester Joint Water Works Catskill Water Treatment Plant
 - Water Source: Catskill Aqueduct
 - Watershed Location: Outside of Watershed
 - Location: Cortlandt, NY

The location of a water filtration plant within a NYC watershed is not a unique situation. As a result, the NYCDEP has requirements for developing this type of facility within a NYC watershed. While the Project Site would be located within the Kensico Reservoir, the Project requires review and approval from NYCDEP for its Stormwater Pollution Prevention Plan which controls for water quantity and quality to protect the reservoir.

Comment 31.2:

The DEIS does not discuss road salt or other winter roadway deicers, nor does it include any estimates of quantities to be used or potentially stored on site. The proposed project involves a paved roadway around the entire facility, which will likely require the application of road salt or other deicers during winter months. Road salt contains chloride ions which could accumulate and migrate from the site or infiltrate into the soil contributing to water quality degradation. The FEIS should analyze potential impacts to groundwater and/or surface water associated with the use of road salt and/or deicers and include mitigation for the impacts on adjacent water resources.

(Memo #1, pg. 2, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 31.2:

Best management practices for limiting deicing requirements along with low or no-chloride deicing options that have limited impacts to the watershed will be used by WJWW. WJWW will have limited on site, indoor storage of deicers for emergency conditions (e.g., deicing sidewalks). Examples of alternative deicers and best management practices to be implemented include those described in the Northern Westchester Watershed Committee Highway Deicing Task Force Report.

Comment 31.3:

Appendix J indicates that 1.7 acres of freshwater wetland buffer disturbance is proposed on the property, but the mitigation measures are not included or explained. It appears that the freshwater wetland buffers will be affected by encroachment of a bioretention stormwater management area, pavement, sewer line installation,

and other site improvements but the DEIS does not make it clear how the impacts are mitigated and/or avoided. As DEP has consistently suggested in SEQRA reviews, to the extent practicable, stormwater basins should be located outside of the regulated wetland buffer area to minimize adverse water quality impacts.

(Memo #1, pg. 3, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3I.3:

The existing site is constrained by setbacks and the Purchase Street buffer that restricts the placement of the water filtration plant to within a building envelope and the stormwater basin in the location proposed. The plant building itself is restricted by the local zoning requirements for building height, which limits the opportunity to reduce the building footprint by increasing height. The building footprint is also dictated by the required treatment capacity of the plant, which cannot be reduced. Once the building footprint was established, the New York State fire code was reviewed, and required a minimum fire access roadway width of 26 feet. The other impervious areas of the site include the electrical equipment required to run the plant.

The impervious area has been minimized to the greatest extent practical to mitigate the sizing of the stormwater management practices (SMPs), which in turn mitigate the impacts to the wetland buffers. For example, the access road to the bioretention and stormwater wetland is a reinforced grass roadway that is pervious. The SMPs were sited on the downstream end of the site to mitigate disturbances and changing overall drainage patterns. The SMPs are also constrained by the geotechnical conditions of the site, specifically poor hydrologic soil group of the soils and the depth of seasonally high groundwater. This made infiltration practices on the site infeasible. An infiltration practice could have potentially reduced the footprint of the SMPs and not required the practice in series. Approximately 0.4 acres within the wetlands adjacent area would be permanently disturbed by the SMPs.

While the buffer disturbance involves removal of vegetation, several site inspections and review of available published reports and databases show the site contains no rare trees, plants, or significant natural communities. Additionally, 56 percent of the tree species on site are invasive and the Project proposes to plant 300 new native trees. The impervious areas have been designed to collect and treat stormwater runoff prior to discharge. This stormwater management treatment includes two SMPs in series and does provide some comparable wetlands as an undisturbed buffer. The benefits include pollutant removal, runoff reduction, and increased detention time. Any non-impervious area disturbed in the buffer would be carefully landscaped with an emphasis on native species.

Comment 3I.4:

The DEIS states that the "proposed limits of clearing for construction of the Project would result in temporary disturbance to approximately 1.7 acres of wetland adjacent area." Please provide a map delineating the boundaries of the temporary disturbance in the wetlands buffer zone.

(Letter #7, pg. 8, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3I.4:

The proposed limits of clearing for construction of the Project would result in temporary disturbance to approximately 1.7 acres of wetland adjacent area (i.e., within 100 feet of regulated wetlands). Disturbance would be associated with construction of the facility building, installation of Project Site utilities including the installation of the sewer line paving around the facility, and grassed walkways (to reduce impervious cover where practical). Appendix C, Site Plan Set, and Figure 3I-5 in the DEIS show the limits of disturbance and site improvements proposed within the delineated wetland adjacent areas. Chapter 3I, Wetlands Waterbodies,

Watercourses, and Floodplains in the DEIS details the wetlands, wetland adjacent areas, and the proposed disturbance.

Comment 3I.5:

Please provide a map showing the boundaries of the 0.26 acres of permanent impervious features that will be located in the wetlands buffer zone.

(Letter #7, pg. 8, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3I.5:

Permanent impervious areas (building, equipment pad, and paving) within the freshwater wetland adjacent area would cover approximately 0.26 acres. Appendix C, Site Plan Set, and Figure 3I-5 in the DEIS show the limits of disturbance and site improvements proposed within the delineated wetland adjacent areas. Chapter 3I, Wetlands Waterbodies, Watercourses, and Floodplains in the DEIS details the wetlands, wetland adjacent areas, and the proposed disturbance.

Comment 3I.6:

Please provide a map showing the boundaries of the 0.4 acres of permanent disturbance that will be located in the wetlands buffer zone.

(Letter #7, pg. 8, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3I.6:

Permanent impervious improvements would cover approximately 0.26 acres within the wetlands adjacent area. Another approximately 0.4 acres within the wetlands adjacent area would be permanently disturbed; however, this area would be used to construct a green stormwater management practice (SMP), such as a constructed wetland or bioretention area to provide the required water quality volume (WQv) needed to treat the projected stormwater runoff from the requisite design storm. Appendix C, Site Plan Set, and Figure 3I-5 in the DEIS show the limits of disturbance and site improvements proposed within the delineated wetland adjacent areas. Chapter 3I, Wetlands Waterbodies, Watercourses, and Floodplains in the DEIS details the wetlands, wetland adjacent areas, and the proposed disturbance.

Comment 3I.7:

Please explain the difference between a wetland and an "area wetland".

(Letter #7, pg. 8, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 3I.7:

There is no difference between a wetland or area wetland; this is simply a difference in phrasing. However, there is a difference between a wetland and a wetland adjacent area. The wetland is the area defined as a wetland and definitions vary between local, State and federal regulation. A wetland adjacent area is defined in Chapter 149 of the Town/Village of Harrison Code as "immediately adjacent to a freshwater wetland or lying within 100 feet of any such freshwater wetlands, measured horizontally from the boundary of a freshwater wetland." The State uses a similar definition to Harrison, and Harrison and the State regulate the wetland adjacent area.

J. ARCHAEOLOGICAL AND HISTORICAL RESOURCES

Comment 3J.1:

Opposed to the location because it is in a location with historical significance with the Quaker Meeting House and their associated cemetery.

(Public Hearing #1, pg.48, Nicole Sceko, Resident, 5/24/22)

Response 3J.1:

Chapter 3.J of the DEIS describes the Historic and Archaeological studies performed on the site and Appendix K, Historic and Archeological Resources, of the DEIS contains the studies and correspondence from the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP).

NYSOPRHP reviewed the Phase 1 Survey and concluded in a letter dated December 30, 2019, that the Project Site “contained no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places that would be impacted by the Proposed Action”. The installation of a new sewer line is also proposed for the Project Site. A request was made to NYSOPRHP for comments on the proposed additional disturbance areas and comments were received from NYSOPRHP on April 12, 2021. After review of the Phase 1 Study and other submitted information, NYSOPRHP opined that no historic properties, including archaeological or historic resources, would be affected by the Proposed Action.

K. TRAFFIC AND TRANSPORTATION

Comment 3K.1:

Traffic is a concern because there are 70 routes every day or 70 trips that they are allowed to take - that's clearly extremely concerning for anyone that lives in the area or anyone that even travels that road to go to the Purchase Community House, to go anywhere on that street.

(Public Hearing #1, pg. 45, Diana Schusterhoff, Resident, 5/24/22)

Response 3K.1:

The Site Work, Filtration Building Excavation phase, which would last for approximately three (3) months, would include approximately 70 trucks and 22-34 personnel on site per day. Per the Traffic Impact Study “during peak hours, 18 employees and 34 truck trips are projected to visit the site during this construction period.” The next most-intensive phase, the site work and site prep phase, would involve clearing, grubbing, stump extraction, removal of materials from the Project Site, and preliminary grading. This phase would last four months and require a daily average of 17 truck trips. The remainder of the phases would not require more than a daily average of five (5) trucks. Additional information on the traffic and construction impacts can be found in Chapters 3K, Traffic and Transportation and 3O, Construction, of the DEIS.

L. PUBLIC HEALTH

Comment 3L.1:

The negative impact on our community in terms of the safety of our drinking water as well as 1,000's and 1,000's of others... is unconscionable and totally irresponsible.

(Letter #2, pg.1, Fran Klingenstein, Resident and Board Member Purchase Environmental Protective Association, 6/5/22)

Response 3L.1:

Section 1.D of the DEIS describes the Project Purpose, Need, and Benefits, stating:

“The Proposed Action would address the health concerns posed by disinfection byproducts (DBPs) through the construction and operation of a water filtration plant as well as fulfills legal requirements with the USEPA and the State of New York regarding the construction of a filtration plant.

To address the health risks of DBPs such as haloacetic acids (HAA5) and trihalomethanes (TTHM), the USEPA adopted the Stage 2 Disinfectants and DBPs Rule on January 4, 2006. The rule requires more stringent regulations to provide for better public health protection against the risks associated with DBPs. The USEPA’s Stage 2 Rule is mandatory for public water systems serving between 50,000 and 99,999 retail customers, which includes WJWW. Starting October 1, 2012, WJWW was required to monitor the maximum contaminant levels (MCL) for total TTHM and HAA5. The results submitted for the first, second, and third quarters of 2019 exceeded these MCLs. In response, the USEPA issued two (2) administrative orders⁵, resulting in an obligation for WJWW to commence design of the proposed Rye Lake Filtration Plant and a Corrective Action Plan that outlines provisions to be taken to achieve compliance with MCLs standards...

In addition to satisfying existing legal obligations, the Proposed Action is a long-term solution to environmental pressures affecting the WJWW water source at Rye Lake. The construction of a water filtration plant provides a vital safeguard for the Rye Lake WJWW water source and WJWW’s nearly 120,000 residents in Westchester County that WJWW serves.”

Chapter 3N, Public Health, of the DEIS provides additional details on the public health benefits of the Proposed Action.

Comment 3L.2:

What this really means is that it is going to be an industrial building that is using chemicals that can very likely wind up in the watershed. So, this is serious business here for all of you and us.

(Public Hearing #1, pg. 40, Linda Heineman Keil, Member of Purchase Friends, 5/24/22)

Response 3L.2:

Chapter 3N, Public Health, of the DEIS discusses the chemicals used on site. All chemicals would be fully utilized on site; the only waste would be from dewatered solids. These would be piped through the filtration plant to centrifuges, with the dewatered solids cake being discharged to a trailer in the dewatering room. For removal, a truck would connect to the trailer, remove it from the building, and deliver it to an approved facility for disposal.

Six (6) chemicals would be stored inside the filtration plant and used onsite for operations: hydrofluosilicic acid (23 percent), alum coagulant, sodium hydroxide (25 percent), sodium hypochlorite (12.5 percent), orthophosphate (corrosion inhibitor) and a dewatering polymer. These chemicals are required for the operation of the water filtration plant to enhance filtration, control corrosion, prevent dental decay and provide secondary disinfection and are commonly used for water treatment.

⁵ See superseding Administrative Order No. SDWA-02-2020-8001

All chemicals would be stored and handled in a manner that would prevent releases to the environment and/or exposure to site workers, according to applicable Federal, State, and local regulations. Based on measurements from inside the plant, the closest bulk storage tank (hydrofluosilicic acid) is located approximately 300 feet from the northern property line. The chemical tanks would be located within the building. The fill station is located approximately 500 feet from the northern property line. This distance, combined with the placement of the storage tanks within the plant building and the implementation of containment measures, monitoring, and spill cleanup procedures required by State and Federal regulations, addresses concerns related to chemical storage. The fill tanks would be located outdoors.

For chemical delivery, a dedicated area (fill station) would be provided for tanker trucks to safely deliver chemicals with emergency containment to prevent a delivery spill from entering the environment. The fill station would contain designated hose connections for filling each specific chemical. Each chemical would have a dedicated fill line leading to an interior bulk storage tank. All chemicals would be fully utilized on-site, the only waste from the treatment process would be from dewatered solids. These would be piped through the filtration plant to centrifuges, with the dewatered solids cake being discharged to a trailer in the dewatering room. For removal, a truck would connect to the trailer, remove it from the building, and deliver it to an approved facility for disposal. It is anticipated that approximately two (2) to three (3) trailers a week would be removed from site.

Furthermore, this is not a unique situation as there are numerous other surface water treatment plants located within the NYC watershed, which routinely and safely store and utilize chemicals, while protecting the health of the Kensico watershed.

M. CONSTRUCTION

Comment 3M.1:

The project sponsor should demonstrate that there are appropriate staging and storage areas for construction equipment and vehicles on site during construction of the internal road. DEP recommends that the applicant provide detailed plans for each construction phase that demonstrates adequate space is available for these activities.

(Memo #1, pg. 1, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 3M.1:

The revised SWPPP found in **Appendix B** of the FEIS, has staging plans (drawings C-111 to C-113) associated with the construction activities. The contractor will have limited space to store soils onsite. The net earthwork for the project site is a cut that will require the majority of excavated soils to be hauled offsite given that the facility has tanks that are approximately 20 feet below grade.

Comment 3M.2:

The construction and the hours of construction is incredibly upsetting.

(Public Hearing #1, pg. 45, Diana Schusteroff, Resident, 5/24/22)

Response 3M.2:

Chapter 30 of the DEIS provides details on the construction impacts of the project. Construction activities would take place during typical work hours and fully comply with § 177-2(F) of the Town/ Village of Harrison Noise chapter, which limits construction activities to the hours of 7:30 a.m. to 8:00 p.m. Monday through Friday and

after 10:00 a.m. on weekends and national and state holidays unless the Town/Village Building Inspector determines that there is an imminent danger to life or property. No work would be conducted on Sundays. The proposed construction schedule includes 12 phases spanning a period of 36 months from notice to proceed (NTP) to completion once all permits and approvals are granted. Many of the construction phases overlap and all require a varying number of trucks on-site. The three (3)-month period when excavation work would occur for the filtration building is the most active phase in terms of the daily average number of trucks required at the Project Site. The reasonable worst case scenario estimate is that a daily average of 70 truck trips would be needed for the three (3)-month phase. The next most-intensive phase, the site work and site prep phase, would involve clearing, grubbing, stump extraction, removal of materials from the Project Site, and preliminary grading. This phase would last four (4) months and require a daily average of 17 truck trips. The remainder of the phases would not require more than a daily average of five (5) trucks.

Comment 3M.3:

Opposed to the location because bike riders use Purchase Street and 70 large construction trucks going by day-by-day for three years would be a safety concern and the location doesn't have the infrastructure to support that many vehicles.

(Public Hearing #1, pgs. 48-49, Nicole Sceko, Resident, 5/24/22)

Response 3M.3:

There are no bike lanes along Purchase Street, and any bike riders that use Purchase Street would ride in the drive lanes used for vehicles. Impacts from construction traffic would be temporary (during the 36-month construction period) and would conclude when the Project is completed. The parking of trucks or prolonged idling on public streets or within the shoulder area of public streets will be prohibited. The Site Work, Filtration Building Excavation phase, which would last for approximately three (3) months, would include approximately 70 trucks and 22-34 personnel on site per day. The next most-intensive phase, the site work and site prep phase, would involve clearing, grubbing, stump extraction, removal of materials from the Project Site, and preliminary grading. This phase would last four months and require a daily average of 17 truck trips. The remainder of the phases would not require more than a daily average of five (5) trucks.

The Traffic Impact Study that can be found in Appendix L of the DEIS conducted sightline measurements at the proposed driveway intersection with Purchase Street. The proposed driveway has adequate sight distances that accommodate exiting and entering vehicles and trucks without interfering with passing traffic. All sight distances for turning movements for trucks and vehicles comply with American Association of State Highway and Transportation Officials (AASHTO) requirements, with the exception of trucks turning left from the Proposed Site onto Purchase Street. Trucks coming out of the Project Site and turning left are required to have 800 feet of sight distance. The Project Site allows for 725 feet of sight distance for this turning movement, which is slightly less than the AASHTO requirement. It is proposed that construction trucks would be prohibited from making a left turn out of the Site during the construction phase, which effectively mitigates this issue. After construction, there would be limited truck traffic, and what truck traffic is anticipated for deliveries would not unduly interfere with users of the road.

Additional information on the traffic and construction impacts can be found in Chapters 3K, Traffic and Transportation and 3O, Construction, of the DEIS.

N. OTHER ENVIRONMENTAL IMPACTS

Comment 3N.1:

The Executive Summary states that the “filtration plant would have the capacity to filter the maximum day water supply demand of WJWW’s entire water distribution system.” Since the proposed WTP (water treatment plant) is designed for 30 mgd, one would assume that is the maximum day demand. However, when looking at the Annual Water Quality Reports prepared by WJWW, the maximum day demand over the past 13 years is 28.1 mg which occurred in 2011. The average maximum day over the 13-year period is only 23.5 mg, much less than the 30 mg max day the plant is designed for. On page 4-3 of the DEIS, it states that the current average demand is 13.8 and the peak demand is 23.7 mgd. While page 4-3 lists projects that “could have an additional impact”, no water demands were given for these projects and while they may seem large to the community, the water demand is not in the range of 6.5 mgd. In fact, some of the projects are replacing existing large corporate office buildings that contributed to the average and max demands in previous years so the increase in water demand is minimal to non-existent.

Furthermore, the DEIS does not state why the proposed WTP capacity was increased to 30 mgd from the 20 mgd that the 2008 WTP was designed to treat. Having worked on that design, the 20 mgd was established by reviewing the present and future needs of the WJWW. Included in the 20 mg was the sale of 3 mgd to Suez water through 3 connections downstream of the WTP. Suez was in fact responsible to pay for 3/20th of the entire cost of the WTP. The DEIS does not state if Suez, or any other water utility or municipality is going to contribute to the cost of the WTP.

(Letter #8, pg.1, Richard Ruge, 6/5/22)

Response 3N.1:

The design capacity of the proposed water filtration plant of 30 MGD is based on historic maximum day demand data and considers demand projections included in a report prepared for WJWW by HDR entitled “DRAFT Conceptual Design of an Alternate to the Rye Lake Source Using Shafts 20 & 22 of the Delaware Aqueduct”, dated December 2014, and provides redundancy for WJWW’s Delaware Aqueduct Shaft 22 source (see Appendix Q of the DEIS).

Since 2008 when the proposed filtration plant had a design capacity of 20 MGD, WJWW has invested in a number of major capital improvement projects to the distribution system over the past seven years, specifically designed to facilitate the transmission of water within all service zones. This includes the ability for WJWW to transmit water from its Rye Lake source to its low service zone which includes the Village of Mamaroneck, Town of Mamaroneck and Village of Larchmont.

The annual debt service associated with costs incurred for capital projects related to the joint water system infrastructure, the Rye Lake Filter Plant being one of those projects, is now incorporated into the wholesale water rate paid per gallon by Veolia Water New York, Rate District 2 (formally known as Suez Water Westchester). A similar concept will be used in relation to the wholesale water rate for the Village of Larchmont.

Comment 3N.2:

Has any thought been given to what security is going to be needed once the site has been built. Are there going to be bright lights around, is this something that's in danger - that it's a possible terrorist target, probably not, but I don't think that's been addressed at all in the Environmental Impact Statement.

(Public Hearing #1, pg.28, Ed Doty, Purchase Meeting Friends, 5/24/22)

Response 3N.2:

An eight (8)-foot high security fence, as required by NYSDOH, would surround the filtration plant and separate the plant from the airport property. All site lighting would be limited to securing the plant and plant operations. All site lighting would remain within the property boundary and not encroach onto the neighboring properties. WJWW does not anticipate this property or project being a terrorist target.

O. ALTERNATIVES**Comment 3O.1:**

It is irresponsible and illogical for WJWW to build the filtration plant within the protected Watershed when WJWW owns an alternative location outside the Watershed that is a preferable site for the plant, especially since no parties object to the WJWW Property Site, including PEPA, Purchase Quakers, the neighboring property owners, and Sylvan Development Corporation, which owns the property bordering 12 Stone Ridge Road. Additional advantages of the WJWW Property Site include:

- 1) The WJWW Property Site was purchase by WJWW in 2002 for the express purpose of constructing a water filtration plant.
- 2) It does not conflict with Harrison Comprehensive Plan.
- 3) It does not conflict with the Westchester County Airport Master Plan.
- 4) It does not require a land swap with the Westchester County or approval from the FAA.
- 5) It does not deforest over 6 acres of property fronting on Purchase Street.
- 6) It does not create more impervious surface in the Watershed.
- 7) It does not negatively impact the residents living near the Airport Site or the Purchase Quakers.
- 8) It will not result in a huge industrial plant visible from Purchase Street at the gateway to Purchase.

(Letter #1, pg.2, Anne Gold, Executive Director, Purchase Environmental Protective Association, 6/6/22)

In my opinion the site owned by WJWW is a better option ... It is outside of the Rye Lake watershed. In my opinion the site owned by WJWW is a better option ... [it] would not require a legislative action by the county board for a land swap that may or may not be of equal value. Westchester Joint Water Works needs to review the two sites and prepare a comprehensive comparison based on the submitted public comments to fully evaluate these options.

(Letter #3, pg.2, Richard L. Lyman, Purchase Meeting Friends, 6/3/22)

We request that the WJWW build the plant on the original site which they already own which not in the Rye Lake Watershed.

(Letter #4, pg.1, Peter Close, Trustee, Purchase Meeting Friends, 5/24/22)

WJWW should build its filtration plant on the property it currently owns and which was previously approved by the Town of Harrison for that purpose. I don't understand why an 11th hour "attempted land swap with the County Airport" now makes this site preferable to anyone, and especially not the homeowners who chose to live here and raise our family's here.

(Letter #5, pg. 1, Joseph M. Billone, Resident, 5/25/22)

Please explain why WJWW decided to build its filtration plant on the Proposed Site in the Rye Lake Watershed when it had the option to build its filtration plant on the site it already owns, a site that is outside of the Rye Lake Watershed.

(Letter #7, pg. 9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Please explain why it is advantageous to build the filtration plant on a S-B0- zoned parcel rather than on an R-2 One-Family residence district. Please explain in detail the obstacles that would have needed to have been overcome. Under normal circumstances, wouldn't it be far easier to get a zoning variance than to convince an airport to sell off chunks of Airport property to third parties?

Regarding page 5-13, what are the decreased environmental restraints that the Proposed Site has? What are the increased environmental restraints the Exchange Site has?

(Letter #7, pg. 9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Regarding page 5-15, Why is the Proposed Site a more "appropriate" location for the plant?

(Letter #7, pg. 10, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

This table also compares the Proposed Action to Alternative 2 which is the site of the 2008 WTP also known as the exchange parcel. It shows that there are more trees removed from the exchange parcel and it states that this site is less protective of surface waters and ecological resources than the proposed action (Page 5-25 of the DEIS). What the DEIS does not state is how many of the additional trees removed, site disturbance and 2 additional detention ponds is due to the construction of the access road or the WTP. This access road will become a public road once the developer, who owns the front portion, builds homes. Or to look at it another way, wont a subdivision built on this property require tree removal and construction of detention ponds and cross wetlands, etc.?

(Letter #8, pg. 3, Richard Ruge, 6/5/22)

We definitely would like to see the filtration plant at the original site rather than right behind our meeting house. And I don't quite understand from what we have been able to discover about the Environmental Impact Statement what was wrong with the first site. I have gotten a variety of information about it, but I don't really understand what is wrong with it. Particularly since I think the Joint Water Works has spent a lot of money doing an original site evaluation of that site.

(Public Hearing #1, pgs. 27-28, Ed Doty, Purchase Meeting Friends, 5/24/22)

I am extremely concerned about the proposed plan to tear down the trees along Purchase Street right next to the meeting house and build an industrial size building, right next to the Quaker Meeting and cemetery, especially when we know, and I have read the DEIS, we know that the Joint Water Works has another completely appropriate site which is not on Purchase Street, which it already owns, which it has already studied and found to be suitable, it has already cut down a lot of trees on the other site, and the other site is not next to a house of worship.

(Public Hearing #1, pg. 30, Austa Devlin, Purchase Meeting Friends, 5/24/22)

You already have another site and you know, you've owned that site now for 24 years if I am not mistaken ... So it is perfectly and appropriate site, it hasn't been explained why it's not any good.

You had a Final Environmental Impact Statement drafted, but I am sure if it has approved, but you've done all the site work, all of the investigations, they have -- they had to -- they had it done over a year ago now, I believe, and -- but you chose to go back to do that and come over next to our meeting house.

(Public Hearing #1, pg. 33, Peter Close, Trustee, Purchase Meeting Friends, 5/24/22)

My neighbors and I have done our research and we understand that WJWW already owns an alternative location outside the watershed that is not only a preferable site for the plant, no parties object to the alternate site, but was also the originally intended logical location for the plant.

I don't know what seems to be the mysterious circumstances as to why the location was moved to a much less desirable location which severely impacts me, all of my neighbors, the house of worship utilized by the Quakers, but this is just unjust and in my opinion outrageous.

Building it within the protected Kensico reservoir watershed, in close proximity to residential homes and a house of worship makes no sense whatsoever especially when WJWW already owns a site which makes more sense from every perspective.

(Public Hearing #1, pgs. 36-37, David De Lott, Resident, 5/24/22)

Opposition to the project location for the following reasons:

- 1) The plan to build an industrial size filtration plant next to the Meeting House is a misguided plan
- 2) The original site was a good location because it was not near homes, houses of worship, and not in the Rye Lake Kensico Reservoir Watershed.
- 3) The original site has already gone through much of the preparation and development that has yet to be done for the site on the airport property.
- 4) There is no need to spend money on duplicated assessments.

(Public Hearing #1, pgs. 38-39, Linda Heineman Keil, Purchase Meeting Friends, 5/24/22 and Letter #6, pg. 1, Linda Heineman Keil, Purchase Meeting Friends, undated)

Sylvan Development Corporation approves of the original site locations and would prefer the original site over the proposed location for the following reasons:

- 1) The original site already has a completed FEIS.
- 2) Concerns regarding County approval of the land swap
- 3) From Sylvan's perspective we don't understand what the exact reasoning was from moving to the airport site at this point in time.

(Public Hearing #1, pgs. 42-43, Eric L. Gordon, Keane and Beane P.C., representing Sylvan Development Corp., 5/24/22)

You already own a site and I am aware that it was already indebted, it is already owned by you guys, all the work has been done. So I implore you to please take a look at that original site again for the sake of my family, and all the residents in Purchase.

(Public Hearing #1, pg. 46, Diana Schusterhoff, Resident, 5/24/22)

The proposed action would result in 6.16 acres of disturbance in close proximity to the Kensico Reservoir in over 2 acres of new impervious and storage of at least six chemicals on site. As you are aware the Kensico Reservoir, a terminal reservoir, is integral to the City's water supply system and as such has been the focus of a decades-long watershed protection plan. Based on the information presented in the DEIS and thus far throughout the SEQRA process, Alternative 2, constructing the facility on the existing WJWW exchange site, would meet WJWW's objective at similar cost and allow for regulatory compliance while at the same time locating the facility and any inherent adverse impacts outside the boundary of Kensico Reservoir.

(Memo #1, pg. 4, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 30.1:

Chapter 5, Alternatives, in the DEIS includes a detailed comparison of Alternative 2, the option of building the proposed water filtration plant on the WJWW-owned Exchange Parcel to the Proposed Action. The Exchange Parcel is the subject of the land swap under the Proposed Action and was also the location of the proposed action described in the 2008 FEIS.

Alternative 2 involves the construction of a water filtration plant that is analogous to the Proposed Action, but on a different site, consistent with the description of the then-proposed action set forth in the 2008 FEIS. This includes construction of an access roadway connection between the plant and Purchase Street through the easement within the adjacent Sylvan residential subdivision to the west, as well as construction of the filtration plant itself on the 13.4-acre Exchange Parcel.

Although there are many similarities between the Proposed Action and Alternative 2 as detailed in Chapter 5 of the DEIS, WJWW believes that the Proposed Action is the preferred Alternative from a SEQRA perspective based on several important factors including, but not limited to, the location of the Project Site on a SB-0-zoned parcel which presently is part of the County Airport property, and which also is characterized by fewer environmental constraints as compared to the prior proposal for plant construction on the Exchange Parcel. Reasons explaining why the Project Site is superior to the Exchange Parcel are listed below. Additional details can be found in Chapter 5, Alternatives of the DEIS.

Land Use and Zoning

- Development of the Exchange Parcel with the proposed filtration plant would involve similar dimensional characteristics as would occur on the Project Site under the Proposed Action. However, the Exchange Parcel is located in an R-2, One-Family Residence zoning district. The Project Site is located in the Special Business District (SB-0), which is classified as a business (i.e., non-residence) district and is a more appropriate location for the proposed filtration plant based on zoning.
- The Project Site is located on Westchester County Airport land between the existing Rye Lake Pump Station and UV facility, and Purchase Street Water Storage Tanks located south of the Project Site on Purchase Street. The Project Site is not in use by the Airport and remains undeveloped. The Project Site is bordered to the north and east by Airport facilities, an access road, and airplane hangars. These uses are classified as transportation and communication. The Project Site is bordered to the west by Purchase Street, and residential land uses are found along and to the west of Purchase Street. A residential land use and the Purchase Friends Meeting House (an institutional and public assembly use), border the Project Site directly to the north.

- Within a ½-mile from the Project Site there are several water supply facilities including the Rye Lake Pump Station and UV facility, and Purchase Street Water Storage Tanks, all owned and managed by WJWW. Rye Lake WJWW water source is also within a ½ mile from the Project Site. Interstate 684, a major transportation corridor, runs north and southwest, approximately 500 feet from the Project Site, and Westchester County Airport, a transportation utility, is contiguous to the Project Site. Therefore, development of the filtration plant on the Project Site would be consistent with the surrounding utility land uses.
- The Exchange Parcel which would be the site of the proposed plant under Alternative 2 is vacant land that is adjacent to the Airport property to the east but is adjacent to existing residential uses to the north and a golf course to the south. The Exchange Parcel also adjoins the presently undeveloped but approved Sylvan residential subdivision to the west. The Exchange Parcel is surrounded by less utility land uses and more residential land uses than the Project Site.

As described above, based on the zoning and the surrounding land uses of the Project Site compared to the Exchange parcel, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Geology, Soils and Topography

- According to the 2008 FEIS, the disturbance area for the construction of the filtration plant on the Exchange Parcel would be approximately 12.77 acres. This area includes clearing necessary for the construction of the filtration plant and the access roadway through an easement connecting this parcel to Purchase Street. The 12.77 acres of disturbance on the Exchange Parcel is more than double the approximately 6.16 acres of disturbance it is estimated would occur on the Project Site (with direct driveway connection to Purchase Street). The 12.77 acres of disturbance on the Exchange Parcel is a conservative estimate, because the 2008 FEIS assessed the disturbance required for a 20-MGD water treatment plant, rather than the 30-MGD water treatment plant that WJWW is proposing at this time.

Based on the amount of disturbance required for the construction of the filtration plant on the Exchange Parcel compared to the amount of disturbance on the Project Site, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Wetlands and Floodplains

- Alternative 2 involves the construction of the proposed water treatment plant on the Exchange Parcel, which is located just outside the Kensico Reservoir drainage basin, whereas the Proposed Action Project Site is situated within this drainage basin, at a linear distance of approximately 800 feet from Rye Lake. Stormwater runoff from onsite impervious surfaces at the Project Site would be captured via curb inlets and roof drains and conveyed through the piped stormwater system. Flow would be conveyed to a proposed constructed wetland for water quality volume treatment, and then discharged to a bioretention cell. Following the bioretention cell, flow would be conveyed through a piped system to the underground stormwater detention structure to reduce the peak flow during storm events. A diversion structure would divert larger flows from larger stormwater events around the bioretention cell. Runoff from these larger storm events would be piped directly to underground stormwater detention structures. Flow from the project site would be discharged to a

stabilized swale via the Project Area Discharge Point (outfall), which flows to the unnamed stream, and ultimately flows to Rye Lake.

The Project complies with all local and State stormwater management regulations to protect the health of the Kensico watershed. The location of a water filtration plant within a NYC watershed is not a unique situation. The NYCDEP has requirements for developing this type of facility within a NYC watershed. The Project requires review and approval from NYCDEP for its Stormwater Pollution Prevention Plan which control for water quantity and quality.

Other examples of surface water treatment plants located within a NYC watershed are as follows:

- Carmel Water Treatment Plant
 - Water Source: Lake Gleneida
 - Watershed Location: Croton Watershed
 - Location: Carmel, NY
- Bedford Water Treatment Plant (Cross River Reservoir)
 - Water Source: Delaware Aqueduct, Backup: Cross River Reservoir
 - Watershed Location: Croton Watershed
 - Location: Katonah, NY
- Amawalk Water Treatment Plant (Amawalk Reservoir)
 - Water Source: Amawalk Reservoir
 - Watershed Location: Croton Watershed
 - Location: Katonah, NY
- Shaft 18 Chemical Addition Facilities
 - Watershed Location: Kensico Reservoir
 - Location: Valhalla, NY
- Rye Lake Pump Station
 - Water Source: Kensico Reservoir
 - Watershed Location: Rye Lake (Kensico Reservoir)
 - Location: Purchase, NY
- Town of New Castle Millwood Water Treatment Plant
 - Water Sources: Catskill Aqueduct, Backup: New Croton Aqueduct
 - Watershed Location: Outside of Watershed
 - Location: Millwood, NY
- Northern Westchester Joint Water Works Catskill Water Treatment Plant
 - Water Source: Catskill Aqueduct
 - Watershed Location: Outside of Watershed
 - Location: Cortlandt, NY
- Development under Alternative 2 would include disturbance of approximately 0.49 acre of regulated freshwater wetlands, for which approximately 0.67 acre of wetland enhancement would be undertaken as mitigation. By contrast, the Proposed Action would not encroach into regulated wetlands.

The Exchange Parcel would require wetland disturbance and the Project Site does not require any disturbance to wetlands. By this criterion, WJWW finds the Project Site to be the preferred location for the construction of the filtration plant. While the Project Site, unlike the Exchange Parcel, is located within the Kensico Reservoir, the project requires review and approval from NYCDEP for its Stormwater Pollution Prevention Plan which control for water quantity and quality to prevent harm to the Kensico Reservoir.

Stormwater/Utilities

- Development on the Exchange Parcel would result in approximately double the extent of impervious surfaces (at 4.6 acres, including the access roadway connection to Purchase Street), as compared to the 2.4 acres of impervious surfaces that would be constructed under the Proposed Action. Therefore, Alternative 2 would involve a significant increase in the volume of stormwater runoff generated and would also be required to provide on-site stormwater management in accordance with applicable regulations.
- Both Alternative 2 and the Proposed Action would involve the preparation and implementation of a SWPPP and associated Erosion and Sediment Control Plan to control stormwater during construction and to provide for long-term stormwater management during plant operation. However, because Alternative 2 would involve more than double the area of land disturbance in comparison to the Proposed Action, the potential for stormwater-related impacts during construction would be increased.
- Alternative 2 would involve more extensive construction to provide the requisite utility connections than would be necessary for the Proposed Action, as the Exchange Parcel is not situated proximate to existing utility lines. All utilities would have to run along the proposed 2,700-foot long access road within the easement from Purchase Street. Whereas the proposed Project Site has more convenient connections to existing utilities due to its location with frontage on Purchase Street.
- For construction and operation of the filtration plant under Alternative 2, an elevated power line would be installed above the access road to the proposed facility. This aboveground power line would go underground before connecting to the proposed facility. The Proposed Action would require connecting to electric utilities by way of existing overhead powerlines located along Purchase Street, which would be in close proximity to the Project Site.

As described above, based on the amount of additional disturbance and installation required for the stormwater management facilities, and water and electric facilities required in Alternative 2 compared to the Proposed Action, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Vegetation and Wildlife

- The 2008 FEIS indicates that the ecological communities within the development area for construction of the proposed filtration plant on the Exchange Parcel are dominated by an Oak-Tulip Tree Forest, with smaller areas of various freshwater wetland communities. This contrasts with the Project Site, which contains a much higher proportion of invasive species and previously disturbed area and is dominated by the less ecologically valuable Successional Southern Hardwood Forest community (Chapter 3H, Vegetation and Wildlife of the DEIS). According to the New York Flora Atlas of the New York Floral Association a Successional Southern Hardwood Forest is characterized by “hardwood or mixed forest that occurs on

sites that have been cleared or otherwise disturbed. Canopy trees are usually relatively young in age (25-50 years old) and signs of earlier forest disturbance are often evident⁶.” An Oak-Tulip Tree Forest is a “hardwood forest that occurs on moist, well-drained sites in southeastern New York.” This difference in existing ecological characteristics would magnify the impact that would result from the more extensive area of disturbance that would occur on under Alternative 2 as compared to the Proposed Action.

- The 2008 FEIS indicates that an estimated 642 trees of eight (8)-inch DBH or greater would be removed under the development plan proposed at that time for the Exchange Parcel, which is approximately 36 percent greater than the estimated 408 eight (8)-inch DBH trees to be removed under the Proposed Action on the Project Site. Approximately 276 trees were previously removed from the Exchange Parcel and road access area, leaving approximately 366 still to be removed. However, tree removal for development of the Exchange Parcel under Alternative 2 would generally impact more ecologically valuable Oak-Tulip Tree Forest species than would occur with the Successional Southern Hardwood Forest species that characterize the Project Site, of which 56 percent of the tree species surveyed on site are invasive. For both Alternative 2 and the Proposed Action, tree removal to accommodate the filtration plant would require a permit from the Town/Village of Harrison and would be required to comply with the Town/Village Tree Ordinance.

Based on the quality of the forests on the Exchange Parcel and the additional tree removal in an Oak-Tulip Tree Forest required in Alternative 2, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Construction

- As with the Proposed Action, Alternative 2 would include best management practices and other suitable measures to avoid or minimize construction-related impacts. However, because Alternative 2 would involve approximately double the area of disturbance in comparison to the Proposed Action, the potential for construction-related impacts would be increased.

Based on the potential for the increase in construction-related impacts of Alternative 2 to the Proposed Action, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

To summarize, Alternative 2 is less protective of surface water and ecological resources than the Proposed Action, considering that this alternative would encroach into wetlands, would involve more than double the area of site disturbance, and would involve clearing of higher value ecological communities than would occur under the Proposed Action. While Alternative 2 would be located outside the Kensico Basin, the Proposed Action would comply with the stringent NYCDEP regulations promulgated to protect the reservoir. Alternative 2 is also inferior to the Proposed Action in terms of the zoning and land use setting. These advantages of the Proposed Action outweigh any benefits that may be associated with a decreased potential under Alternative 2 for impacts with respect to visual/aesthetic resources given the location of the Exchange Parcel away from publicly accessible viewing locations, particularly when considering the setbacks and other mitigation that are included in the Proposed Action to minimize the Project’s visibility from Purchase Street and the residential and house of worship uses to the north as detailed in the DEIS Chapter 3.B, Community Character and Visual Impacts.

Agency decisions were not made on WJWW’s prior proposal to construct the proposed water filtration plant on the WJWW owned Exchange Parcel, since the SEQRA process at that time did not proceed to a findings statement. A key impediment to the completion of action on that prior application was perceived conflicts and

⁶ <https://newyork.plantatlas.usf.edu/EcologicalCommunities.aspx>, last accessed August 19, 2022.

concerns regarding project consistency with surrounding land uses, especially nearby residential development, given that the Exchange Parcel is situated in the Town/Village of Harrison's R-2 One-Family Residence District.

WJWW's identification of the Project Site as the preferred site has been identified in past studies as well. A 1994 study was undertaken by WJWW on seven (7) different sites. Site 3 is the Project Site, and Site 5 is the Exchange Parcel (see **Appendix C, 1994 Rye Lake Supply Treatment Study**). The study concludes that Site 3, the Project Site, is the preferred site for the construction of the filtration plant due to the following reasons:

- Close proximity to the existing water mains on Purchase Street, which will minimize the cost of connecting mains;
- Zoning of airport property;
- Sufficient land available and a relatively level site; and
- Existing trees will likely be sufficient to provide adequate buffer to local residents.

Comment 30.2:

The DEIS does not include a comparison for the pre- and post -development pollutant loading rates for the various alternatives suggested. An assessment of peak discharge rates and runoff volumes for the various design storms at the various discharge points for each of the alternatives should be included in the FEIS.

(Memo #1, pgs. 3-4, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

Response 30.2:

Each site alternative would have a different site layout, but it is anticipated that the final impervious area would be on the same order of magnitude for a 30-MGD facility on any site considered (with the exception of Alternative 2, which would require more impervious area due to the long driveway to the facility, as explained above). With comparable impervious area, it is anticipated that similar peak discharge rates and runoff volumes would be comparable to the selected site.

Comment 30.3:

The DEIS should include a comparison and analyses that considers site constraints and inherent limitations of development for the various alternatives. This should be of sufficient detail to allow for meaningful comparison of potential environmental impacts between alternatives and an accurate assessment of the requisite environmental mitigation.

(Memo #1, pg. 4, Cynthia Garcia, Supervisor, New York City Department of Environmental Protection, 5/26/22)

When the locations are being considered, environmentally as well as keeping the character of the location of the community is something that needs to be considered.

(Public Hearing #1, pg. 49, Nicole Sceko, Resident, 5/24/22)

Response 30.3:

The DEIS provides detailed comparisons and analyses that consider site constraints and the limitations of development for the various alternatives. Chapter 5 of the DEIS analyzes nine (9) different alternatives. The DEIS provides information on existing documents or other studies associated with the alternatives, projections based on past studies, Geographical Information Systems (GIS) data, and documentation that demonstrated why certain alternatives should be excluded from consideration.

Comment 30.4:

Regarding page 5-13-11, please explain whether the 2008 FEIS was adopted/accepted by WJWW or any other entity in 2008 or 2009. If so, please give the date that it was adopted/accepted. If not, please give the date(s) of any hearings scheduled or held by WJWW or any other entity for the 2008 FEIS to be adopted/accepted and the reason(s) why it was not adopted/accepted.

(Letter #7, pgs. 8-9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Please explain why the Proposed Site is now the preferred site when it was rejected as Alternative Site 4 in 2008? Please explain what changed between 2008 and 2022 that led the County/Airport to change its mind and allow WJWW to buy the Proposed Site while it had rejected the Proposed Site in 2008.

(Letter #7, pg. 9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Something happened between 2008 and 2021 -- 2020, and that's what I am trying to figure out. Apparently the Water Works did go to the airport and said we would like to have that site and the airport for some reason this time said yes, we will give you that site, okay. So that seems unusual to me. Why is the airport giving away land base for it?

(Public Hearing #1, pgs. 34-35, Peter Close, Trustee, Purchase Meeting Friends, 5/24/22)

Response 30.4:

The current Proposed Action is the outgrowth of a prior review process under SEQRA which included the preparation of the 2008 FEIS, whereby the action proposed at that time involved the construction of the water filtration plant on the WJWW-owned parcel situated to the south of Westchester County Airport, at the Exchange Parcel presently proposed for a land swap with Westchester County to provide WJWW with title to the Project Site.

As noted previously, agency decisions were not made on WJWW's prior proposal to construct the proposed water filtration plant on the WJWW-owned Exchange Parcel since the SEQRA process at that time did not proceed to a findings statement. Thereafter, WJWW reconsidered its options for providing filtration to the Rye Lake water supply. A key impediment to the completion of action on that prior application was perceived conflicts and concerns regarding project consistency with surrounding land uses, especially nearby residential development, particularly given that the Exchange Parcel is situated in the Town/Village of Harrison's R-2 One-Family Residence District.

A 1994 study was undertaken by WJWW on seven (7) different sites. Within this study, Site 3 is the Project Site, and Site 5 is the Exchange Parcel (see **Appendix C, 1994 Rye Lake Supply Treatment Study**). The study concludes that Site 3, the Project Site, is the preferred site for the construction of the filtration plant due to the following reasons:

- Close proximity to the existing water mains on Purchase Street, which will minimize the cost of connecting mains;
- Zoning of airport property;
- Sufficient land available and a relatively level site; and
- Existing trees will likely be sufficient to provide adequate buffer to local residents.

The 2022 DEIS also came to the same conclusions and reasons for preferring the Project Site over the Exchange Parcel. However, the Project Site was not an option that was available for WJWW to pursue until this current SEQRA process.

Comment 30.5:

Please explain why the location of the Exchange Parcel in an R-2 One-Family residence district was a concern or impediment to the completion of the action.

(Letter #7, pg. 9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 30.5:

The concern expressed by the public regarding the zoning of the Exchange Parcel revolved around the fact that the R-2 is a residential zoning district, and the proposed project was a utility use rather than a residential use.

Comment 30.6:

Please explain whether there were any third parties who objected to the placement of the filtration plant at Alternative Site 2. If so, who were these third parties and what were their objections?

(Letter #7, pg. 9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 30.6:

Please see **Responses 30.4 and 30.5**.

Comment 30.7:

Regarding page 5-17, based upon the detailed maps prepared in connection with the 2007 DEIS and 2008 FEIS, please quantify the additional mitigation to compensate for wetland buffer zone encroachment that the 2008 FEIS is alleged to have left out.

(Letter #7, pg. 9, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 30.7:

The impervious area that would be located within the wetland adjacent areas, if the filtration plant was built on the Exchange Parcel, is estimated to be 0.1 acres. Mitigation would most likely include vegetative plantings and stormwater management elsewhere on site similar to what is proposed for the Project Site.

Comment 30.8:

Regarding page 5-22, explain the method by which the number of 579 trees would need to be removed on the Exchange Site was calculated. What was the name of the method used to count trees? Was the method based upon estimating only or was it an actual tree count? What was the date the estimation or actual tree count was made? What portion of the estimation or actual tree count was attributable to the Exchange Site? What portion of the estimation or actual tree count was attributable to the Access Road? If the method was based upon estimating only, please obtain an accurate, up-to-date actual tree count for the Exchange Site. Again, if the method was based upon estimating only, please obtain an actual tree count for the Access Road to the Exchange Site. If there has been a tree count since the date of the 2008 FEIS hearing, please provide the date of that count, the method of counting and the updated tree count. An in-person investigation of the Access Road reveals that there are no trees on the access road.

An examination of the Exchange Site on Google Maps and the Real Estate Tax Maps of the Town of Harrison reveal that most of the trees on the filtration plant site on the Exchange parcel have already been cut/were cut between 2004 and 2007. Please obtain new tree counts by hand for the access road and the filtration plant site on the Exchange parcel. Regarding page 5-23, please re-calculate the area/limits of disturbance on the access

road and the filtration plant site on the Exchange parcel to reflect that most of the trees and tree stumps have already been removed. Please provide an updated comparison for the relative areas/limits of disturbance due to the construction on the Proposed Site versus the Exchange Site. This recalculation should reflect far less area/limits of disturbance on the Exchange Site than on the Proposed Site. Regarding page 5-25, paragraph beginning with "To summarize ..." Please update this paragraph to reflect the lowered area/limits of disturbance and lower tree count for the Exchange Site.

(Letter #7, pg. 10, Peter Close, Trustee, Purchase Meeting Friends, 6/6/22)

Response 30.8:

A tree survey was conducted at the Project Site to determine if any environmentally significant species are present that warrant special consideration. The survey recorded the common name, scientific name, and tree diameter breast height (DBH) for each regulated tree. According to the Town/Village of Harrison's code (Chapter 220: Trees), a regulated tree is "any living, woody plant, its root system and the area within the outer limit of its branches, which is four (4) inches or more in diameter of its trunk measured at breast height."

The tree survey revealed a total of 1,896 trees with a DBH of four inches or greater. The largest DBH surveyed was a Cottonwood (*Populus deltoides*) at 66.4 inches. Of note, four trees were measured with DBHs at 33.5" (Norway Maple); 34.2" (Norway Maple); 36.5" (Red Maple); and 41.8" (Norway Maple). The smallest trees surveyed had DBHs of four (4) inches. In total, there were twenty-one different tree species identified on site; however, the tree surveys concluded that there are no tree species that would warrant special consideration during the proposed construction of the filtration plant. Furthermore, based on the several Site inspections and review of available published reports and databases, the Site contains no rare trees, plants or significant natural communities. Of the 1,896 trees found on the Project Site, 56 percent of them are invasive.

The 2008 FEIS indicates that an estimated 642 trees of eight (8)-inch DBH would be removed under the development plan proposed at that time for the Exchange Parcel, which is approximately 36 percent greater than the estimated 408 eight (8)-inch DBH trees to be removed under the Proposed Action on the Project Site. Approximately 276 trees were previously removed from the Exchange Parcel and road access area, leaving approximately 366 still to be removed if the filtration plant were to be located there.

Comment 30.9:

Sylvan is now in favor of placing the water filtration plant at the 12 Stone Ridge Site, rather than the airport site included in the Proposed Action. Sylvan prefers providing access to the water filtration plant at the 12 Stone Ridge Road site through airport property via Tower Road and the airport access road to avoid having WJWW delivery and employee traffic running through the Sylvan Subdivision once that subdivision is constructed.

However, Sylvan would agree to waive any objections to allowing all construction traffic to enter and exit through the proposed road on filed Subdivision Map 26544, filed with the Westchester County Clerk on May 2, 2020, or to WJWW running all electric, water, sewer, gas or other utilities from Purchase Street through the Sylvan subdivision to the 12 Stone Ridge Road site, so long as Sylvan is granted the right to tap into any such utilities and that appropriate connections are installed.

With respect to providing access to the 12 Stone Ridge Road site after the water filtration plant is constructed, as stated above, the preferred alternative would be to have such access for WJWW's employees and deliveries to the water filtration plant via Tower Road and through the airport access road. Sylvan has determined that

access could be achieved this way without having to obtain easement rights over any private properties. In addition, Sylvan would be willing to cooperate with and assist WJWW to obtain access rights over Tower Road and the airport access road and to work with the WJWW to improve any roads needed to allow such access.

To the extent it is ultimately determined that access to the 12 Stone Ridge Road site cannot be provided via Tower Road and the airport access road, Sylvan would also agree to waive any objections to allowing access to the water filtration plant through the Sylvan Subdivision. Sylvan would request as a condition of allowing such access that any road constructed through the Sylvan Subdivision shall meet all Town and State fire and safety code standards, that appropriate curb cuts be installed for the proposed lots as shown on the attached filed Subdivision, and that utility spurs be provided for the proposed lots in the Sylvan Subdivision.

(Letter #10, pg. 2, Eric L. Gordon, Keane and Beane P.C., representing Sylvan Development Corp., 5/17/22)

Response 30.9:

The Exchange Property was purchased as part of a 40-acre parcel by WJWW in 1998 in anticipation of the potential future need for a water treatment plant. After purchasing the 40-acre parcel, WJWW determined that it only needed 13.4 acres and sold the rest to a private developer, while retaining an easement that runs east/west through the center of the western portion of the original parcel from Purchase Street. The 2008 FEIS proposed that this easement would be used for raw and filtered water transmission mains, an access road to the facility, and other water treatment facility utilities. The 2008 FEIS also examined three alternative routes to access the Exchange Parcel, besides the then-proposed westward connection to Purchase Street via the easement through the adjacent Sylvan subdivision property:

- A) eastward from the Exchange Parcel, onto the Airport property, and then southward to Lincoln Avenue
- B) northward from the Exchange Parcel to the internal roadway system at the Airport, then westward to Tower Road and continuing on Tower Road westward to Purchase Street
- C) westward from the Exchange Parcel and then northward to the internal roadway system at the Airport, then (following the same route at that point as Option B) westward to Tower Road and continuing on Tower Road westward to Purchase Street.

The 2008 FEIS determined that none of these three alternate access routes to the Exchange Parcel was viable, based on the following considerations:

- As indicated, all three alternate access routes would encroach onto Airport property, which would necessitate proprietary approval from Westchester County and the FAA. Specifically, Routes B and C would connect to the Airport's internal roadway system so that traffic can travel on Tower Road to Purchase Street, while Route A would enter Airport property to the south of its internal roadway system. Therefore, absent the County's concurrence, none of the alternate access routes are practical as they are simply not available for WJWW's use. With respect to Routes B and C, the County has stated that the non-airport use of Tower Road would be inconsistent with Tower Road's status as an airport "access road" under Federal Aviation Administration grant-making policies⁷ and with the County's past and future reliance on FAA grant monies for the airport. In 2016, the County received funding from the FAA to rehabilitate Tower Road (See Appendix B, Legal Documentation in the DEIS).
- All three alternate access routes would also traverse private property for which easements would be needed, separate from and in addition to the requisite County approval discussed above. WJWW does not currently have ownership interest in these private lands, across

⁷ Table C-2 of the Airport Improvement Program Handbook www.faa.gov/airprts/aip/aip_handbook/?Chapter=Appendix#PC01

which the alternate access routes connecting to the Exchange Parcel would have to pass, further magnifying the impracticality of these development scenarios.

In contrast, the means of the roadway connection proposed in the 2008 FEIS is already established via the existing easement to the west and WJWW already has the necessary ownership interest, thereby making this a reasonable and feasible alternative for the purposes of the DEIS, as analyzed above, notwithstanding that the previous SEQRA process for this proposal was unable to reach a conclusion, primarily due to opposition to locating the facility on the Exchange Parcel and the use of the access easement as the access roadway for the filtration plant. As a result of the SEQR process not able to reach a conclusion, this prompted WJWW to pursue different options which lead to the current Proposed Action which utilizes a vacant portion of the Airport property with access from Purchase Street as the Project Site. Notwithstanding Sylvan's ongoing dialogue about conditions, the fact remains that the Project Site is more appropriately located to WJWW's existing water transmission main beneath Purchase Street and the necessary utility connections for the project, reducing environmental impacts and Project cost. See **Response 30.1** for more information on why the Project Site is the preferred site.

Comment 30.10:

Alternative 2 has significant adverse impacts to wetlands and stormwater management. Alternative 2 requires the loss of 0.49 acres of regulated freshwater wetlands and disturbance to the 100-foot-wide regulatory adjacent area to these wetlands. (p. 5-19, DEIS). Given the increased frequency of significant storms, wetlands are critical to protecting neighboring properties from stormwater runoff as well as reducing the flow into the stormwater sewers. In fact, the negative stormwater runoff situation is further exacerbated by doubling the impervious surface due to the need to construct an access road through the wetland area as compared to the Project Site. (p. 20, DEIS).

(Letter #11, pgs. 1-2, David Naidu, K&L Gates, representing a property owner, 6/4/22)

Alternative 2 has significant adverse impacts to the natural tree canopy and the native ecosystem. As noted in the DEIS, the Exchange Parcel is "dominated by an Oak-Tulip Tree Forest." (p. 5-22, DEIS). Construction at the Exchange Parcel would result in the destruction of an estimated 642 trees, which is "approximately 11% greater than the estimated 579 trees to be removed under the Proposed Action on the Project Site." In addition to increased numbers of trees to be removed, the Project Site has a higher proportion of invasive species. (p. 5-22, DEIS). A native tree canopy provides for ecosystem for native species. Thus, from both a quantity and quality perspective, Alternative 2 would be a worse option than the Proposed Action for flora and fauna of the area.

(Letter #11, pg. 2, David Naidu, K&L Gates, representing a property owner, 6/4/22)

The Exchange Parcel located in the Town/Village of Harrison's R- 2 One Family Residence District and placement of an industrial facility at this location would be inconsistent with the existing land uses, such as my client's residential home and would have adverse impact on residential property values.

(Letter #11, pg. 2, David Naidu, K&L Gates, representing a property owner, 6/4/22)

Response 30.10:

Comment noted. See **Response 30.1** for additional reasons why WJWW finds the Project Site the preferred site for the filtration plant.

Comment 30.11:

I spoke to three legislators last night at the airport master plan hearing and they had no idea that this required a land swap. They kind of had heard about the water filtration plant and they had not heard about the memorandum of understanding. So I think that it seems like this is all so far along and you don't even have permission to build it on the land where you are planning on building it, and that's something that I'd like to know more about. I know it is not a dialogue, but I would like to you know, get some feedback on that when it's possible.

(Public Hearing #1, pgs. 25-26, Anne Gold, Executive Director, Purchase Environmental Protective Association, 5/24/22)

Response 30.11:

Westchester County is aware of the project and has provided a Memorandum of Understanding dated November 30, 2021, which can be found in Appendix B of the DEIS. The project will require approval from the Westchester County Board of Legislators for the land transfer of the Airport property to WJWW, but the land transfer cannot take place until the SEQR process is complete.

Comment 30.12:

It's a swap, but the most important thing it was the same area, 13 acres, but the value of that piece of property, okay, is much less. It's not an even swap, they're not of equal value. I don't think there is any way any appraiser would appraise something way back off of Purchase Street, where there were like 700 feet of frontage on Purchase Street

(Public Hearing #1, pg. 35, Peter Close, Trustee, Purchase Meeting Friends, 5/24/22)

Response 30.12:

The appraised market value of the two properties is not required to assess the environmental impacts of the Proposed Project under SEQRA. It is anticipated that the County would convey the 13.4 acres to WJWW in exchange for another property of equal size, Exchange Parcel (Parcel ID 0961.1) from WJWW, resulting in no net loss of airport property. The Exchange Parcel would benefit the County because it is adjacent to the Westchester County Airport and would be left in its existing condition or used for airport stormwater management or wetland restoration projects undertaken by the County.

Comment 30.13:

We want to make sure a lot of the mitigation efforts that have now been designed by your new set of professionals would be implemented for the alternative site and that the alternative site be studied and all the mitigation efforts be put into the alternative site and a real comparison between the two as to what are the benefits and what aren't.

(Public Hearing #1, pg. 43, Eric L. Gordon, Keane and Beane P.C., representing Sylvan Development Corp., 5/24/22)

The alternatives are an important part of the SEQRA analysis, but to just dismiss them and to move forward as if there are no other alternatives, especially in this situation where there is a very valid alternative.

(Public Hearing #1, pg. 44, Eric L. Gordon, Keane and Beane P.C., representing Sylvan Development Corp., 5/24/22)

Response 3O.13:

Alternative 2 was studied in detail during the 2007-2008 DEIS and FEIS SEQR process. Those impacts and mitigation efforts were discussed and compared in Chapter 5 of the DEIS. In addition, **Response O.1** provides additional information on the reasons why the Project Site is the preferred location for the filtration plant. In addition, Chapter 5 of the DEIS analyzes nine (9) different alternatives. The DEIS provides information on existing documents or other studies associated with the alternatives, projections based on past studies, Geographical Information Systems (GIS) data, and documentation that demonstrated why certain alternatives should be excluded from consideration.

P. MISCELLANEOUS**Comment3 P.1:**

I am totally against the constructing of plant. I have been a resident for 43 years. Please stop.

(Letter #9, pg. 1, Kenneth R. Stuart, Resident, 5/31/22)

Response 3P.1:

Comment noted.