



**TOWN OF MAMARONECK - VILLAGE OF LARCHMONT  
COASTAL ZONE MANAGEMENT COMMISSION**

**Monday, February 24, 2020**

**7:30 PM, Mamaroneck Town Center, 1st Floor - Conference Room D, 740 W.  
Boston Post Road, Mamaroneck, NY 10543**

**Approval of Minutes**

1. Approval of Minutes - January 27, 2020

**Agenda Items**

1. 251 Murray Avenue
2. 44 Edgewood Avenue Residential Site Plan
3. Judson Avenue

**Old Business**

**New Business**

**Meeting Adjournment**

Any physically handicapped person needing special assistance in order to attend the meeting should call the Town Administrator's office at 381-7810.





**Town of Mamaroneck — Village of Larchmont**

**COASTAL ZONE MANAGEMENT COMMISSION**

TOWN CENTER: 740 West Boston Post Road, Mamaroneck, NY 10543-3353

TEL: 914-381-7845 FAX: 914-381-8473 conservationdept@townofmamaroneck.org

**CZMC Minutes-Draft**

**January 27, 2020**

A meeting of the Coastal Zone Management Commission (CZMC) was held on Monday, January 27, 2020 in the Mamaroneck Town Center, Conference Room D, 1st Floor, 740 W. Boston Post Road, Mamaroneck, New York. The meeting was called to order at 7:30 p.m.

**MEMBERS PRESENT:**

C. Alan Mason, Chairman  
Matthew Teitsch  
Robert Fletcher  
Kanan Sheth  
Sara Hanna

**OTHERS PRESENT:**

Elizabeth Aitchison, Environmental Planner, Town of Mamaroneck  
Jaine Elkind Eney, Town Councilwoman, Liaison to CZMC  
Jeffrey M. Schwartz, Nautilus Diner, 1240 W. Boston Post Road  
Joseph Pajonas, 1 Spanish Cove  
Robert Keller, 1 Spanish Cove  
David Carlos, 1 Spanish Cove  
Jeremy Rainato, 14 Wildwood Circle & 220 Hommocks Road  
Benedict Salanitro, 14 Wildwood Circle & 220 Hommocks Road  
Martin Harwood, 220 Hommocks Road  
Azure Dee Sleicher, 220 Hommocks Road  
Christopher Eggers, 220 Hommocks Road  
Tim DeBartolomeo, 220 Hommocks Road  
Neil J. Alexander, 220 Hommocks Road  
Bryan Martin, 220 Hommocks Road

**1. Approval of Minutes**

The minutes of the October 28, 2019 meeting were approved as submitted.

**2. Referral – Nautilus Diner, 1240 Boston Post Road, Site Plan Approval, Special Use Permit**

Jeffrey Schwartz presented the application to legalize the site plan for the property as well as obtain a special use permit. The business has been in operation at the location for 22 years. Mr. Schwartz described the operation of the business as well as maintenance of the property including the collection of grease, solid waste, and litter from the site, extermination and the maintenance of the storm drains in the parking area. CZMC found



the operation of the Diner and the use of the property to be consistent with the policies in the Local Waterfront Revitalization Program (LWRP).

3. **Referral – 1 Spanish Cove, Residential Site Plan Approval**

Robert Keller and Joseph Pajonas presented the proposal to demolish the existing home and construct a new single family home on the property. The proposed home will be elevated above the base flood elevation by utilizing pilings. Insufficient engineering data was available to determine the number or depth of pilings required to support the structure and will have to be determined by the applicant as work on the design progresses. No infiltrators are proposed due to the shallow water table, so stormwater quality will be enhanced by utilizing 2 rain gardens. A view easement exists on the property which limits the available space for landscaping in the rear yard, therefore proposed planting will be concentrated along the side property lines. In addition, the landscaping plan includes a wood burning fire pit in the rear yard, which may not be permitted. Brush fires have occurred in the vicinity and an alternative to a wood fire pit should be required. With this amendment to the proposal, CZMC found the proposal to be consistent with the policies in the LWRP.

4. **Referral – 14 Wildwood Circle, Residential Site Plan Approval/Wetlands and Watercourses Permit**

Benedict Salanitro and Jeremy Rainato presented the proposal to replace the existing septic system located in the rear yard. The septic system is failing and no municipal sewers are available in the vicinity. The installation of a new system will require raising the grade by three feet in the rear yard but is not expected to impact the existing rain garden, which was installed several years ago to handle runoff from the pool area. The tidal wetlands are located along the Premium River and will be protected by the existing seawall and the installation of reinforced siltfence. In addition the applicant agreed to protect the stormwater inlet located in the driveway by using filter fabric. Overall, water quality will be improved by the installation of a new system which will utilize beneficial bacteria to digest nutrients. CZMC found the proposal to be consistent with the policies in the LWRP.

5. **Referral – 220 Hommocks Road, Residential Site Plan Approval/Wetlands and Watercourses Permit**

The applicant and a team of consultants presented the proposal for improvements to the property at 220 Hommocks Road. The improvements are to include repairs and modifications the sea wall, the construction of a HAR-TRU tennis court, swimming pool, accessory structures, a new septic system, a pier and floating dock, a gazebo, tree removal grading and landscaping. The existing house and garage will be repaired and renovated, but their footprints are expected to remain unchanged.

In addition to Town permits, the proposal requires permits from the New York State Department of Environmental Conservation (NYSDEC), the US Army Corps of Engineers (USACOE) and the Westchester County Department of Health. The applicant has been working with these agencies on these approvals. CZMC has been asked by the



NYS Department of State for a local consistency determination as a part of the requirements for the NYSDEC and USACOE approval process.

The applicant stated to CZMC that the project will be conducted in harmony with their surroundings, using best practices during construction to protect the surrounding wetlands, and will work on the seawall repairs in small sections to minimize disturbance. The proposed landscaping plan includes the removal of mature but invasive Norway maple trees and the planting of small native trees. Lighting will be done using low level, down lighting and the seawall will be repaired using stone to match the existing wall.

The applicant will provide to the Planning Board and the NYSDOS documentation on the existence of any underwater land grant, patent or deed allowing for the siting and construction of the pier and dock in the waters adjacent to the property. If allowed, the pier and dock will not be permitted to obstruct navigation. CZMC found the proposal to be consistent with the policies in the LWRP.

6. **Old Business**

No old business to discuss.

7. **New Business**

No new business to discuss.

The meeting was adjourned at 9:00 p.m.



**Town of Mamaroneck - Village of Larchmont  
Coastal Assessment Form (CAF)**

Applicants, or the appropriate municipal agency, shall complete this Coastal Assessment Form (CAF) for proposed actions which are subject to Local Consistency Review (see Waterfront Revitalization Law §§234-1 through 234-5 in the Code of the Town of Mamaroneck and §§292-1 through 292-4 in the Code of the Village of Larchmont). This assessment is intended to supplement other information used by the Bi-Municipal Coastal Zone Management Commission in making a determination of consistency with the Town of Mamaroneck and Village of Larchmont Local Waterfront Revitalization Program.

Upon completion of this form, it should be submitted as part of a complete application package for review. If assistance or further information is required for Town of Mamaroneck matters, please contact the Town of Mamaroneck Environmental Planner at (914) 381-7845. For Village of Larchmont matters, please contact the Village of Larchmont Building Inspector at (914) 834-6210.

---

**PLEASE PRINT OR TYPE ALL ANSWERS.**

**A. GENERAL INFORMATION**

Will the proposed action be undertaken by a municipal agency? Yes [ ] No [ ✓ ]

If yes, please list agency or agencies and contact person(s): \_\_\_\_\_

If no, please complete the applicant information:

Name of Applicant: PDF02, LLC  
Street Address: 4 Edgehill Clse  
City, State, Zip: Bronxville, NY 10708  
Phone: (917) - 450 - 0813 Fax: \_\_\_\_\_ Email: deo@brhld.com

**Location and ownership of property for which action is proposed:**

Section: 1 Block: 13 Lot: 103  
Owner of Property: PDF02, LLC  
Street Address: 4 Edgehill Clse  
City, State, Zip: Bronxville, NY 10708  
Phone: (917) - 450 - 0813 Fax: \_\_\_\_\_ Email: deo@brhld.com

Size of property (square feet): 10,938 Is the property now developed? Yes [ ✓ ] No [ ]

Will project require a zoning variance? Yes [ ] No [ ✓ ]

If yes, briefly describe: Pending decision of the Building Inspector.



Describe any unique/unusual landforms on the project site (rock outcroppings, swales, etc.):

A rock outcropping is present within the front yard.

---

---

---

Percentage of site which contains slopes of 25% or greater: 0%

---

Are there streams, lakes, ponds or wetlands existing within or contiguous to the project area?

If so, describe (name, size, characteristics): No.

---

---

---

Will the action require approval by a state or federal agency? Yes [ ] No [x]

If yes, specify which state or federal agency and attach a copy of pending application and any relevant information and/or documentation to this form:

---

---

---

## **B. DESCRIPTION OF SITE AND PROPOSED ACTION**

Provide a written description of the nature and the extent of the proposed action. Attach plans or additional information as necessary and/or required by application procedures.

---

The proposed action consists of additions and alterations to an existing single-family dwelling, driveway and patio along with the associated stormwater practice.

---

---

---

---

---

---

---

---

---

---



## C. COASTAL ASSESSMENT

Check either "Yes" or "No" for each of the following questions:

1. Will the proposed action be located in, or contiguous to, or have a **potentially adverse effect** upon any of the following designated resource areas?

	Yes	No	Maybe
a. Significant fish or wildlife habitat or designated critical environmental area .....	[ ]	[ ✓ ]	[ ]
b. Scenic resources of local significance .....	[ ]	[ ✓ ]	[ ]
c. Natural protective features in an erosion hazard area .....	[ ]	[ ✓ ]	[ ]

**NOTE:** If the answer to any of the above questions is "Yes", please explain in Section D any measures which will be undertaken to mitigate the adverse effects.

2. Will the proposed action have a **significant effect** upon:

	Yes	No	Maybe
a. Commercial or recreational use of fish and wildlife resources .....	[ ]	[ ✓ ]	[ ]
b. Scenic quality of the coastal environment .....	[ ]	[ ✓ ]	[ ]
c. Development of future, or existing water dependent uses .....	[ ]	[ ✓ ]	[ ]
d. Land or water uses within a small harbor area .....	[ ]	[ ✓ ]	[ ]
e. Stability of the shoreline .....	[ ]	[ ✓ ]	[ ]
f. Surface or groundwater quality .....	[ ]	[ ✓ ]	[ ]
g. Existing or potential public recreation opportunities .....	[ ]	[ ✓ ]	[ ]
h. Structures, sites or districts of historic, archeological or cultural significance to the local area, state or nation .....	[ ]	[ ✓ ]	[ ]

3. Will the proposed action **involve or result in** any of the following:

	Yes	No	Maybe
a. Physical alteration of land along the shoreline, land underwater or coastal waters .....	[ ]	[ ✓ ]	[ ]
b. Expansion of existing public services or infrastructure in or near undeveloped or low density areas of the coastal area? .....	[ ]	[ ✓ ]	[ ]
c. Filling, dredging, excavation or mining in coastal waters .....	[ ]	[ ✓ ]	[ ]
d. Reduction of existing or potential public access to or along the shore .....	[ ]	[ ✓ ]	[ ]
e. Development within a designated flood or erosion hazard area .....	[ ]	[ ✓ ]	[ ]
f. Development of a natural feature that protects against flooding or erosion .....	[ ]	[ ✓ ]	[ ]
g. Replacement of eroded sand or soil .....	[ ]	[ ✓ ]	[ ]
h. Construction or reconstruction of erosion protective structures .....	[ ]	[ ✓ ]	[ ]
i. Any change in surface or groundwater quality .....	[ ]	[ ✓ ]	[ ]
j. Removal of trees from the site .....	[ ]	[ ✓ ]	[ ]

4. Project details:

	Yes	No	Maybe
a. If the project is to be located adjacent to the shore:			
1. Does the project require a waterfront site in order to function .....	[ ]	[ ✓ ]	[ ]
2. Will water-related recreation be provided .....	[ ]	[ ✓ ]	[ ]
3. Will public access to shore or state owned underwater lands be provided .....	[ ]	[ ✓ ]	[ ]
4. Will it replace a recreational or maritime use .....	[ ]	[ ✓ ]	[ ]
5. Do essential public services and facilities presently exist at or near the site ..	[ ]	[ ✓ ]	[ ]



- Please explain any of the above answers that may need further clarification in Section D.**

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



**I certify that I am the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.**

Date: February 14th 2020



Signature of Applicant

**Prepared by:** (if different than the applicant)

Name and Title: Hudson Engineering & Consulting, P.C.

Agency/Company: Hudson Engineering & Consulting, P.C.

Street Address: 45 Knollwood Road

City, State, Zip: Elmsford, NY 10523

Phone: (914) - 909 - 0420 Fax: \_\_\_\_\_ Email: Michael@Hudsonec.com

**I certify that I prepared this Coastal Assessment Form for the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.**

Date: February 14th 2020

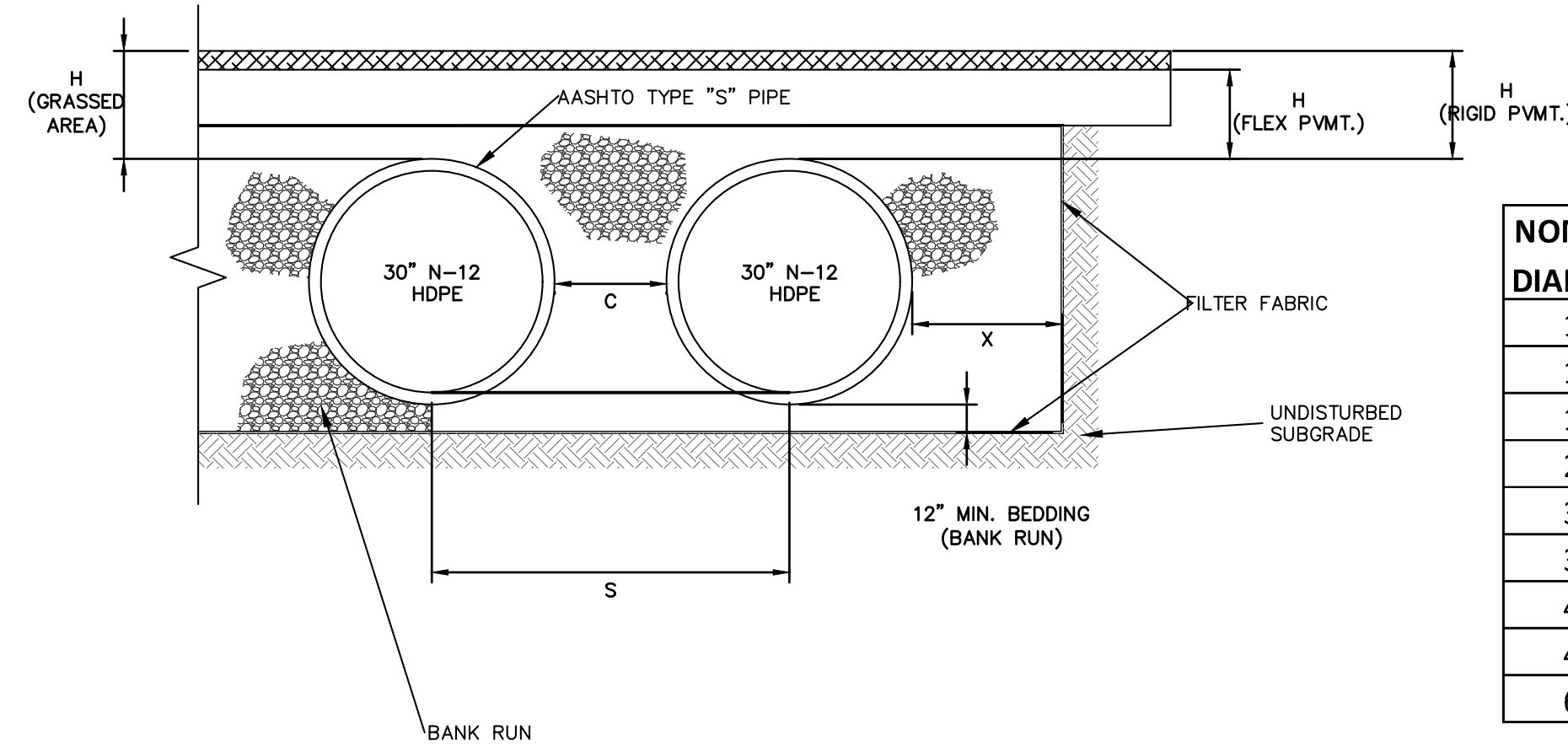


Signature of Preparer







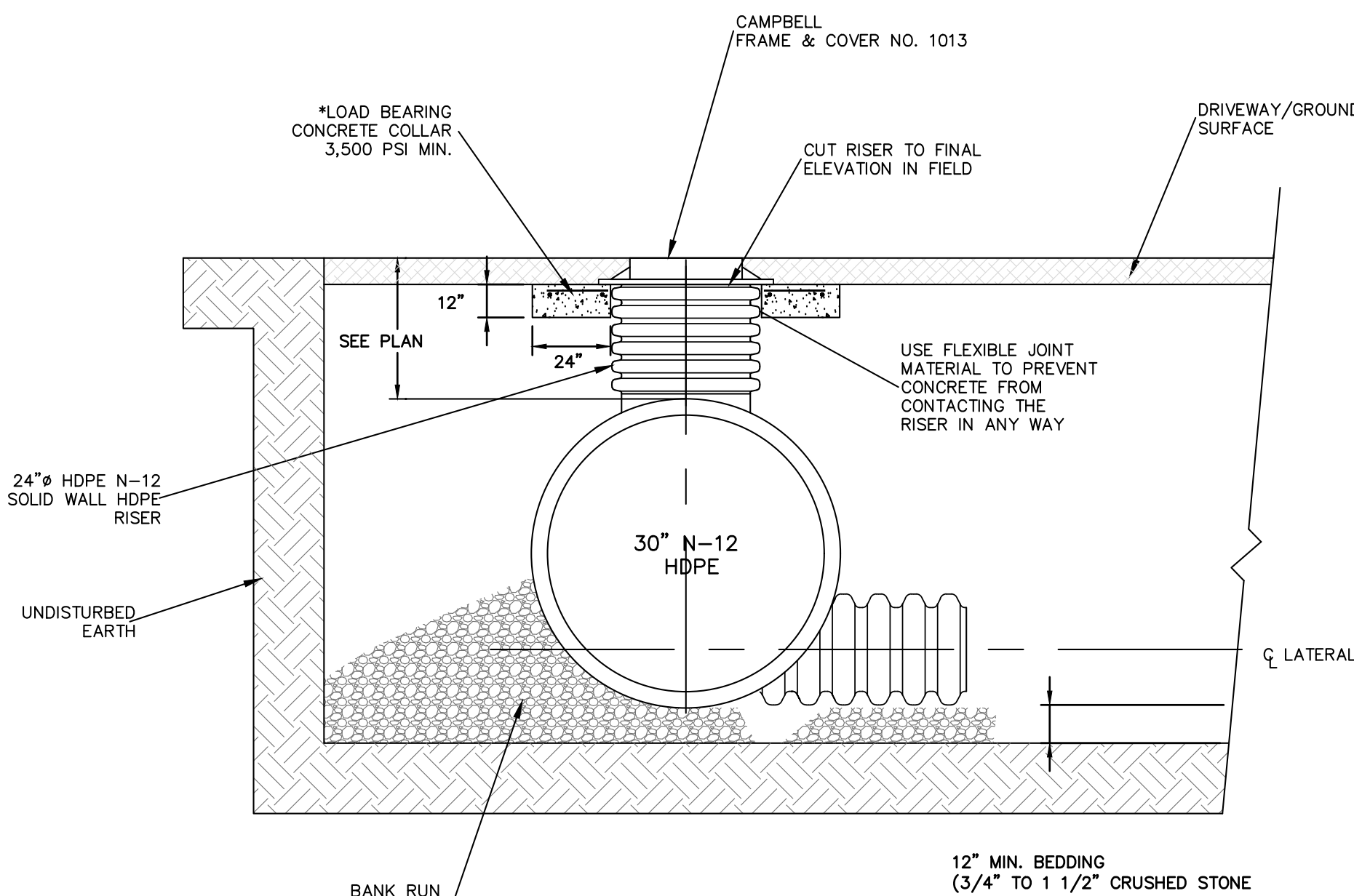


### ATTENUATION GALLERY SECTION

#### NOTES:

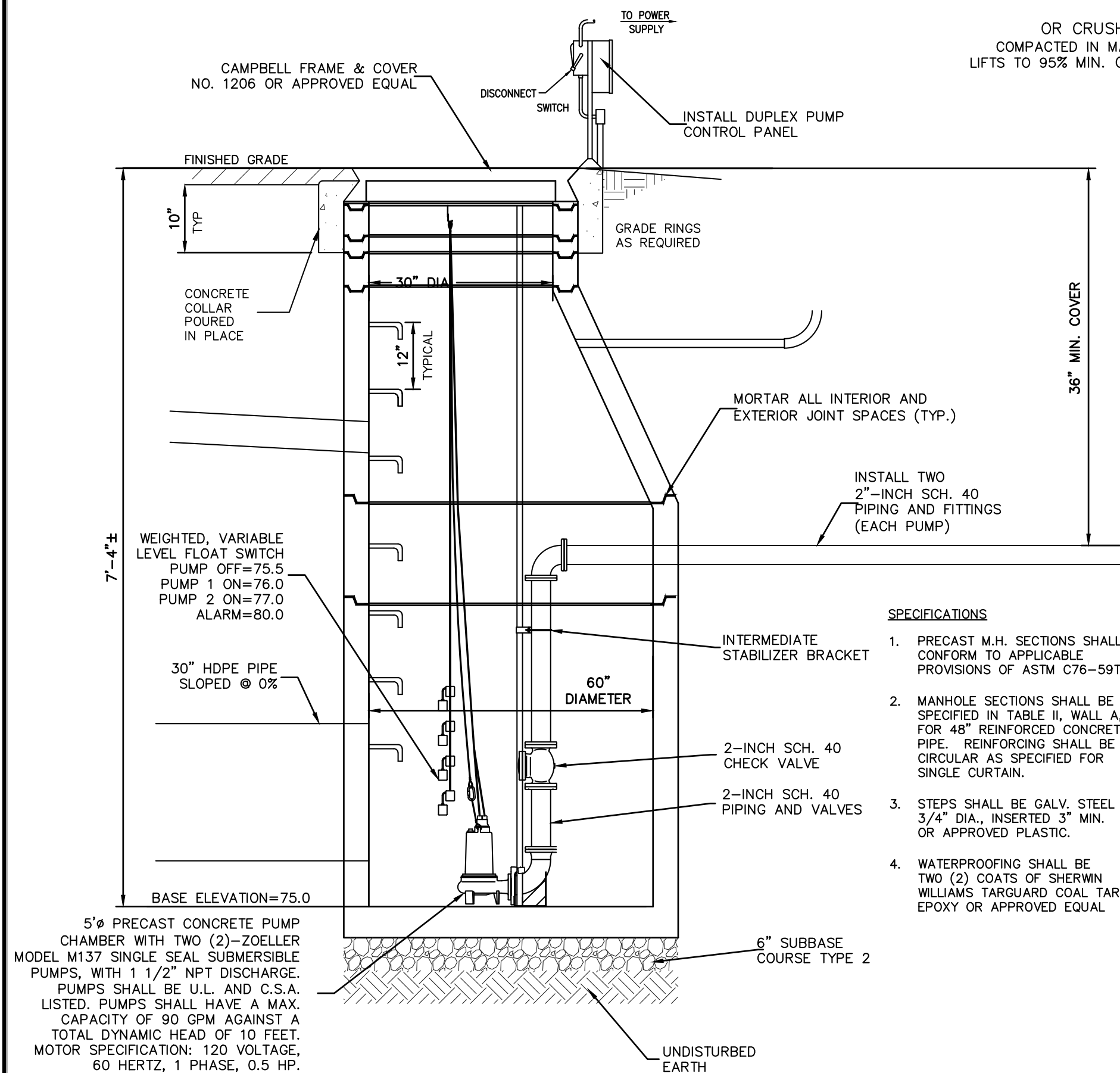
- THE ATTENUATION/EXFILTRATION GALLERY SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
- MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED, SEE ASTM D2321.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE BANK RUN MATERIAL. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 12" MINIMUM.
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE BANK RUN MATERIAL IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER: MINIMUM COVER OVER ALL ATTENUATION/EXFILTRATION GALLERIES IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- ALL PIPE STUBS, ORIFICE PLATES, FITTINGS, BENDS, TEES, ETC. SHALL BE MANUFACTURED AT THE FACTORY.

NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "C"	TYPICAL SPACING "S"	TYPICAL SIDE WALL "X"	H (NON-TRAFFIC)	H (TRAFFIC)
12"	14.5"	11"	25.4"	8"	12"	12"
15"	18"	12"	28.9"	8"	12"	12"
18"	21"	17"	33.9"	9"	12"	12"
24"	28"	13"	40.7"	10"	12"	12"
30"	36"	18"	53.1"	18"	12"	12"
36"	42"	22"	63"	18"	12"	12"
42"	48"	24"	71.9"	18"	12"	24"
48"	54"	25"	78.5"	18"	12"	24"
60"	67"	24"	90"	18"	12"	24"



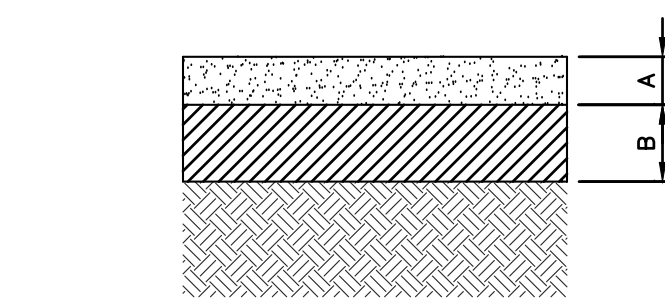
### ACCESS MANHOLE STRUCTURE

- \* LOAD BEARING CONCRETE COLLAR SHALL BE CONSTRUCTED IN TRAFFIC AREAS SUCH THAT THE LIVE LOAD IS TRANSMITTED TO THE SURROUNDING SOIL AND NOT DIRECTLY TO THE RISER.

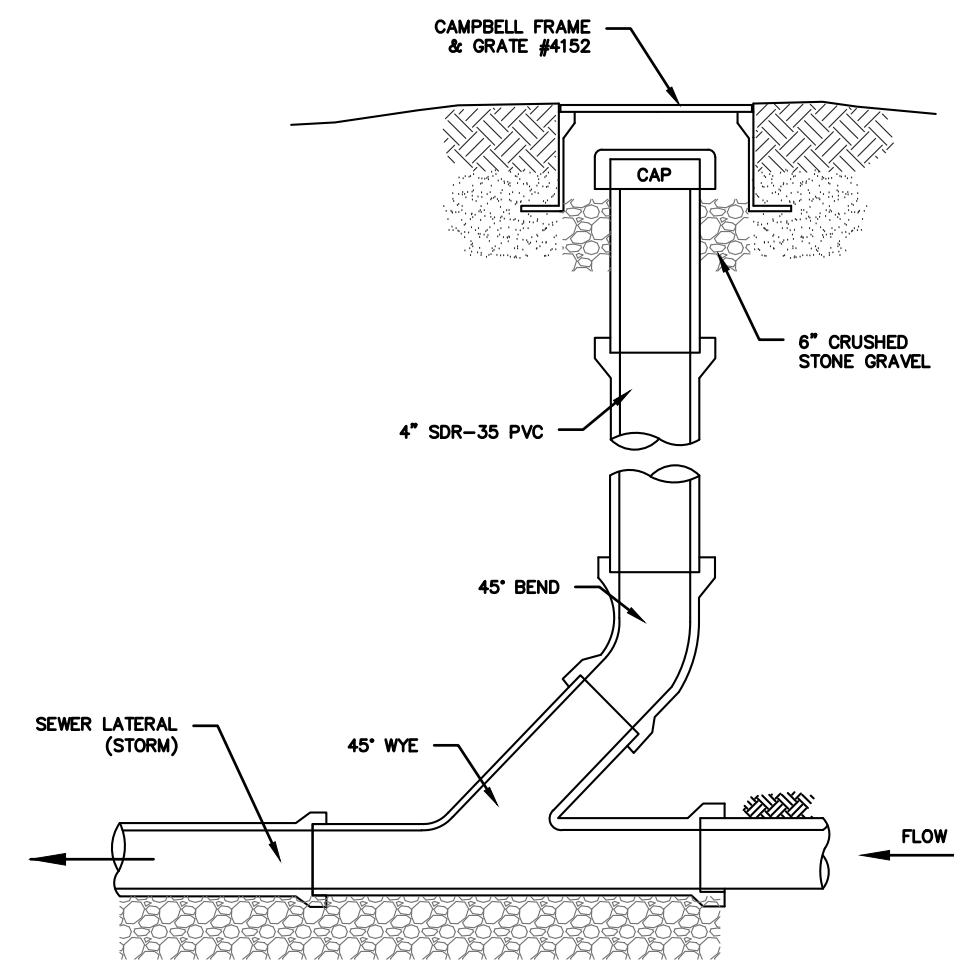
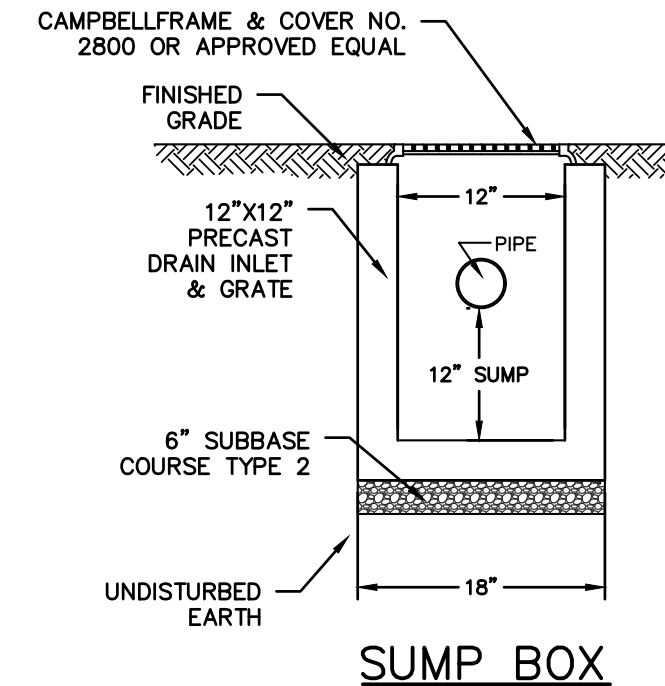


### PUMPING SYSTEM SECTION

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

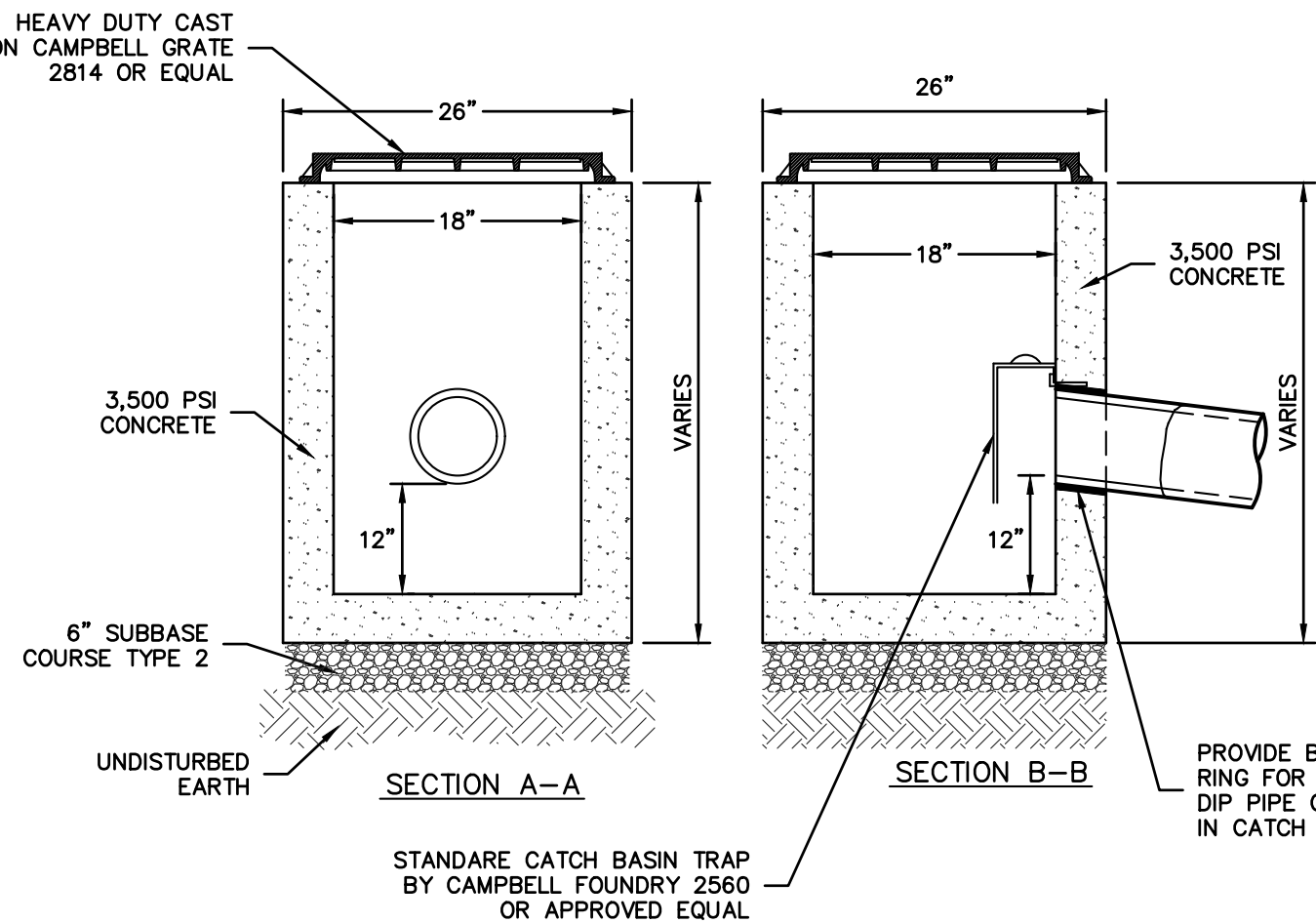


### DRIVEWAY PAVEMENT SECTION



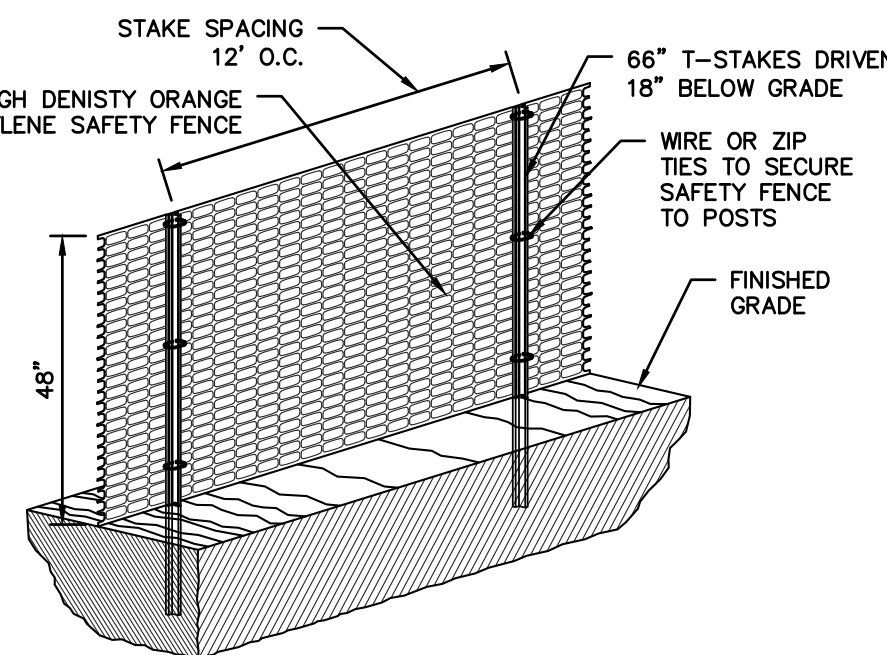
- NOTES (STORM SEWER):  
1. REFER TO PLAN FOR SPECIFIC PIPE SIZING AND SLOPE SPECIFICATIONS; HOWEVER, IN GENERAL, ALL STORM SEWER SERVICES TO BE 6" SCH. 40 @ 1.0% MINIMUM.  
2. CLEANOUTS SHALL BE PLACED BEFORE SIGNIFICANT PIPE BEND LOCATIONS (I.E., JUNCTIONS, 90-DEGREE BENDS, ETC.) UNLESS A ROOF LEADER DOWNSPOUT CONNECTION IS PROPOSED.

### SEWER CLEANOUT DETAIL (GRAVITY) (STORM)



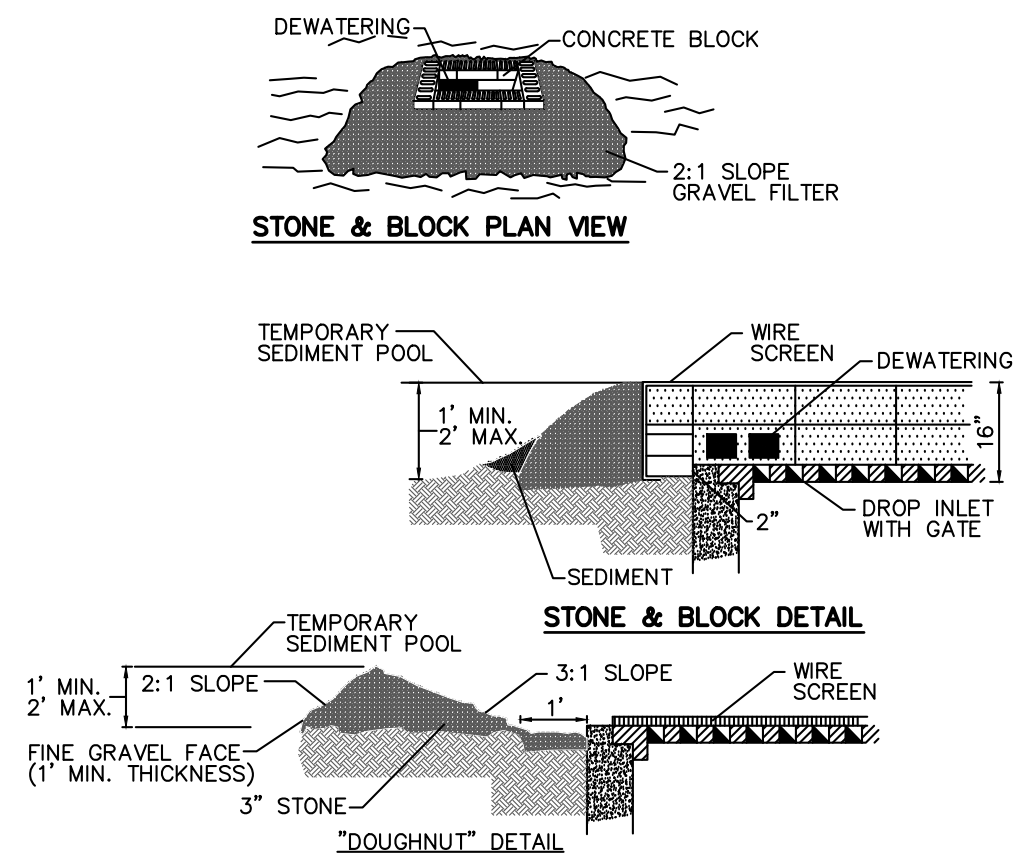
- NOTES:  
1. CONCRETE - 3,500 PSI MINIMUM STRENGTH @ 28 DAYS  
2. DESIGN LOADING - AASHTO HS20-44  
3. EARTH COVER - 0 TO 5 FEET  
4. CONSTRUCTION JOINT - LAPPED

### 18"X18" PRECAST CONCRETE CATCH BASIN



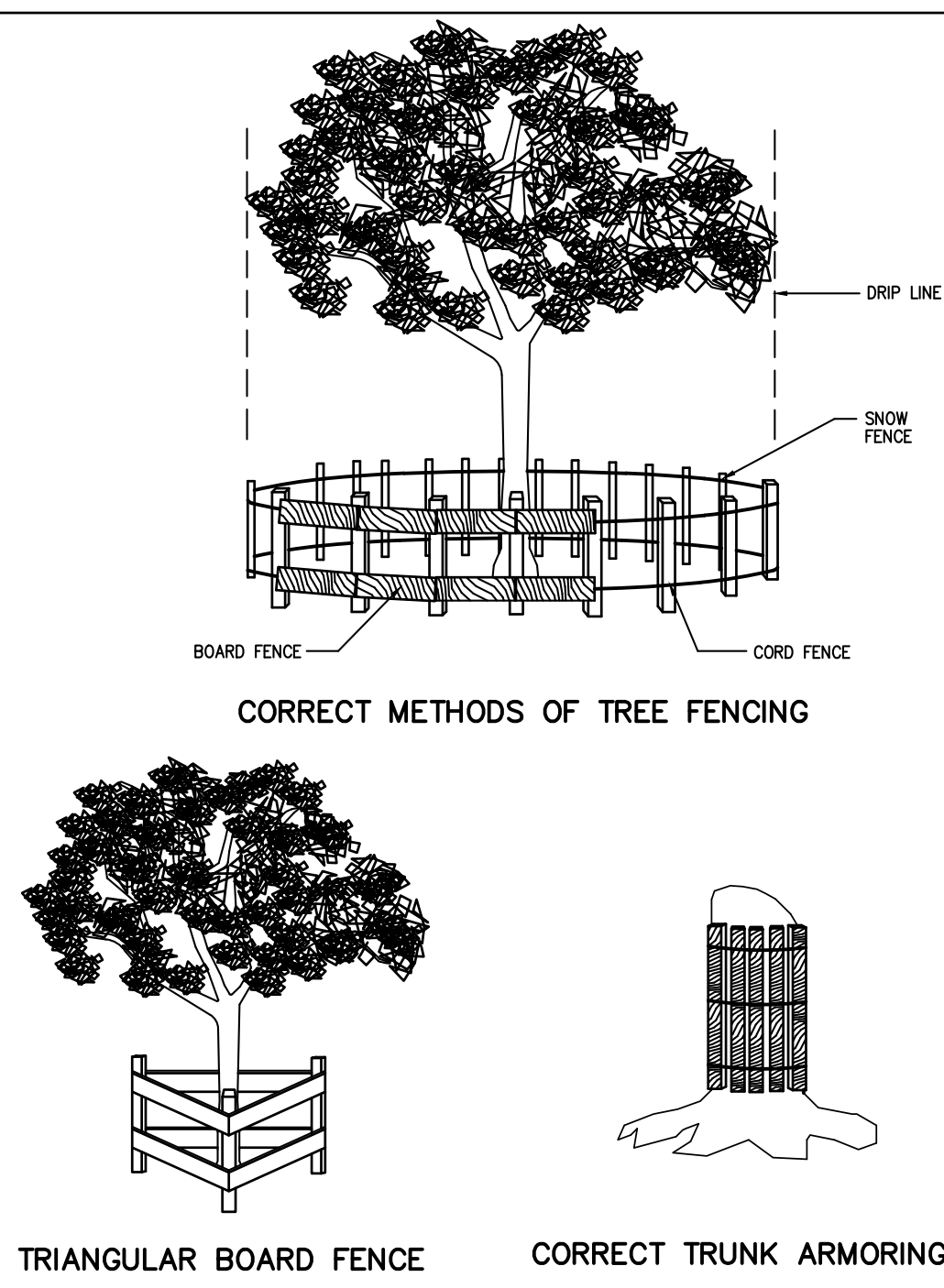
### CONSTRUCTION FENCE

### STONE & BLOCK DROP INLET PROTECTION



- CONSTRUCTION SPECIFICATION  
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.  
2. HARDWARECLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.  
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF BLOCK ON A 2:1 SLOPE OR FLATTER.  
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.  
MAXIMUM DRAINAGE AREA 1 ACRE.

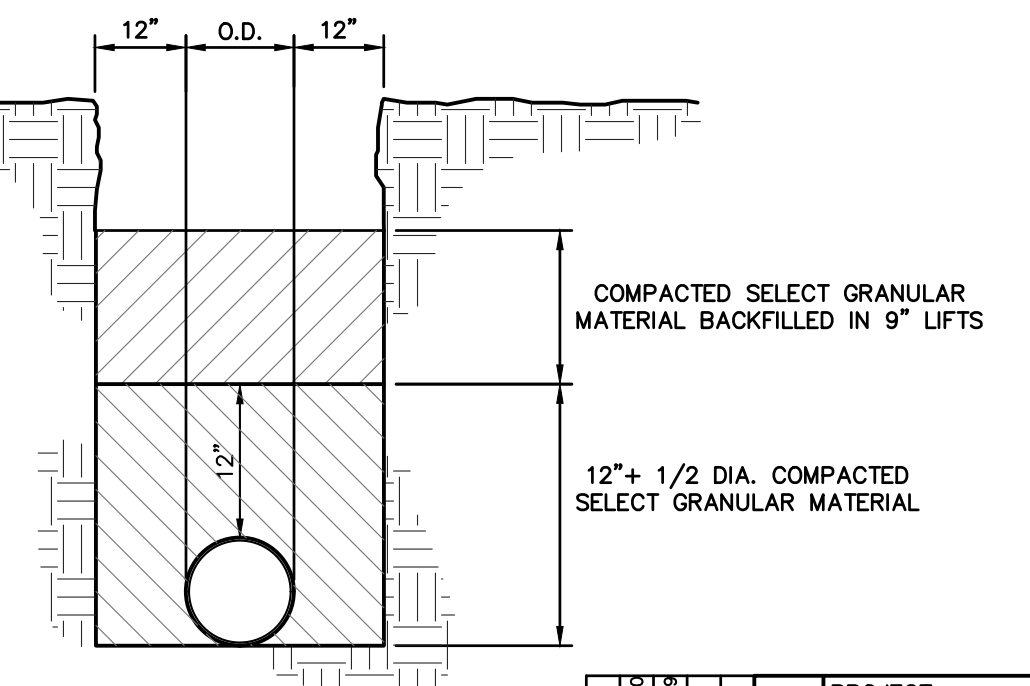
### FENCING AND ARMORING



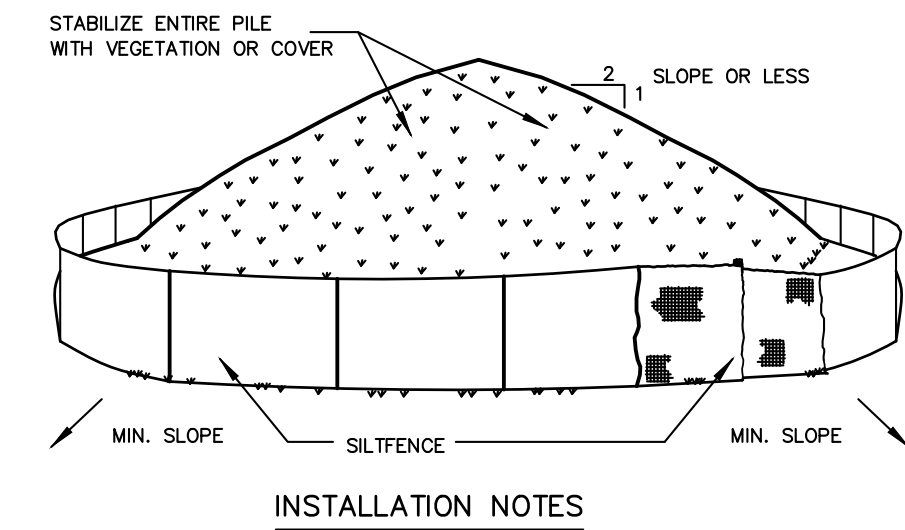
### TRIANGULAR BOARD FENCE

### CORRECT TRUNK ARMORING

### TRENCH BEDDING

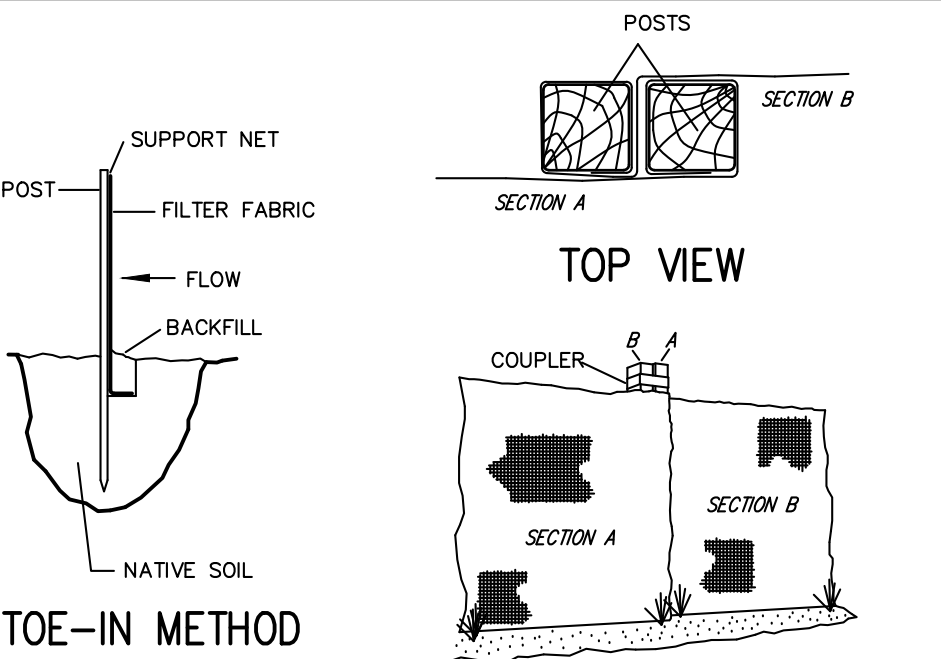


### SOIL STOCKPILING



- INSTALLATION NOTES:  
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.  
2. SOILS OR FILL TO BE STOCKPILED ON SITE DURING CUTTING AND FILLING ACTIVITIES SHOULD BE LOCATED ON LEVEL PORTIONS OF THE SITE WITH A MINIMUM OF 50-75 FOOT SETBACKS FROM TEMPORARY DRAINAGE SWALES.  
3. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.  
4. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.  
5. STOCKPILES REMAINING IN PLACE FOR MORE THAN A WEEK SHOULD BE SEEDED AND MULCHED OR COVERED WITH GEOTEXTILE FABRIC SURROUNDED BY SILT FENCE.  
6. SEE SPECIFICATIONS (THIS MANUAL) FOR INSTALLATION OF SILT FENCE.

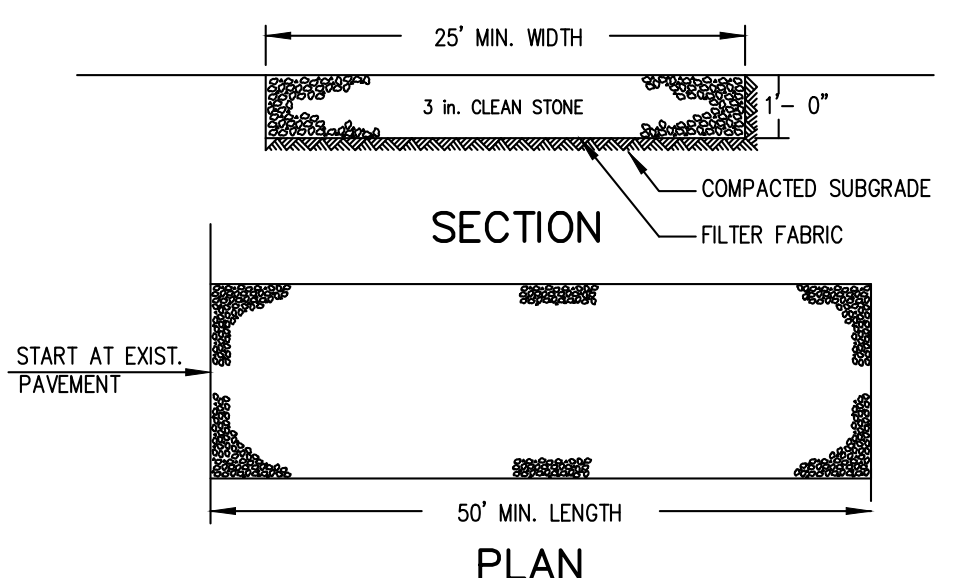
### SILT FENCE



### JOINING SECTIONS OF FENCING

- INSTALLATION NOTES:  
1. EXCAVATE A 4 INCH x 4 INCH TRENCH ALONG THE LOWER PERIMETER OF THE SITE.  
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (SIDE AWAY FROM DIRECTION OF FLOW).  
3. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS APPROXIMATELY 2 INCHES FROM THE TRENCH BOTTOM.  
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACKFILL THE TRENCH AND TAMP THE SOIL. STEEPER SLOPES REQUIRE AN INTERCEPT TRENCH.  
5. JOIN SECTIONS AS SHOWN ABOVE.

### STABILIZED CONSTRUCTION ENTRANCE



- INSTALLATION NOTES:  
1. STONE SIZE - USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.  
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).  
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.  
4. WIDTH - 25 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.  
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.  
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPIED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTAIN 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 WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.  
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.  
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

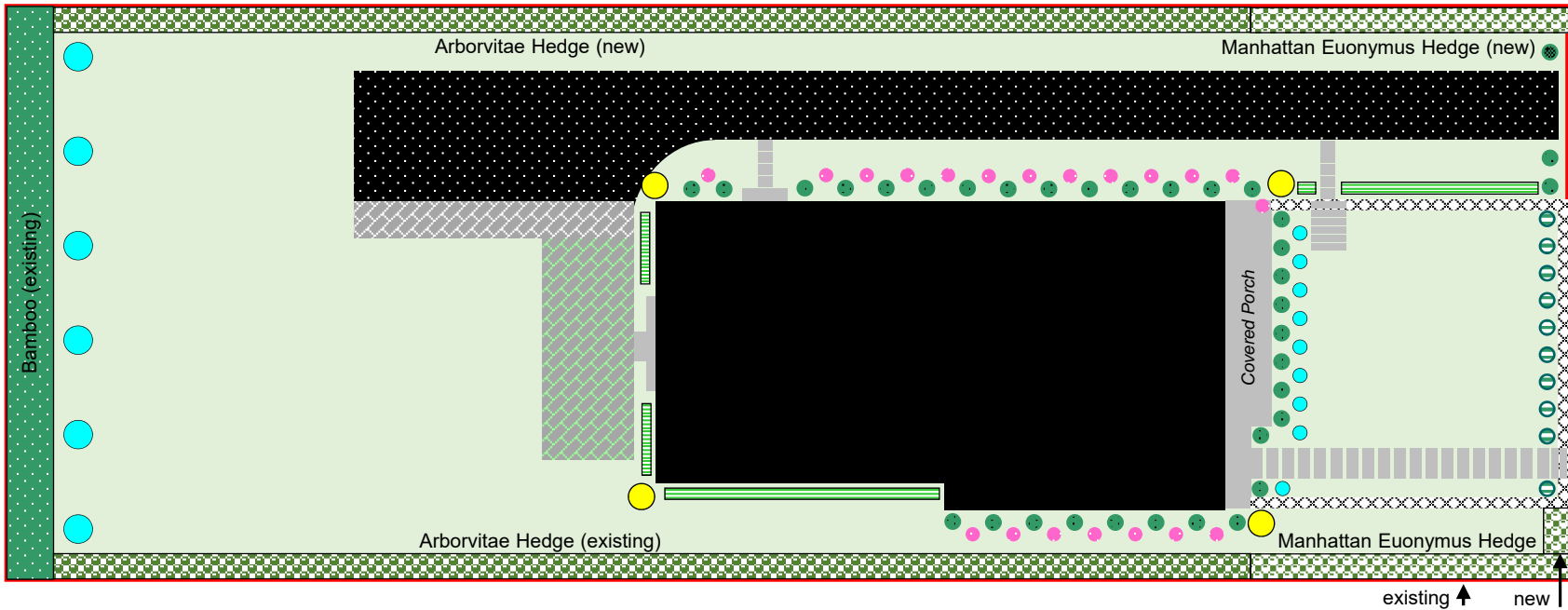
SUBMITTAL TO PLANNING BOARD REVIEWED FOR COMMENTS DATE BY		PROJECT: <b>PROPOSED ADDITIONS &amp; ALTERATIONS          251 MURRAY AVENUE          TOWN OF MAMARONECK          WESTCHESTER COUNTY - NEW YORK</b>		
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEER'S SEAL & SIGNATURE		STANDARD DETAILS <b>HUDSON ENGINEERING &amp; CONSULTING, P.C.</b> 45 Knollwood Road - Suite 201 Elmsford, New York 10523 T: 914-909-0420 F: 914-560-2086		
Date: 06/28/19 Sheet: 2 Designed By: S.G. Checked By: M.S.		Date: 06/28/19 Sheet: 2 Designed By: S.G. Checked By: M.S.		<b>C-2</b>
ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.		ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.		



# 251 MURRAY Avenue Landscaping Plan

- Green Velvet Boxwood
- English Laurel
- Perennial
- Big Daddy Hydrangea
- Endless Summer Hydrangea
- Steeds Upright Japanese Holly

- Arborvitae
- Manhattan Euonymus
- Bamboo
- Blue Liriope
- Retaining wall
- Hardscape pavers
- Pervious hardscape



existing ↑ new ↑

	Mature Height	Mature Width	Planting Size
Green Velvet Boxwood	3-4'	3-4'	3-5 gal
English Laurel	8-10'	5'	7 gal
Manhattan Euonymus	6'	5-6'	7 gal
Arborvitae Thin Man	3-5'	10-12'	5 gal
Steeds Upright Japanese Holly	8-10'	4'	7 gal
Big Daddy Hydrangea (blue)	5-6'	5-6'	3 gal
Endless Summer Hydrangea (blue)	3-4'	3-4'	3 gal
Blue Liriope	12-18"	12-18"	3" pots





# **STORMWATER MANAGEMENT PLAN & DRAINAGE ANALYSIS**

**251 Murray Avenue  
Town of Mamaroneck - New York**

**June 28, 2019  
Revised: January 22, 2020**



**Hudson Engineering & Consulting, P.C.**  
*45 knollwood Road, Suite 201  
Elmsford, NY 10523  
(914) 909-0420*







**STORMWATER MANAGEMENT  
PLAN & DRAINAGE ANALYSIS  
251 Murray Avenue  
Town of Mamaroneck - New York**

***INTRODUCTION***

This Stormwater Management Plan presents the proposed Best Management Practices (BMPs) to control erosion and sedimentation and manage stormwater during and upon construction of the proposed additions and alterations at 251 Murray Avenue in the Town of Mamaroneck, Westchester County, New York.

This Plan consists of this narrative and a plan set entitled: "Proposed Additions & Alterations, 251 Murray Avenue, Town of Mamaroneck, Westchester County - New York", all as prepared by Hudson Engineering and Consulting, P.C., Elmsford, New York, last revised January 22, 2020. The design is in accordance with the Town of Mamaroneck requirements. Since the project disturbance is less than one acre the New York State Department of Environmental Conservation [NYSDEC] stormwater regulations are not applicable.

***METHODOLOGY***

The stormwater analysis was developed utilizing the Soil Conservation Service (SCS) TR-20, 24-hour Type III storm events (HydroCad®) to assist with the design of the mitigating practices. The "Complex Number" (CN) value determination is based on soil type, vegetation and land use. The design is in accordance with the Town of Mamaroneck's stormwater regulations. The "Time of Concentration" ( $T_c$ ) was determined as a direct entry of one-minute. The CN and  $T_c$  data are input into the computer model. The project site was modeled for the 2-year, 5-year, 10-year and 25-year Type III – 24-hour storm event.

***BACKGROUND INFORMATION***

The project site consists of 10,938 square feet situated on Murray Avenue. The site contains an existing dwelling, driveway, walkway, retaining walls and patio. The soil classification, based upon Westchester County Soils Mapping, is primarily Urban Land-Charlton-Chatfield complex, rolling, very rocky (Hydrologic soil group B). The site vegetation can be characterized as grass. The site is characterized as sloping from the east and west.

***PRE-DESIGN INVESTIGATIVE ANALYSIS***

A pre-design investigative analysis was performed consisting of deep tests in the location shown on the plans. Due to the presence of high ground water, it was unnecessary to perform percolation testing. A series of Deep test holes were excavated and labeled TP-1, TP-2 and TP-3 as shown on the plans.



- TP-1 was excavated to a depth of 78-inches. The test revealed topsoil to a depth of 6-inches, dark brown clay loam to a depth of 42-inches, and grey clay to the invert. Ground water was observed at a depth of 42-inches. No ledge rock was encountered for the entire depth.
- TP-2 was excavated to a depth of 105-inches. The test revealed topsoil to a depth of 6-inches, dark brown clay loam to a depth of 30-inches, and grey clay to the invert. Groundwater was observed at a depth of 30-inches. No Ledge rock was encountered for the entire depth.
- TP-3 was excavated to a depth of 96-inches. The test revealed topsoil to a depth of 6-inches, dark brown clay loam to a depth of 28-inches, and dark brown clay to the invert. Groundwater was observed at a depth of 28-inches. No Ledge rock was encountered for the entire depth.

*The Deep test data sheet is attached.*

### **PRE-DEVELOPED CONDITION**

In the pre-developed condition, the site is modeled as one watershed, Watershed 1 which contains 10,938 square feet of area in the form of 8,235 square feet of pervious area consisting of grass cover and 2,703 square feet of impervious area consisting of existing dwelling, driveway, walkway, patio and retaining walls. The weighted Complex Number (CN) value is calculated as 70 and the Time of Concentration (T<sub>c</sub>) is calculated as 9.3 minutes. The runoff originates from the eastern portion of the property, flows overland in a western direction and exits the site along the southwestern corner of the property at DP-1.

### **POST-DEVELOPED CONDITION**

Watershed 1A contains 7,192 square feet of tributary area which is made up of 6,892 square feet of pervious area in the form of grass pave and grass cover and 300 square feet of impervious area in the form of retaining walls, walkways, and steps. The weighted Curve Number (CN) value is calculated as 63 and the Time of Concentration (T<sub>c</sub>) is calculated as 9.8 minutes. The runoff originates from the eastern portion of the property, flows west overland and exits the site along the southwestern corner at drainage point DP-1.

The proposed altered dwelling and driveway were modeled as one watershed, Watershed 1B, containing approximately 3,746 square feet of impervious area. The CN value for this area is 98 and the T<sub>c</sub> is a direct entry of 1 minute. The stormwater runoff from this tributary area is conveyed via a comprehensive drainage system and released into a proposed attenuation gallery consisting of 50 LF of 30" HDPE pipe. The runoff volume for storm events greater than the water quality storm event is released at a rate that is equal to or less than the existing peak rate up to and including the 25-year storm event. The flows from



watershed 1A combine with the flows from watershed 1B and exit the site at drainage point DP-1.

The peak rates of runoff from the Watershed were calculated to be as follows:

Design Point	STORM EVENT			
	2-year	5-year	10-year	25-year
<b>DP-1</b>				
• Pre-[cfs]	0.23	0.39	0.55	0.82
• <b>Post-[cfs]</b>	<b>0.19</b>	<b>0.38</b>	<b>0.47</b>	<b>0.65</b>

## **CONCLUSION**

The stormwater management plan proposed meets all the requirements set forth by the Town of Mamaroneck. Design modification requirements that may occur during the approval process will be performed and submitted for review to the Town of Mamaroneck.







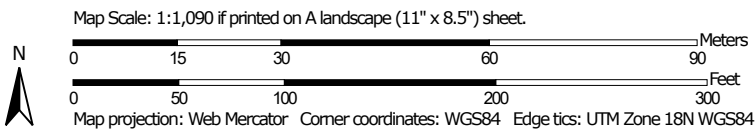
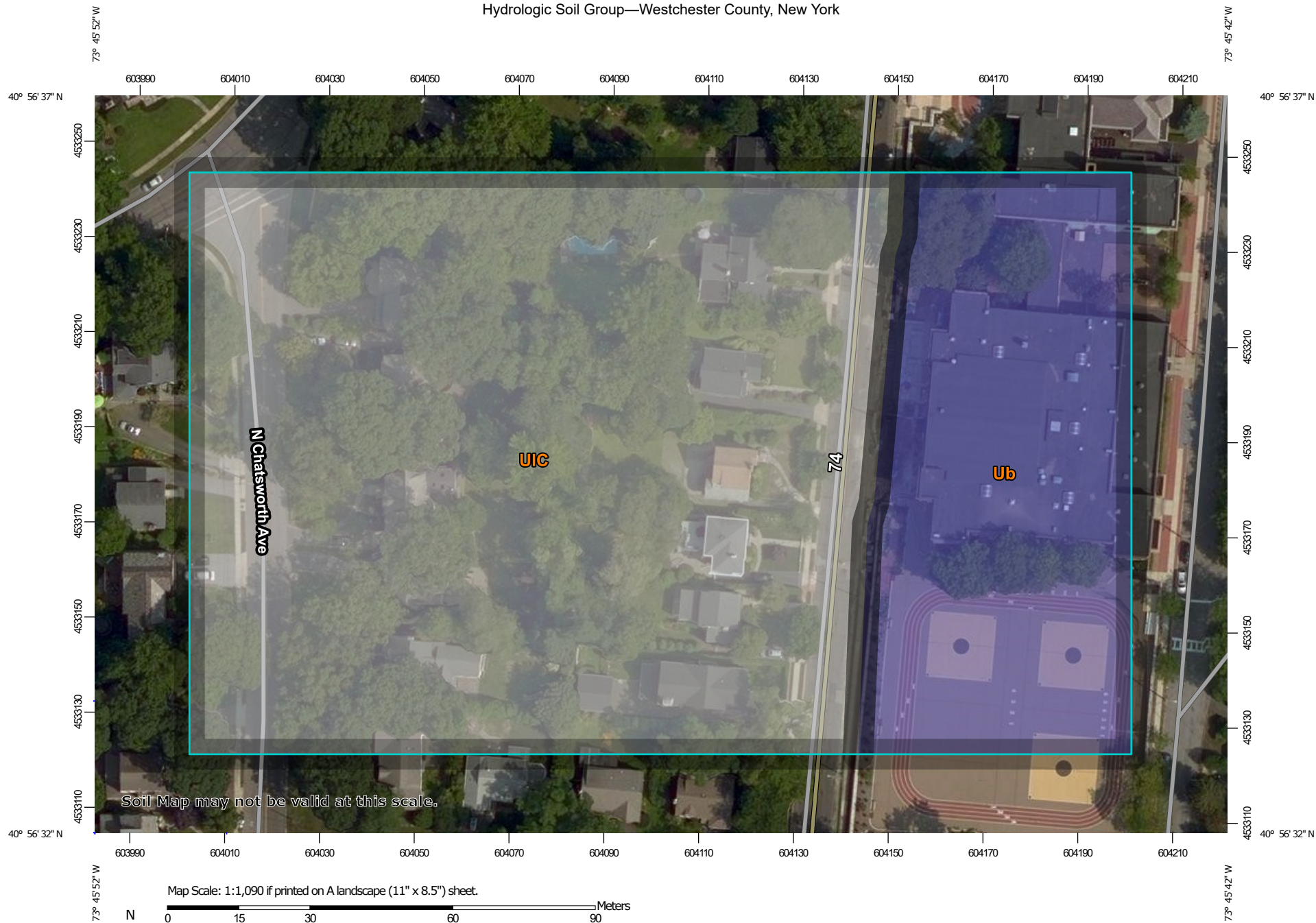
# Soils Maps & Soils Data







# Hydrologic Soil Group—Westchester County, New York



**Natural Resources  
Conservation Service**


Web Soil Survey  
National Cooperative Soil Survey

4/25/2019  
Page 1 of 4



## MAP LEGEND

### Area of Interest (AOI)









 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons





 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Lines


 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Points





 A  
 A/D  
 B  
 B/D

 C  
 C/D  
 D  
 Not rated or not available


### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York  
 Survey Area Data: Version 14, Sep 3, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 21, 2014—Aug 27, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ub	Udorthents, smoothed	B	1.6	26.9%
UIC	Urban land-Charlton-Chatfield complex, rolling, very rocky		4.4	73.1%
<b>Totals for Area of Interest</b>			<b>6.0</b>	<b>100.0%</b>

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition



*Component Percent Cutoff: None Specified*

*Tie-break Rule: Higher*



# Extreme Precipitation Tables







# Extreme Precipitation Tables

## Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	73.763 degrees West
Latitude	40.943 degrees North
Elevation	0 feet
Date/Time	Wed, 12 Jun 2019 16:17:14 -0400

## Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.34	0.51	0.64	0.84	1.04	1.30	1yr	0.90	1.23	1.50	1.86	2.31	2.85	3.22	1yr	2.53	3.10	3.59	4.31	4.94	1yr
2yr	0.40	0.62	0.77	1.02	1.28	1.60	2yr	1.11	1.50	1.84	2.28	2.80	3.44	3.87	2yr	3.05	3.72	4.27	5.07	5.75	2yr
5yr	0.47	0.74	0.92	1.24	1.58	2.00	5yr	1.37	1.85	2.31	2.86	3.52	4.31	4.89	5yr	3.81	4.70	5.45	6.38	7.12	5yr
10yr	0.53	0.84	1.05	1.43	1.86	2.37	10yr	1.61	2.18	2.74	3.40	4.18	5.11	5.84	10yr	4.52	5.62	6.55	7.59	8.38	10yr
25yr	0.62	0.98	1.25	1.73	2.31	2.97	25yr	1.99	2.70	3.45	4.29	5.27	6.40	7.40	25yr	5.66	7.11	8.37	9.55	10.38	25yr
50yr	0.70	1.13	1.45	2.02	2.72	3.52	50yr	2.35	3.18	4.11	5.11	6.26	7.59	8.85	50yr	6.72	8.51	10.07	11.36	12.22	50yr
100yr	0.80	1.29	1.66	2.35	3.21	4.18	100yr	2.77	3.75	4.88	6.08	7.45	9.01	10.58	100yr	7.98	10.18	12.12	13.52	14.39	100yr
200yr	0.90	1.48	1.91	2.74	3.79	4.97	200yr	3.27	4.42	5.81	7.25	8.87	10.70	12.67	200yr	9.47	12.18	14.60	16.10	16.95	200yr
500yr	1.08	1.78	2.32	3.37	4.72	6.24	500yr	4.07	5.51	7.31	9.13	11.16	13.44	16.07	500yr	11.90	15.45	18.69	20.29	21.06	500yr

## Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.41	0.50	0.67	0.82	0.94	1yr	0.71	0.92	1.25	1.52	1.97	2.59	3.01	1yr	2.29	2.90	3.34	4.02	4.61	1yr
2yr	0.39	0.61	0.74	1.01	1.24	1.50	2yr	1.07	1.47	1.70	2.18	2.71	3.35	3.76	2yr	2.97	3.61	4.15	4.94	5.61	2yr
5yr	0.44	0.68	0.84	1.15	1.47	1.78	5yr	1.27	1.74	2.02	2.58	3.20	4.03	4.54	5yr	3.56	4.37	5.07	5.95	6.70	5yr
10yr	0.49	0.75	0.93	1.30	1.67	2.03	10yr	1.45	1.99	2.30	2.92	3.55	4.62	5.19	10yr	4.09	5.00	5.92	6.85	7.64	10yr
25yr	0.56	0.85	1.06	1.51	1.98	2.40	25yr	1.71	2.35	2.73	3.44	4.08	5.53	6.18	25yr	4.89	5.94	7.24	8.25	9.08	25yr
50yr	0.62	0.94	1.17	1.68	2.26	2.71	50yr	1.95	2.65	3.13	3.93	4.49	6.31	7.04	50yr	5.58	6.77	8.47	9.48	10.35	50yr
100yr	0.69	1.04	1.31	1.89	2.59	3.06	100yr	2.23	2.99	3.60	4.50	4.98	7.20	7.99	100yr	6.37	7.68	9.89	10.89	11.80	100yr
200yr	0.77	1.16	1.47	2.13	2.98	3.48	200yr	2.57	3.40	4.14	5.16	5.48	8.22	9.09	200yr	7.27	8.74	11.58	12.52	13.47	200yr
500yr	0.91	1.35	1.74	2.52	3.59	4.15	500yr	3.10	4.06	5.01	6.25	8.46	9.77	10.76	500yr	8.64	10.35	14.27	15.04	16.02	500yr

## Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.38	0.59	0.72	0.96	1.19	1.39	1yr	1.02	1.36	1.63	2.13	2.61	3.12	3.46	1yr	2.76	3.32	3.84	4.62	5.25	1yr
2yr	0.42	0.65	0.79	1.08	1.33	1.63	2yr	1.15	1.60	1.88	2.37	3.01	3.55	4.03	2yr	3.14	3.87	4.40	5.23	5.92	2yr
5yr	0.51	0.78	0.97	1.33	1.69	1.99	5yr	1.46	1.95	2.31	3.02	3.75	4.60	5.21	5yr	4.07	5.01	5.84	6.81	7.53	5yr
10yr	0.59	0.91	1.13	1.58	2.04	2.39	10yr	1.76	2.33	2.80	3.66	4.54	5.62	6.38	10yr	4.98	6.14	7.24	8.34	9.08	10yr
25yr	0.73	1.12	1.39	1.99	2.61	3.02	25yr	2.25	2.95	3.60	4.71	5.86	7.30	8.36	25yr	6.46	8.04	9.62	10.92	11.60	25yr
50yr	0.86	1.31	1.63	2.34	3.15	3.62	50yr	2.72	3.54	4.37	5.72	7.11	8.94	10.23	50yr	7.91	9.84	11.92	13.39	13.98	50yr
100yr	1.01	1.53	1.92	2.77	3.80	4.33	100yr	3.28	4.24	5.27	6.92	8.63	10.93	12.57	100yr	9.67	12.09	14.77	16.42	16.86	100yr
200yr	1.19	1.79	2.27	3.29	4.59	5.19	200yr	3.96	5.07	6.37	8.39	10.47	13.36	15.46	200yr	11.82	14.87	18.30	20.17	20.32	200yr
500yr	1.49	2.21	2.85	4.14	5.88	6.57	500yr	5.08	6.43	8.19	10.82	13.32	17.45	20.34	500yr	15.44	19.56	24.31	26.45	26.03	500yr





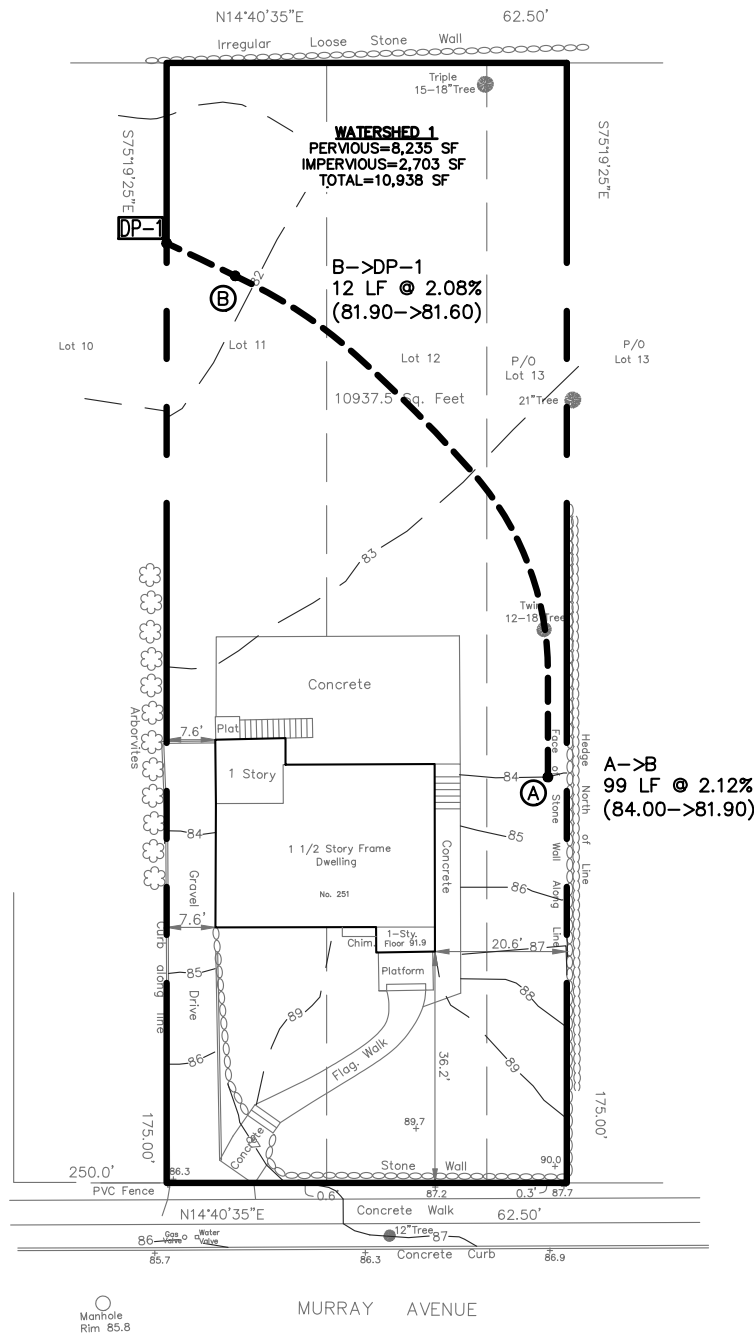


# Watershed Maps









PROJECT: **PROPOSED ADDITIONS & ALTERATIONS  
251 MURRAY AVENUE  
TOWN OF MAMARONECK  
WESTCHESTER COUNTY – NEW YORK**

TITLE:

**WATERSHED MAP – EXISTING**

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

1.	SUBMISSION TO PLANNING	01/22/20
No.	Description	Date
Revisions		
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE		

**HEC**

**HUDSON  
ENGINEERING  
&  
CONSULTING, P.C.**  
45 Knollwood Road – Suite 201  
Elmsford, NY 10523

T: 914-909-0420  
F: 914-560-2086

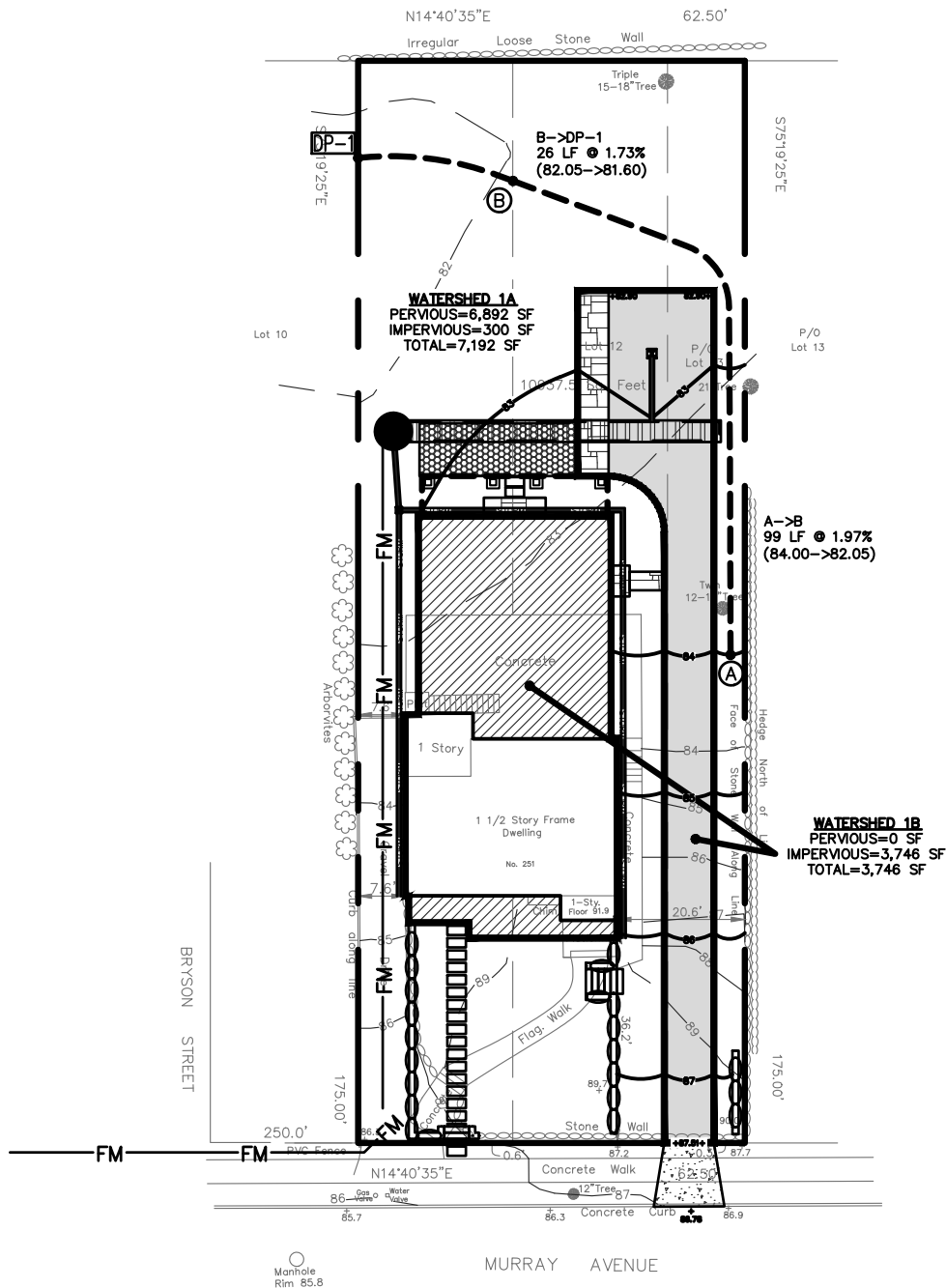
© 2019

Date: 06/28/19 Sheet: 1  
Scale: 1"=30'  
Drawn By: S.G.  
Checked By: M.S.  
Sheet No.  
**WS-E**









PROJECT: **PROPOSED ADDITIONS & ALTERATIONS  
 251 MURRAY AVENUE  
 TOWN OF MAMARONECK  
 WESTCHESTER COUNTY – NEW YORK**

TITLE: **WATERSHED MAP – PROPOSED**

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

1.	SUBMISSION TO PLANNING	01/22/20
No.	Description	Date
Revisions		
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE		

**HEC**

**HUDSON  
 ENGINEERING  
 &  
 CONSULTING, P.C.**  
 45 Knollwood Road – Suite 201  
 Elmsford, NY 10523

T: 914-909-0420  
 F: 914-560-2086

© 2019

Date: 06/28/19 Sheet: 1  
 Scale: 1"=30'  
 Drawn By: S.G.  
 Checked By: M.S.  
 Sheet No.  
**WS-P**





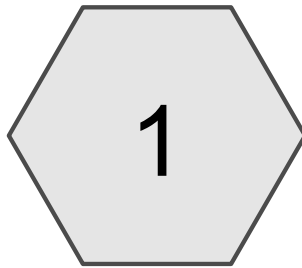


# Pre-Development Analysis of the 2, 5, 10, and 25-year Storm Events

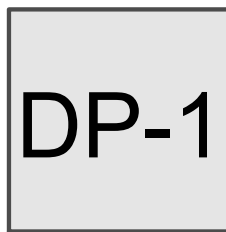
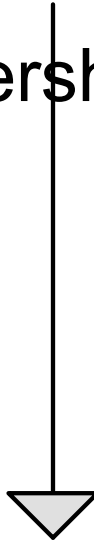




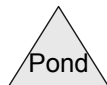
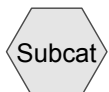




Watershed 1



DP-1









**Existing Condition**

Type III 24-hr 2-Year Rainfall=3.44"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 2

**Summary for Subcatchment 1: Watershed 1**

Runoff = 0.23 cfs @ 12.14 hrs, Volume= 885 cf, Depth= 0.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 2-Year Rainfall=3.44"

	Area (sf)	CN	Description
*	2,703	98	Impervious Surfaces
	8,235	61	>75% Grass cover, Good, HSG B
	10,938	70	Weighted Average
	8,235		75.29% Pervious Area
	2,703		24.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	99	0.0212	0.18		<b>Sheet Flow, A -&gt; B</b> Grass: Short n= 0.150 P2= 3.50"
0.2	12	0.0250	1.11		<b>Shallow Concentrated Flow, B-&gt;DP-1</b> Short Grass Pasture Kv= 7.0 fps
9.3	111	Total			

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 24.71% Impervious, Inflow Depth = 0.97" for 2-Year event

Inflow = 0.23 cfs @ 12.14 hrs, Volume= 885 cf

Outflow = 0.23 cfs @ 12.14 hrs, Volume= 885 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs



**Existing Condition**

Type III 24-hr 5-Year Rainfall=4.31"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 3

**Summary for Subcatchment 1: Watershed 1**

Runoff = 0.39 cfs @ 12.14 hrs, Volume= 1,404 cf, Depth= 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 5-Year Rainfall=4.31"

	Area (sf)	CN	Description
*	2,703	98	Impervious Surfaces
	8,235	61	>75% Grass cover, Good, HSG B
	10,938	70	Weighted Average
	8,235		75.29% Pervious Area
	2,703		24.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	99	0.0212	0.18		<b>Sheet Flow, A -&gt; B</b>
					Grass: Short n= 0.150 P2= 3.50"
0.2	12	0.0250	1.11		<b>Shallow Concentrated Flow, B-&gt;DP-1</b>
					Short Grass Pasture Kv= 7.0 fps
9.3	111	Total			

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 24.71% Impervious, Inflow Depth = 1.54" for 5-Year event

Inflow = 0.39 cfs @ 12.14 hrs, Volume= 1,404 cf

Outflow = 0.39 cfs @ 12.14 hrs, Volume= 1,404 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs



**Existing Condition**

Type III 24-hr 10-Year Rainfall=5.11"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 4

**Summary for Subcatchment 1: Watershed 1**

Runoff = 0.55 cfs @ 12.14 hrs, Volume= 1,931 cf, Depth= 2.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 10-Year Rainfall=5.11"

	Area (sf)	CN	Description
*	2,703	98	Impervious Surfaces
	8,235	61	>75% Grass cover, Good, HSG B
	10,938	70	Weighted Average
	8,235		75.29% Pervious Area
	2,703		24.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	99	0.0212	0.18		<b>Sheet Flow, A -&gt; B</b>
					Grass: Short n= 0.150 P2= 3.50"
0.2	12	0.0250	1.11		<b>Shallow Concentrated Flow, B-&gt;DP-1</b>
					Short Grass Pasture Kv= 7.0 fps
9.3	111	Total			

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 24.71% Impervious, Inflow Depth = 2.12" for 10-Year event

Inflow = 0.55 cfs @ 12.14 hrs, Volume= 1,931 cf

Outflow = 0.55 cfs @ 12.14 hrs, Volume= 1,931 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs



**Existing Condition**

Type III 24-hr 25-Year Rainfall=6.40"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 5

**Summary for Subcatchment 1: Watershed 1**

Runoff = 0.82 cfs @ 12.13 hrs, Volume= 2,849 cf, Depth= 3.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 25-Year Rainfall=6.40"

	Area (sf)	CN	Description
*	2,703	98	Impervious Surfaces
	8,235	61	>75% Grass cover, Good, HSG B
	10,938	70	Weighted Average
	8,235		75.29% Pervious Area
	2,703		24.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	99	0.0212	0.18		<b>Sheet Flow, A -&gt; B</b>
					Grass: Short n= 0.150 P2= 3.50"
0.2	12	0.0250	1.11		<b>Shallow Concentrated Flow, B-&gt;DP-1</b>
					Short Grass Pasture Kv= 7.0 fps
9.3	111	Total			

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 24.71% Impervious, Inflow Depth = 3.13" for 25-Year event

Inflow = 0.82 cfs @ 12.13 hrs, Volume= 2,849 cf

Outflow = 0.82 cfs @ 12.13 hrs, Volume= 2,849 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

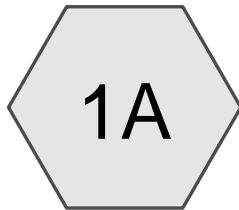


# Post-Development Analysis of the 2, 5, 10, and 25-Year Storm Events

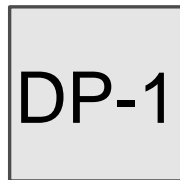




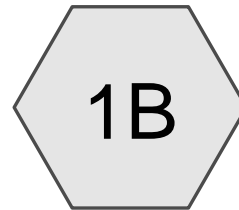




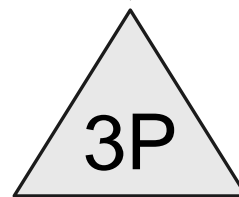
Watershed 1A



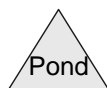
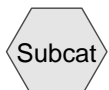
DP-1



Watershed 1B



(2) Zoeller model 137  
with 50 LF 30" pipe









**Proposed Condition**

Type III 24-hr 2-Year Rainfall=3.44"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 2

**Summary for Subcatchment 1A: Watershed 1A**

Runoff = 0.08 cfs @ 12.16 hrs, Volume= 378 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 2-Year Rainfall=3.44"

Area (sf)	CN	Description
6,674	61	>75% Grass cover, Good, HSG B
* 183	98	Existing Walkway and Steps
* 117	98	Retaining Walls
* 218	84	Grass Patio
7,192	63	Weighted Average
6,892		95.83% Pervious Area
300		4.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	99	0.0197	0.18		<b>Sheet Flow, A -&gt; B</b>
					Grass: Short n= 0.150 P2= 3.50"
0.5	26	0.0173	0.92		<b>Shallow Concentrated Flow, B -&gt; DP-1</b>
					Short Grass Pasture Kv= 7.0 fps
9.8	125	Total			

**Summary for Subcatchment 1B: Watershed 1B**

Runoff = 0.34 cfs @ 12.01 hrs, Volume= 1,001 cf, Depth= 3.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 2-Year Rainfall=3.44"

Area (sf)	CN	Description
* 2,206	98	Proposed Altered Dwelling
* 1,540	98	Proposed Patio & Driveway
3,746	98	Weighted Average
3,746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					<b>Direct Entry,</b>

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 36.99% Impervious, Inflow Depth = 1.48" for 2-Year event

Inflow = 0.19 cfs @ 12.16 hrs, Volume= 1,350 cf

Outflow = 0.19 cfs @ 12.16 hrs, Volume= 1,350 cf, Atten= 0%, Lag= 0.0 min



**Proposed Condition**

Type III 24-hr 2-Year Rainfall=3.44"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

**Summary for Pond 3P: (2) Zoeller model 137 with 50 LF 30" pipe**

Inflow Area = 3,746 sf, 100.00% Impervious, Inflow Depth = 3.21" for 2-Year event  
 Inflow = 0.34 cfs @ 12.01 hrs, Volume= 1,001 cf  
 Outflow = 0.11 cfs @ 12.24 hrs, Volume= 972 cf, Atten= 69%, Lag= 13.3 min  
 Primary = 0.11 cfs @ 12.24 hrs, Volume= 972 cf  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 76.76' @ 12.24 hrs Surf.Area= 0.003 ac Storage= 0.004 af

Plug-Flow detention time= 40.6 min calculated for 972 cf (97% of inflow)

Center-of-Mass det. time= 22.4 min ( 772.7 - 750.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	75.00'	0.003 af	<b>5.00'D x 7.50'H Vertical Cone/Cylinder</b>
#2	75.50'	0.006 af	<b>30.0" Round Pipe Storage</b>
			L= 50.0'
		0.009 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	76.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14
#2	Secondary	77.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14

**Primary OutFlow** Max=0.11 cfs @ 12.24 hrs HW=76.76' TW=0.00' (Dynamic Tailwater)

↑1=Zoeller Model 270 (Pump Controls 0.11 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=75.00' TW=0.00' (Dynamic Tailwater)

↑2=Zoeller Model 270 ( Controls 0.00 cfs)



**Proposed Condition**

Type III 24-hr 5-Year Rainfall=4.31"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 4

**Summary for Subcatchment 1A: Watershed 1A**

Runoff = 0.16 cfs @ 12.15 hrs, Volume= 654 cf, Depth= 1.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 5-Year Rainfall=4.31"

Area (sf)	CN	Description
6,674	61	>75% Grass cover, Good, HSG B
* 183	98	Existing Walkway and Steps
* 117	98	Retaining Walls
* 218	84	Grass Patio
7,192	63	Weighted Average
6,892		95.83% Pervious Area
300		4.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	99	0.0197	0.18		<b>Sheet Flow, A -&gt; B</b>
					Grass: Short n= 0.150 P2= 3.50"
0.5	26	0.0173	0.92		<b>Shallow Concentrated Flow, B -&gt; DP-1</b>
					Short Grass Pasture Kv= 7.0 fps
9.8	125	Total			

**Summary for Subcatchment 1B: Watershed 1B**

Runoff = 0.43 cfs @ 12.01 hrs, Volume= 1,272 cf, Depth= 4.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 5-Year Rainfall=4.31"

Area (sf)	CN	Description
* 2,206	98	Proposed Altered Dwelling
* 1,540	98	Proposed Patio & Driveway
3,746	98	Weighted Average
3,746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					<b>Direct Entry,</b>

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 36.99% Impervious, Inflow Depth = 2.08" for 5-Year event

Inflow = 0.38 cfs @ 12.15 hrs, Volume= 1,900 cf

Outflow = 0.38 cfs @ 12.15 hrs, Volume= 1,900 cf, Atten= 0%, Lag= 0.0 min



**Proposed Condition**

Type III 24-hr 5-Year Rainfall=4.31"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

**Summary for Pond 3P: (2) Zoeller model 137 with 50 LF 30" pipe**

Inflow Area = 3,746 sf, 100.00% Impervious, Inflow Depth = 4.07" for 5-Year event  
 Inflow = 0.43 cfs @ 12.01 hrs, Volume= 1,272 cf  
 Outflow = 0.22 cfs @ 12.10 hrs, Volume= 1,246 cf, Atten= 50%, Lag= 5.1 min  
 Primary = 0.11 cfs @ 12.10 hrs, Volume= 1,060 cf  
 Secondary = 0.11 cfs @ 12.10 hrs, Volume= 186 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 77.01' @ 12.10 hrs Surf.Area= 0.003 ac Storage= 0.004 af

Plug-Flow detention time= 32.9 min calculated for 1,246 cf (98% of inflow)

Center-of-Mass det. time= 19.9 min ( 765.9 - 746.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	75.00'	0.003 af	<b>5.00'D x 7.50'H Vertical Cone/Cylinder</b>
#2	75.50'	0.006 af	<b>30.0" Round Pipe Storage</b>
			L= 50.0'
		0.009 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	76.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14
#2	Secondary	77.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14

**Primary OutFlow** Max=0.11 cfs @ 12.10 hrs HW=77.01' TW=0.00' (Dynamic Tailwater)

↑1=Zoeller Model 270 (Pump Controls 0.11 cfs)

**Secondary OutFlow** Max=0.11 cfs @ 12.10 hrs HW=77.01' TW=0.00' (Dynamic Tailwater)

↑2=Zoeller Model 270 (Pump Controls 0.11 cfs)



**Proposed Condition**

Type III 24-hr 10-Year Rainfall=5.11"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 6

**Summary for Subcatchment 1A: Watershed 1A**

Runoff = 0.25 cfs @ 12.15 hrs, Volume= 946 cf, Depth= 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 10-Year Rainfall=5.11"

Area (sf)	CN	Description
6,674	61	>75% Grass cover, Good, HSG B
* 183	98	Existing Walkway and Steps
* 117	98	Retaining Walls
* 218	84	Grass Patio
7,192	63	Weighted Average
6,892		95.83% Pervious Area
300		4.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	99	0.0197	0.18		<b>Sheet Flow, A -&gt; B</b>
					Grass: Short n= 0.150 P2= 3.50"
0.5	26	0.0173	0.92		<b>Shallow Concentrated Flow, B -&gt; DP-1</b>
					Short Grass Pasture Kv= 7.0 fps
9.8	125	Total			

**Summary for Subcatchment 1B: Watershed 1B**

Runoff = 0.51 cfs @ 12.01 hrs, Volume= 1,521 cf, Depth= 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 10-Year Rainfall=5.11"

Area (sf)	CN	Description
* 2,206	98	Proposed Altered Dwelling
* 1,540	98	Proposed Patio & Driveway
3,746	98	Weighted Average
3,746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					<b>Direct Entry,</b>

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 36.99% Impervious, Inflow Depth = 2.69" for 10-Year event  
 Inflow = 0.47 cfs @ 12.15 hrs, Volume= 2,450 cf  
 Outflow = 0.47 cfs @ 12.15 hrs, Volume= 2,450 cf, Atten= 0%, Lag= 0.0 min



**Proposed Condition**

Type III 24-hr 10-Year Rainfall=5.11"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

**Summary for Pond 3P: (2) Zoeller model 137 with 50 LF 30" pipe**

Inflow Area = 3,746 sf, 100.00% Impervious, Inflow Depth = 4.87" for 10-Year event  
 Inflow = 0.51 cfs @ 12.01 hrs, Volume= 1,521 cf  
 Outflow = 0.22 cfs @ 12.11 hrs, Volume= 1,504 cf, Atten= 57%, Lag= 6.0 min  
 Primary = 0.11 cfs @ 12.11 hrs, Volume= 1,249 cf  
 Secondary = 0.11 cfs @ 12.11 hrs, Volume= 255 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 77.30' @ 12.11 hrs Surf.Area= 0.003 ac Storage= 0.005 af

Plug-Flow detention time= 30.3 min calculated for 1,503 cf (99% of inflow)  
 Center-of-Mass det. time= 22.6 min ( 765.6 - 743.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	75.00'	0.003 af	<b>5.00'D x 7.50'H Vertical Cone/Cylinder</b>
#2	75.50'	0.006 af	<b>30.0" Round Pipe Storage</b> L= 50.0'
		0.009 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	76.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14
#2	Secondary	77.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14

**Primary OutFlow** Max=0.11 cfs @ 12.11 hrs HW=77.30' TW=0.00' (Dynamic Tailwater)

↑1=Zoeller Model 270 (Pump Controls 0.11 cfs)

**Secondary OutFlow** Max=0.11 cfs @ 12.11 hrs HW=77.30' TW=0.00' (Dynamic Tailwater)

↑2=Zoeller Model 270 (Pump Controls 0.11 cfs)



**Proposed Condition**

Type III 24-hr 25-Year Rainfall=6.40"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 8

**Summary for Subcatchment 1A: Watershed 1A**

Runoff = 0.41 cfs @ 12.14 hrs, Volume= 1,475 cf, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 25-Year Rainfall=6.40"

Area (sf)	CN	Description
6,674	61	>75% Grass cover, Good, HSG B
* 183	98	Existing Walkway and Steps
* 117	98	Retaining Walls
* 218	84	Grass Patio
7,192	63	Weighted Average
6,892		95.83% Pervious Area
300		4.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	99	0.0197	0.18		<b>Sheet Flow, A -&gt; B</b>
					Grass: Short n= 0.150 P2= 3.50"
0.5	26	0.0173	0.92		<b>Shallow Concentrated Flow, B -&gt; DP-1</b>
					Short Grass Pasture Kv= 7.0 fps
9.8	125	Total			

**Summary for Subcatchment 1B: Watershed 1B**

Runoff = 0.64 cfs @ 12.01 hrs, Volume= 1,923 cf, Depth= 6.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type III 24-hr 25-Year Rainfall=6.40"

Area (sf)	CN	Description
* 2,206	98	Proposed Altered Dwelling
* 1,540	98	Proposed Patio & Driveway
3,746	98	Weighted Average
3,746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					<b>Direct Entry,</b>

**Summary for Reach DP-1: DP-1**

Inflow Area = 10,938 sf, 36.99% Impervious, Inflow Depth = 3.71" for 25-Year event

Inflow = 0.65 cfs @ 12.14 hrs, Volume= 3,380 cf

Outflow = 0.65 cfs @ 12.14 hrs, Volume= 3,380 cf, Atten= 0%, Lag= 0.0 min



**Proposed Condition**

Type III 24-hr 25-Year Rainfall=6.40"

Prepared by Hudson Engineering &amp; Consulting

HydroCAD® 10.00-20 s/n 02549 © 2017 HydroCAD Software Solutions LLC

Page 9

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

**Summary for Pond 3P: (2) Zoeller model 137 with 50 LF 30" pipe**

Inflow Area = 3,746 sf, 100.00% Impervious, Inflow Depth = 6.16" for 25-Year event  
 Inflow = 0.64 cfs @ 12.01 hrs, Volume= 1,923 cf  
 Outflow = 0.24 cfs @ 12.16 hrs, Volume= 1,906 cf, Atten= 63%, Lag= 8.7 min  
 Primary = 0.12 cfs @ 12.16 hrs, Volume= 1,522 cf  
 Secondary = 0.12 cfs @ 12.16 hrs, Volume= 383 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 79.68' @ 12.16 hrs Surf.Area= 0.000 ac Storage= 0.008 af

Plug-Flow detention time= 27.9 min calculated for 1,906 cf (99% of inflow)  
 Center-of-Mass det. time= 21.7 min ( 761.3 - 739.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	75.00'	0.003 af	<b>5.00'D x 7.50'H Vertical Cone/Cylinder</b>
#2	75.50'	0.006 af	<b>30.0" Round Pipe Storage</b>
			L= 50.0'
		0.009 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	76.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14
#2	Secondary	77.00'	<b>Zoeller Model 270</b> Discharges@85.00' Turns Off@75.50' 2.0" Diam. x 150.0' Long Discharge, Hazen-Williams C= 130 Flow (gpm)= 8.0 36.0 58.0 79.0 90.0 Head (feet)= 25.00 20.00 15.00 10.00 5.00 -Loss (feet)= 0.31 4.97 12.03 21.32 27.14 =Lift (feet)= 24.69 15.03 2.97 -11.32 -22.14

**Primary OutFlow** Max=0.12 cfs @ 12.16 hrs HW=79.68' TW=0.00' (Dynamic Tailwater)

↑1=Zoeller Model 270 (Pump Controls 0.12 cfs)

**Secondary OutFlow** Max=0.12 cfs @ 12.16 hrs HW=79.68' TW=0.00' (Dynamic Tailwater)

↑2=Zoeller Model 270 (Pump Controls 0.12 cfs)



# Deep Hole Test Logs









**HUDSON**  
**ENGINEERING**  
&  
**CONSULTING, P.C.**

SITE ADDRESS: 251 Murray Ave.

TOWN/VILLAGE: Mamaroneck CT

DATE: 4-23-19 TIME: 11:00 AM

WEATHER: Sunny TEMP. 64° F

WITNESSED BY: Nicholas Shirriah

**DEEP TEST HOLE DATA SHEET – STORMWATER MANAGEMENT SYSTEM**

DEPTH	HOLE NO. <u>1</u>	HOLE NO. <u>2</u>	HOLE NO. <u>3</u>	HOLE NO. _____
G.L.	<u>Topsoil 0-6"</u>	<u>Topsoil 0-6"</u>	<u>Topsoil 0-6"</u>	
6"				
12"				
18"				
24"				
30"		<u>6-30" Dark</u>	<u>6-28" Dark</u>	
36"	<u>6-42"</u>	<u>Brown Clay</u>	<u>Clay Loam</u>	
42"	<u>Dark Brown</u>	<u>Loam</u>	<u>GW at 28"</u>	
48"	<u>Clay Loam</u>	<u>GW at 30"</u>		
54"	<u>GW at 42"</u>			
60"				
66"				
72"				
78"	<u>42-78"</u>			
84"	<u>Grey Clay</u>			
90"			<u>No Ledge</u>	
96"	<u>No Ledge</u>	<u>No Ledge</u>	<u>28-96"</u>	
102"		<u>30-105"</u>	<u>Dark Brown</u>	
108"		<u>Grey Clay</u>	<u>clay</u>	

- Indicate level at which Ground Water (GW), Mottling and/or Ledge Rock is encountered.
- Indicate level for which water level rises after being encountered.

EXCAVATION PERFORMED BY: \_\_\_\_\_



**Town of Mamaroneck - Village of Larchmont  
Coastal Assessment Form (CAF)**

Applicants, or the appropriate municipal agency, shall complete this Coastal Assessment Form (CAF) for proposed actions which are subject to Local Consistency Review (see Waterfront Revitalization Law §§234-1 through 234-5 in the Code of the Town of Mamaroneck and §§292-1 through 292-4 in the Code of the Village of Larchmont). This assessment is intended to supplement other information used by the Bi-Municipal Coastal Zone Management Commission in making a determination of consistency with the Town of Mamaroneck and Village of Larchmont Local Waterfront Revitalization Program.

Upon completion of this form, it should be submitted as part of a complete application package for review. If assistance or further information is required for Town of Mamaroneck matters, please contact the Town of Mamaroneck Environmental Planner at (914) 381-7845. For Village of Larchmont matters, please contact the Village of Larchmont Building Inspector at (914) 834-6210.

---

**PLEASE PRINT OR TYPE ALL ANSWERS.**

**A. GENERAL INFORMATION**

Will the proposed action be undertaken by a municipal agency?    Yes [    ]    No [    ]

If yes, please list agency or agencies and contact person(s): \_\_\_\_\_

\_\_\_\_\_

If no, please complete the applicant information:

Name of Applicant: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**Location and ownership of property for which action is proposed:**

Section: \_\_\_\_\_ Block: \_\_\_\_\_ Lot: \_\_\_\_\_

Owner of Property: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Size of property (square feet): \_\_\_\_\_ Is the property now developed? Yes [    ] No [    ]

Will project require a zoning variance? Yes [    ] No [    ]

If yes, briefly describe: \_\_\_\_\_

\_\_\_\_\_



---

---

---

Are there streams, lakes, ponds or wetlands existing within or contiguous to the project area?

If so, describe (name, size, characteristics): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.



## C. COASTAL ASSESSMENT

Check either "Yes" or "No" for each of the following questions:

1. Will the proposed action be located in, or contiguous to, or have a **potentially adverse effect** upon any of the following designated resource areas?

	Yes	No	Maybe
a. Significant fish or wildlife habitat or designated critical environmental area .....	[ ]	[ ]	[ ]
b. Scenic resources of local significance .....	[ ]	[ ]	[ ]
c. Natural protective features in an erosion hazard area .....	[ ]	[ ]	[ ]

**NOTE:** If the answer to any of the above questions is "Yes", please explain in Section D any measures which will be undertaken to mitigate the adverse effects.

2. Will the proposed action have a **significant effect** upon:

	Yes	No	Maybe
a. Commercial or recreational use of fish and wildlife resources.....	[ ]	[ ]	[ ]
b. Scenic quality of the coastal environment .....	[ ]	[ ]	[ ]
c. Development of future, or existing water dependent uses .....	[ ]	[ ]	[ ]
d. Land or water uses within a small harbor area .....	[ ]	[ ]	[ ]
e. Stability of the shoreline .....	[ ]	[ ]	[ ]
f. Surface or groundwater quality.....	[ ]	[ ]	[ ]
g. Existing or potential public recreation opportunities.....	[ ]	[ ]	[ ]
h. Structures, sites or districts of historic, archeological or cultural significance to the local area, state or nation .....	[ ]	[ ]	[ ]

3. Will the proposed action **involve or result in** any of the following:

	Yes	No	Maybe
a. Physical alteration of land along the shoreline, land underwater or coastal waters.....	[ ]	[ ]	[ ]
b. Expansion of existing public services or infrastructure in or near undeveloped or low density areas of the coastal area? .....	[ ]	[ ]	[ ]
c. Filling, dredging, excavation or mining in coastal waters .....	[ ]	[ ]	[ ]
d. Reduction of existing or potential public access to or along the shore.....	[ ]	[ ]	[ ]
e. Development within a designated flood or erosion hazard area .....	[ ]	[ ]	[ ]
f. Development of a natural feature that protects against flooding or erosion .....	[ ]	[ ]	[ ]
g. Replacement of eroded sand or soil .....	[ ]	[ ]	[ ]
h. Construction or reconstruction of erosion protective structures .....	[ ]	[ ]	[ ]
i. Any change in surface or groundwater quality .....	[ ]	[ ]	[ ]
j. Removal of trees from the site .....	[ ]	[ ]	[ ]

4. Project details:

	Yes	No	Maybe
a. If the project is to be located adjacent to the shore:			
1. Does the project require a waterfront site in order to function .....	[ ]	[ ]	[ ]
2. Will water-related recreation be provided .....	[ ]	[ ]	[ ]
3. Will public access to shore or state owned underwater lands be provided.....	[ ]	[ ]	[ ]
4. Will it replace a recreational or maritime use .....	[ ]	[ ]	[ ]
5. Do essential public services and facilities presently exist at or near the site..	[ ]	[ ]	[ ]



- Please explain any of the above answers that may need further clarification in Section D.**

## This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



[illegible]



**I certify that I am the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.**

Date: \_\_\_\_\_ 20 \_\_\_\_\_  
Signature of Applicant

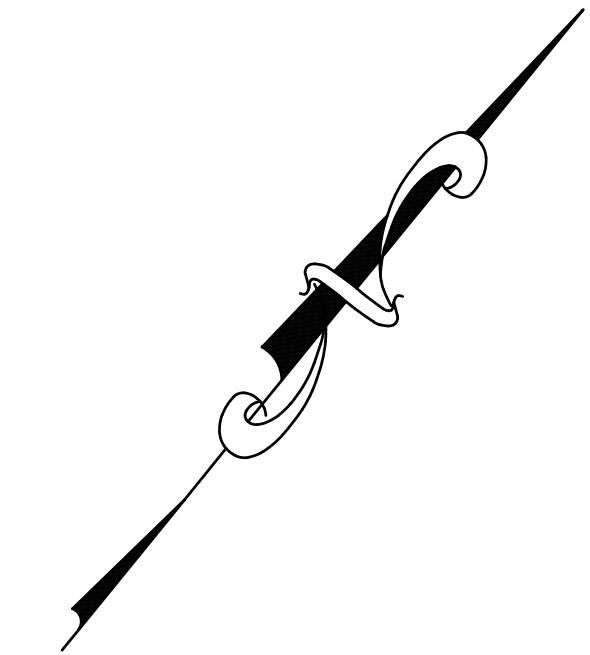
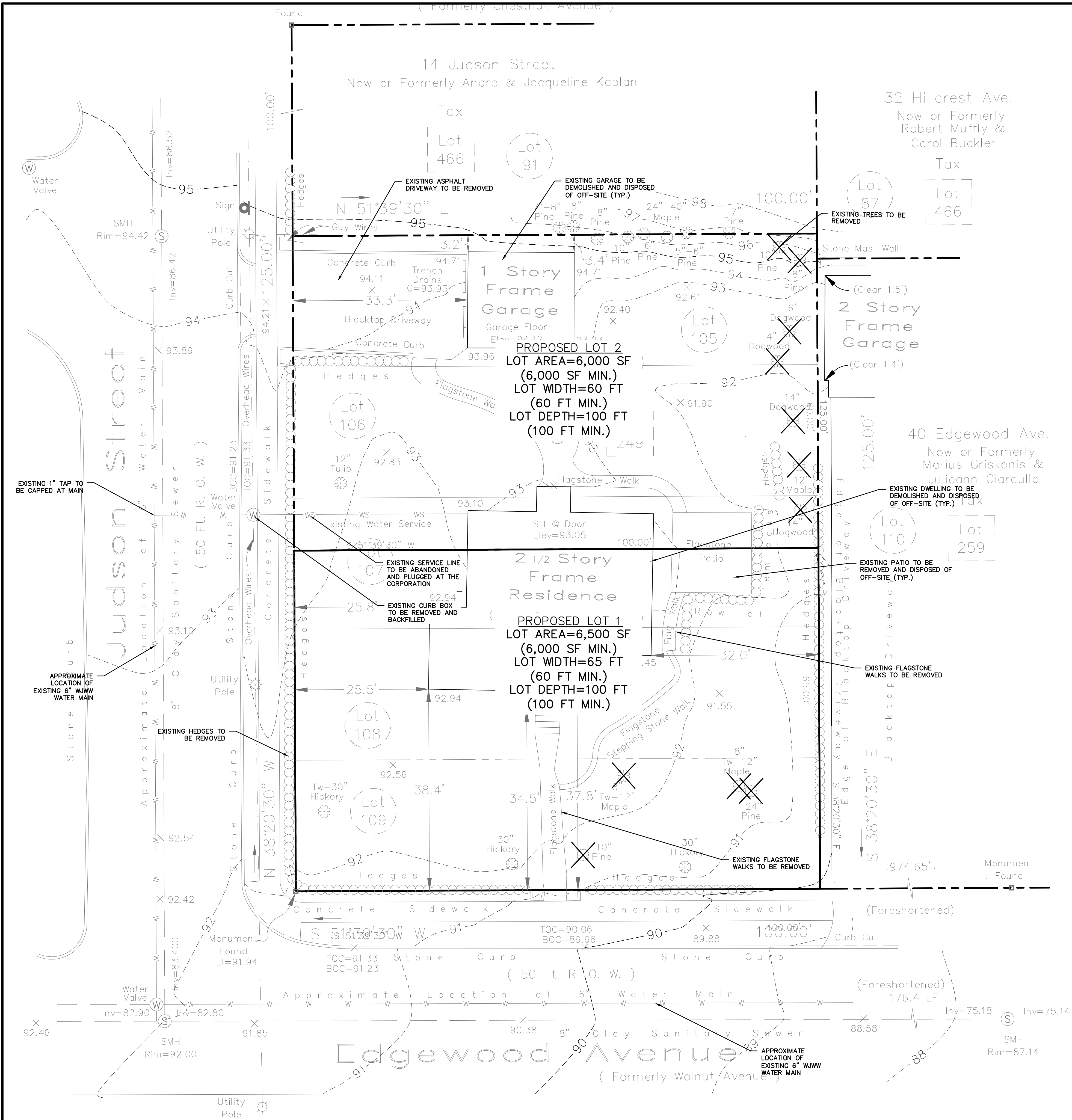
**Prepared by:** (if different than the applicant)

Name and Title: \_\_\_\_\_  
Agency/Company: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**I certify that I prepared this Coastal Assessment Form for the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.**

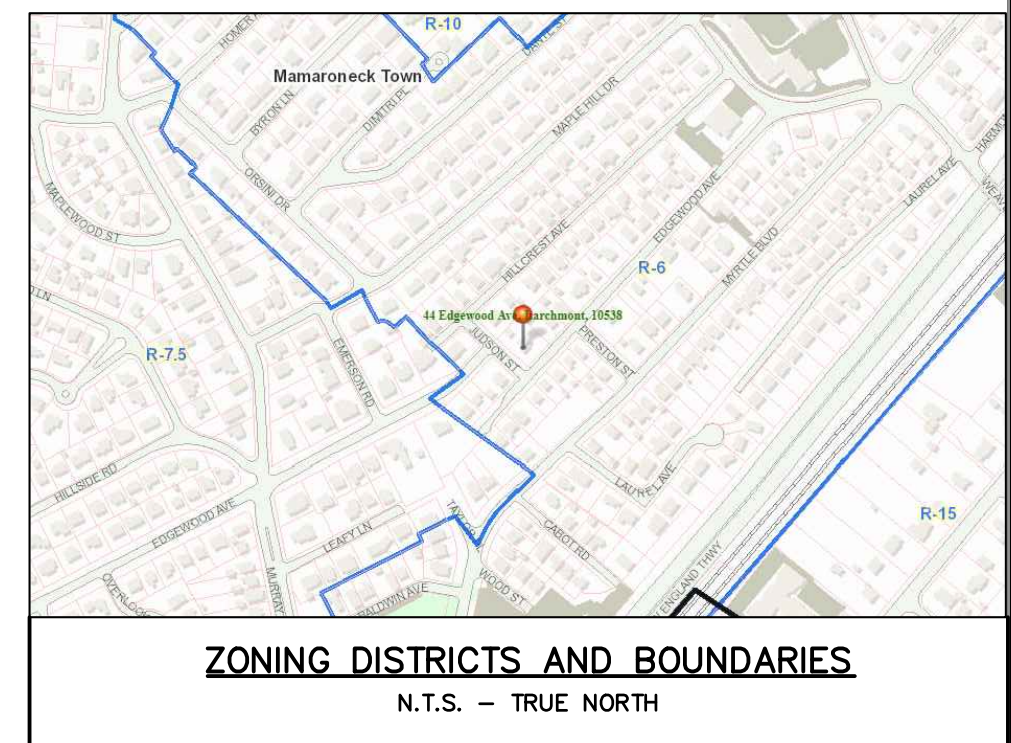
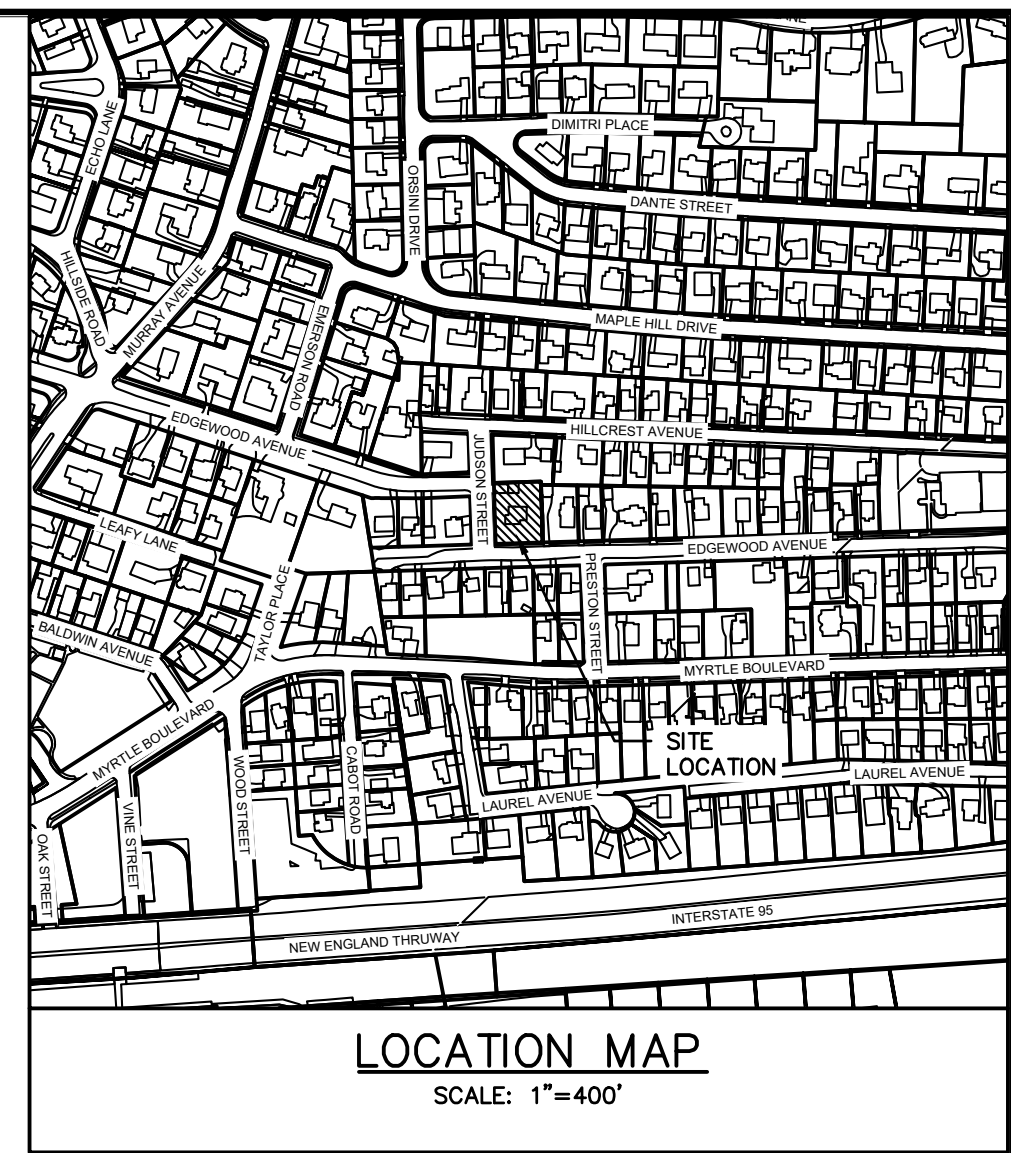
Date: \_\_\_\_\_ 20 \_\_\_\_\_  
Signature of Preparer





LEGEND

PROPERTY LINE

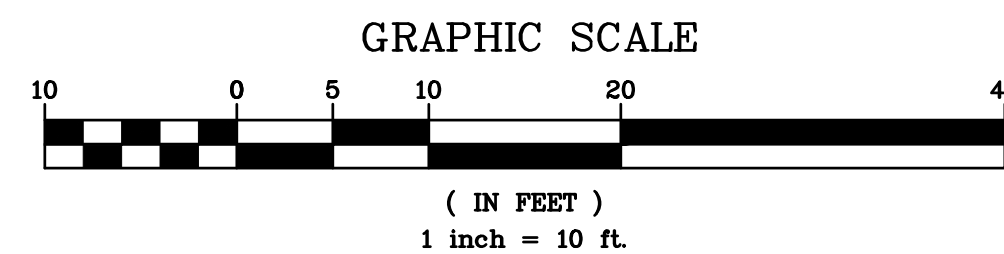


GENERAL NOTES:

1. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE SUPERVISION OF THE CONSTRUCTION.
2. NO CHANGES SHALL BE MADE TO THESE PLANS EXCEPT AS PER NYS LAW CHAPTER 987.
3. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO A.C.I., A.S.C., ZONING, AND THE NEW YORK STATE BUILDING CODE.
4. ALL CONDITIONS, LOCATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
5. ALL CHANGES MADE TO THE PLANS SHALL BE APPROVED BY THE ENGINEER AND ANY SUCH CHANGES SHALL BE FILED AS AMENDMENTS TO THE ORIGINAL BUILDING PERMIT.
6. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR THE ACTS AND OMISSIONS OF HIS EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
8. SAFETY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL AGENCIES IN EFFECT DURING THE PERIOD OF CONSTRUCTION.
9. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL MAKE APPLICATION TO RECEIVE ALL NECESSARY PERMITS TO PERFORM THE WORK UNDER CONTRACT. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL BE LICENSED TO DO ALL WORK AS REQUIRED BY THE LOCAL, COUNTY, AND STATE AGENCIES WHICH MAY HAVE JURISDICTION OVER THOSE TRADES, AND SHALL PRESENT THE OWNER WITH COPIES OF ALL LICENSES AND INSURANCE CERTIFICATES.
10. FINAL GRADING AROUND THE BUILDING AREA SHALL SLOPE AWAY FROM THE STRUCTURE.
11. ALL WRITTEN DIMENSIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY SCALED DIMENSIONS.
12. ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION AND DEMOLITION WORK. PROTECTION MUST BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES. THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDING SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.
13. OWNER SHALL INSURE THAT THE INSURANCE PROVIDED BY THE CONTRACTOR HIRED TO PERFORM THE WORK SHALL BE ENDORSED TO NAME HUDSON ENGINEERING & CONSULTING, P.C. AND ANY DIRECTORS, OFFICERS, EMPLOYEES, SUBSIDIARIES, AND AFFILIATES, AS ADDITIONAL INSURED ON ALL POLICIES AND HOLD HARMLESS DOCUMENTS, AND SHALL STIPULATE THAT THIS INSURANCE IS PRIMARY, AND THAT ANY OTHER INSURANCE MAINTAINED BY HUDSON ENGINEERING & CONSULTING, P.C., SHALL BE EXCESS ONLY AND SHALL NOT BE CALLED UPON TO CONTRIBUTE WITH THIS INSURANCE. ISO ADDITIONAL INSURED ENDORSEMENT FORM NUMBER 02010 1185 UNDER GL. COPIES OF THE INSURANCE POLICIES SHALL BE SUBMITTED TO HUDSON ENGINEERING & CONSULTING, P.C., FOR APPROVAL PRIOR TO THE SIGNED OF THE CONTRACT.
14. INDUSTRIAL CODE RULE 753: THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS PRIOR TO THE START OF HIS OPERATIONS AND SHALL COMPLY WITH ALL THE LATEST INDUSTRIAL CODE RULE 753 REGULATIONS.

OWNER OF RECORD	
NAME	MAILING ADDRESS
DOROTHEA TOMCZYK	46 E. BROOKSIDE DR LARCHMONT, NY 10538

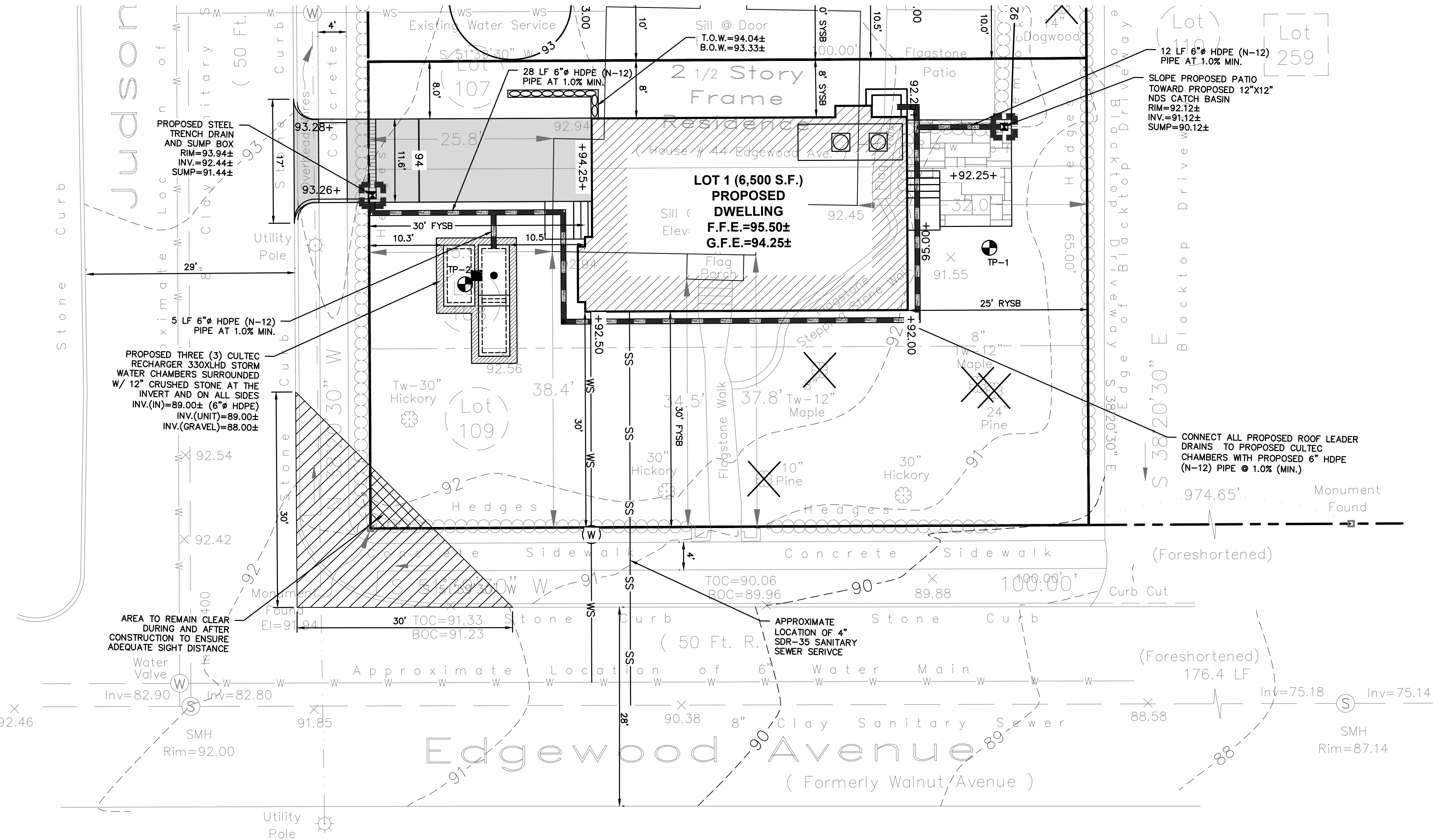
44 EDGEWOOD AVENUE EXISTING  
CONDITION/DEMOLITION PLAN BASED UPON  
EXISTING INFORMATION PROVIDED BY THE  
MUNSON COMPANY, DATED MAY 21, 2019



No.	Description	Revisions	Date	PROJECT:
				PROPOSED SUBDIVISION 44 EDGEWOOD AVENUE – LOT 1 TOWN OF MAMARONECK WESTCHESTER COUNTY – NEW YORK
				EXISTING CONDITION/DEMOLITION PLAN
				HEC HUDSON ENGINEERING & CONSULTING, P.C. 45 Knowlwood Road, Suite 201 Elmsford, New York 10523 T: 914-909-0420 F: 914-560-2086 © 2019
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE				State of New York Professional Engineer No. 00657 Date: 01/17/20 Scale: 1" = 10' Designed By: M.F. Checked By: M.S. Sheet No. 4
				C-1

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.





INSTALL T  
FENCE DOWN  
DISTURBED

INSTALL O  
CONSTRUCT  
NECESSARY TC

## LEGEND

PROPERTY LINE	---
PROPOSED BELGIAN BLOCK CURB	=====
PROPOSED ASPHALT DRIVEWAY	=====
PROPOSED WALKWAY/PATIO	=====
PROPOSED CONTOUR	94
PROPOSED SPOT GRADE	+94.25
PROPOSED TRENCH DRAIN	=====
PROPOSED WATER SERVICE	WS
PROPOSED SANITARY SEWER SERVICE	SS
EXISTING WATER MAIN	W
EXISTING SANITARY SEWER MAIN	S

## GENERAL NOTES:

1. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE SUPERVISION OF THE CONSTRUCTION.
2. NO CHANGES SHALL BE MADE TO THESE PLANS EXCEPT AS PER NYS LAW CHAPTER 987.
3. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO A.C.I. ZONING, AND THE NEW YORK STATE BUILDING CODE.
4. ALL CONDITIONS, LOCATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
5. ALL CHANGES MADE TO THE PLANS SHALL BE APPROVED BY THE ENGINEER AND ANY SUCH CHANGES SHALL BE FILED AS AMENDMENTS TO THE ORIGINAL BUILDING PERMIT.
6. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR THE ACTS AND OMISSIONS OF HIS EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
8. SAFETY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL AGENCIES IN EFFECT DURING THE PERIOD OF CONSTRUCTION.
9. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL MAKE APPLICATION TO RECEIVE ALL NECESSARY PERMITS TO PERFORM THE WORK UNDER CONTRACT. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL BE LICENSED TO DO ALL WORK AS REQUIRED BY THE LOCAL, COUNTY, AND STATE AGENCIES WHICH MAY HAVE JURISDICTION OVER THOSE TRADES, AND SHALL PRESENT THE OWNER WITH COPIES OF ALL LICENSES AND INSURANCE CERTIFICATES.
10. FINAL GRADING AROUND THE BUILDING AREA SHALL SLOPE AWAY FROM THE STRUCTURE.
11. ALL WRITTEN DIMENSIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY SCALED DIMENSIONS.
12. ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION, REMODELING AND DEMOLITION WORK. PROTECTION MUST BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES. THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDING SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.
13. OWNER SHALL INSURE THAT THE INSURANCE PROVIDED BY THE CONTRACTOR HIRED TO PERFORM THE WORK SHALL BE ENDORSED TO NAME HUDSON ENGINEERING & CONSULTING, P.C., AND ANY DIRECTORS, OFFICERS, EMPLOYEES, SUBSIDIARIES, AND AFFILIATES, AS ADDITIONAL INSURED ON ALL POLICIES AND HOLD HARMLESS DOCUMENTS, AND SHALL STIPULATE THAT THIS INSURANCE IS PRIMARY, AND THAT ANY OTHER INSURANCE OR SELF-INSURANCE MAINTAINED BY HUDSON ENGINEERING & CONSULTING, P.C., SHALL BE EXCESS ONLY AND SHALL NOT BE CALLED UPON TO CONTRIBUTE WITH THIS INSURANCE. ISO ADDITIONAL INSURED ENDORSEMENT FORM NUMBER CG2010 1185 UNDER GL. COPIES OF THE INSURANCE POLICIES SHALL BE SUBMITTED TO HUDSON ENGINEERING & CONSULTING, P.C., FOR APPROVAL PRIOR TO THE SIGNING OF THE CONTRACT.
14. INDUSTRIAL CODE RULE 753: THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS PRIOR TO THE START OF HIS OPERATIONS AND SHALL COMPLY WITH ALL THE LATEST INDUSTRIAL CODE RULE 753 REGULATIONS.

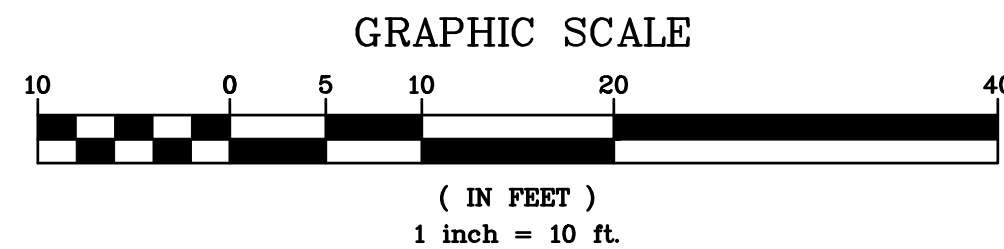
## TEST HOLE DATA:

TEST HOLE #1  
DEPTH - 78"  
0-6" TOPSOIL  
6-78" BROWN LOAM  
NO GROUNDWATER  
LEDGE ROCK AT 78"  
PERC. = 13.85" INCHES/HOUR

TEST HOLE #2  
DEPTH - 84"  
0-8" TOPSOIL  
8-84" BROWN LOAM  
NO GROUNDWATER  
LEDGE ROCK AT 84"  
PERC. = 11.25" INCHES/HOUR

ZONING ANALYSIS TABLE			
BLOCK: 123	LOT: 249.1	ZONE: R-6 (Residential Zoning)	
REGULATION	Required	Existing	Proposed
Min. Lot Area (S.F.)	6,000	12,500	6,500
Min. Lot Width (ft.)	60	100	65
Min. Lot Depth (ft.)	100	100	100
Min. Yards			
- Front (ft.)	30	37.8	30
- Side (ft.)	8	32.0	8
- Both Sides (ft.)	18	57.8	-
- Rear (ft.)	25	42.03	25
Height			
- Feet	35	≤35	28
- Stories	2.5	2.5	2.5
Max. Lot Coverage	35.0%	24.0%	24.2%
Building Coverage (S.F.)	Per Lot Size	1,623	1,215
Building Coverage (%)	Per Lot Size	37.8%	18.7%

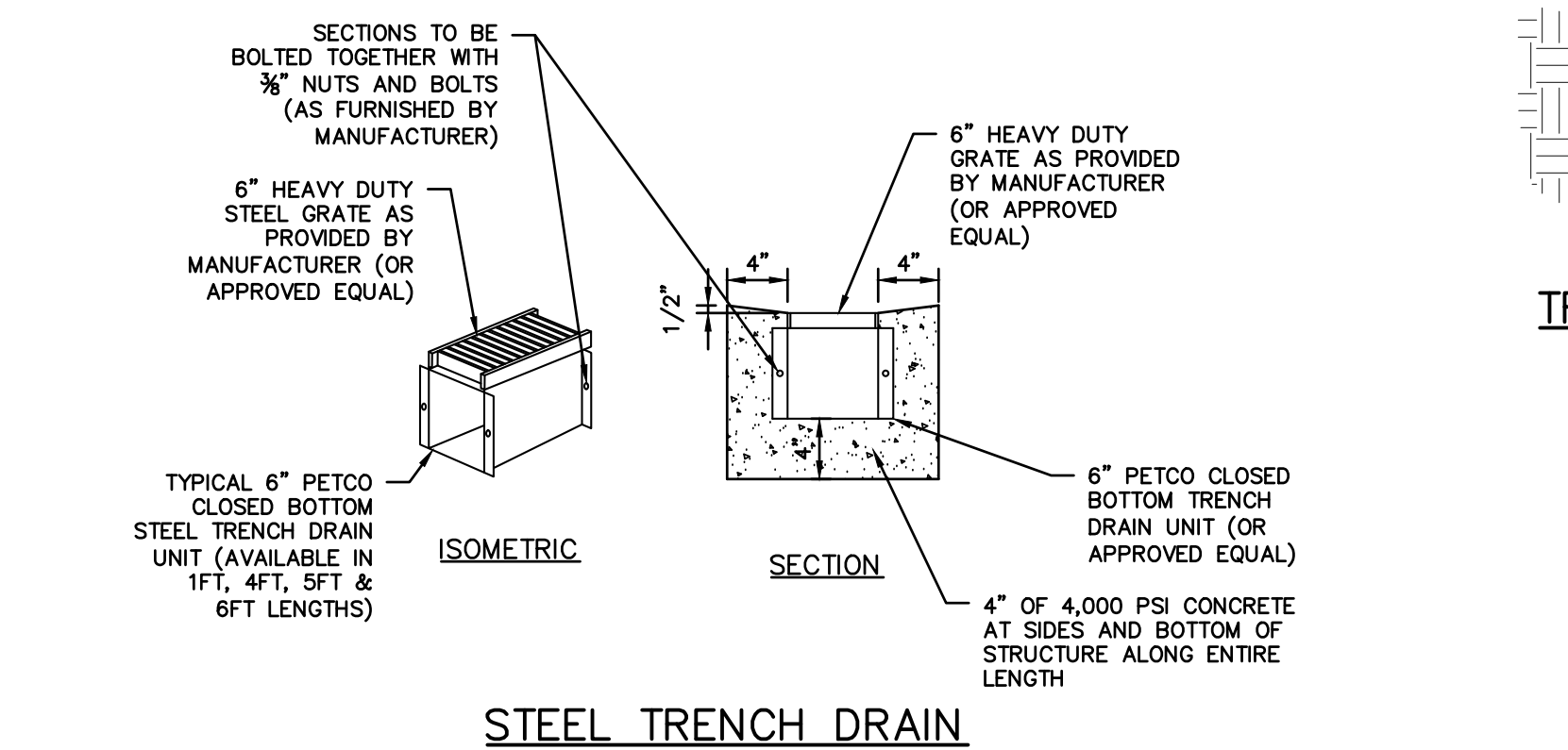
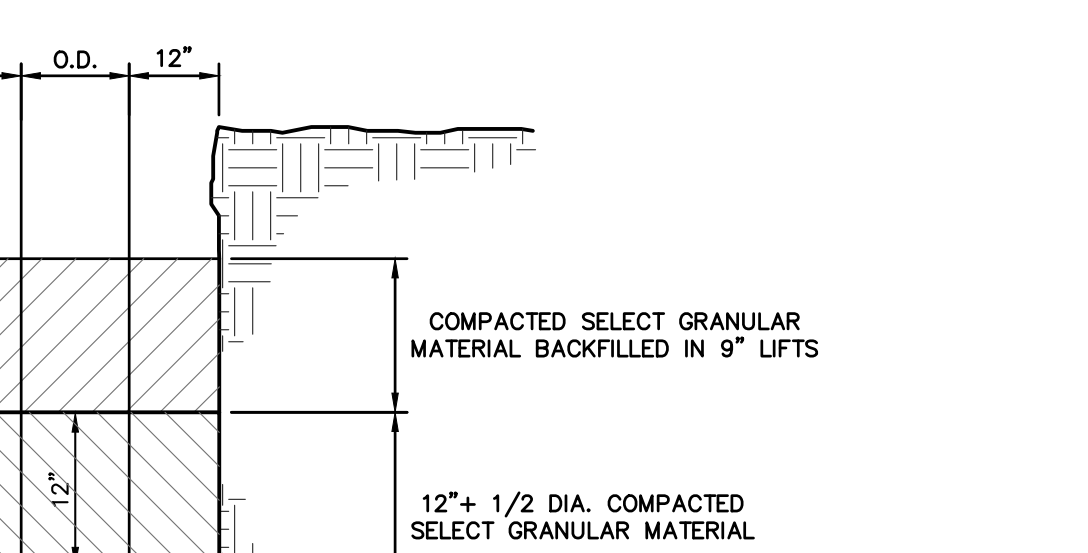
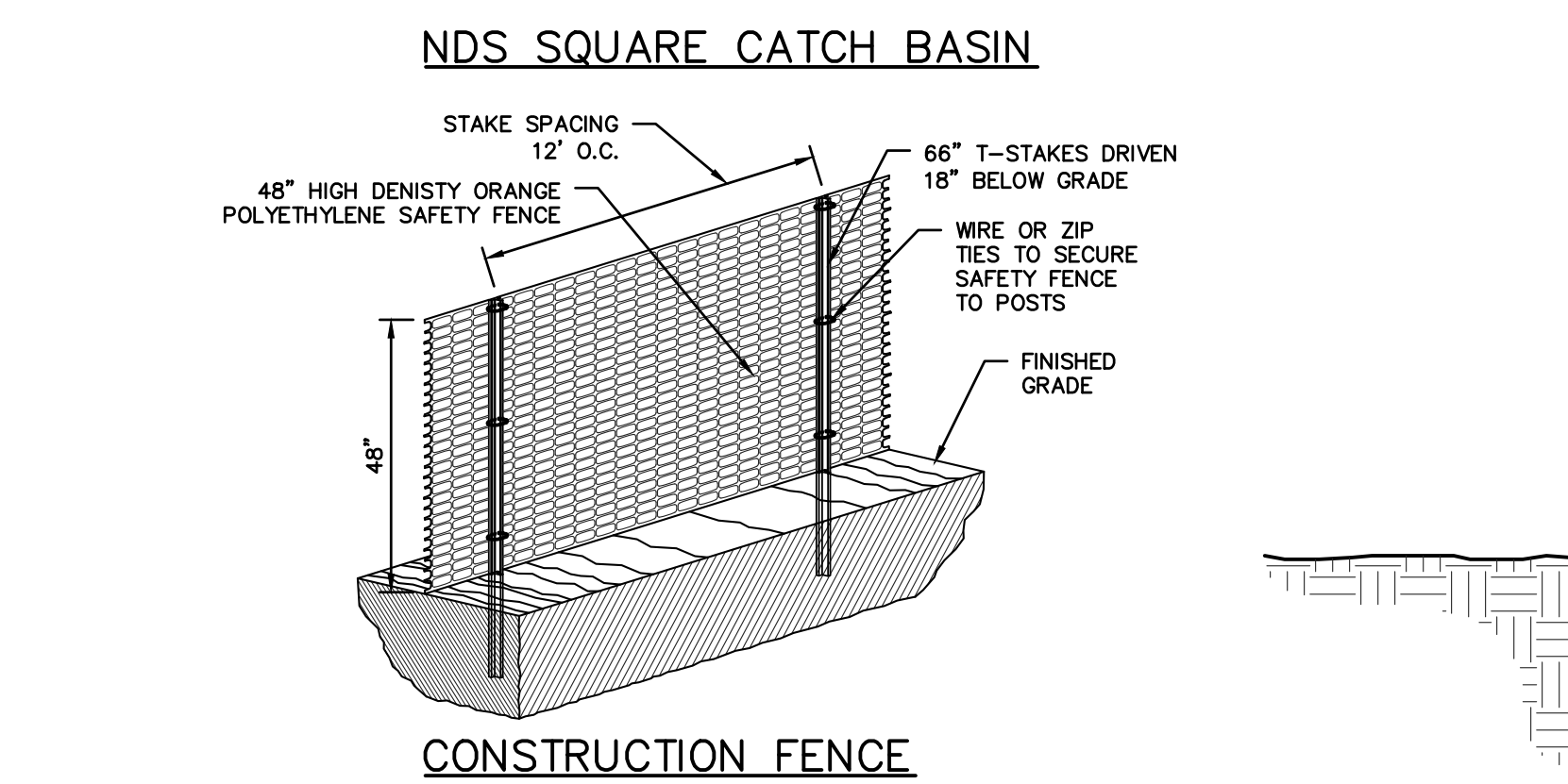
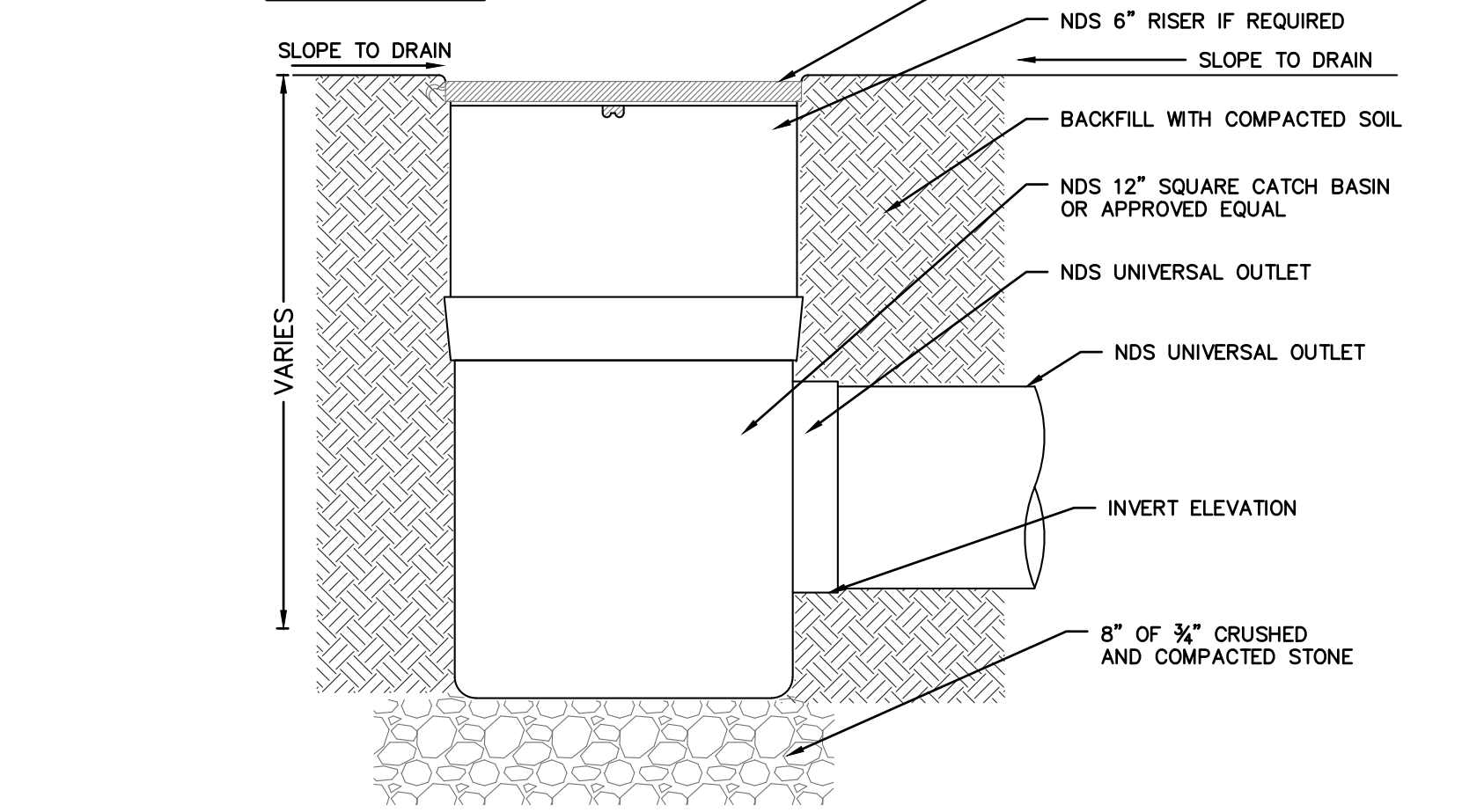
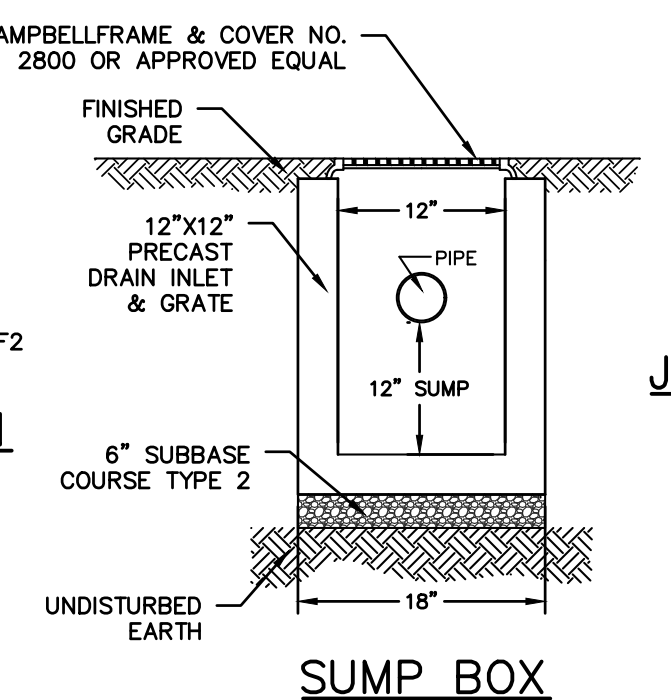
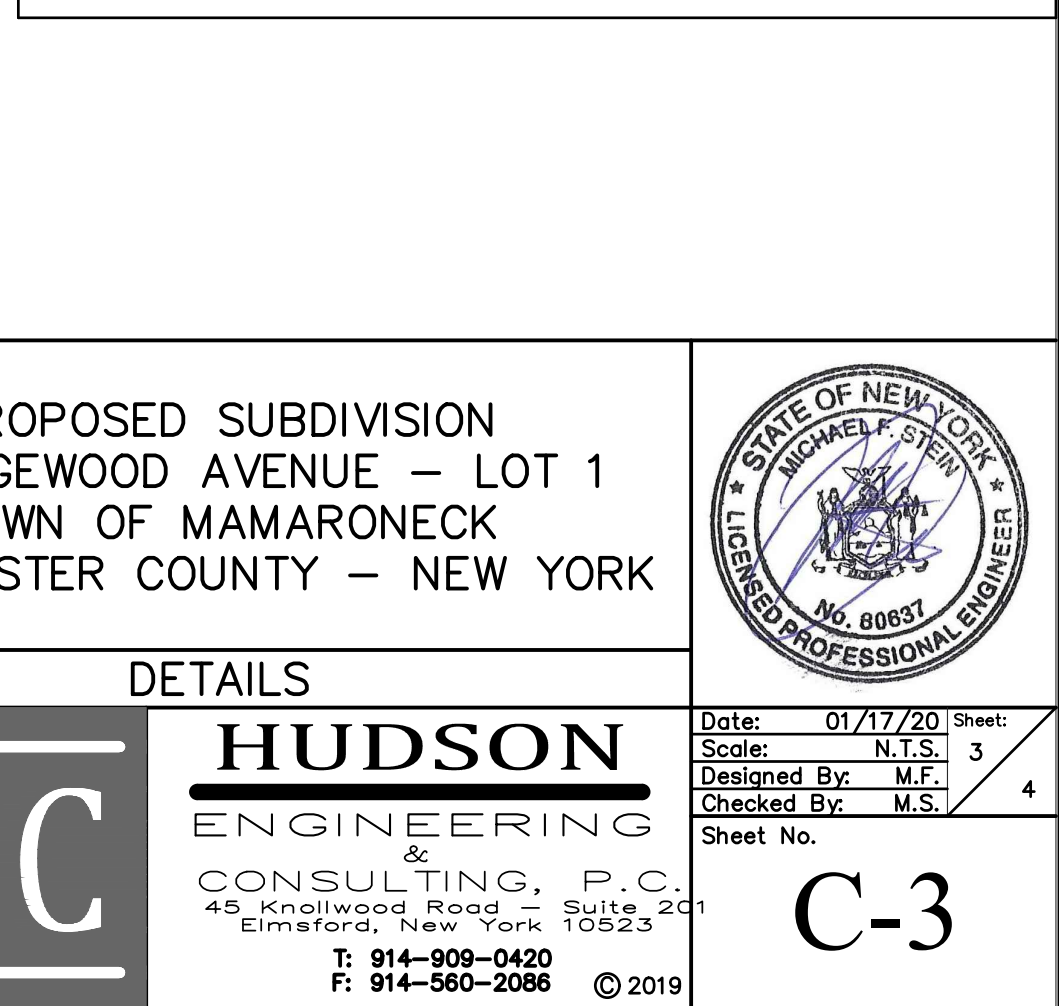
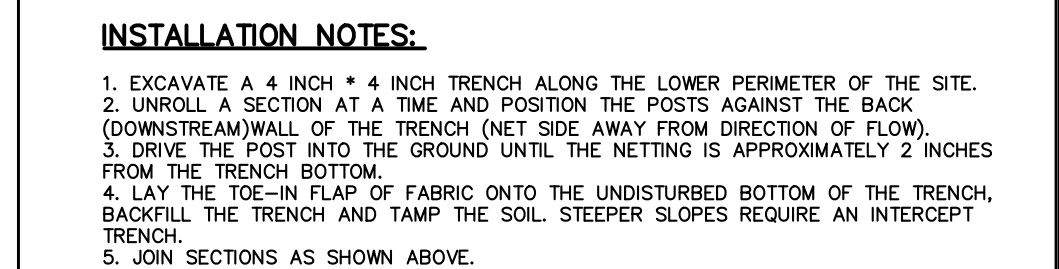
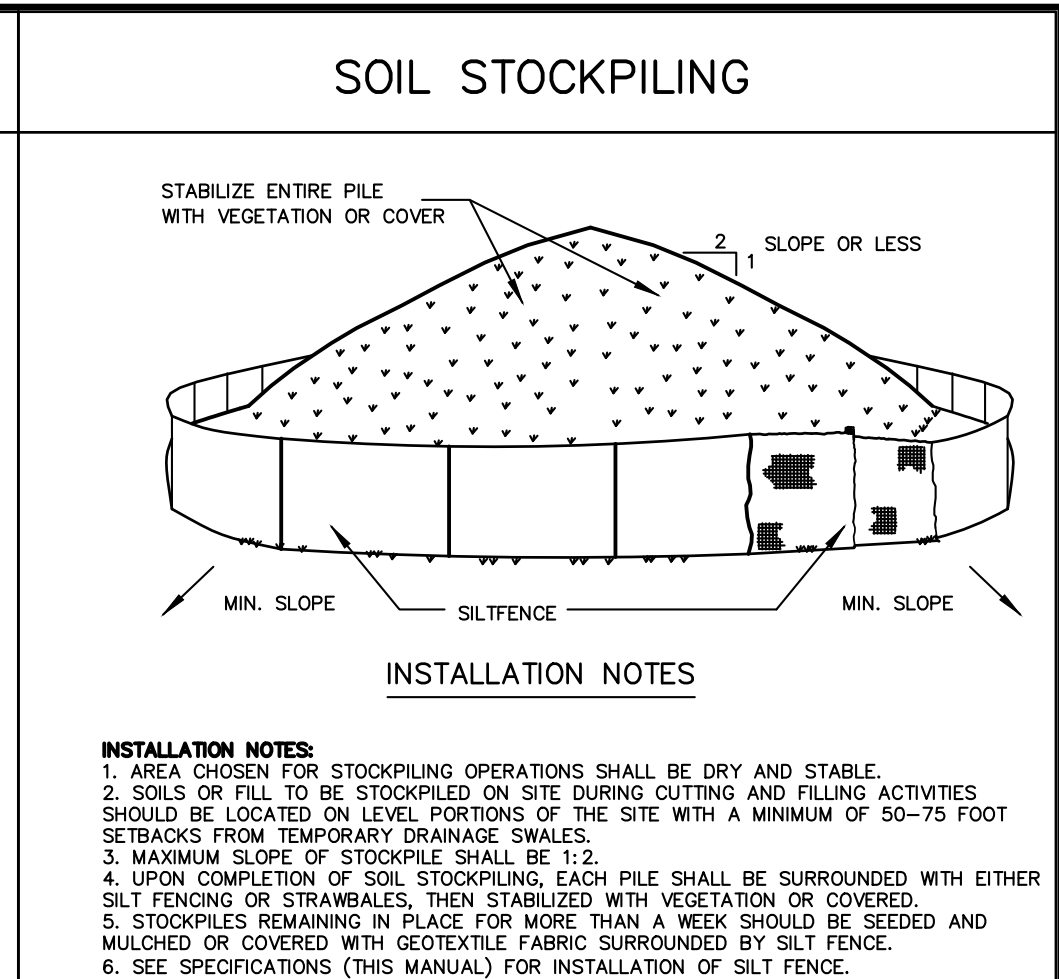
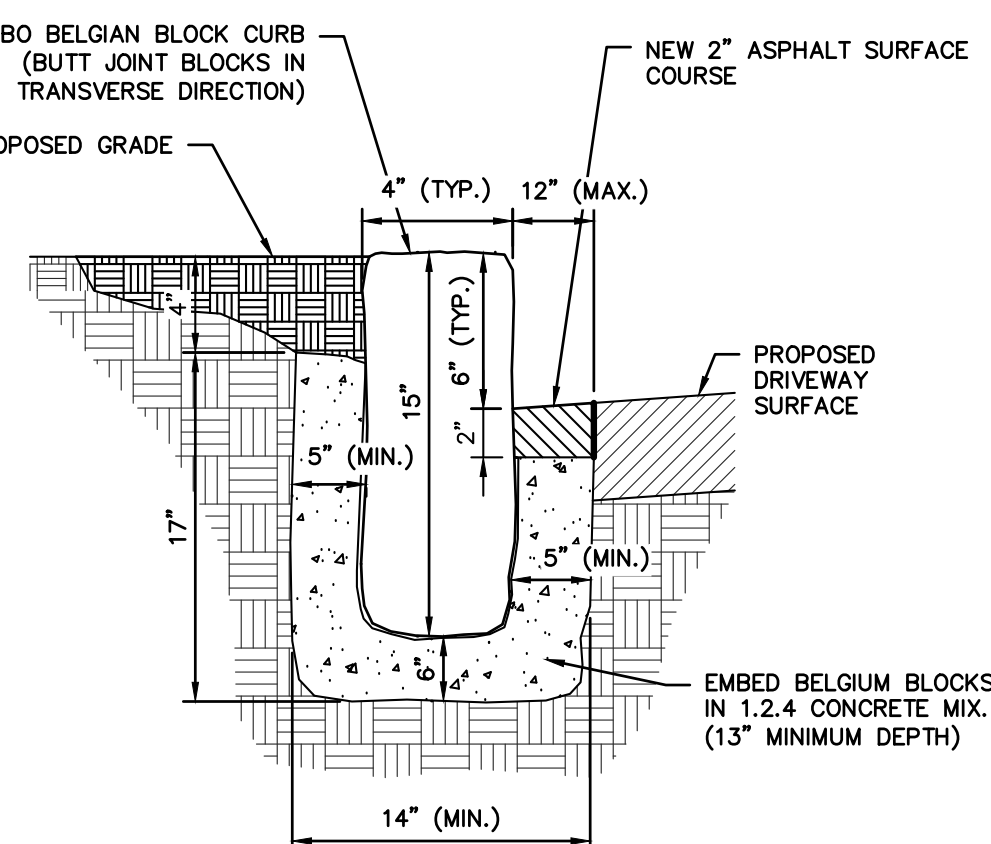
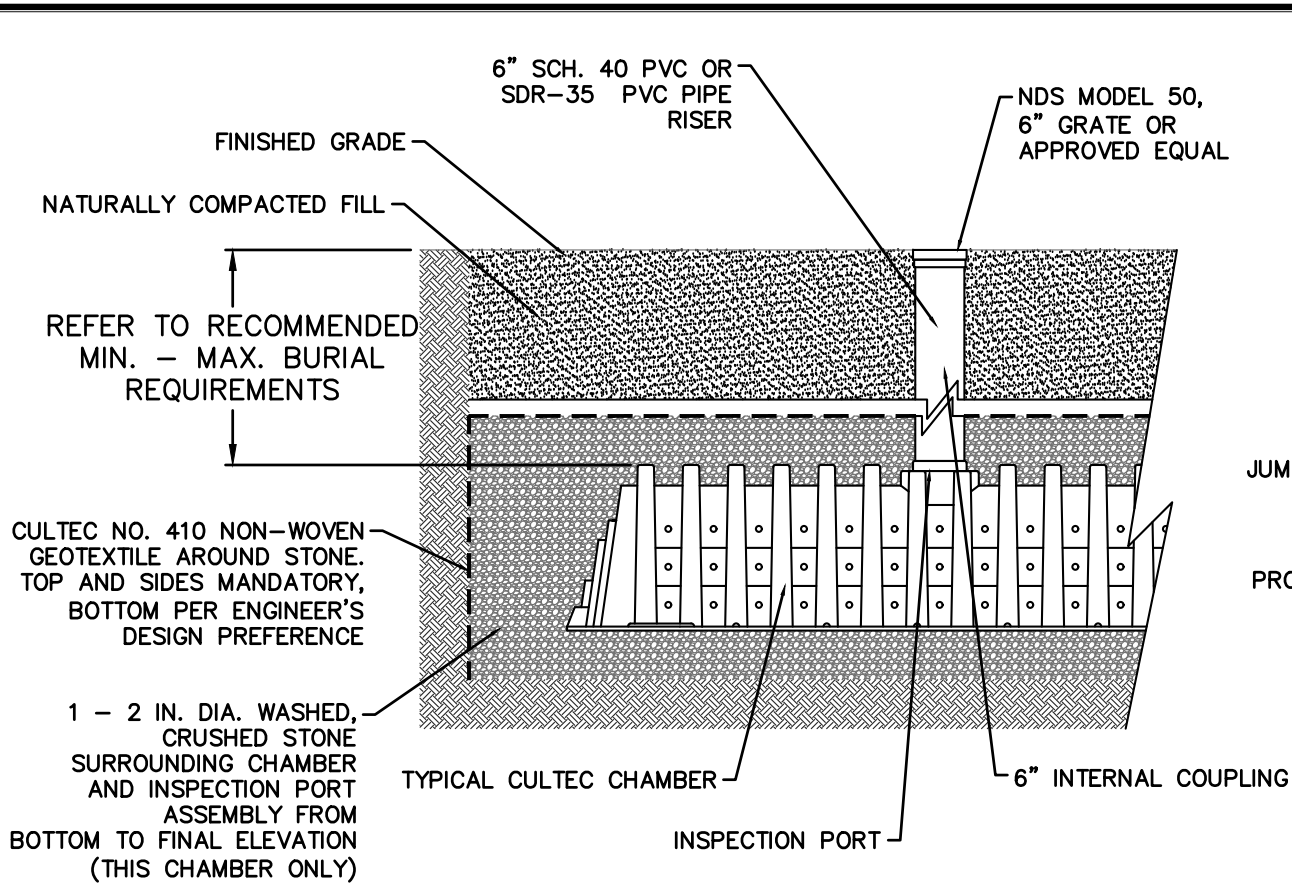
44 EDGEWOOD AVENUE PRELIMINARY  
SITE PLAN BASED UPON EXISTING  
INFORMATION PROVIDED BY THE MUNSON  
COMPANY, DATED MAY 21, 2019



No.	Description	Date	PROJECT:	
			44 EDGEWOOD AVENUE - LOT 1 TOWN OF MAMARONECK WESTCHESTER COUNTY - NEW YORK	
			STORMWATER MANAGEMENT PLAN	
			HUDSON ENGINEERING & CONSULTING, P.C. 45 Knollwood Road, Suite 201 Elmsford, New York 10523 T: 914-909-0420 F: 914-560-2086 © 2019	
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE				
			Date: 01/17/20 Scale: 1" = 10' Designed By: M.F. Checked By: M.S. Sheet No. 4	
			C-2	

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.





No.	Description	Revisions	THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE	PROJECT:	
				PROPOSED SUBDIVISION 44 EDGEWOOD AVENUE – LOT 1 TOWN OF MAMARONECK WESTCHESTER COUNTY – NEW YORK	
				DETAILS	Date: 01/17/20 Sheet: 3 Scale: N.T.S. Designed By: M.F. Checked By: M.S. Sheet No.
					







**Town of Mamaroneck - Village of Larchmont  
Coastal Assessment Form (CAF)**

Applicants, or the appropriate municipal agency, shall complete this Coastal Assessment Form (CAF) for proposed actions which are subject to Local Consistency Review (see Waterfront Revitalization Law §§234-1 through 234-5 in the Code of the Town of Mamaroneck and §§292-1 through 292-4 in the Code of the Village of Larchmont). This assessment is intended to supplement other information used by the Bi-Municipal Coastal Zone Management Commission in making a determination of consistency with the Town of Mamaroneck and Village of Larchmont Local Waterfront Revitalization Program.

Upon completion of this form, it should be submitted as part of a complete application package for review. If assistance or further information is required for Town of Mamaroneck matters, please contact the Town of Mamaroneck Environmental Planner at (914) 381-7845. For Village of Larchmont matters, please contact the Village of Larchmont Building Inspector at (914) 834-6210.

---

**PLEASE PRINT OR TYPE ALL ANSWERS.**

**A. GENERAL INFORMATION**

Will the proposed action be undertaken by a municipal agency?    Yes [    ]    No [    ]

If yes, please list agency or agencies and contact person(s): \_\_\_\_\_

\_\_\_\_\_

If no, please complete the applicant information:

Name of Applicant: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**Location and ownership of property for which action is proposed:**

Section: \_\_\_\_\_ Block: \_\_\_\_\_ Lot: \_\_\_\_\_

Owner of Property: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Size of property (square feet): \_\_\_\_\_ Is the property now developed? Yes [    ] No [    ]

Will project require a zoning variance? Yes [    ] No [    ]

If yes, briefly describe: \_\_\_\_\_

\_\_\_\_\_



---

---

---

Are there streams, lakes, ponds or wetlands existing within or contiguous to the project area?

If so, describe (name, size, characteristics): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.



## C. COASTAL ASSESSMENT

Check either "Yes" or "No" for each of the following questions:

1. Will the proposed action be located in, or contiguous to, or have a **potentially adverse effect** upon any of the following designated resource areas?

	Yes	No	Maybe
a. Significant fish or wildlife habitat or designated critical environmental area .....	[ ]	[ ]	[ ]
b. Scenic resources of local significance .....	[ ]	[ ]	[ ]
c. Natural protective features in an erosion hazard area .....	[ ]	[ ]	[ ]

**NOTE:** If the answer to any of the above questions is "Yes", please explain in Section D any measures which will be undertaken to mitigate the adverse effects.

2. Will the proposed action have a **significant effect** upon:

	Yes	No	Maybe
a. Commercial or recreational use of fish and wildlife resources.....	[ ]	[ ]	[ ]
b. Scenic quality of the coastal environment .....	[ ]	[ ]	[ ]
c. Development of future, or existing water dependent uses .....	[ ]	[ ]	[ ]
d. Land or water uses within a small harbor area .....	[ ]	[ ]	[ ]
e. Stability of the shoreline .....	[ ]	[ ]	[ ]
f. Surface or groundwater quality.....	[ ]	[ ]	[ ]
g. Existing or potential public recreation opportunities.....	[ ]	[ ]	[ ]
h. Structures, sites or districts of historic, archeological or cultural significance to the local area, state or nation .....	[ ]	[ ]	[ ]

3. Will the proposed action **involve or result in** any of the following:

	Yes	No	Maybe
a. Physical alteration of land along the shoreline, land underwater or coastal waters.....	[ ]	[ ]	[ ]
b. Expansion of existing public services or infrastructure in or near undeveloped or low density areas of the coastal area? .....	[ ]	[ ]	[ ]
c. Filling, dredging, excavation or mining in coastal waters .....	[ ]	[ ]	[ ]
d. Reduction of existing or potential public access to or along the shore.....	[ ]	[ ]	[ ]
e. Development within a designated flood or erosion hazard area .....	[ ]	[ ]	[ ]
f. Development of a natural feature that protects against flooding or erosion .....	[ ]	[ ]	[ ]
g. Replacement of eroded sand or soil .....	[ ]	[ ]	[ ]
h. Construction or reconstruction of erosion protective structures .....	[ ]	[ ]	[ ]
i. Any change in surface or groundwater quality .....	[ ]	[ ]	[ ]
j. Removal of trees from the site .....	[ ]	[ ]	[ ]

4. Project details:

	Yes	No	Maybe
a. If the project is to be located adjacent to the shore:			
1. Does the project require a waterfront site in order to function .....	[ ]	[ ]	[ ]
2. Will water-related recreation be provided .....	[ ]	[ ]	[ ]
3. Will public access to shore or state owned underwater lands be provided.....	[ ]	[ ]	[ ]
4. Will it replace a recreational or maritime use .....	[ ]	[ ]	[ ]
5. Do essential public services and facilities presently exist at or near the site..	[ ]	[ ]	[ ]



- Please explain any of the above answers that may need further clarification in Section D.**

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



[illegible]



**I certify that I am the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.**

Date: \_\_\_\_\_ 20 \_\_\_\_\_  
Signature of Applicant

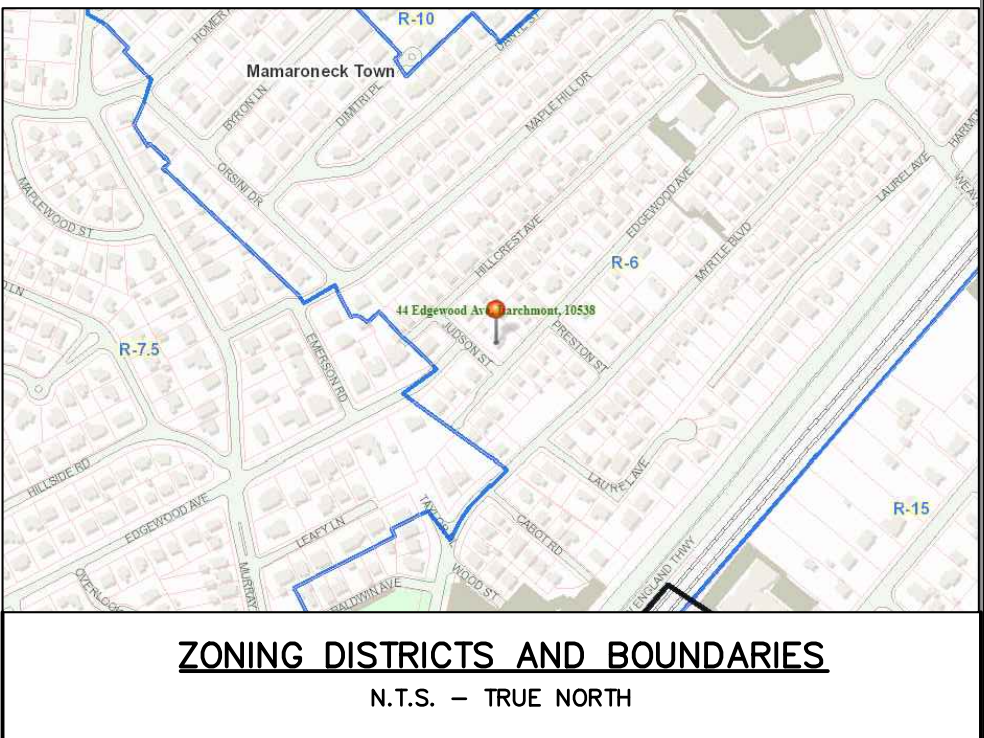
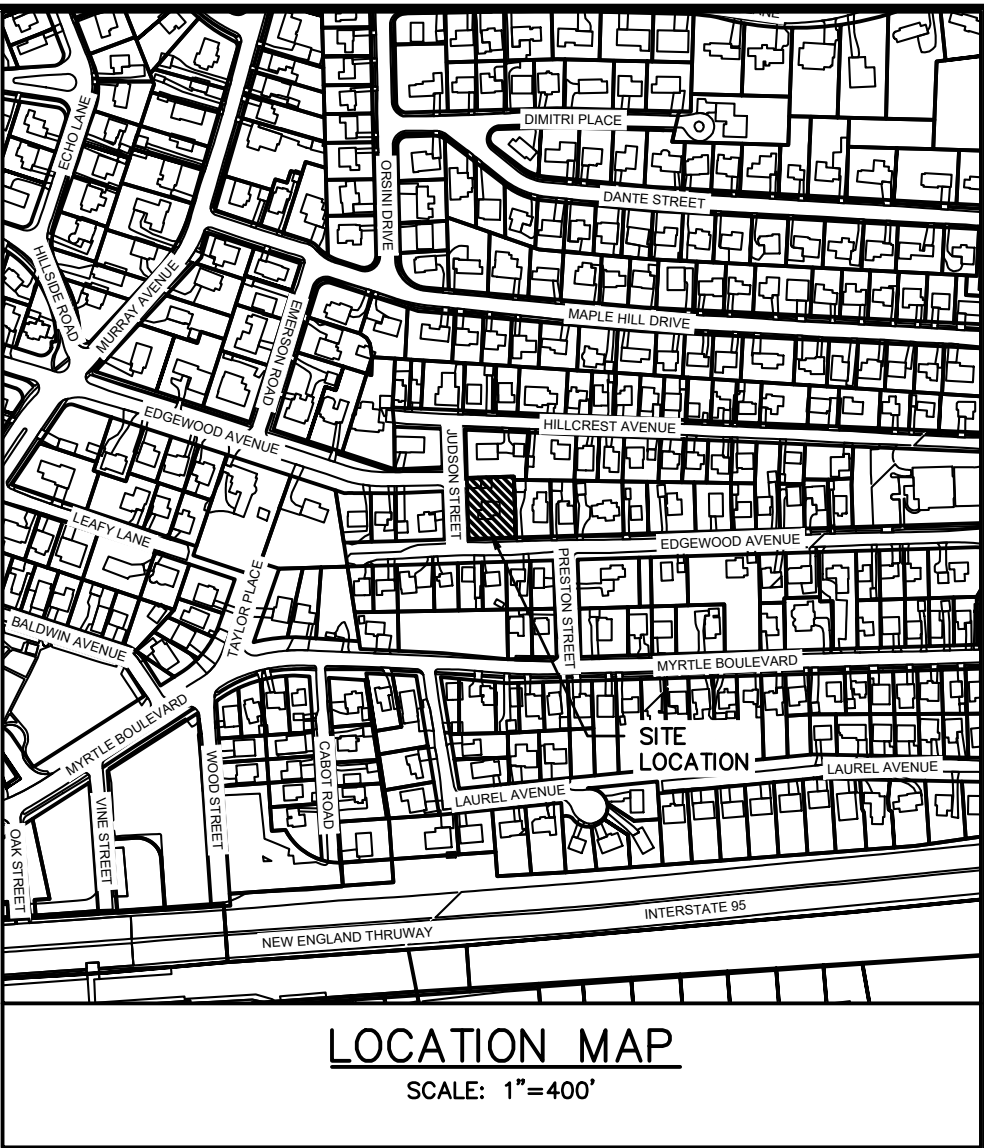
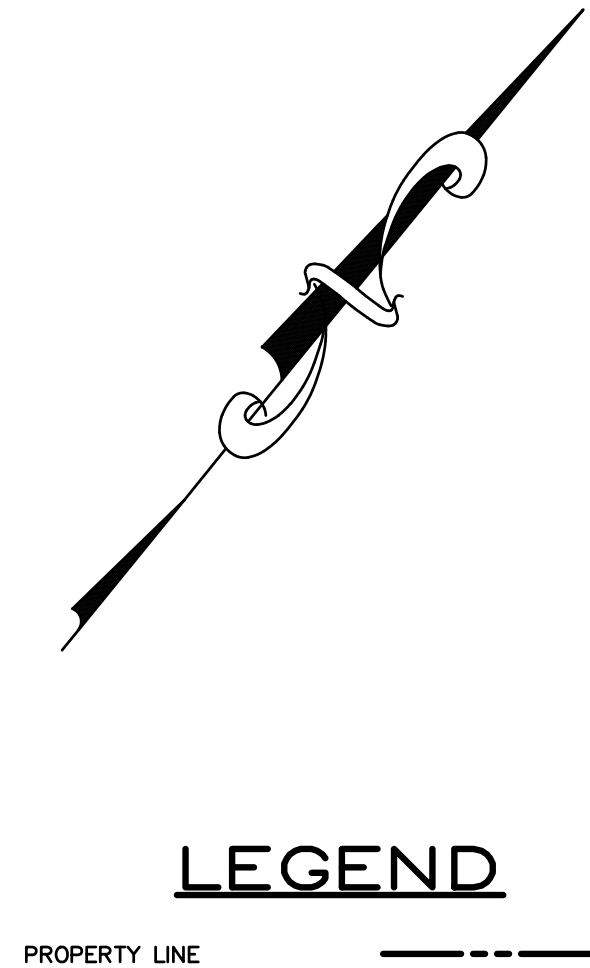
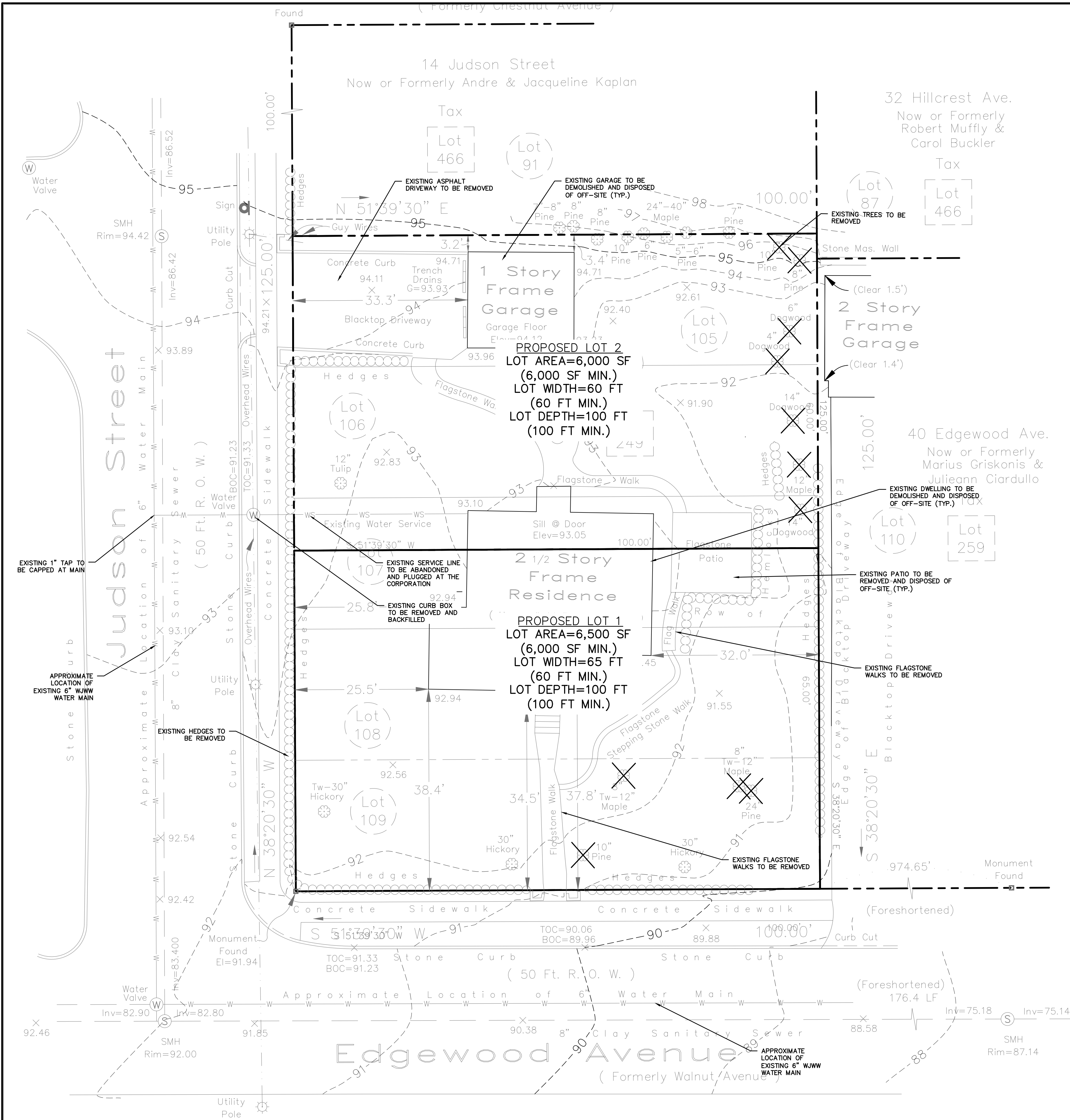
**Prepared by:** (if different than the applicant)

Name and Title: \_\_\_\_\_  
Agency/Company: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**I certify that I prepared this Coastal Assessment Form for the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.**

Date: \_\_\_\_\_ 20 \_\_\_\_\_  
Signature of Preparer

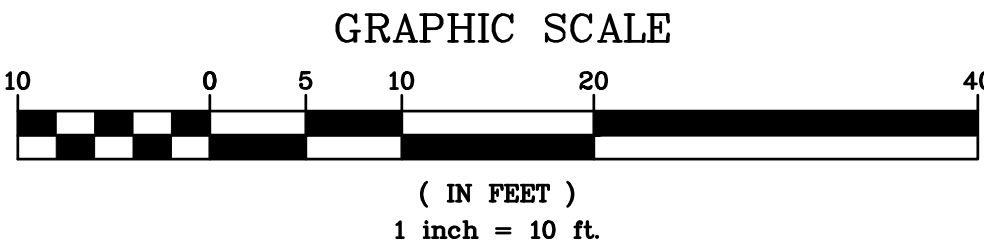




- GENERAL NOTES:**
1. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE SUPERVISION OF THE CONSTRUCTION.
  2. NO CHANGES SHALL BE MADE TO THESE PLANS EXCEPT AS PER NYS LAW CHAPTER 987.
  3. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO A.C.I., A.S.C., ZONING, AND THE NEW YORK STATE BUILDING CODE.
  4. ALL CONDITIONS, LOCATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
  5. ALL CHANGES MADE TO THE PLANS SHALL BE APPROVED BY THE ENGINEER AND ANY SUCH CHANGES SHALL BE FILED AS AMENDMENTS TO THE ORIGINAL BUILDING PERMIT.
  6. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
  7. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR THE ACTS AND OMISSIONS OF HIS EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
  8. SAFETY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL AGENCIES IN EFFECT DURING THE PERIOD OF CONSTRUCTION.
  9. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL MAKE APPLICATION TO RECEIVE ALL NECESSARY PERMITS TO PERFORM THE WORK UNDER CONTRACT. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL BE LICENSED TO DO ALL WORK AS REQUIRED BY THE LOCAL, COUNTY, AND STATE AGENCIES WHICH MAY HAVE JURISDICTION OVER THOSE TRADES, AND SHALL PRESENT THE OWNER WITH COPIES OF ALL LICENSES AND INSURANCE CERTIFICATES.
  10. FINAL GRADING AROUND THE BUILDING AREA SHALL SLOPE AWAY FROM THE STRUCTURE.
  11. ALL WRITTEN DIMENSIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY SCALED DIMENSIONS.
  12. ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION AND DEMOLITION WORK. PROTECTION MUST BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES. THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDING SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.
  13. OWNER SHALL INSURE THAT THE INSURANCE PROVIDED BY THE CONTRACTOR HIRED TO PERFORM THE WORK SHALL BE ENDORSED TO NAME HUDSON ENGINEERING & CONSULTING, P.C. AND ANY DIRECTORS, OFFICERS, EMPLOYEES, SUBSIDIARIES, AND AFFILIATES, AS ADDITIONAL INSURED ON ALL POLICIES AND HOLD HARMLESS DOCUMENTS, AND SHALL STIPULATE THAT THIS INSURANCE IS PRIMARY, AND THAT ANY OTHER INSURANCE MAINTAINED BY OR UNDER INSURANCE MAINTAINED BY HUDSON ENGINEERING & CONSULTING, P.C., SHALL BE EXCESS ONLY AND SHALL NOT BE CALLED UPON TO CONTRIBUTE WITH THIS INSURANCE. ISO ADDITIONAL INSURED ENDORSEMENT FORM NUMBER 02010 1185 UNDER GL. COPIES OF THE INSURANCE POLICIES SHALL BE SUBMITTED TO HUDSON ENGINEERING & CONSULTING, P.C., FOR APPROVAL PRIOR TO THE SIGNING OF THE CONTRACT.
  14. INDUSTRIAL CODE RULE 753: THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS PRIOR TO THE START OF HIS OPERATIONS AND SHALL COMPLY WITH ALL THE LATEST INDUSTRIAL CODE RULE 753 REGULATIONS.

OWNER OF RECORD	
NAME	MAILING ADDRESS
DOROTHEA TOMCZYK	46 E. BROOKSIDE DR LARCHMONT, NY 10538

44 EDGEWOOD AVENUE EXISTING  
CONDITION/DEMOLITION PLAN BASED UPON  
EXISTING INFORMATION PROVIDED BY THE  
MUNSON COMPANY, DATED MAY 21, 2019



No.	Description	Revisions	Date	PROJECT:
				PROPOSED SUBDIVISION 44 EDGEWOOD AVENUE - LOT 2 TOWN OF MAMARONECK WESTCHESTER COUNTY - NEW YORK
				EXISTING CONDITION/DEMOLITION PLAN
				HEC HUDSON ENGINEERING & CONSULTING, P.C. 45 Knowlwood Road, Suite 201 Elmsford, New York 10523 T: 914-909-0420 F: 914-560-2086 © 2019
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE				State of New York MICHAEL F. STERN No. 00657 LICENSED PROFESSIONAL ENGINEER
Date: 01/17/20 Sheet: 1 Scale: 1" = 10' Designed By: M.F. Checked By: M.S. Sheet No. 4				C-1

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.



# Hillcrest Avenue

( Formerly Chestnut Avenue )

14 Judson Street

Now or Formerly Andre & Jacqueline Kaplan

Tax

Lot  
466

Lot  
91

32 Hillcrest Ave.

Now or Formerly  
Robert Muffy &  
Carol Buckler

Tax

Lot  
466

40 Edgewood Ave.

Now or Formerly  
Marius Griskonis &  
Julieann Ciardullo

Tax

Lot  
259

LOT 2 (6,000 S.F.)  
PROPOSED  
DWELLING  
F.F.E.=96.50±  
G.F.E.=95.25±

Tax

Lot  
249

2 1/2 Story

Tax

Lot  
110

Lot  
106

Lot  
107

Lot  
108

Lot  
109

Lot  
111

Lot  
112

Lot  
113

Lot  
114

Lot  
115

Lot  
116

Lot  
117

Lot  
118

Lot  
119

Lot  
120

Lot  
121

Lot  
122

Lot  
123

Lot  
124

Lot  
125

Lot  
126

Lot  
127

Lot  
128

Lot  
129

Lot  
130

Lot  
131

Lot  
132

Lot  
133

Lot  
134

Lot  
135

Lot  
136

Lot  
137

Lot  
138

Lot  
139

Lot  
140

Lot  
141

Lot  
142

Lot  
143

Lot  
144

Lot  
145

Lot  
146

Lot  
147

Lot  
148

Lot  
149

Lot  
150

Lot  
151

Lot  
152

Lot  
153

Lot  
154

Lot  
155

Lot  
156

Lot  
157

Lot  
158

Lot  
159

Lot  
160

Lot  
161

Lot  
162

Lot  
163

Lot  
164

Lot  
165

Lot  
166

Lot  
167

Lot  
168

Lot  
169

Lot  
170

Lot  
171

Lot  
172

Lot  
173

Lot  
174

Lot  
175

Lot  
176

Lot  
177

Lot  
178

Lot  
179

Lot  
180

Lot  
181

Lot  
182

Lot  
183

Lot  
184

Lot  
185

Lot  
186

Lot  
187

Lot  
188

Lot  
189

Lot  
190

Lot  
191

Lot  
192

Lot  
193

Lot  
194

Lot  
195

Lot  
196

Lot  
197

Lot  
198

Lot  
199

Lot  
200

Lot  
201

Lot  
202

Lot  
203

Lot  
204

Lot  
205

Lot  
206

Lot  
207

Lot  
208

Lot  
209

Lot  
210

Lot  
211

Lot  
212

Lot  
213

Lot  
214

Lot  
215

Lot  
216

Lot  
217

Lot  
218

Lot  
219

Lot  
220

Lot  
221

Lot  
222

Lot  
223

Lot  
224

Lot  
225

Lot  
226

Lot  
227

Lot  
228

Lot  
229

Lot  
230

Lot  
231

Lot  
232

Lot  
233

Lot  
234

Lot  
235

Lot  
236

Lot  
237

Lot  
238

Lot  
239

Lot  
240

Lot  
241

Lot  
242

Lot  
243

Lot  
244

Lot  
245

Lot  
246

Lot  
247

Lot  
248

Lot  
249

Lot  
250

Lot  
251

Lot  
252

Lot  
253

Lot  
254

Lot  
255

Lot  
256

Lot  
257

Lot  
258

Lot  
259

Lot  
260

Lot  
261

Lot  
262

Lot  
263

Lot  
264

Lot  
265

Lot  
266

Lot  
267

Lot  
268

Lot  
269

Lot  
270

Lot  
271

Lot  
272

Lot  
273

Lot  
274

Lot  
275

Lot  
276

Lot  
277

Lot  
278

Lot  
279

Lot  
280

Lot  
281

Lot  
282

Lot  
283

Lot  
284

Lot  
285

Lot  
286

Lot  
287

Lot  
288

Lot  
289

Lot  
290

Lot  
291

Lot  
292

Lot  
293

Lot  
294

Lot  
295

Lot  
296

Lot  
297

Lot  
298

Lot  
299

Lot  
300

Lot  
301

Lot  
302

Lot  
303

Lot  
304

Lot  
305

Lot  
306

Lot  
307

Lot  
308

Lot  
309

Lot  
310

Lot  
311

Lot  
312

Lot  
313

Lot  
314

Lot  
315

Lot  
316

Lot  
317

Lot  
318

Lot  
319

Lot  
320

Lot  
321

Lot  
322

Lot  
323

Lot  
324

Lot  
325

Lot  
326

Lot  
327

Lot  
328

Lot  
329

Lot  
330

Lot  
331

Lot  
332

Lot  
333

Lot  
334

Lot  
335

Lot  
336

Lot  
337

Lot  
338

Lot  
339

Lot  
340

Lot  
341

Lot  
342

Lot  
343

Lot  
344

Lot  
345

Lot  
346

Lot  
347

Lot  
348

Lot  
349

Lot  
350

Lot  
351

Lot  
352

Lot  
353

Lot  
354

Lot  
355

Lot  
356

Lot  
357

Lot  
358

Lot  
359

Lot  
360

Lot  
361

Lot  
362

Lot  
363

Lot  
364

Lot  
365

Lot  
366

Lot  
367

Lot  
368

Lot  
369

Lot  
370

Lot  
371

Lot  
372

Lot  
373

Lot  
374

Lot  
375

Lot  
376

Lot  
377

Lot  
378

Lot  
379

Lot  
380

Lot  
381

Lot  
382

Lot  
383

Lot  
384

Lot  
385

Lot  
386

Lot  
387

Lot  
388

Lot  
389

Lot  
390

Lot  
391

Lot  
392

Lot  
393

Lot  
394

Lot  
395

Lot  
396

Lot  
397

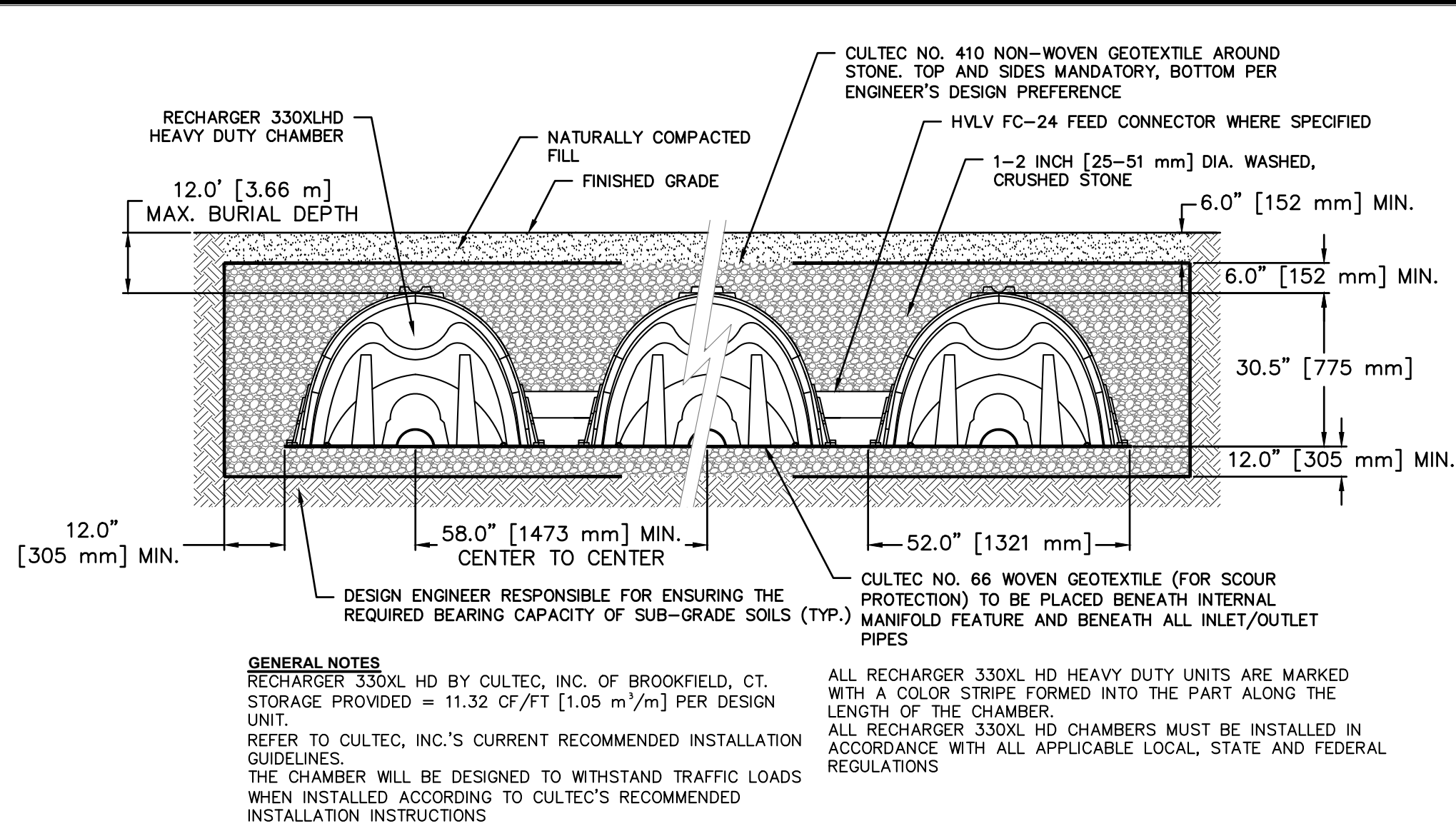
Lot  
398

Lot  
399

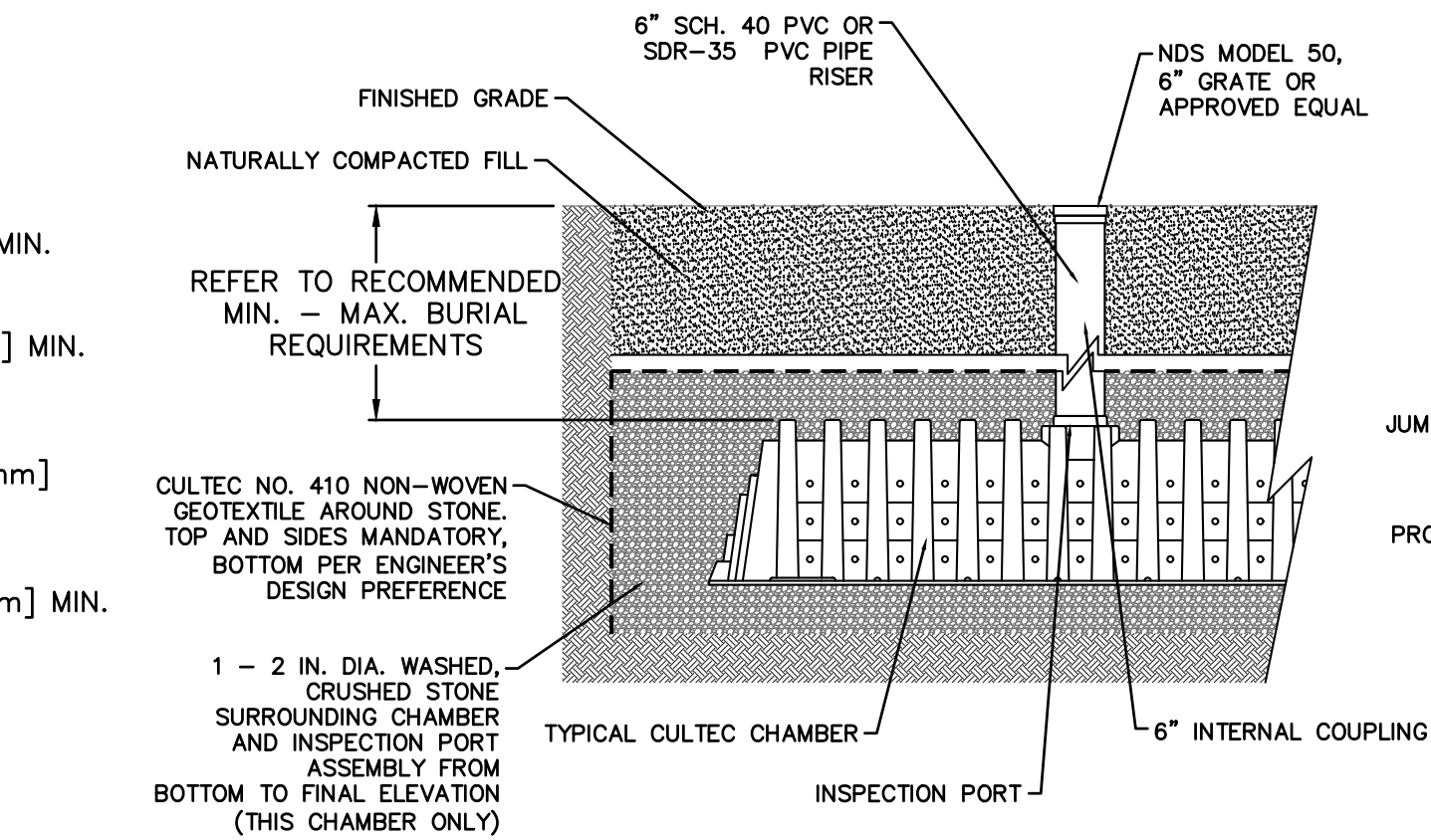
Lot  
400

Lot  
401

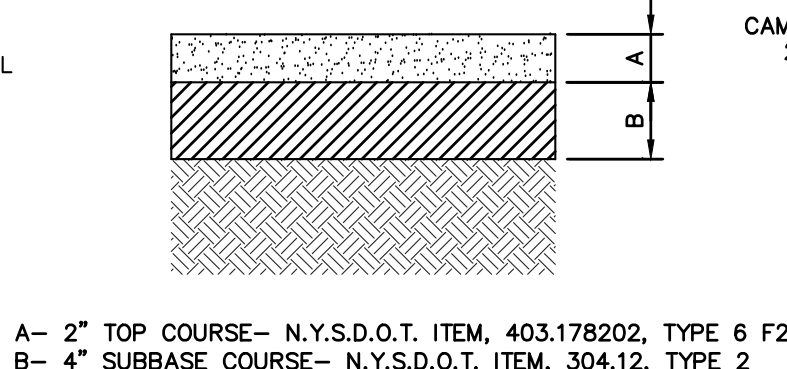




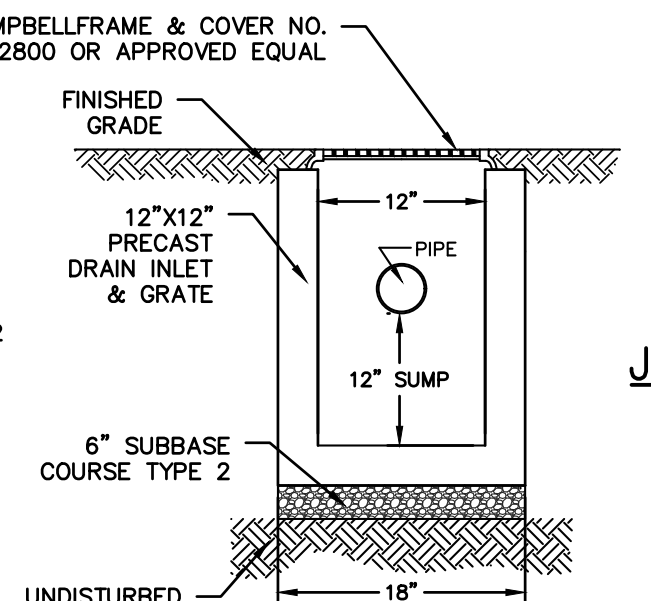
CULTEC RECHARGER 330XLHD



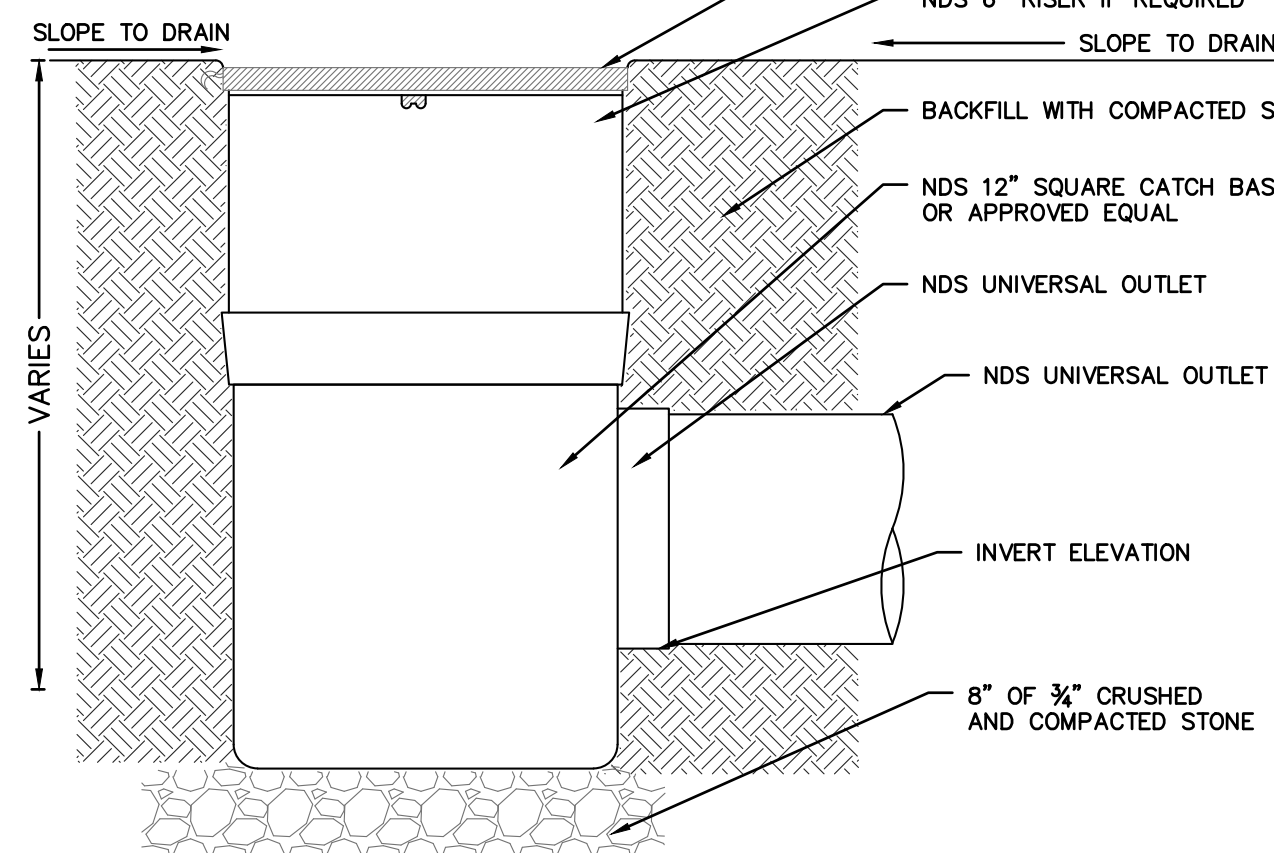
CULTEC ACCESS PORT



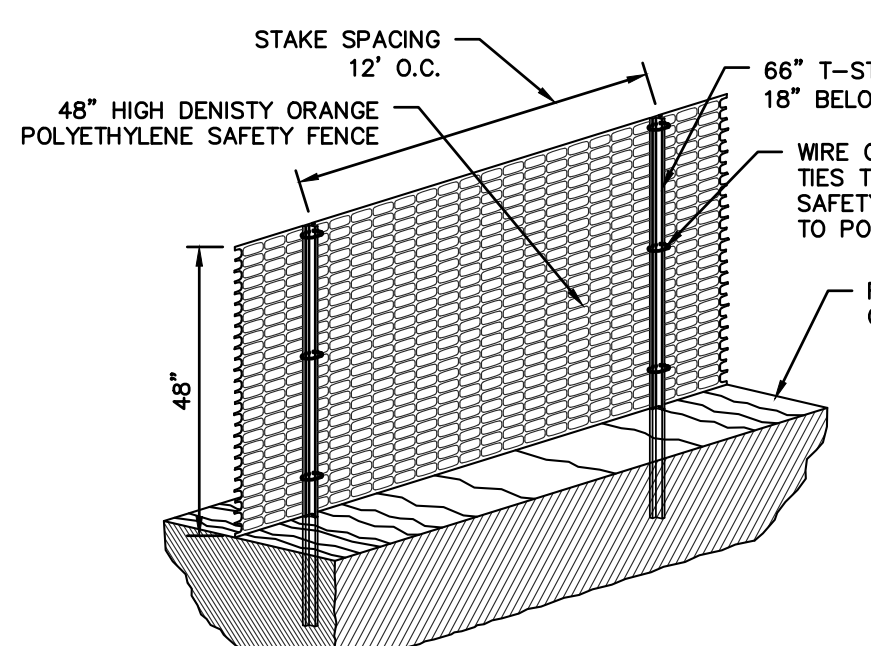
DRIVEWAY PAVEMENT SECTION



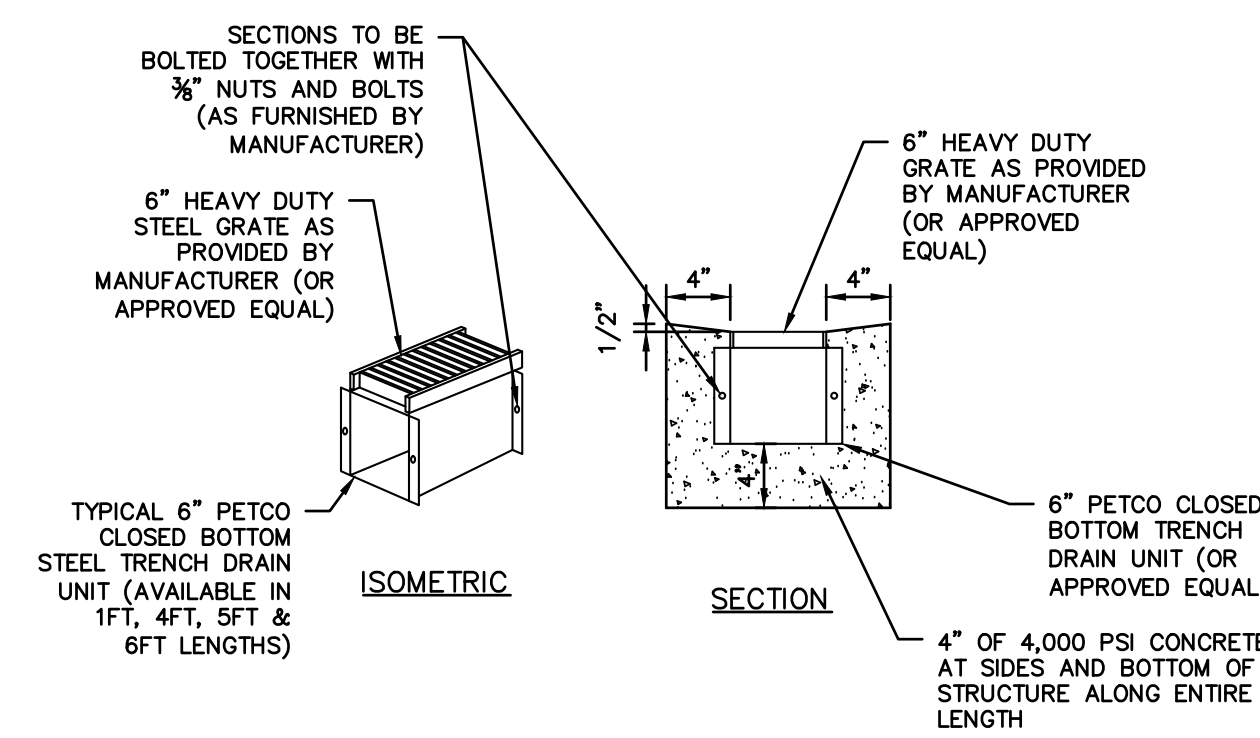
SUMP BOX



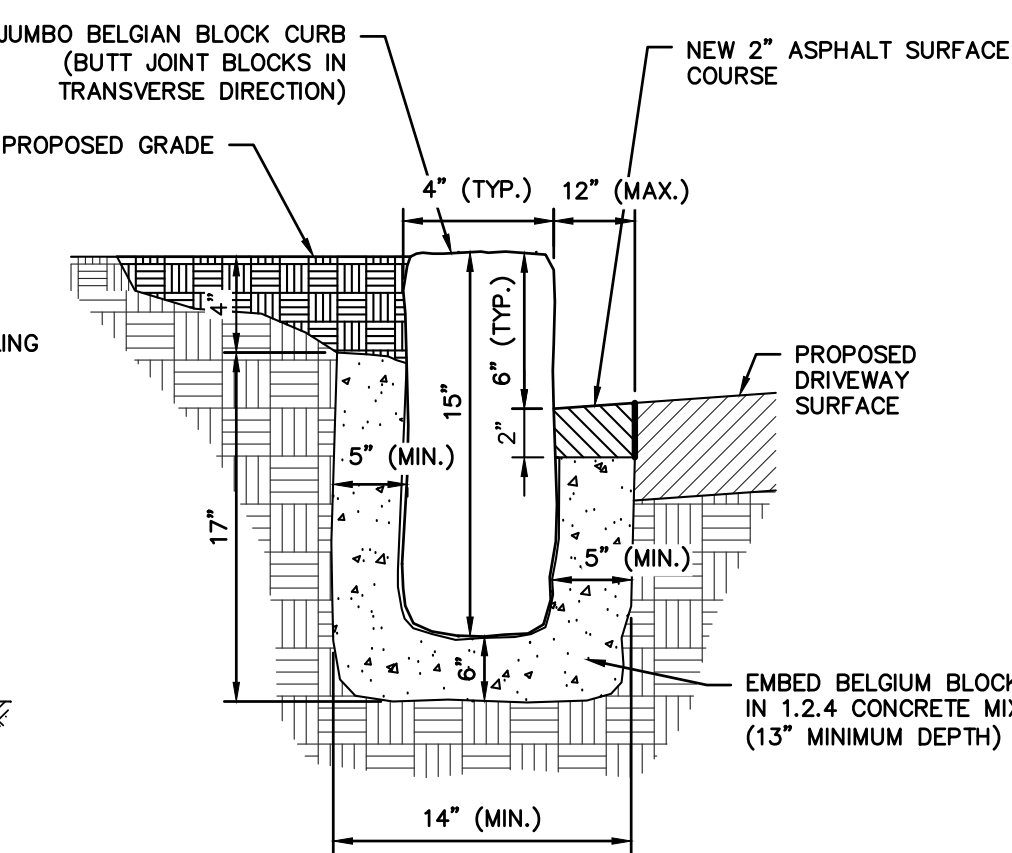
NDS SQUARE CATCH BASIN



CONSTRUCTION FENCE

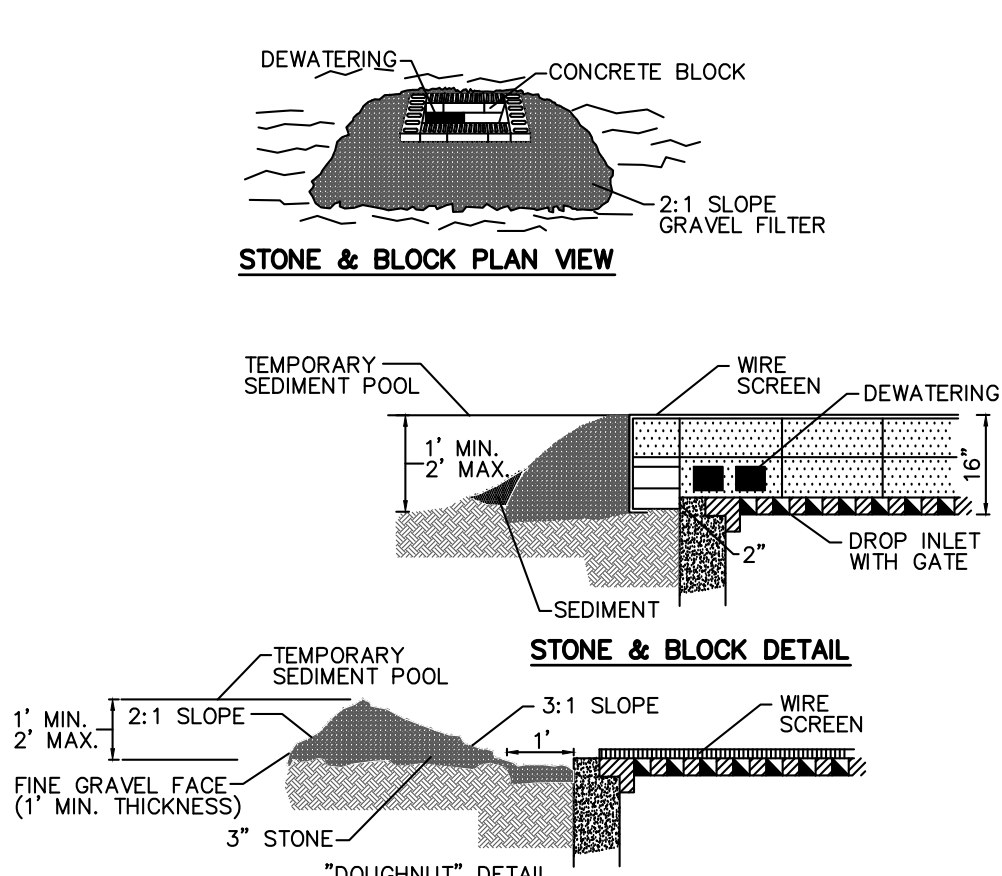


STEEL TRENCH DRAIN



JUMBO BELGIUM BLOCK CURB DETAIL

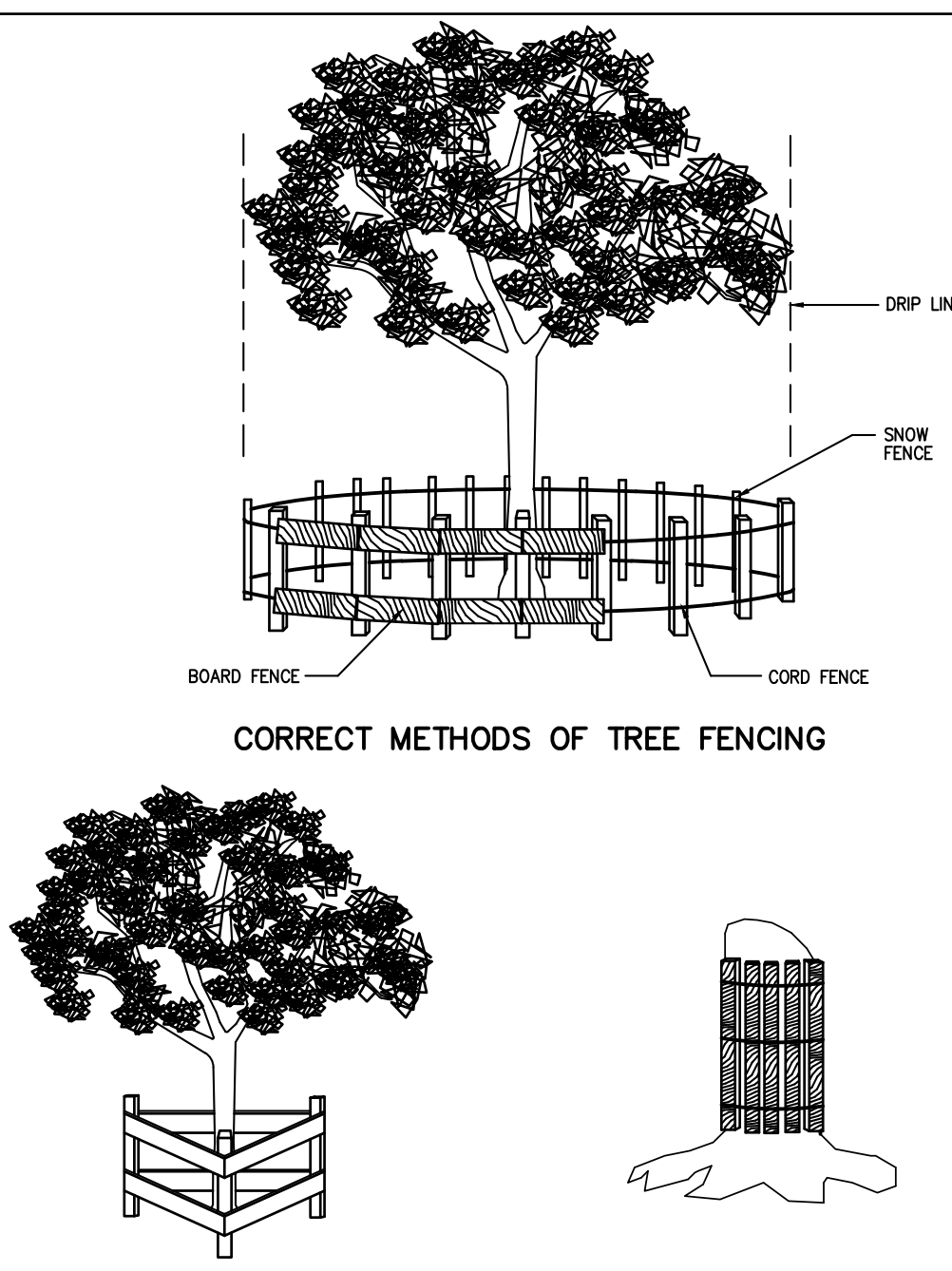
## STONE & BLOCK DROP INLET PROTECTION



CONSTRUCTION SPECIFICATION

- LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
- HARDWARECLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
- USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF BLOCK ON A 2:1 SLOPE OR FLATTER.
- FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

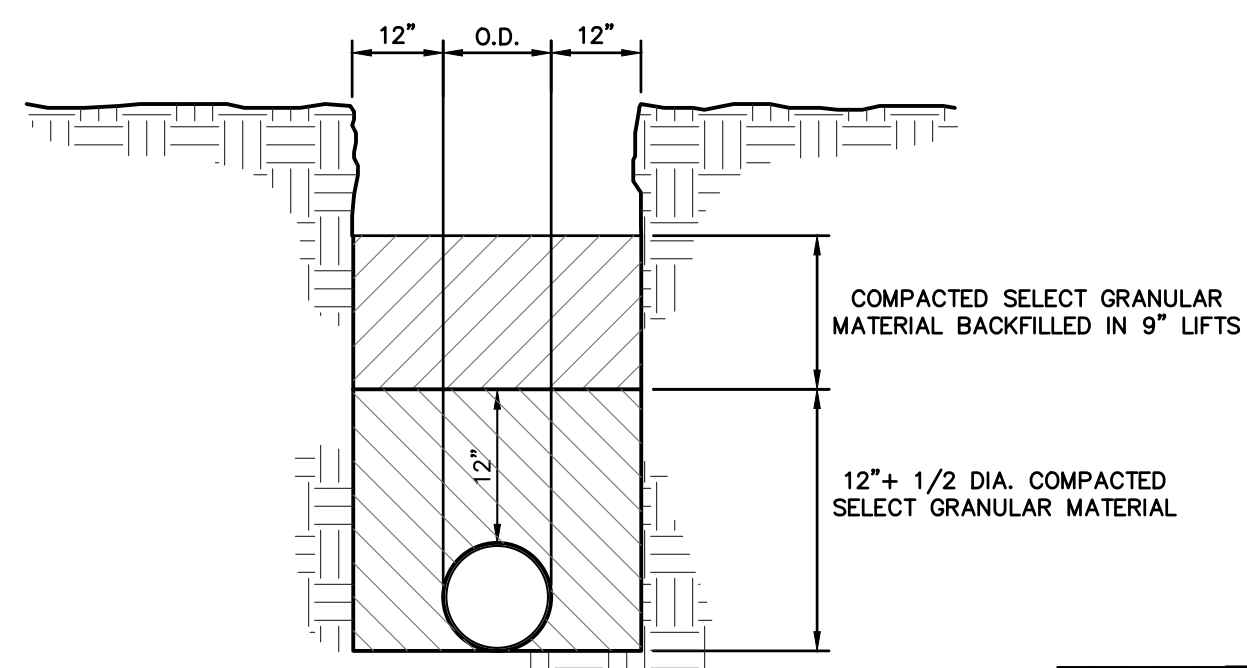
## FENCING AND ARMORING



CORRECT METHODS OF TREE FENCING

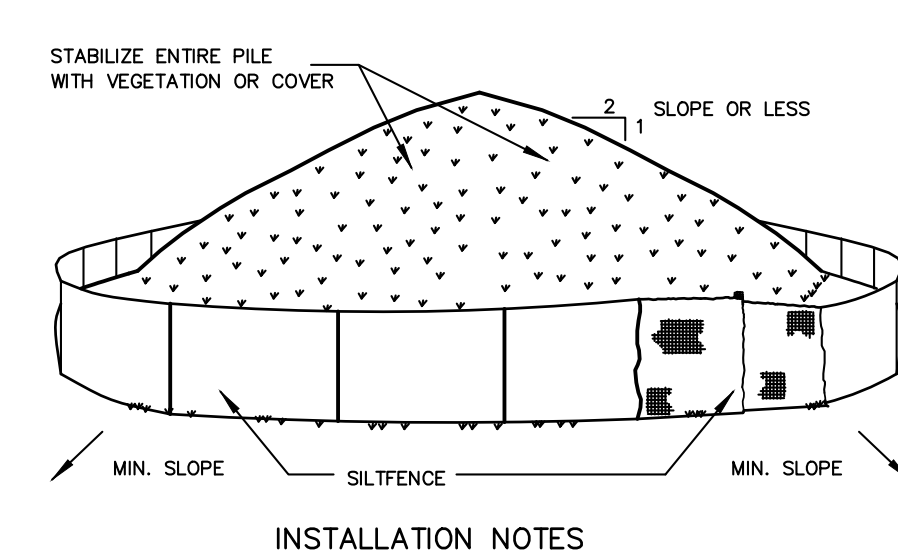
TRIANGULAR BOARD FENCE

CORRECT TRUNK ARMORING



TRENCH BEDDING

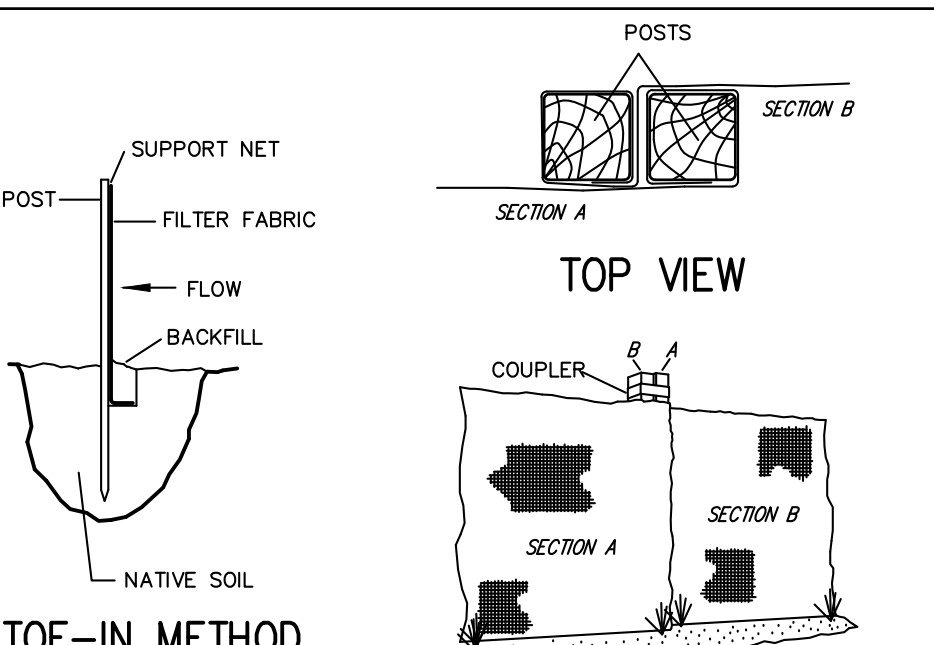
## SOIL STOCKPILING



INSTALLATION NOTES

- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
- SOILS OR FILL TO BE STOCKPILED ON SITE DURING CUTTING AND FILLING ACTIVITIES SHOULD BE LOCATED ON LEVEL PORTIONS OF THE SITE WITH A MINIMUM OF 50-75 FOOT SETBACKS FROM TEMPORARY DRAINAGE SWALES.
- MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
- UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.
- STOCKPILES REMAINING IN PLACE FOR MORE THAN A WEEK SHOULD BE SEEDED AND MULCHED OR COVERED WITH GEOTEXTILE FABRIC SURROUND BY SILT FENCE.
- SEE SPECIFICATIONS (THIS MANUAL) FOR INSTALLATION OF SILT FENCE.

## SILT FENCE

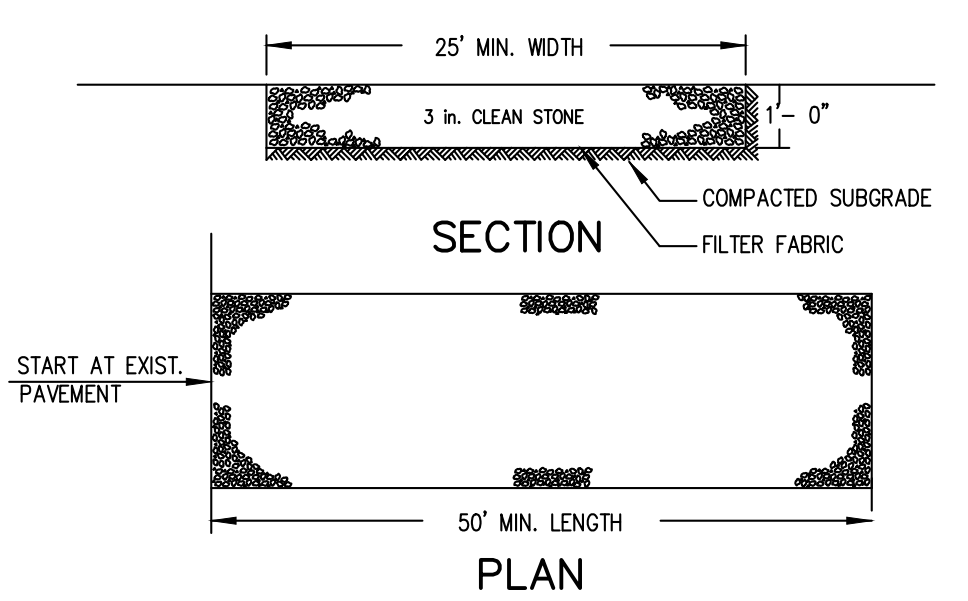


TOE-IN METHOD

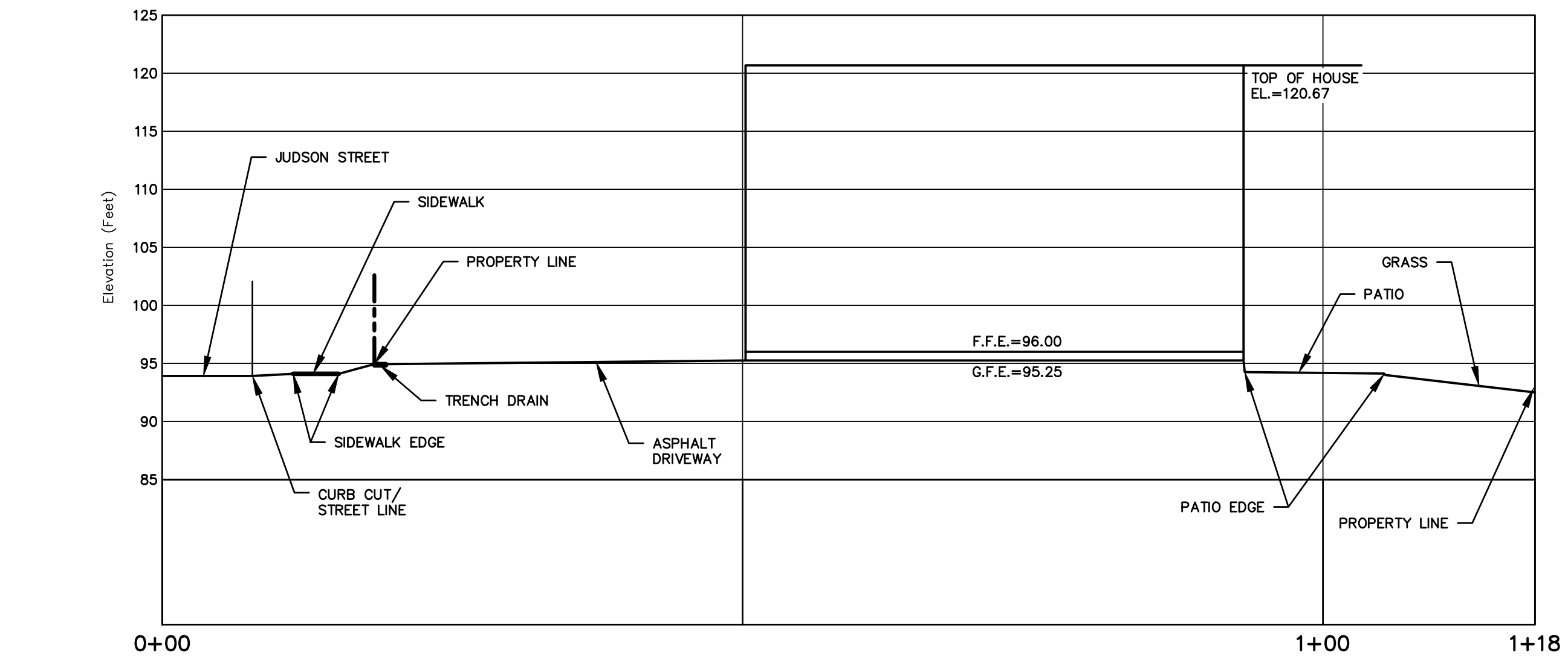
JOINING SECTIONS OF FENCING

- EXCAVATE A 4 INCH x 4 INCH TRENCH ALONG THE LOWER PERIMETER OF THE SITE.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - 25 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIRED ACROSS THE ENTRANCE. IF PIRING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

## STABILIZED CONSTRUCTION ENTRANCE



- STONE SIZE - USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - 25 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIRED ACROSS THE ENTRANCE. IF PIRING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



LOT 2 PROFILE STA. 0+00 TO STA. 1+18

HORIZONTAL SCALE: 1" = 10'

VERTICAL SCALE: 1" = 10'

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

PROJECT: <b>PROPOSED SUBDIVISION 44 EDGEWOOD AVENUE - LOT 2 TOWN OF MAMARONECK WESTCHESTER COUNTY - NEW YORK</b>		
DETAILS <b>HUDSON ENGINEERING &amp; CONSULTING, P.C.</b> 45 Knollwood Road, Suite 201 Elmsford, New York 10523 T: 914-909-0420 F: 914-560-2086 © 2019		
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE	Date: 01/17/20 Scale: N.T.S. Designed By: M.J.S. Checked By: M.S. Sheet No. 3	<b>C-3</b>



Hillcrest Avenue  
( Formerly Chestnut Avenue )

14 Judson Street  
Now or Formerly Andre & Jacqueline Kaplan

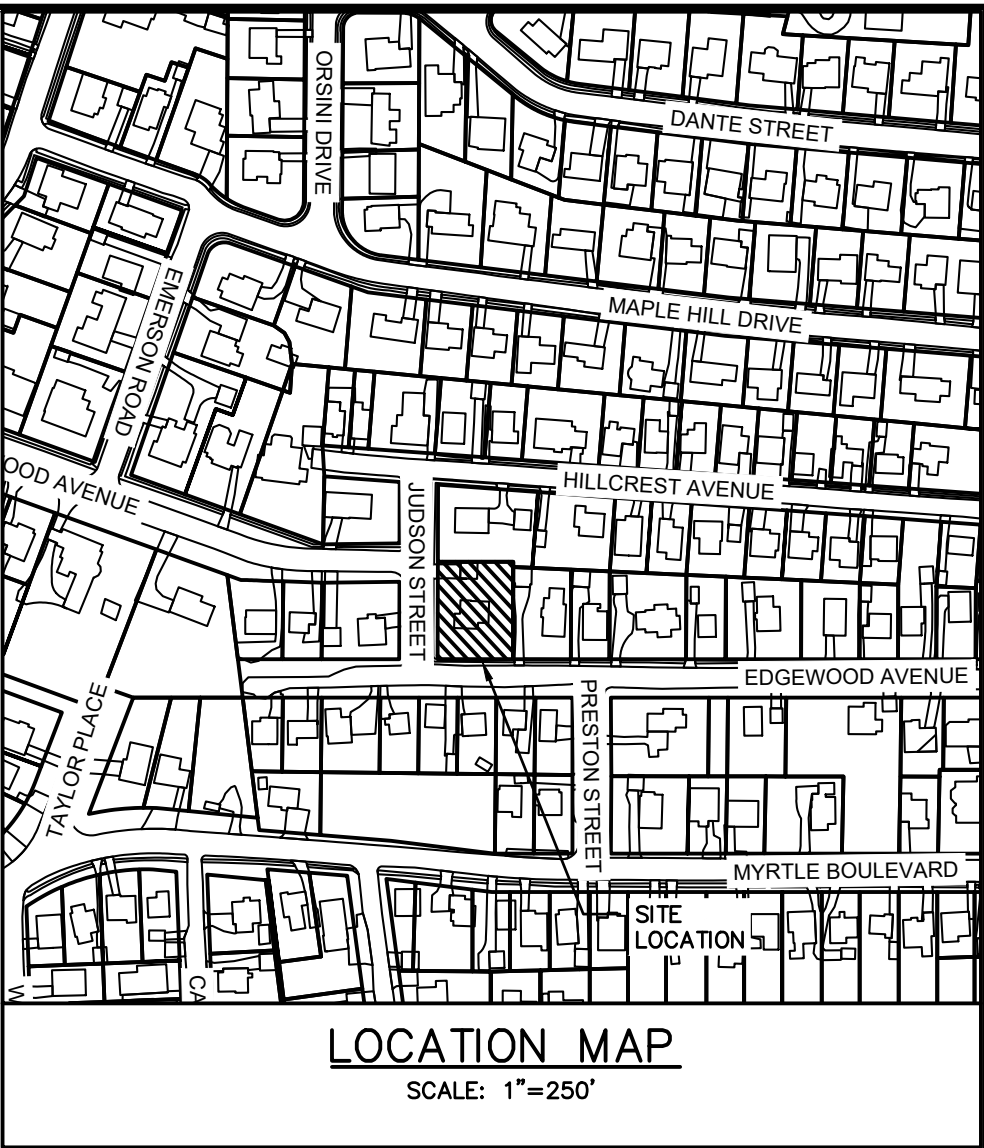
32 Hillcrest Ave.  
Now or Formerly  
Robert Muffly &  
Carol Buckler

40 Edgewood Ave.  
Now or Formerly  
Marius Griskonis &  
Julieann Ciardullo

LOT 2 (6,000 S.F.)  
PROPOSED  
DWELLING  
F.F.E.=96.50±  
G.F.E.=95.25±

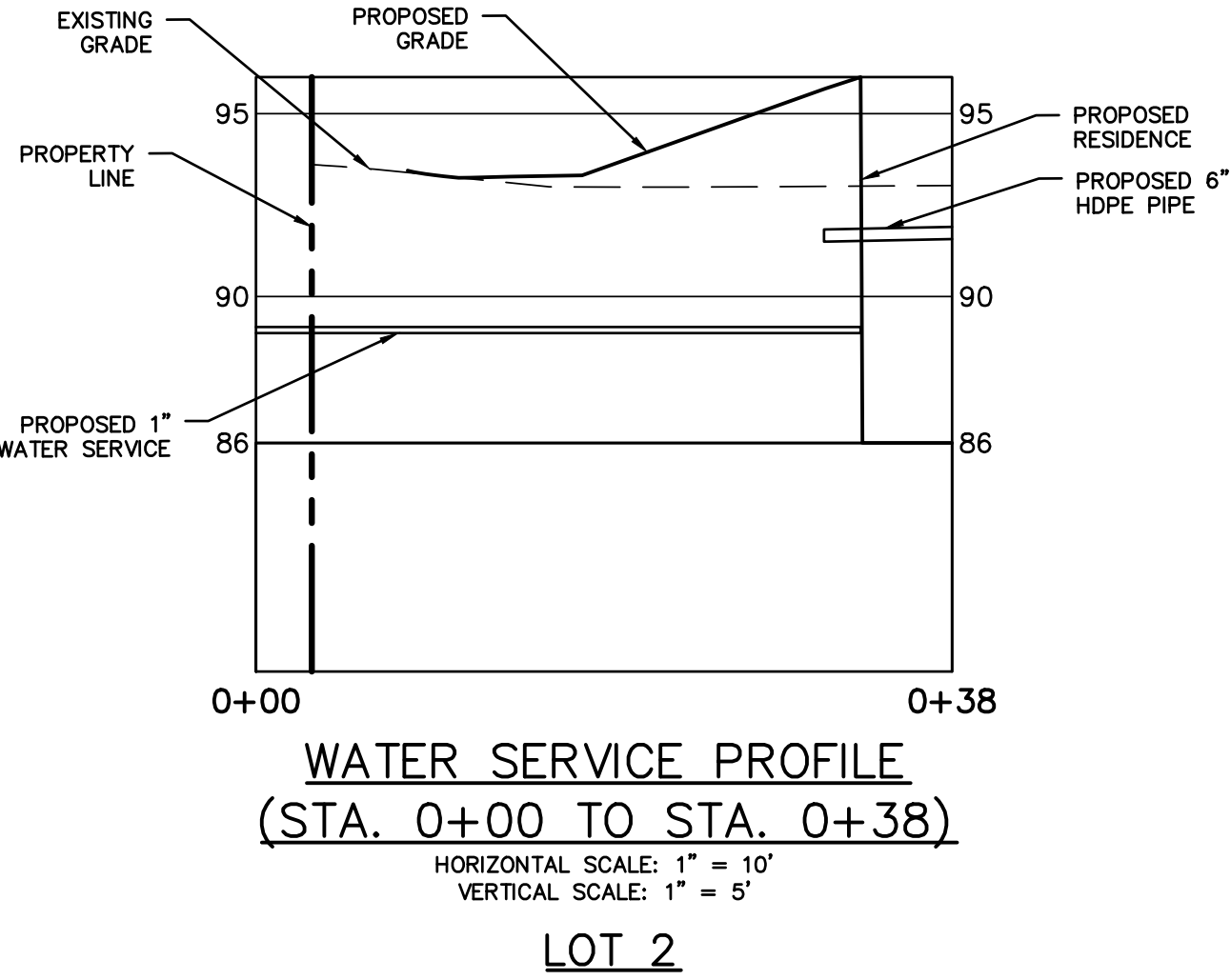
LEGEND

- PROPERTY LINE  
PROPOSED BELGIAN BLOCK CURB  
PROPOSED ASPHALT DRIVEWAY  
PROPOSED WALKWAY/PATIO  
PROPOSED CONTOUR  
PROPOSED SPOT GRADE  
PROPOSED TRENCH DRAIN  
PROPOSED WATER SERVICE  
PROPOSED SANITARY SEWER SERVICE  
EXISTING WATER MAIN  
EXISTING SANITARY SEWER MAIN  
PROPOSED STORM PIPE

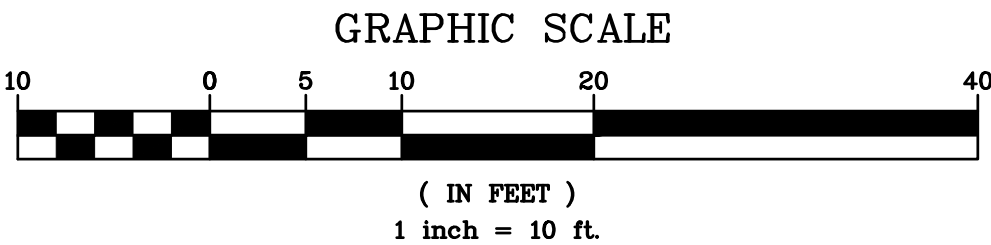


NOTES:

THE INSTALLATION OF BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED IN ACCORDANCE WITH WJWW REGULATIONS. THE TYPE OF BACKFLOW DEVICE(S) WILL BE BASED ON THE POTENTIAL HAZARD.



44 EDGEWOOD AVENUE PRELIMINARY  
SITE PLAN BASED UPON EXISTING  
INFORMATION PROVIDED BY THE MUNSON  
COMPANY, DATED MAY 21, 2019



ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

No.	Description	Revisions	Date	PROJECT:	
				PROPOSED SUBDIVISION 44 EDGEWOOD AVENUE - LOT 2 TOWN OF MAMARONECK WESTCHESTER COUNTY - NEW YORK	
				UTILITY PLAN	
				HEC HUDSON ENGINEERING CONSULTING, P.C. 45 Knollwood Road, Suite 201 Elmsford, New York 10523 T: 914-909-0420 F: 914-560-2086 © 2019	
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE				Date: 01/17/20 Scale: 1" = 10' Designed By: M.F. Checked By: M.S. Sheet No. 4	
				C-4	