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

OCTOBER 15, 2020 – 7:30 P.M.

ELIGIBLE FOR A PERMIT

APPLICANT	ADDRESS	TAX MAP #	COMMENTS
1. White Sail Condominiums c/o Lions Gate Property Mgmt	4 Marina Drive	76.5-1-52	Replace Existing Retaining Wall

SUBMISSION OF AN APPLICATION OR LETTER OF PERMISSION

2. Mahopac Point Owner's Association	Tamarack Road & Sycamore Road	N/A	Repair Drainage System

MISCELLANEOUS

3. Minutes – 09/03/20 & 09/17/20

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

October 8, 2020

Town of Carmel Environmental Conservation Board
Carmel Town Hall
60 McAlpin Avenue
Mahopac, New York 10541

RE: Mahopac Point Owner's Association
Private Drainage System Repair
Town of Carmel, New York

Dear Chairman Laga and Members of the Board:

Enclosed please find the following information in support of a Letter of Permission for the above referenced project:

- Project Plans (3 sheets total) dated September 25, 2020.
- $150.00 Letter of Permission fee.

As the board is aware, the Mahopac Point Community is a private community located on a peninsula that extends into Lake Mahopac. The Mahopac Point Owners Association (MPOA) owns and maintains the existing roads around the point, including the existing drainage infrastructure. Based on multiple site visits and exploratory investigations by our office it was determined that much of the existing network of drainage structures and piping around the Point is in a state of disrepair and is in need of an upgrade. Many of the existing drainage structures are constructed of stone and date back almost 90 years. It was found during our investigation of the existing infrastructure that many of the existing pipes which consisted of a variety of materials were also in a state of disrepair. Based on video investigation it was determined that many of the pipes, including the lake drain pipes, were either clogged, partially separated at pipe joints, or consisted of corrugated metal pipes that were completed rotted along the bottom. The existing condition of the pipes is currently contributing to the sediment that is ultimately transported directly to Lake Mahopac.

The Mahopac Point Owner's Association was before your Board in the Fall of 2018 for a letter of permission to complete drainage system repairs at two (2) of the onsite intersections. The Board reviewed the application and granted a letter of permission for the drainage system repairs. This work was then started and completed in the Spring / Summer of 2019 and the current plans are for repairs at a different location on the point.

The enclosures are being submitted for the review and issuance of another letter of permission for a drainage system repair at the interection of Tamarack and Sycamore. The plans include notes and details from the Board's comments received on the previous application. Specifically, the enclosed plans include additional construction notes to address the Board's previous concerns relative to the completion of the drainage improvements.

If you have any questions or comments regarding this information, please do not hesitate to contact our office.

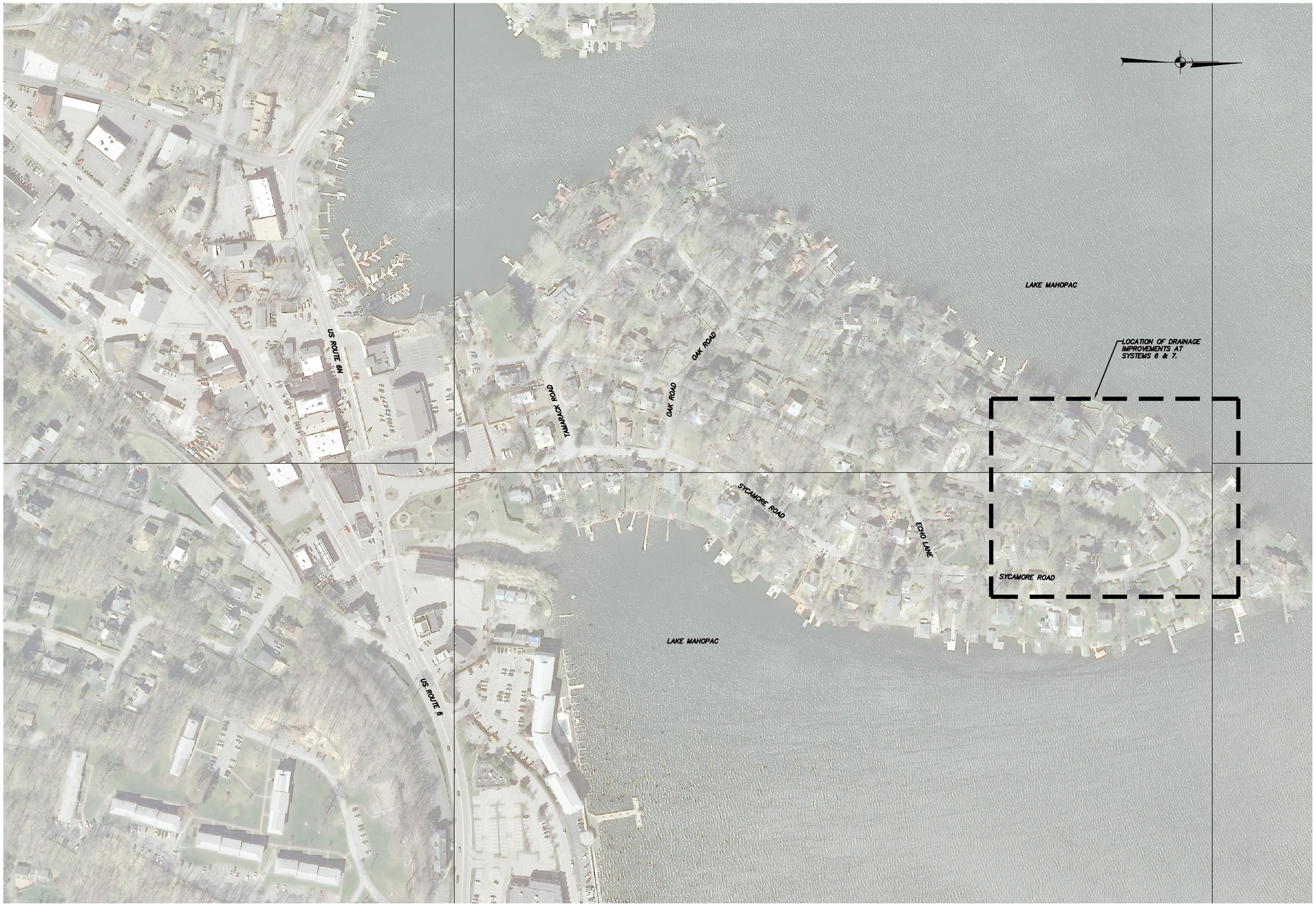
Very truly yours,

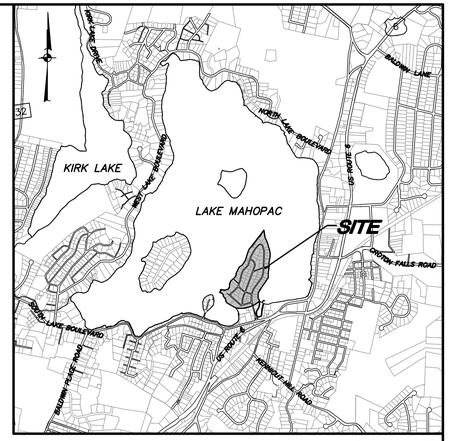
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
John M. Watson, P.E.
Senior Principal Engineer

JMW/zmp/cbz

cc: Andreas Kuhbier, Mahopac Point Owners Association with enclosures
Richard Franzetti P.E., Town of Carmel Engineer, with enclosures
Insite File No. 14186.100





LOCATION MAP SCALE: 1" = 2,000'±

OWNER/APPLICANT:

MAHOPAC OWNERS ASSOCIATION
TAMARACK ROAD
MAHOPAC, NY 10541

SITE DATA:

Zone: Residential
Total Acreage 35± AC

GENERAL NOTES:

1. Topography, spot grades and existing conditions are shown hereon per aerial photography dated April 14, 2003 and is photogrametrically compiled at a scale of 1"= 40'. Elevations shown hereon conform to the North American Vertical Datum of 1988 (N.A.V.D. 1988) as derived by GPS observation. The contour interval is 1'.
2. Supplemental localized topography, spot grades and existing conditions per survey fieldwork completed October 30, 2014 by Insite Engineering, Surveying & Landscape Architecture, P.C. are limited to the site-specific work area limits. Additions or improvements beyond the work area limits are not updated or included hereon.
3. Property line is shown hereon per a map entitled "Map Showing Private Roadways Prepared For Mahopac Point Owners Association, Inc." dated March 28, 2014, prepared by Robert Baxter, L.S. Meridian shown hereon is referenced to the New York State Plane Coordinate System (NAD 83) NY East as derived by GPS observation.
4. Base map information was taken from NYS Othroimagery dated April of 2013.
5. Proposed features labeled as such, all else existing.
6. The contractor shall call "Dig Safely – New York" (811) prior to the start of construction.
7. The contractor shall notify the Engineer and the Mahopac Point Owner's Association (MPOA) at least 48 hours prior to the start of construction for an onsite Pre-Construction meeting.

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

NO.	DATE	REVISION	BY

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www.insite-eng.com

PROJECT:
MAHOPAC POINT OWNERS ASSOC.
DRAINAGE SYSTEMS 6 & 7
SYCAMORE ROAD, TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
OVERALL PLAN

STATE OF NEW YORK · JOHN M. WATSON · No. 77959 · LICENSED PROFESSIONAL ENGINEER

PROJECT NUMBER	14186.100	PROJECT MANAGER	J.M.W.	DRAWING NO.	SHEET
DATE	9-25-20	DRAWN BY	C.B.Z.	OP-1	1 / 3
SCALE	1" = 80'	CHECKED	Z.M.P		

Drainage System 6 & 7 Construction Sequence:

1. Install appropriate traffic maintenance and protection of traffic devices. Coordinate with Mahopac Point Owners Association (MPOA) to alert home owners of potential disruptions to driveways during construction.
2. Install erosion controls as shown on the plan including silt fence at the toe of disturbed soils, in general locations indicated on the plans.
3. Begin saw cut for removals of existing drainage structures and installation of new drainage structures and piping in accordance with the project plans.
4. Remove existing drainage structures and piping, all excess material shall be disposed of offsite at the expense of the contractor.
5. Begin installation of new drainage structures and piping, all excess excavated material shall be disposed of offsite at the expense of the contractor. No stockpiling of excess material will be allowed given the limited available space around the proposed work area.
6. Upon completion of all drainage work, re-establish asphalt pavement within Sycamore Road and stabilize disturbed areas outside of pavement in accordance with the Sedimentation and Erosion Control Notes. Permanent stabilization is achieved when 80% of the plant/grass density is established or asphalt .
7. After the site is permanently stabilized, remove all temporary erosion control measures.

LEGEND

- Existing Property Line
- Existing Tree Line
- Existing Stonewall
- Existing Masonry Wall
- Existing Edge of Pavement
- Existing Pavement Marking
- Existing Retaining Wall
- 695 Existing 5' Contour
- 697 Existing 1' Contour
- 664.3 Existing Spot Shot
- 100' Lake Buffer
- Existing Drainage Pipe
- Existing Catch Basin
- SF PROPOSED SILT FENCE
- TB PROPOSED TURBIDITY CURTAIN
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED DRAIN INLET
- PROPOSED HDPE PIPE

CONSTRUCTION NOTES

1. Work along Sycamore & Tamarack Road will require warning signs and traffic control in accordance with M.U.T.C.D. standards. One lane must remain open at all times.
2. The subject project has coverage under the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity, permit No. GP-0-20-001, for Erosion and Sediment Control only.
3. All pre-cast concrete drainage structures, frames, and grates are to meet H-20 loading requirements.
4. Design Engineer to approve locations and elevations of all structures prior to placement.
5. Existing drainage structures and pipe where new drainage structures and pipe are proposed as noted on the project plans are to be crushed and removed from the site.
6. All catch basins and drain inlets shall be 30" X 30" unless otherwise noted on the plans.
7. All mailboxes and signs shall be replaced in their respective preconstruction general location at the completion of construction.
8. The contractor shall field verify the existing grades / utility locations prior to commencement of any work. Any discrepancy shall be reported to the owner and project engineer when identified.
9. All existing vegetation not proposed to be removed shall be protected from damage, and if damaged replaced at the contractor's expense.
10. The contractor will be held responsible for all damage caused to existing utilities / features / facilities during execution of the work not proposed to be modified or removed by this contract. All damage to any existing utilities / features / facilities not proposed to be modified by the contract shall be repaired or replaced by the contractor to the satisfaction of the owner at no additional cost.
11. Original condition shall mean the condition in which the feature was found at the start of construction.
12. The contractor shall provide all removals incidental and necessary to execute the work shown on the project plans. All existing features specified to be removed shall be removed in their entirety unless otherwise authorized in writing by the owner or the Engineer.
13. During execution of the work, the contractor shall be responsible for dewatering and control of surface water in accordance with the New York State Standards and Specifications for Erosion and Sediment Control. The New York State Standards and Specifications for Erosion and Sediment Control can be found at http://www.dec.ny.gov/chemical/29066.html.
14. The contractor shall be responsible for the implementation of erosion and sediment controls as necessary to prevent erosion and migration of sediment outside of the project limits. Erosion and sediment controls may include but are not limited to silt fence and a stabilized construction entrance. All erosion and sediment controls shall be installed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control. Additional erosion and sediment controls may be required during construction by the Engineer.
15. All existing pavement shall be cleaned and swept prior to the completion of construction.
16. All excess soil material shall be disposed of by contractor offsite, no stockpiling is proposed given limited work area in right of way.
17. Drain inlet rims have been set based on an interpolation of existing contours. Final rim elevations will be determined in the field by the contractor to ensure all intended stormwater runoff is directed to the drain inlets.
18. The silt fencing shown hereon, specifically between Sycamore Road and Lake Mahopac shall be installed prior to the start of any work. Silt fencing shall be installed at the end of each work day in locations up hill of completed work to protect disturbed areas.
19. Filter fabric shall be placed over the existing drain inlet grates during saw cutting activities to prevent the slurry from entering the existing pipes.
20. The lake drains shall be checked daily by the contractor to ensure construction related materials are transported to the lake during the installation.
21. All mechanical equipment stored in the staging areas shall be parked or placed on a 20 mil plastic liner.
22. No fueling or maintenance of construction equipment will be conducted within the 100 foot buffer of the lake. Any vehicle fueling is to take place in the designated staging areas.
23. The contractor shall maintain a spill kit on-site at all times during construction.

NO.	DATE	REVISION	BY

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PROJECT:
MAHOPAC POINT OWNERS ASSOCIATION
SYCAMORE ROAD, TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
REPAIR & IMPROVEMENTS TO DRAINAGE SYSTEMS 6 & 7

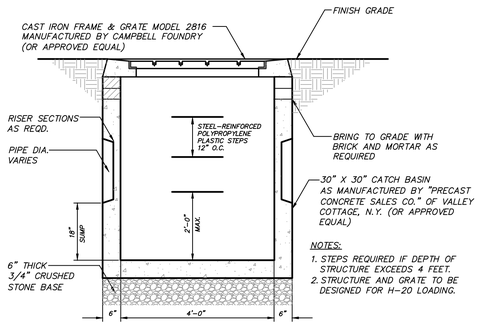
STATE OF NEW YORK — JOHN M. WATSON — No. 77959 — LICENSED PROFESSIONAL ENGINEER

PROJECT NUMBER	14186.100	PROJECT MANAGER	J.M.W.
DATE	9-25-20	DRAWN BY	C.B.Z.
SCALE	1" = 20'	CHECKED	Z.M.P.

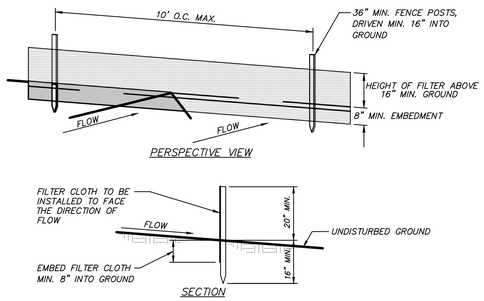
DRAWING NO. SP-1 — SHEET 2 / 3

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Z:\E\14186\00\CONSTRUCTION\Construction Plans\00\00\E SP-1.dwg, 10/8/2020 3:23:38 PM, cazzaro, 1:1



DRAIN INLET DETAIL
(N.T.S.)



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

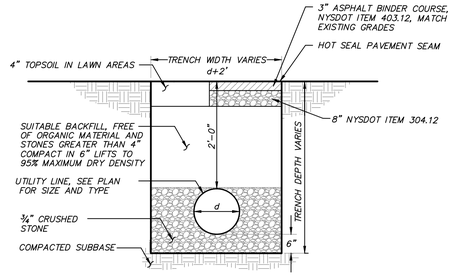
1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

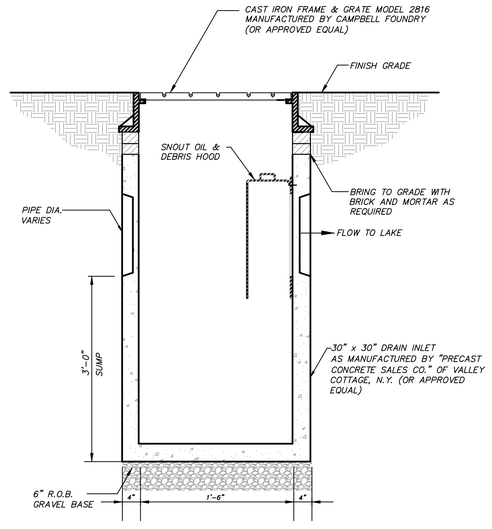
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

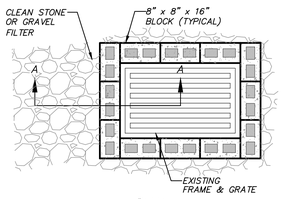
SILT FENCE DETAIL
(N.T.S.)



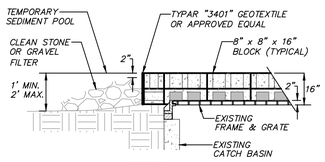
TRENCH RESTORATION DETAIL
(N.T.S.)



DEEP SUMP DRAIN INLET (DI 6) DETAIL
(N.T.S.)



PLAN



SECTION 'A-A'

CONSTRUCTION NOTES:

1. LAY ONE LAYER OF BLOCKS ON EACH SIDE OF THE STRUCTURE ON THEIR SIDES FOR DEWATERING. EDGES OF BLOCK SHALL BE 2 INCHES MINIMUM BELOW THE GRATE. BLOCKS SHALL BE PLACED AGAINST THE INLET FOR SUPPORT. PLACE A SECOND LAYER OF BLOCKS ON TOP OF THE FIRST LAYER WITH HOLE FACE UP.
2. GEOTEXTILE SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2 TO 3/4 INCH IN DIAMETER PLACED ON A 2H:1V SLOPE OR FLATTER, TO WITHIN 2 INCHES OF THE TOP OF THE BLOCKS.

STONE AND BLOCK DROP INLET PROTECTION AT EXISTING DRAIN INLET DETAIL
(N.T.S.)

EROSION & SEDIMENT CONTROL NOTES:

1. The Erosion and Sediment Control Plan is only to be referred to for the installation of erosion and sediment control measures. For all other construction related activities, including, but not limited to, grading and utilities, refer to the appropriate drawings.
2. Each contractor or subcontractor responsible for soil disturbance shall have a NYSDEC trained contractor onsite during soil disturbing activities. The NYSDEC trained contractor will be responsible to comply with the stormwater pollution prevention plan and for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction. The NYSDEC trained contractor shall sign a certification statement required by GP-0-20-001.
3. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
4. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
5. When land is exposed during development, the exposure shall be kept to the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized in the areas required to perform construction.
6. All construction vehicles shall be kept clear of the watercourses and wetland control areas outside the areas of proposed development. Silt fence and orange construction fence shall be installed in the areas where the grading is in close proximity of the watercourses or wetland control areas.
7. The stabilized construction entrances, silt fence, and orange construction fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
8. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded with Lolium perenne aristatum or Lolium perenne multiflorum for temporary stabilization. Lolium perenne aristatum shall be used for winter seeding and Lolium perenne multiflorum shall be used for spring and summer seeding.
9. Any graded areas not subject to further disturbance or construction traffic shall, within 7 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched between March 21 and May 20 or between August 15 and October 15 or as directed by project representative, with specified seed mixes as shown in the General Site Seeding Notes.
   - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
10. Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1". Hydroseeding shall be performed using materials and methods as approved by the site engineer.
11. Cut or fill slopes steeper than 2:1 shall be stabilized immediately after grading with Curlex I Single Net Erosion Control Blanket, or approved equal.
12. Paved roadways shall be kept clean at all times.
13. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
14. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
15. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
16. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the NYSDEC Trained Contractor. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the site engineer.
17. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the trained contractor or site engineer.
18. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
19. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
20. The NYSDEC Trained Contractor shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
21. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer, the Wetlands Inspector, the Town Engineer and/or NYCDEP shall be installed by the contractor.
22. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.
23. After completion of the site improvements, the owner will assume responsibility for maintenance of the roads, parking lots, drainage systems and stormwater facilities. Each spring the paved areas shall be cleaned to remove the winter accumulation of traction sand. After this is completed all drain inlet and catch basin sumps should be cleaned. All pipes should be checked for debris and blockage and cleaned as required. During the cleaning process, the drain inlets, catch basins and pipes should be inspected for structural integrity and overall condition. Repairs and/or replacements should be made as required.
24. Inspection of the stormwater basins should be performed every 6 months and after large storm events. These inspections should, at a minimum, check the outlet pipes for blockage and the general overall integrity of the basin and appurtenances.
25. Maintain basin vegetation including removal of trees and replacement of vegetation that should die. Remove any litter which accumulates as necessary. Typically, the accumulated silt will be required to be removed every 10 to 20 years. Any accumulated silt shall be removed from the stormwater basins once the site has been stabilized.
26. Refer to the Stormwater Pollution Prevention Plan for additional details regarding long-term maintenance of the storm drainage facilities.

REQUIRED EROSION CONTROL SWPPP CONTENTS:

Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-20-001), all Stormwater Pollution Prevention Plan's (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.1a-l of General Permit GP-0-20-001:

a. Background Information: The subject project consists of the replacement and improvements to the existing privately owned drainage systems along Sycamore Road. The improvements include replacement of existing drainage structures, installation of new drainage structures in critical areas to eliminate overland flow and replacement of the existing drainage pipes connecting the structures.

b. Site map / construction drawing: These plans serve to satisfy this SWPPP requirement.

c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Charlton-Chatfield Complex (CrC), Chatfield-Charlton Complex (CsD), as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "B."

d. Construction phasing plan / sequence of operations: The Construction Sequence and phasing found on these plans provide the required phasing. A Construction Sequence and Erosion and Sediment Control Maintenance Schedule has been provided. The Erosion and Sediment Control Notes contained hereon outline a general sequence of operations for the proposed project. In general all erosion and sediment control facilities shall be installed prior to commencement with land disturbing activities, and areas of disturbance shall be limited to the shortest period of time as practicable.

e. Description of erosion and sediment control practices: This plan, and details / notes shown hereon serve to satisfy this SWPPP requirement.

f. Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided heron identify temporary and permanent stabilization measures to be employed with respect to specific elements of the project, and at the various stages of development.

g. Site map / construction drawing: This plan serves to satisfy this SWPPP requirement.

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details, Erosion and Sediment Control Notes, and Erosion and Sediment Control Maintenance Schedule serve to satisfy this SWPPP requirement.

i. An inspection schedule: Inspections are not required by the General Permit GP-0-20-001. In addition the NYSDEC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.

j. A description of pollution prevention measures that will be used to control litter, construction chemicals and construction debris: In general, all construction litter / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction chemicals utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weatherproof building. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventory, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.

k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site: There are no known industrial stormwater discharges present or proposed at the site.

l. Identification of any elements of the design that are not in conformance with the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." All proposed elements of this SWPPP have been designed in accordance with the "New York Standards and Specifications for Erosion and Sediment Control."

NO.	DATE	REVISION	BY

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PROJECT:
MAHOPAC POINT OWNERS ASSOC. DRAINAGE SYSTEMS 6 & 7
SYCAMORE ROAD, TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
DETAILS

STATE OF NEW YORK · JOHN M. WATSON · No. 77950 · LICENSED PROFESSIONAL ENGINEER

PROJECT NUMBER	14186.100	PROJECT MANAGER	J.M.W.
DATE	9-25-20	DRAWN BY	C.B.Z.
SCALE	AS SHOWN	CHECKED BY	Z.M.P.

DRAWING NO. D-1
SHEET 3 / 3

Z:\2014\14186.100\CONSTRUCTION\Greenwich Road\2020\03 D-1.dwg, 10/8/2020 3:25:55 PM, cazzaro, 1:1