TOWN OF CARMEL

ENVIRONMENTAL CONSERVATION BOARD

60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 - Ext. 190
www.ci.carmel.ny.us

ENVIRONMENTAL CONSERVATION BOARD AGENDA

APRIL 18, 2024 – 7:30 P.M.

EXTENSION OF WETLAND PERMIT

APPLICANT	ADDRESS	TAX MAP #	COMMENTS
1. NYCDEP West Branch Auxiliary Dam	34 Drewville Road	65.-1-5	Site Plan (Planning Board Referral)

SUBMISSION OF APPLICATION OR LETTER OF PERMISSION

2. Veolia (formerly Suez) Water Mahopac Wells	Behind 34 Coventry Circle	75.20-2-68	Upgrades to Existing Well Site

Environmental Protection

Rohit T. Aggarwala
Commissioner

Ana Barrio
Deputy Commissioner
Bureau of Engineering Design & Construction

Sean McAndrew, P.E.
Executive Director
Water System Capital Program

16 Little Hollow Road
Grahamsville, NY 12740

Tel. (845) 334-7195
Fax (845) 985-2282
mcandrews@dep.nyc.gov

April 12, 2024

Town of Carmel
Environmental Conservation Board
60 McAlpin Avenue
Mahopac, NY 10541
Attn: Rose Trombetta

RE: New York City Department of Environmental Protection
Bureau of Engineering, Design and Construction
CRO-534: West Branch Reservoir Auxiliary Dam (Putnam County)
Slope Safety Improvements Project - Request to extend Wetland Permit

Dear Environmental Conservation Board Members,
The New York City Department of Environmental Protection (DEP) is requesting approval to extend the Wetland Permit for the referenced project at the West Branch Auxiliary Dam, Tax Map #65.-1-5, originally issued by the Environmental Conservation Board (ECB) on April 20, 2023.
The DEP is requesting to be added to the ECB's next available meeting agenda on April 18, 2024.

If you have any questions, please contact Linda Singh at 917-207-9477 or via e-mail at LindaSi@dep.nyc.gov .

Sincerely,

Arne Fareth

Arne Fareth, P.E.
Portfolio Manager

cc. L. Singh, DEP
I. Kennelty, DEP
S. Salzberg, DEP
E. LeClair, CDM Smith
M. Encinas, CDM Smith

ATZL, NASHER & ZIGLER P.C.
ENGINEERS - SURVEYORS - PLANNERS
Web: www.anzny.com

April 12, 2024

To: Mr. Robert Laga, Chairman
Town of Carmel Environmental Conservation Board (ECB)

Re: Site Plan update summary– Mahopac Wells 1, 2 & 3 (Behind 34 Coventry Circle, Mahopac, NY 10541)

Cc: Ms. Rose Trombetta, Secretary

Dear Mr. Laga:

We wish to summarize the recent update to the Site Plan of the above referenced project which has been modified based on feedback received from your Board (ECB) during the March 21, 2024 meeting.

To eliminate any disturbance of the wetlands we have revised the Site Plan to incorporate a retaining wall on the west end of the proposed dry pond. The new design obviates the need to grade within or otherwise permanently disturb the wetlands. Therefore, wetland mitigation measures will no longer be necessary.

We respectfully request the ECB to kindly accept and subsequently approve the wetlands permit application for this project, conditioned on the following:

1. Veolia North America ("Veolia") will submit a landscape maintenance bond to the Town Clerk after Planning Board approval has been obtained. In the interim timeframe, Veolia will communicate with various Town departments in order to clarify any questions they may have about the same.

2. Veolia will submit any new correspondences from the NYSDEC and/or ACOE when these are received. It is understood that if there are any changes to existing permits granted by these agencies, additional review by the ECB may be necessary.

Thank you for your cooperation in this matter.

Very Truly Yours,

Ryan A. Nasher, P.E.
Vice President

HUNTERS RUN HOMEOWNERS ASSOCIATION, INC.

March 20, 2024

Hon. Robert Laga, Chairman, and
Members of the Town of Carmel Environmental Conservation Board
60 McAlpin Avenue
Mahopac New York 10541

RE: *Submission by the Hunters Run Homeowners Association, Inc., in Support of the Amended Application by Veolia Water New York Inc. (Veolia) (formerly SUEZ Water New York, Inc.), for Approval of the PFAS Treatment Facility*

Dear Chairman Laga and Members of the Board,

I am president of the Hunters Run Homeowners Association, Inc. (the "HOA"), and am writing on behalf of the HOA in support of the above-referenced application. As you are aware, Veolia Water New York Inc. (formerly SUEZ Water New York, Inc.), has applied for site plan approval and a conditional use permit to authorize a PFAS water treatment facility within its easement that encumbers property owned by the HOA. The HOA has reviewed the set of plans currently before the Planning Board, titled "Mahopac Wells 1, 2 & 3", prepared by Atzl, Nasher & Zigler P.C., last revised February 12, 2024, which will also be subject to your review, and urges your Board to take positive action with respect to them.

The HOA recognizes that the proposed project will advance the important objective of meeting state-imposed requirements for water treatment, serving both the public at large and the HOA's members, while not generating any significant impacts.

Respectfully submitted,

Hunters Run Homeowners Association, Inc.

By: _____
Kenneth Schweigler, President

cc: Rose Trombetta (*via electronic mail*)

S:\# MATTERS\Kirkpatrick 0311\Carmel Zoning Matter (SUEZ) 004\Letters\HOA Letter to ECB.docx

NYSDEC DELINEATED FRESHWATER WETLAND MAP

SUEZ Water New York, Inc.
PFAS Compliance Project H - Mahopac Well

Town of Carmel,
Putnam County, NY

Data Source: Aerial Imagery provided by ArcGIS webservices. Stream and wetlands delineated by Gannett Fleming Spring 2021.

This SWPPP was prepared in accordance with SPDES Permit No. GP-0-20-001 and must be kept on the job site and available for use of contractors and sub-contractors. Certifications by applicant/developer and by the contractors/subcontractors are included. A copy of the Notice of Intent (NOI), which must be filed at least 5 days prior to the commencement of any work along with the MS4 SWPPP acceptance form, is included herein. Notice of Termination (NOT) must be filed when all stormwater management facilities are in place and the site has been stabilized with specified vegetation. Sample inspection forms are included. Operation and maintenance plan is attached and included both temporary and permanent facilities maintenance. This SWPPP, together with all required plans, completed inspection forms and log of activities including any mitigation of items noted on inspection forms must be kept on the job site and available for inspection by all regulatory authorities.

FULL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REPORT

Prepared For:

Mahopac Wells 1, 2, & 3
Town of Carmel, Putnam County, New York

Prepared By:

ATZL, NASHER & ZIGLER
Engineers – Surveyors – Planners
232 North Main Street
New City, New York 10956
Tel. (845) 634-4694 • Fax (845) 634-5543

This plan has been prepared to comply with the provisions of the SPDES general permit no. GP-0-20-001, issued by the New York State Department of Environmental Conservation for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared and revised under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations.

Revision 4: April 09, 2024
Revision 3: January 19, 2024
Revision 2: May 02, 2022
Revision 1: September 30, 2021
Date: August 27, 2021
Job No. 4870

Ryan A. Nasher, P.E. License No.: 89066
New York State Professional Engineer

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APPENDIX-F:

MAPS:

Section 1: O, I & M

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

SECTION 1:

OPERATION INSPECTION AND MAINTENANCE PLAN REPORT

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

1.0 INTRODUCTION

1.1 Notice of Intent:

Section 402 of the Clean Water Act requires permits for stormwater discharge from construction activities, which disturb one or more acres of land to obtain a permit. To implement this law, the New York State Department of Environmental Conservation (NYSDEC) issued the General Permit GP-0-20-001 for Stormwater Discharges from Construction Activities. The Notice of Intent (NOI) is the means to obtain coverage under this permit.

1.2 SWPPP Goals and Objective:

The goal of the Stormwater Pollution Prevention Plan (SWPPP) is to control runoff of pollutants from the project site during and after construction activities by complying with the NY State Pollutant Discharge Elimination System (SPDES) Stormwater Permit for construction activities and local rules and regulations. The SWPPP will implement the following practices:

- Reduction or elimination of erosion and sediment loading to waterbodies during construction;
- Control of the impact of stormwater runoff on the water quality of the receiving waters;
- Control of the increased volume and peak rate of runoff during and after construction; and
- Maintenance of stormwater controls during and after completion of construction.

The SWPPP will incorporate the proper selection, sizing and siting of the Stromwater Management Practices (SMPs) to protect water resources from stormwater impacts. The design of the proposed SMPs were determined using current engineering methodologies to provide appropriate sizing criteria to avoid overburdening stormwater conveyance structures. Erosion and Sediment Control (ESC), Water Quantity Control, and Water Quality Controls are inter-related components of the SWPPP.

The SWPPP is intended to be a "living" document. The document should be revised and updated by a qualified professional whenever site conditions dictate. Any proposed revisions shall undergo review by the owner or his designated representative prior to incorporation in the SWPPP and implementation at the site. Any proposed modifications shall be in accordance with the New York State Department of Environmental Conservation's technical standards.

2.0 SITE DESCRIPTION

2.1 Project Name & Location:

Mahopac Wells 1, 2, & 3
Town of Carmel
Putnam County, New York
Town of Ramapo Tax Map: Section 75.20, Block 2, Lot 68

2.2 Owner/Operator Name & Address:

Suez Water New York, Inc.
Attention: Steven Garabed
162 Old Mill Road
West Nyack, NY 10994
Email: steven.garabed@suez.com

2.3 General Contractor*:

_____
(Company Name)

_____
(Street Address)

_____
(City, State, Zip Code)

_____
(Phone Number)

*note – General Contractor shall be identified prior to commencement of work.

2.4 Description:

The project site is located east of Bucks Hollow Road, $\pm 890 ft$ south of Astor Drive in the Town of Carmel, Putnam County, New York. The site has an area of about 53.382 acres. The existing site consists of a pond, woods, grass, an access gravel area road, and some impervious area. The developed site includes the construction of a building and an increase in the gravel coverage.

Soil Name	Soil Map Symbol	Hydrological Soil Group
Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	CrC	B
Natchaug muck, 0 to 2 percent slopes	NcA	D
Sun loam	Sh	D

* Source: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
** HSG "B & D" were used in the drainage calculation.

Soil disturbing activities will include clearing and grubbing; installation of a stabilized construction entrance; grading (cuts & fills); excavation for the installation of drainage pipes, SMPs, sanitary sewer connections, water main connections, building foundations, stormwater management facilities and the preparation for final planting and seeding.

2.5 Impervious Cover:

Impervious cover within the planned disturbance will be increased from 0.126 acres in the existing condition to 0.242 acres in the proposed condition.

2.6 Site Area:

The site is approximately 53.382 acres and about 0.985 acres will be disturbed by the proposed construction activities.

2.7 Location Map:

STREET MAP
Source: maps.google.com

2.8 Sequence of Major Activities:

Phasing and schedule of construction is as follows (several phases will overlap):

Phase 1: Clearing and grubbing of designated areas

Phase 2: Land grading according to the approved site development plan

Phase 3: Building construction

Phase 4: Utilities construction

Phase 5: Final Grading, landscaping

The general order of activities will be as follows:

1. Schedule a pre-construction meeting.
2. Locate natural resources and the limit of disturbance per approved plans.
3. Install perimeter erosion and sediment control practices (silt fences).
4. Install construction entrances and temporary staging.
5. Limit grading for installation of E&SC practices.
6. Dispose clearing and grading materials as construction progresses.
7. Stockpile top soil and stabilize.
8. Perform rough grading/cut & fill and stabilize inactive areas.
9. Install utilities and drainage structures.
10. Construct foundation and building structure as per plan.
11. Apply soil restoration practices as described in the plan.
12. Perform final stabilization, i.e. top soil and landscaping.
13. Remove sediment accumulations and complete permanent post construction SMPs per the approved plan.
14. Remove E&SC practices and apply for a Notice of Termination (N.O.T.).

3.0 CONTROLS

3.1 Erosion and Sediment Controls Stabilization Practices:

3.1.1 Temporary Stabilization:

Topsoil, stockpiles, and soils that are exposed and left bare for a period of 14 days which are not being graded, not under active construction for 14 days or more, or not scheduled for permanent seeding within 14 days will be stabilized with temporary seed and mulch. All grass seed mixtures and application rates shall comply with Sediment and Erosion Control Plan.

Areas of the site, which are to be paved; will be temporarily stabilized by applying stone sub-base until bituminous pavement can be applied.

3.1.2 Permanent Stabilization:

Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 14 days after the last construction activity.

3.2 Structural Practices:

Proposed measures will include silt fences, construction fence, concrete washout, stockpile, and stabilized construction entrance.

3.3 Stormwater Management Water Quality:

Stormwater runoff generated by the rooftop will be directed towards the proposed dry pond system through a combination of downspouts and pipes.

The stormwater management system has been designed to comply with the most recent NYSDEC design manual requirements. The dry pond system is designed to treat the first flush water quality volume of required impervious area, according to NYSDEC redevelopment rules.

The property owner shall be responsible for the long-term operation, maintenance and inspection of the proposed stormwater management facilities and provide maintenance records to the Town of Carmel.

3.3.1 Name of Receiving Waters:

The site drains towards a NYSDEC wetland. The site is located in one of the watersheds identified in Appendix C of GP-0-20-001.

3.4 Peak Flow Attenuation:

In order to provide the zero net increase of peak runoff, a Dry Pond System has been proposed.

3.5 Runoff Conveyance Systems:

The stormwater pipes and the 12-inch riser with domed structure are design to convey the 10-year peak flow discharge.

3.6 Other Controls:

3.6.1 Waste Materials:

All waste materials will be collected and stored in securely lidded metal dumpsters rented from ____________________________, a solid waste management company located in Putnam County (name of carting company to be identified 30 days prior to commencement of work). The dumpsters will meet Town of Carmel, Putnam County, and New York State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpsters. The dumpsters will be emptied as necessary, and the trash will be hauled off site to ______________________________(destination to be identified 30 days prior to commencement of work). No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer and ____________________, the Job Supervisor, individual who is responsible for managing the day to day site operations, will be responsible for seeing that these procedures are followed (Job Supervisor shall be identified 30 days prior to commencement of work).

3.6.2 Hazardous waste:

All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in these practices and ________________________, Job Supervisor, individual who is responsible for managing the day to day site operations, will be responsible for seeing that these procedures are followed (Job Supervisor shall be identified 30 days prior to commencement of work).

3.6.3 Sanitary Waste:

A licensed sanitary waste management contractor (sanitary waste management contractor to be identified 30 days prior to commencement of work) will collect all sanitary waste from the portable units.

3.6.4 Offsite Vehicle Tracking:

A stabilized construction entrance and gravel pad will be provided to wash or spray-clean trucks over before leaving the site in order to prevent track-out of dirt, mud, debris and dust. In addition, trucks will be covered with a tarp and at least 6 inches of freeboard clearance will be maintained to keep excessive dust from escaping the truck during hauling operations.

3.7 Timing of Control Measures:

As indicated in the Sequence of Major Activities, the stabilized construction entrance and other sediment and erosion control activities will be constructed prior to earthwork activities on any part of the site. Any soil areas that are exposed and left bare for a period of 14 days which are not being graded, not under active construction for 14 days or more, or not scheduled for permanent seeding within 14 days will be treated with temporary seed and mulch. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch. After the entire site is stabilized, accumulated sediments will be removed from the sediment and erosion control structures and the controls will be removed.

3.8 Certification of Compliance With Federal, State And Local Regulations:

The stormwater pollution prevention plan reflects New York State Department of Environmental Conservation requirements for storm water management and erosion and sediment control, as established in Article 17, Titles 7, 8 and Article 70 of the Environmental Conservation Law. To ensure compliance, this plan was prepared in accordance with guidelines issued with the SPDES General Permit for Storm Water Discharges from Construction Activities that are Classified as "Associated with Construction Activity", published by the NYSDEC.

4.0 MAINTENANCE & INSPECTION PROCEDURES

4.1 Sediment & Erosion Control Inspection And Maintenance Practices:

The following are inspection and maintenance practices that will be used in coordination with the SWPPP Construction Log Book prepared for this project, the template which is included in Appendix A, to maintain sediment and erosion controls:

- The Operator shall have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP, as required by the SPDES General Permit for Stormwater Discharges, have been adequately installed or implemented to ensure overall preparedness of the site for commencement of construction. Qualified professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a licensed professional engineer, Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, or someone working under the direction and supervision of a licensed professional engineer, Certified Professional in Erosion and Sediment Control (CPESC), or soil scientist (person must have experience in the principles and practices of erosion and sediment control). The template for the initial inspection and assessment is included in Appendix A.
- All control measures will be inspected by a qualified professional at least once each week (7 days) and immediately following any storm event of 0.5 inches or greater.
- All measures will be maintained in good working order. If a repair is necessary, it will be initiated within 24 hours of discovery.
- Provide sprinkle water on the dirt road during hot summer or when appropriate to prevent particles to be air born.
- Built up sediment to be removed from the silt fence when it has reached 1/3 the height of the fence. Sediment traps will be cleaned when built up sediments reaches 25 percent of design capacity.
- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- A maintenance inspection report will be filled out after each inspection and will become part of the SWPPP.
- _____, Job Supervisor – Trained Individual per GP-0-20-001, will select individuals who will be responsible for coordinating efforts with the qualified professional for regular inspections, maintenance and repair activities, and filling out the inspection and maintenance report forms. Inspection reports will summarize:

1. Name of Inspector
2. Qualifications of Inspector
3. Date of Inspection
4. Weather Conditions
5. Areas inspected, including measurements
6. Areas that have undergone temporary and permanent stabilization
7. Indicate all disturbed areas that have not undergone active site work during the previous 14-day period
8. Observed condition of all erosion and sediment control practices
9. Inspect all sediment control practices and record approximate degree of sediment accumulation as a percentage of the sediment storage volume
10. Actions Taken to Correct Problems
11. Incorporate changes necessary to the SWPPP

The template for regular inspections is included in Appendix A.

- Personnel selected for inspection and maintenance responsibilities will receive training from the Job Supervisor and/or the qualified professional. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used on site in good working order.
- The Operator shall ensure that a record of all inspection reports is maintained in the SWPPP Construction Log Book. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. Prior to the commencement of construction, the Operator shall certify in the site log book that the SWPPP was prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. The Operator shall retain copies of SWPPPs and any reports submitted in conjunction with this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis. The template for SWPPP Construction Log Book is included in Appendix A.
- Prior to filing of the Notice of Termination (NOT) or the end of permit term, the Operator shall have the qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. Final stabilization means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of 80% has been established, or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structure. The template for final inspections is included in Appendix A.

- Clean out all **temporary** structures and pipes upon completion of the project.
- When the site has been finally stabilized, the operator must submit a Notice of Termination form to terminate coverage under the SPDES General Permit GP 0-20-001. The permittee must identify all of the permanent stormwater management structures that have been constructed. In addition, an manual describing the operation and maintenance practices that will be necessary for the structures to function as designed after the site is stabilized must be finalized and in-place. The permittee must also certify that the permanent structure have been constructed as described in the SWPPP.

The inspection procedures that will be used for the construction of the proposed Stormwater management facilities are included in the CONSTRUCTION INSPECTION CHECKLIST FORM prepared for this project, the template of which is included in Appendix B, to be used to ensure proper construction.

4.2 Summary of SWPPP Required Document Filings:

The following table provides a summary of the required forms and inspections that need to be completed as part of the SWPPP requirements and which checklist or report document forms need to be used for each:

Name of Document	Form to be Used	When to complete
Pre-Construction Meeting Documents Form	Appendix A – SWPPP Construction Site Log Book	Prior to beginning of construction
Owner/Operator Certification	Appendix A, SWPPP Report	Prior to beginning of construction
Prime Contractor Certification	SWPPP Report	Prior to beginning of construction
Sub-Contractor Certification	SWPPP Report	Prior to beginning of construction
Pre-Construction Site Assessment Form	Appendix A	Prior to beginning of construction
Construction Duration Inspection Forms	Appendix A	Every seven days
Three-Month Status Reports	Appendix A	Every three months
SMPs Construction Inspection Checklist Form	Appendix B	During the construction of the proposed stormwater facilities
Final Stabilization and Retention of Records	Appendix B	At completion of project
Spill Control & Prevention Log	Appendix C	Before and after completion of Project
Stormwater Facilities Maintenance Plan and Inspection Checklists	Appendix D	After completion of Project

5.0 NON-STORM WATER DISCHARGES

5.1 Non-Stormwater Discharges:

It is expected that the following non-storm water discharges will occur from the site during the construction period:

- Water from water line flushing.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater (from natural springs)

6.0 INVENTORY FOR POLLUTION PREVENTION PLAN

6.1 Material substances:

The materials or substances listed below are expected to be present on the site during construction:

- Concrete
- Detergents
- Paints (enamels and latex)
- Metal Studs
- Roofing Materials
- Tar and Paving Materials
- Fertilizers
- Petroleum Based Products
- Cleaning Solvents
- Wood
- Masonry Block

7.0 SPILL CONTROL & PREVENTION

7.1 Material Management Practices:

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff:

7.1.1 Good Housekeeping:

The following good housekeeping practices will be followed on site during the construction project:

- An effort will be made to store only enough products required to do the job.
- All materials stored on site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Product will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The Job Supervisor will inspect daily to ensure proper use and disposal of materials on site.

7.1.2 Hazardous Products:

The following practices will be used to reduce the risks associated with hazardous materials:

- Products will be kept in original containers unless they are not reseal able.
- Original labels and material safety data will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturer's or local and State recommended methods for proper disposal will be followed.

7.2 Product Specific Practices:

The following product specific practices will be followed on site:

7.2.1 Petroleum Products:

All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used on site will be applied according to the manufacturer's recommendations.

7.2.2 Fertilizers:

Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The content of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

7.2.3 Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm drainage system, but will be properly disposed of according to manufacturer's instructions or State and local regulations.

7.2.4 Concrete Trucks:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

7.3 Spill Control Practices:

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanups:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage areas on site. Equipment and materials will include, but not be limited to, brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated, and personnel will wear appropriate protective clothing to prevent injury from contact with hazardous substances.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size of the spill. The Spill Control & Prevention Log form provided in Appendix C should be used for this purpose.
- The spill prevention plan will be adjusted to include measures to prevent a repetitive type of spill from re-occurring and how to clean up the spill if it does re-occur. A description of the spill, what caused it, and the cleanup measures will also be included.
- The Job Supervisor responsible for daily site operations, will be designated as the spill prevention and cleanup coordinator. He will designate at least

three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of the responsible spill personnel will be posted in the material storage area and in the office trailer on site.

8.0 SUPPORTING PLANS & REPORTS

1. Site Plan Drawings prepared by Atzl, Nasher & Zigler
2. Soil & Erosion Control Plans prepared by Atzl, Nasher & Zigler
3. Stormwater Management Design Report by Atzl, Nasher & Zigler

9.0 POLLUTION PREVENTION PLAN CERTIFICATION

9.1 OWNER/OPERATOR CERTIFICATION

"I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I also certify under penalty of law that this document and all corresponding attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgement that I will receive as a result of submitting this NOI. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction and agree to comply with all the terms and conditions of the general permit for which this NOI is being submitted."

Signed: _____ Date: _____
(Owner/Operator)

_____
(Printed Name & Title)

_____

_____

_____
(Company Name, Address & Telephone Number)

10.0 CERTIFICATION BY CONTRACTORS

Made pursuant to the State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP 0-20-001) for:

Mahopac Wells 1, 2, & 3, Town of Carmel, Putnam County, New York

10.1 Prime Contractor Certification:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the stormwater pollution prevention plan for the construction site identified in this plan as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

Prime Contractor:

(Signature)	(Company)
(Name)	(Street Address)
(Title)	(City, State, Zip Code)
(Date)	(Phone Number)

10.2 Sub-Contractor Certification:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the stormwater pollution prevention plan for the construction site identified in this plan as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

Sub-Contractor:

(Signature)	(Company)
(Name)	(Street Address)
(Title)	(City, State, Zip Code)
(Date)	(Phone Number)

CONTRACTOR and SUBCONTRACTOR CERTIFICATION STATEMENT

for the New York State Department of Environmental Conservation (DEC) State Pollutant Discharge Elimination System Permit for Stormwater Discharges from Construction Activity (GP-0-20-001)

As per *Part III.A.6* on page 13 of *GP-0-20-001* (effective January 29, 2020):

'Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and sub-contractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.'

The *owner or operator* shall have each contractor and subcontractor involved in soil disturbance sign a copy of the following certification statement before they commence any *construction activity*:

_____	NYR _____	_____
Name of Construction Site	*DEC Permit ID*	*Municipality (MS4)*

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Responsible Corporate Officer/Partner Signature	Date
Name of above Signatory	Name of Company
Title of above Signatory	Mailing Address
Telephone of Company	City, State, and Zip

Identify the specific elements of the SWPPP the contractor or subcontractor is responsible for:

***'TRAINED CONTRACTOR'* FOR THE CERTIFIED CONTRACTOR OR SUBCONTRACTOR**

_____	_____	_____
Name of Trained Employee	*Title of Trained Employee*	*NYSDEC SWT #*

A copy of this signed contractor certification statement must be maintained at the SWPPP on site

Appendix - A

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

APPENDIX-A

CONSTRUCTION SITE LOGBOOK

BY

ATZL, NASHER & ZIGLER
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NY STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM
FOR CONSTRUCTION ACTIVITIES

SWPPP CONSTRUCTION SITE LOG BOOK

For

Mahopac Wells 1, 2, & 3
Town of Carmel
Putnam County, New York

ATZL, NASHER & ZIGLER
232 North Main Street, New City, NY 10956
Tel: (845) 634-4694, Fax: (845) 634-5543, Email: rnasher@anzny.com

Table of Contents

Properly completing forms such as those contained in this document meet the inspection requirement of NYSDEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name MAHOPAC WELLS 1, 2, & 3
Permit No. _____ **Date of Authorization** _____
Name of Operator _____
Prime Contractor _____

a. Preamble to Site Assessment and Inspections -the following information to be read by all person's involved in the construction of stormwater related activities:

The Operator agrees to have a qualified professional[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site log book. The site log book shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).

2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Operators Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law. "

Name (Please Print):_____

Title _____ **Date:**_____

Address: _____

Phone: _____ **Email:**_____

Signature:_____

c. Qualified Professional's Credentials & Certification

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (Please Print):_____

Title _____ **Date:**_____

Address: _____

Phone: _____ **Email:**_____

Signature:_____

d. Pre-construction Site Assessment Checklist (NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

Pre-construction Site Assessment Checklist (continued)

2. Resource Protection

Yes No NA

[ ] [ ] [ ] Are construction limits clearly flagged or fenced?

[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.

[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.

[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.

[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.

[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Entrance

Yes No NA

[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.

[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.

[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Perimeter Sediment Controls

Yes No NA

[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.

[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals

[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.

[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.

[ ] [ ] [ ] The plan is contained in the SWPPP on page _____

[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:
Inspection Forms will be filled out during the entire construction phase of the project.
Required Elements:

(1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

(2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

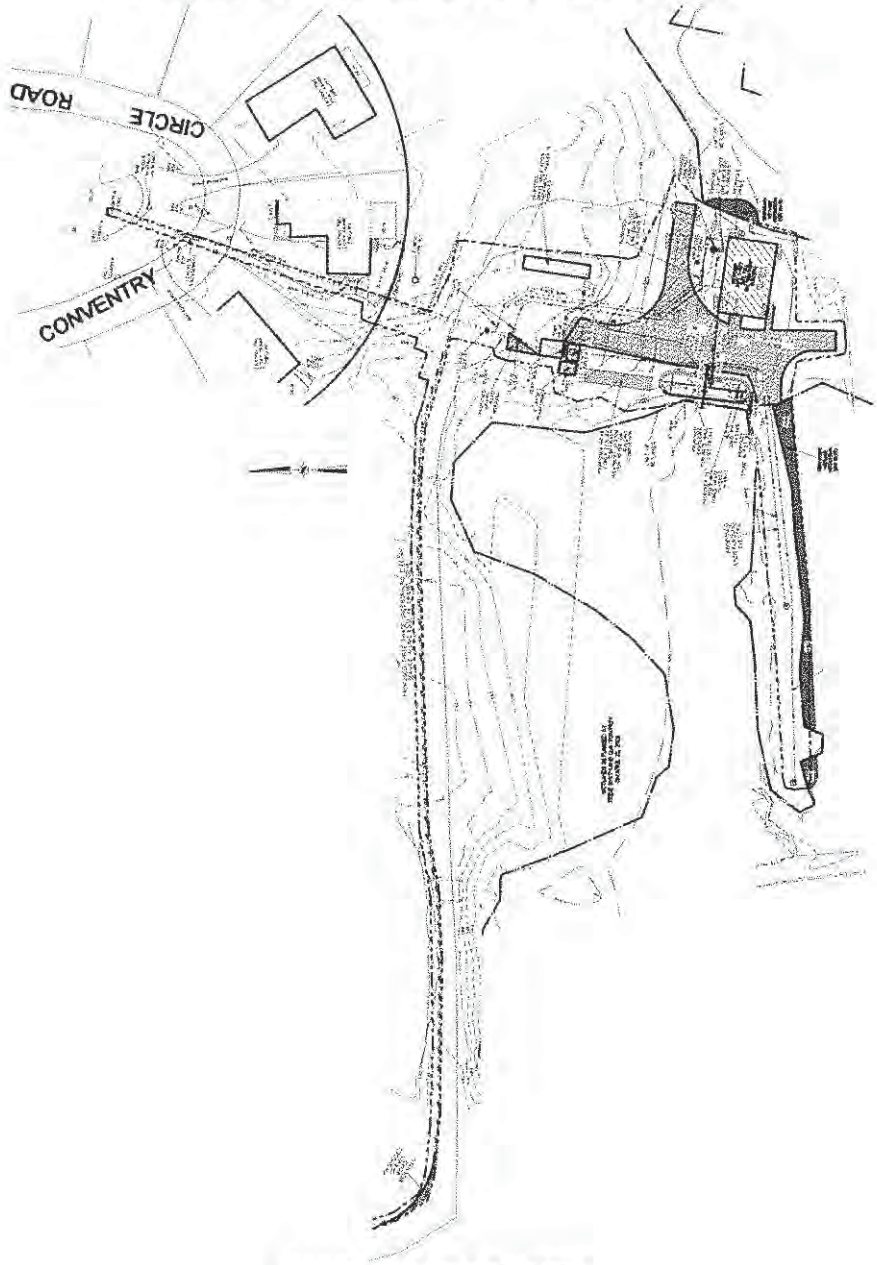
(3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

(5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

(6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

CONSTRUCTION DURATION INSPECTIONS



SITE PLAN/SKETCH

Inspector (Print Name)	**Date of Inspection**
Qualified Professional (Print Name)	**Qualified Professional Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

CONSTRUCTION DURATION INSPECTIONS

Maintaining Water Quality

Yes No NA

[ ] [ ] [ ] Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
[ ] [ ] [ ] Is there residue from oil and floating substances, visible oil film, or globules or grease?
[ ] [ ] [ ] All disturbance is within the limits of the approved plans.
[ ] [ ] [ ] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

[ ] [ ] [ ] Is construction site litter and debris appropriately managed?
[ ] [ ] [ ] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
[ ] [ ] [ ] Is construction impacting the adjacent property?
[ ] [ ] [ ] Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

[ ] [ ] [ ] Maximum diameter pipes necessary to span creek without dredging are installed.
[ ] [ ] [ ] Installed non-woven geotextile fabric beneath approaches.
[ ] [ ] [ ] Is fill composed of aggregate (no earth or soil)?
[ ] [ ] [ ] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

[ ] [ ] [ ] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
[ ] [ ] [ ] Clean water from upstream pool is being pumped to the downstream pool.
[ ] [ ] [ ] Sediment laden water from work area is being discharged to a silt-trapping device.
[ ] [ ] [ ] Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader

Yes No NA

[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
[ ] [ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

[ ] [ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.
[ ] [ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
[ ] [ ] [ ] Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

Yes No NA
[ ] [ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).
[ ] [ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure).
[ ] [ ] [ ] Has accumulated sediment been removed?.

5. Rock Outlet Protection
Yes No NA
[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Installed concurrently with pipe installation.

Soil Stabilization
1. Topsoil and Spoil Stockpiles
Yes No NA
[ ] [ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.
[ ] [ ] [ ] Sediment control is installed at the toe of the slope.

2. Revegetation
Yes No NA
[ ] [ ] [ ] Temporary seedings and mulch have been applied to idle areas.
[ ] [ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control
1. Stabilized Construction Entrance
Yes No NA
[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.
[ ] [ ] [ ] Installed per standards and specifications?
[ ] [ ] [ ] Does all traffic use the stabilized entrance to enter and leave site?
[ ] [ ] [ ] Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence
Yes No NA
[ ] [ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.
[ ] [ ] [ ] Fabric buried 6 inches minimum.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
[ ] [ ] [ ] Sediment accumulation is ___% of design capacity.

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)
Yes No NA
[ ] [ ] [ ] Installed concrete blocks lengthwise so open ends face outward, not upward.
[ ] [ ] [ ] Placed wire screen between No. 3 crushed stone and concrete blocks.
[ ] [ ] [ ] Drainage area is 1acre or less.
[ ] [ ] [ ] Excavated area is 900 cubic feet.
[ ] [ ] [ ] Excavated side slopes should be 2:1.

[ ] [ ] [ ] 2" x 4" frame is constructed and structurally sound.
[ ] [ ] [ ] Posts 3-foot maximum spacing between posts.
[ ] [ ] [ ] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
[ ] [ ] [ ] Sediment accumulation ___% of design capacity.

4. Temporary Sediment Trap

Yes No NA

[ ] [ ] [ ] Outlet structure is constructed per the approved plan or drawing.
[ ] [ ] [ ] Geotextile fabric has been placed beneath rock fill.
[ ] [ ] [ ] Sediment accumulation is ___% of design capacity.

5. Temporary Sediment Basin

Yes No NA

[ ] [ ] [ ] Basin and outlet structure constructed per the approved plan.
[ ] [ ] [ ] Basin side slopes are stabilized with seed/mulch.
[ ] [ ] [ ] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
[ ] [ ] [ ] Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.
Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
   a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
   b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modification & Reason:

III. Monthly Summary of Site Inspection Activities

Name of Permitted Facility:	Today's Date:	Reporting Month:
Location:	Permit Identification #:	
Name and Telephone Number of Site Inspector:		

Date of Inspection	Regular / Rainfall based Inspection	Name of Inspector	Items of Concern

Owner/Operator Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

Signature of Permittee or Duly Authorized Representative

Name of Permittee or Duly Authorized Representative date

Duly authorized representatives must have written authorization, submitted to DEC, to sign any permit documents.

Appendix-B

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

APPENDIX-B

CONSTRUCTION INSPECTION CHECKLISTS

BY

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STORMWATER MANAGEMENT CONSTRUCTION INSPECTION CHECKLIST FORM

Project: **Mahopac Wells 1, 2, & 3**
Location: Town of Carmel, Putnam County, NY

Site Status: _____

Date of Inspection: _____

Time of Inspection: _____

Weather Conditions (including recent rainfall): _____

Inspector's Name: _____

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction/Materials and Equipment		
Pre-construction meeting		
Pipe and appurtenances on-site prior to construction and dimensions checked		
1. Material (including protective coating, if specified)		
2. Diameter		
3. Dimensions of metal riser or pre-cast concrete outlet structure		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope		
6. Number and dimensions of prefabricated anti-seep collars		
7. Watertight connectors and gaskets		
8. Outlet drain valve		
Project benchmark near pond site		
Equipment for temporary de-watering		

2. Subgrade Preparation		
Area beneath embankment stripped of all Vegetation, topsoil, and organic matter		
3. Pipe Spillway Installation		
Method of installation detailed on plans		
A. Bed preparation		
Installation trench excavated with specified side slopes		
CONSTRUCTION SEQUENCE	**SATISFACTORY/ UNSATISFACTORY**	**COMMENTS**
Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation)		
Invert at proper elevation and grade		
B. Pipe placement		
Metal / plastic pipe		
1. Watertight connectors and gaskets properly installed		
2. Anti-seep collars properly spaced and having watertight connections to pipe		
3. Backfill placed and tamped by hand under "haunches" of pipe		
4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached		
3. Pipe Spillway Installation		
Concrete pipe		
1. Pipe set on blocks or concrete slab for pouring of low cradle		
2. Pipe installed with rubber gasket joints with no spalling in gasket interface area		
3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set		

4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant		
5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix		
6. Upper half of anti-seep collar(s) formed with reinforcing steel set		
7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary.		
C. Backfilling		
Fill placed in maximum 8 inch lifts		
Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment		
4. Riser / Outlet Structure Installation		
Riser located within embankment		
A. Metal riser		
Riser base excavated or formed on stable subgrade to design dimensions		
CONSTRUCTION SEQUENCE	**SATISFACTORY/ UNSATISFACTORY**	**COMMENTS**
Set on blocks to design elevations and plumbed		
Reinforcing bars placed at right angles and projecting into sides of riser		
Concrete poured so as to fill inside of riser to invert of barrel		
B. Pre-cast concrete structure		

Dry and stable subgrade		
Riser base set to design elevation		
If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely		
Watertight and structurally sound collar or Gasket joint where structure connects to pipe spillway		
C. Poured concrete structure		
Footing excavated or formed on stable Subgrade, to design dimensions with reinforcing steel set		
Structure formed to design dimensions, with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
Forms stripped & inspected for "honeycomb" prior to backfilling; parge if necessary		
5. Embankment Construction		
Fill material		
Compaction		
Embankment		
1. Fill placed in specified lifts and compacted with appropriate equipment		
2. Constructed to design cross-section, side slopes and top width		
3. Constructed to design elevation plus allowance for settlement		
6. Impounded Area Construction		
Excavated / graded to design contours and side slopes		
Inlet pipes have adequate outfall protection		
Forebay(s)		

Pond benches		
7. Earth Emergency Spillway Construction		
Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc.		
Excavated to proper cross-section, side slopes and bottom width		
Entrance channel, crest, and exit channel Constructed to design grades and elevations		
CONSTRUCTION SEQUENCE	**SATISFACTORY/ UNSATISFACTORY**	**COMMENTS**
8. Outlet Protection		
A. End section		
Securely in place and properly backfilled		
B. Endwall		
Footing excavated or formed on stable Subgrade, to design dimensions and reinforcing steel set, if specified		
Endwall formed to design dimensions with Reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)		
Forms stripped and structure inspected for "honeycomb" prior to backfilling; parge if necessary		
C. Riprap apron / channel		
Apron / channel excavated to design cross-Section with proper transition to existing ground		
Filter fabric in place		
Stone sized as per plan and uniformly place at the thickness specified		
9. Vegetative Stabilization		
Approved seed mixture or sod		
Proper surface preparation and required soil Amendments		

Excelsior mat or other stabilization, as per plan		
10. Miscellaneous		
Drain for ponds having a permanent pool		
Trash rack / anti-vortex device secured to outlet structure		
Trash protection for low flow pipes, orifices, etc.		
Fencing (when required)		
Access road		
Set aside for clean-out maintenance		
11. Stormwater Wetlands		
Adequate water balance		
Variety of depth zones present		
Approved pondscaping plan in place reinforcement budget for additional plantings		
Plants and materials ordered 6 months prior to construction		
Construction planned to allow for adequate planting and establishment of plant community (April-June planting window)		
Wetland buffer area preserved to maximum extent possible		

Comments:

Actions to be Taken:

Appendix - C

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

APPENDIX-C

SPILL CONTROL AND PREVENTION LOG

BY

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E-MAIL: rnasher@anzny.com

SPILL CONTROL & PREVENTION LOG
MAHOPAC WELLS 1, 2, & 3
Town of Carmel
Putnam County, New York

Date of Spill	Material Spilled	Spill Location	Cause	Cleanup	Agency Reported (Toxic/Hazardous)	Reoccurance Prevention Measure

Appendix-D

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

APPENDIX-D
MAINTENANCE AGREEMENT

BY

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FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

Town of Carmel
Stormwater Facility Maintenance Agreement

Whereas, the Town of Carmel, County of Putnam, State of New York ("Municipality") and Suez Water New York, Inc ("facility owner") want to enter into an agreement to provide for the long term maintenance and continuation of stormwater control measures approved by the Municipality for the below named project, Mahopac Wells 1, 2, & 3.

Whereas, the Municipality and the facility owner desire that the stormwater control measures be built in accordance with the approved project plans and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components.

Therefore, the Municipality and the facility owner agree as follows:

1. This agreement inures to the benefit of the Municipality and binds the facility owner, its successors and assigns, to the maintenance provisions depicted in the approved project plans which are attached as Schedule A of this agreement.
2. The facility owner shall maintain, clean, repair, replace and continue the stormwater control measures depicted in Schedule A-1 and A-2 as necessary to ensure optimum performance of the measures to design specifications. The stormwater control measures shall include, but shall not be limited to, the following: pipes, and dry pond system.
3. The facility owner shall be responsible for all expenses related to the maintenance of the stormwater control measures and shall establish a means for the collection and distribution of expenses among parties for any commonly owned facilities.
4. The facility owner shall provide for the periodic inspection of the stormwater control measures, not less than once in every five-year period, to determine the condition and integrity of the measures. Such inspection shall be performed by a professional engineer licensed by the State of New York. The inspecting engineer shall prepare and submit to the Municipality, within 30 days of the inspection, a written report of the findings, including recommendations for those actions necessary for the continuation of the stormwater control measures.
5. The facility owner shall not authorize, undertake or permit alteration, abandonment, modification or discontinuation of the stormwater control measures except in accordance with written approval of the Municipality.

6. The facility owner shall undertake necessary repairs and replacement of the stormwater control measures at the direction of the Municipality or in accordance with the recommendations of the inspecting engineer.

7. The facility owner shall provide to the Municipality, within 30 days of the date of this agreement, a security for the maintenance and continuation of the stormwater control measures in the form of a bond, letter of credit or escrow account in the amount not to exceed $2,500.00.

8. This agreement shall be recorded in the Office of the County Clerk, County of Putnam together with the deed for the subject premises.

9. In the event that the Municipality determines that the facility owner has failed to construct or maintain the stormwater control measures in accordance with the project plan or has failed to undertake corrective action specified by the Municipality or by the inspecting engineer, the Municipality is authorized to undertake such steps as reasonably necessary for the preservation, continuation or maintenance of the stormwater control measures and to affix the expenses thereof as a lien against the property.

10. Nothing within this agreement shall be construed to impose any affirmative obligation or covenant of performance on the Municipality.

11. This agreement is effective _____.

Facility Owner: Suez Water New York, INC

Owner's Representative: Steven Garabed, Manager of Engineering West Nyack Operations

Representative Signature: _____

ACKNOWLEDGEMENTS

State of New York)
) ss:
County of _____)

On the _____ day of _____ in the year _____ before me, the undersigned, personally appeared Christopher Graziano, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Signature and office of individual taking acknowledgment

Town of Carmel: _____

Representative Signature: Richard J. Franzetti. P.E, BCEE, Town Engineer

ACKNOWLEDGEMENTS

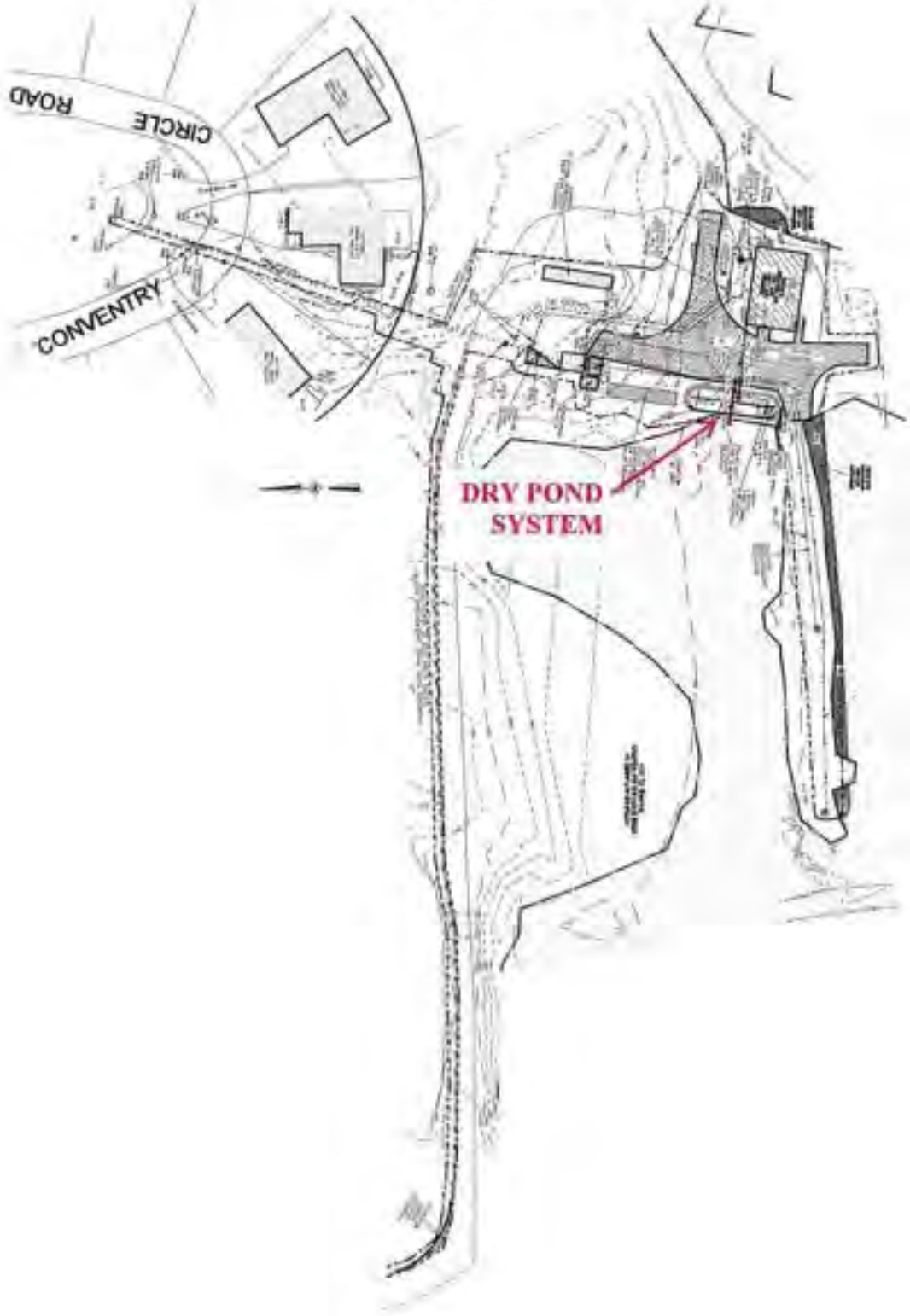
State of New York)
) ss:
County of _____)

On the _____ day of _____ in the year _____ before me, the undersigned, personally appeared Steven Garabed, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Signature and office of individual taking acknowledgment

SCHEDULE "A-1"

STORMWATER MANAGEMENT FACILITIES
LAYOUT & LOCATION



SCHEDULE "A-2"

STORMWATER MANAGEMENT SYSTEM
INSPECTION AND MAINTENANCE SCHEDULE

Stormwater Management Structures:

- Stormwater Piping
- Dry Pond System

Inspections Schedule:

- Stormwater Pipes:
    - Monthly, and after major storms: Check for debris at inlets, outlets, and cleanouts.
- Dry Pond System
    - Monthly inspections during construction and on an annual basis thereafter.

Maintenance Schedule:

- Stormwater Piping: Must be cleaned as found necessary by inspection.
- Dry Pond System
    - Remove accumulated sediment and clean out and/or replace the filter gravel bed at the outfall pipe whenever accumulated sediment reaches a volume of 10% of the available basin capacity.
    - Restore any eroded embankments.
    - Remove accumulated debris within the basin and at outfall structures.

Stormwater Piping
Inspection and Maintenance Checklist

Project: _____
Location: _____
Site Status: _____

Date: _____
Time: _____

Inspector: _____

Inspection/Maintenance Items	Satisfactory or Unsatisfactory	Comments/Corrective Action
1. Inspection (Quarter-annually, After Major Storms)		
1. Accumulated sediment exceeds 10% of the diameter of the pipe.		
2. Vegetation the reduces free movement of water through pipes.		
3. Pipe damage: Any dent that increases flow area by more than 10% or puncture that impacts performance		
4. Trash accumulated to reduce free movement of water through pipes.		

Inspector shall use one sheet for each individual pipe run.

(Provide sketch to show location of unsatisfactory items)

ACTIONS TO BE TAKEN:

_____
_____
_____
_____
_____

COMMENTS:

_____
_____
_____

Dry Pond System
Inspection and Maintenance Checklist

Project: _____
Location: _____
Site Status: _____

Date: _____
Time: _____

Inspector: _____

Inspection/Maintenance Items	Satisfactory or Unsatisfactory	Comments/Corrective Action
1. Embankment and emergency spillway (Annual, After Major Storms)		
1. Vegetation and ground cover adequate		
2. Embankment erosion		
3. Animal burrows		
4. Unauthorized planting		
5. Cracking, bulging, or sliding of dam		
a) Upstream face		
b) Downstream face		
c) At or beyond toe		
• Downstream		
• Upstream		
d) Emergency spillway		
6. Pond, toe & chimney drains clear and functioning		
7. Seeps/leaks on downstream face		
8. Slope protection or riprap failure		
9. Vertical/horizontal alignment of top of dam "As-Built"		
10. Emergency spillway clear of obstructions and debris		
11. Other (specify)		

2. Riser and principal spillway	**(Annual)**	
Type: Reinforced concrete		
- Corrugated pipe		
- Masonry		
1. Low flow orifice obstructed		
2. Low flow trash rack.		
a) Debris removal necessary		
b) Corrosion control		
3. Weir trash rack maintenance		
a) Debris removal necessary		
b) corrosion control		
4. Excessive sediment accumulation insider riser		
5. Concrete/masonry condition riser and barrels		
a) cracks or displacement		
b) Minor spalling (1")		
c) Major spalling (rebars exposed)		
d) Joint failures		
e) Water tightness		
6. Metal pipe condition		
7. Control valve		
a) Operational/exercised		
b) Chained and locked		
8. Pond drain valve		
a) Operational/exercised		
b) Chained and locked		
9. Outfall channels functioning		
10. Other (specify)		
3. Dry Pond Areas		
1. Vegetation adequate		
2. Undesirable vegetative growth		

3. Undesirable woody vegetation		
4. Low flow channels clear of obstructions		
5. Standing water or wet spots		
6. Sediment and / or trash accumulation		
7. Other (specify)		
4. Condition of Outfalls	**(Annual, After Major Storms)**	
1. Riprap failures		
2. Slope erosion		
3. Storm drain pipes		
4. Endwalls / Headwalls		
5. Other (specify)		
5. Other	**(Annual)**	
1. Encroachment on pond, wetland or easement area		
2. Complaints from residents		
3. Aesthetics		
a) Grass growing required		
b) Graffiti removal needed		
c) Other (specify)		
4. Conditions of maintenance access routes.		
5. Signs of hydrocarbon build-up		
6. Any public hazards (specify)		

ACTIONS TO BE TAKEN:

COMMENTS:

Appendix-E

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

APPENDIX-E

CONSTRUCTION PLANS
IN
(11"X17") FORMAT

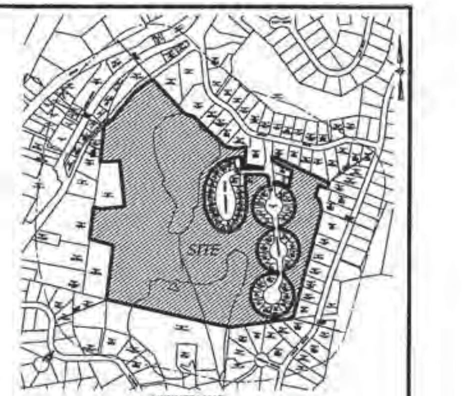
BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

OWNERS WITHIN 500 FEET:
TOWN OF CARMEL TAX MAP

Tax Map No.	Owner	Tax Map No.	Owner
75.16-1-1	GEORGE F & TRACEY E GALIANO 149 BUCKS HOLLOW ROAD MAHOPAC, NY 10541	75.16-1-41	MATTHEW & CAROLYN [illegible] 133 DAHLIA DRIVE MAHOPAC, NY 10541
75.16-1-2	JOHN BATTISTA 157 BUCKS HOLLOW ROAD MAHOPAC, NY 10541	75.16-2-10	NORBERT VOGL 8 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-3	JOHN BATTISTA 163 BUCKS HOLLOW ROAD MAHOPAC, NY 10541	75.16-2-11	DONAL E & MEAGAN [illegible] 32 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-4	WALKER [illegible] LIVING TRUST 163 BUCKS HOLLOW ROAD MAHOPAC, NY 10541	75.16-2-12	TOWN OF CARMEL 60 MCALPIN AVENUE MAHOPAC, NY 10541
75.16-1-6	ZOILA Y NATALIO & MANUEL I CHILLOGALLI 171 BUCKS HOLLOW ROAD MAHOPAC, NY 10541	75.16-2-13	DIANE KOGH 22 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-8	CHARLIE'S MARINA INC 847 SOUTH LAKE ROAD MAHOPAC, NY 10541	75.16-2-14	HUNTER JASON LLC 23 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-9	SOTERIOS & IRENE KARVOUNIS 193 BUCKS HOLLOW ROAD MAHOPAC, NY 10541	75.16-2-15	FRANK GRANT 32 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-10	JAMES MCCABE PO BOX 472 BALDWIN PLACE, NY 10505	75.16-2-16	WAYNE & SUSAN [illegible] 38 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-15	BRIDG MEAGHAN 485 ROUTE 6 MAHOPAC, NY 10541	75.16-2-17	DOMENICK & LOUISE [illegible] 44 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-16	HILLTOP MANOR REALTY CORP. 488 ROUTE 6 MAHOPAC, NY 10541	75.16-2-18	FRANK & LISA [illegible] 50 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-17	HILLTOP MANOR REALTY CORP. 488 ROUTE 6 MAHOPAC, NY 10541	75.16-2-19	JOHN & LINDA [illegible] 54 ASTOR DRIVE MAHOPAC, NY 10541
[illegible]	[illegible]	[illegible]	[illegible]

LOCATION MAP
SCALE: 1"=500'



VICINITY MAP
SCALE: 1"=500'

TAX MAP REFERENCE:
TOWN OF CARMEL TAX MAP
SECTION 75.20, BLOCK 2, LOT 68

ADDRESS:
BUCKS HOLLOW ROAD
MAHOPAC, NY 10541

AREA:
33.342 ACRES

DATUM:
VERTICAL: NAVD 1988
HORIZONTAL: NAD 1983, NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE

SUBDIVISION REFERENCES:
"MAP OF HUNTERS' RUN" FILED IN THE PUTNAM COUNTY CLERK'S OFFICE ON MARCH 28, 1998, AS MAP No. 2296.

REVISION	DATE	DESCRIPTION
A	04-08-24	DRY POND & LIMIT OF DISTURBANCE
7	02-13-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-23	DRAINAGE REVISION PER INFILTRATION TEST
4	03-25-22	PER PLANNING BOARD 3-10-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER CDE & PE SUBMISSION
1	11-12-21	PER PB MTG. 6-22-21

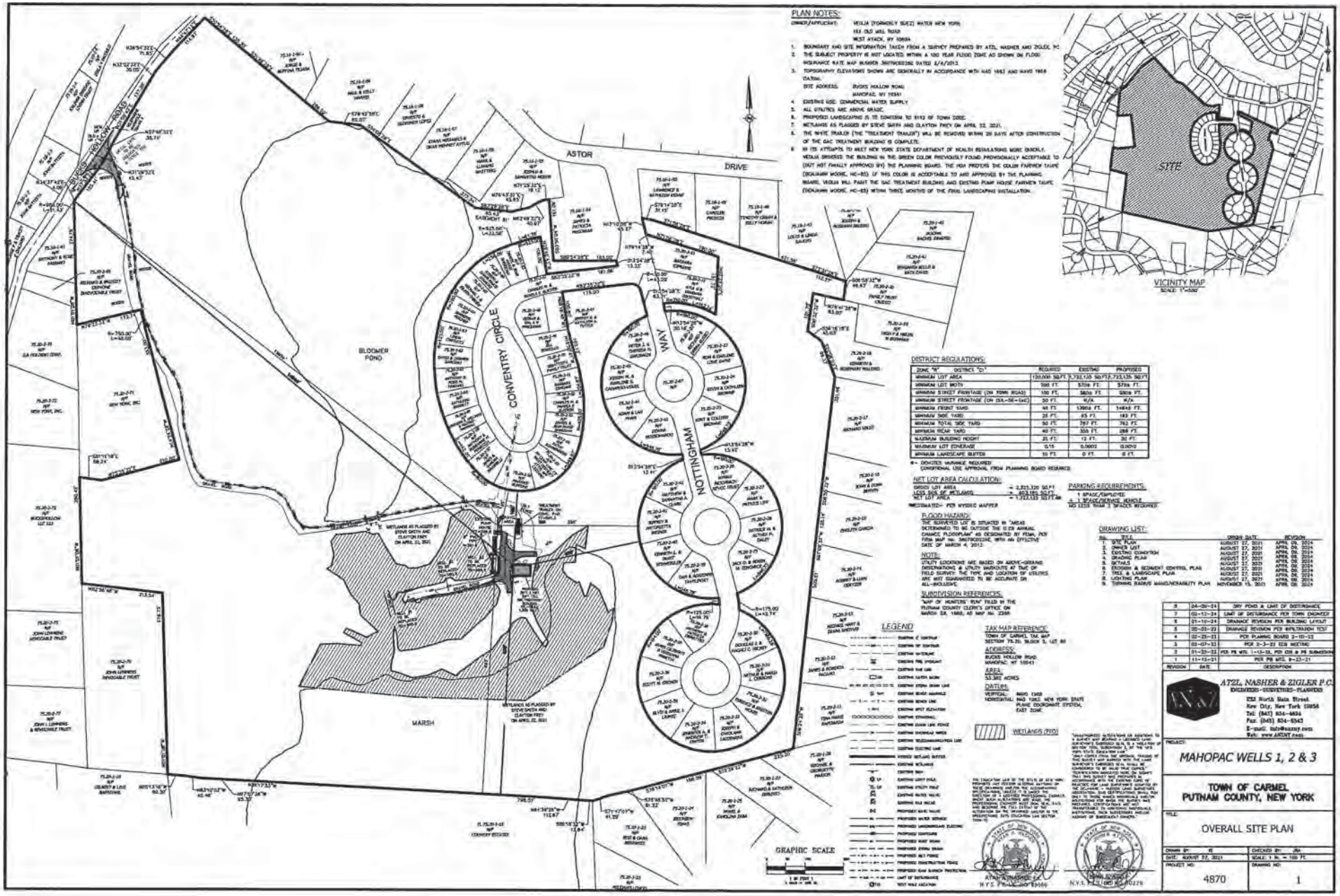
ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS
232 North Main Street
New City, New York 10956
Tel. (845) 634-4694
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
LOCATION MAP

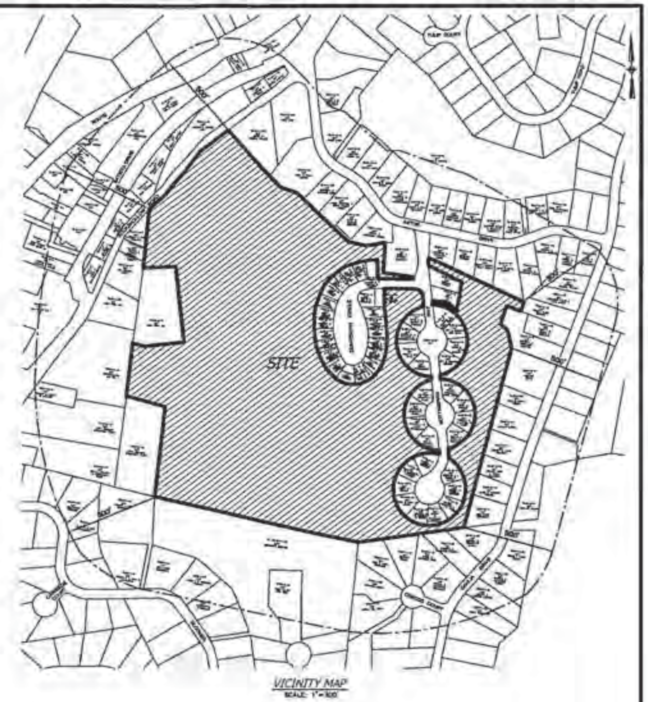
DRAWN BY: [illegible]	CHECKED BY: [illegible]
DATE: AUGUST 27, 2021	SCALE: AS SHOWN
PROJECT NO: 4870	DRAWING NO: LM


PLAN NOTES:
OWNER/APPLICANT: VEOLIA (FORMERLY SUEZ) WATER NEW YORK
153 OLD MILL ROAD
WEST NYACK, NY 10994
1. BOUNDARY AND SITE INFORMATION TAKEN FROM A SURVEY PREPARED BY ATZL, NASHER AND ZIGLER, PC.
2. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A 100 YEAR FLOOD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 36079C0235E DATED 2/6/2012.
3. TOPOGRAPHY ELEVATIONS SHOWN ARE GENERALLY IN ACCORDANCE WITH NAD 1983 AND NAVD 1988 DATUM.
SITE ADDRESS: BUCKS HOLLOW ROAD
MAHOPAC, NY 10541
4. EXISTING USE: COMMERCIAL WATER SUPPLY.
5. ALL UTILITIES ARE ABOVE GRADE.
6. PROPOSED LANDSCAPING IS TO CONFORM TO §162 OF TOWN CODE.
7. WETLANDS AS FLAGGED BY STEVE SMITH AND CLAYTON FREY ON APRIL 22, 2021.
8. THE WHITE TRAILER (THE "TREATMENT TRAILER") WILL BE REMOVED WITHIN 28 DAYS AFTER CONSTRUCTION OF THE GAC TREATMENT BUILDING IS COMPLETE.
9. IN ITS ATTEMPTS TO MEET NEW YORK STATE DEPARTMENT OF HEALTH REGULATIONS MORE QUICKLY, VEOLIA DRESSED THE BUILDING IN THE GREEN COLOR PREVIOUSLY FOUND PROVISIONALLY ACCEPTABLE TO (BUT NOT FINALLY APPROVED BY) THE PLANNING BOARD. THE HOA PREFERS THE COLOR FAIRWICK TAUPE (BENJAMIN MOORE, HC-85). IF THIS COLOR IS ACCEPTABLE TO AND APPROVED BY THE PLANNING BOARD, VEOLIA WILL PAINT THE GAC TREATMENT BUILDING AND EXISTING PUMP HOUSE FAIRWICK TAUPE (BENJAMIN MOORE, HC-85) WITHIN THREE MONTHS OF THE FINAL LANDSCAPING INSTALLATION.
VICINITY MAP
SCALE: 1"=500'
SITE
ASTOR
DRIVE
CONVENTRY CIRCLE
NOTTINGHAM WAY
BLOOMER POND
MARSH
DISTRICT REGULATIONS:
ZONE "R" DISTRICT "D1"
NET LOT AREA CALCULATION:
PARKING REQUIREMENTS:
FLOOD HAZARD:
NOTE:
SUBDIVISION REFERENCES:
DRAWING LIST:
LEGEND
TAX MAP REFERENCE:
ADDRESS:
AREA:
DATUM:
WETLANDS (REG)
GRAPHIC SCALE
ATZL, NASHER & ZIGLER P.C.
ENGINEERS - SURVEYORS - PLANNERS
MAHOPAC WELLS 1, 2 & 3
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK
OVERALL SITE PLAN
4870
1

OWNERS WITHIN 500 FEET:

TOWN OF CARMEL TAX MAP

Tax Map No.	Owner / Mailing Address
75.16-1-1	GEORGE P & TRACEY E GIULIANO, 149 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-2	JOHN BATTISTA, 157 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-3	JOHN BATTISTA, 165 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
5.16-1-4	KALMER BREVOC LIVING TRUST, 163 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-6	ZORA Y MATALLO & MANUEL I. CHILLOGALLI, 171 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-8	CHARLIE'S MARINA INC, 867 SOUTH LAKE ROAD, MAHOPAC, NY 10541
75.16-1-9	SOTIRIOS & IRENE KAMVOSOULIS, 165 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-10	JAMES MCCABE, PO BOX 472, BALDWIN PLACE, NY 10505
75.16-1-13	BRICE BEACHAM, 485 ROUTE 6, MAHOPAC, NY 10541
75.16-1-16	HILLTOP MANOR REALTY CORP., 484 ROUTE 6, MAHOPAC, NY 10541
75.16-1-17	HILLTOP MANOR REALTY CORP., 484 ROUTE 6, MAHOPAC, NY 10541
75.16-1-18	ACHILLES BOURIS, 441 ROUTE 6, MAHOPAC, NY 10541
75.16-1-19	FTR PROPERTIES, LLC, 44 BLOOMER ROAD, MAHOPAC, NY 10541
75.16-1-20	THOMAS & GENE SIMONE, 153 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-21	THOMAS & GENE SIMONE, 155 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-22	SCOTT NYGARD, 427 ROUTE 6, MAHOPAC, NY 10541
75.16-1-23	SCOTT NYGARD, 433 ROUTE 6, MAHOPAC, NY 10541
75.16-1-24	JACRYE REALTY CORP., 431 ROUTE 6, MAHOPAC, NY 10541
75.16-1-27	MEMRA REAL ESTATE LLC, 10 SOUTH VESICH LANE, MAHOPAC, NY 10541
75.16-1-28	BOHUMIL & ROZALIE FILIP, 5 BATTISTA DRIVE, MAHOPAC, NY 10541
75.16-1-29	SANTA & ROBERT PORTINO, 7 BATTISTA DRIVE, MAHOPAC, NY 10541
75.16-1-30	THOMAS SIMONE, 159 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-61	ANTHONY & ROSE FABIANO, 154 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-60.1	JOHN PARK, 7 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-60.2	JORGE & RUFINA TEJADA, 190 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.16-1-59	PAUL & KELLY HARRIS, 15 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-58	ERNESTO & GLORIMER LOPEZ, 63 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-57	AYANA MORALES & OMAR MONET AYTUG, 27 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-56	MARC & LUMARIE WHITTEN, 31 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-55	JOSHUA & SAMANTHA WEBER, 37 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-54	JAMES & PATRICIA McKENNA, 41 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-50	LAWRENCE & KATHLEEN KEANE, 51 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-49	CARLEEN PRISCIA, 53 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-48	TIMOTHY CREAN & KELLY MORAN, 9 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-47	LOUIS & LINDA GAUDIO, 65 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-46	JOSEPH & ROSEANN BRUSSO, 69 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-45	MICHAEL & MARIANNE NICALE, 73 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-44	VINCENT & ANNMARIE VIANDO, 81 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-1-43	JAMES & CAROLINE COOKE, 142 DAHLIA DRIVE, MAHOPAC, NY 10541
75.16-1-42	JACOB & TRACY PEDMAN, 127 DAHLIA DRIVE, MAHOPAC, NY 10541
75.16-1-41	MATTHEW & CAROLYN TURRONE, 133 DAHLIA DRIVE, MAHOPAC, NY 10541
75.16-2-10	NORBERT NOOL, 8 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-11	DONAL K & MEAGAN M HARTNETT, 12 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-12	TOWN OF CARMEL, 60 MCALPIN AVENUE, MAHOPAC, NY 10541
75.16-2-13	DIANE JESSY, 22 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-14	HUNTER JASON LLC, 32 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-15	FRANK CIANTE, 32 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-16	WAYNE & SUSAN SPEAR, 38 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-17	DOMENICK & LOUISE SACCONTELLO, 44 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-18	FRANK & LISA GUALDINO, 50 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-19	JOHN & LINDA MAHNA, 54 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-20	LYNDAL RODRIGUEZ & ERICA RIVERA, 58 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-21	KEVIN & IMELDA DIARIO, 62 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-22	VLADAN KLACA & BOHUMILA KLACOVA, 68 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-23	PAGNOTTA GEORGE IRREV TRUST, 74 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-24	ROBERT F JR & JANE M HILLERY, 78 ASTOR DRIVE, MAHOPAC, NY 10541
75.16-2-25	JOHN & PHYLLIS DIAPOLI, 85 ASTOR DRIVE, MAHOPAC, NY 10541
75.20-2-3	BRAHS FAMILY IRREV TRUST #1, 3 SOUTH VESICH LANE, MAHOPAC, NY 10541
75.20-2-5	NICOLE STERN & MICHAEL A BAREZ, 486 ROUTE 6, MAHOPAC, NY 10541
75.20-2-6	SAC ROUTE 6, LLC, PO BOX 636, MAHOPAC, NY 10541
75.20-2-7	ITALIAN AMERICAN CLUB INC, PO BOX 631, MAHOPAC, NY 10541
75.20-2-8	ADRIANA CERQUEIRA, PO BOX 782, CROTON FALLS, NY 10519
75.20-2-11	TINA MARIE BARBAGELA, 85 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-12	JAMES & ROBERTA FAGANO, 89 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-13	MICHAEL HART & DIANA SMOYER, 83 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-14	ROBERT & LIANA DEXTER, 87 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-15	EVELYN GARCIA, PO BOX 757, MAHOPAC, NY 10541
75.20-2-16	JOHN & DONNA BEHAN, 107 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-17	RICHARD HELEZ, 117 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-18	KENNETH & ROSEMARY WALDRON, 121 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-19	HUGH F & HELEN M BROWN, 125 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-20	FAMILY TRUST CRESSO, 129 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-21	DEOSTHALI AXEL G, DEOSTHALI VIARJANA, 11 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-22	RICHARD & DEBRA RUSSO, 15 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-23	RON & DARLENE LINE GAITA, 17 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-24	KEVIN & CATHLEEN BROWNE, 18 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-25	KENT & COLLEEN BROWNE, 21 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-26	JOHANN ROCHBACH IRREVOC TRUST, 27 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-27	MARC & PATRICE LETT, 29 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-28	PATRICK M. & ALTHEA M. DALEY, 31 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-29	JACK D. & RONNI M. ZEICHICK, 33 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-30	DOUGLAS J. & MAGALI C. MOKEY, 37 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-31	ARTHUR & MARIA L. CERBONE, 39 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-32	TERENCE & KRISTEN BOYCE, 41 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-33	JOSEPH & CAROLANN LACOFARRA, 43 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-34	JENNIFER A. & ANDREW T. SAMEK, 44 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-35	ELMIR & APRIL J. LEMIC, 42 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-36	SCOTT M. GROMM, 40 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-37	JAMES DILBERT & HERDIANA PANCITA, 38 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-38	ANTHONY & PATRICIA DEMATTEO, 36 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-39	DAN & ADRIENNE TAVELINSKY, 32 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-40	KENNETH L. & JANET SCHMICKLER, 28 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-41	JEFFREY & ANTONIETTA MOHER, 20 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-43	MATTHEW & SAMANTHA A. CLARK, 24 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-42	EMMA ROSSOMANDO, 18 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-44	ADAM & LAN PHAM, 16 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-45	JOSEPH W. & MARLENE D. CHIARIZIO-VOGEL, 14 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-46	PETER J. & THERESA M. GARIBALDI, 12 NOTTINGHAM WAY, MAHOPAC, NY 10541
75.20-2-47	JEFFREY A. & KATHLEEN A. RUFFLE, 9 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-48	KIERAN & MAL A H FARQUHAR, 13 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-49	JILL DONNELLY, 15 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-50	DEBATTISTA FAMILY TRUST, 17 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-51	BARBARA LIPSHAM, 19 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-52	CHARLES M. & PAMELA E. BLECKER, 21 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-53	DANIEL & JEAN MARIE SHERIDAN, 23 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-54	KATHY SONNENBERG, 27 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-55	NY CONF-UMC ET, WEST DISTRICT, ATTN: APL CASTIANO, 2 SEAVIEW AVE, WHITE PLAINS, NY 10606
75.20-2-56	MAURICE BUFFONE, 34 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-57	JAMES & SANDRA MARINELLI, 32 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-58	ANTHONY & ROSEANNE M. PORRAZZA, 30 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-59	GREGORY A. WILLIAMS & MILDRED MARSHALL, 28 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-60	KATHLEEN BARRETT, 26 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-61	ANTHONY & ROSE M. TABANO, PO BOX 634, MAHOPAC, NY 10541
75.20-2-62	DAVID & CARMEN DARCEAU, 22 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-63	LINDA CAPUTO, 20 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-64	JENNIFER FISCHER, 18 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-65	MICHAEL J. & EILEEN STREIN, 16 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-66	JOSEPH & DAWN MARIE D'AMORE, 14 COVENTRY DR, MAHOPAC, NY 10541
75.20-2-69	RICHARD & BRIDGET CERVONE, 154 BUCKSHOLLOW RD, MAHOPAC, NY 10541
75.20-2-70	JLR HOLDINGS CORP, 144 BUCKS HOLLOW, MAHOPAC, NY 10541
75.20-2-71	VERIZON NEW YORK INC, PO BOX 2749, ADDISON, TX 75001
75.20-2-72	VERIZON NEW YORK INC, PO BOX 2749, ADDISON, TX 75001
75.20-2-73	BUCKSHOLLOW LLC 122, 4 BAUCHLOW COURT, MAHOPAC, NY 10541
75.20-2-74	WILLIAM & LOUISE DE GASPERI, 112 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.20-2-75	JOHN LEMMONS REVOCABLE TRUST, 100 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.20-2-76	JOHN LEMMONS REVOCABLE TRUST, 30 CREST ROAD, MAHOPAC, NY 10541
75.20-2-77	JOHN LEMMONS REVOCABLE TRUST, 100 BUCKS HOLLOW ROAD, MAHOPAC, NY 10541
75.20-1-32	DIANE SCRAVONE, 84 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-1-31	JOSEPH & DEBORAH KORNICKI, 58 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-1-30	PATRICK & CATHERINE TAPPEY, 74 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-1-29	EDWIN & MARIE TRULAS, 80 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-1-28	MICHAEL & DEBRA HARON, 77 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-1-27	RICHARD & KATHLEEN BRUSSO, 71 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-1-26	MICHAEL & CATHERINE SCARANGA, 2 GRECCO COURT, MAHOPAC, NY 10541
75.20-1-25	PAWEL & KAROLINA ZABA, 8 GRECCO COURT, MAHOPAC, NY 10541
75.20-1-24	ZBIGNIEW PAWAS, PO BOX 332, BALDWIN PLACE, NY 10505
75.20-1-23	JESS J DANA BERRY, 10 GRECCO COURT, MAHOPAC, NY 10541
75.20-1-22	WILLIAMS LONGO, 11 GRECCO COURT, MAHOPAC, NY 10541
75.20-1-21	CALCAS HILL CORP., 330 GLENBROOK AVENUE, YONKERS, NY 10705
75.20-1-18	SUEZ WATER NEW YORK, PO BOX 71670, PHOENIX, AZ 85050
75.20-1-13	LINDA M VERIC, 44 BLOOMER ROAD, MAHOPAC, NY 10541
75.20-1-12	STEPHEN A & MARY BETH MAHAN, 50 BLOOMER ROAD, MAHOPAC, NY 10541
75.20-1-11	MARIE A RIZZO, 54 BLOOMER ROAD, MAHOPAC, NY 10541
75.20-1-10	GILBERT & LOIS BACHMAN, 68 BLOOMER ROAD, MAHOPAC, NY 10541
75.20-1-8	JOSEPH G & JOAN D MAZZOTTA, 60 BLOOMER ROAD, MAHOPAC, NY 10541
75.20-1-6	GILBERT & LOIS BACHMAN, 68 BLOOMER ROAD, MAHOPAC, NY 10541
75.20-1-5	ALEJANDRO MERLINO, 80 BLOOMER ROAD, MAHOPAC, NY 10541
75.20-2-10	STEPHEN MILLER, 80 DAHLIA DRIVE, MAHOPAC, NY 10541
75.20-2-9	ANTHONY ZHAO & EMMA ZHAO, 100 DAHLIA DRIVE, MAHOPAC, NY 10541
78.17-1-28	PARENT ESTATE, PO BOX 366, MAHOPAC, NY 10541
78.17-1-29	MARICA T & LEE W DOMINO, 108 DAHLIA DRIVE, MAHOPAC, NY 10541
78.17-1-25	CRAIG H & JENNIFER M HETTINGER, 112 DAHLIA DRIVE, MAHOPCA, NY 10541
78.17-1-24	BORIS L BERARDO, 118 DAHLIA DRIVE, MAHOPAC, NY 10541
78.17-1-23	DONALD R & SALLI A WISE, 122 DAHLIA DRIVE, MAHOPCA, NY 10541
78.17-1-22	BRIAN & MARTIN COYNE, 125 DAHLIA DRIVE, MAHOPAC, NY 10541
78.17-1-21	PETER & VALERIE FELDMAN, 130 DAHLIA DRIVE, MAHOPAC, NY 10541
78.17-1-20	MICHAEL & EUNICE LANELLE, 134 DAHLIA DRIVE, MAHOPAC, NY 10541



VICINITY MAP
SCALE: 1"=500'

LEGEND

REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
7	02-13-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	03-30-22	PER PLANNING BOARD 3-10-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB WS. 1-13-22, PER CDI & PB SUBMISSION
1	11-15-21	PER PB APPL. 9-22-21

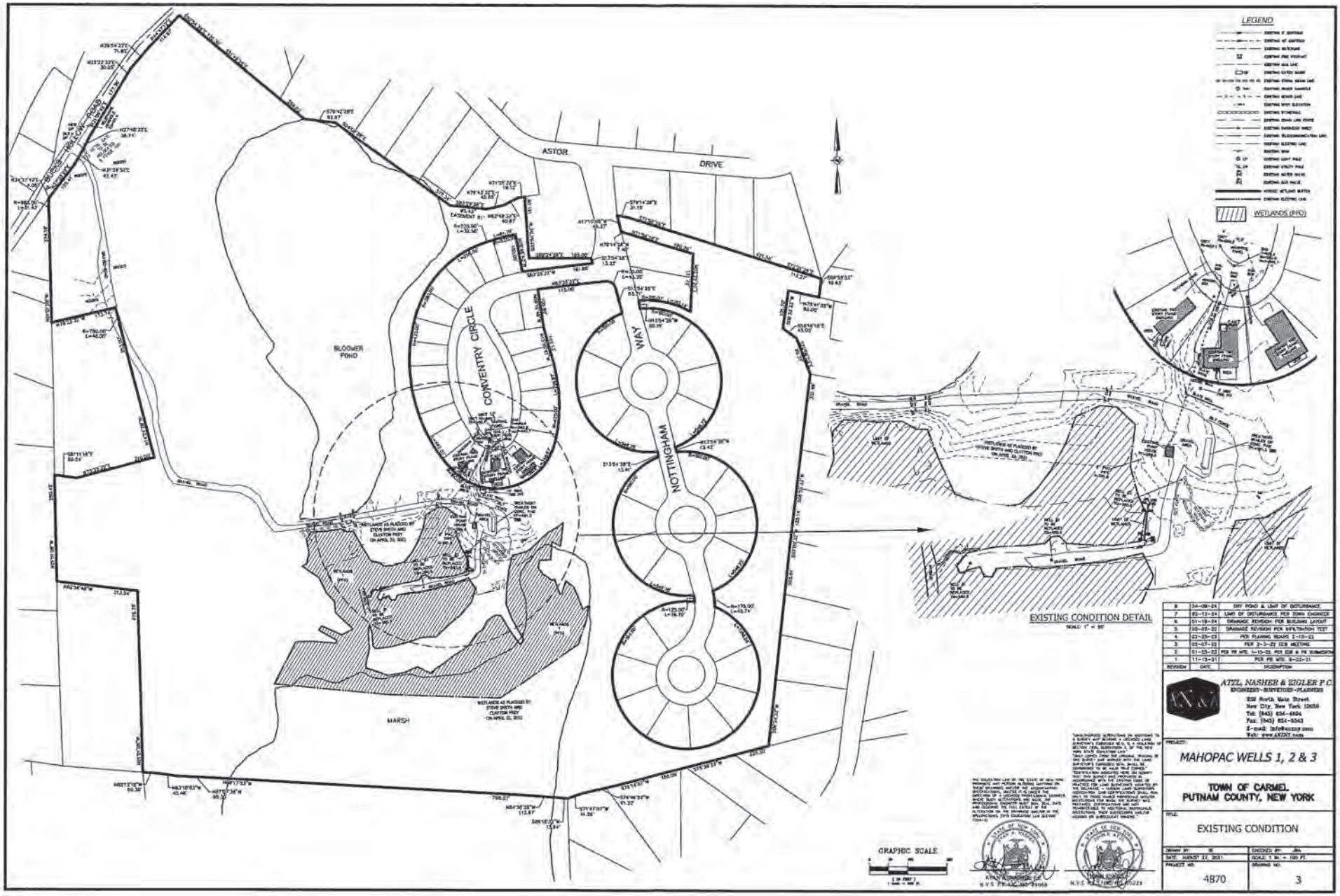
ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS
232 North Main Street
New City, New York 10956
Tel. (845) 634-4694
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
OWNERS WITHIN 500 FT. LIST

DRAWN BY: D.	CHECKED BY: JEL
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 100 FT.
PROJECT NO: 4870	DRAWING NO: 2



REVISION	DATE	DESCRIPTION
8	04-08-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION FOR BUILDING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	02-25-22	PER PLANNING BOARD 2-15-22
3	02-07-22	PER 2-3-22 TCE MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER TCE & PW SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

ATZL, NASHER & ZIGLER P.C.
ENGINEERS - SURVEYORS - PLANNERS
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PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
EXISTING CONDITION

DRAWN BY: IC	CHECKED BY: JBA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 100 FT.
PROJECT NO. 4870	DRAWING NO. 3

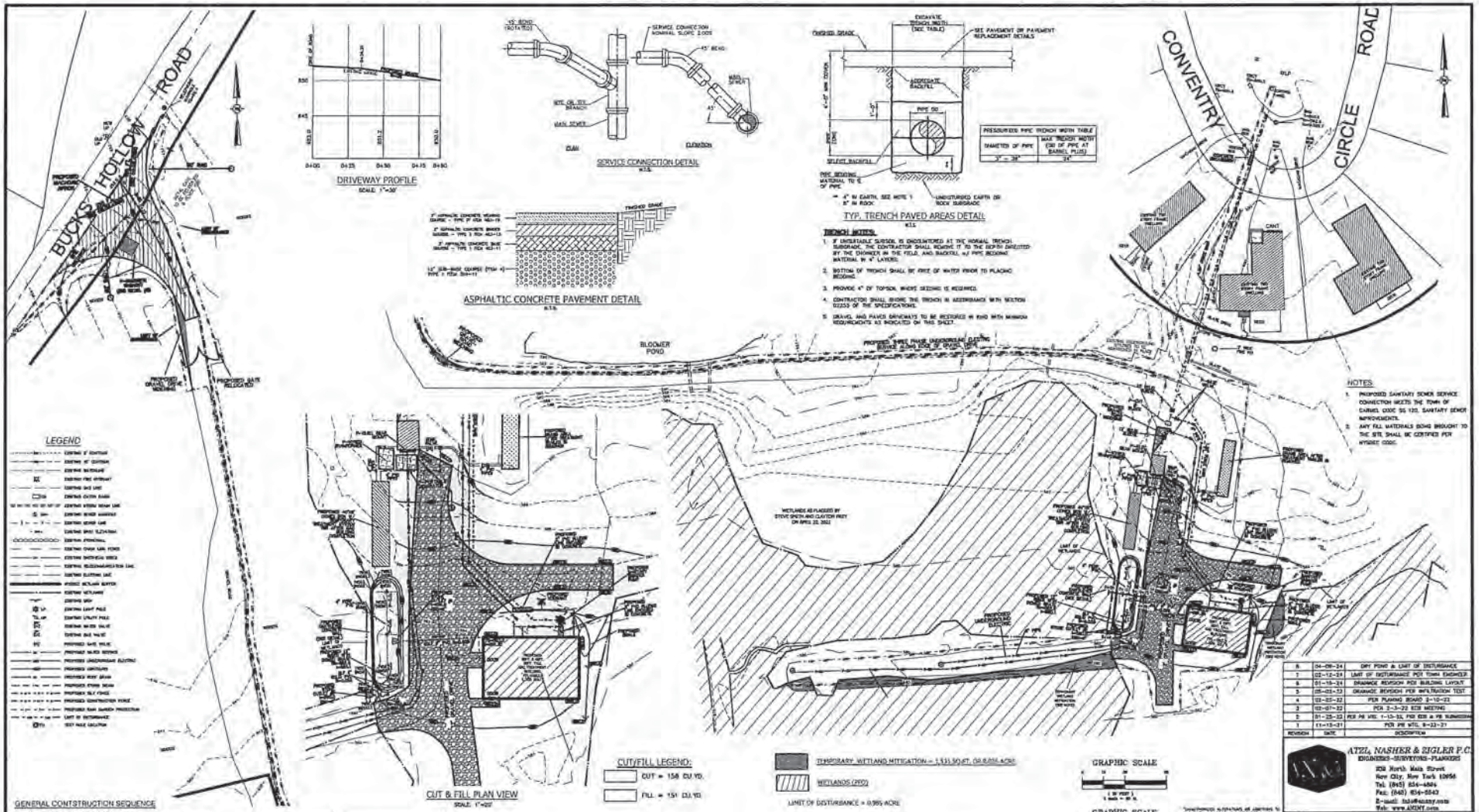

TABLE-1 PERCENT PASSING BY WEIGHT OF GRAVEL MATERIALS			
SIEVE (U.S. SIEVE)	OPTIONS TYPE		
	SURFACE	BASE	SUBBASE
3"			100
2"		100	-
1.5"		85-100	70-100
1"	100	-	-
3/4"	85-100	-	-
1/4"	50-75	30-50	30-55
#40	13-32	5-20	5-25
#200	8-15	5-85	5-8

NOTES:
1. SUBGRADE, BASE AND SURFACE MATERIAL SHALL CONFORM TO GRADING LIMITS IN TABLE-1.
2. USE UNIFORM GRAVEL TYPES AND MATERIALS BETWEEN THE ROADBED LIMITS.

PRESSURIZED PIPE TRENCH WIDTH TABLE	
DIAMETER OF PIPE	MAX TRENCH WIDTH (OD OF PIPE AT BARREL PLUS)
3" – 24"	24"

TRENCH NOTES:
1. IF UNSUITABLE SUBSOIL IS ENCOUNTERED AT THE NORMAL TRENCH SUBGRADE, THE CONTRACTOR SHALL REMOVE IT TO THE DEPTH DIRECTED BY THE ENGINEER IN THE FIELD, AND BACKFILL w/ PIPE BEDDING MATERIAL IN 4" LAYERS.
2. BOTTOM OF TRENCH SHALL BE FREE OF WATER PRIOR TO PLACING BEDDING.
3. PROVIDE 4" OF TOPSOIL WHERE SEEDING IS REQUIRED.
4. CONTRACTOR SHALL BRACE THE TRENCH IN ACCORDANCE WITH SECTION 02233 OF THE SPECIFICATIONS.
5. GRAVEL AND PAVED DRIVEWAYS TO BE RESTORED IN KIND WITH MINIMUM REQUIREMENTS AS INDICATED ON THIS SHEET.

REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
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6	01-10-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-03-23	DRAINAGE REVISION PER INFILTRATION TEST
4	03-07-22	PER PLANNING BOARD 2-10-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-10-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

ATZL, NASHER & SIGLER P.C.
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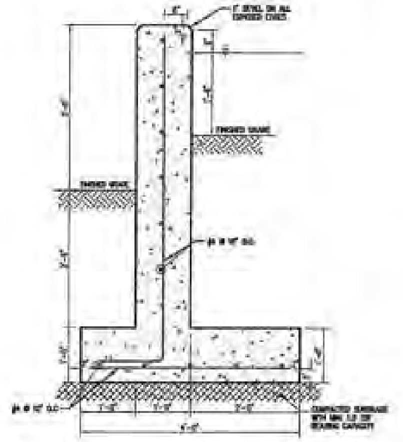
Tel: (845) 634-4884
Fax: (845) 634-5543
E-mail: info@anszny.com
Web: www.ANSNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

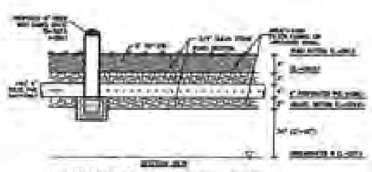
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
GRADING PLAN

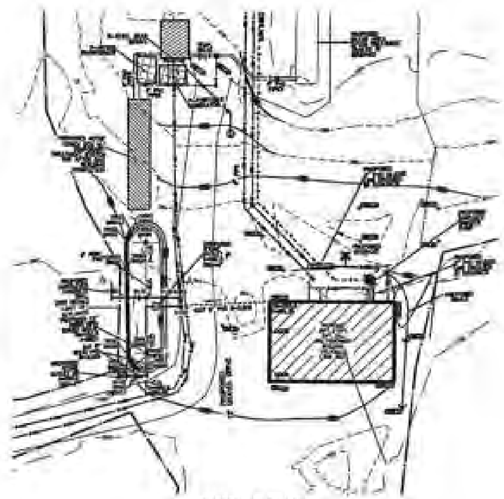
DRAWN BY:	IS	CHECKED BY:	JAA
DATE:	AUGUST 27, 2021	SCALE:	1 IN. = 20 FT.
PROJECT NO.	4870	DRAWING NO.	4



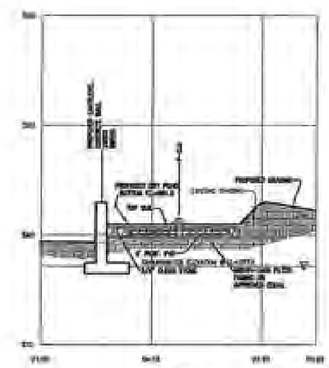
CANTILEVER CONCRETE RETAINING WALL DETAIL



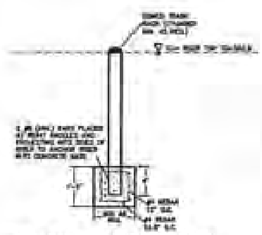
8" DRY POND FLOOR TILE DRAIN DETAIL



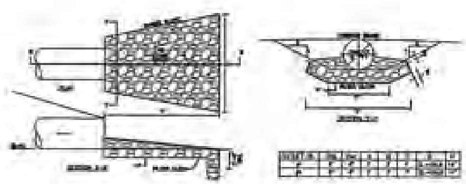
DRY POND PLAN VIEW



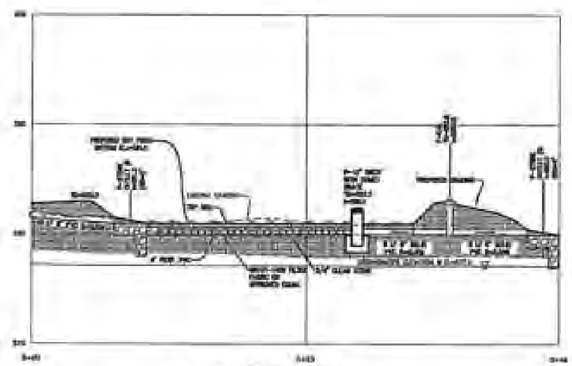
SECTION A-A



TYP. RISER W/H DOMED GRATE DETAIL



STONE OUTLET DETAIL



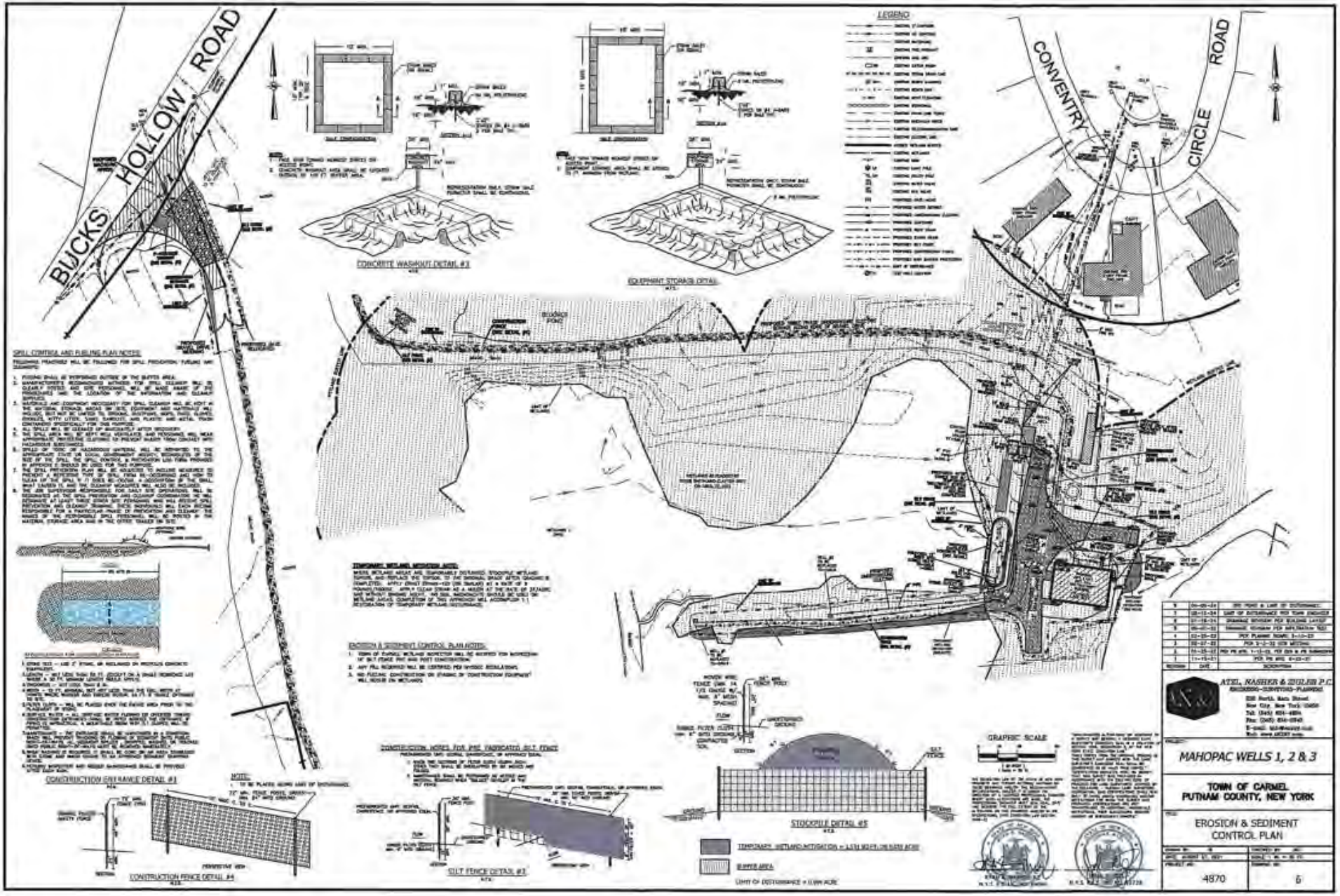
PROPOSED DRY POND PROFILE

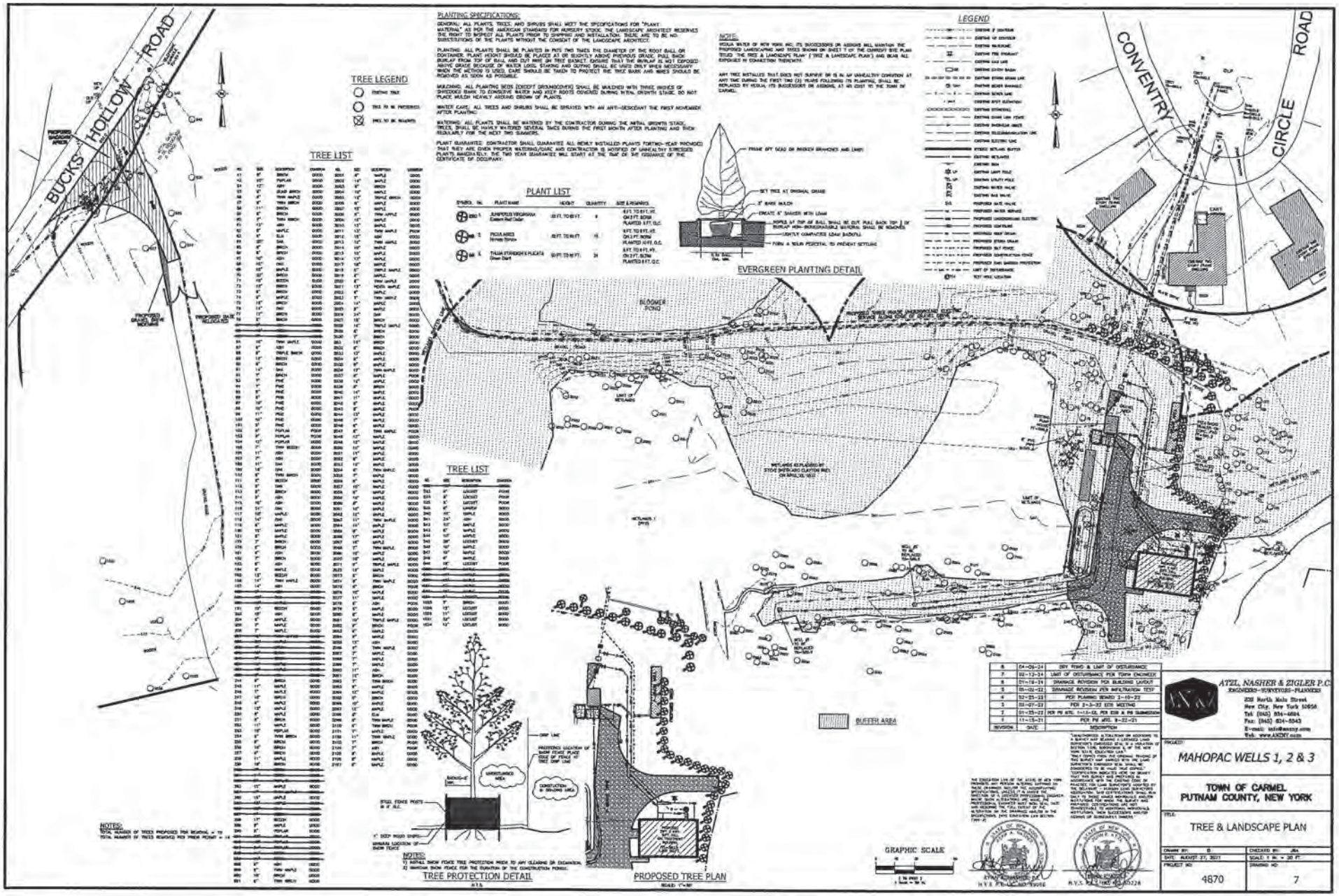
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

DETAILS

4870	5


BUCKS HOLLOW ROAD
CONVENTRY CIRCLE ROAD
LEGEND
CONCRETE WASHOUT DETAIL #3
EQUIPMENT STORAGE DETAIL
SPILL CONTROL AND PUMPING PLAN NOTES:
TEMPORARY WETLAND MITIGATION NOTE:
EROSION & SEDIMENT CONTROL PLAN NOTES:
CONSTRUCTION ENTRANCE DETAIL #1
CONSTRUCTION FENCE DETAIL #4
NOTE:
CONSTRUCTION NOTES FOR PRE FABRICATED SILT FENCE
SILT FENCE DETAIL #3
STOCKPILE DETAIL #5
TEMPORARY WETLAND MITIGATION = 4,574 SQ.FT. (.105 ACRE) AFTER
BUFFER AREA
LIMIT OF DISTURBANCE = 11.994 ACRE
GRAPHIC SCALE
ATEL, NASHER & ZIGLER P.C.
MAHOPAC WELLS 1, 2 & 3
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK
EROSION & SEDIMENT CONTROL PLAN
4870
6


BUCKS HOLLOW ROAD
CONVENTRY CIRCLE ROAD
TREE LEGEND
TREE LIST
PLANTING SPECIFICATIONS:
GENERAL: ALL PLANTS, TREES, AND SHRUBS SHALL MEET THE SPECIFICATIONS FOR "PLANT MATERIAL" AS PER THE AMERICAN STANDARDS FOR NURSERY STOCK. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT ALL PLANTS PRIOR TO SHIPPING AND INSTALLATION. THERE ARE TO BE NO SUBSTITUTIONS OF THE PLANTS WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT.
PLANTING: ALL PLANTS SHALL BE PLANTED IN PITS TWO TIMES THE DIAMETER OF THE ROOT BALL OR CONTAINER. PLANT HEIGHT SHOULD BE PLACED AT OR SLIGHTLY ABOVE PREVIOUS GRADE. PULL BACK BURLAP FROM TOP OF BALL AND CUT WIRE ON TREE BASKET. ENSURE THAT THE BURLAP IS NOT EXPOSED ABOVE GRADE BECAUSE OF WATER LOSS. STAKING AND GUYING SHALL BE USED ONLY WHEN NECESSARY. WHEN THE METHOD IS USED, CARE SHOULD BE TAKEN TO PROTECT THE TREE BARK AND WIRES SHOULD BE REMOVED AS SOON AS POSSIBLE.
MULCHING: ALL PLANTING BEDS (EXCEPT GROUNDCOVER) SHALL BE MULCHED WITH THREE INCHES OF SHREDDED BARK TO CONSERVE WATER AND KEEP ROOTS COOLED DURING INTIAL GROWTH STAGE. DO NOT PLACE MULCH HEAVILY AROUND CROWN OF PLANTS.
WINTER CARE: ALL TREES AND SHRUBS SHALL BE SPRAYED WITH AN ANTI-DESICCANT THE FIRST NOVEMBER AFTER PLANTING.
WATERING: ALL PLANTS SHALL BE WATERED BY THE CONTRACTOR DURING THE INITIAL GROWTH STAGE. TREES SHALL BE HAVILY WATERED SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND THOR REGULARLY FOR THE NEXT TWO SUMMERS.
PLANT GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL NEWLY INSTALLED PLANTS FORTWO-YEAR PERIODED THAT THEY ARE GIVEN PROPER WATERING/CARE AND CONTRACTOR IS NOTIFIED OF UNHEALTHY SUPPOSED PLANTS IMMEDIATELY. THE TWO YEAR GUARANTEE WILL START AT THE TIME OF SITE ISSUANCE OF THE CERTIFICATE OF OCCUPANY.
NOTE:
LEGEND
PLANT LIST
EVERGREEN PLANTING DETAIL
BLOOMER POND
TREE LIST
TREE PROTECTION DETAIL
PROPOSED TREE PLAN
BUFFER AREA
GRAPHIC SCALE
NOTES:
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ENGINEERS - SURVEYORS - PLANNERS
202 North Main Street
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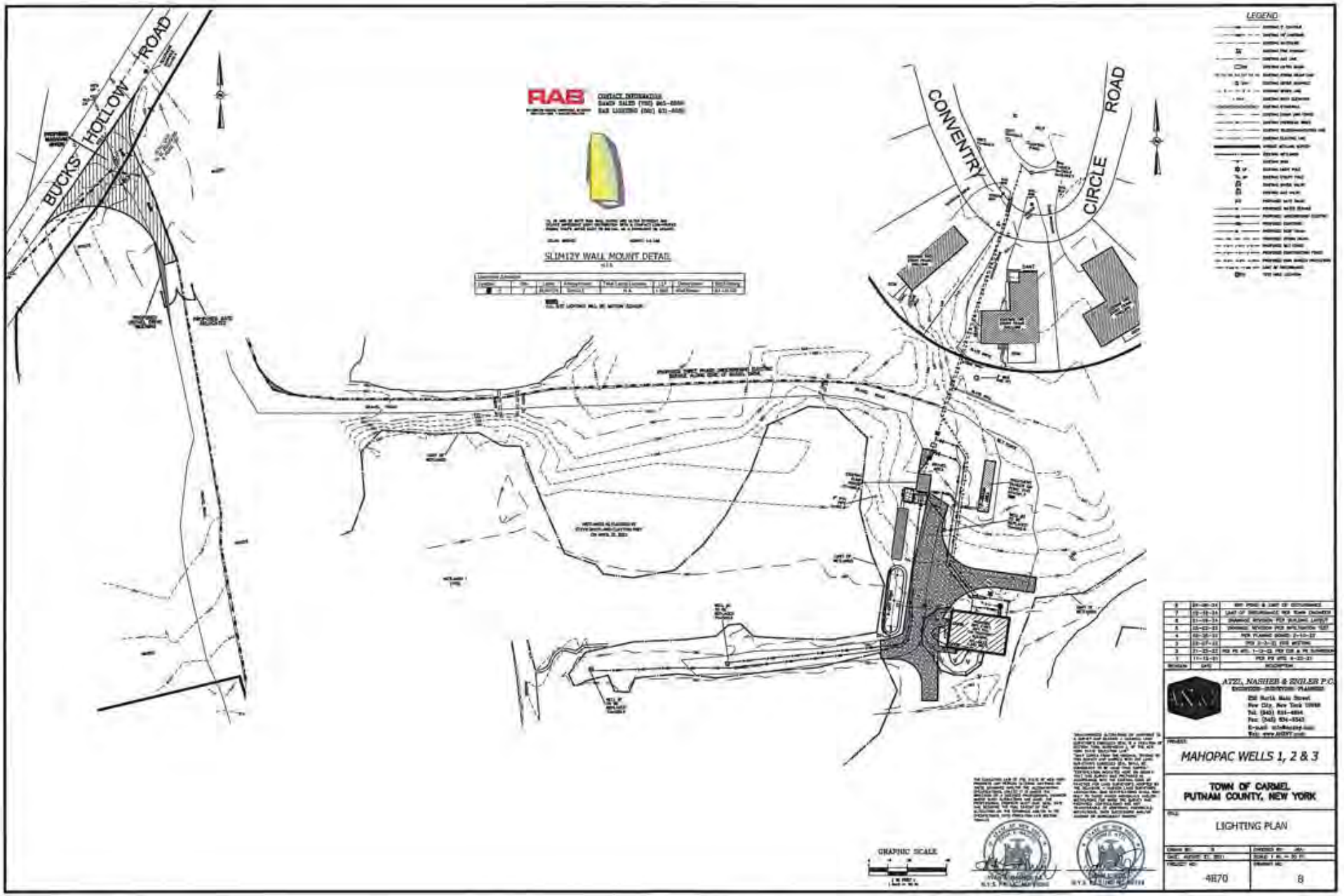
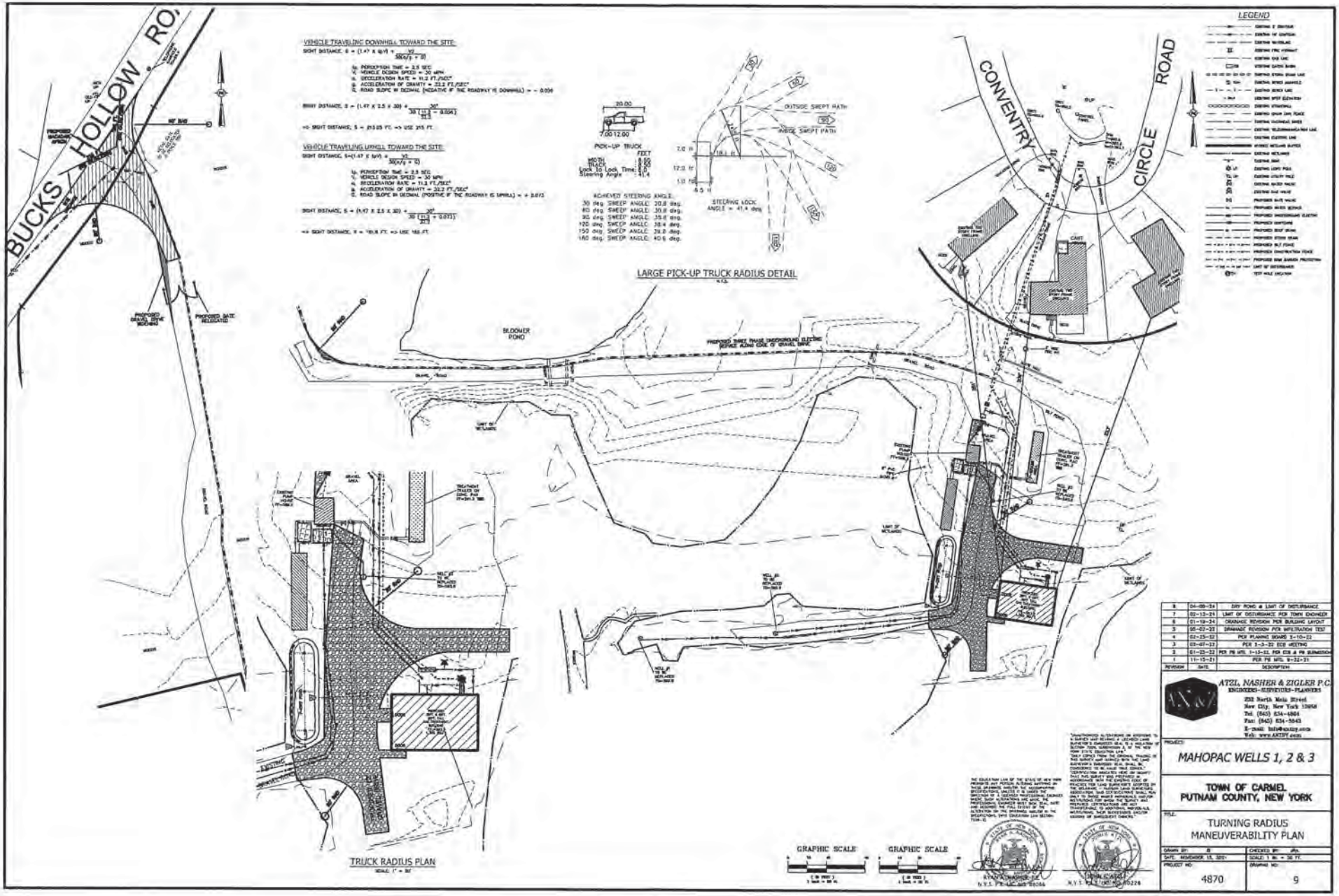
Fax: (845) 634-4043
E-mail: info@anzny.com
Web: www.ANZNY.com
MAHOPAC WELLS 1, 2 & 3
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK
TREE & LANDSCAPE PLAN
DRAWN BY: B
CHECKED BY: JRA
DATE: AUGUST 27, 2021
SCALE: 1 IN. = 30 FT.
PROJECT NO: 4870
DRAWING NO: 7


BUCKS HOLLOW ROAD
CONVENTRY CIRCLE ROAD
LEGEND
SLIMLITE WALL MOUNT DETAIL
GRAPHIC SCALE
MAHOPAC WELLS 1, 2 & 3
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK
LIGHTING PLAN
4870
8



REVISION	DATE	DESCRIPTION
8	04-08-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
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3	03-07-22	PER 3-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

ATZI, NASHER & ZIGLER P.C.
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Web: www.AKTZPY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
TURNING RADIUS
MANEUVERABILITY PLAN

DRAWN BY: IB	CHECKED BY: JRA
DATE: NOVEMBER 15, 2021	SCALE: 1 IN. = 50 FT.
PROJECT NO: 4870	DRAWING NO: 9

Section 2: Drainage

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

SECTION 2:

STORMWATER SYSTEM DESIGN REPORT COMPLYING WITH NYS STORMWATER MANAGEMENT DESIGN MANUAL JANUARY 2015

BY

ATZL, NASHER & ZIGLER
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FAX: (845) 634-5543
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232 North Main Street, New City, NY 10956
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Email: rnasher@anzny.com

Revision 4: April 9, 2024

Revision 3: January 19, 2024

Revision 2: May 02, 2022

Revision 1: September 30, 2021

August 27, 2021

Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

Att.: Richard Franzetti, PE, LEED
Town Engineer

Ref.: Mahopac Wells 1, 2, & 3 (Job #4870)
Town of Carmel
Putnam County, New York

Sub: Hydraulic and Hydrological Study

1.0 REVISION OVERVIEW:

The previous SWPPP report dated January 19, 2024, proposed a dry pond system to achieve zero net increase of peak runoff. However, in order to minimize the limit of the disturbance a cantilever concrete wall has been proposed on the west side of the dry pond system. As a result, the volume provided by the dry pond has been revised accordingly. Regardless of the revision, the overall hydraulics of the SMP System remains the same.

1.1 INTRODUCTION:

The following hydraulic/hydrological study has been proposed for the above-mentioned project to provide zero net increase of peak runoff for the proposed project. The project disturbed area is 0.994 acres (43,300 sq.ft.), which is smaller than 1 acre. Therefore, a general construction permit is not required according to the NYSDEC 2015 version of the design manual. However, a zero-net increase of peak runoff is required per Town code.

1.2 SITE LOCATION:

The project is located at Bucks Hollow Road, $\pm 890\ ft$ south of Astor Drive in the Town of Carmel, Putnam County, New York.

2.0 HYDROLOGICAL SOIL GROUP:

The soil onsite is the following, based on data from the Soil Survey of Putnam County, New York, dated October 1994.

Soil Name	Soil Map Symbol	Hydrological Soil Group
Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	CrC	B
Natchaug muck, 0 to 2 percent slopes	NcA	D
Sun loam	Sh	D

* Source: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

** HSG "B" was used in the drainage calculation.

3.1 EXISTING CONDITION:

The existing drainage area is 0.536 acres. The land cover of the drainage area consists of woods, gravel and grass area, plus some impervious area. The drainage area delineation is shown on the Existing Condition Drainage Map (E-1).

3.2 DEVELOPED CONDITION:

The proposed development includes the construction of a building and an increase in the gravel coverage. The peak runoff from the study area will be increased upon competition of the proposed development. The drainage area delineation is shown on the Developed Condition Drainage Map (D-1).

4.0 DRAINAGE STUDY:

Due to the proposed improvement the peak runoff of the designated drainage area will be increased. The hydrological software, HydroCAD has been used to calculate pre and post peak runoff rates for 1, 10, 100-year design storm events.

5.0 MITIGATION MEASURES:

To attenuate the post-developed peak flow to pre-developed peak flow, we are proposing a Dry Pond System. The Westchester Method was used to calculate the 10-year storm maximum storage.

The drainage study shows that the required 10-year storage for the site is 1,187.0 cu.ft. The Dry Pond System provides 1,213.0 cu.ft (@ELV= 582.50'), which is more than the required volume. The software HydroCAD was used to calculate peak flows for different storm events at the outlet "Point of Interest", for the Existing and Developed Condition. The summary table for the peak flow of different storm frequencies (1, 10, & 100-year storms) at the point of interest (P.O.I.), and water quantity design calculations are attached for your reference.

If you have further questions or concerns, feel free to contact me. Thank you.

Very Truly Yours,

Ryan A. Nasher, P.E.

P:\STORMWATER MANAGEMENT\4870\Current SWPPP Report\Section 2 - Drainage\4870 Drainage Report.docx

Summary Table

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

SUMMARY TABLE

BY

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SUMMARY FLOW
EXSITING AND DEVELOPED CONDITIONS
1, 10, & 100 YEAR STORMS PEAK RUNOFF

STORM FREQUENCY (YEAR)	EXISTING CONDITION PEAK FLOW (CFS) (PER HYDROCAD)	DEVELOPED CONDITION PEAK FLOW, NO ROUTING (CFS) (PER HYDROCAD)	CHANGE IN FLOW, ΔQ (CFS)	REMARK
1	0.16	0.39	+0.23	*
10	0.95	1.37	+0.42	*
100	2.81	3.40	+0.59	*

* Note: Zero net increase of peak runoff will be achieved by the proposed Dry Pond System. The location of the system is shown on the site plan drawings.

Location Maps

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

LOCATION MAPS

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NORTH

Source: maps.google.com

STREET MAP

NORTH

Source: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

SOIL MAP

Drainage Calculations

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

DRAINAGE CALCULATION

BY

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EXISTING CONDITION:

The existing area of interest consists of one watershed (WS#1), with an area of about 0.536 acres. The site consists of woods/grass and gravel, plus some impervious areas. The drainage area is delineated on the Existing Condition Drainage Map (E-1).

WS#1E:
The soil within WS#1E belongs to Hydrological Soil Group "B".

A = 0.536 Acres

Composition	HSG "B"
A_{Gravel}=	0.116 acres
$A_{Impervious}$=	0.01 acres
$A_{Wood/Grass}$=	0.41 acres

Due to the small size of the watershed, the time of concentration is considered the minimum of 0.1 hours.

WS#1E → P.O.I.#1

DEVELOPED CONDITION:

Upon development of the site, the total area of the developed watershed will remain the same as the existing watershed area (0.536 acres). The developed condition consists of the construction of a building and an increase in gravel coverage. The watershed area is delineated on the Developed Condition Drainage Map (D-1).

WS#1D:
The soil within WS#1D belongs to Hydrological Soil Group "B".

A = 0.536 Acres

Composition	HSG "B"
A_{Gravel}	0.194 acres
$A_{Impervious}$	0.048 acres
$A_{Wood/Grass}$	0.294 acres

Due to the small size of the watershed, the time of concentration is considered the minimum of 0.1 hours.

ROOFTOP → DRY POND SYSTEM → P.O.I.#1.

WS#1D → P.O.I.#1.

SMP Design

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

STORMWATER MANAGEMENT PRACTICE DESIGN CALCULATIONS

BY

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WATER QUANTITY CALCULATION
WESTCHESTER METHOD

1. **Select Design Storm**
   (Use 1-Year, 24-Hour Storm)
   Total Rainfall = 4.90 inches

2. **Calculate The Storage Volume (Vs):**
   10-Year, 24-Hour Rainfall = 4.90 inches

   Soil: Hydrologic Soil Group (HSG) is "B", see attached Soil Survey Map.

   Existing CN (WS#1E) = 65, $(Q_E)_{10}$ = 0.95 cfs (Hydrocad, attached)
   Runoff depth = 1.59 inches

   Proposed CN (WS#1D) = 73, $(Q_D)_{10}$ = 1.37 cfs (Hydrocad, attached)
   Runoff depth = 2.20 inches

   Drainage Area = 23,349 ft^2

$$\Delta Vr = 2.20\ in - 1.59\ in = 0.61\ in$$

$$\Delta Vr = 0.61\ in * \frac{1\ ft}{12\ in}$$

$$\Delta Vr = 0.05\ ft$$

$$V_S = \Delta Vr * Area$$

$$V_S = 0.05\ ft * 23{,}349\ ft^2$$

$$V_S = 1{,}187.0\ ft^3$$

The 10-year storm storage volume is $1,187.0\ ft^3$

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SMP SIZING CALCULATION

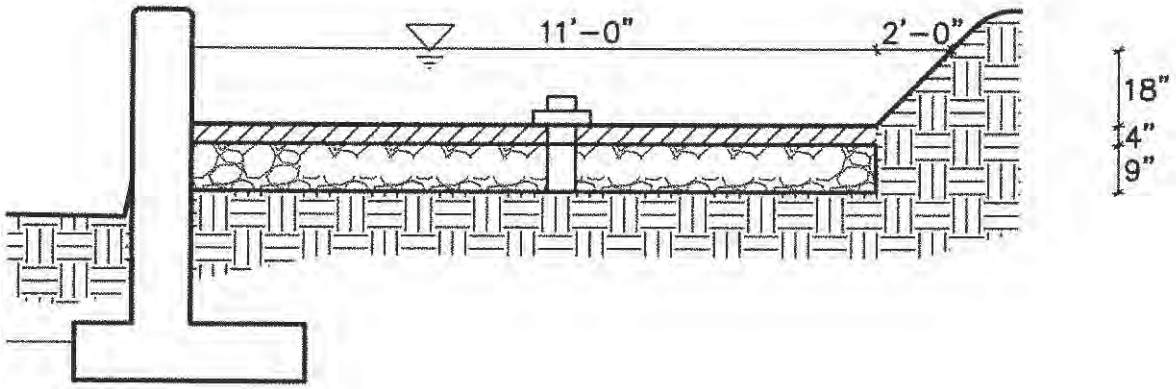
In order to provide zero net increase of peak runoff a dry pond system has been proposed. The storage is calculated as 1,187.0 cu.ft. for the entire WS#1.

Calculate Provided Storage Volume:

The Dry Pond has the following characteristics:

- 31" deep
- 9" of ¾" gravel (porosity = 0.4) on bottom
- 4" of soil (porosity = 0.2) above the gravel
- 18" of freeboard between the top of the catch basin to the surface of the soil

A cross-sectional, not to scale sketch of the dry pond system is shown below:



DRY POND CROSS SECTION
N.T.S.

Void space in the dry pond cross-section:

= A1 (Void area above-ground) + A2(Void area in planting soil) + A3(Void area in gravel)

$$= \left[(1.5')\left(\frac{1}{2}\right)(13.0' + 11.0')\right] + (0.2)(13.0')(0.33') + (0.4)(13.0')(0.83')$$

$$= 23.17\ ft^2$$

Required width of the dry pond: $24.0\ ft$

Required dry pond length (total):

$$= \frac{1{,}187.0\ ft^3}{24.0\ ft^2} = 49.5\ ft$$

Required length of the dry pond: $50.0\ ft$

Use one (1) dry pond. Required dimensions of the dry pond:

$50.0\ ft\ (Length)\ x\ 24.0\ ft(Width)$

Provided Storage:

$$= (50.0\ ft)(24.0\ ft^2)$$
$$= 1{,}200.0\ ft^3$$

Note: HydroCAD was used to calculate the actual storage provided by the proposed system.

The proposed Dry Pond will provide $1,213.0\ ft^3$ (@ ELV= 582.50') > $1,187.0\ ft^3$

OK√

(Please see HydroCAD for detailed calculations)

HydroCAD Model

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

HYDROCAD MODEL
FOR EXISTING AND PROPOSED CONDITIONS
1, 10, AND 100 YEAR STORMS

BY

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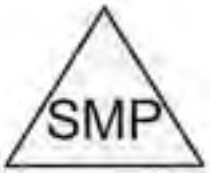
EXISTING CONDITIONS

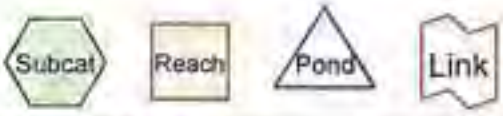
EXISTING

DEVELOPED CONDITIONS

DEVELOPED



DRY DETENTION BASIN



Routing Diagram for 4870 Mahopac Wells 1, 2, & 3
Prepared by ATZL NASHER & ZIGLER, Printed 4/10/2024
HydroCAD® 10.00-20 s/n 03403 © 2017 HydroCAD Software Solutions LLC

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentWS#1D: DEVELOPED Runoff Area=0.536 ac 8.96% Impervious Runoff Depth=0.70"
Tc=6.0 min CN=73 Runoff=0.39 cfs 0.031 af

SubcatchmentWS#1E: EXISTING Runoff Area=0.536 ac 1.87% Impervious Runoff Depth=0.39"
Tc=6.0 min CN=65 Runoff=0.16 cfs 0.017 af

Pond SMP: DRY DETENTIONBASIN Peak Elev=0.00' Storage=0 cf

Total Runoff Area = 1.072 ac Runoff Volume = 0.048 af Average Runoff Depth = 0.54"
94.59% Pervious = 1.014 ac 5.41% Impervious = 0.058 ac

Summary for Subcatchment WS#1D: DEVELOPED

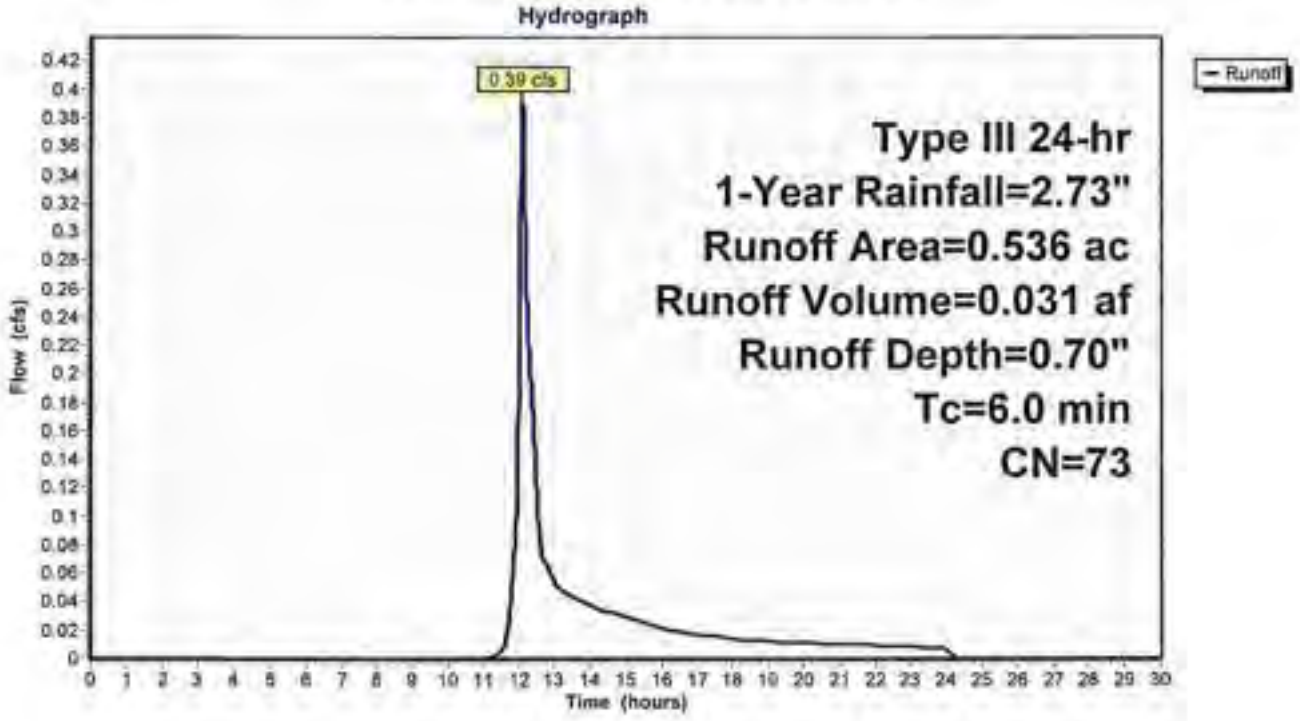
Runoff = 0.39 cfs @ 12.10 hrs, Volume= 0.031 af, Depth= 0.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.73"

Area (ac)	CN	Description
0.194	85	Gravel roads, HSG B
0.048	98	Paved parking, HSG B
0.294	61	>75% Grass cover, Good, HSG B
0.536	73	Weighted Average
0.488		91.04% Pervious Area
0.048		8.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment WS#1D: DEVELOPED



Summary for Subcatchment WS#1E: EXISTING

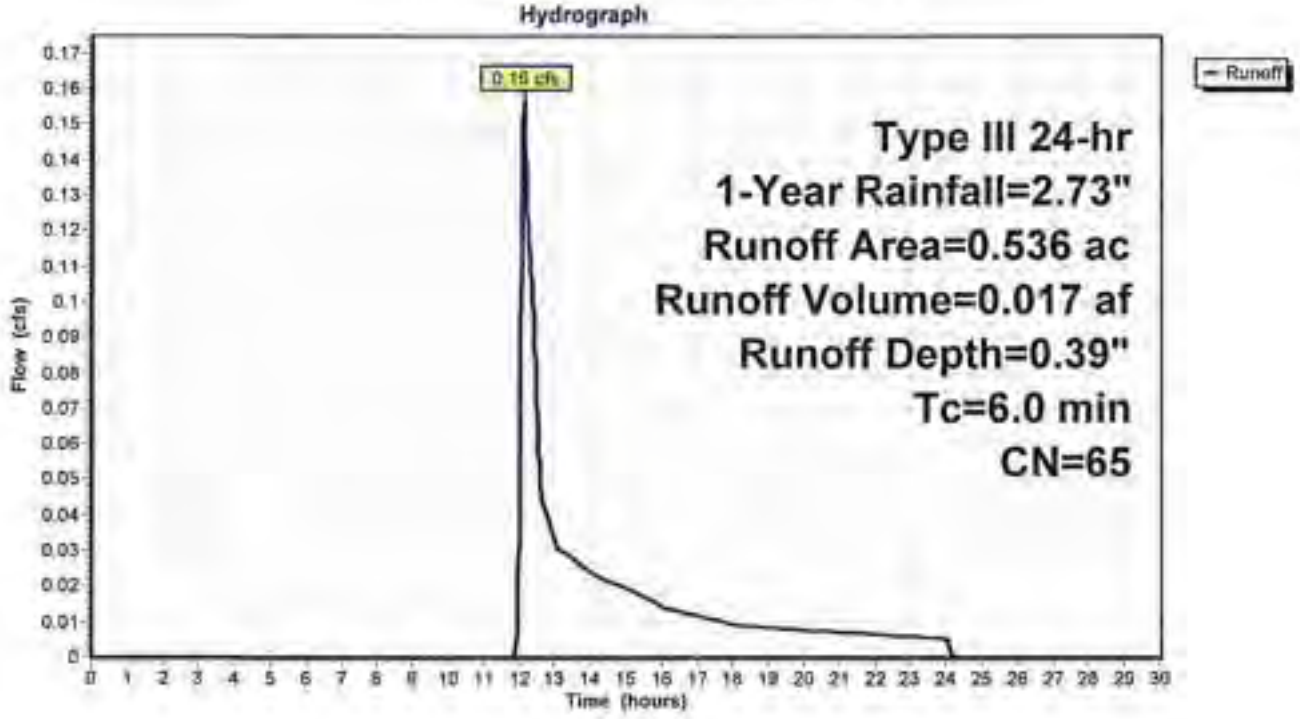
Runoff = 0.16 cfs @ 12.12 hrs, Volume= 0.017 af, Depth= 0.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.73"

Area (ac)	CN	Description
0.116	85	Gravel roads, HSG B
0.010	98	Paved parking, HSG B
0.410	58	Woods/grass comb., Good, HSG B
0.536	65	Weighted Average
0.526		98.13% Pervious Area
0.010		1.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment WS#1E: EXISTING



Summary for Pond SMP: DRY DETENTION BASIN

Volume	Invert	Avail.Storage	Storage Description
#1	579.83'	1,562 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
579.83	717	0.0	0	0
580.67	717	40.0	241	241
581.00	565	20.0	42	283
581.01	565	100.0	6	289
582.00	638	100.0	595	884
583.00	717	100.0	678	1,562

Stage-Discharge for Pond SMP: DRY DETENTION BASIN

Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)
579.83	0.00	580.89	0.00	581.95	0.00
579.85	0.00	580.91	0.00	581.97	0.00
579.87	0.00	580.93	0.00	581.99	0.00
579.89	0.00	580.95	0.00	582.01	0.00
579.91	0.00	580.97	0.00	582.03	0.00
579.93	0.00	580.99	0.00	582.05	0.00
579.95	0.00	581.01	0.00	582.07	0.00
579.97	0.00	581.03	0.00	582.09	0.00
579.99	0.00	581.05	0.00	582.11	0.00
580.01	0.00	581.07	0.00	582.13	0.00
580.03	0.00	581.09	0.00	582.15	0.00
580.05	0.00	581.11	0.00	582.17	0.00
580.07	0.00	581.13	0.00	582.19	0.00
580.09	0.00	581.15	0.00	582.21	0.00
580.11	0.00	581.17	0.00	582.23	0.00
580.13	0.00	581.19	0.00	582.25	0.00
580.15	0.00	581.21	0.00	582.27	0.00
580.17	0.00	581.23	0.00	582.29	0.00
580.19	0.00	581.25	0.00	582.31	0.00
580.21	0.00	581.27	0.00	582.33	0.00
580.23	0.00	581.29	0.00	582.35	0.00
580.25	0.00	581.31	0.00	582.37	0.00
580.27	0.00	581.33	0.00	582.39	0.00
580.29	0.00	581.35	0.00	582.41	0.00
580.31	0.00	581.37	0.00	582.43	0.00
580.33	0.00	581.39	0.00	582.45	0.00
580.35	0.00	581.41	0.00	582.47	0.00
580.37	0.00	581.43	0.00	582.49	0.00
580.39	0.00	581.45	0.00	582.51	0.00
580.41	0.00	581.47	0.00	582.53	0.00
580.43	0.00	581.49	0.00	582.55	0.00
580.45	0.00	581.51	0.00	582.57	0.00
580.47	0.00	581.53	0.00	582.59	0.00
580.49	0.00	581.55	0.00	582.61	0.00
580.51	0.00	581.57	0.00	582.63	0.00
580.53	0.00	581.59	0.00	582.65	0.00
580.55	0.00	581.61	0.00	582.67	0.00
580.57	0.00	581.63	0.00	582.69	0.00
580.59	0.00	581.65	0.00	582.71	0.00
580.61	0.00	581.67	0.00	582.73	0.00
580.63	0.00	581.69	0.00	582.75	0.00
580.65	0.00	581.71	0.00	582.77	0.00
580.67	0.00	581.73	0.00	582.79	0.00
580.69	0.00	581.75	0.00	582.81	0.00
580.71	0.00	581.77	0.00	582.83	0.00
580.73	0.00	581.79	0.00	582.85	0.00
580.75	0.00	581.81	0.00	582.87	0.00
580.77	0.00	581.83	0.00	582.89	0.00
580.79	0.00	581.85	0.00	582.91	0.00
580.81	0.00	581.87	0.00	582.93	0.00
580.83	0.00	581.89	0.00	582.95	0.00
580.85	0.00	581.91	0.00	582.97	0.00
580.87	0.00	581.93	0.00	582.99	0.00

Stage-Area-Storage for Pond SMP: DRY DETENTION BASIN

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
579.83	717	0
579.88	717	14
579.93	717	29
579.98	717	43
580.03	717	57
580.08	717	72
580.13	717	86
580.18	717	100
580.23	717	115
580.28	717	129
580.33	717	143
580.38	717	158
580.43	717	172
580.48	717	186
580.53	717	201
580.58	717	215
580.63	717	229
580.68	712	242
580.73	689	249
580.78	666	256
580.83	643	263
580.88	620	269
580.93	597	275
580.98	574	281
581.03	566	300
581.08	570	329
581.13	574	357
581.18	578	386
581.23	581	415
581.28	585	444
581.33	589	473
581.38	592	503
581.43	596	533
581.48	600	563
581.53	603	593
581.58	607	623
581.63	611	653
581.68	614	684
581.73	618	715
581.78	622	746
581.83	625	777
581.88	629	808
581.93	633	840
581.98	637	872
582.03	640	904
582.08	644	936
582.13	648	968
582.18	652	1,000
582.23	656	1,033
582.28	660	1,066
582.33	664	1,099
582.38	668	1,132
582.43	672	1,166
582.48	676	1,200
582.53	680	1,234
582.58	684	1,268
582.63	688	1,302
582.68	692	1,336
582.73	696	1,371
582.78	700	1,406
582.83	704	1,441
582.88	708	1,476
582.93	711	1,512
582.98	715	**1,548**

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS#1D: DEVELOPED Runoff Area=0.536 ac 8.96% Impervious Runoff Depth=2.20"
Tc=6.0 min CN=73 Runoff=1.37 cfs 0.098 af

Subcatchment WS#1E: EXISTING Runoff Area=0.536 ac 1.87% Impervious Runoff Depth=1.59"
Tc=6.0 min CN=65 Runoff=0.95 cfs 0.071 af

Pond SMP: DRY DETENTION BASIN Peak Elev=0.00' Storage=0 cf

Total Runoff Area = 1.072 ac Runoff Volume = 0.169 af Average Runoff Depth = 1.89"
94.59% Pervious = 1.014 ac 5.41% Impervious = 0.058 ac

Summary for Subcatchment WS#1D: DEVELOPED

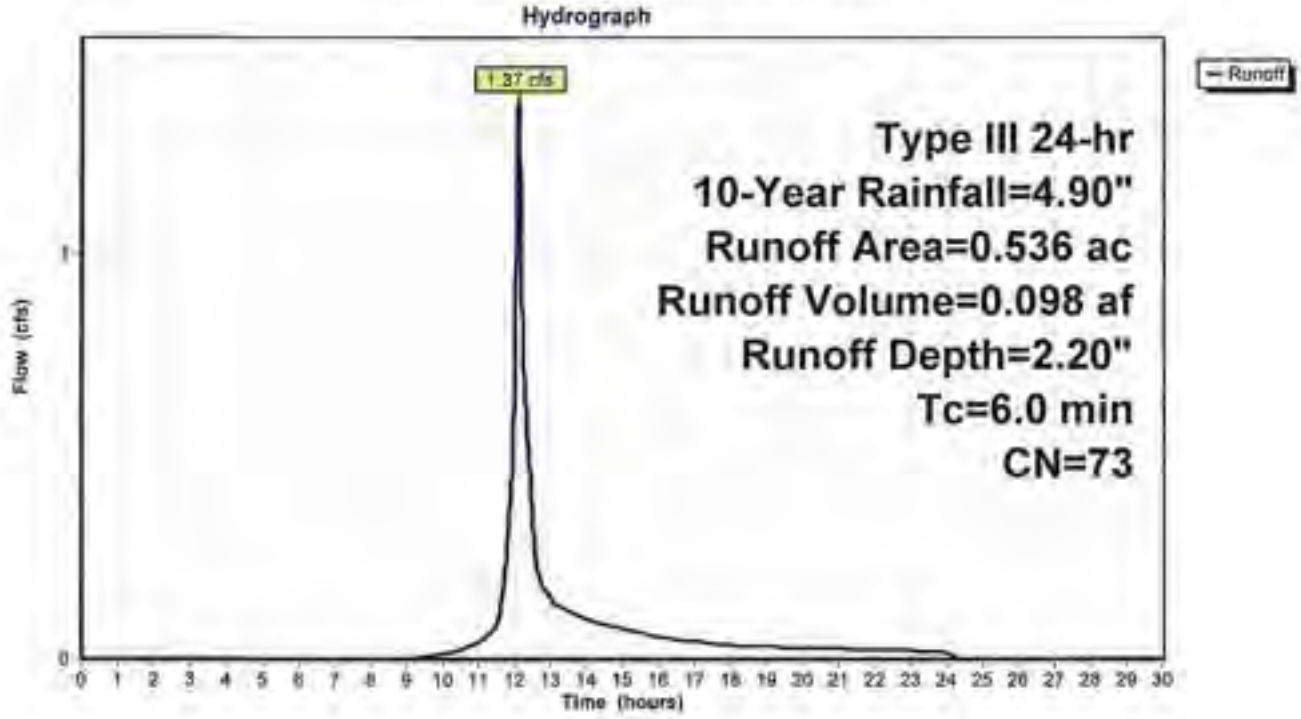
Runoff = 1.37 cfs @ 12.09 hrs, Volume= 0.098 af, Depth= 2.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (ac)	CN	Description
0.194	85	Gravel roads, HSG B
0.048	98	Paved parking, HSG B
0.294	61	>75% Grass cover, Good, HSG B
0.536	73	Weighted Average
0.488		91.04% Pervious Area
0.048		8.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment WS#1D: DEVELOPED



Summary for Subcatchment WS#1E: EXISTING

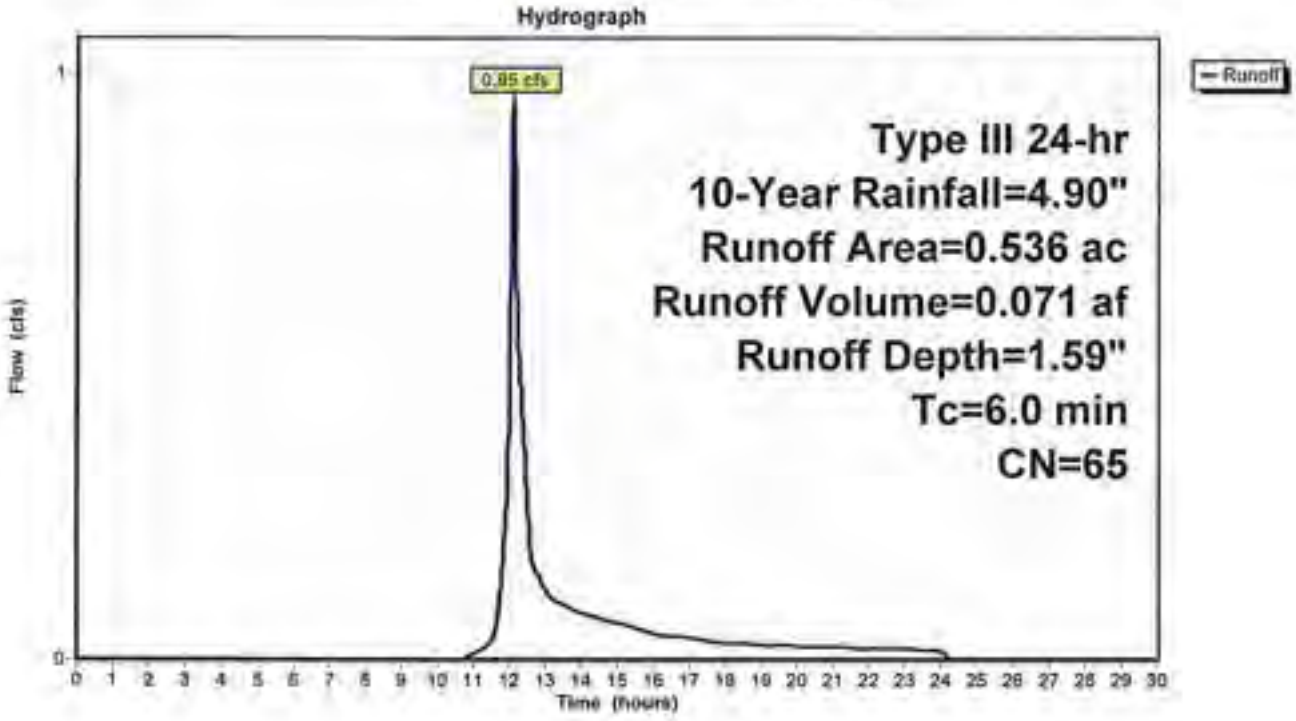
Runoff = 0.95 cfs @ 12.10 hrs, Volume= 0.071 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (ac)	CN	Description
0.116	85	Gravel roads, HSG B
0.010	98	Paved parking, HSG B
0.410	58	Woods/grass comb., Good, HSG B
0.536	65	Weighted Average
0.526		98.13% Pervious Area
0.010		1.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment WS#1E: EXISTING



Summary for Pond SMP: DRY DETENTION BASIN

Volume	Invert	Avail.Storage	Storage Description
#1	579.83'	1,562 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
579.83	717	0.0	0	0
580.67	717	40.0	241	241
581.00	565	20.0	42	283
581.01	565	100.0	6	289
582.00	638	100.0	595	884
583.00	717	100.0	678	1,562

Stage-Discharge for Pond SMP: DRY DETENTION BASIN

Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)
579.83	**0.00**	580.89	0.00	581.95	0.00
579.85	0.00	580.91	0.00	581.97	0.00
579.87	0.00	580.93	0.00	581.99	0.00
579.89	0.00	580.95	0.00	582.01	0.00
579.91	0.00	580.97	0.00	582.03	0.00
579.93	0.00	580.99	0.00	582.05	0.00
579.95	0.00	581.01	0.00	582.07	0.00
579.97	0.00	581.03	0.00	582.09	0.00
579.99	0.00	581.05	0.00	582.11	0.00
580.01	0.00	581.07	0.00	582.13	0.00
580.03	0.00	581.09	0.00	582.15	0.00
580.05	0.00	581.11	0.00	582.17	0.00
580.07	0.00	581.13	0.00	582.19	0.00
580.09	0.00	581.15	0.00	582.21	0.00
580.11	0.00	581.17	0.00	582.23	0.00
580.13	0.00	581.19	0.00	582.25	0.00
580.15	0.00	581.21	0.00	582.27	0.00
580.17	0.00	581.23	0.00	582.29	0.00
580.19	0.00	581.25	0.00	582.31	0.00
580.21	0.00	581.27	0.00	582.33	0.00
580.23	0.00	581.29	0.00	582.35	0.00
580.25	0.00	581.31	0.00	582.37	0.00
580.27	0.00	581.33	0.00	582.39	0.00
580.29	0.00	581.35	0.00	582.41	0.00
580.31	0.00	581.37	0.00	582.43	0.00
580.33	0.00	581.39	0.00	582.45	0.00
580.35	0.00	581.41	0.00	582.47	0.00
580.37	0.00	581.43	0.00	582.49	0.00
580.39	0.00	581.45	0.00	582.51	0.00
580.41	0.00	581.47	0.00	582.53	0.00
580.43	0.00	581.49	0.00	582.55	0.00
580.45	0.00	581.51	0.00	582.57	0.00
580.47	0.00	581.53	0.00	582.59	0.00
580.49	0.00	581.55	0.00	582.61	0.00
580.51	0.00	581.57	0.00	582.63	0.00
580.53	0.00	581.59	0.00	582.65	0.00
580.55	0.00	581.61	0.00	582.67	0.00
580.57	0.00	581.63	0.00	582.69	0.00
580.59	0.00	581.65	0.00	582.71	0.00
580.61	0.00	581.67	0.00	582.73	0.00
580.63	0.00	581.69	0.00	582.75	0.00
580.65	0.00	581.71	0.00	582.77	0.00
580.67	0.00	581.73	0.00	582.79	0.00
580.69	0.00	581.75	0.00	582.81	0.00
580.71	0.00	581.77	0.00	582.83	0.00
580.73	0.00	581.79	0.00	582.85	0.00
580.75	0.00	581.81	0.00	582.87	0.00
580.77	0.00	581.83	0.00	582.89	0.00
580.79	0.00	581.85	0.00	582.91	0.00
580.81	0.00	581.87	0.00	582.93	0.00
580.83	0.00	581.89	0.00	582.95	0.00
580.85	0.00	581.91	0.00	582.97	0.00
580.87	0.00	581.93	0.00	582.99	0.00

Stage-Area-Storage for Pond SMP: DRY DETENTION BASIN

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
579.83	717	0
579.88	717	14
579.93	717	29
579.98	717	43
580.03	717	57
580.08	717	72
580.13	717	86
580.18	717	100
580.23	717	115
580.28	717	129
580.33	717	143
580.38	717	158
580.43	717	172
580.48	717	186
580.53	717	201
580.58	717	215
580.63	717	229
580.68	712	242
580.73	689	249
580.78	666	256
580.83	643	263
580.88	620	269
580.93	597	275
580.98	574	281
581.03	566	300
581.08	570	329
581.13	574	357
581.18	578	386
581.23	581	415
581.28	585	444
581.33	589	473
581.38	592	503
581.43	596	533
581.48	600	563
581.53	603	593
581.58	607	623
581.63	611	653
581.68	614	684
581.73	618	715
581.78	622	746
581.83	625	777
581.88	629	808
581.93	633	840
581.98	637	872
582.03	640	904
582.08	644	936
582.13	648	968
582.18	652	1,000
582.23	656	1,033
582.28	660	1,066
582.33	664	1,099
582.38	668	1,132
582.43	672	1,166
582.48	676	1,200
582.53	680	1,234
582.58	684	1,268
582.63	688	1,302
582.68	692	1,336
582.73	696	1,371
582.78	700	1,406
582.83	704	1,441
582.88	708	1,476
582.93	711	1,512
582.98	715	**1,548**

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS#1D: DEVELOPED Runoff Area=0.536 ac 8.96% Impervious Runoff Depth=5.43"
Tc=6.0 min CN=73 Runoff=3.40 cfs 0.243 af

Subcatchment WS#1E: EXISTING Runoff Area=0.536 ac 1.87% Impervious Runoff Depth=4.47"
Tc=6.0 min CN=65 Runoff=2.81 cfs 0.200 af

Pond SMP: DRY DETENTION BASIN Peak Elev=0.00' Storage=0 cf

Total Runoff Area = 1.072 ac Runoff Volume = 0.442 af Average Runoff Depth = 4.95"
94.59% Pervious = 1.014 ac 5.41% Impervious = 0.058 ac

Summary for Subcatchment WS#1D: DEVELOPED

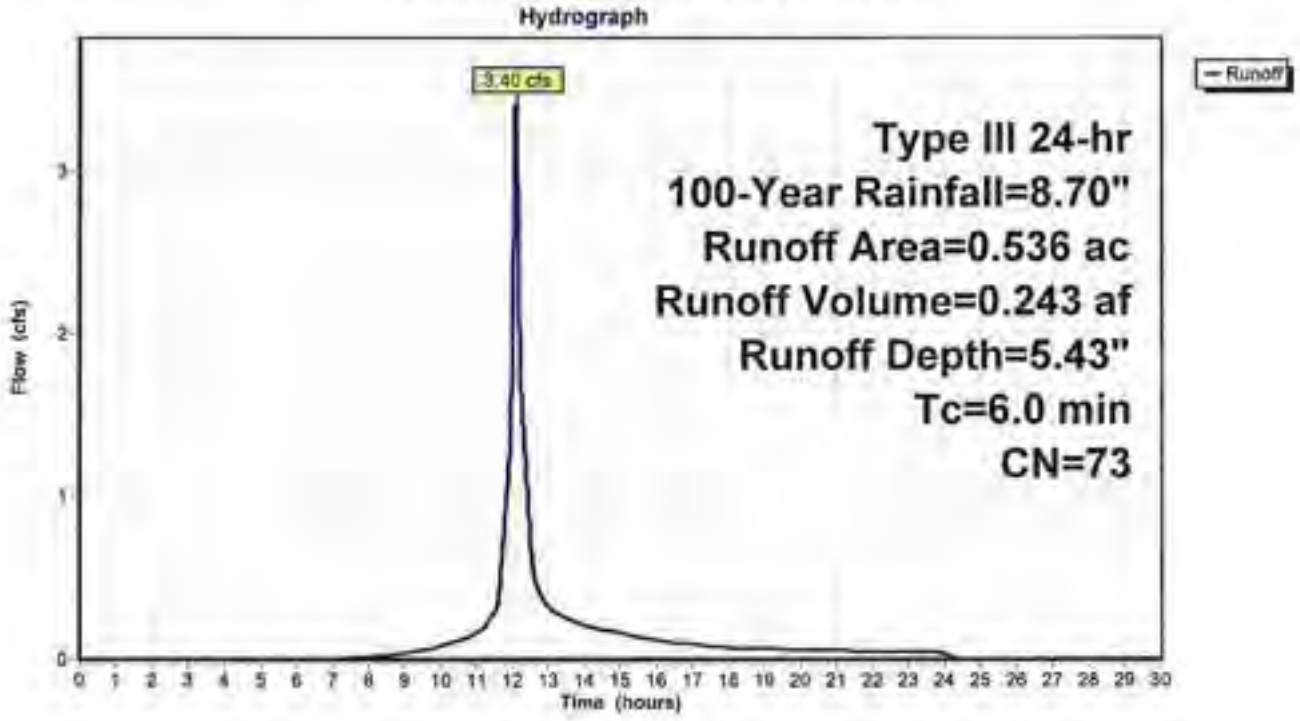
Runoff = 3.40 cfs @ 12.09 hrs, Volume= 0.243 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.70"

Area (ac)	CN	Description
0.194	85	Gravel roads, HSG B
0.048	98	Paved parking, HSG B
0.294	61	>75% Grass cover, Good, HSG B
0.536	73	Weighted Average
0.488		91.04% Pervious Area
0.048		8.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment WS#1D: DEVELOPED



Summary for Subcatchment WS#1E: EXISTING

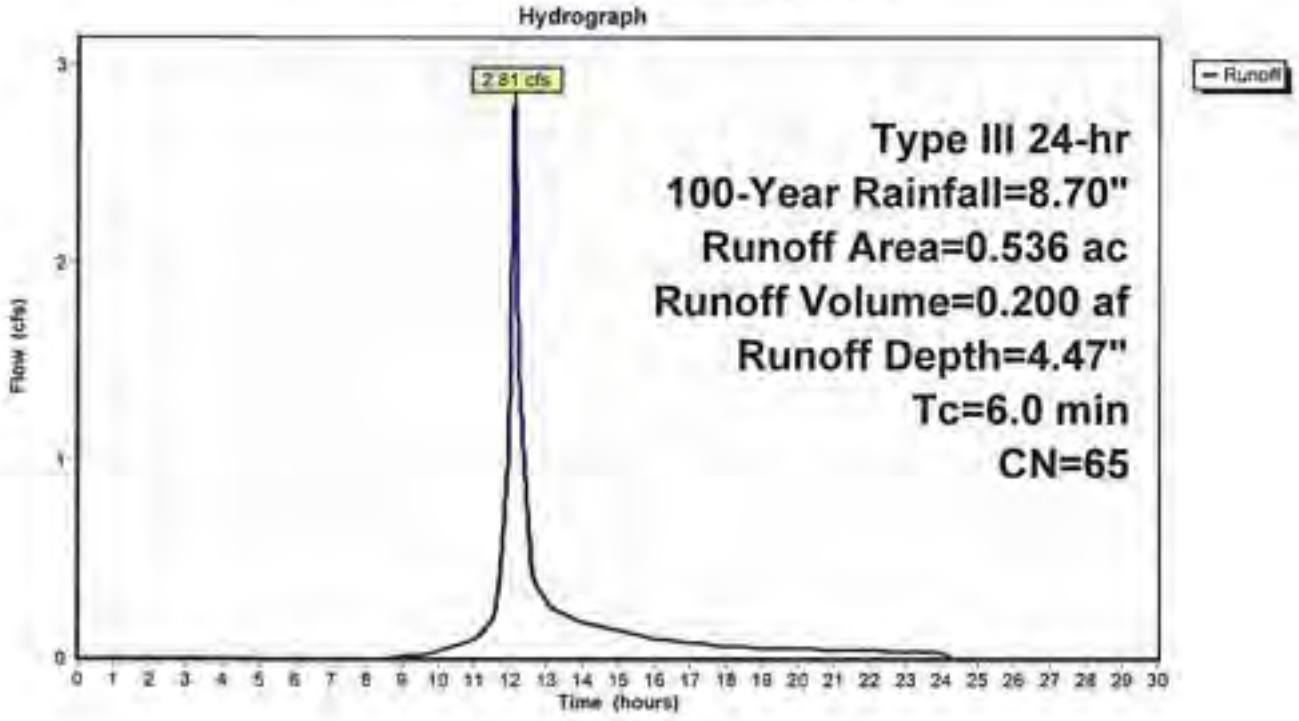
Runoff = 2.81 cfs @ 12.09 hrs, Volume= 0.200 af, Depth= 4.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.70"

Area (ac)	CN	Description
0.116	85	Gravel roads, HSG B
0.010	98	Paved parking, HSG B
0.410	58	Woods/grass comb., Good, HSG B
0.536	65	Weighted Average
0.526		98.13% Pervious Area
0.010		1.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment WS#1E: EXISTING



Summary for Pond SMP: DRY DETENTION BASIN

Volume	Invert	Avail.Storage	Storage Description
#1	579.83'	1,562 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
579.83	717	0.0	0	0
580.67	717	40.0	241	241
581.00	565	20.0	42	283
581.01	565	100.0	6	289
582.00	638	100.0	595	884
583.00	717	100.0	678	1,562

Stage-Discharge for Pond SMP: DRY DETENTION BASIN

Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)
579.83	**0.00**	580.89	0.00	581.95	0.00
579.85	0.00	580.91	0.00	581.97	0.00
579.87	0.00	580.93	0.00	581.99	0.00
579.89	0.00	580.95	0.00	582.01	0.00
579.91	0.00	580.97	0.00	582.03	0.00
579.93	0.00	580.99	0.00	582.05	0.00
579.95	0.00	581.01	0.00	582.07	0.00
579.97	0.00	581.03	0.00	582.09	0.00
579.99	0.00	581.05	0.00	582.11	0.00
580.01	0.00	581.07	0.00	582.13	0.00
580.03	0.00	581.09	0.00	582.15	0.00
580.05	0.00	581.11	0.00	582.17	0.00
580.07	0.00	581.13	0.00	582.19	0.00
580.09	0.00	581.15	0.00	582.21	0.00
580.11	0.00	581.17	0.00	582.23	0.00
580.13	0.00	581.19	0.00	582.25	0.00
580.15	0.00	581.21	0.00	582.27	0.00
580.17	0.00	581.23	0.00	582.29	0.00
580.19	0.00	581.25	0.00	582.31	0.00
580.21	0.00	581.27	0.00	582.33	0.00
580.23	0.00	581.29	0.00	582.35	0.00
580.25	0.00	581.31	0.00	582.37	0.00
580.27	0.00	581.33	0.00	582.39	0.00
580.29	0.00	581.35	0.00	582.41	0.00
580.31	0.00	581.37	0.00	582.43	0.00
580.33	0.00	581.39	0.00	582.45	0.00
580.35	0.00	581.41	0.00	582.47	0.00
580.37	0.00	581.43	0.00	582.49	0.00
580.39	0.00	581.45	0.00	582.51	0.00
580.41	0.00	581.47	0.00	582.53	0.00
580.43	0.00	581.49	0.00	582.55	0.00
580.45	0.00	581.51	0.00	582.57	0.00
580.47	0.00	581.53	0.00	582.59	0.00
580.49	0.00	581.55	0.00	582.61	0.00
580.51	0.00	581.57	0.00	582.63	0.00
580.53	0.00	581.59	0.00	582.65	0.00
580.55	0.00	581.61	0.00	582.67	0.00
580.57	0.00	581.63	0.00	582.69	0.00
580.59	0.00	581.65	0.00	582.71	0.00
580.61	0.00	581.67	0.00	582.73	0.00
580.63	0.00	581.69	0.00	582.75	0.00
580.65	0.00	581.71	0.00	582.77	0.00
580.67	0.00	581.73	0.00	582.79	0.00
580.69	0.00	581.75	0.00	582.81	0.00
580.71	0.00	581.77	0.00	582.83	0.00
580.73	0.00	581.79	0.00	582.85	0.00
580.75	0.00	581.81	0.00	582.87	0.00
580.77	0.00	581.83	0.00	582.89	0.00
580.79	0.00	581.85	0.00	582.91	0.00
580.81	0.00	581.87	0.00	582.93	0.00
580.83	0.00	581.89	0.00	582.95	0.00
580.85	0.00	581.91	0.00	582.97	0.00
580.87	0.00	581.93	0.00	582.99	0.00

Stage-Area-Storage for Pond SMP: DRY DETENTION BASIN

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
579.83	**717**	0
579.88	717	14
579.93	717	29
579.98	717	43
580.03	717	57
580.08	717	72
580.13	717	86
580.18	717	100
580.23	717	115
580.28	717	129
580.33	717	143
580.38	717	158
580.43	717	172
580.48	717	186
580.53	717	201
580.58	717	215
580.63	717	229
580.68	712	242
580.73	689	249
580.78	666	256
580.83	643	263
580.88	620	269
580.93	597	275
580.98	574	281
581.03	566	300
581.08	570	329
581.13	574	357
581.18	578	386
581.23	581	415
581.28	585	444
581.33	589	473
581.38	592	503
581.43	596	533
581.48	600	563
581.53	603	593
581.58	607	623
581.63	611	653
581.68	614	684
581.73	618	715
581.78	622	746
581.83	625	777
581.88	629	808
581.93	633	840
581.98	637	872
582.03	640	904
582.08	644	936
582.13	648	968
582.18	652	1,000
582.23	656	1,033
582.28	660	1,066
582.33	664	1,099
582.38	668	1,132
582.43	672	1,166
582.48	676	1,200
582.53	680	1,234
582.58	684	1,268
582.63	688	1,302
582.68	692	1,336
582.73	696	1,371
582.78	700	1,406
582.83	704	1,441
582.88	708	1,476
582.93	711	1,512
582.98	715	**1,548**

Section 3 : NOI & MS4

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

SECTION 3:

SPDES ACKNOWLEDGEMENT LETTER, FILLED OUT NOTICE OF INTENT (N.O.I.), AND MS4 SWPPP ACCEPTANCE FORM

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

0644089821

NOTICE OF INTENT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR [ ] (for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

-IMPORTANT-

RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
SUEZ WATER NEW YORK, INC

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
GARABED

Owner/Operator Contact Person First Name
STEVEN

Owner/Operator Mailing Address
163 OLD MILL ROAD

City
WEST NYACK

State: NY Zip: 10994-[ ]

Phone (Owner/Operator): 845-620-3319 Fax (Owner/Operator): [ ]-[ ]-[ ]

Email (Owner/Operator)
STEVEN.GARABED@SUEZ.COM

FED TAX ID
[ ]-[ ] (not required for individuals)

Project Site Information

Project/Site Name
MAHOPAC WELLS 1,2,&3

Street Address (NOT P.O. BOX)
BUCKS HOLLOW ROAD

Side of Street
○ North ○ South ● East ○ West

City/Town/Village (THAT ISSUES BUILDING PERMIT)
TOWN OF CARMEL

State: NY
Zip: 10541-
County: PUTNAM
DEC Region: 3

Name of Nearest Cross Street
ASTOR DRIVE

Distance to Nearest Cross Street (Feet)
890

Project In Relation to Cross Street
○ North ● South ○ East ○ West

Tax Map Numbers
Section-Block-Parcel
75.20-2-68

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site. To do this, go to the NYSDEC Stormwater Interactive Map on the DEC website at:

https://gisservices.dec.ny.gov/gis/stormwater/

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located the centroid of your project site, go to the bottom right hand corner of the map for the X, Y coordinates. Enter the coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)
-73740
Ex. -73.749

Y Coordinates (Northing)
41360
Ex. 42.652

2. What is the nature of this construction project?

○ **New Construction**

● **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ● OTHER

WATER FACILITY

Post-Development Future Land Use

- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots [ ]
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ● OTHER

WATER FACILITY

***Note:** for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
53.4	0.9	0.1	0.2

5. Do you plan to disturb more than 5 acres of soil at any one time? ○ Yes ● No

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
%	100 %	%	%

7. Is this a phased project? ○ Yes ● No

8. Enter the planned start and end dates of the disturbance activities.

Start Date 05/06/2024 – End Date 05/09/2025

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

P L U M B R O O K

9a. Type of waterbody identified in Question 9?

- ○ Wetland / State Jurisdiction On Site (Answer 9b)
- ○ Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 9b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ○ Stream / Creek Off Site
- ● River On Site
- ○ River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

9b. How was the wetland identified?

- ○ Regulatory Map
- ● Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001? ○ **Yes** ● **No**

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001? ● **Yes** ○ **No**

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ○ **Yes** ● **No**
If no, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? ○ **Yes** ● **No**
If Yes, what is the acreage to be disturbed?

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ● **Yes** ○ **No**

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ● Yes ○ No ○ Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

TOWN OF CARMEL

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ Yes ● No ○ Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ Yes ● No

19. Is this property owned by a state authority, state agency, federal government or local government? ○ Yes ● No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ Yes ● No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ● Yes ○ No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ○ Yes ● No
If No, skip questions 23 and 27-39.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ○ Yes ○ No

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**

SWPPP Preparer

ATZL, NASHER & ZIGLER

Contact Name (Last, Space, First)

NASHER, RYAN, A.

Mailing Address

232 NORTH MAIN STREET

City

NEW CITY

State NY Zip 10956-

Phone 845-634-4694

Fax 845-634-5543

Email

RNASHER@ANZNY.COM

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name RYAN **MI** A

Last Name NASHER

Signature

Date / /

25. Has a construction sequence schedule for the planned management practices been prepared? ● Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- ○ Check Dams
- ○ Construction Road Stabilization
- ○ Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ○ Sediment Traps
- ● Silt Fence
- ● Stabilized Construction Entrance
- ○ Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ○ Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ○ Grassed Waterway
- ● Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ● Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ○ Temporary Swale
- ● Topsoiling
- ○ Vegetating Waterways

Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ○ Grade Stabilization Structure
- ● Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ○ Riprap Slope Protection
- ○ Rock Outlet Protection
- ○ Streambank Protection

Other

STOCKPILE, CONCRETE WASHOUT,

CONSTRUCTION FENCE

Post-construction Stormwater Management Practice (SMP) Requirements

Important: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- O **Preservation of Undisturbed Areas**
- O **Preservation of Buffers**
- O **Reduction of Clearing and Grading**
- O **Locating Development in Less Sensitive Areas**
- O **Roadway Reduction**
- O **Sidewalk Reduction**
- O **Driveway Reduction**
- O **Cul-de-sac Reduction**
- O **Building Footprint Reduction**
- O **Parking Reduction**

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- O All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- O Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

[ ][ ][ ].[ ][ ][ ] **acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

	Total Contributing Area (acres)		Total Contributing Impervious Area (acres)	
RR Techniques (Area Reduction)				
○ Conservation of Natural Areas (RR-1)		and/or		
○ Sheetflow to Riparian Buffers/Filters Strips (RR-2)		and/or		
○ Tree Planting/Tree Pit (RR-3)		and/or		
○ Disconnection of Rooftop Runoff (RR-4)		and/or		
RR Techniques (Volume Reduction)				
○ Vegetated Swale (RR-5)				
○ Rain Garden (RR-6)				
○ Stormwater Planter (RR-7)				
○ Rain Barrel/Cistern (RR-8)				
○ Porous Pavement (RR-9)				
○ Green Roof (RR-10)				
Standard SMPs with RRv Capacity				
○ Infiltration Trench (I-1)				
○ Infiltration Basin (I-2)				
○ Dry Well (I-3)				
○ Underground Infiltration System (I-4)				
○ Bioretention (F-5)				
○ Dry Swale (O-1)				
Standard SMPs				
○ Micropool Extended Detention (P-1)				
○ Wet Pond (P-2)				
○ Wet Extended Detention (P-3)				
○ Multiple Pond System (P-4)				
○ Pocket Pond (P-5)				
○ Surface Sand Filter (F-1)				
○ Underground Sand Filter (F-2)				
○ Perimeter Sand Filter (F-3)				
○ Organic Filter (F-4)				
○ Shallow Wetland (W-1)				
○ Extended Detention Wetland (W-2)				
○ Pond/Wetland System (W-3)				
○ Pocket Wetland (W-4)				
○ Wet Swale (O-2)				

Table 2 - Alternative SMPs
(DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Alternative SMP	Total Contributing Impervious Area (acres)
○ Hydrodynamic	
○ Wet Vault	
○ Media Filter	
○ Other [ ]	

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name

Manufacturer

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

[ ][ ][ ].[ ][ ][ ] **acre-feet**

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ **Yes** ○ **No**

If Yes, go to question 36.
If No, go to question 32.

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

Minimum RRv Required

[ ][ ][ ].[ ][ ][ ] **acre-feet**

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

○ **Yes** ○ **No**

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

WQv Provided

[ ][ ][ ].[ ][ ][ ] **acre-feet**

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). [ ][ ][ ].[ ][ ][ ]

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ○ **Yes** ○ **No**

If Yes, go to question 36.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

CPv Required

[ ][ ][ ].[ ][ ][ ] **acre-feet**

CPv Provided

[ ][ ][ ].[ ][ ][ ] **acre-feet**

36a. The need to provide channel protection has been waived because:

○ Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qp)

Pre-Development

[ ][ ][ ].[ ][ ][ ] **CFS**

Post-development

[ ][ ][ ].[ ][ ][ ] **CFS**

Total Extreme Flood Control Criteria (Qf)

Pre-Development

[ ][ ][ ].[ ][ ][ ] **CFS**

Post-development

[ ][ ][ ].[ ][ ][ ] **CFS**

37a. The need to meet the Qp and Qf criteria has been waived because:

- O Site discharges directly to tidal waters or a fifth order or larger stream.
- O Downstream analysis reveals that the Qp and Qf controls are not required

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? O Yes O No

If Yes, Identify the entity responsible for the long term Operation and Maintenance

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(#28). (See question 32a) This space can also be used for other pertinent project information.

40. Identify other DEC permits, existing and new, that are required for this project/facility.

- ○ Air Pollution Control
- ○ Coastal Erosion
- ○ Hazardous Waste
- ○ Long Island Wells
- ○ Mined Land Reclamation
- ○ Solid Waste
- ○ Navigable Waters Protection / Article 15
- ○ Water Quality Certificate
- ○ Dam Safety
- ○ Water Supply
- ● Freshwater Wetlands/Article 24
- ○ Tidal Wetlands
- ○ Wild, Scenic and Recreational Rivers
- ○ Stream Bed or Bank Protection / Article 15
- ○ Endangered or Threatened Species(Incidental Take Permit)
- ○ Individual SPDES
- ○ SPDES Multi-Sector GP [N][Y][R][ ][ ][ ][ ][ ]
- ○ Other [ ]
- ○ None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ● **Yes** ○ **No**
If Yes, Indicate Size of Impact. [ ][ ][ ][ ][ ].[ ]

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ● **Yes** ○ **No**
(If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ● **Yes** ○ **No**

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. [N][Y][R][ ][ ][ ][ ][ ][ ]

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name

STEVEN

MI

Print Last Name

GARABED

Owner/Operator Signature

Date

__ / __ / ____

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	SUEZ WATER NEW YORK, INC
2. Contact Person:	STEVEN GARABED
3. Street Address:	163 OLD MILL ROAD
4. City/State/Zip:	WEST NYACK / NY / 10994
II. Project Site Information	
5. Project/Site Name:	MAHOPAC WELLS 1, 2, & 3
6. Street Address:	BUCKS HOLLOW ROAD
7. City/State/Zip:	CARMEL / NY / 10541
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	RICHARD FRANZETTI, PE, LEED
9. Title/Position:	TOWN ENGINEER
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4:	TOWN OF CARMEL
12. MS4 SPDES Permit Identification Number: NYR20A	294
13. Contact Person:	RICHARD FRANZETTI, PE, LEED
14. Street Address:	60 MCALPIN AVENUE
15. City/State/Zip:	MAHOPAC, NY 10541
16. Telephone Number:	845-628-1500

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name: RICHARD FRANZETTI, PE, LEED

Title/Position: TOWN ENGINEER

Signature:

Date:

VI. Additional Information

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

Appendix - F

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

APPENDIX-F
INFILTRATION TEST CERTIFICATION

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS
232 North Main Street, New City, NY 10956
Tel: (845) 634-4694 Fax: (845) 634-5543
Email: rnasher@anznv.com

April 15, 2022

Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

Attn: Richard Franzetti, PE, LEED
Town Engineer

Re: Infiltration Test Certification
Mahopac Wells 1, 2, & 3 (Job #4870)
Town of Carmel
Putnam County, New York

Dear Mr. Franzetti,

A soil infiltration test was performed on April 11, 2022. The infiltration test location map is attached to this report for your reference (Page F-5). The infiltration test failed due to the presence of groundwater.

The results are as follows.

Test Hole #1

Infiltration test was proposed at a depth of 72-inches (6-feet):

Soil Log	Soil Type
0" to 12"	Topsoil
12" to 96"	Silt & Sand

Groundwater was found at 72-inches (6-feet) deep, El.: 577.0.

Note: An infiltration practice is not acceptable on the site per the infiltration test.

If you have further questions or concerns, feel free to contact our office. Thank you.

Very Truly Yours,

Ryan A. Nasher, P.E.

Figure 1: View of deep test hole (Test Hole#1) at 72-inches deep and the 30-inch pvc pipe used to determine the infiltration rate.

Figure 2: View of the soil profile (Test Hole#1).

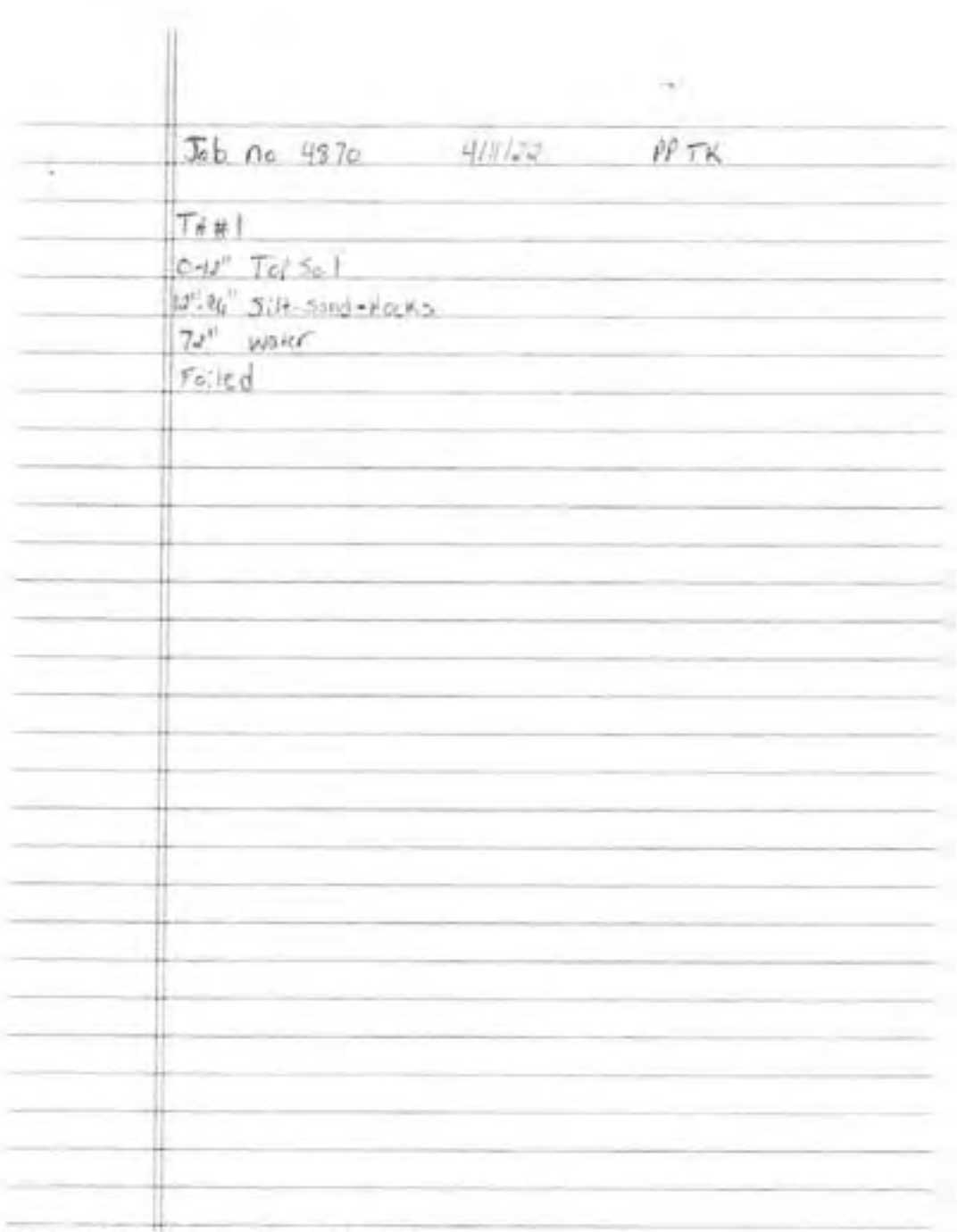
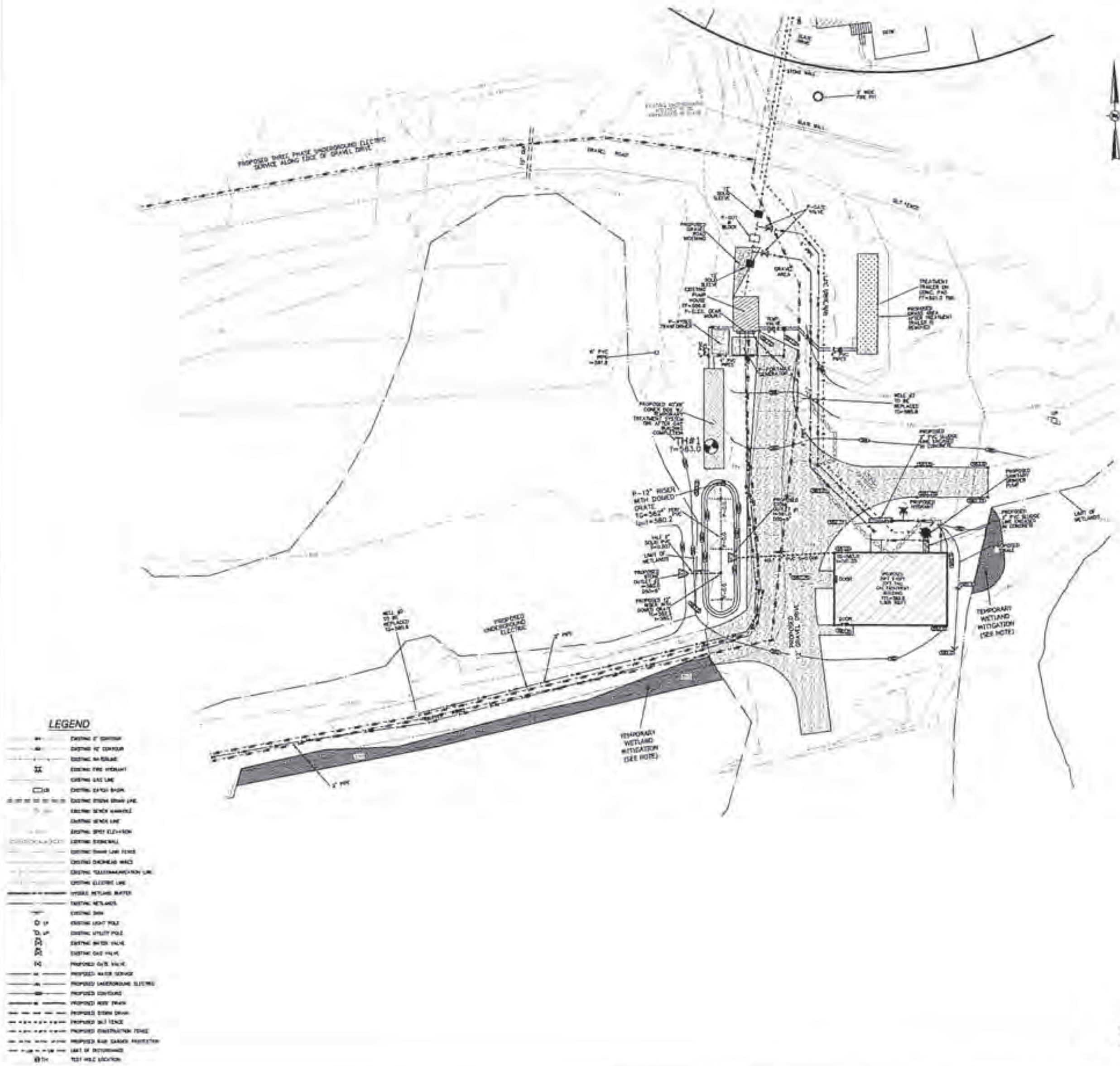
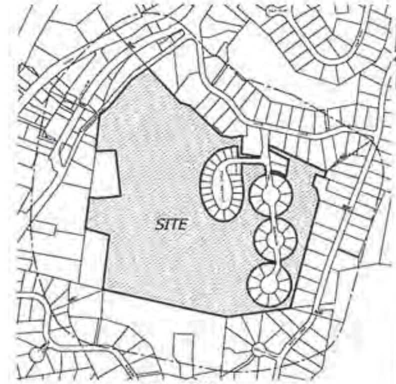


Figure 3: Field notes (Test Hole #1).

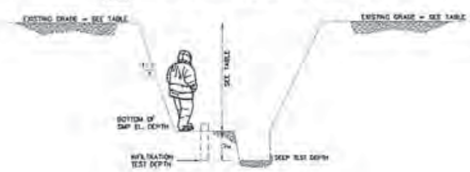




VICINITY MAP
SCALE: 1"=500'

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SAFE AND PRUDENT EXCAVATION OPERATION IN A MANNER SO THAT THE WORKERS, PUBLIC AND AUTHORITIES WILL BE PROTECTED FROM UNREASONABLE HAZARD.
2. SLOPE SIDES OF EXCAVATIONS TO COMPLY WITH LOCAL CODES AND ORDINANCES HAVING JURISDICTION. SHORE AND BRACE WHERE SLOPING IS NOT POSSIBLE BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED. COMPLY WITH OSHA REQUIREMENTS.
3. FOR THE SAFETY OF PERSONNEL, SHEETING SHALL BE USED AS REQUIRED IN ANY TRENCH OR EXCAVATION MORE THAN FIVE (5) FEET ABOVE THE PERSONNEL'S FOOTING.



TYPICAL INFILTRATION TEST CROSS SECTION
N.T.S.

INFILTRATION AND DEEP TEST FOR STORMWATER MITIGATION PRACTICE

TEST HOLE ID	EXISTING GRADE EL.	INFILTRATION TEST DEPTH	DEEP TEST DEPTH
TH #1	EL.=583.0	EL.=575.0 (8'-0")	EL.=575.0 (8'-0")

RYAN A. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89088

JOHN R. ATZL
N.Y.S. P.L.S. LIC. NO. 49228

REVISION	DATE	DESCRIPTION

ATZL, NASHER & ZIGLER P.C.
ENGINEERS–SURVEYORS–PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-4694
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
TEST HOLE LOCATION PLAN

DRAWN BY: IS	CHECKED BY: RN
DATE: MARCH 31, 2022	SCALE: 1 IN. = 30 FT.
PROJECT NO.: 4870	DRAWING NO.: 1

Drainage Maps

MAHOPAC WELLS 1, 2, & 3

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK

DRAINAGE MAPS

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

REVISION	DATE	DESCRIPTION
8	04-26-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER GRADING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	04-25-22	PER PLANNING BOARD 2-15-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

ATZL, NASHER & ZIGLER P.C.
ENGINEERS - SURVEYORS - PLANNERS
62 North Main Street
New City, New York 10956
Tel (845) 634-4894
Fax (845) 634-3543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

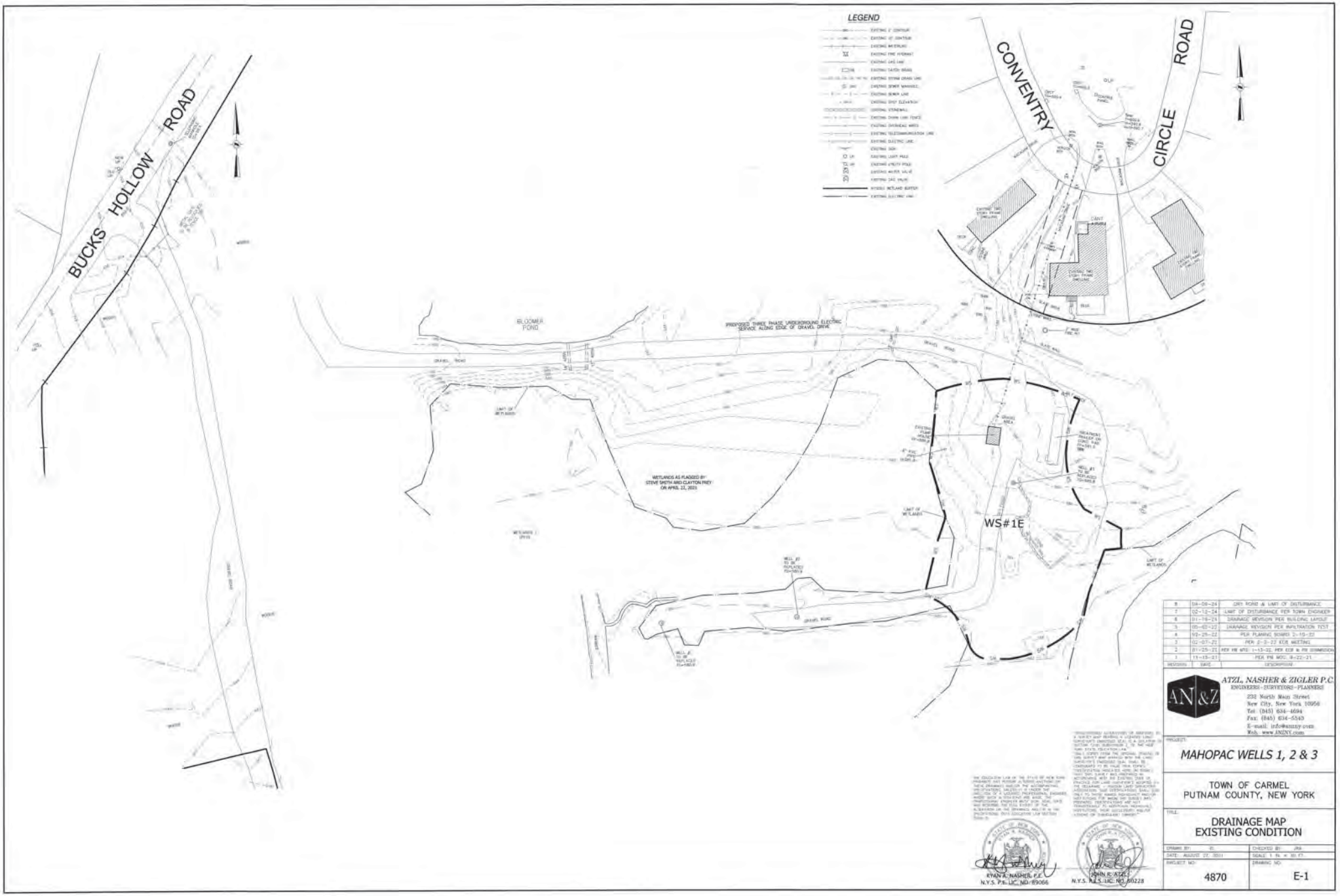
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
DRAINAGE MAP
DEVELOPED CONDITION

DRAWN BY:	CHECKED BY:
DATE: AUGUST 23, 2021	SCALE: 1 IN. = 30 FT.
PROJECT NO.: 4870	DRAWING NO.: D-1

RYAN A. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89066

JOHN R. ATZL
N.Y.S. L.S. LIC. NO. 50228



REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	02-25-22	PER PLANNING BOARD 2-15-22
3	02-07-22	PER 2-2-22 ECB MEETING
2	01-25-21	PER PB MTG. 1-13-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

ATZL, NASHER & ZIGLER P.C.
ENGINEERS - SURVEYORS - PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-4694
Fax: (845) 634-5563
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

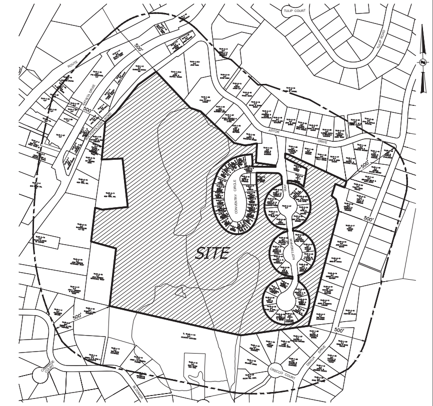
TITLE:
DRAINAGE MAP
EXISTING CONDITION

DRAWN BY: KC	CHECKED BY: JAN
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 80 FT.
PROJECT NO: 4870	DRAWING NO: E-1

RYAN E. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89066

JOHN R. ATZL
N.Y.S. L.S. LIC. NO. 50228

LOCATION MAP
SCALE: 1"=500'



VICINITY MAP
SCALE: 1"=500'

OWNERS WITHIN 500 FEET:

TOWN OF CARMEL TAX MAP

75.16-1-1	GEORGE P & TRACEY E SIALIANO 149 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-2	JOHN BATTISTA 157 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-3	JOHN BATTISTA 165 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
5.16-1-4	KALINER IRREVOC LIVING TRUST 163 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-6	ZOILA V MATAILO & MANUEL L CHILLOGALLI 171 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-8	CHARLIE'S MARINA INC 897 SOUTH LAKE ROAD MAHOPAC, NY 10541
75.16-1-9	SOTERIOS & IRENE KAMVOSULIS 193 BICKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-10	JAMES MCCABE PO BOX 472 BALDWIN PLACE, NY 10505
75.16-1-15	BROS BEACHAK 485 ROUTE 6 MAHOPAC, NY 10541
75.16-1-16	HILLTOP MANOR REALTY CORP. 466 ROUTE 6 MAHOPAC, NY 10541
75.16-1-17	HILLTOP MANOR REALTY CORP. 466 ROUTE 6 MAHOPAC, NY 10541
75.16-1-18	ACHILLES DOUPIS 441 ROUTE 6 MAHOPAC, NY 10541
75.16-1-19	FYB PROPERTIES, LLC 44 BLOOMER ROAD MAHOPAC, NY 10541
75.16-1-20	THOMAS & GENE SIMONE 155 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-21	THOMAS & GENE SIMONE 155 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-22	SCOTT NYGARD 427 ROUTE 6 MAHOPAC, NY 10541
75.16-1-23	SCOTT NYGARD 423 ROUTE 6 MAHOPAC, NY 1054
75.16-1-24	JACRYE REALTY CORP. 421 ROUTE 6 MAHOPAC, NY 10541
75.16-1-27	MEHRA REAL ESTATE LLC 10 SOUTH VESCHI LANE MAHOPAC, NY 10541
75316-1-28	BOHUMIL & ROZALIE FILIP 5 BATTISTA DRIVE MAHOPAC, NY 10541
75.16-1-29	SANTA & ROBERT PORTINO 7 BATTISTA DRIVE MAHOPAC, NY 10541
753.16-1-30	THOMAS SIMONE 155 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-61	ANTHONY & ROSE FABIANO 154 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-60.1	JOHN PARK 7 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-60.2	JORGE & RUFFINA TEJADA 190 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-59	PAUL & KELLY HARRIS 15 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-58	ERNESTO & GLORIMER LOPEZ 23 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-57	AYANA MIGHALES & ORAN MEHMET AYTUG 27 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-56	MARK & LUWANG WHITTERS 31 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-55	JOSHUA & SAMANTHA MOSER 37 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-54	JAMES & PATRICIA McGOWAN 41 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-50	LAWRENCE & KATHLEEN KEANE 51 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-49	CARLOER PROSCIA 55 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-48	TIMOTHY CREAN & KELLY HORAN 61ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-47	LOUIS & LINDA GAUDIO 65 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-46	JOSEPH & ROSEANN BRUSSO 69 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-45	MICHAEL & MARIANNE VICALE 73 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-44	VINCENT & ANNMARIE VIAGGIO 81 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-43	JAMES & CAROLINE COOKE 145 DAHLIA DRIVE MAHOPAC, NY 10541
75.16-1-42	JACOBL & TRACY POSNIAK 137 DAHLIA DRIVE MAHOPAC, NY 10541
75.16-1-41	MATTHEW & CARALYN TURRONE 133 DAHLIA DRIVE MAHOPAC, NY 10541
75.16-2-10	NORBERT VOGL 6 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-11	DONAL K & MEAGAN M HARTNETT 12 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-12	TOWN OF CARMEL 60 MCALPIN AVENUE MAHOPAC NY 10541
75.16-2-13	DIANE KISSH 22 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-14	HUNTER JAXON LLC 22 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-15	FRANK GIUNTI 32 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-16	WAYNE & SUSAN SPEAR 36 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-17	DOMENICK & LOUISE SACCHITIELLO 44 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-18	FRANK & LISA GUALDINO 50 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-19	JOHN & LINDA NANNA 54 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-20	LYNDIA RODRIGUEZ & ERICA RIVERA 58 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-21	KEVIN & IMELDA DANKO 62 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-22	VLADMIR KUNCA & BOHUMILA KUNCOVA 66 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-23	PAGNOTTA GEORGE IRREV TRUST 74 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-24	HERBERT F JR & JUNE M HILLERY 78 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-25	JOHN & PHYLLIS DIAPOLI 85 ASTOR DRIVE MAHOPAC, NY 1054
75.20-2-2	BINNS FAMILY IRREV TRUST #1 5 SOUTH VESCHI LANE MAHOPAC, NY 10541
75.20-2-3	NICOLE STERN & MICHAEL A BARILE 888 ROUTE 6 MAHOPAC, NY 10541
75.20-2-5	DAG ROUTE SIX, LLC PO BOX 636 MAHOPAC, NY 10541
75.20-2-7	ITALIAN AMERICAN CLUB INC PO BOX 931 MAHOPAC, NY 10541
75.20-2-8	ADRIANA CERQUERIA PO BOX 782 CROTON FALLS, NY 10519
75.20-2-11	TINA MARIE RAPISARDA 85 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-12	JAMES & ROBERTA PAGANO 89 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-13	MICHAEL HART & DIANA SMOYVER 93 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-14	ROBERT & LIANA GERTZER 97 DAHILA DRIVE MAHOPAC, NY 10541
75.20-2-15	EMELITH GARCIA PO BOX 757 MAHOPAC, NY 10541
75.20-2-16	JOHN & DONNA BENVIN 107 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-17	RICHARD VELEZ 117 DAHILA DRIVE MAHOPAC, NY 10541
75.20-2-18	KENNETH & ROSEMARY WALDRON 121 DAHLIA DRIVE MAHOPAC, NT 10541
75.20-2-19	HUGH F & HELEN M BRENNAN 125 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-20	FAMILY TRUST CRECCO 129 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-21	DEOSTHALI ATUL G DEOSTHALI VANDANA 11 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-22	RICHARD & DEBRA RUSSO 15 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-23	RON & DARLENE LOVE GAFNI 17 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-24	KEVIN & CATHLEEN BROWNE 19 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-25	KENT & COLLEEN BROWNE 21 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-26	HYMAN REICHBACH REVOC TRUST 27 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-27	MARK & PATRICE LIFF 29 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-28	PATRICK M. & ALTHEA M. DALEY 31 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-29	JACK D. & ROBIN M. ZENCHECK 33 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-30	DOUGLAS J. & MAGALI C. HICKEY 37 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-31	ARTHUR & MARIA L. CERBONE 39 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-32	TERENCE & KRISTEN MCKEE 41 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-33	JOSEPH & CAROLANN LACOPARRA 43 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-34	JENNIFER A. & ANDREW T. DWYER 44 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-35	ELVIS & APRIL J. LJUMIC 42 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-36	SCOTT M. CRONIN 40 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-37	JAMES CILIBERTI & VERDIANA PANETTA 38 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-38	ANTHONY & PATRICIA DEMATTEO 36 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-39	DAN & ADRIENNE TAVELINSKY 32 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-40	KENNETH L. & JANET SCHWEIGLER 28 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-41	JEFFREY & ANTONIETTA WEINER 26 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-42	MATTHEW & SAMANTHA A. CLARK 24 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-43	DONNA ROSSOMANDO 18 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-44	ADAM & LAN PHAM 16 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-45	JOSEPH M. & MARLENE S. CAMARGO-VOGEL 14 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-46	PETER J. & THERESA M. GARIBALDI 12 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-47	JEFFREY A. & KATHLEEN A. TUTTLE 9 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-48	KEIRAN & HAL A H FARQUHAR 13 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-49	JILL BONIELLO 15 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-50	DIBATTISTA FAMILY TRUST 17 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-51	BARBARA CIPRIANI 19 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-52	CHARLES M. & PAMELA E. BLECKER 21 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-53	DANIEL & JEAN MARIE SHERIDAN 23 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-54	KATHY SONNENBERG 27 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-55	NY CONF-UMC CT WEST DISTRICT ATTN: API CASTANO 2 SOUNDVIEW AVE WHITE PLAINS, NY 10606
75.20-2-56	MARINEE BUFFONE 34 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-57	JAMES & SANDRA MARINELLI 32 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-58	ANTHONY & ROSEANNE M. PERRUZZA 30 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-59	GREGORY A. WILLIAMS & MILDRED MARSHALL 28 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-60	KATHLEEN BARRETT 26 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-61	ANTHONY & ROSE M. FABIANO PO BOX 634 MAHOPAC, NY 10541
75.20-2-62	DAVID & CARMEN GARCEAU 22 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-63	LINDA CARTUCCI 20 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-64	JENNIFER FISCHER 18 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-65	MICHAEL J. & EILEEN O'BRIEN 16 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-66	JOSEPH & DAWN MARIE D'AMORE 14 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-69	RICHARD & BRIDGET CERVONE 154 BUCKSHOLLOW RD MAHOPAC, NY 10541
75.20-2-70	JLR HOLDINGS CORP 144 BUCKS HOLLOW MAHOPAC, NY 10541
75.20-2-71	VERIZON NEW YORK INC PO BOX 2749 ADDISION, TX 75001
75.20-2-72	VERIZON NEW YORK INC PO BOX 2749 ADDISION, TX 75001
75.20-2-73	BUCKSHOLLOW LLC 122 4 BAUERLEIN COURT MAHOPAC, NY 10541
75.20-2-74	WILLIAM & LOUISE DE GASPERI 112 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.20-2-75	JOHN LEMMENS REVOCABLE TRUST 100 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.20-2-76	JOHN LEMMENS REVOCABLE TRUST 30 CREST ROAD MAHOPAC, NY 10541
75.20-2-77	JOHN LEMMENS REVOCABLE TRUST 100 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.20-1-32	DIANE SCHIAVONE 64 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-31	JOSEPH & DEBORAH KIRINCIC 68 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-30	PATRICK & CATHERINE TARPEY 74 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-29	EDWIN & MARIE TRILLAS 80 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-28	MICHAEL & GEORGTTE MARION 77 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-27	RICHARD & KATHLEEN DIRUSSO 71 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-26	MICHAEL & CATHERINE SCAIRABBA 2 CRECCO COURT MAHOPAC, NY 10541
75.20-1-25	PAWEL & KAROLINA ZABA 6 CRECCO COURT MAHOPAC, NY 10541
75.20-1-24	ZBIGNIEW PINAS PO BOX 332 BALDWIN PLACE, NY 10505
75.20-1-23	JESS 7 DARA BERKWITS 10 CRECCO COURT MAHOPAC, NY 10541
75.20-1-22	MILIJANO LONGO 11 CRECCO COURT MAHOPAC, NY 10541
75.20-1-21	GILEAD HILL CORP. 230 GLENBROOK AVENUE YONKERS, NY 10705
75.20-1-16	SUEZ WATER NEW YORK PO BOX 71970 PHOENIX, AZ 85050
75.20-1-13	LINDA N VERDE 44 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-12	STEPHEN A & MARY BETH VRABEL 50 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-11	MARIE A RIZZO 54 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-10	GILBERT & LIOS BAERISWIL 86 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-9	JOSEPH G & JONH G MAGNOTTA 60 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-6	GILBERT & LIOS BAERISWIL 86 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-5	ALEJANDRO MERLINO 90 BLOOMER ROAD MAHOPAC, NY 10541
75.20-2-10	STEPHEN MILLER 90 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-9	ANTHONY CHACH & ERIN COXEN 100 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-28	PARENT ESTATE PO BOX 396 MAHOPAC, NY 10541
76.17-1-26	MARIEA T & LEE M DOBBINS 108 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-25	CRAIG H & JENNIFER M HETTINGER 112 DAHLIA DRIVE MAHOPCA, NY 10541
76.17-1-24	DORIS L BERARDO 116 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-23	DONALD A & SALLI A WEISS 122 DAHLIA DRIVE MAHOPCA, NY 10541
76.17-1-22	BRIAN & MARTIN COYNE 126 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-21	PETER & VAORIE PELOQUIN 130 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-20	MICHAEL & EUNICE LAVELLE 134 DHALIA DRIVE MAHOPAC, NY 10541

TAX MAP REFERENCE:
TOWN OF CARMEL TAX MAP
SECTION 75.20, BLOCK 2, LOT 68

ADDRESS:
BUCKS HOLLOW ROAD
MAHOPAC, NY 10541

AREA:
53.382 ACRES

DATUM:
VERTICAL: NAVD 1988
HORIZONTAL: NAD 1983, NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE

SUBDIVISION REFERENCES:
"MAP OF HUNTERS' RUN" FILED IN THE PUTNAM COUNTY CLERK'S OFFICE ON MARCH 28, 1988, AS MAP No. 2298.

REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	02-25-22	PER PLANING BOARD 2-10-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICTIONS. (NYS EDUCATION LAW SECTION 7209-2)

"UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."
"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES."
"CERTIFICATION INDICATED HERE ON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYOR'S ADOPTED BY THE DELAWARE - HUDSON LAND SURVEYORS ASSOCIATION. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS."

STATE OF NEW YORK — RYAN A. NASHER — PROFESSIONAL ENGINEER
RYAN A. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK — JOHN R. ATZL
JOHN R. ATZL
N.Y.S. P.L.S. LIC. NO. 50228

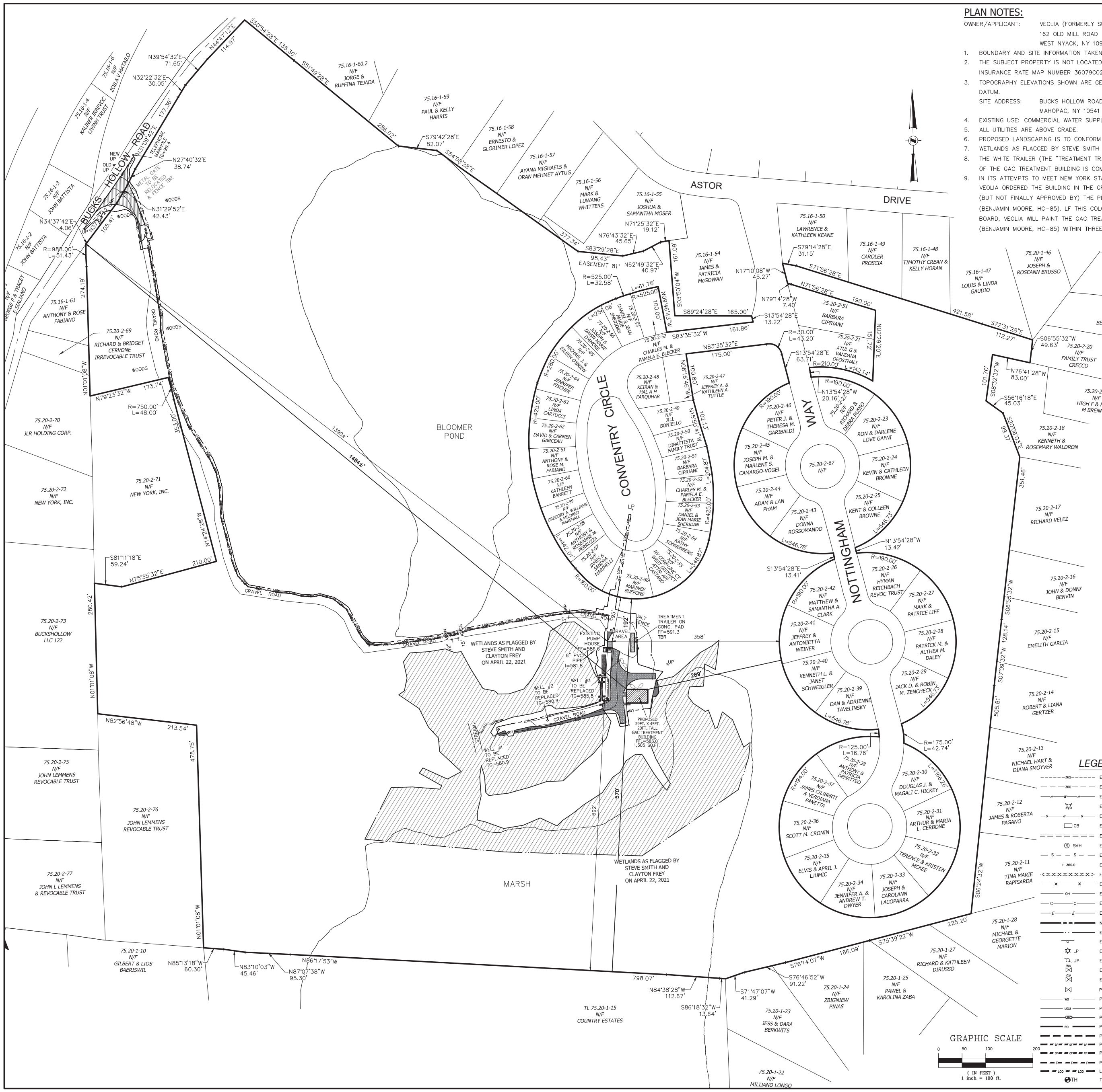
ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-4694
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
LOCATION MAP

DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: AS SHOWN
PROJECT NO: 4870	DRAWING NO: LM



PLAN NOTES:

OWNER/APPLICANT: VEOLIA (FORMERLY SUEZ) WATER NEW YORK
162 OLD MILL ROAD
WEST NYACK, NY 10994

1. BOUNDARY AND SITE INFORMATION TAKEN FROM A SURVEY PREPARED BY ATZL, NASHER AND ZIGLER, PC.
2. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A 100 YEAR FLOOD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 36079C0226E DATED 3/4/2013.
3. TOPOGRAPHY ELEVATIONS SHOWN ARE GENERALLY IN ACCORDANCE WITH NAD 1983 AND NAVD 1988 DATUM.
   SITE ADDRESS: BUCKS HOLLOW ROAD
   MAHOPAC, NY 10541
4. EXISTING USE: COMMERCIAL WATER SUPPLY
5. ALL UTILITIES ARE ABOVE GRADE.
6. PROPOSED LANDSCAPING IS TO CONFORM TO S142 OF TOWN CODE.
7. WETLANDS AS FLAGGED BY STEVE SMITH AND CLAYTON FREY ON APRIL 22, 2021.
8. THE WHITE TRAILER (THE "TREATMENT TRAILER") WILL BE REMOVED WITHIN 20 DAYS AFTER CONSTRUCTION OF THE GAC TREATMENT BUILDING IS COMPLETE.
9. IN ITS ATTEMPTS TO MEET NEW YORK STATE DEPARTMENT OF HEALTH REGULATIONS MORE QUICKLY, VEOLIA ORDERED THE BUILDING IN THE GREEN COLOR PREVIOUSLY FOUND PROVISIONALLY ACCEPTABLE TO (BUT NOT FINALLY APPROVED BY) THE PLANNING BOARD. THE HOA PREFERS THE COLOR FAIRVIEW TAUPE (BENJAMIN MOORE, HC–85). LF THIS COLOR IS ACCEPTABLE TO AND APPROVED BY THE PLANNING BOARD, VEOLIA WILL PAINT THE GAC TREATMENT BUILDING AND EXISTING PUMP HOUSE FAIRVIEW TAUPE (BENJAMIN MOORE, HC–85) WITHIN THREE MONTHS OF THE FINAL LANDSCAPING INSTALLATION.

VICINITY MAP
SCALE: 1"=500'

DISTRICT REGULATIONS:

ZONE "R" DISTRICT "C1"	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	120,000 SQ.FT.	1,722,135 SQ.FT.	1,722,135 SQ.FT.
MINIMUM LOT WIDTH	200 FT.	570± FT.	570± FT.
MINIMUM STREET FRONTAGE (ON TOWN ROAD)	100 FT.	580± FT.	580± FT.
MINIMUM STREET FRONTAGE (ON CUL-DE-SAC)	50 FT.	N/A	N/A
MINIMUM FRONT YARD	40 FT.	1390± FT.	1484± FT.
MINIMUM SIDE YARD	25 FT.	95 FT.	192 FT.
MINIMUM TOTAL SIDE YARD	50 FT.	787 FT.	762 FT.
MINIMUM REAR YARD	40 FT.	358 FT.	289 FT.
MAXIMUM BUILDING HEIGHT	35 FT.	12 FT.	20 FT.
MAXIMUM LOT COVERAGE	0.15	0.0002	0.0010
MINIMUM LANDSCAPE BUFFER	10 FT.	0 FT.	0 FT.

*– DENOTES VARIANCE REQUIRED
CONDITIONAL USE APPROVAL FROM PLANNING BOARD REQUIRED.

NET LOT AREA CALCULATION:

GROSS LOT AREA = 2,325,320 SQ.FT.
LESS 90% OF WETLANDS = 603,185 SQ.FT.
NET LOT AREA = 1,722,135 SQ.FT.**

**ESTIMATED– PER NYSDEC MAPPER

PARKING REQUIREMENTS:

1 SPACE/EMPLOYEE
+ 1 SPACE/SERVICE VEHICLE
NO LESS THAN 2 SPACES REQUIRED

FLOOD HAZARD:

THE SURVEYED LOT IS SITUATED IN "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AS DESIGNATED BY FEMA, PER FIRM MAP No. 36079C0226E, WITH AN EFFECTIVE DATE OF MARCH 4, 2013.

NOTE:

UTILITY LOCATIONS ARE BASED ON ABOVE–GROUND OBSERVATIONS & UTILITY MARKOUTS AT TIME OF FIELD SURVEY. THE TYPE AND LOCATION OF UTILITIES ARE NOT GUARANTEED TO BE ACCURATE OR ALL–INCLUSIVE.

SUBDIVISION REFERENCES:

"MAP OF HUNTERS' RUN" FILED IN THE PUTNAM COUNTY CLERK'S OFFICE ON MARCH 28, 1988, AS MAP No. 2298.

DRAWING LIST:

No.	TITLE	ORIGIN DATE	REVISION
1.	SITE PLAN	AUGUST 27, 2021	APRIL 09, 2024
2.	OWNER LIST	AUGUST 27, 2021	APRIL 09, 2024
3.	EXISTING CONDITION	AUGUST 27, 2021	APRIL 09, 2024
4.	GRADING PLAN	AUGUST 27, 2021	APRIL 09, 2024
5.	DETAILS	AUGUST 27, 2021	APRIL 09, 2024
6.	EROSION & SEDIMENT CONTROL PLAN	AUGUST 27, 2021	APRIL 09, 2024
7.	TREE & LANDSCAPE PLAN	AUGUST 27, 2021	APRIL 09, 2024
8.	LIGHTING PLAN	AUGUST 27, 2021	APRIL 09, 2024
9.	TURNING RADIUS MANEUVERABILITY PLAN	NOVEMBER 15, 2021	APRIL 09, 2024

LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- CB EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- SMH EXISTING SEWER MANHOLE
- EXISTING SEWER LINE
- + 360.0 EXISTING SPOT ELEVATION
- EXISTING STONEWALL
- EXISTING CHAIN LINK FENCE
- OH EXISTING OVERHEAD WIRES
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- NYSDEC WETLAND BUFFER
- EXISTING WETLANDS
- EXISTING SIGN
- LP EXISTING LIGHT POLE
- UP EXISTING UTILITY POLE
- WV EXISTING WATER VALVE
- GV EXISTING GAS VALVE
- PROPOSED GATE VALVE
- WS PROPOSED WATER SERVICE
- UGU PROPOSED UNDERGROUND ELECTRIC
- PROPOSED CONTOURS
- RD PROPOSED ROOF DRAIN
- PROPOSED STORM DRAIN
- SF PROPOSED SILT FENCE
- CF PROPOSED CONSTRUCTION FENCE
- F PROPOSED RAIN GARDEN PROTECTION
- LOD LIMIT OF DISTURBANCE
- TH TEST HOLE LOCATION

WETLANDS (PFO)

TAX MAP REFERENCE:

TOWN OF CARMEL TAX MAP
SECTION 75.20, BLOCK 2, LOT 68

ADDRESS:

BUCKS HOLLOW ROAD
MAHOPAC, NY 10541

AREA:

53.382 ACRES

DATUM:

VERTICAL: NAVD 1988
HORIZONTAL: NAD 1983, NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE

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STATE OF NEW YORK · RYAN A. NASHER
RYAN A. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK · JOHN R. ATZL
JOHN R. ATZL
N.Y.S. L.S. LIC. NO. 50228

REVISION	DATE	DESCRIPTION
8	04–09–24	DRY POND & LIMIT OF DISTURBANCE
7	02–12–24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01–19–24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05–02–22	DRAINAGE REVISION PER INFILTRATION TEST
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3	02–07–22	PER 2–3–22 ECB MEETING
2	01–25–22	PER PB MTG. 1–13–22, PER ECB & PB SUBMISSION
1	11–15–21	PER PB MTG. 9–22–21

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ENGINEERS–SURVEYORS–PLANNERS
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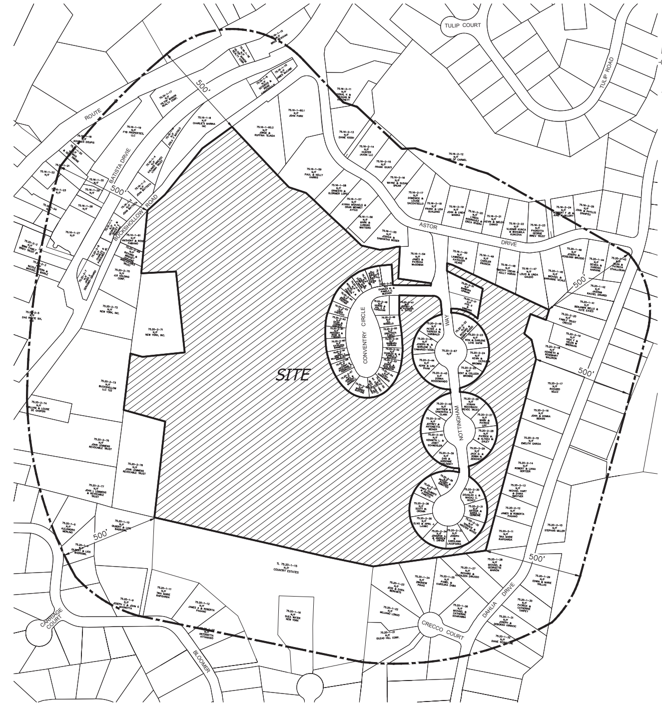
Fax: (845) 634–5543
E–mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
OVERALL SITE PLAN

DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 100 FT.
PROJECT NO: 4870	DRAWING NO: 1



VICINITY MAP
SCALE: 1"=300'

OWNERS WITHIN 500 FEET:

TOWN OF CARMEL TAX MAP

75.16-1-1	GEORGE P & TRACEY E SIALIANO 149 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-2	JOHN BATTISTA 157 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-3	JOHN BATTISTA 165 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
5.16-1-4	KALINER IRREVOC LIVING TRUST 163 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-6	ZOILA V MATAILO & MANUEL L CHILLOGALLI 171 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-8	CHARLIE'S MARINA INC 897 SOUTH LAKE ROAD MAHOPAC, NY 10541
75.16-1-9	SOTERIOS & IRENE KAMVOSULIS 193 BICKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-10	JAMES MCCABE PO BOX 472 BALDWIN PLACE, NY 10505
75.16-1-15	BROS BEACHAK 485 ROUTE 6 MAHOPAC, NY 10541
75.16-1-16	HILLTOP MANOR REALTY CORP. 466 ROUTE 6 MAHOPAC, NY 10541
75.16-1-17	HILLTOP MANOR REALTY CORP. 466 ROUTE 6 MAHOPAC, NY 10541
75.16-1-18	ACHILLES DOUPIS 441 ROUTE 6 MAHOPAC, NY 10541
75.16-1-19	FYB PROPERTIES, LLC 44 BLOOMER ROAD MAHOPAC, NY 10541
75.16-1-20	THOMAS & GENE SIMONE 155 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-21	THOMAS & GENE SIMONE 155 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-22	SCOTT NYGARD 427 ROUTE 6 MAHOPAC, NY 10541
75.16-1-23	SCOTT NYGARD 423 ROUTE 6 MAHOPAC, NY 1054
75.16-1-24	JACRYE REALTY CORP. 421 ROUTE 6 MAHOPAC, NY 10541
75.16-1-27	MEHRA REAL ESTATE LLC 10 SOUTH VESCHI LANE MAHOPAC, NY 10541
75316-1-28	BOHUMIL & ROZALIE FILIP 5 BATTISTA DRIVE MAHOPAC, NY 10541
75.16-1-29	SANTA & ROBERT PORTINO 7 BATTISTA DRIVE MAHOPAC, NY 10541
753.16-1-30	THOMAS SIMONE 155 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-61	ANTHONY & ROSE FABIANO 154 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-60.1	JOHN PARK 7 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-60.2	JORGE & RUFFINA TEJADA 190 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.16-1-59	PAUL & KELLY HARRIS 15 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-58	ERNESTO & GLORIMER LOPEZ 23 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-57	AYANA MIGHALES & ORAN MEHMET AYTUG 27 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-56	MARK & LUWANG WHITTERS 31 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-55	JOSHUA & SAMANTHA MOSER 37 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-54	JAMES & PATRICIA McGOWAN 41 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-50	LAWRENCE & KATHLEEN KEANE 51 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-49	CARLOER PROSCIA 55 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-48	TIMOTHY CREAN & KELLY HORAN 61ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-47	LOUIS & LINDA GAUDIO 65 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-46	JOSEPH & ROSEANN BRUSSO 69 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-45	MICHAEL & MARIANNE VICALE 73 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-44	VINCENT & ANNMARIE VIAGGIO 81 ASTOR DRIVE MAHOPAC, NY 10541
75.16-1-43	JAMES & CAROLINE COOKE 145 DAHLIA DRIVE MAHOPAC, NY 10541
75.16-1-42	JACOBL & TRACY POSNIAK 137 DAHLIA DRIVE MAHOPAC, NY 10541
75.16-1-41	MATTHEW & CARALYN TURRONE 133 DAHLIA DRIVE MAHOPAC, NY 10541
75.16-2-10	NORBERT VOGL 6 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-11	DONAL K & MEAGAN M HARTNETT 12 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-12	TOWN OF CARMEL 60 MCALPIN AVENUE MAHOPAC NY 10541
75.16-2-13	DIANE KISSH 22 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-14	HUNTER JAXON LLC 22 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-15	FRANK GIUNTI 32 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-16	WAYNE & SUSAN SPEAR 36 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-17	DOMENICK & LOUISE SACCHITIELLO 44 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-18	FRANK & LISA GUALDINO 50 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-19	JOHN & LINDA NANNA 54 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-20	LYNDIA RODRIGUEZ & ERICA RIVERA 58 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-21	KEVIN & IMELDA DANKO 62 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-22	VLADMIR KUNCA & BOHUMILA KUNCOVA 66 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-23	PAGNOTTA GEORGE IRREV TRUST 74 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-24	HERBERT F JR & JUNE M HILLERY 78 ASTOR DRIVE MAHOPAC, NY 10541
75.16-2-25	JOHN & PHYLLIS DIAPOLI 85 ASTOR DRIVE MAHOPAC, NY 1054
75.20-2-2	BINNS FAMILY IRREV TRUST #1 5 SOUTH VESCHI LANE MAHOPAC, NY 10541
75.20-2-3	NICOLE STERN & MICHAEL A BARILE 888 ROUTE 6 MAHOPAC, NY 10541
75.20-2-5	DAG ROUTE SIX, LLC PO BOX 636 MAHOPAC, NY 10541
75.20-2-7	ITALIAN AMERICAN CLUB INC PO BOX 931 MAHOPAC, NY 10541
75.20-2-8	ADRIANA CERQUERIA PO BOX 782 CROTON FALLS, NY 10519
75.20-2-11	TINA MARIE RAPISARDA 85 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-12	JAMES & ROBERTA PAGANO 89 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-13	MICHAEL HART & DIANA SMOYVER 93 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-14	ROBERT & LIANA GERTZER 97 DAHILA DRIVE MAHOPAC, NY 10541
75.20-2-15	EMELITH GARCIA PO BOX 757 MAHOPAC, NY 10541
75.20-2-16	JOHN & DONNA BENVIN 107 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-17	RICHARD VELEZ 117 DAHILA DRIVE MAHOPAC, NY 10541
75.20-2-18	KENNETH & ROSEMARY WALDRON 121 DAHLIA DRIVE MAHOPAC, NT 10541
75.20-2-19	HUGH F & HELEN M BRENNAN 125 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-20	FAMILY TRUST CRECCO 129 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-21	DEOSTHALI ATUL G DEOSTHALI VANDANA 11 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-22	RICHARD & DEBRA RUSSO 15 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-23	RON & DARLENE LOVE GAFNI 17 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-24	KEVIN & CATHLEEN BROWNE 19 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-25	KENT & COLLEEN BROWNE 21 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-26	HYMAN REICHBACH REVOC TRUST 27 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-27	MARK & PATRICE LIFF 29 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-28	PATRICK M. & ALTHEA M. DALEY 31 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-29	JACK D. & ROBIN M. ZENCHECK 33 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-30	DOUGLAS J. & MAGALI C. HICKEY 37 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-31	ARTHUR & MARIA L. CERBONE 39 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-32	TERENCE & KRISTEN MCKEE 41 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-33	JOSEPH & CAROLANN LACOPARRA 43 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-34	JENNIFER A. & ANDREW T. DWYER 44 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-35	ELVIS & APRIL J. LJUMIC 42 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-36	SCOTT M. CRONIN 40 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-37	JAMES CILIBERTI & VERDIANA PANETTA 38 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-38	ANTHONY & PATRICIA DEMATTEO 36 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-39	DAN & ADRIENNE TAVELINSKY 32 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-40	KENNETH L. & JANET SCHWEIGLER 28 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-41	JEFFREY & ANTONIETTA WEINER 26 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-42	MATTHEW & SAMANTHA A. CLARK 24 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-43	DONNA ROSSOMANDO 18 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-44	ADAM & LAN PHAM 16 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-45	JOSEPH M. & MARLENE S. CAMARGO-VOGEL 14 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-46	PETER J. & THERESA M. GARIBALDI 12 NOTTINGHAM WAY MAHOPAC, NY 10541
75.20-2-47	JEFFREY A. & KATHLEEN A. TUTTLE 9 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-48	KEIRAN & HAL A H FARQUHAR 13 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-49	JILL BONIELLO 15 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-50	DIBATTISTA FAMILY TRUST 17 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-51	BARBARA CIPRIANI 19 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-52	CHARLES M. & PAMELA E. BLECKER 21 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-53	DANIEL & JEAN MARIE SHERIDAN 23 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-54	KATHY SONNENBERG 27 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-55	NY CONF-UMC CT WEST DISTRICT ATTN: API CASTANO 2 SOUNDVIEW AVE WHITE PLAINS, NY 10606
75.20-2-56	MARINEE BUFFONE 34 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-57	JAMES & SANDRA MARINELLI 32 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-58	ANTHONY & ROSEANNE M. PERRUZZA 30 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-59	GREGORY A. WILLIAMS & MILDRED MARSHALL 28 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-60	KATHLEEN BARRETT 26 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-61	ANTHONY & ROSE M. FABIANO PO BOX 634 MAHOPAC, NY 10541
75.20-2-62	DAVID & CARMEN GARCEAU 22 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-63	LINDA CARTUCCI 20 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-64	JENNIFER FISCHER 18 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-65	MICHAEL J. & EILEEN O'BRIEN 16 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-66	JOSEPH & DAWN MARIE D'AMORE 14 COVENTRY CIR MAHOPAC, NY 10541
75.20-2-69	RICHARD & BRIDGET CERVONE 154 BUCKSHOLLOW RD MAHOPAC, NY 10541
75.20-2-70	JLR HOLDINGS CORP 144 BUCKS HOLLOW MAHOPAC, NY 10541
75.20-2-71	VERIZON NEW YORK INC PO BOX 2749 ADDISION, TX 75001
75.20-2-72	VERIZON NEW YORK INC PO BOX 2749 ADDISION, TX 75001
75.20-2-73	BUCKSHOLLOW LLC 122 4 BAUERLEIN COURT MAHOPAC, NY 10541
75.20-2-74	WILLIAM & LOUISE DE GASPERI 112 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.20-2-75	JOHN LEMMENS REVOCABLE TRUST 100 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.20-2-76	JOHN LEMMENS REVOCABLE TRUST 30 CREST ROAD MAHOPAC, NY 10541
75.20-2-77	JOHN LEMMENS REVOCABLE TRUST 100 BUCKS HOLLOW ROAD MAHOPAC, NY 10541
75.20-1-32	DIANE SCHIAVONE 64 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-31	JOSEPH & DEBORAH KIRINCIC 68 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-30	PATRICK & CATHERINE TARPEY 74 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-29	EDWIN & MARIE TRILLAS 80 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-28	MICHAEL & GEORGTTE MARION 77 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-27	RICHARD & KATHLEEN DIRUSSO 71 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-1-26	MICHAEL & CATHERINE SCAIRABBA 2 CRECCO COURT MAHOPAC, NY 10541
75.20-1-25	PAWEL & KAROLINA ZABA 6 CRECCO COURT MAHOPAC, NY 10541
75.20-1-24	ZBIGNIEW PINAS PO BOX 332 BALDWIN PLACE, NY 10505
75.20-1-23	JESS 7 DARA BERKWITS 10 CRECCO COURT MAHOPAC, NY 10541
75.20-1-22	MILIJANO LONGO 11 CRECCO COURT MAHOPAC, NY 10541
75.20-1-21	GILEAD HILL CORP. 230 GLENBROOK AVENUE YONKERS, NY 10705
75.20-1-16	SUEZ WATER NEW YORK PO BOX 71970 PHOENIX, AZ 85050
75.20-1-13	LINDA N VERDE 44 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-12	STEPHEN A & MARY BETH VRABEL 50 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-11	MARIE A RIZZO 54 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-10	GILBERT & LIOS BAERISWIL 86 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-9	JOSEPH G & JONH G MAGNOTTA 60 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-6	GILBERT & LIOS BAERISWIL 86 BLOOMER ROAD MAHOPAC, NY 10541
75.20-1-5	ALEJANDRO MERLINO 90 BLOOMER ROAD MAHOPAC, NY 10541
75.20-2-10	STEPHEN MILLER 90 DAHLIA DRIVE MAHOPAC, NY 10541
75.20-2-9	ANTHONY CHACH & ERIN COXEN 100 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-28	PARENT ESTATE PO BOX 396 MAHOPAC, NY 10541
76.17-1-26	MARIEA T & LEE M DOBBINS 108 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-25	CRAIG H & JENNIFER M HETTINGER 112 DAHLIA DRIVE MAHOPCA, NY 10541
76.17-1-24	DORIS L BERARDO 116 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-23	DONALD A & SALLI A WEISS 122 DAHLIA DRIVE MAHOPCA, NY 10541
76.17-1-22	BRIAN & MARTIN COYNE 126 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-21	PETER & VAORIE PELOQUIN 130 DAHLIA DRIVE MAHOPAC, NY 10541
76.17-1-20	MICHAEL & EUNICE LAVELLE 134 DHALIA DRIVE MAHOPAC, NY 10541

LEGEND

------362------	EXISTING 2' CONTOUR
— — —360— — —	EXISTING 10' CONTOUR
——W——W——W——	EXISTING WATERLINE
	EXISTING FIRE HYDRANT
—G——G——G—	EXISTING GAS LINE
CB	EXISTING CATCH BASIN
= = = = = = =	EXISTING STORM DRAIN LINE
(S) SMH	EXISTING SEWER MANHOLE
— S — — S — —	EXISTING SEWER LINE
+ 360.0	EXISTING SPOT ELEVATION
	EXISTING STONEWALL
—— × —— × ——	EXISTING CHAIN LINK FENCE
—— OH ——	EXISTING OVERHEAD WIRES
—C——C—	EXISTING TELECOMMUNICATION LINE
—E——E—	EXISTING ELECTRIC LINE
	EXISTING SIGN
LP	EXISTING LIGHT POLE
UP	EXISTING UTILITY POLE
WV	EXISTING WATER VALVE
GV	EXISTING GAS VALVE
	NYSDEC WETLAND BUFFER
—— ·· ——	EXISTING ELECTRIC LINE

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STATE OF NEW YORK · RYAN A. NASHER · PROFESSIONAL ENGINEER
RYAN A. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK · JOHN R. ATZL · LICENSED LAND SURVEYOR
JOHN R. ATZL
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AN&Z
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E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:

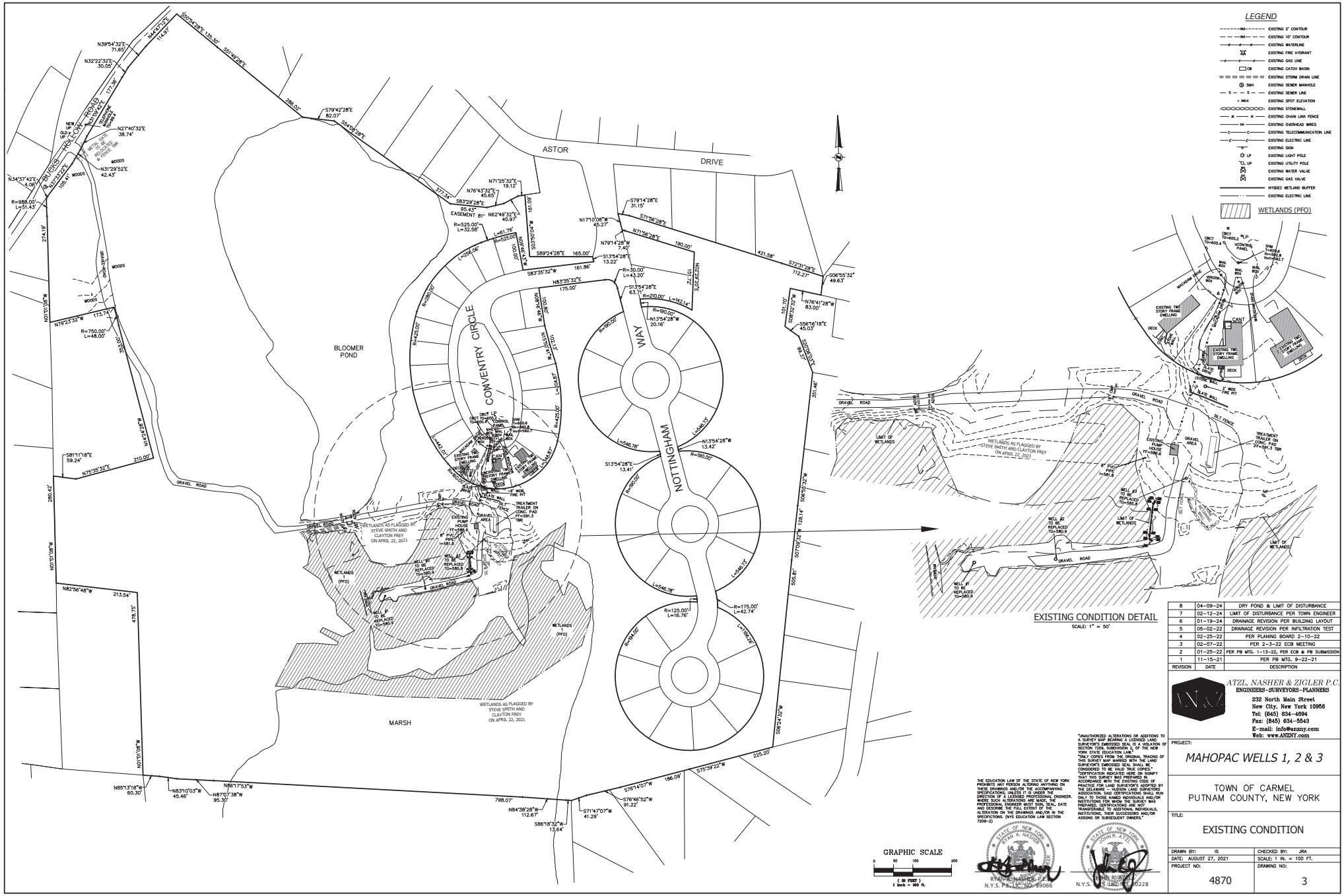
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:

OWNERS WITHIN 500 FT. LIST

DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 100 FT.
PROJECT NO: 4870	DRAWING NO: 2



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PROJECT:

MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:

EXISTING CONDITION

DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 100 FT.
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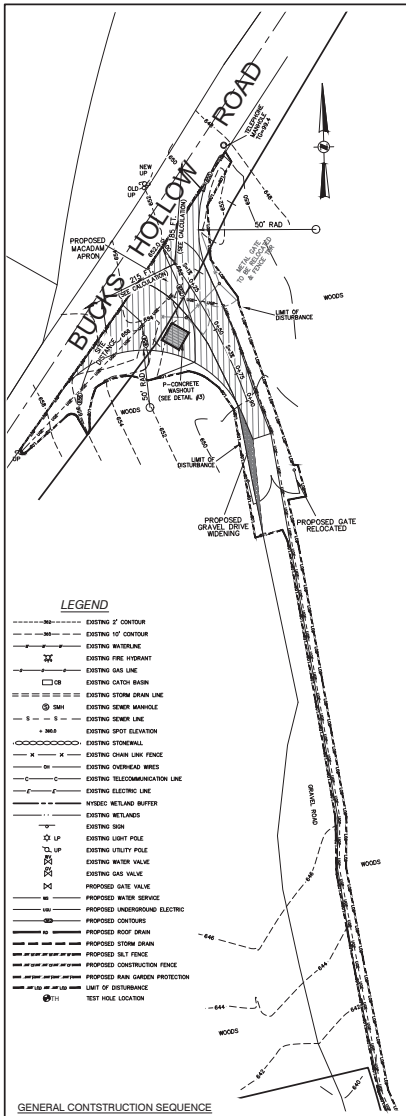
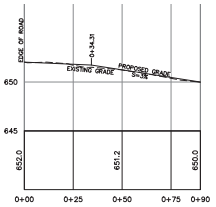
RYAN A. NASHER, P.E.
N.Y.S. P.E. LICENSE NO. 89066

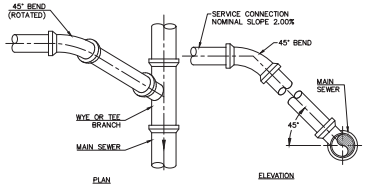
JOHN R. ATZL
N.Y.S. LAND SURVEYOR LIC. NO. 050228





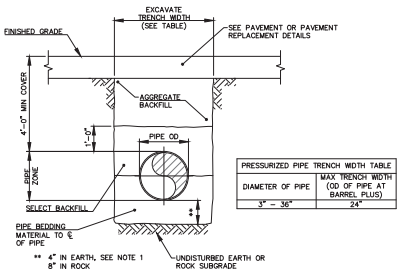
DRIVEWAY PROFILE

SCALE: 1"=30'



SERVICE CONNECTION DETAIL

N.T.S.



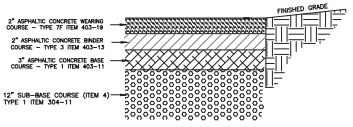
PRESSURIZED PIPE TRENCH WIDTH TABLE	
DIAMETER OF PIPE	MAX TRENCH WIDTH (OD OF PIPE AT BARREL PLUS)
3" – 36"	24"

TYP. TRENCH PAVED AREAS DETAIL

N.T.S.

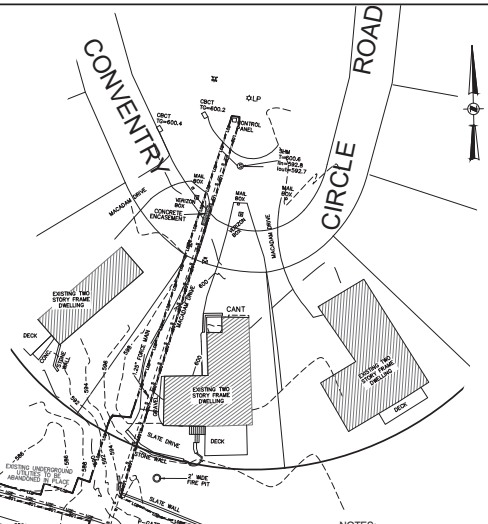
TRENCH NOTES:

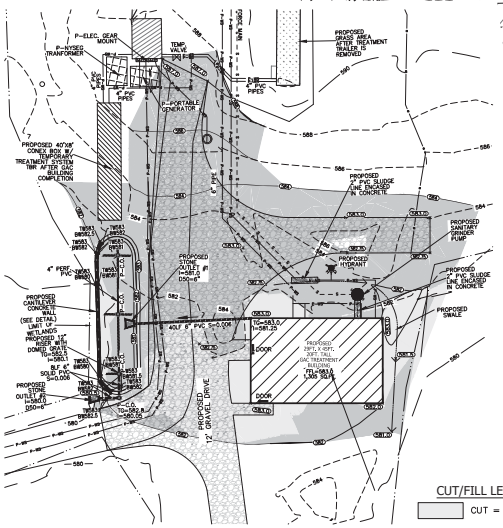
1. IF UNSUITABLE SUBSOIL IS ENCOUNTERED AT THE NORMAL TRENCH SUBGRADE, THE CONTRACTOR SHALL REMOVE IT TO THE DEPTH DIRECTED BY THE ENGINEER IN THE FIELD, AND BACKFILL w/ PIPE BEDDING MATERIAL IN 4" LAYERS.
2. BOTTOM OF TRENCH SHALL BE FREE OF WATER PRIOR TO PLACING BEDDING.
3. PROVIDE 4" OF TOPSOIL WHERE SEEDING IS REQUIRED.
4. CONTRACTOR SHALL SHORE THE TRENCH IN ACCORDANCE WITH SECTION 02255 OF THE SPECIFICATIONS.
5. GRAVEL AND PAVED DRIVEWAYS TO BE RESTORED IN KIND WITH MINIMUM REQUIREMENTS AS INDICATED ON THIS SHEET.



ASPHALTIC CONCRETE PAVEMENT DETAIL

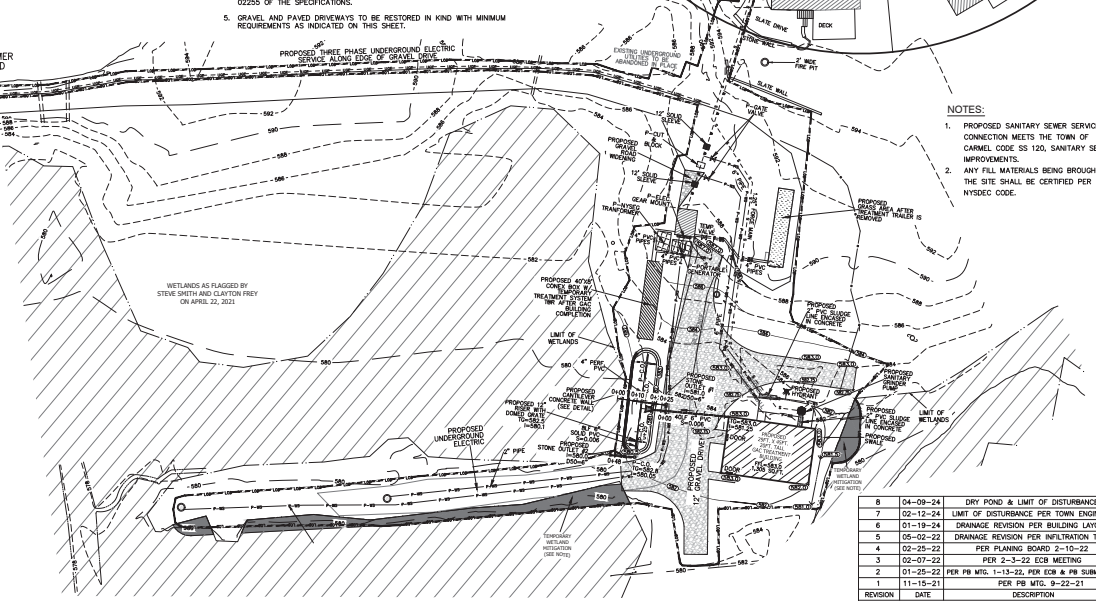
N.T.S.





CUT & FILL PLAN VIEW

SCALE: 1"=20'



NOTES:

1. PROPOSED SANITARY SEWER SERVICE CONNECTION MEETS THE TOWN OF CARMEL CODE SS 120, SANITARY SEWER IMPROVEMENTS.
2. ANY FILL MATERIALS BEING BROUGHT TO THE SITE SHALL BE CERTIFIED PER NYSDEC CODE.

LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- CB EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- SMH EXISTING SEWER MANHOLE
- EXISTING SEWER LINE
- EXISTING SPOT ELEVATION
- EXISTING STONEWALL
- EXISTING CHAIN LINK FENCE
- OH EXISTING OVERHEAD WIRES
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- NYSDEC WETLAND BUFFER
- EXISTING WETLANDS
- EXISTING SIGN
- LP EXISTING LIGHT POLE
- UP EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- PROPOSED GATE VALVE
- WS PROPOSED WATER SERVICE
- UGU PROPOSED UNDERGROUND ELECTRIC
- PROPOSED CONTOURS
- RD PROPOSED ROOF DRAIN
- PROPOSED STORM DRAIN
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE
- PROPOSED RAIN GARDEN PROTECTION
- LIMIT OF DISTURBANCE
- TH TEST HOLE LOCATION

CUT/FILL LEGEND:

CUT = 158 CU.YD.

FILL = 151 CU.YD.

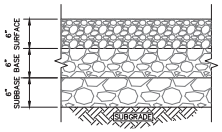
TEMPORARY WETLAND MITIGATION = 1,531 SQ.FT. OR 0.035 ACRE

WETLANDS (PFO)

LIMIT OF DISTURBANCE = 0.985 ACRE

GENERAL CONTSTRUCTION SEQUENCE

1. SCHEDULE A PRE-CONSTRUCTION MEETING
2. LOCATE NATURAL RESOURCE AND LIMIT OF DISTURBANCE PER PLAN
3. INSTALL PERIMETER E&SC PRACTICE PER PLAN
4. CREATE CONSTRUCTION ENTRANCE & TEMPORARY STAGING
5. LIMIT GRADING FOR E&SC PRACTICES
6. INSTALL DIVERSION SWALES, CHECK DAMS, INTERNAL SWALE FOR STABILIZATION WHERE APPLICABLE
7. INSTALL SEDIMENT BASIN / SEDIMENT TRAP PER PLAN
8. DISPOSE CLEARING AND GRADING MATERIALS AS CONSTRUCTION IS IN PROGRESS
9. STOCK PILE TOP SOIL AND STABILIZE
10. ROUGH GRADING/CUT & FILL AND STABILIZE
11. INSTALL UTILITIES AND DRAINAGE STRUCTURES
12. PROCEED PARTIAL ROAD CONSTRUCTION WHERE APPLICABLE
13. CONSTRUCT FOUNDATION & BUILDING STRUCTURES AS PER PLAN
14. CONSTRUCT FINAL GRADING AND STABILIZE AS PER PLAN
15. APPLY SOIL RESTORATION AS SHOWN ON PLAN
16. FINAL STABILIZATION TO APPLY, I.E. TOP SOIL, PERMANENT GREEN INFRASTRUCTURE PRACTICES AND LANDSCAPING.
17. REMOVE SEDIMENT & COMPLETE PERMANENT POST CONSTRUCTION SMPs PER PLAN
18. REMOVE E&SC PRACTICES AND APPLY FOR NOTICE OF TERMINATION (N.O.T.)



TYPICAL GRAVEL PAVING SECTION

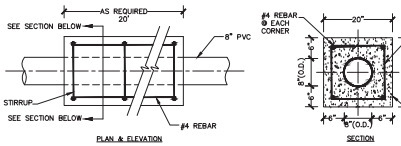
SCALE: 1"=1'

NOTES:

1. SUBGRADE, BASE AND SURFACE MATERIAL SHALL CONFORM TO GRADING LIMITS IN TABLE-1.
2. USE UNIFORM GRAVEL TYPES AND MATERIALS BETWEEN THE ROADBED LIMITS.

TABLE-1 PERCENT PASSING BE WEIGHT OF GRAVEL MATERIALS

SIEVE (U.S. SIEVE)	OPTION TYPE		
	SURFACE	BASE	SUBBASE
3"			100
2"		100	–
1.5"		85–100	70–100
1"	100	–	–
3/4"	85–100	–	–
1/4"	50–75	30–50	30–55
#40	15–35	5–20	5–25
#200	8–15	0–85	0–8



TYPICAL PIPE ENCASEMENT

N.T.S.

GRAPHIC SCALE

0 15 30 60

(IN FEET)

1 inch = 30 ft.

GRAPHIC SCALE

0 10 20 40

(IN FEET)

1 inch = 20 ft.

"UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."

"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES."

"I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYOR'S ADOPTED BY THE DELAWARE – HUDSON LAND SURVEYORS ASSOCIATION. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THIS MAP WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS."

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209-2)

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N.Y.S. P.E. LIC. NO. 89066

JOHN R. ATZL
N.Y.S. LAND SURVEYOR LIC. NO. 050228

REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	02-25-22	PER PLANING BOARD 2-10-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

ATZL, NASHER & ZIGLER P.C.
ENGINEERS–SURVEYORS–PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-4694
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:

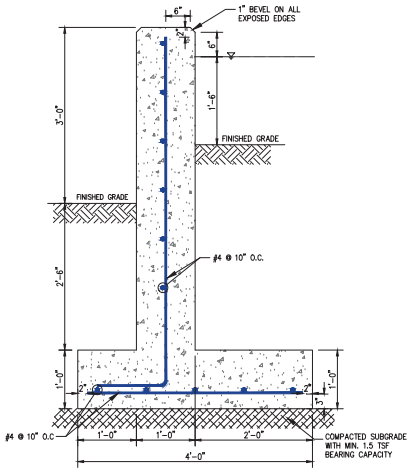
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:

GRADING PLAN

DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 30 FT.
PROJECT NO: 4870	DRAWING NO: 4

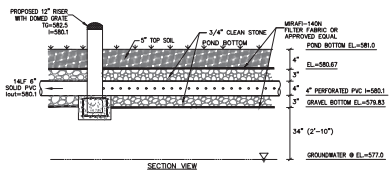


CANTILEVER CONCRETE RETAINING WALL DETAIL

SCALE: 1"=1'-0"

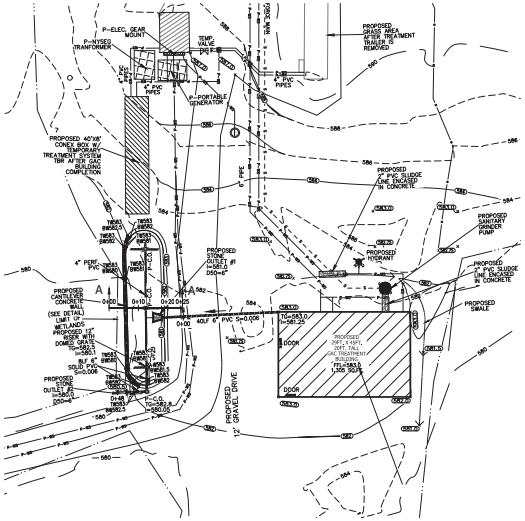
CONCRETE

1. ALL CONCRETE WORK (BOTH MATERIALS AND CONSTRUCTION PROCEDURES) SHALL BE IN ACCORDANCE WITH ACI STANDARD 318.
2. CONCRETE SHALL BE CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
3. REINFORCING BARS SHALL BE DEFORMED BILLET STEEL BARS IN ACCORDANCE WITH ASTM A615, GRADE 60. ALL DETAILING OF REINFORCING SHALL BE IN ACCORDANCE. WITH ACI STANDARD 315.
4. CALCIUM CHLORIDE OR SOLUTIONS CONTAINING CHLORIDE WILL NOT BE PERMITTED AS ADMIXTURES IN ANY CONCRETE.
5. CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE AS FOLLOWS: SLABS: 3/4" BEAMS & COLUMNS (EDESTALS): 1.5" INSIDE FACE OF WALLS: 1" CONCRETE POURED ON GROUND: 3" EXTERIOR FACE OF WALLS (AGAINST EARTH) 2".



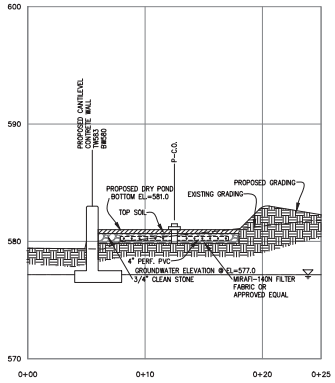
P-DRY POND FLOOR TILE DRAIN DETAIL

N.T.S.



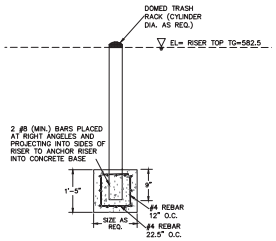
DRY POND PLAN VIEW

SCALE: 1"=20'



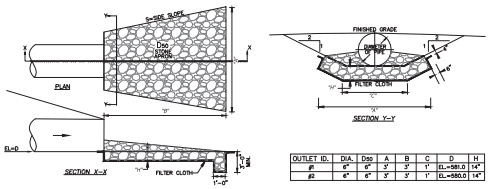
SECTION A-A

SCALE: 1"=5'



TYP. RISER WIH DOMED GRATE DETAIL

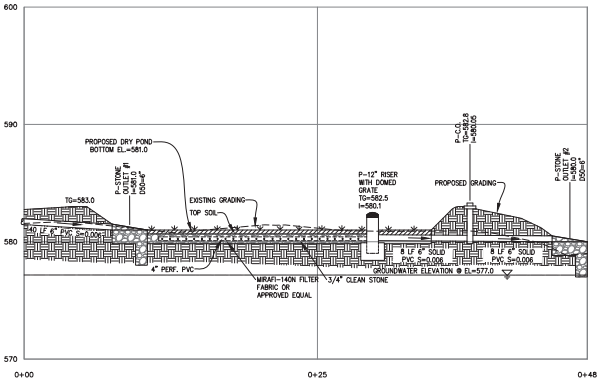
NTS



OUTLET ID.	DIA.	Dso	A	B	C	D	H
#1	6"	6"	3'	3'	1'	EL.=581.0	14"
#2	6"	6"	3'	3'	1'	EL.=580.0	14"

STONE OUTLET DETAIL

N.T.S.



PROPOSED DRY POND PROFILE

SCALE: 1"=5'

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Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:

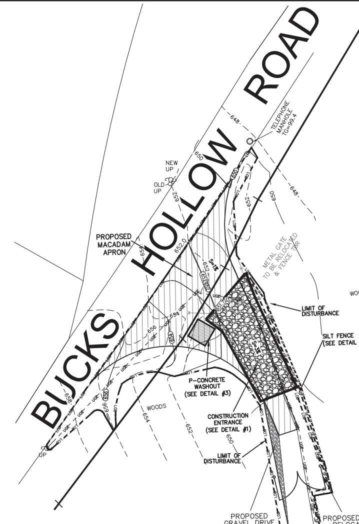
MAHOPAC WELLS 1, 2 & 3

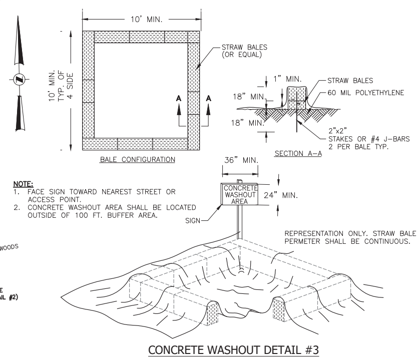
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:

DETAILS

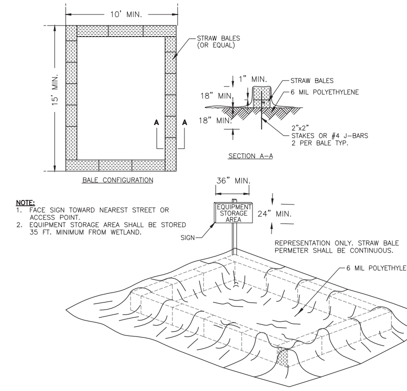
DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: AS SHOWN
PROJECT NO: 4870	DRAWING NO: 5





NOTE:
1. FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT.
2. CONCRETE WASHOUT AREA SHALL BE LOCATED OUTSIDE OF 100 FT. BUFFER AREA.

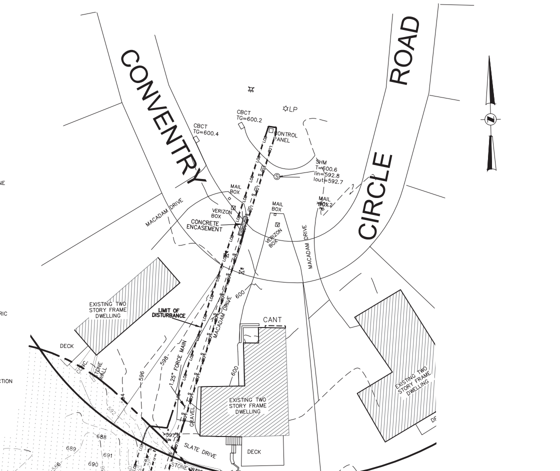
CONCRETE WASHOUT DETAIL #3
N.T.S.

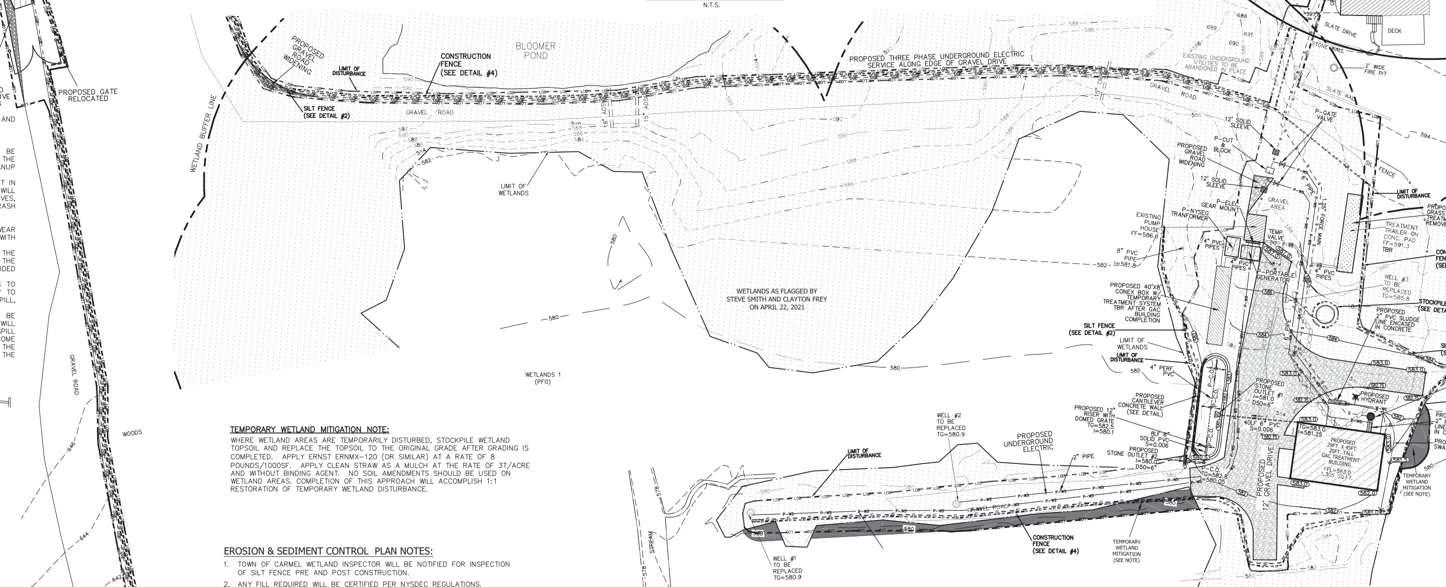


NOTE:
1. FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT.
2. EQUIPMENT STORAGE AREA SHALL BE STORED 35 FT. MINIMUM FROM WETLAND.

EQUIPMENT STORAGE DETAIL
N.T.S.

LEGEND
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER LINE
- EXISTING SPOT ELEVATION
- EXISTING STONEWALL
- EXISTING CHAIN LINK FENCE
- EXISTING OVERHEAD WIRES
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- NYSDEC WETLAND BUFFER
- EXISTING WETLANDS
- EXISTING SIGN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- PROPOSED GATE VALVE
- PROPOSED WATER SERVICE
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED CONTOURS
- PROPOSED ROOF DRAIN
- PROPOSED STORM DRAIN
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE
- PROPOSED RAIN GARDEN PROTECTION
- LIMIT OF DISTURBANCE
- TEST HOLE LOCATION

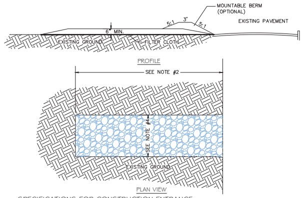




SPILL CONTROL AND FUELING PLAN NOTES:

FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION, FUELING AND CLEANUPS:

1. FUELING SHALL BE PERFORMED OUTSIDE OF THE BUFFER AREA.
2. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
3. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE, BUT NOT BE LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
5. THE SPILL AREA WILL BE KEPT WELL VENTILATED, AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH HAZARDOUS SUBSTANCES.
6. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL. THE SPILL CONTROL & PREVENTION LOG FORM PROVIDED IN APPENDIX C SHOULD BE USED FOR THIS PURPOSE.
7. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT A REPETITIVE TYPE OF SPILL FROM RE–OCCURRING AND HOW TO CLEAN UP THE SPILL IF IT DOES RE–OCCUR. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
8. THE JOB SUPERVISOR RESPONSIBLE FOR DAILY SITE OPERATIONS, WILL BE DESIGNATED AS THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF THE RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ON SITE.



SPECIFICATIONS FOR CONSTRUCTION ENTRANCE

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FT. (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FT. MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN 6 IN..
4. WIDTH – 12 FT. MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCUR. 24 FT. IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. ALL SEDIMENT SPILLED , DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT–OF–WAYS MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS TO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

CONSTRUCTION ENTRANCE DETAIL #1
N.T.S.

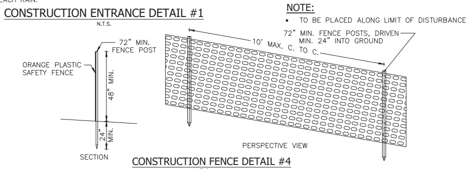
TEMPORARY WETLAND MITIGATION NOTE:

WHERE WETLAND AREAS ARE TEMPORARILY DISTURBED, STOCKPILE WETLAND TOPSOIL AND REPLACE THE TOPSOIL TO THE ORIGINAL GRADE AFTER GRADING IS COMPLETED. APPLY ERNST ERNMX–120 (OR SIMILAR) AT A RATE OF 8 POUNDS/1000SF. APPLY CLEAN STRAW AS A MULCH AT THE RATE OF 3T/ACRE AND WITHOUT BINDING AGENT. NO SOIL AMENDMENTS SHOULD BE USED ON WETLAND AREAS. COMPLETION OF THIS APPROACH WILL ACCOMPLISH 1:1 RESTORATION OF TEMPORARY WETLAND DISTURBANCE.

EROSION & SEDIMENT CONTROL PLAN NOTES:

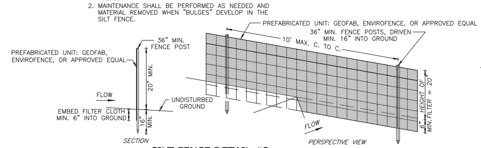
1. TOWN OF CARMEL WETLAND INSPECTOR WILL BE NOTIFIED FOR INSPECTION OF SILT FENCE PRE AND POST CONSTRUCTION.
2. ANY FILL REQUIRED WILL BE CERTIFIED PER NYSDEC REGULATIONS.
3. NO FUELING, CONSTRUCTION OR STAGING OF CONSTRUCTION EQUIPMENT WILL OCCUR ON WETLANDS.

NOTE:
- TO BE PLACED ALONG LIMIT OF DISTURBANCE

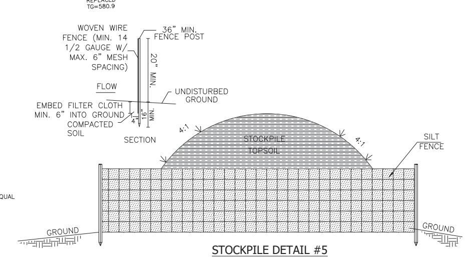


CONSTRUCTION FENCE DETAIL #4
N.T.S.

CONSTRUCTION NOTES FOR PRE FABRICATED SILT FENCE
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL
1. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



SILT FENCE DETAIL #2
N.T.S.



STOCKPILE DETAIL #5
N.T.S.

TEMPORARY WETLAND MITIGATION = 1,531 SQ.FT. OR 0.035 ACRE

BUFFER AREA

LIMIT OF DISTURBANCE = 0.994 ACRE

GRAPHIC SCALE
0 15 30 60
(IN FEET)
1 inch = 30 ft.

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"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES."
"CERTIFICATION INDICATED HERE ON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYOR'S ADOPTED BY THE DELAWARE – HUDSON LAND SURVEYORS ASSOCIATION. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS."

RYAN A. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89066

JOHN R. ATZL
N.Y.S. P.L.S. LIC. NO. 50228

REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	02-25-22	PER PLANING BOARD 2-10-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

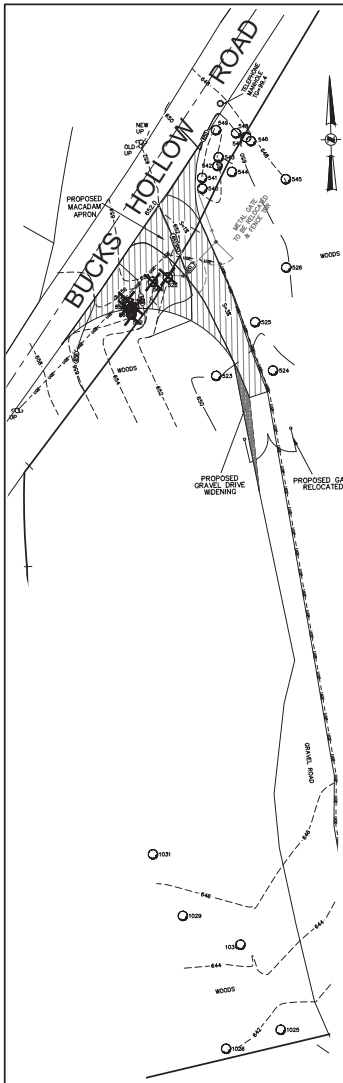
ATZL, NASHER & ZIGLER P.C.
ENGINEERS–SURVEYORS–PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-4694
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
EROSION & SEDIMENT CONTROL PLAN

DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 30 FT.
PROJECT NO: 4870	DRAWING NO: 6



TREE LEGEND

- EXISTING TREE
- TREE TO BE PRESERVED
- TREE TO BE REMOVED

TREE LIST

NO.	SIZE	DESCRIPTION	CONDITON
41	9"	BIRCH	GOOD
42	10"	POPLAR	GOOD
54	12"	ASH	GOOD
55	8"	QUAD BIRCH	GOOD
56	8"	TWIN MAPLE	GOOD
57	8"	TWIN BIRCH	GOOD
58	11"	BIRCH	GOOD
59	6"	BIRCH	GOOD
60	7"	TWIN BIRCH	GOOD
61	12"	ASH	GOOD
62	8"	MAPLE	GOOD
63	6"	ELM	GOOD
64	20"	OAK	GOOD
65	8"	BIRCH	GOOD
66	6"	BIRCH	GOOD
67	10"	ASH	GOOD
68	10"	OAK	GOOD
69	10"	MAPLE	GOOD
70	20"	BIRCH	GOOD
71	10"	BEECH	GOOD
72	12"	BIRCH	GOOD
73	6"	BIRCH	GOOD
74	6"	MAPLE	GOOD
75	12"	BIRCH	GOOD
76	14"	OAK	GOOD
77	12"	BIRCH	GOOD
78	6"	BIRCH	GOOD
81	8"	TRIPLE MAPLE	GOOD
82	16"	BEECH	GOOD
83	7"	BEECH	GOOD
84	10"	TWIN MAPLE	GOOD
87	6"	ASH	GOOD
88	8"	TRIPLE BIRCH	GOOD
89	12"	BIRCH	GOOD
90	8"	BIRCH	GOOD
91	14"	OAK	GOOD
92	7"	BIRCH	GOOD
93	7"	PINE	GOOD
94	7"	PINE	GOOD
95	9"	PINE	GOOD
96	8"	PINE	GOOD
97	10"	PINE	GOOD
98	10"	PINE	GOOD
99	11"	PINE	GOOD
100	10"	PINE	GOOD
101	9"	PINE	GOOD
102	8"	POPLAR	POOR
103	8"	POPLAR	POOR
104	12"	POPLAR	GOOD
105	7"	TWIN BEECH	GOOD
106	11"	ASH	GOOD
107	7"	ASH	GOOD
108	11"	OAK	GOOD
109	18"	OAK	GOOD
110	6"	TWIN BIRCH	GOOD
111	6"	BEECH	GOOD
112	8"	OAK	GOOD
113	6"	BIRCH	GOOD
114	9"	ASH	GOOD
115	10"	ASH	GOOD
116	24"	OAK	GOOD
117	10"	MAPLE	GOOD
118	14"	OAK	GOOD
119	9"	MAPLE	GOOD
120	12"	MAPLE	GOOD
121	8"	MAPLE	GOOD
175	7"	BIRCH	GOOD
176	6"	BIRCH	GOOD
181	6"	ASH	GOOD
182	7"	BIRCH	GOOD
183	9"	ASH	GOOD
184	6"	MAPLE	GOOD
185	12"	BEECH	GOOD
186	14"	TWIN MAPLE	GOOD
187	14"	ASH	GOOD
188	9"	ASH	GOOD
189	20"	OAK	GOOD
190	10"	MAPLE	GOOD
191	10"	BEECH	GOOD
203	15"	ASH	GOOD
204	9"	MAPLE	GOOD
205	7"	MAPLE	GOOD
206	7"	MAPLE	GOOD
207	10"	TWIN MAPLE	GOOD
208	20"	MAPLE	POOR
209	7"	BIRCH	GOOD
210	10"	BIRCH	GOOD
211	7"	BIRCH	GOOD
226	10"	MAPLE	GOOD
227	12"	MAPLE	GOOD
229	6"	ASH	GOOD
244	6"	BIRCH	GOOD
245	11"	MAPLE	GOOD
246	7"	MAPLE	GOOD
247	10"	BIRCH	GOOD
248	9"	MAPLE	GOOD
249	12"	MAPLE	GOOD
250	8"	MAPLE	GOOD
251	9"	BIRCH	GOOD
252	11"	MAPLE	GOOD
253	10"	POPLAR	GOOD
254	6"	TWIN BIRCH	GOOD
255	6"	BIRCH	GOOD
256	10"	BIRCH	GOOD
257	9"	BIRCH	GOOD
258	11"	MAPLE	GOOD
259	10"	BIRCH	GOOD
260	7"	BIRCH	GOOD
261	11"	BIRCH	GOOD
262	8"	POPLAR	GOOD
263	12"	MAPLE	GOOD
264	8"	TWIN MAPLE	GOOD
265	15"	MAPLE	GOOD
266	15"	MAPLE	GOOD
286	20"	OAK	GOOD
287	7"	BEECH	GOOD
288	12"	BEECH	GOOD
289	8"	MAPLE	GOOD
290	6"	POPLAR	GOOD
291	28"	POPLAR	GOOD
292	18"	POPLAR	GOOD
293	24"	POPLAR	GOOD
294	11"	BIRCH	GOOD
295	11"	BIRCH	GOOD
688	6"	ASH	GOOD
689	6"	TWIN MAPLE	GOOD
690	10"	BIRCH	GOOD
691	9"	TWIN BIRCH	GOOD

NOTES:
TOTAL NUMBER OF TREES REMOVED PER WAIVER FROM ECB DATED 3-21-24 = 19
TOTAL NUMBER OF TREES REMOVED PER PRIOR PERMIT = 14

PLANTING SPECIFICATIONS:

GENERAL: ALL PLANTS, TREES, AND SHRUBS SHALL MEET THE SPECIFICATIONS FOR "PLANT MATERIAL" AS PER THE AMERICAN STANDARD FOR NURSERY STOCK. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT ALL PLANTS PRIOR TO SHIPPING AND INSTALLATION. THERE ARE TO BE NO SUBSTITUTIONS OF THE PLANTS WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT.

PLANTING: ALL PLANTS SHALL BE PLANTED IN PITS TWO TIMES THE DIAMETER OF THE ROOT BALL OR CONTAINER. PLANT HEIGHT SHOULD BE PLACED AT OR SLIGHTLY ABOVE PREVIOUS GRADE. PULL BACK BURLAP FROM TOP OF BALL AND CUT WIRE ON TREE BASKET. ENSURE THAT THE BURLAP IS NOT EXPOSED ABOVE GRADE BECAUSE OF WATER LOSS. STAKING AND GUYING SHALL BE USED ONLY WHEN NECESSARY. WHEN THE METHOD IS USED, CARE SHOULD BE TAKEN TO PROTECT THE TREE BARK AND WIRES SHOULD BE REMOVED AS SOON AS POSSIBLE.

MULCHING: ALL PLANTING BEDS (EXCEPT GROUNDCOVER) SHALL BE MULCHED WITH THREE INCHES OF SHREDDED BARK TO CONSERVE WATER AND KEEP ROOTS COVERED DURING INITIAL GROWTH STAGE. DO NOT PLACE MULCH HEAVILY AROUND CROWN OF PLANTS.

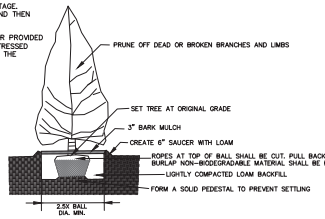
WINTER CARE: ALL TREES AND SHRUBS SHALL BE SPRAYED WITH AN ANTI-DESICCANT THE FIRST NOVEMBER AFTER PLANTING.

WATERING: ALL PLANTS SHALL BE WATERED BY THE CONTRACTOR DURING THE INITIAL GROWTH STAGE. TREES, SHALL BE HAVILY WATERED SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND THEN REGULARLY FOR THE NEXT TWO SUMMERS.

PLANT GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL NEWLY INSTALLED PLANTS FORTWO--YEAR PROVIDED THAT THEY ARE GIVEN PROPER WATERING/CARE AND CONTRACTOR IS NOTIFIED OF UNHEALTHY STRESSED PLANTS IMMEDIATELY. THE TWO YEAR GUARANTEE WILL START AT THE TIME OF THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

PLANT LIST

SYMBOL	No.	PLANT NAME	HEIGHT	QUANTITY	SIZE & REMARKS
JVC	1.	JUNIPERUS VIRGINIANA Eastern Red Cedar	50 FT. TO 60 FT.	9	6 FT. TO 8 FT. HT. ON 2 FT. BERM PLANTED 5 FT. O.C.
PA	2.	PICEA ABIES Norway Spruce	50 FT. TO 60 FT.	15	6 FT. TO 8 FT. HT. ON 2 FT. BERM PLANTED 10 FT. O.C.
TOG	3.	THUJA STANDISH X PLICATA Green Giant	50 FT. TO 60 FT.	24	6 FT. TO 8 FT. HT. ON 2 FT. BERM PLANTED 6 FT. O.C.



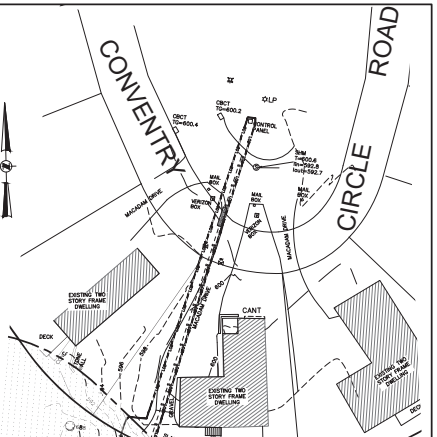
EVERGREEN PLANTING DETAIL

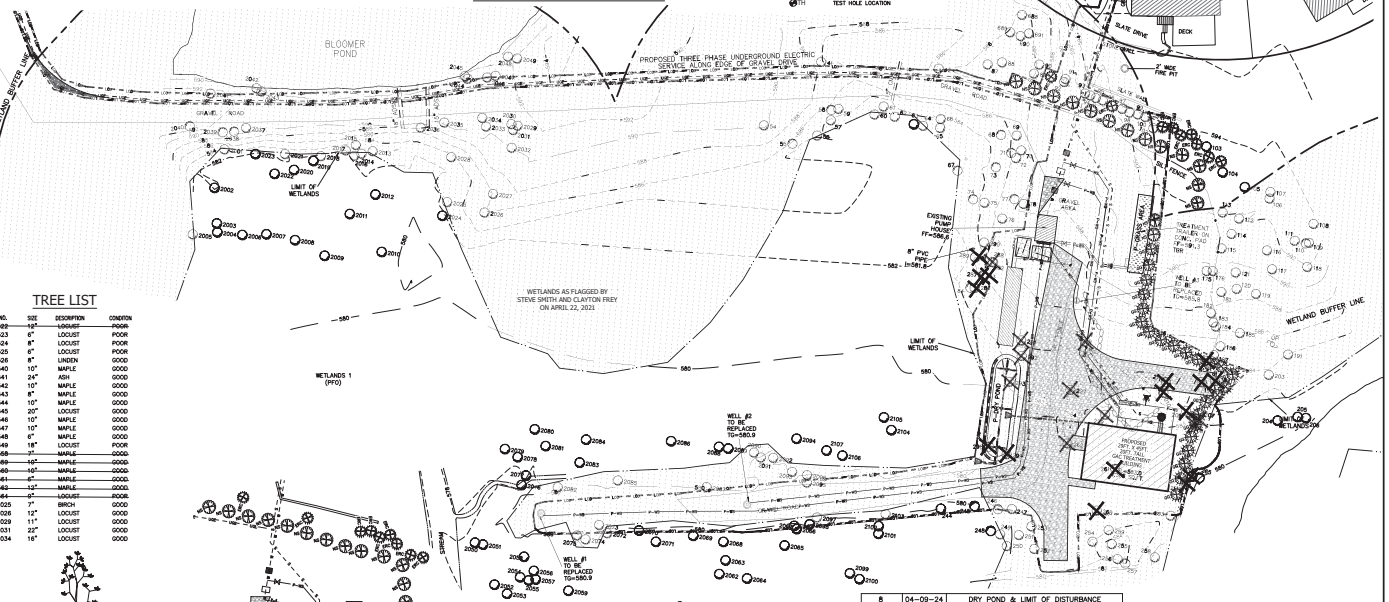
NOTE:
VEOLIA WATER OF NEW YORK INC, ITS SUCCESSORS OR ASSIGNS WILL MAINTAIN THE PROPOSED LANDSCAPING AND TREES SHOWN ON SHEET 7 OF THE CURRENT SITE PLAN TITLED "THE TREE & LANDSCAPE PLAN" ("TREE & LANDSCAPE PLAN") AND BEAR ALL EXPENSES IN CONNECTION THEREWITH.

ANY TREE INSTALLED THAT DOES NOT SURVIVE OR IS IN AN UNHEALTHY CONDITION AT ANY TIME DURING THE FIRST TWO (2) YEARS FOLLOWING ITS PLANTING, SHALL BE REPLACED BY VEOLIA, ITS SUCCESSORS OR ASSIGNS, AT NO COST TO THE TOWN OF CARMEL.

LEGEND

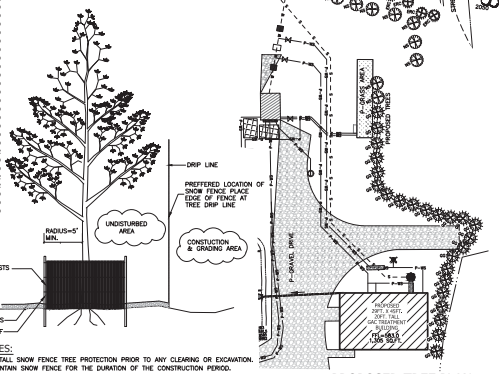
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER LINE
- EXISTING SPOT ELEVATION
- EXISTING STONEWALL
- EXISTING CHAIN LINK FENCE
- EXISTING OVERHEAD WIRES
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- NYSDEC WETLAND BUFFER
- EXISTING WETLANDS
- EXISTING SIGN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- PROPOSED GATE VALVE
- PROPOSED WATER SERVICE
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED CONTOURS
- PROPOSED ROOF DRAIN
- PROPOSED STORM DRAIN
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE
- PROPOSED RAIN GARDEN PROTECTION
- LIMIT OF DISTURBANCE
- TEST HOLE LOCATION





TREE LIST

NO.	SIZE	DESCRIPTION	CONDITON
522	10"	LOCUST	POOR
523	6"	LOCUST	POOR
524	8"	LOCUST	POOR
525	6"	LOCUST	POOR
526	8"	LINDEN	GOOD
540	10"	MAPLE	GOOD
541	24"	ASH	GOOD
542	10"	MAPLE	GOOD
543	8"	MAPLE	GOOD
544	10"	MAPLE	GOOD
545	20"	LOCUST	GOOD
546	10"	MAPLE	GOOD
547	10"	MAPLE	GOOD
548	6"	MAPLE	GOOD
549	18"	LOCUST	GOOD
658	7"	MAPLE	GOOD
660	10"	MAPLE	GOOD
660	10"	MAPLE	GOOD
661	6"	MAPLE	GOOD
662	12"	MAPLE	GOOD
663	9"	LOCUST	POOR
1025	7"	BIRCH	GOOD
1026	10"	LOCUST	GOOD
1029	11"	LOCUST	GOOD
1031	22"	LOCUST	GOOD
1034	16"	LOCUST	GOOD



NOTES:
1) INSTALL SNOW FENCE TREE PROTECTION PRIOR TO ANY CLEARING OR EXCAVATION.
2) MAINTAIN SNOW FENCE FOR THE DURATION OF THE CONSTRUCTION PERIOD.

TREE PROTECTION DETAIL
N.T.S.

PROPOSED TREE PLAN
SCALE: 1"=30'

GRAPHIC SCALE
0 15 30 60
(IN FEET)
1 inch = 30 ft.

REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
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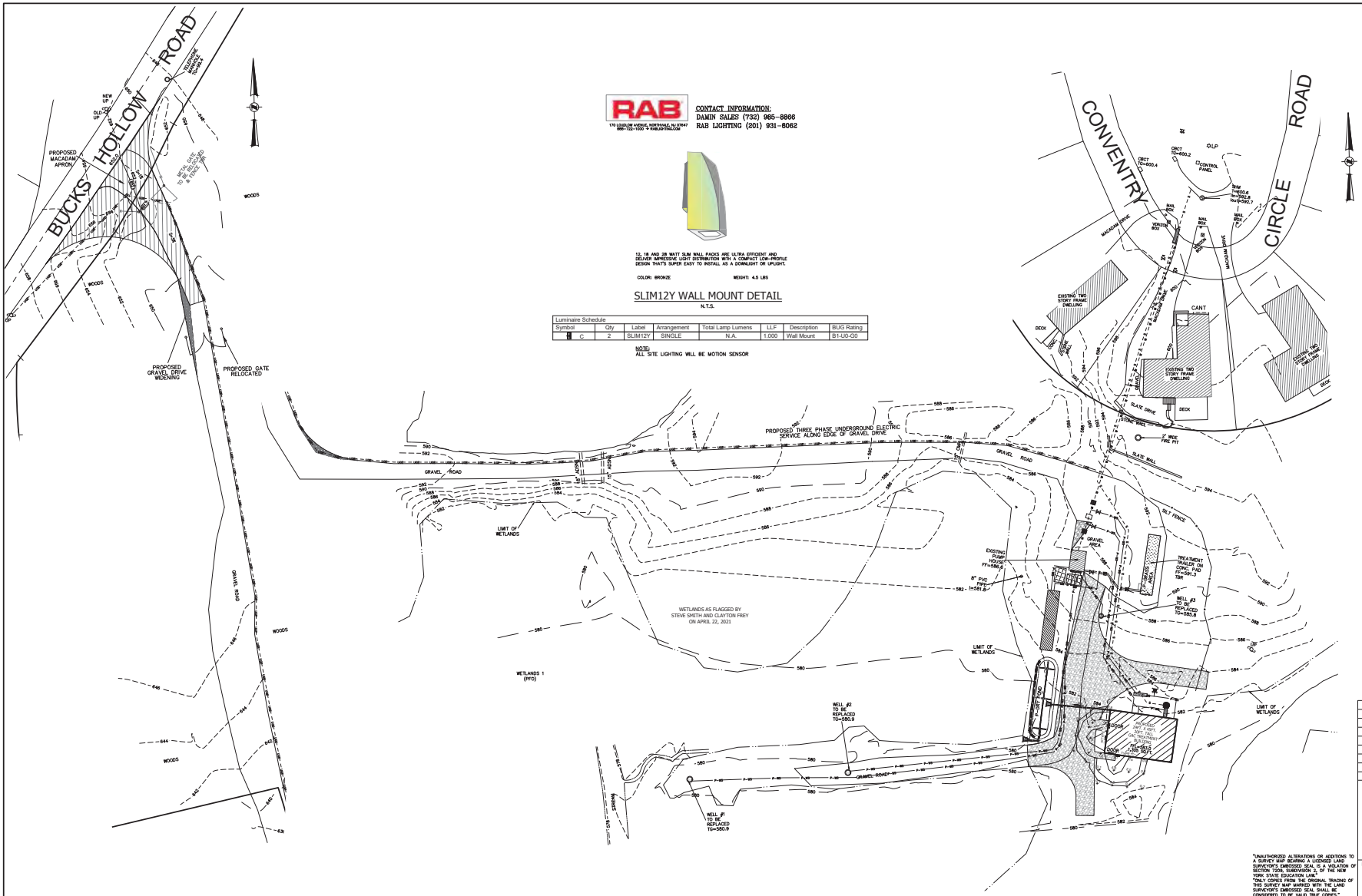
PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
TREE & LANDSCAPE PLAN

DRAWN BY:	IS	CHECKED BY:	JRA
DATE:	AUGUST 27, 2021	SCALE:	1 IN. = 30 FT.
PROJECT NO:	4870	DRAWING NO:	7



RAB
170 LOUDLOW AVENUE, NORTHVALE, NJ 07647
888-722-1000 • RABLIGHTING.COM

CONTACT INFORMATION:
DAMIN SALES (732) 965-8866
RAB LIGHTING (201) 931-8062

12, 18 AND 28 WATT SLIM WALL PACKS ARE ULTRA EFFICIENT AND DELIVER IMPRESSIVE LIGHT DISTRIBUTION WITH A COMPACT LOW-PROFILE DESIGN THAT'S SUPER EASY TO INSTALL AS A DOWNLIGHT OR UPLIGHT.

COLOR: BRONZE WEIGHT: 4.5 LBS

SLIM12Y WALL MOUNT DETAIL

N.T.S.

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	BUG Rating
C	2	SLIM12Y	SINGLE	N.A.	1.000	Wall Mount	B1-U0-G0

NOTE:
ALL SITE LIGHTING WILL BE MOTION SENSOR

LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- CB EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- SMH EXISTING SEWER MANHOLE
- EXISTING SEWER LINE
- EXISTING SPOT ELEVATION
- EXISTING STONEWALL
- EXISTING CHAIN LINK FENCE
- OH EXISTING OVERHEAD WIRES
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- NYSDEC WETLAND BUFFER
- EXISTING WETLANDS
- EXISTING SIGN
- UP EXISTING LIGHT POLE
- UP EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- PROPOSED GATE VALVE
- W PROPOSED WATER SERVICE
- UGE PROPOSED UNDERGROUND ELECTRIC
- PROPOSED CONTOURS
- RD PROPOSED ROOF DRAIN
- PROPOSED STORM DRAIN
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE
- PROPOSED RAIN GARDEN PROTECTION
- LOD LIMIT OF DISTURBANCE
- TH TEST HOLE LOCATION

GRAPHIC SCALE
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(IN FEET)
1 inch = 30 ft.

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"UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."
"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES."
"CERTIFICATIONS HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE DELAWARE – HUDSON LAND SURVEYORS ASSOCIATION. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR ENTITIES FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS."

JOHN R. ATZL
N.Y.S. P.L.S. LIC. NO. 050228

REVISION	DATE	DESCRIPTION
8	04-09-24	DRY POND & LIMIT OF DISTURBANCE
7	02-12-24	LIMIT OF DISTURBANCE PER TOWN ENGINEER
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-22	DRAINAGE REVISION PER INFILTRATION TEST
4	02-25-22	PER PLANING BOARD 2-10-22
3	02-07-22	PER 2-3-22 ECB MEETING
2	01-25-22	PER PB MTG. 1-13-22, PER ECB & PB SUBMISSION
1	11-15-21	PER PB MTG. 9-22-21

ATZL, NASHER & ZIGLER P.C.
ENGINEERS–SURVEYORS–PLANNERS
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New City, New York 10956
Tel: (845) 634-4694
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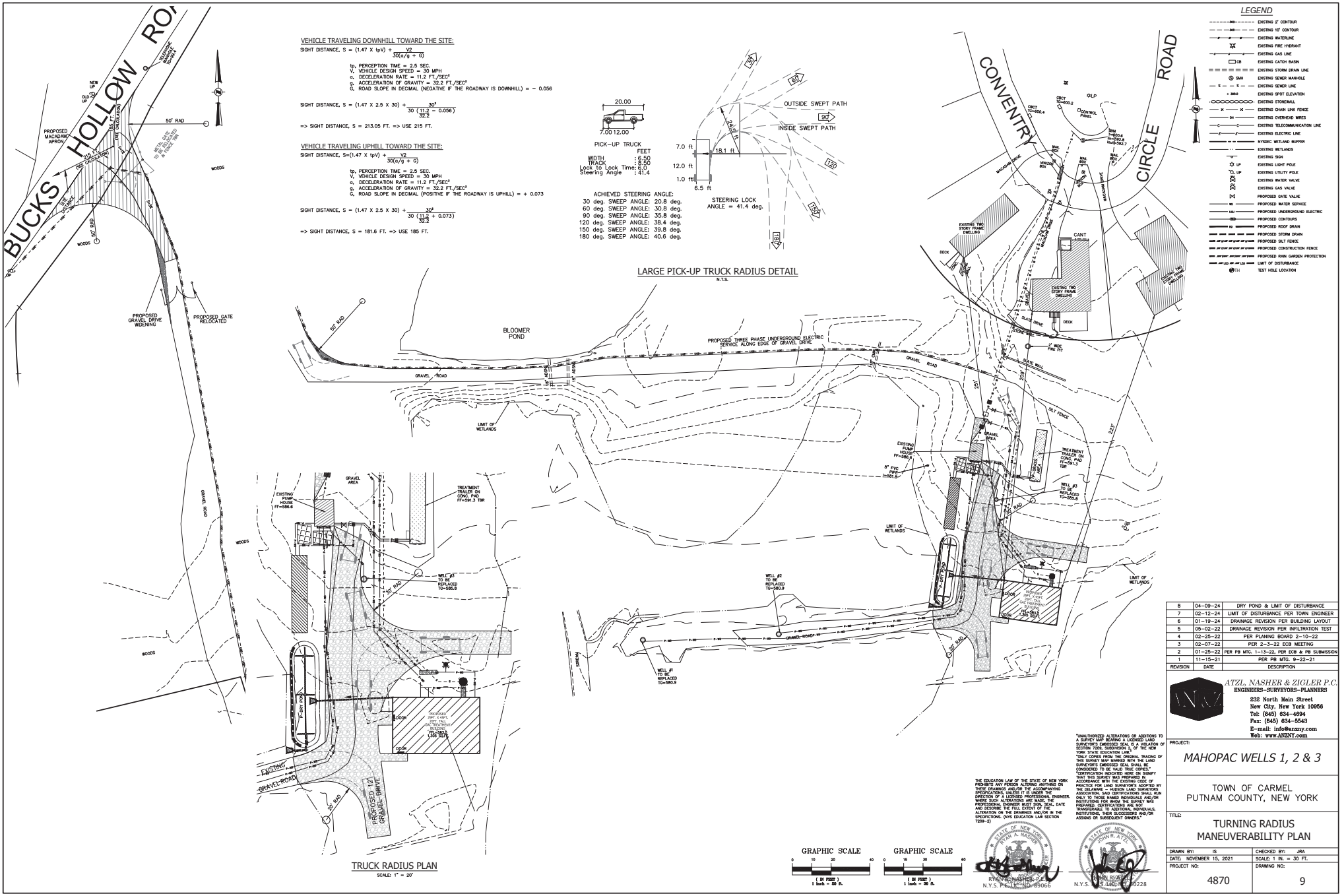
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
LIGHTING PLAN

DRAWN BY: IS	CHECKED BY: JRA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 30 FT.
PROJECT NO: 4870	DRAWING NO: 8



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PROJECT:

MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:

TURNING RADIUS
MANEUVERABILITY PLAN

DRAWN BY: IS	CHECKED BY: JRA
DATE: NOVEMBER 15, 2021	SCALE: 1 IN. = 30 FT.
PROJECT NO: 4870	DRAWING NO: 9

RYAN A. NASHER, P.E.
N.Y.S. P.E. LIC. NO. 89066

JOHN R. ATZL
N.Y.S. LAND SURVEYOR LIC. NO. 050228