Richard Fon
Chairman

Matthew J. Slater
Town Supervisor

TOWN OF YORKTOWN
PLANNING BOARD

Albert. A. Capellini Community and Cultural Center, 1974 Commerce Street, Yorktown Heights, New York 10598, Phone: (914) 962-6565, Fax: (914) 962-3986

PUBLIC MEETING AGENDA
VIDEO CONFERENCE
June 14, 2021
7:00 PM

This meeting will be broadcast Live on the Town's YGTV stations, Optimum channel 20 and FiOS channel 33, and on the Town's website at yorktownny.org/ygtv/live.
To participate in the video conference, please register in advance:
https://us02web.zoom.us/meeting/register/tZYkc-mgqjwjHNK0vAt03oKgc_kciCyNwaPd

1. **Correspondence**
2. **Meeting Minutes – May 24, 2021**

REGULAR SESSION

3. **Stahmer Subdivision**
   Decision SWPPP-Tree Permit
   Location: 59.10-1-10; 600 Birdsall Drive
   Contact: Insite Engineering
   Description: Revised SWPPP-Tree Permit to only include proposed work for subdivision Lot 1.

4. **Wells Fargo Bank**
   Decision Lighting Plan
   Location: 16.09-2-14; 1342 East Main Street, Shrub Oak
   Contact: Natalia Sell, Bureau Veritas
   Description: Proposed lighting upgrades for existing sites.

5. **Nantucket Sound, LLC**
   Decision Site Plan
   Location: 37.18-2-86; 385 Kear Street
   Contact: Site Design Consultants
   Description: Proposed three-story, 8,100 sf building consisting of 2,500 square foot retail use on the first floor and two upper floors of 2,800 square foot, and 3 apartments each on 0.36 acres in the C-2R zone.

6. **McDonalds Restaurant**
   Public Hearing Amended Site Plan
   Location: 36.05-1-10; 3481 Crompond Road
   Contact: Keith Brown, Esq.
   Description: Applicant proposes to amend the recently approved site plan to include a 886 square foot addition for storage space.

WORK SESSION

7. **Town Board Referral**
   Lajqi Stormwater Permit
   Location: 47.16-1-29; 1039 Underhill Avenue
   Contact: Site Design Consultants
   Description: Proposed renovation of existing residence with associated grading, reconstruction of the driveway, and construction of a rain garden for stormwater management.

8. **Nadine's Restaurant**
   Discussion Special Use Permit for Outdoor Seating
   Location: 59.14-1-23 & 24; 715 Saw Mill River Road
   Contact: Cronin Engineering
   Description: Applicant request to make permanent the 70 seat outdoor seating area created in response to the pandemic.

9. **650 Pines Bridge Road**
   Discussion Subdivision
   Location: 70.10-1-29; 650 Pines Bridge Road
   Contact: Alex Cochran
   Description: Proposed 3-lot subdivision on 8.06 acres in the R1-80 zone with one existing residence.

10. **Kitchawan Farm Solar Farm**
    Discussion Site Plan & Special Use Permit
    Location: 70.06-1-2 & 3; 716 Kitchawan Road
    Contact: Ecogy Kitchawan Community Solar Farm, LLC
    Description: Proposed 2 MW ground mounted large-scale solar energy system.

11. **Arcadia Farm Solar Farm**
    Discussion Site Plan & Special Use Permit
    Location: 47.11-1-4; 1300 Baptist Church Road
    Contact: Croton Energy Group
    Description: Proposed 800 kW ground mounted large-scale solar energy system.

12. **Large-Scale Solar Power Generation System at Shrub Oak Plaza**
    Discussion Special Permit
    Location: 16.09-2-13, 1426 East Main Street, Shrub Oak
    Contact: Ecogy New York
    Description: Proposed installation of a 2 MW Large-Scale Roof-mounted and Ground-mounted solar energy system at the existing Shrub Oak Plaza. Ground-mounted solar energy system will be three separate accessory canopy structures over existing parking.

Last Revised – June 11, 2021

Correspondence

1401 Front Street Associates, LLC
BREWSTER BUSINESS PARK
1944 Rt 22, Brewster, NY 10509
845 279-6111 fax 845 179-7410

June 3, 2021

Town of Yorktown
Engineering Department
363 Underhill Ave. P.O. Box 703
Yorktown Heights, NY 10598

Re: Performance Bond $48,847.00
Erosion Control $5,000.00 check #050512 copy attached

Gentlemen:

We are requesting the return of our Performance Bond and a return of the $5,000.00 that was put up for the Erosion Control due to the project not moving forward and the project was abandoned.

Sincerely,

1401 FRONT STREET ASSOCIATES, LLC

Lorraine D Xavier
Representative

Robyn Steinberg

From: John Tegeder
Sent: Saturday, June 12, 2021 10:33 AM
To: Richard Falcone; Joseph Riina [jriina@sitedesignconsultants.com]; Dan Ciarcia; Rob Garrigan; Matthew Slater; Robyn Steinberg
Subject: Re: 3511 & 3515 buckhorn st final CO

Rich,

We inspected both sites on June 12, 2021. We found that the conservation easement established by the subdivision approval has been encroached into and disturbed, cleared, graded, and seeded. The easement area was required to be left in its natural state, and marked with appropriate monuments. The encroachment has occurred for approximately 20-35 feet. The area will need to be restored.
Therefore, we request that the certificate of occupancy for both sites not be issued, until a plan for remediation is offered, accepted and executed.

Please contact us if you have any questions.

John Tegeder
Yorktown Planning Department

Sent from my iPhone

> On Jun 9, 2021, at 10:56 AM, John Tegeder <jtegeder@yorktownny.org> wrote:
>
> Thanks rich I'll let you know by tomorrow
>
> Sent from my iPhone
>
> > On Jun 9, 2021, at 10:48 AM, Richard Falcone <rfalcone@yorktownny.org> wrote:
> >
> > Ok john sounds good please let me know if there are any issues on your end.Thanks
> >
> > Regards,
> > Richard Falcone
> > Assistant Building Inspector
> > Building Department
> > Town of Yorktown
> > 914-962-5722 Ext. 233
> >
> > ---
> >
> > **From:** John Tegeder <jtegeder@yorktownny.org>
> > **Sent:** Wednesday, June 09, 2021 9:27 AM
> > **To:** Richard Falcone <rfalcone@yorktownny.org>; David Paganelli <dpaganelli@yorktownny.org>; Kenny Rundle <krundle@yorktownny.org>; Dan Ciarcia <dciarcia@yorktownny.org>
> > **Subject:** RE: 3511 & 3515 buckhorn st final CO

Rich,

Thanks. We would like to take a look at the subdivision prior to that.

John A. Tegeder, R.A.
Director of Planning
Town of Yorktown, N.Y.
1974 Commerce Street
Yorktown Heights, N.Y. 10598
Tel. (914)962-6565 x 326
Fax (914)962-3986
www.yorktownny.org
jtegeder@yorktownny.org

From: Richard Falcone
Sent: Wednesday, June 09, 2021 9:24 AM
To: John Tegeder <jtegeder@yorktownny.org>; David Paganelli <dpaganelli@yorktownny.org>; Kenny Rundle <krundle@yorktownny.org>; Dan Ciarcia <dciarcia@yorktownny.org>
Subject: 3511 & 3515 buckhorn st final CO

Good day gentle man I am in the process of issuing the CO for 3511 & 3515 Buckhorn street if anyone has any objections to this matter please let me know thanks for your help and have a great day

Regards,
Richard Falcone
Assistant Building Inspector
Building Department
Town of Yorktown
914-962-5722 Ext. 233

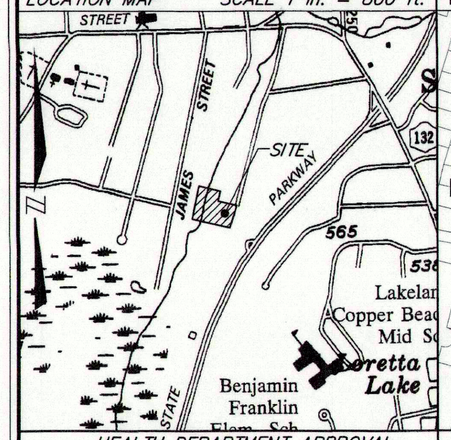

PROPERTY
CORNER


Lot 8

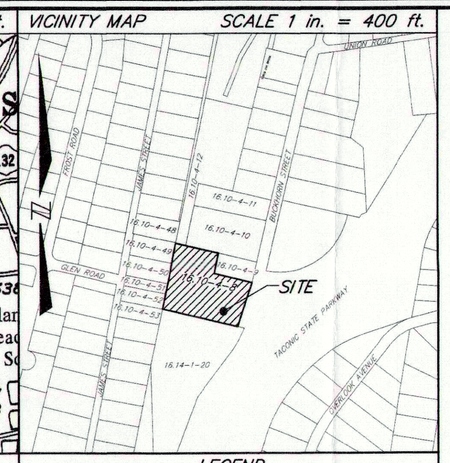

Lot 8.1

GEOGRAPHIC INDEX 41-19-29.6 -73-49-29.5

LOCATION MAP SCALE 1 in. = 800 ft.



VICINITY MAP SCALE 1 in. = 400 ft.



HEALTH DEPARTMENT APPROVAL

EXISTING PUBLIC WATER/PUBLIC SEWER
Westchester County Department of Health
New Rochelle, New York

Approved pursuant to Chapter 873, Article X, Sections 873.951 and 873.1021 of the Westchester County Sanitary Code subject to the provision of public water supply and public sanitary sewer facilities to serve all structures intended for human occupancy constructed herein.

Each purchaser of property shown hereon shall be furnished a true copy of this plat showing this endorsement. Any erasures, changes, additions or alterations of any kind, except the addition of signatures of other approving authority and the date thereof made on this plan after this approval, shall invalidate this approval.

Date: 3/15/2019

Approved by the Assistant Commissioner
of Health on Behalf of the Department of Health

PLANNING BOARD APPROVAL

Approved by Resolution No. 18-15 of the Planning Board of the Town of Yorktown, New York, on the 17TH day of September 2018, subject to all requirements and and conditions of said Resolution. Any change, erasure, modification or revision in this plat, after the above date, shall void this approval.

Signed this 17TH day of October 2019.

Vice Chairman

Secretary

OWNER'S APPROVAL

The undersigned, owner of the property hereon, states that it s/he is familiar with this map, its contents and its legends and hereby consents to the filing of this map.

Signed this 23rd day of JULY, 2019.

NOTES

1. Unauthorized alteration or addition to a document prepared by a licensed Land Surveyor or licensed Professional Engineer is a violation of Section 7209, Sub-Division 2 of the New York State Education Law.
2. The vertical datum hereon is North American Vertical Datum of 1988 (NAVD 1988).

LEGEND

CPP	CORRUGATED PLASTIC PIPE
↳	GUY
☆	LAMP
○	POLE
PVC	POLYVINYL CHLORIDE PIPE
■	MONUMENT SET (5/8" REBAR WITH CAP)
✳	WATER VALVE

WETLANDS LEGEND

Flag — WL — WL — A01 — Flag No.

Wetland boundary flags as set by Steve Marino of Tim Miller Associates on November 18, 2016, and located by Badey & Watson on December 22, 2016.

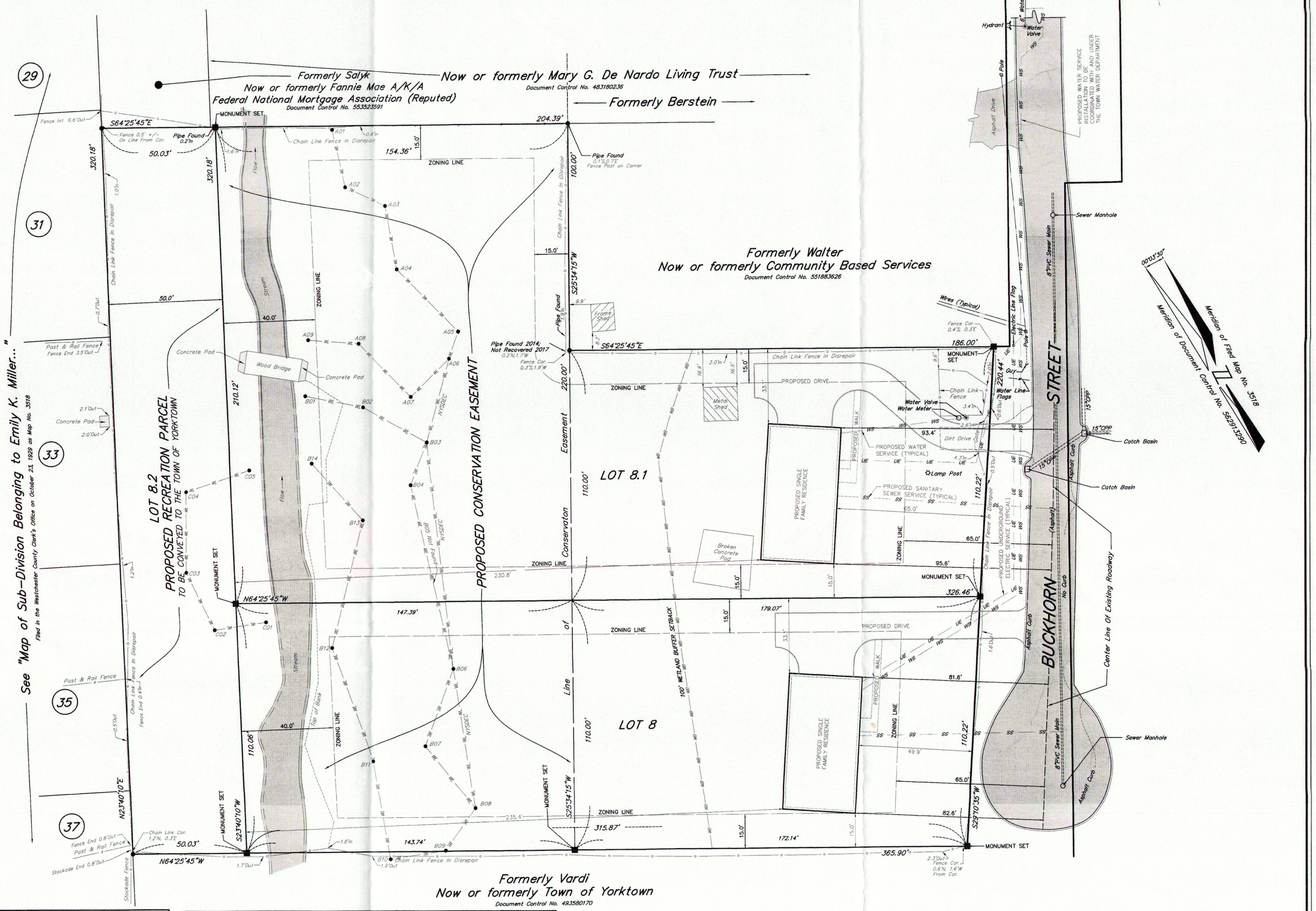
The NYSDEC wetland boundary was delineated by Joshua Fisher on May 18, 2018.

REVISIONS

Date	Revision	Description
See Title	R01	Original Drawing.
04-19-2019	R02	Revised by adjusting proposed water service in accordance with new plans, reformatted tables.
06-20-2019	R03	Revised by adding Conservation Easement Note.

PREPARED AND SURVEYED BY

BADEY & WATSON
Surveying & Engineering, P.C.
3063 Route 9
Cold Spring, NY 10516
www.Badey-Watson.com
845.265.9217
845.265.4428 (Fax)
877.3.141593 (Toll Free)



ZONING REQUIREMENTS – Zone R1-20

REQUIRED		PROPOSED LOT 8	PROPOSED LOT 8.1
Lot Area (square feet)	20,000	35,328	51,763
Floor Area Ratio, Usable (with public sewers) (square feet)(10)	–	–	–
Minimum Site Area (acres)	–	–	–
Lot width at main building line (feet)	100	110	110
Lot depth (feet)	100	321	332
Front Yard (feet)(1)	65	81.6	93.4
Side Yard (feet)			
Main or accessory building, minimum either side	15	15	15
Two combined	40	48.1	48.1
Accessory building if in rear yard, minimum either site(4)	10	–	–
Rear yard (feet)			
Main Building	40	235.4	230.8
Accessory Building(4)	10	–	–
Maximum Height (feet)			
Main Building	35	35	35
Accessory Building or structure	15	–	–
Minimum usable floor area of dwelling unit (square feet)	800	1,920	1,920
Maximum building coverge of actual lot area (all buildings)	20%	4.7%	3.1%
Required off-street parking spaces per dwelling unit	1	2	2
Road Frontage (feet)	100	110.2	110.2

Notes:
1. On streets with less than a 50-foot right-of-way, the front yard setback shall be measured from the center line of the exisitng roadway and 25 feet shall be added to the required front yard setback.
4. The required rear and side yard setbacks for an accessory building in an R1-40, R1-20, R1-10 or R-2 Zone shall be no less than 20 feet where the accessory building is (a) located wholly or partly in a rear yard and (b) has a footprint 50ft or greater than that of the main building.
10. In all multifamily districts, including R-3, R-2A, RSP-1, RSP-2 and R-3A, the floor area ratio, usable and the lot area (square feet) shall be calculated on the basis of net area, which shall be determined by subtracting from the gross area of the site all wetlands and controlled areas as defined in Chapter 178, Freshwater Wetlands.

CONSERVATION EASEMENT NOTE

THE NATURAL RESOURCES OF THE AREA WITHIN THE CONSERVATION EASEMENT SHALL REMAIN UNDISTURBED, EXCEPT AS MAY BE REQUIRED FOR CONSERVATION PURPOSES, UPON THE APPROVAL OF THE PLANNING BOARD, CONTOURS THEREOF SHALL NOT BE ALTERED, NO TOPSOIL OR UNDERLYING SOIL SHALL BE EXCAVATED THEREFROM, NOTHING SHALL BE PERMITTED TO OCCUR ON THIS AREA WHICH WOULD CONTRIBUTE TO THE EROSION OF THE LAND AND NO TREES SHALL BE DESTROYED OR REMOVED AND NO OTHER PLANT OR VEGETATION SHALL BE DESTROYED OR REMOVED. THE OWNERS OF FEE SIMPLE MAINTAIN THE RIGHT TO EXCLUSIVE USE OF THE LAND AND ARE PERMITTED TO REMOVE DEAD VEGETATION AND TREES AND REPLACE SAME WITH NEW PLANTINGS.

AREA TABLE

LOT	LOT AREA	AREA OF LOT IN CONSERVATION EASEMENT
LOT 8	35,328 sq. ft. 0.811 acres	16,012 sq. ft. 0.368 acres
LOT 8.1	51,763 sq. ft. 1.188 acres	31,684 sq. ft. 0.727 acres
LOT 8.2 RECREATION PARCEL	16,009 sq. ft. 0.368 acres	00,000 sq. ft. 0.000 acres
TOTAL	103,100 sq. ft. 2.367 acres	47,696 sq. ft. 1.095 acres

SURVEYOR	SITE ENGINEERING BY	OWNER & APPLICANT	PROPERTY DATA
License No. 49789	SITE DESIGN CONSULTANTS Civil Engineers-Land Planners 251-F Underhill Avenue Yorktown Heights, NY 10598 914-962-4488 License No. 644.31	Prestige Renovations and Remodeling 12 Maurice Avenue Ossining, NY, 10562	Tax Map Designation: 16.10-4-8 Zoning District: R1-20, 1/2 Acre One-Family Residential Total Area: 103,100 sq. ft. 2.367 acres

The property hereon is located on
SHEET 295
BLOCK 11440
of the Westchester County Block Index System

Filed Map No. 29351
Filed November 22, 2019

SUBDIVISION PLAT
PREPARED FOR
PRESTIGE RENOVATIONS AND REMODELING
SITUATE IN THE
TOWN OF YORKTOWN
WESTCHESTER COUNTY
NEW YORK

SCALE 1 in. = 20 ft. JANUARY 17, 2019

We hereby certify that this map is based on a survey completed by us on November 30, 2017 that this map was completed on January 17, 2019 and that the survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc.
For latest issue date see revision box.

BADEY & WATSON
SURVEYING & ENGINEERING, P.C.
by
NEW YORK STATE LICENSED LAND SURVEYOR
LICENSE No. 49789

FILE No. 14-199

NOTE:

1. *THIS IS NOT A SURVEY.* ALL SURVEY INFORMATION SHOWN ON THIS PLAN HAS BEEN TAKEN FROM SURVEY MAP PREPARED BY BADEY & WATSON ENGINEERING & SURVEYING, DATED 11/30/17. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

NOTE: UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

F:\2017\17-64 ANTHONY VERRINO - PRECISION\ENGINEERING\CAD\C3D-17-64 ANTHONY VERRINO - PRECISION\17-64 SITE PLAN 4-05-19.DWG 1/16/2017 3:19:52 PM

APPROVED
Resolution Number 18.15
Date Sep. 17, 2018
Reapproved # 19-23, Aug 12, 2019

SCALE: 1"=20'-0"

SAFE DIG
Before You Dig, Drill or Blast!
CALL US TOLL FREE 811 or 1-800-962-7962
NY Industrial Code Rule 753 requires no less than two working days notice, but not more than ten days notice.
www.digsafelynewyork.com

PROJECT # 17-64

Site Design Consultants
Civil Engineers • Land Planners
251-F Underhill Avenue, Yorktown Heights, NY 10598
(914) 962-4488 - Fax: (914) 962-7386
www.sitedesignconsultants.com

Engineer:
Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
1.	3/14/18	Plan Update
2.	4/12/18	Rec. Area Update
3.	5/29/18	ABACA
4.	4/05/19	HD Comments

SCALE: 1"=20'
DRAWN BY: MD
DATE: 12-6-17

SUBDIVISION PLAN

PROPOSED SUBDIVISION
PREPARED FOR
PRESTIGE RENOVATIONS AND REMODELING
3511 BUCKHORN STREET
Town of Yorktown — Westchester County, NY

Sheet 2 of 7

LEGEND

- 222 — EXISTING GRADING
- ×222.8 — EXISTING SPOT GRADE
- 200 — PROPOSED GRADING
- PROPERTY LINE / RIGHT OF WAY
- PROPOSED DRIVEWAY CENTERLINE
- PROPOSED CURB
- EDGE OF WETLAND
- 100' WETLAND BUFFER
- EXISTING STONE WALL
- W — EXISTING WATER LINE
- EXISTING FIRE HYDRANT
- S — EXISTING SANITARY LINE
- EXISTING DRAINAGE INLET
- WS — PROPOSED WATER SERVICE CONNECTION
- SS — PROPOSED SEWER SERVICE CONNECTION
- FD — PROPOSED FOOTING DRAIN
- RD — PROPOSED ROOF DRAIN
- UE — PROPOSED UNDERGROUND ELECTRIC SERVICE
- SS SS — PROPOSED SOIL STOCKPILES
- PROPOSED SILT FENCE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- EXISTING TREE TO BE PROTECTED
- EXISTING TREE TO BE REMOVED

0 10 20 40

SCALE: 1"=20'-0"

N

SAFE DIG
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APPROVED
Resolution Number 18.15
Date Sep. 17, 2018

Reapproved # 19-23, Aug 12, 2019

NOTE:
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Site Design Consultants
Civil Engineers • Land Planners
251-F Underhill Avenue, Yorktown Heights, NY 10598
(914) 962-4488 - Fax: (914) 962-7386
www.sitedesignconsultants.com

PROJECT # 17-64

Engineer: STATE OF NEW YORK — JOSEPH CARLO RINA — LICENSED PROFESSIONAL ENGINEER
Joseph C. Rina, P.E.
NYS Lic. No. 64431

Revisions:		
No.	Date	Comments:
1.	3/1/18	Plan Update
2.	4/12/18	Plan Update
3.	5/29/18	ABACA
4.	4/05/19	HD Comments

SCALE: 1"=20'
DRAWN BY: MD
DATE: 12-6-17

EROSION & SEDIMENT CONTROL PLAN

PROPOSED SUBDIVISION
PREPARED FOR
PRESTIGE RENOVATIONS AND REMODELING
3511 BUCKHORN STREET
Town of Yorktown — Westchester County, NY

Sheet 4 of 7

Diane Dreier Co-Chair
Phyllis Bock Co-Chair

Matthew Slater
Town Supervisor

TOWN OF YORKTOWN
CONSERVATION BOARD

Town of Yorktown Town Hall, 363 Underhill Avenue, Yorktown Heights, New York 10598, Phone (914) 962-5722

MEMORANDUM

To: **Planning Board**

From: **Conservation Board**

Date: **May 24, 2021**

Re: **Par 3 Golf Course: Route 6**

The Conservation Board at its May 19, 2021 meeting reviewed the landscape plans to restore the former Shallow Creek Golf Course, now called the Par 3 Golf Course, with Jim Martorano and Sean Murphy. On Saturday May 22, 2021, members of the Conservation Board (Bock/Francois/Pruyne) attended a joint site walk with members of the Yorktown Planning Board, Supervisor Slater, Planning Department representatives and site managers. The Conservation Board had the opportunity to walk the perimeter of the nine-hole executive course and identified the following areas of concern:

The site of the former Shallow Creek Golf Course lies within a network of meandering streams and wetlands that connect Osceola Lake to the east to the Shrub Oak Brook, which is the main stream that ambles through the property before exiting beside the Taconic Parkway into Shrub Oak.

Site managers indicated that the stream is being choked out by existing vegetation and algae, and are very concerned that the "stagnant creek breeds mosquitos that will impact golfers enjoyment of the course." We did not observe algae nor phragmites, a widespread invasive wetland plant; instead, the stream contains large stands of cattails, pickerelweed and floating masses of duckweed, all native plants indicating a healthy wetland. Although the stream is currently at a low flow due to the Town's upstream bridge replacement work on Hill Blvd., the vegetation operates as a natural filtration system, and slows the water in times of heavy rains, preventing the stream from eroding the banks. The edges of the streambed have virtually no vegetation and are spongy. Recommendations include enhancing vegetation along the apron of the streambed with native shrubs and perennials.

A large (apparently natural) cistern (old well) is present on the site, adjacent to the contemplated ninth tee box. We noted the cistern populated by frogs and containing duckweed.

It appears that there has recently been grading and seeding done to an area adjacent to the widest part of the stream in the east corner of the property. Cattails re-emerging through this area indicate that this area was marshy. This appears to be an instance of ongoing work done in regulated wetlands without a permit. We recommend the Planning Board address this.

Site managers indicated that the plan is to divert water from the existing stream for course irrigation. This is a serious concern and we recommend against this.

Site managers indicated that they will filter existing soil and return it to the site and no outside fill will be used. Managers also stated that no pesticides would be used per Town Code. These actions are supported.

Any cartpaths or footpaths should be made of permeable material (i.e. gravel) rather than blacktop, if contemplated.

The Site should include signage not to disturb wildlife or litter in streambed. The area should be enhanced with bluebird/woodduck/batboxes to increase natural predator population, as mosquitoes can be anticipated as a concern.

On review of the tree mitigation plan, the Tree Commission noted serious concerns with the amount and type of mitigation planned. The Conservation Board agrees that a better plan should be presented, and plants that are not native such as forsythia and Norway spruce should be eliminated. On the site visit, John Tegeder indicated that the forested area to the south of the course, also Town property, could be cleared of invasive species and replanted with native understory trees and shrubs. The outer perimeter of the site closest to Route 6 and the TSP exit presents another opportunity for mitigation and should be cleared of invasive plants and enhanced with native trees.

The Board would like to see an amended tree mitigation and landscape plan, and wetland mitigation plan for any work proposed along the stream as well as for work already done on the site. In addition, the site developers should employ current "green" greens practices utilized by many golf courses. The NY Golf Course Foundation and Cornell University Best Management Practices for NYS Golf Courses link below.

https://www.gcsaa.org/docs/default-source/environment/new-york-bmps-2nd-edition.pdf?sfvrsn=65faf83e_2

Respectfully submitted:

Phyllis Bock

For the Conservation Board

CC: Town Board
Planning Board
Supervisors Office
Engineering Dept.
Applicant

NEW YORK STATE OF OPPORTUNITY.
Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

May 27, 2021

Alexandra Ryan
General Engineer/Project Manager
USACE Operations
Regulatory 16-406
26 Federal Plaza
New York, NY 10278

Re: USACE
Soundview -Underhill Farms Development
Town of Yorktown, Westchester County, NY
21PR02382

Dear Alexandra Ryan:

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

Flora Villa, also known as the Underhill Estate and Soundview Preparatory School is eligible for listing in the State and National Registers of Historic Places. First developed in 1828, the estate appears to be eligible under Criterion A and C. Criteria A for Abraham and Edward B. Underhill's contribution to the settlement and economic development of Yorktown and C, as an intact example of a Federal style building adapted to the Italianate style reflecting the evolution of popular architectural tastes throughout the mid-to-late 19th century. The mansion, outbuildings, farmland, parklike lawns and stone walls all contribute to the property and retain integrity.

Our office has reviewed the proposed development of the property. With the intensity of construction proposed the setting and feeling of the property would be significantly altered. We further note that the majority of the contributing outbuildings on site are proposed for removal. Under the provisions of Section 106, demolition of historic resources is deemed an Adverse Effect.

This finding triggers an exploration of prudent and feasible alternatives that might avoid or reduce the project effects. As a matter of policy and practice, this exploration must occur before mitigation measures can be developed and before demolition can occur. If no prudent and feasible alternatives are identified in the analysis, we would begin development of a formal agreement document, which would document the reasons for the adverse finding and identify proper mitigation measures to be incorporated into the work.

During the Section 106 process, consulting parties should be invited to participate in the process. Please note that the Yorktown Heritage Preservation Commission and the Underhill Society of America, Inc., may be interested in being included as consulting parties as required under 36 CFR Part 800.2. If you have any questions, I am best reached by email.

Sincerely,

Derek Rohde
Historic Site Restoration Coordinator
e-mail: derek.rohde@parks.ny.gov

via e-mail only

RE/MAX®

Town & Country

Dear Planning Board & To Whom It May Concern,

My Name is Howard Payson. I am the Broker-Owner of RE/MAX Town & Country. We are excited to be opening a new office in Yorktown. With this new venture, we see a great opportunity to continue the efforts of enhancing our community.

We understand 2013 crompond, has been considered an eye sore by the community and while we don't own the building. We take pride in everything we do. Hence, we are proposing a beautiful, elegant mural showcasing the great features of Yorktown. So that our community can be proud of its heritage. It is with a humble request that we are give permission to trim the hedges that cover the building. So that visitors and community members can see what culture we have here. As I have been told the hedge was designed to hide the building because of its current state. With the update, in our opinion the mural would negate the original purpose.

RE/MAX®

Town & Country

Please feel free to contact me with any questions, suggestions, or recommendations.

Thank You for your consideration

Howard Payson

Broker-Owner

Robyn Steinberg

From: Robyn Steinberg
Sent: Monday, June 14, 2021 10:40 AM
To: Rich Fon; William LaScala; Aaron Bock; Robert Garrigan; Roxanne Visconti; JWGlatthaar (JWGlatthaar@bpslaw.com); Dan Ciarcia; John Tegeder; Nancy Calicchia; Matthew Slater; Ed lachterman
Subject: FW: Latest version from Chris
Attachments: cablevision2.jpg

Below is the latest version of the mural proposed on the old cablevision building along with the attached photo of the existing conditions on the site. Mr. Payson is requesting to add the mural on the side of the building and lower the row of hedges along the road so it can be seen. Information on this request was included in the correspondence section of the book. You can briefly discuss and refer to ABACA for their next meeting on June 22.

****

Robyn A. Steinberg, AICP, CPESC
Town of Yorktown Planning Department
Albert A. Capellini Community & Cultural Center
1974 Commerce Street, Room 222
Yorktown Heights, NY 10598
Phone | 914-962-6565
Email | rsteinberg@yorktownny.org
Web | http://www.yorktownny.org/planning

From: Matthew Slater
Sent: Monday, June 14, 2021 10:28 AM
To: Robyn Steinberg <rsteinberg@yorktownny.org>
Subject: FW: Latest version from Chris

See below.

Matt Slater
Yorktown Town Supervisor
914-962-5722 X200
mslater@yorktownny.org

From: Howard Payson <hjpayson@gmail.com>
Sent: Monday, June 14, 2021 10:05 AM
To: Matthew Slater <mslater@yorktownny.org>
Subject: Re: Latest version from Chris

Matt,
I know things are crazy.According to the planning receptionist I am not on the agenda for the planning meeting tonite. If there is anything, you or I can do to expedite the process,please let me know.I would ultimately have this completed by September for a grand opening coordination.

On Sun, Jun 13, 2021 at 1:48 PM Matthew Slater <mslater@yorktownny.org> wrote:

Howard,

Looks great!

Matt

On Jun 13, 2021 8:00 AM, Howard Payson <hjpayson@gmail.com> wrote:


WELCOME TO YORKTOWN
RE/MAX


WELCOME TO YORKTOWN
Welcome To
Franklin D. Roosevelt
State Park
YORKTOWN
RE/MAX

John A. Tegeder, R.A.

Director of Planning

Town of Yorktown, N.Y.

1974 Commerce Street

Yorktown Heights, N.Y. 10598

Tel. (914)962-6565 x 326

Fax (914)962-3986

www.yorktownny.org

jtegeder@yorktownny.org

From: Howard Payson [mailto:hjpayson@gmail.com]
Sent: Friday, June 04, 2021 10:36 AM
To: Matthew Slater <mslater@yorktownny.org>; John Tegeder <jtegeder@yorktownny.org>
Cc: Diane Butterman <dbuttermax@gmail.com>
Subject: Re:

John,

Please confirm receipt. Thank You

On Thu, Jun 3, 2021 at 9:35 PM Howard Payson <hjpayson@gmail.com> wrote:

> John & Matt,
>
> It was a pleasure meeting you at the building today. Please let me know your thoughts. I have added some other images that we can add too.
>
> I have attached pictures of initial design, envison on the wall, pics of the area, what I believe is the site plan? Which application do I need to submit?
>
> Size is approximate 10 Ft High by 50/60 ft Wide.
>
> Thank You I appreciate all your help

--

Sincerely,

Howard Payson
G.R.I (Graduate Realtor Institute), E-Pro (Electronic Professional)
Licensed Real Estate Broker/Owner

"For service before, during & after the sale in NY & CT"

584 Route 9, Ste 106

Fishkill,NY 12524

Cell: (203) 240-7233

Direct: (845) 232-0844

Direct (914) 340-4345

Email: hjpayson@gmail.com

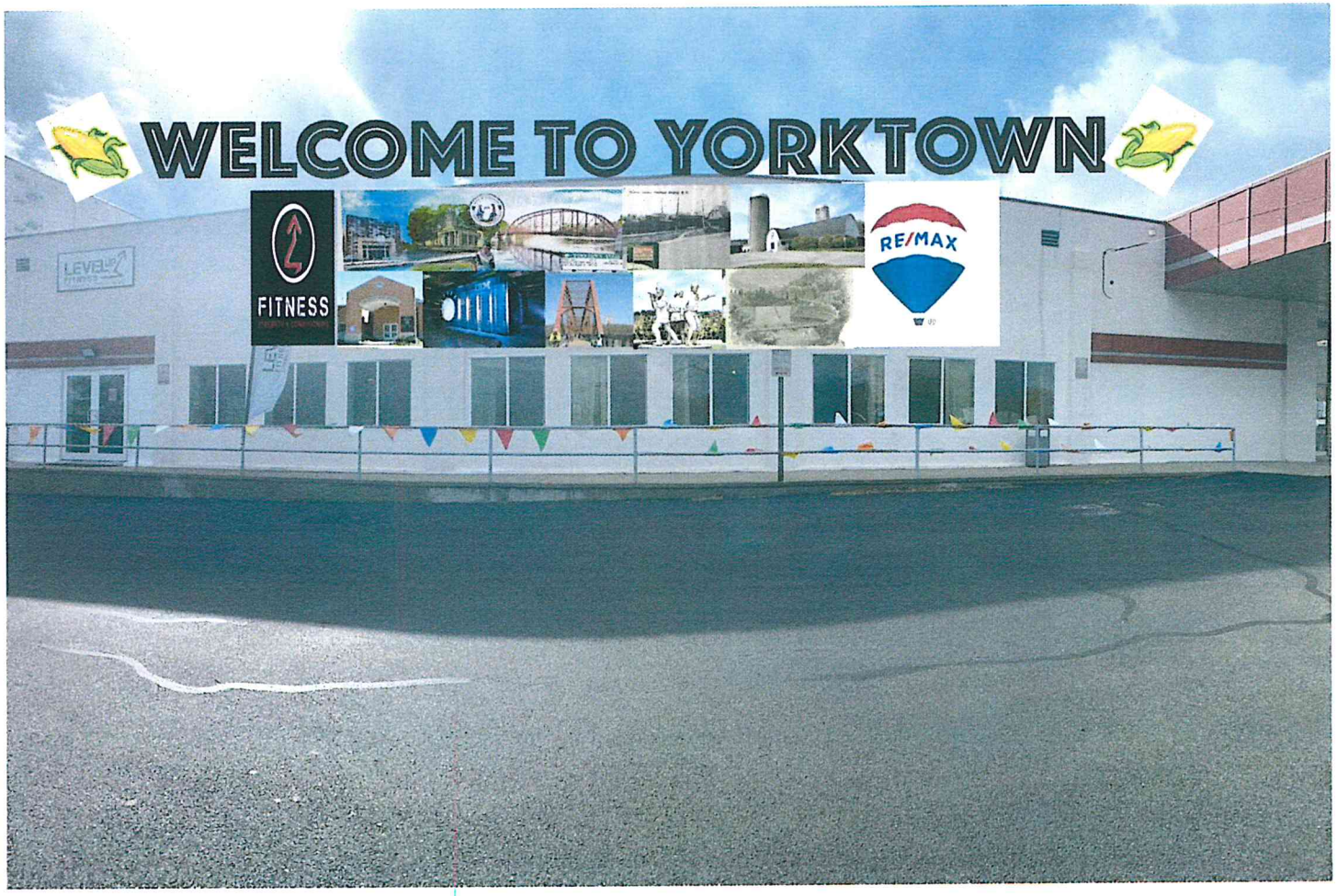
View homes on the Market via my website

Check me out on Facebook

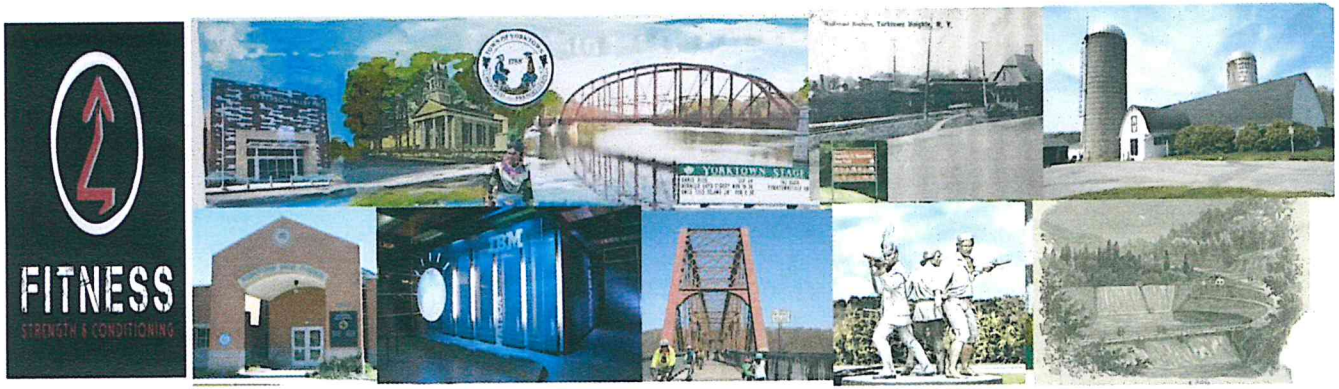
Video Tour of How I Market Homes

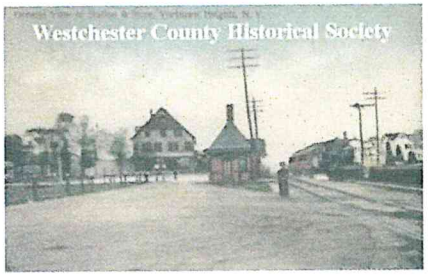
Sent from my iphone

Acme Realty – Proposed Mural
June 4, 2021



WELCOME TO YORKTOWN





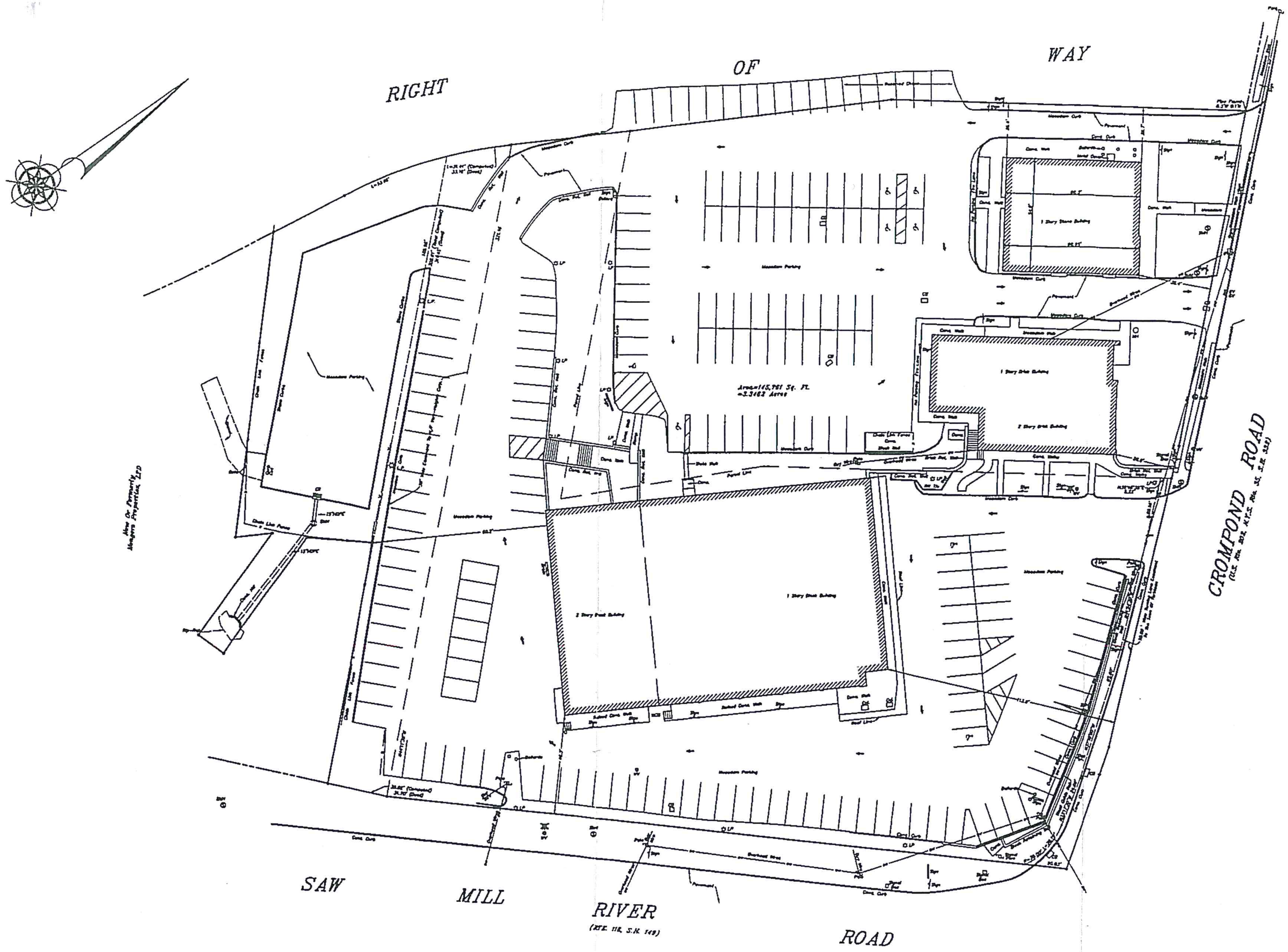

HEY-8572


2


2013


201


FOR LEASE
2013



MAP OF PROPERTY PREPARED
For
ACME REALTY

Situate in the
TOWN OF YORKTOWN
COUNTY OF WESTCHESTER, NY
Scale: 1"=20' April 21, 2016

PREPARED BY:

DONALD D. COLEMAN, L.S., N.Y.S. LIC. NO. 49922

DONNELLY LAND
SURVEYING, P.C.
1979 COMMERCE STREET
YORKTOWN HEIGHTS, NY 10598
PHONE: (914) 962-2215
FAX: (914) 962-2209

Christopher Taormina, RA
Chairman

Matthew Slater
Town Supervisor

TOWN OF YORKTOWN

ADVISORY BOARD ON ARCHITECTURE & COMMUNITY APPEARANCE (*ABACA*)

Albert A. Capellini Community and Cultural Center, 1974 Commerce Street, Yorktown Heights, New York 10598, Phone (914) 962-6565

To: Planning Department
From: ABACA
Date: June10, 2021
Subject: **Extra Space Storage at Staples Plaza / SBL: 36.06-2-76; 3333 Crompond Road**

- Review of proposed alterations to tenant space 2, formerly occupied by A.C. Moore, to expand the self-storage use into approximately 16,000SF of this space with a rear entrance.
- Review of faux storage doors installed below the existing Extra Space Storage sign without approval.

Documents Reviewed:

Title:	Date:	Produced By:
Staples Plaza – Tenant Space 2 - Proposed Expansion - Plan Set, Sheets 1-16 Photos	4-9-2021	Studio Architecture

The Advisory Board on Architecture and Community Appearance reviewed the above referenced subject via video conference at the Board meeting held on Tuesday, June 8, 2021. Chris Raffaelli of Studio Architecture was present.

The ABACA has the following comments:

1. **Proposed Extra Space storage expansion** – The ABACA has no objections to the proposal as presented and discussed.
2. **Installation of faux storage doors on the front façade of the building below the existing Extra Space Storage sign without approval** ***(photo attached)*** – Mr. Raffaelli informed the Board that the applicant is no longer seeking approval for the installation of this display. The display will be removed within the next month and revert back to what it was previously.

Christopher Taormina
Christopher Taormina, RA
Chairman

/nc
cc: Applicant

Christopher Taormina, RA
Chairman

Matthew Slater
Town Supervisor

TOWN OF YORKTOWN

ADVISORY BOARD ON ARCHITECTURE & COMMUNITY APPEARANCE (*ABACA*)

Albert A. Capellini Community and Cultural Center, 1974 Commerce Street, Yorktown Heights, New York 10598, Phone (914) 962-6565

EXISTING FAUX STORAGE DOOR DISPLAY TO BE REMOVED BY APPLICANT

NYC Environmental Protection

Vincent Sapienza P.E.
Commissioner

Paul V. Rush, P.E.
Deputy Commissioner
Bureau of Water Supply
prush@dep.nyc.gov

465 Columbus Avenue
Valhalla, NY 10595

T: (845) 340-7800
F: (845) 334-7175

May 26, 2021

Robyn A. Steinberg, Town Planner
Town of Yorktown
363 Underhill Avenue, P.O. Box 703
Yorktown Heights, NY 10598

Re: **Notice of Intent to be Lead Agency**
Dell Avenue Solar Farm
Dell Avenue
Town of Yorktown; Westchester County, NY
Tax Map #: 70.15-1-2
DEP Log #: 2010-CNC-0479-SQ.2

Dear Ms.Steinberg and Members of the Planning Board:

The New York City Department of Environmental Protection (DEP) has reviewed the Town of Yorktown Planning Board's (Board) Notice of Intent to act as Lead Agency and short Environmental Assessment Form (EAF) for the above-referenced project. DEP does not object to the Board acting as Lead Agency for the Coordinated Review of the proposed action pursuant to the New York State Environmental Quality Review Act (SEQRA).

The proposed site is located in the New Croton Reservoir drainage basin of New York City's Water Supply. New Croton Reservoir is phosphorous restricted; as such, water quality impacts to the receiving reservoir from pollutant-laden runoff must be avoided or mitigated.

The proposed action involves the construction and installation of a new 3,652 kWac fixed-tilt ground-mounted solar array and ~15MW (4 hour) energy storage system.

DEP's status as an involved agency stems from its review and approval authority for a Stormwater Pollution Prevention Plan (SWPPP) pursuant to Section 18-39 of the *Rules and Regulations for the Protection from Contamination, Degradation, and Pollution of the New York City Water Supply and Its Sources* (Watershed Regulations).

Based upon the review of the submitted documents, DEP respectfully submits the following comments for the Board's consideration:

1. According to the EAF, approximately 16.23 acres of disturbance is proposed. As such, it appears this activity would be considered a Type I action rather than an unlisted; and, a long form EAF should be required.

2. There is no detail provided on how the solar panels will be mounted although the examples show flat or tilted panels. The submission mentions storing lithium batteries onsite, however additional information of how and what type of batteries will be stored should be provided. Batteries comprised of harmful chemical substances to be located near wetlands and stream buffers is prohibited under Section 18-41 of the Watershed Regulations. The applicant should provide detailed information about the battery use and storage to determine the extent of the project's permit requirements.

   As stated, the EAF indicates over 16 acres of physical disturbance for the proposed action. Per Section 18-39(b) (3) (ii) of the Watershed Regulations, it appears that the surface hydrology of the land may change by more than 5% from pre- to post-development conditions and therefore a full SWPPP with post construction stormwater controls may be required. The site plan does not depict any information on where and what type of stormwater practices would be proposed to provide adequate mitigation and how runoff would be treated. It is advised that the applicant contact DEP representative, Mariyam Zachariah @ (914)749-5357 to schedule a virtual pre-application meeting to discuss details of the project and to confirm any DEP permit requirements and prohibitions.

3. Since local wetlands are present on site, watercourses as defined by DEP may also be present on site. The applicant's representative is encouraged to schedule a site walk with DEP at their earliest convenience to locate the presence and status of any waterbodies or watercourses on site. The applicant's representative may Mariyam Zachariah at mzachariah@dep.nyc.gov to make arrangements.

4. It appears that some of the solar panels proposed may be within the 100 foot limiting distance of the watercourse situated near the intersection of Dell Avenue and Pines Bridge Road. The construction of new impervious surfaces is generally prohibited within 100 feet of a watercourse. Furthermore, land disturbance within stream buffer areas must be avoided and or mitigated.

Thank you for the opportunity to provide comments. You may reach the undersigned at cgarcia@dep.nyc.gov or (914) 749-5302 with any questions or if you care to discuss the matter further.

Sincerely,

Cynthia Garcia

Cynthia Garcia, Supervisor
SEQRA Coordination Section

X: J. Petronella, NYSDEC Region 3
N. Drummond, WCPD

Draft Minutes

Stahmer Lot 1

TOWN OF YORKTOWN
PLANNING BOARD

RESOLUTION APPROVING
STORMWATER POLLUTION PREVENTION AND TREE PERMIT
#FSWPPP-T-075-16 FOR STAHMER SUBDIVISION LOT 1

RESOLUTION NUMBER: # DATE:

Upon motion by _____, seconded by _____, and unanimously voted in favor by Fon, LaScala, Bock, Garrigan, and Visconti, the following resolution was adopted:

WHEREAS a subdivision plat and improvement plan for the Stahmer Subdivision was approved by Resolution #18-01 dated February 26, 2018 and amended as a result of NYC DEP approval by Resolution #19-19 dated July 15, 2019; and

WHEREAS Resolution #18-01 approved a Stormwater Pollution Prevention Plan Permit #FSWPPP-T-075-16 for a three-lot subdivision including the subject parcel; and

WHEREAS Lots 2 and 3 of the subdivision have been purchased by a different property owner and are subject to separate amended stormwater and tree permits; and

WHEREAS Andrew Fiore (the "Applicant"), has applied to amend Permit #FSWPPP-T-075-16 to reflect only the proposed development on subdivision Lot 1, also known as Section 59.10, Block 1, Lot 10 on the Town of Yorktown Tax Map, and as shown on the following maps and documents submitted in support of this application:

1. Improvement Plans, 4 sheets, titled, "Fiore Residence," prepared by Insite Engineering, Surveying, and Landscape Architecture, P.C., and dated April 28, 2021; and

2. Addendum to the Stormwater Pollution Prevention Plan for Lot 1 of the Stahmer Subdivision (Fiore Residence), prepared by Insite Engineering, Surveying, and Landscape Architecture, P.C., and dated April 28, 2021; and

WHEREAS no significant changes have been made from the approved improvement plan for Lot 1; and

WHEREAS after full review of the SWPPP and consideration of the staff comments regarding the Stormwater Pollution and Prevention Plan, the Board found the plan to be acceptable; and

NOW THEREFORE BE IT RESOLVED that stormwater permit **#FSWPPP-T-075-16** is hereby approved subject to the conditions listed therein.

BE IT FURTHER RESOLVED Permit **#FSWPP-T-075-16** shall not be valid until it has been signed by the Chairman of this Board.

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

April 29, 2021

Town of Yorktown Planning Board
Planning Department
Yorktown Community & Cultural Center
1974 Commerce Street, Room 222
Yorktown Heights, N.Y. 10598

RE: Fiore Residence (Lot 10 of Stahmer Subdivision)
600 Birdsall Drive, Town of Yorktown
Tax Map #59.10-1-10

Dear Chairman Fon and Members of the Board:

Enclosed please find the following information:

- Site Plans (4 Sheets) dated April 28, 2021 (3 copies).
- Addendum to the Stormwater Pollution Prevention Plan (SWPPP) dated April 28, 2021 (2 copies).
- Revised MS4 Stormwater Management Permit Application dated April 29,2021 (1 copy)

The subject project consists of the construction a single-family residence including a driveway, patio and associated appurtenances. This property is Lot 10 of the Stahmer subdivision filed in December of 2019. At the time of the subdivision approval a single stormwater permit was issued for all three lots of the subdivision. As individual lots are sold it is necessary for each lot to obtain its own permit.

The current owner of Lot 10, Mr. Andrew Fiore, is proposing a revised house footprint, revised landscaping and slightly different driveway layout. As such, enclosed is an Addendum to the previously approved Stormwater Pollution Prevention Plan (SWPPP) and revised MS4 Stormwater Permit Application. The original permit number was #FSWPPP-T-075-16.

We respectfully request this matter to be placed on the May 24 Work Session agenda for issuance of the updated stormwater permit for the individual lot.

Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

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

By: R Will
Richard D. Williams, P.E.
Principal Engineer

RDW/jwm

Enclosure(s)

cc: Andrew Fiore (email only)

Insite File No. 20213.100

3 Garrett Place, Carmel, New York 10512 (845) 225-9690 Fax (845) 225-9717
www.insite-eng.com

Z:\E\20213100 Fiore-600 Birdsall Drive\Correspondence\2021\042821pb

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

Addendum

to the

STORMWATER POLLUTION PREVENTION PLAN

For

Lot 1 of the Stahmer Subdivision (Fiore Residence)

600 Birdsall Drive

Town of Yorktown, New York

April 28, 2021

Owner / Applicant Information:
Andrew Fiore
37 South 8th Street, Unit #306
Brooklyn, New York 11249

Note: This report in conjunction with the project plans make up the complete Stormwater Pollution Prevention Plan.

Prepared by:
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

1.0 INTRODUCTION

The following Addendum is for the previously approved Stormwater Pollution Prevention Plan (SWPPP) prepared for the Stahmer Subdivision. Lot 10 of the subdivsion has been purchased and the new owner is proposing to construct a single-family residence including a driveway, patio and associated appurtenances. The subject property is identified as Section 59.10-1-10 in the Town of Yorktown.

The project is proposing modifications to the driveway and house footprint. Approximately 0.24 acres of impervious surfaces are proposed (0.23 acres were previously proposed on this lot.) Also, the project proposes an alternate tank manufacturer for the proposed Stormwater Cistern than what was previously approved. The alternate Stormwater Cistern has been designed to capture and treat the runoff from the proposed impervious surfaces and does not change the previously approved design assumptions.

Design Lines (Design Lines 1 & 3) and Design Point (Design Point 2) utilized in our previously analysis have not changed. The portion of the subject property that drains west are tributary to Design Line 1 & 3. These areas are consistent with what was shown on the approved SWPPP for the subdivision and are not the subject of this addendum. This report analyzes the subcatchments tributary to Design Point 2 as these are revised based on the modified house footprint, driveway and cistern tank manufacturer.

The following report has been prepared to address the proposed modifications to the approved Stormwater Pollution Prevention Plan (SWPPP). As shown in the following sections of this report, the stormwater quality and quantity for the proposed development have been treated in accordance with the requirements of the NYSDEC General Permit, GP-0-20-001, the requirements of Town of Yorktown, the New York City Department of Environmental Protection (NYCDEP) and the previously approval.

2.0 STORMWATER MANAGEMENT

The following summary demonstrates that the revised house footprint and driveway and alternate Stormwater Cistern still provide the required stormwater quality and quantity treatment for the proposed development:

- The following table summarizes the required and provided WQ_v /RR_v for the approved and amended SWPPP as calculated in Attachment B.

Table 1 – WQv/RR_v Summary Table

SMP ID	Initial WQ_v	Volume provided below overflow pipe[1]
2.1P (Previously Approved)	0.049 a.f.	0.058 a.f.
2.1P (Amended)	0.051 a.f.	0.059 a.f.

[1] The volume below the overflow pipe can be verified in the HydroCAD output contained in Attachment B.

- The proposed Cistern is sized to capture and store the entire WQv generated from the 1-year storm. Therefore, the NYSDEC Stream Channel Protection Volume (CPv) requirement does not apply, and the criterion is still met in this SWPPP Amendment.

- The Stormwater Cistern Sizing Calculations shown on Attachment E demonstrate that the proposed Cistern has been sized in general accordance with the NYSDEC Design Manual.

- The peak flows for Design Point 2 were recalculated and are summarized for the approved and amended SWPPP in the table below.

Table 2 Pre and Post-Development Peak Flows at Design Point/Line

24-HOUR DESIGN STORM PEAK FLOWS (c.f.s.)						
	10-YEAR (Overbank Flood Control)			100-YEAR (Extreme Flood Control)		
	Pre	Post (Previously Approved)	Post (Amended)	Pre	Post (Previously Approved)	Post (Amended)
Design Point 2	5.08	4.90	4.91	11.29	10.45	11.19

As shown in the above table, the site meets the requirements for Q_p and Q_f for the Amended Site Plan. For additional information see attached HydroCAD output in Attachment A & B.

- Per the Rules and Regulations, the stormwater treatment volume used shall be the greater of the runoff volume from the 1-year, 24-hour storm event or the volume generated by the 90% storm. The initial WQv from the 1-year storm event was discussed above. The following equation, per Chapter 4, was used to determine the water quality volume for the 90% storm event for for the approved and amended SWPPP:

Table 3 - Water Quality Volume Calculation Summary 90% Storm vs. 1-Year Storm Comparison

Subcatchments	P (in.)	%I	R_v[1]	A (ac.)	WQ_{v90} (a.f.)	WQ_v 1-year (a.f.)
2.1S (Previously Approved)	1.5	79.3	0.76	0.29	0.028	0.049
2.1S (Amended)	1.5	92.3	0.88	0.26	0.029	0.051

[1] A minimum R_v of 0.2 is required

As shown in the table above, the volume produced by the 1-year, 24-hour design storm for subcatchments 2.1S & 2.2S are larger than the volume produced by the 90% storm. Therefore, the 1-year, 24-hour design storm volumes shall still be used for the WQv sizing in this report.

- The stormwater collection and conveyance systems have been slightly modified to accommodate the revised building footprint and driveway. Revised Pipe Sizing Calculations can be found in Attachment C.
- Hydrodynamic Separator Sizing and Information can be found in Attachment D.

3.0 CONCULSION

Based on the above, the slight increase in impervious area, and the change in tank manufacturer do not alter the previous design, its assumptions, or the approvals. The proposed modifications are consistent with Town of Yorktown, NYSDEC and NYCDEP Stormwater requirements.

ATTACHMENTS

FIGURES

ATTACHMENT A

Pre-development HydroCAD Output

Subcat Reach Pond Link

Routing Diagram for A - Pre-development Drainage

Prepared by Insite Engineering, Surveying and Landscape Architecture, P.C., Printed 4/27/2021

Summary for Subcatchment 2.0S:

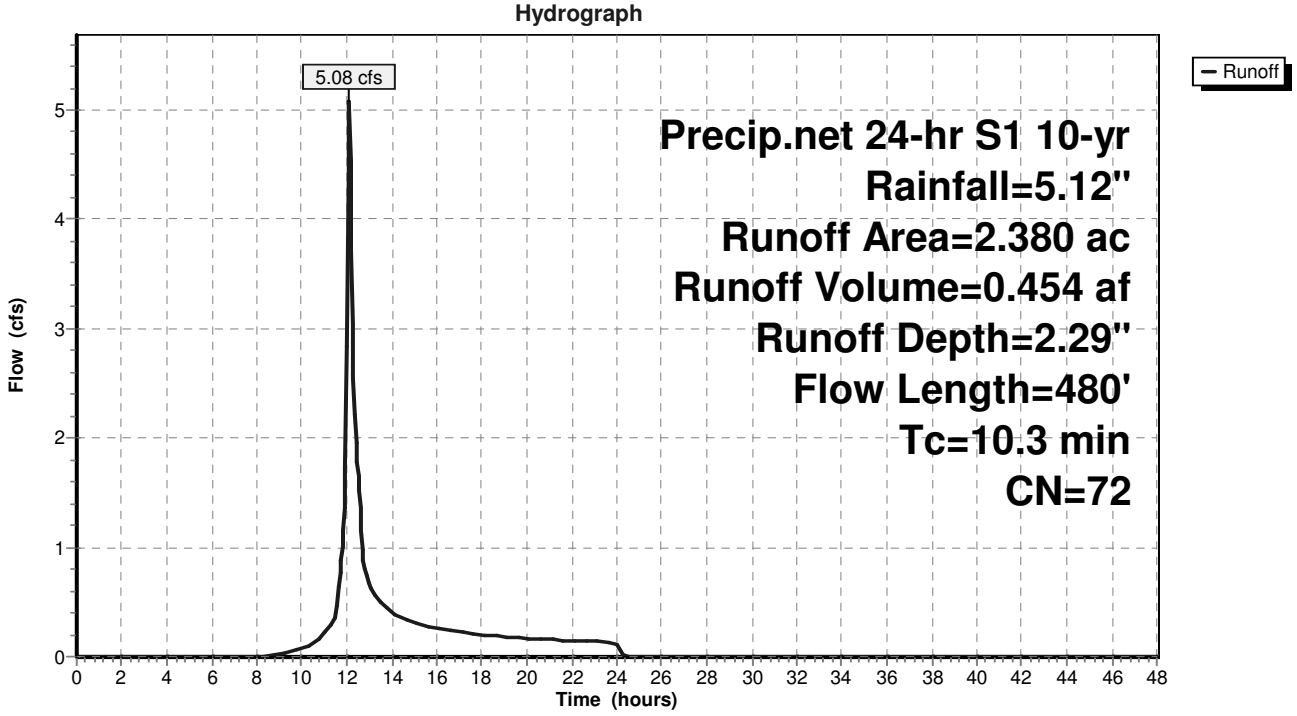
Runoff = 5.08 cfs @ 12.10 hrs, Volume= 0.454 af, Depth= 2.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 10-yr Rainfall=5.12"

	Area (ac)	CN	Description
*	0.350	70	Woods, Fair, HSG C
	1.210	71	Meadow, non-grazed, HSG C
	0.060	98	Paved parking, HSG C
	0.760	74	>75% Grass cover, Good, HSG C
	2.380	72	Weighted Average
	2.320		97.48% Pervious Area
	0.060		2.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.0350	0.22		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
2.6	360	0.1100	2.32		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	20	0.0270	3.34		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.3	480	Total			

Subcatchment 2.0S:



Summary for Subcatchment 2.0S:

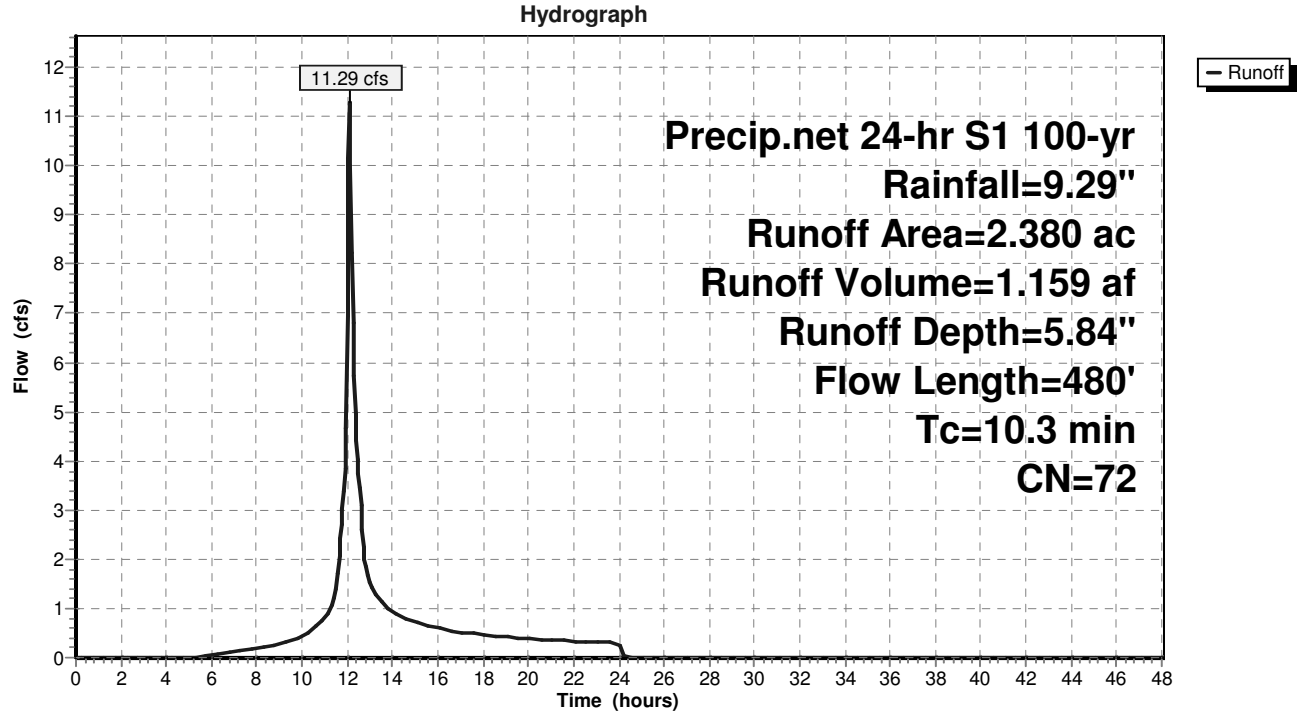
Runoff = 11.29 cfs @ 12.10 hrs, Volume= 1.159 af, Depth= 5.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 100-yr Rainfall=9.29"

	Area (ac)	CN	Description
*	0.350	70	Woods, Fair, HSG C
	1.210	71	Meadow, non-grazed, HSG C
	0.060	98	Paved parking, HSG C
	0.760	74	>75% Grass cover, Good, HSG C
	2.380	72	Weighted Average
	2.320		97.48% Pervious Area
	0.060		2.52% Impervious Area

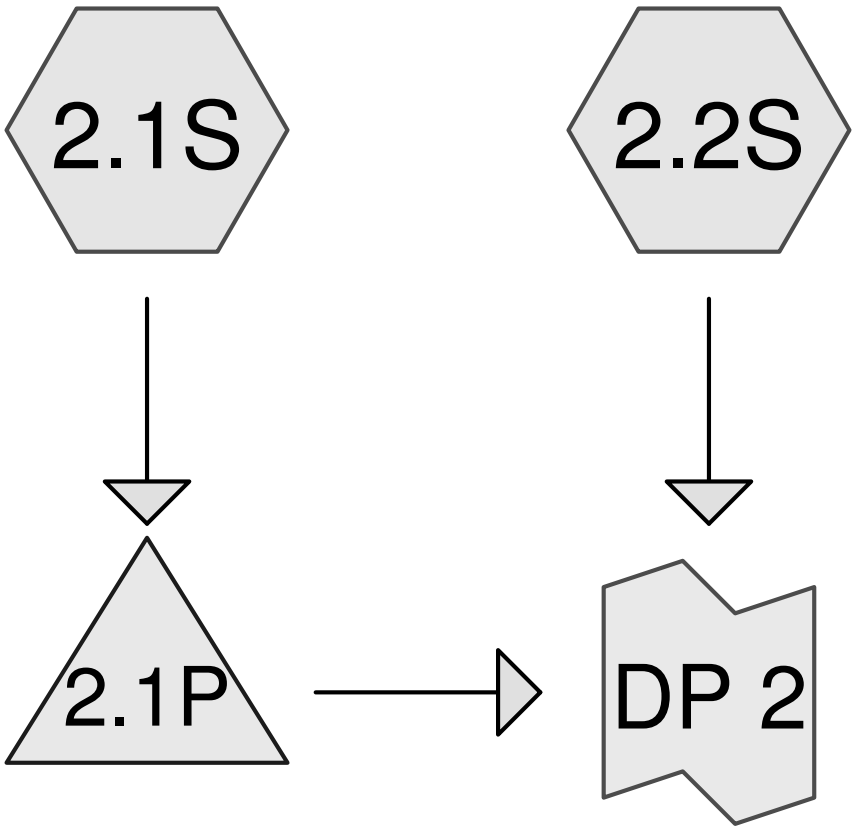
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.0350	0.22		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
2.6	360	0.1100	2.32		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	20	0.0270	3.34		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.3	480	Total			

Subcatchment 2.0S:



ATTACHMENT B

Post-development HydroCAD Output



Design Point 2

Subcat Reach Pond Link

Routing Diagram for B- Post-development Drainage

Prepared by Insite Engineering, Surveying and Landscape Architecture, P.C., Printed 4/29/2021

Summary for Subcatchment 2.1S:

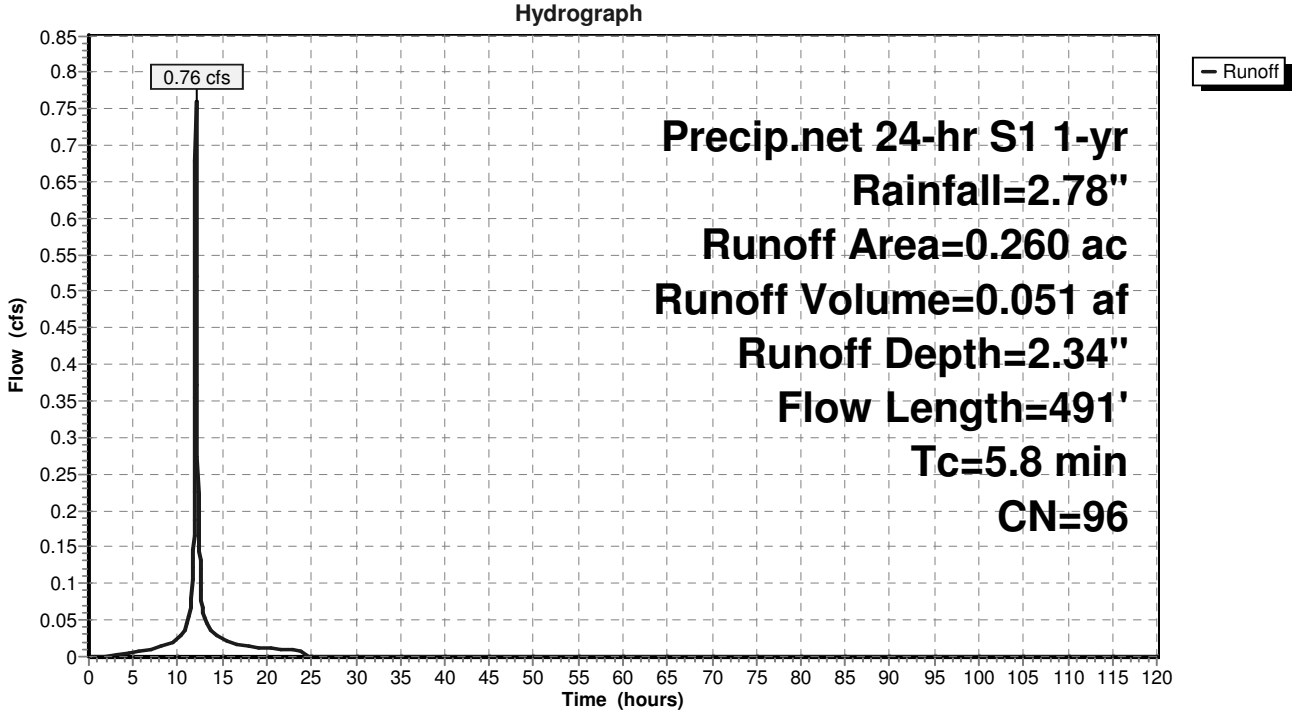
Runoff = 0.76 cfs @ 12.04 hrs, Volume= 0.051 af, Depth= 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 1-yr Rainfall=2.78"

Area (ac)	CN	Description
0.240	98	Paved parking, HSG D
0.020	74	>75% Grass cover, Good, HSG C
0.260	96	Weighted Average
0.020		7.69% Pervious Area
0.240		92.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	47	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
0.3	150	0.0590	7.52	1.48	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012
0.3	294	0.0950	15.15	11.90	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
5.8	491	Total			

Subcatchment 2.1S:



Summary for Subcatchment 2.2S:

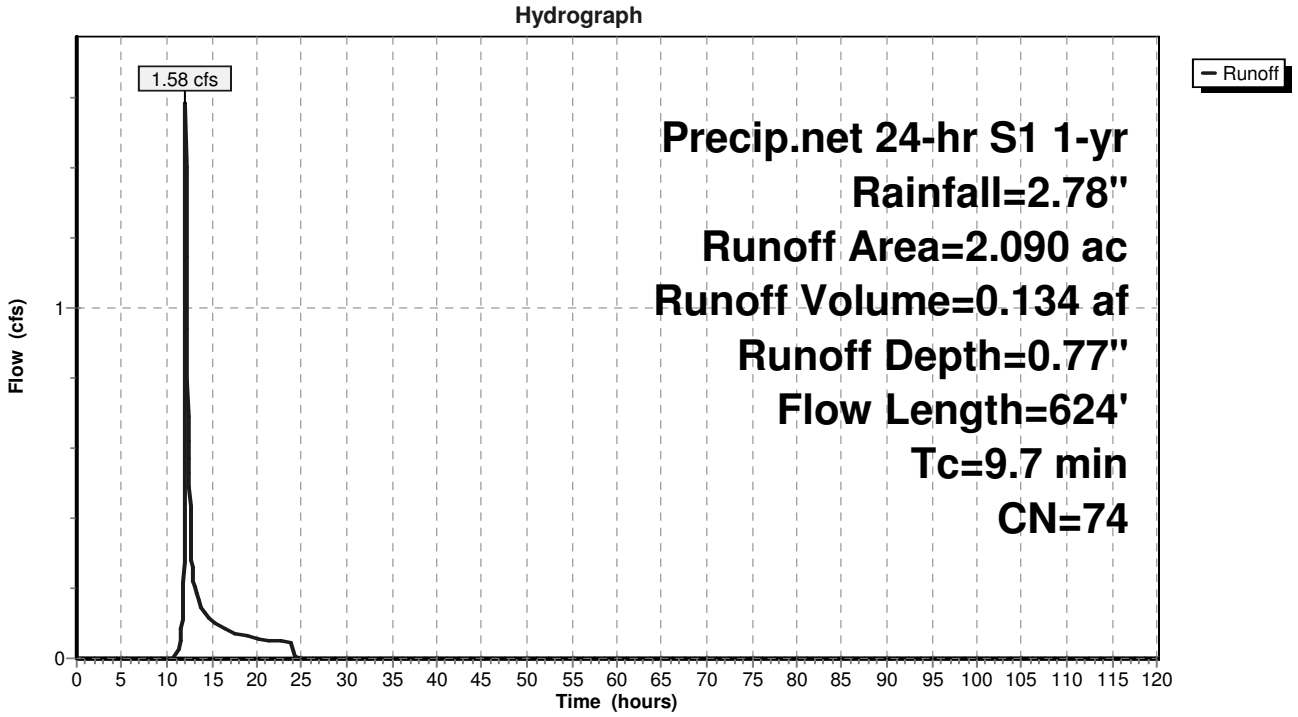
Runoff = 1.58 cfs @ 12.10 hrs, Volume= 0.134 af, Depth= 0.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 1-yr Rainfall=2.78"

Area (ac)	CN	Description
1.730	74	>75% Grass cover, Good, HSG C
0.300	70	Woods, Good, HSG C
0.060	98	Paved parking, HSG D
2.090	74	Weighted Average
2.030		97.13% Pervious Area
0.060		2.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.0350	0.22		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.4	177	0.0900	2.10		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	25	0.3000	8.22		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	8.04	24.13	**Trap/Vee/Rect Channel Flow,** Bot.W=1.00' D=1.00' Z= 2.0 '/' Top.W=5.00' n= 0.035 Earth, dense weeds
0.1	67	0.0300	8.51	6.69	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.1	38	0.0180	7.65	9.39	**Pipe Channel,** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
0.3	167	0.0240	8.83	10.84	**Pipe Channel,** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
9.7	624	Total			

Subcatchment 2.2S:



Summary for Pond 2.1P:

Inflow Area = 0.260 ac, 92.31% Impervious, Inflow Depth = 2.34" for 1-yr event
Inflow = 0.76 cfs @ 12.04 hrs, Volume= 0.051 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 385.14' @ 24.40 hrs Surf.Area= 0.024 ac Storage= 0.051 af

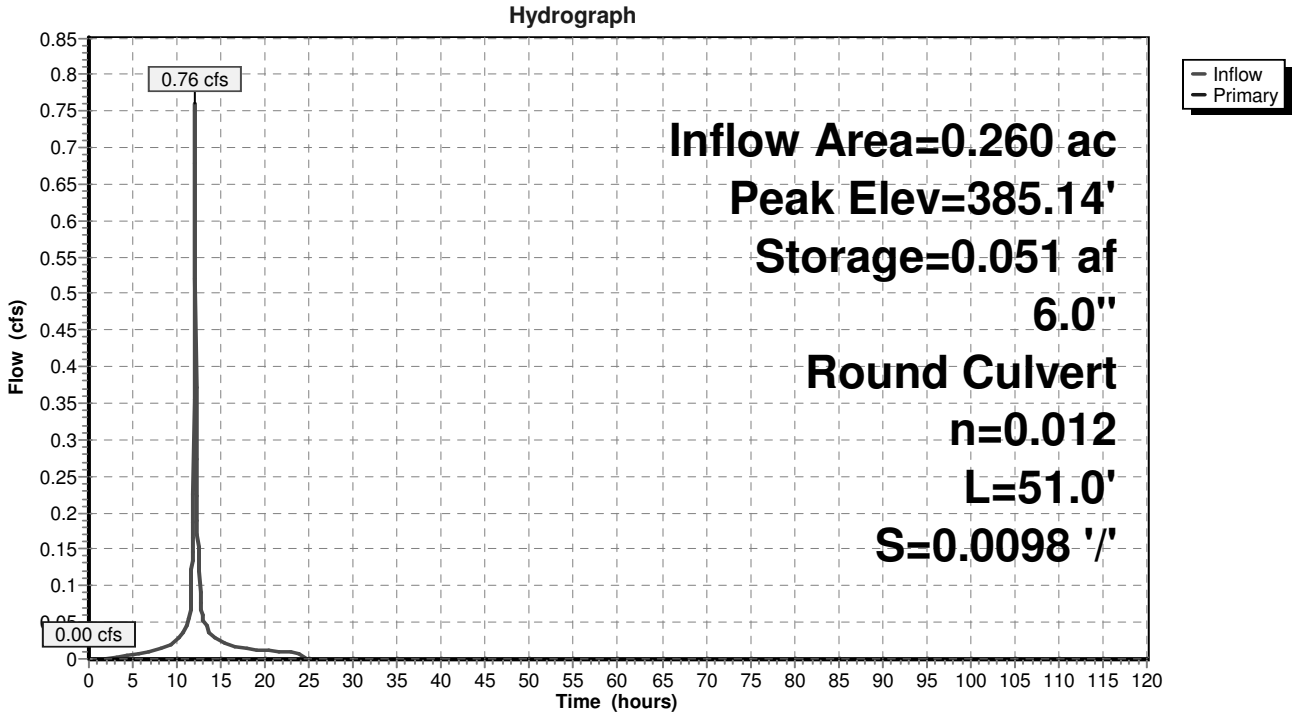
Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	383.00'	0.078 af	**6.00'W x 11.50'L x 6.16'H Prismatoid** x 8
#2	383.00'	0.060 af	**6.00'W x 13.25'L x 5.50'H Prismatoid** x 6
		0.138 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	385.50'	**6.0" Round Culvert** L= 51.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 385.50' / 385.00' S= 0.0098 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=383.00' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Controls 0.00 cfs)

Pond 2.1P:



Stage-Area-Storage for Pond 2.1P:

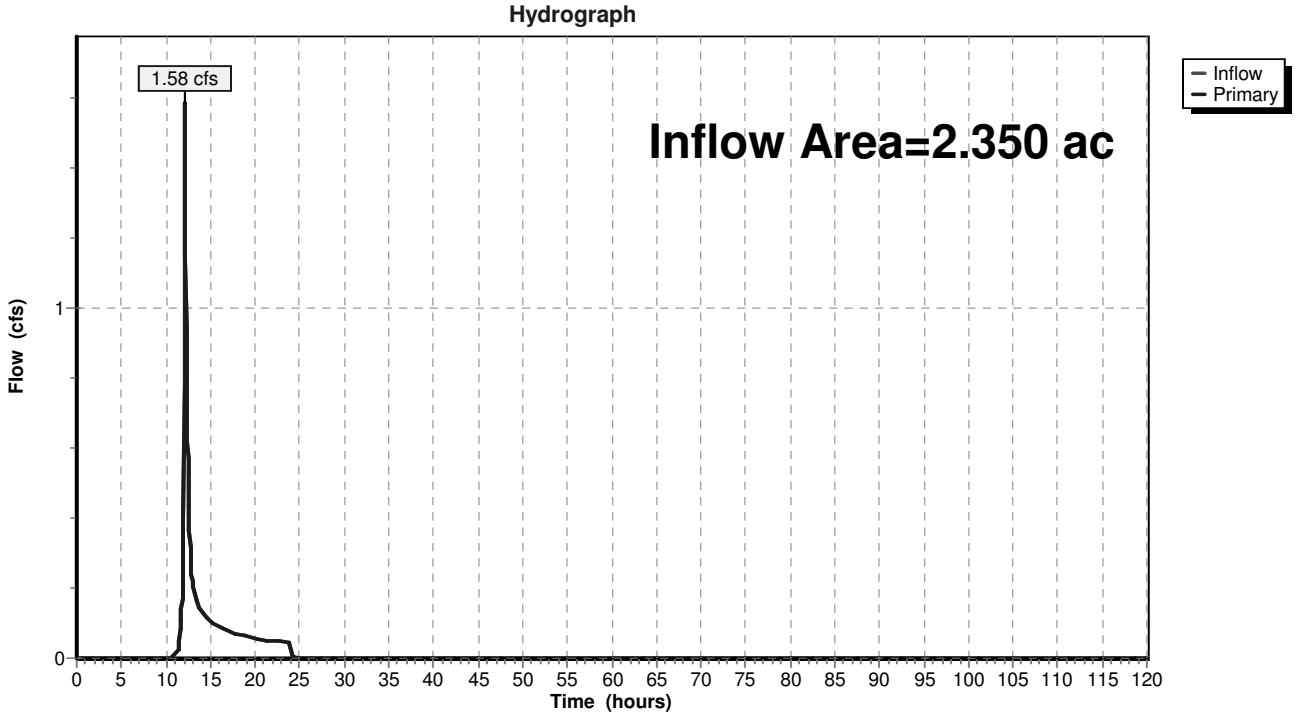
Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
383.00	0.000	385.08	0.049	387.16	0.098
383.04	0.001	385.12	0.050	387.20	0.099
383.08	0.002	385.16	0.051	387.24	0.100
383.12	0.003	385.20	0.052	387.28	0.101
383.16	0.004	385.24	0.053	387.32	0.102
383.20	0.005	385.28	0.054	387.36	0.103
383.24	0.006	385.32	0.055	387.40	0.104
383.28	0.007	385.36	0.056	387.44	0.105
383.32	0.008	385.40	0.057	387.48	0.106
383.36	0.009	385.44	0.058	387.52	0.107
383.40	0.009	385.48	0.059	387.56	0.108
383.44	0.010	385.52	0.060	387.60	0.109
383.48	0.011	385.56	0.060	387.64	0.110
383.52	0.012	385.60	0.061	387.68	0.111
383.56	0.013	385.64	0.062	387.72	0.111
383.60	0.014	385.68	0.063	387.76	0.112
383.64	0.015	385.72	0.064	387.80	0.113
383.68	0.016	385.76	0.065	387.84	0.114
383.72	0.017	385.80	0.066	387.88	0.115
383.76	0.018	385.84	0.067	387.92	0.116
383.80	0.019	385.88	0.068	387.96	0.117
383.84	0.020	385.92	0.069	388.00	0.118
383.88	0.021	385.96	0.070	388.04	0.119
383.92	0.022	386.00	0.071	388.08	0.120
383.96	0.023	386.04	0.072	388.12	0.121
384.00	0.024	386.08	0.073	388.16	0.122
384.04	0.025	386.12	0.074	388.20	0.123
384.08	0.026	386.16	0.075	388.24	0.124
384.12	0.026	386.20	0.076	388.28	0.125
384.16	0.027	386.24	0.077	388.32	0.126
384.20	0.028	386.28	0.077	388.36	0.127
384.24	0.029	386.32	0.078	388.40	0.128
384.28	0.030	386.36	0.079	388.44	0.129
384.32	0.031	386.40	0.080	388.48	0.129
384.36	0.032	386.44	0.081	388.52	0.130
384.40	0.033	386.48	0.082	388.56	0.131
384.44	0.034	386.52	0.083	388.60	0.131
384.48	0.035	386.56	0.084	388.64	0.132
384.52	0.036	386.60	0.085	388.68	0.132
384.56	0.037	386.64	0.086	388.72	0.133
384.60	0.038	386.68	0.087	388.76	0.133
384.64	0.039	386.72	0.088	388.80	0.134
384.68	0.040	386.76	0.089	388.84	0.134
384.72	0.041	386.80	0.090	388.88	0.135
384.76	0.042	386.84	0.091	388.92	0.135
384.80	0.043	386.88	0.092	388.96	0.136
384.84	0.043	386.92	0.093	389.00	0.136
384.88	0.044	386.96	0.094	389.04	0.137
384.92	0.045	387.00	0.094	389.08	0.137
384.96	0.046	387.04	0.095	389.12	0.138
385.00	0.047	387.08	0.096	389.16	**0.138**
385.04	0.048	387.12	0.097		

Summary for Link DP 2: Design Point 2

Inflow Area = 2.350 ac, 12.77% Impervious, Inflow Depth = 0.69" for 1-yr event
Inflow = 1.58 cfs @ 12.10 hrs, Volume= 0.134 af
Primary = 1.58 cfs @ 12.10 hrs, Volume= 0.134 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs

Link DP 2: Design Point 2



Summary for Subcatchment 2.1S:

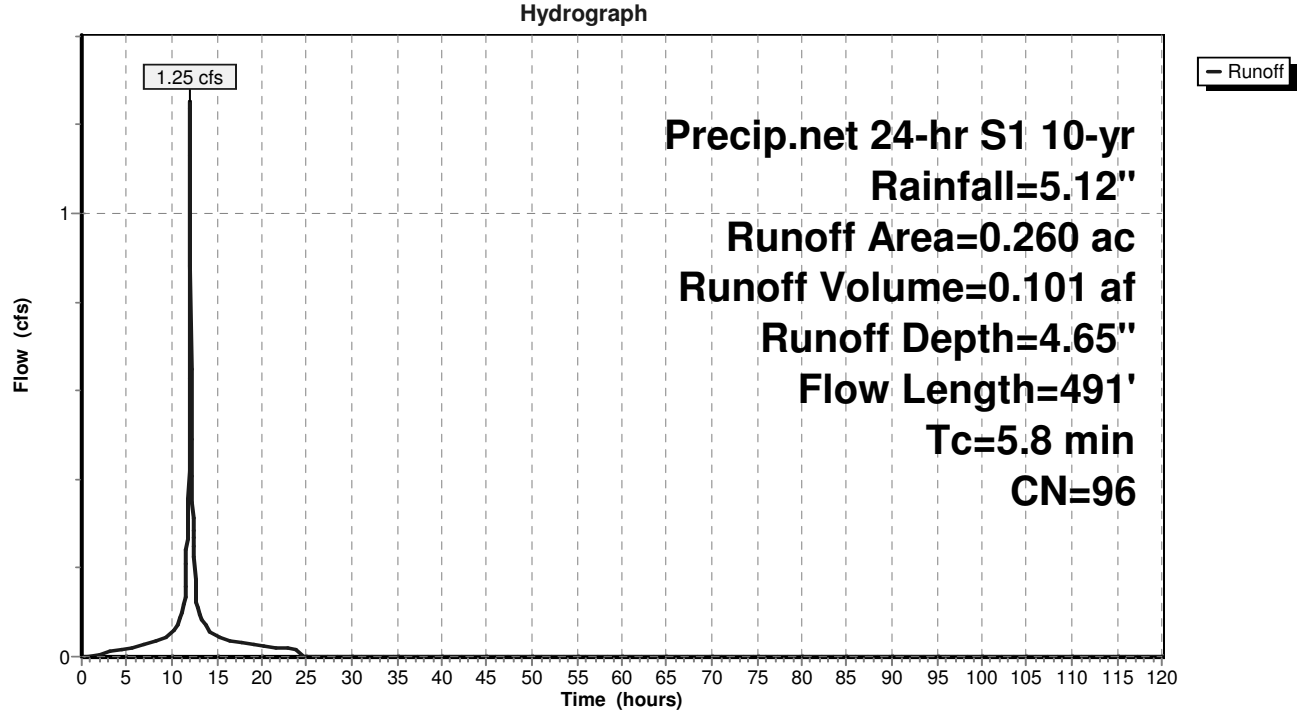
Runoff = 1.25 cfs @ 12.04 hrs, Volume= 0.101 af, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 10-yr Rainfall=5.12"

Area (ac)	CN	Description
0.240	98	Paved parking, HSG D
0.020	74	>75% Grass cover, Good, HSG C
0.260	96	Weighted Average
0.020		7.69% Pervious Area
0.240		92.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	47	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
0.3	150	0.0590	7.52	1.48	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012
0.3	294	0.0950	15.15	11.90	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
5.8	491	Total			

Subcatchment 2.1S:



Summary for Subcatchment 2.2S:

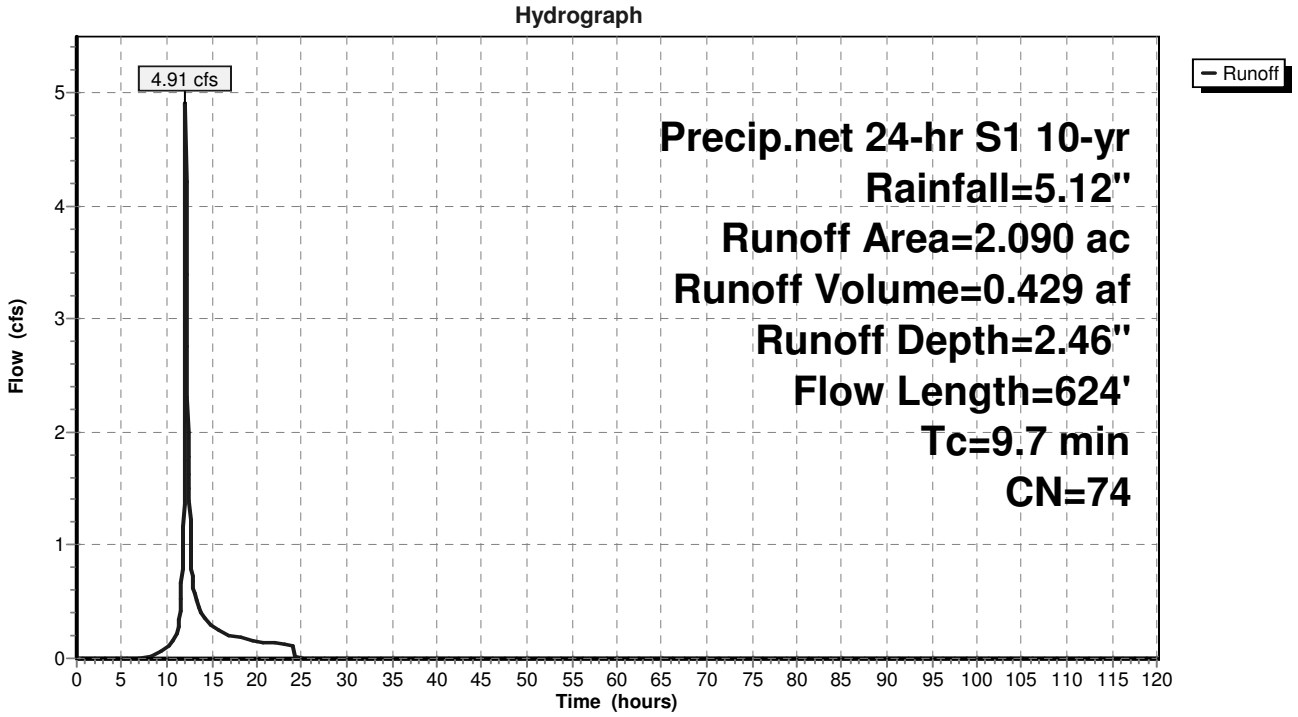
Runoff = 4.91 cfs @ 12.09 hrs, Volume= 0.429 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 10-yr Rainfall=5.12"

Area (ac)	CN	Description
1.730	74	>75% Grass cover, Good, HSG C
0.300	70	Woods, Good, HSG C
0.060	98	Paved parking, HSG D
2.090	74	Weighted Average
2.030		97.13% Pervious Area
0.060		2.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.0350	0.22		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.4	177	0.0900	2.10		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	25	0.3000	8.22		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	8.04	24.13	**Trap/Vee/Rect Channel Flow,** Bot.W=1.00' D=1.00' Z= 2.0 '/' Top.W=5.00' n= 0.035 Earth, dense weeds
0.1	67	0.0300	8.51	6.69	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.1	38	0.0180	7.65	9.39	**Pipe Channel,** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
0.3	167	0.0240	8.83	10.84	**Pipe Channel,** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
9.7	624	Total			

Subcatchment 2.2S:



Summary for Pond 2.1P:

Inflow Area = 0.260 ac, 92.31% Impervious, Inflow Depth = 4.65" for 10-yr event
Inflow = 1.25 cfs @ 12.04 hrs, Volume= 0.101 af
Outflow = 0.13 cfs @ 12.72 hrs, Volume= 0.042 af, Atten= 90%, Lag= 40.8 min
Primary = 0.13 cfs @ 12.72 hrs, Volume= 0.042 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 385.72' @ 12.72 hrs Surf.Area= 0.024 ac Storage= 0.064 af

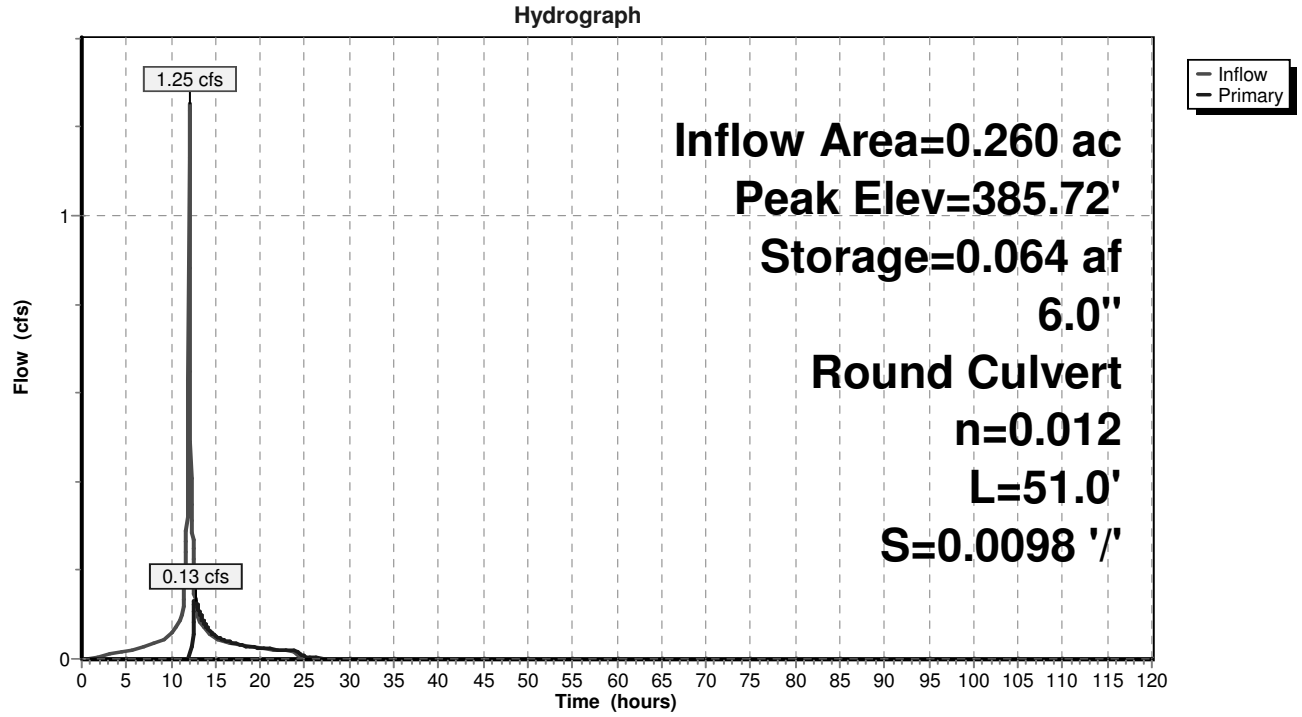
Plug-Flow detention time= 427.4 min calculated for 0.042 af (41% of inflow)
Center-of-Mass det. time= 251.8 min (1,017.1 - 765.3)

Volume	Invert	Avail.Storage	Storage Description
#1	383.00'	0.078 af	**6.00'W x 11.50'L x 6.16'H Prismatoid** x 8
#2	383.00'	0.060 af	**6.00'W x 13.25'L x 5.50'H Prismatoid** x 6
		0.138 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	385.50'	**6.0" Round Culvert** L= 51.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 385.50' / 385.00' S= 0.0098 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf

Primary OutFlow Max=0.13 cfs @ 12.72 hrs HW=385.72' TW=0.00' (Dynamic Tailwater)
↳**1=Culvert** (Barrel Controls 0.13 cfs @ 2.32 fps)

Pond 2.1P:



Stage-Area-Storage for Pond 2.1P:

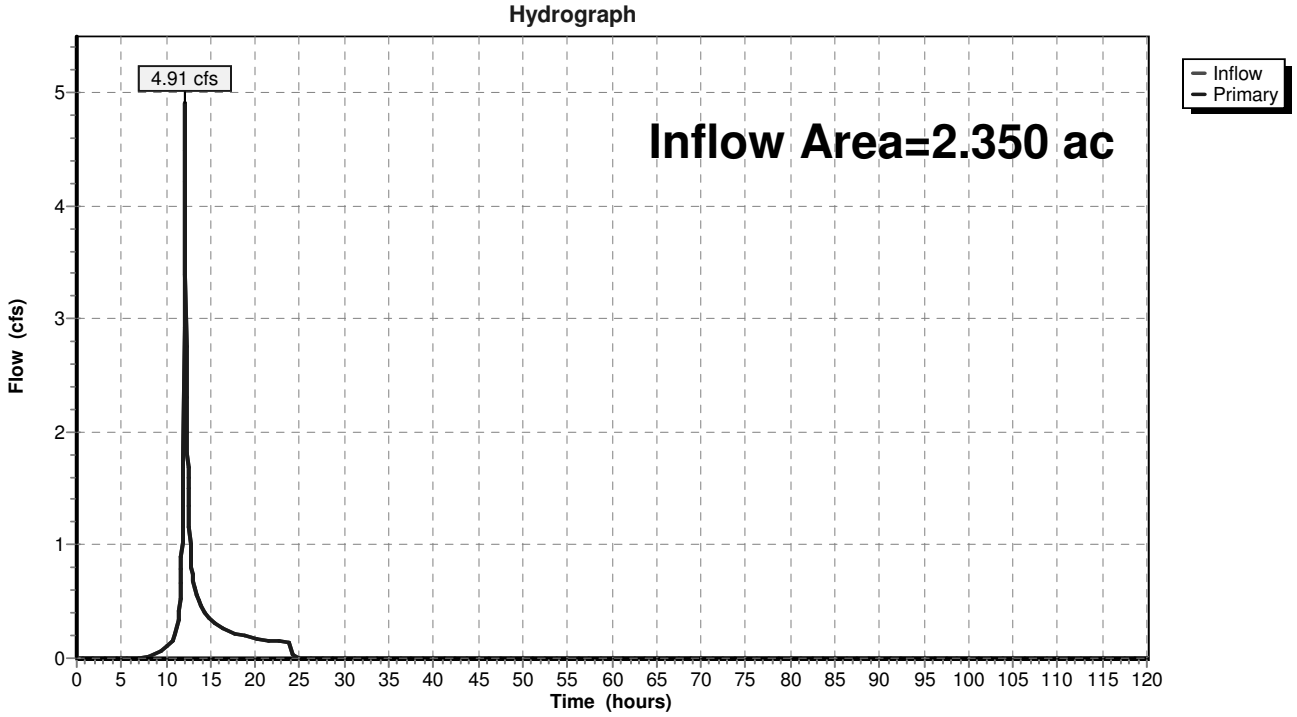
Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
383.00	0.000	385.08	0.049	387.16	0.098
383.04	0.001	385.12	0.050	387.20	0.099
383.08	0.002	385.16	0.051	387.24	0.100
383.12	0.003	385.20	0.052	387.28	0.101
383.16	0.004	385.24	0.053	387.32	0.102
383.20	0.005	385.28	0.054	387.36	0.103
383.24	0.006	385.32	0.055	387.40	0.104
383.28	0.007	385.36	0.056	387.44	0.105
383.32	0.008	385.40	0.057	387.48	0.106
383.36	0.009	385.44	0.058	387.52	0.107
383.40	0.009	385.48	0.059	387.56	0.108
383.44	0.010	385.52	0.060	387.60	0.109
383.48	0.011	385.56	0.060	387.64	0.110
383.52	0.012	385.60	0.061	387.68	0.111
383.56	0.013	385.64	0.062	387.72	0.111
383.60	0.014	385.68	0.063	387.76	0.112
383.64	0.015	385.72	0.064	387.80	0.113
383.68	0.016	385.76	0.065	387.84	0.114
383.72	0.017	385.80	0.066	387.88	0.115
383.76	0.018	385.84	0.067	387.92	0.116
383.80	0.019	385.88	0.068	387.96	0.117
383.84	0.020	385.92	0.069	388.00	0.118
383.88	0.021	385.96	0.070	388.04	0.119
383.92	0.022	386.00	0.071	388.08	0.120
383.96	0.023	386.04	0.072	388.12	0.121
384.00	0.024	386.08	0.073	388.16	0.122
384.04	0.025	386.12	0.074	388.20	0.123
384.08	0.026	386.16	0.075	388.24	0.124
384.12	0.026	386.20	0.076	388.28	0.125
384.16	0.027	386.24	0.077	388.32	0.126
384.20	0.028	386.28	0.077	388.36	0.127
384.24	0.029	386.32	0.078	388.40	0.128
384.28	0.030	386.36	0.079	388.44	0.129
384.32	0.031	386.40	0.080	388.48	0.129
384.36	0.032	386.44	0.081	388.52	0.130
384.40	0.033	386.48	0.082	388.56	0.131
384.44	0.034	386.52	0.083	388.60	0.131
384.48	0.035	386.56	0.084	388.64	0.132
384.52	0.036	386.60	0.085	388.68	0.132
384.56	0.037	386.64	0.086	388.72	0.133
384.60	0.038	386.68	0.087	388.76	0.133
384.64	0.039	386.72	0.088	388.80	0.134
384.68	0.040	386.76	0.089	388.84	0.134
384.72	0.041	386.80	0.090	388.88	0.135
384.76	0.042	386.84	0.091	388.92	0.135
384.80	0.043	386.88	0.092	388.96	0.136
384.84	0.043	386.92	0.093	389.00	0.136
384.88	0.044	386.96	0.094	389.04	0.137
384.92	0.045	387.00	0.094	389.08	0.137
384.96	0.046	387.04	0.095	389.12	0.138
385.00	0.047	387.08	0.096	389.16	**0.138**
385.04	0.048	387.12	0.097		

Summary for Link DP 2: Design Point 2

Inflow Area = 2.350 ac, 12.77% Impervious, Inflow Depth = 2.40" for 10-yr event
Inflow = 4.91 cfs @ 12.09 hrs, Volume= 0.470 af
Primary = 4.91 cfs @ 12.09 hrs, Volume= 0.470 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs

Link DP 2: Design Point 2



Summary for Subcatchment 2.1S:

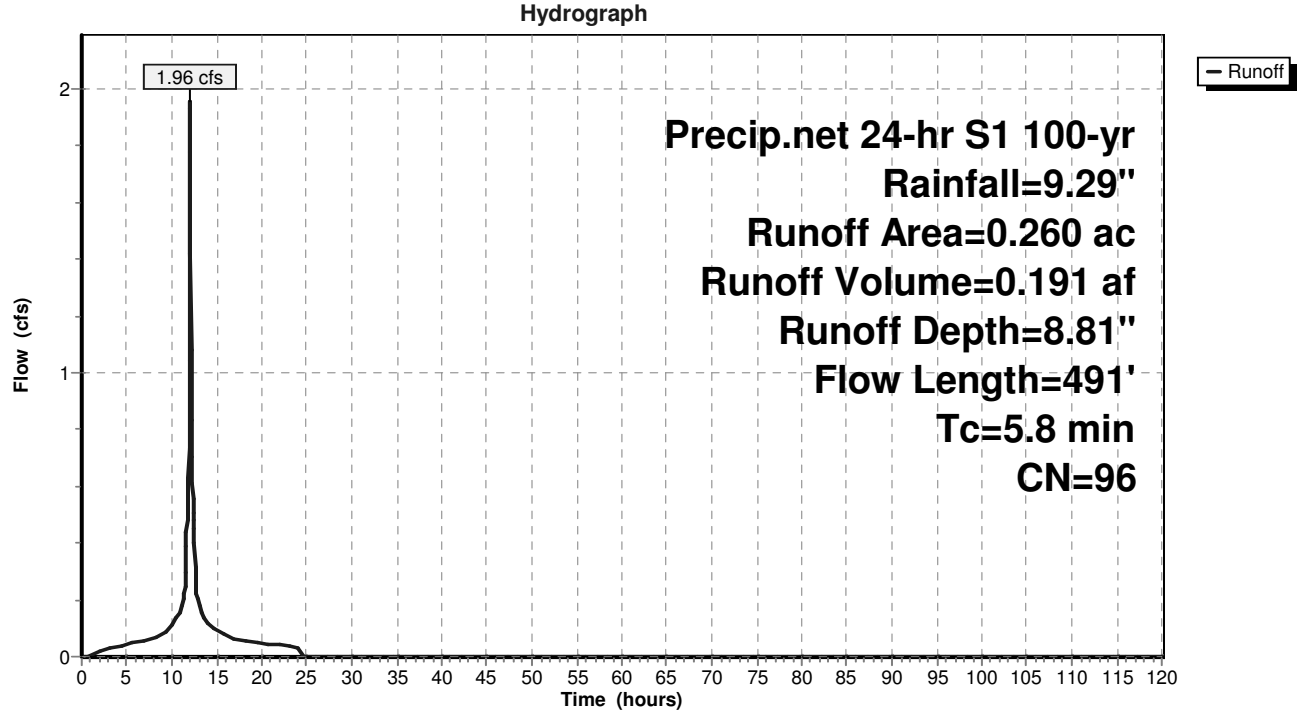
Runoff = 1.96 cfs @ 12.04 hrs, Volume= 0.191 af, Depth= 8.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 100-yr Rainfall=9.29"

Area (ac)	CN	Description
0.240	98	Paved parking, HSG D
0.020	74	>75% Grass cover, Good, HSG C
0.260	96	Weighted Average
0.020		7.69% Pervious Area
0.240		92.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	47	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
0.3	150	0.0590	7.52	1.48	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012
0.3	294	0.0950	15.15	11.90	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
5.8	491	Total			

Subcatchment 2.1S:



Summary for Subcatchment 2.2S:

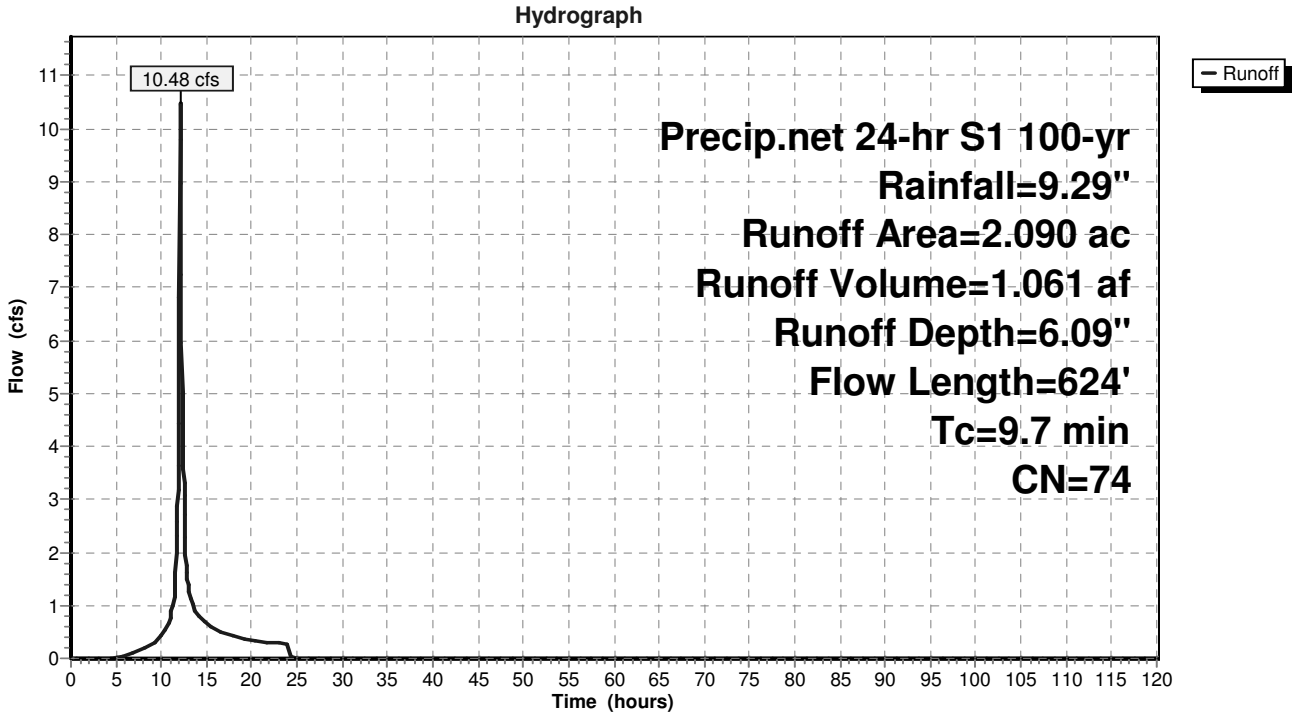
Runoff = 10.48 cfs @ 12.09 hrs, Volume= 1.061 af, Depth= 6.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
Precip.net 24-hr S1 100-yr Rainfall=9.29"

Area (ac)	CN	Description
1.730	74	>75% Grass cover, Good, HSG C
0.300	70	Woods, Good, HSG C
0.060	98	Paved parking, HSG D
2.090	74	Weighted Average
2.030		97.13% Pervious Area
0.060		2.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.0350	0.22		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.4	177	0.0900	2.10		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	25	0.3000	8.22		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	8.04	24.13	**Trap/Vee/Rect Channel Flow,** Bot.W=1.00' D=1.00' Z= 2.0 '/' Top.W=5.00' n= 0.035 Earth, dense weeds
0.1	67	0.0300	8.51	6.69	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.1	38	0.0180	7.65	9.39	**Pipe Channel,** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
0.3	167	0.0240	8.83	10.84	**Pipe Channel,** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
9.7	624	Total			

Subcatchment 2.2S:



Summary for Pond 2.1P:

Inflow Area = 0.260 ac, 92.31% Impervious, Inflow Depth = 8.81" for 100-yr event
Inflow = 1.96 cfs @ 12.04 hrs, Volume= 0.191 af
Outflow = 0.76 cfs @ 12.23 hrs, Volume= 0.132 af, Atten= 61%, Lag= 11.4 min
Primary = 0.76 cfs @ 12.23 hrs, Volume= 0.132 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 386.66' @ 12.23 hrs Surf.Area= 0.024 ac Storage= 0.086 af

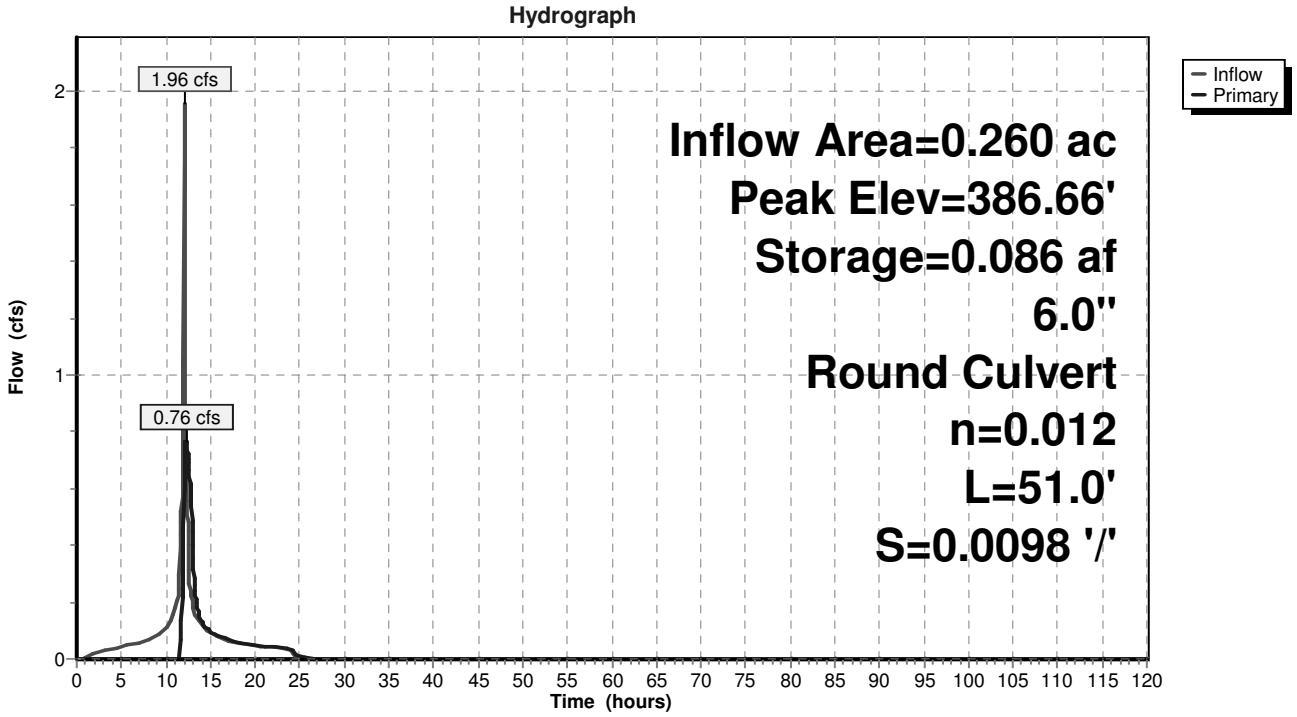
Plug-Flow detention time= 275.4 min calculated for 0.132 af (69% of inflow)
Center-of-Mass det. time= 148.4 min (899.8 - 751.4)

Volume	Invert	Avail.Storage	Storage Description
#1	383.00'	0.078 af	**6.00'W x 11.50'L x 6.16'H Prismatoid** x 8
#2	383.00'	0.060 af	**6.00'W x 13.25'L x 5.50'H Prismatoid** x 6
		0.138 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	385.50'	**6.0" Round Culvert** L= 51.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 385.50' / 385.00' S= 0.0098 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf

Primary OutFlow Max=0.76 cfs @ 12.23 hrs HW=386.66' TW=0.00' (Dynamic Tailwater)
↳**1=Culvert** (Barrel Controls 0.76 cfs @ 3.89 fps)

Pond 2.1P:



Stage-Area-Storage for Pond 2.1P:

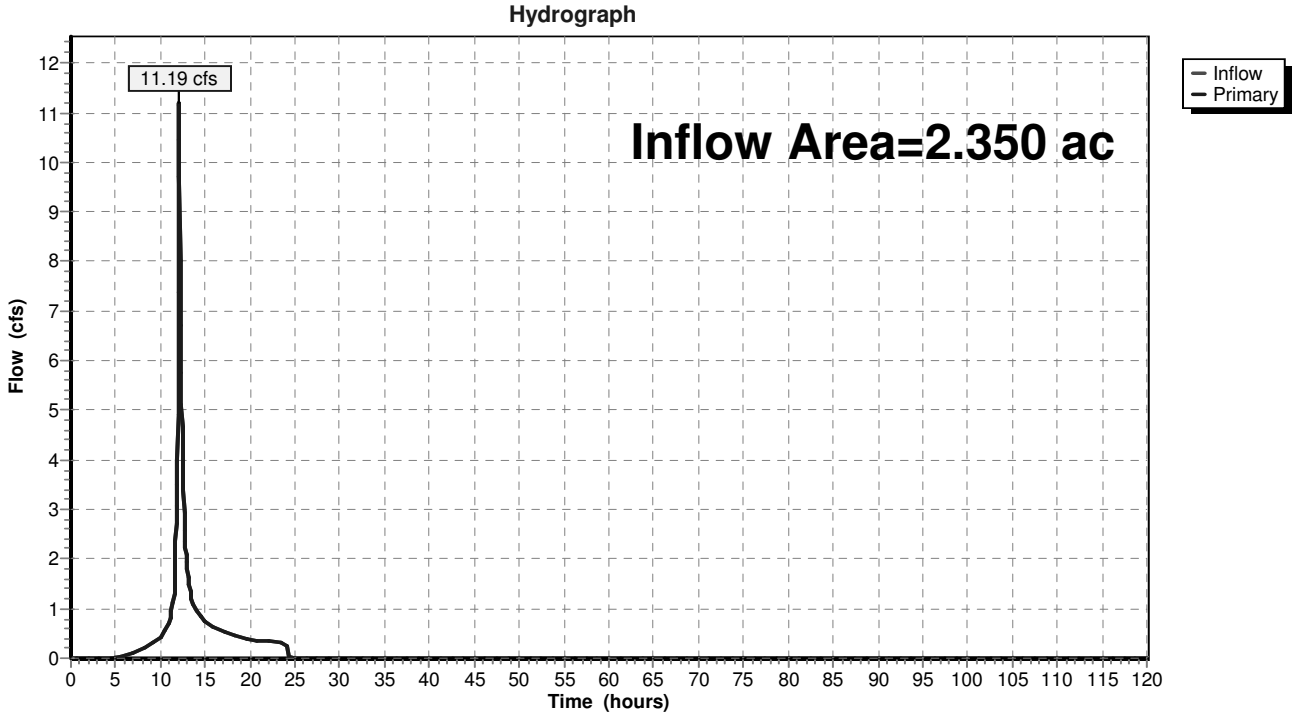
Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
383.00	0.000	385.08	0.049	387.16	0.098
383.04	0.001	385.12	0.050	387.20	0.099
383.08	0.002	385.16	0.051	387.24	0.100
383.12	0.003	385.20	0.052	387.28	0.101
383.16	0.004	385.24	0.053	387.32	0.102
383.20	0.005	385.28	0.054	387.36	0.103
383.24	0.006	385.32	0.055	387.40	0.104
383.28	0.007	385.36	0.056	387.44	0.105
383.32	0.008	385.40	0.057	387.48	0.106
383.36	0.009	385.44	0.058	387.52	0.107
383.40	0.009	385.48	0.059	387.56	0.108
383.44	0.010	385.52	0.060	387.60	0.109
383.48	0.011	385.56	0.060	387.64	0.110
383.52	0.012	385.60	0.061	387.68	0.111
383.56	0.013	385.64	0.062	387.72	0.111
383.60	0.014	385.68	0.063	387.76	0.112
383.64	0.015	385.72	0.064	387.80	0.113
383.68	0.016	385.76	0.065	387.84	0.114
383.72	0.017	385.80	0.066	387.88	0.115
383.76	0.018	385.84	0.067	387.92	0.116
383.80	0.019	385.88	0.068	387.96	0.117
383.84	0.020	385.92	0.069	388.00	0.118
383.88	0.021	385.96	0.070	388.04	0.119
383.92	0.022	386.00	0.071	388.08	0.120
383.96	0.023	386.04	0.072	388.12	0.121
384.00	0.024	386.08	0.073	388.16	0.122
384.04	0.025	386.12	0.074	388.20	0.123
384.08	0.026	386.16	0.075	388.24	0.124
384.12	0.026	386.20	0.076	388.28	0.125
384.16	0.027	386.24	0.077	388.32	0.126
384.20	0.028	386.28	0.077	388.36	0.127
384.24	0.029	386.32	0.078	388.40	0.128
384.28	0.030	386.36	0.079	388.44	0.129
384.32	0.031	386.40	0.080	388.48	0.129
384.36	0.032	386.44	0.081	388.52	0.130
384.40	0.033	386.48	0.082	388.56	0.131
384.44	0.034	386.52	0.083	388.60	0.131
384.48	0.035	386.56	0.084	388.64	0.132
384.52	0.036	386.60	0.085	388.68	0.132
384.56	0.037	386.64	0.086	388.72	0.133
384.60	0.038	386.68	0.087	388.76	0.133
384.64	0.039	386.72	0.088	388.80	0.134
384.68	0.040	386.76	0.089	388.84	0.134
384.72	0.041	386.80	0.090	388.88	0.135
384.76	0.042	386.84	0.091	388.92	0.135
384.80	0.043	386.88	0.092	388.96	0.136
384.84	0.043	386.92	0.093	389.00	0.136
384.88	0.044	386.96	0.094	389.04	0.137
384.92	0.045	387.00	0.094	389.08	0.137
384.96	0.046	387.04	0.095	389.12	0.138
385.00	0.047	387.08	0.096	389.16	**0.138**
385.04	0.048	387.12	0.097		

Summary for Link DP 2: Design Point 2

Inflow Area = 2.350 ac, 12.77% Impervious, Inflow Depth = 6.09" for 100-yr event
Inflow = 11.19 cfs @ 12.09 hrs, Volume= 1.193 af
Primary = 11.19 cfs @ 12.09 hrs, Volume= 1.193 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs

Link DP 2: Design Point 2



ATTACHMENT C

Revised Pipe Sizing Calculations

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

DRAINAGE SYSTEM CALCULATIONS
Design Storm: 100-Year

PROJECT: **Stahmer Subdivision**
JOB NUMBER: **16140.100**
BY: JWM DATE: 4-28-21
CHK: RDW DATE: 4-28-21

STRUCTURE		IMPERVIOUS AREA			PERVIOUS AREA			CA	TIME OF CONC. (min.)			I	Q (cfs)		PIPE DESIGN				
FROM	TO	A (ac.)	C	CA	A (ac.)	C	CA		INLET	PIPE	TOTAL		DESIGN	CAP.	V(ft/s)	n	s (%)	L (ft)	DIA (in)
YD 8	DI 7	**0.02**	0.9	0.02	**0.02**	0.3	0.01	0.03	**6**	-	6	**8.9**	0.3	1.5	5.7	**0.012**	**5.9**	**150**	**6**
DI 7	CB 6	**0.14**	0.9	0.13	**0.00**	0.3	0.00	0.17	**<6**	-	6	**8.9**	1.5	12.0	10.5	**0.012**	**9.6**	**120**	**12**
CB 6	CB 5	**0.04**	0.9	0.04	**0.00**	0.3	0.00	0.21	**<6**	-	6	**8.9**	1.9	11.1	10.6	**0.012**	**8.3**	**123**	**12**
CB 5	HDS 3A	**0.04**	0.9	0.04	**0.00**	0.3	0.00	0.25	**<6**	-	6	**8.9**	2.2	13.7	12.9	**0.012**	**12.6**	**19**	**12**
HDS 3A	SMP 2.1	**0.00**	0.9	0.00	**0.00**	0.3	0.00	0.27	**<6**	-	6	**8.9**	2.4	13.6	13.1	**0.012**	**12.4**	**25**	**12**
DI 7A	DI 7	**0.01**	0.9	0.01	**0.00**	0.3	0.00	0.01	**<6**	-	6	**8.9**	0.1	0.6	2.2	**0.012**	**1.0**	**210**	**6**
DI 4	DI 3	**0.00**	0.9	0.00	**1.00**	0.3	0.30	0.30	**9**	-	9	**8**	2.4	6.7	7.8	**0.012**	**3.0**	**67**	**12**
DI 3	DMH 2	**0.00**	0.9	0.00	**0.11**	0.3	0.03	0.33	**<9**	-	9	**8**	2.6	9.4	6.6	**0.012**	**1.8**	**38**	**15**
DMH 2	DI 1	**0.00**	0.9	0.00	**0.00**	0.3	0.00	0.33	**<9**	-	9	**8**	2.6	10.8	7.3	**0.012**	**2.4**	**167**	**15**
DI 2B	HDS 3A	**0.02**	0.9	0.02	**0.00**	0.3	0.00	0.02	**<6**	-	6	**8**	0.2	0.5	2.4	**0.012**	**0.8**	**36**	**6**
SMP 2.1	DMH 2	**Pipe Sized in HydroCAD**																	

ATTACHMENT D

Hydrodynamic Separator Information

The proposed hydrodynamic separator for the project is sized to provide pretreatment for the 1-YR WQ_v event. As the units are proposed to be used for pre-treatment, the units are sized based on the manufacturers water quality treatment flow rates. Included in this Attachment is a copy of the letter prepared by the New Jersey Department of Environmental Protection, which is utilized by the manufacturer to determine water quality treatment rates. This letter will serve as verification that the HydroStorm Hydrodynamic Separator is an approved practice based on the New Jersey Corporation for Advanced Technology (NJCAT) Standards.

Utilizing the calculated flows from Attachment B and the design criteria stated on the attached documents the appropriate model of hydrodynamic separator was determined as follows:

Hydrodynamic Separator ID	1-Year Peak Flow (cfs)[1]	Required Hydrodynamic Separator
HDS 3A	0.76	HS-4

1-year peak flows obtained from HydroCAD output provided in Attachment C.

State of New Jersey

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Division of Water Quality
Bureau of Nonpoint Pollution Control
P.O. Box 420 – 401 E. State St.
Trenton, NJ 08625-0420
Phone: (609) 633-7021 / Fax: (609) 777-0432
http://www.state.nj.us/dep/dwq/bnpc_home.htm

CATHERINE R. McCABE
Acting Commissioner

March 27, 2018

Graham Bryant, M.Sc., P.E.
President
Hydroworks, LLC
136 Central Avenue
Clark, NJ 07066

Re: MTD Lab Certification
HydroStorm Hydrodynamic Separator by Hydroworks, LLC
Online Installation

TSS Removal Rate 50%

Dear Mr. Bryant:

The Stormwater Management rules under N.J.A.C. 7:8-5.5(b) and 5.7 (c) allow the use of manufactured treatment devices (MTDs) for compliance with the design and performance standards at N.J.A.C. 7:8-5 if the pollutant removal rates have been verified by the New Jersey Corporation for Advanced Technology (NJCAT) and have been certified by the New Jersey Department of Environmental Protection (NJDEP). Hydroworks, LLC has requested an MTD Laboratory Certification for the Hydroworks HydroStorm Hydrodynamic Separator.

The project falls under the "Procedure for Obtaining Verification of a Stormwater Manufactured Treatment Device from New Jersey Corporation for Advance Technology" dated January 25, 2013. The applicable protocol is the "New Jersey Laboratory Testing Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device" dated January 25, 2013.

NJCAT verification documents submitted to the NJDEP indicate that the requirements of the aforementioned protocol have been met or exceeded. The NJCAT letter also included a recommended certification TSS removal rate and the required maintenance plan. The NJCAT Verification Report with the Verification Appendix (dated February 2018) for this device is published online at http://www.njcat.org/verification-process/technology-verification-database.html.

The NJDEP certifies the use of the HydroStorm by Hydroworks, LLC at a TSS removal rate of 50% when designed, operated, and maintained in accordance with the information provided in the Verification Appendix and the following conditions:

1. The maximum treatment flow rate (MTFR) for the manufactured treatment device (MTD) is calculated using the New Jersey Water Quality Design Storm (1.25 inches in 2 hrs) in N.J.A.C. 7:8-5.5.

2. The HydroStorm shall be installed using the same configuration reviewed by NJCAT and shall be sized in accordance with the criteria specified in item 6 below.

3. This HydroStorm cannot be used in series with another MTD or a media filter (such as a sand filter) to achieve an enhanced removal rate for total suspended solids (TSS) removal under N.J.A.C. 7:8-5.5.

4. Additional design criteria for MTDs can be found in Chapter 9.6 of the New Jersey Stormwater Best Management Practices (NJ Stormwater BMP) Manual, which can be found online at www.njstormwater.org.

5. The maintenance plan for a site using this device shall incorporate, at a minimum, the maintenance requirements for the Hydrostorm. A copy of the maintenance plan is attached to this certification. However, it is recommended to review the maintenance website at http://www.hydroworks.com/hydrostormo&m.pdf for any changes to the maintenance requirements.

6. Sizing Requirement:

The example below demonstrates the sizing procedure for the Hydrostorm:

Example: A 0.25-acre impervious site is to be treated to 50% TSS removal using a HydroStorm. The impervious site runoff (Q) based on the New Jersey Water Quality Design Storm was determined to be 0.79 cfs.

Maximum Treatment Flow Rate (MTFR) Evaluation:

The site runoff (Q) was based on the following:

time of concentration = 10 minutes
i = 3.2 in/hr (page 5-8, Fig. 5-3 of the NJ Stormwater BMP Manual)
c = 0.99 (runoff coefficient for impervious)
Q = ciA = 0.99 x 3.2 x 0.25 = 0.79 cfs

Given the site runoff is 0.79 cfs and based on Table 1 below, the HydroStorm Model HS4 with a MTFR of 0.88 cfs could be used for this site to remove 50% of the TSS from the impervious area without exceeding the MTFR.

The sizing table corresponding to the available system models is noted below. Additional specifications regarding each model can be found in the Verification Appendix under Table A-1.

Table 1 HydroStorm Sizing Information

HydroStorm Model	NJDEP 50% TSS Maximum Treatment Flow Rate (cfs)	Treatment Area (ft^2)	Hydraulic Loading Rate (gpm/ft^2)	50% Maximum Sediment Storage (ft^3)
HS3	0.50	7.1	31.4	3.6
HS4	0.88	12.6	31.4	6.3
HS5	1.37	19.6	31.4	9.8
HS6	1.98	28.3	31.4	14.2
HS7	2.69	38.5	31.4	19.3
HS8	3.52	50.3	31.4	25.2
HS9	4.45	63.6	31.4	31.8
HS10	5.49	78.5	31.4	39.3
HS11	6.65	95.0	31.4	47.5
HS12	7.91	113.0	31.4	56.5

A detailed maintenance plan is mandatory for any project with a Stormwater BMP subject to the Stormwater Management Rules, N.J.A.C. 7:8. The plan must include all of the items identified in the Stormwater Management Rules, N.J.A.C. 7:8-5.8. Such items include, but are not limited to, the list of inspection and maintenance equipment and tools, specific corrective and preventative maintenance tasks, indication of problems in the system, and training of maintenance personnel. Additional information can be found in Chapter 8: Maintenance and Retrofit of Stormwater Management Measures.

If you have any questions regarding the above information, please contact Brian Salvo or Nick Grotts of my office at (609) 633-7021.

Sincerely,

James J. Murphy, Chief
Bureau of Nonpoint Pollution Control

Attachment: Maintenance Plan

cc: Chron File
Richard Magee, NJCAT
Vince Mazzei, NJDEP - DLUR
Ravi Patraju, NJDEP - BES
Gabriel Mahon, NJDEP - BNPC
Brian Salvo, NJDEP – BNPC
Nick Grotts, NJDEP – BNPC

Hydroworks

Introduction

Hydroworks® HydroStorm Operation

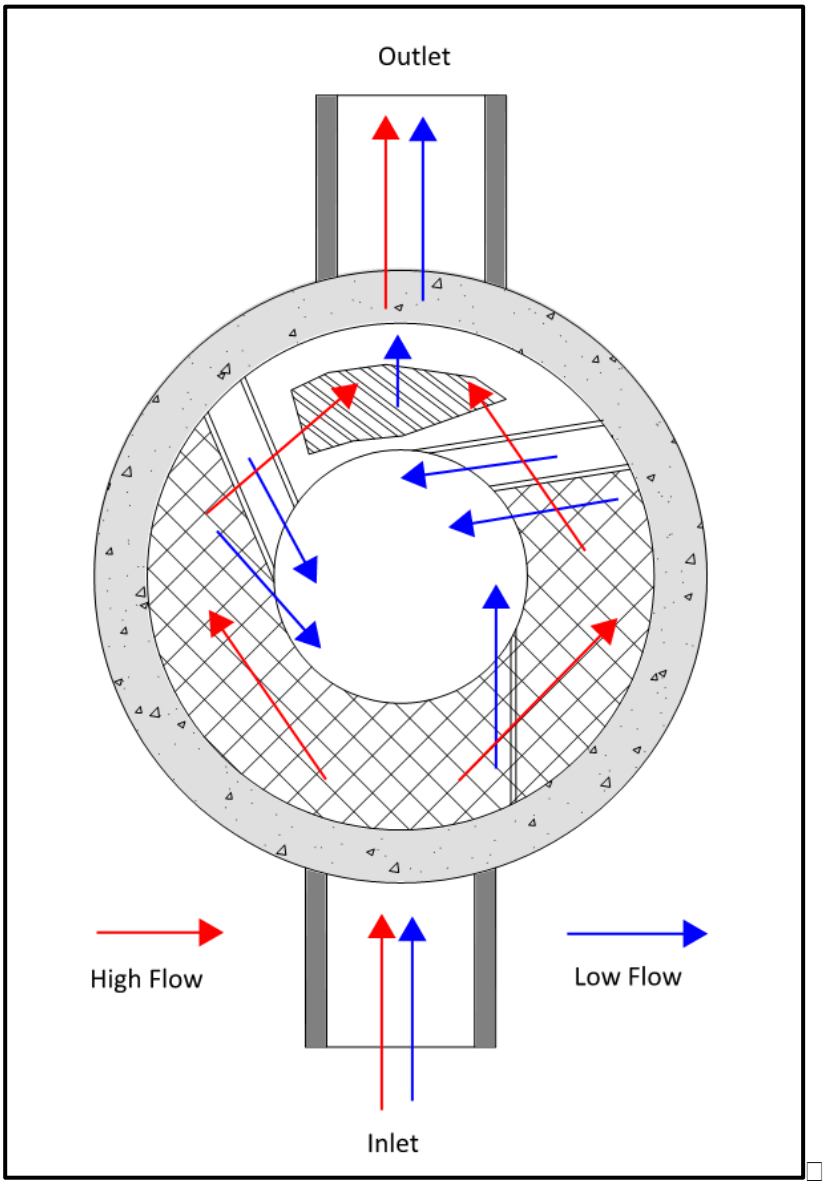


Figure 1. Hydroworks HydroStorm Operation – Plan View

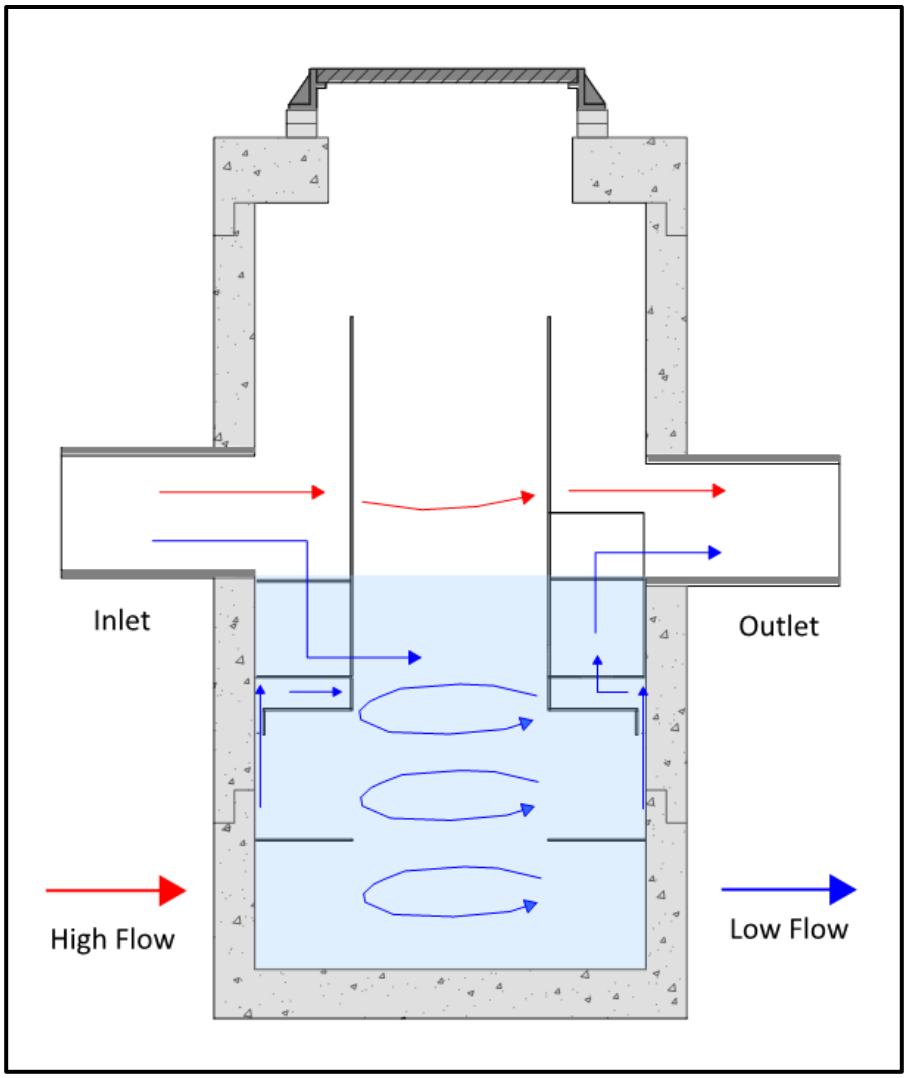


Figure 2. Hydroworks HydroStorm Operation – Profile View

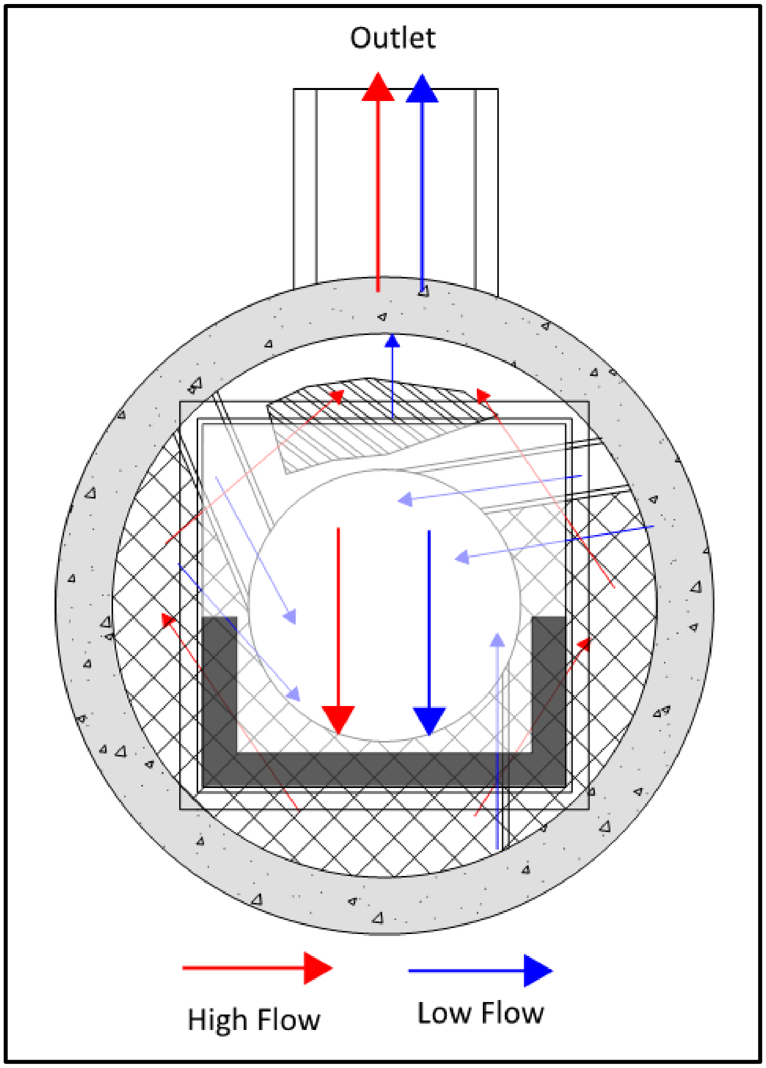


Figure 3. Hydroworks HS 4i Funnel

Inspection

Procedure

[illegible]

[illegible]

[illegible]

[illegible]

Frequency

[illegible]

[illegible]

[illegible]

[illegible]

Reporting

[illegible]

[illegible]

Maintenance

Procedure

entral access opening (24” or greater) is provided to the gain access to the lower

Hydroworks

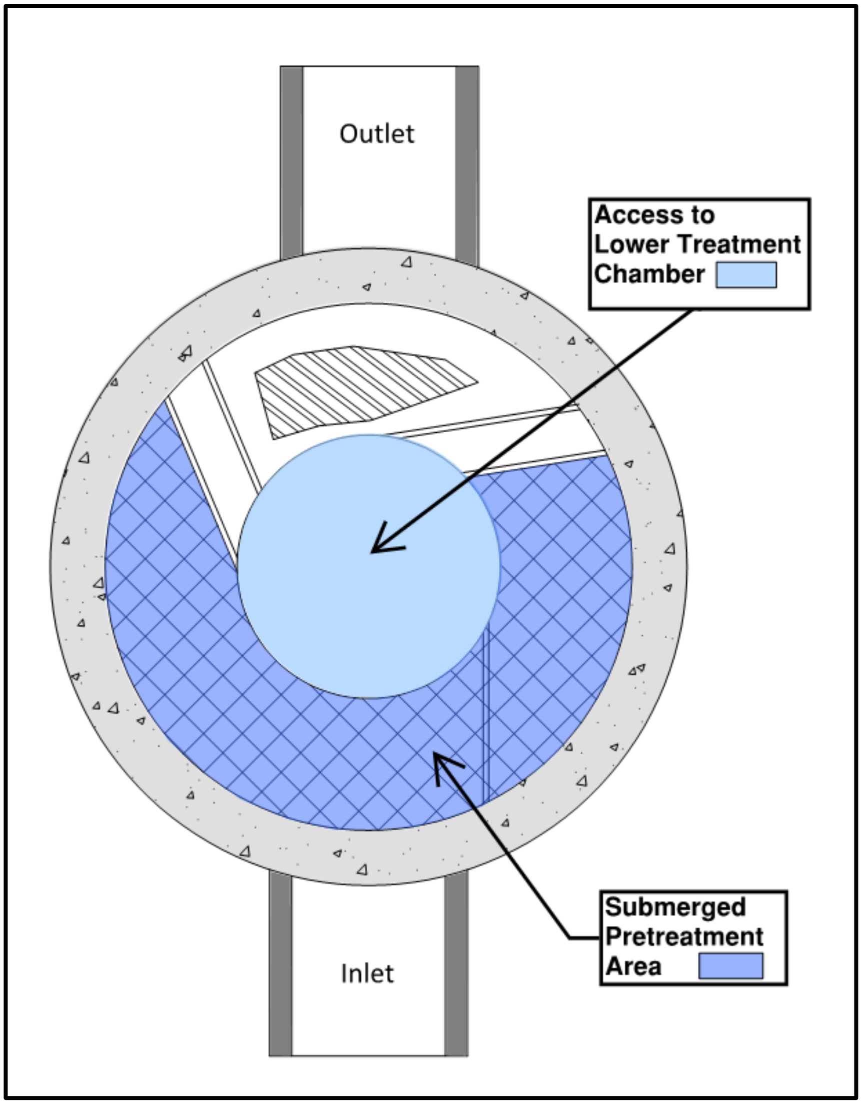


Figure 3. Maintenance Access

Frequency

[illegible]

[illegible]

[illegible]

Hydroworks

Table 1 Standard Dimensions for Hydroworks HydroStorm Models

Model	Diameter (ft)	Total Water Depth (ft)	Sediment Maintenance Depth for Table 1 Total Water Depth(ft)
HS-3	3	3	1
HS-4	4	4	1
HS-5	5	4	1
HS-6	6	4	1
HS-7	7	6	1
HS-8	8	7	1
HS-9	9	7.5	1
HS-10	10	8	1
HS-11	11	9	1
HS-12	12	9.5	1

HYDROSTORM INSPECTION SHEET

Date _____

Date of Last Inspection _____

Site _____

City _____

State _____

Owner _____

GPS Coordinates _____

Date of last rainfall _____

Site Characteristics	**Yes**	**No**
	☐	☐
	☐	☐
	☐	☐
	☐	☐

HydroStorm	**Yes**	**No**
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐

_____"

Routine Measurements

	< 0.5" (13mm)	☐	**>0.5" 13mm)**
	< 50% of surface area	☐	**> 50% surface area**
	< 12" (300mm)	☐	**> 12" (300mm)** *

M

R

Hydroworks

Hydroworks

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] red at Hydroworks' option provided, however, that by doing so Hydroworks, LLC will not be obligated to [illegible]

[illegible]

[illegible]

[illegible]

[illegible] local codes; all other applicable laws; and Hydroworks' written installation instructions.

[illegible] ited warranty represents Hydroworks' sole liability to the [illegible]

ATTACHMENT E

Revised Stormwater Cistern (2.1P) Sizing Calculations

The following equation is for the sizing of the stormwater cistern:

Water Quality Volume (WQ_v)

WQv = 0.051 acre-feet = 2,222 cubic feet from Attachment C

Required Storage Volume of Stormwater Cisterns:

$V_f = (WQ_v \times 7.5 \text{ gal/c.f.})$

The following applies for the detention system:

WQv	= 2,222 cf
7.5 gal/c.f	= conversion factor

Therefore,

$V_f =$ (2,222 c.f.)(7.5 gal/c.f.)

V_f = 16,665 gallons storage volume required

The stormwater cistern shown on the project plans provides a volume of 19,275 gallons below the overflow pipe which is greater than the WQv of 16,665 gallons. Therefore, the stormwater cistern has been sized in general accordance with the NYSDEC Design Manual. A pump and irrigation system will be provided to dewater the system every 2.5 days.

General Notes:

1. Property line and existing features shown hereon obtained from final plat subdivision of property prepared by Baxter Land Surveying dated 7–13–15.
2. Topography shown hereon is based upon aerial photogrammetry provided by Baxter Land Surveying. The contour interval is 2'.
3. Topography shown on N/F Robert Stahmer obtained from Westchester County GIS website.
4. The spot elevation that separates Subcatchment 1.0S, 2.0S and 3.0S along the existing stonewall was visually inspected and verified in the field.

LEGEND

Symbol	Description
1.0S	Subcatchment
R1	Existing Channel Section Modeled as Reach in Hydrocad
SF →	Time of Concentration Sheet Flow
SCF →	Time of Concentration Shallow Concentrated Flow
CF →	Time of Concentration Channel Flow

SOILS LEGEND

SOILS	DESCRIPTION	HYDROLOGICAL GROUP
CuD	Chatfield–Hollis–Rock outcrop complex, hilly	C
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	C
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	C

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225–9690
(845) 225–9717 fax
www.insite–eng.com

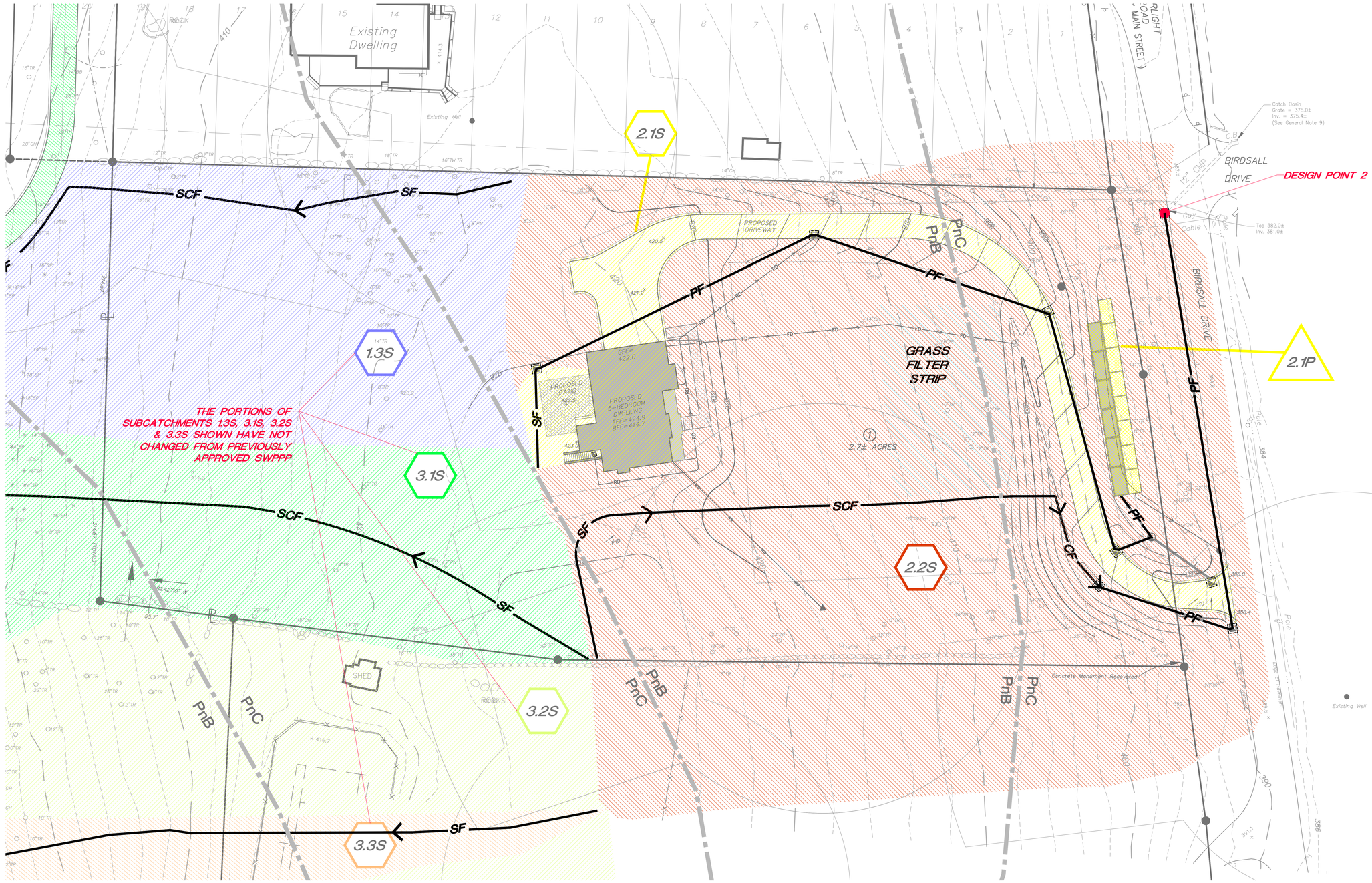
PROJECT:
STAHMER SUBDIVISION
(LOT 1)
BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NY

DRAWING:
PRE–DEVELOPMENT DRAINAGE MAP

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.
DATE	4–27–21	DRAWN BY	J.W.M
SCALE	1" = 20'	CHECKED BY	R.D.W.

DRAWING NO. 2

SHEET 2 / 3



General Notes:

1. Property line and existing features shown hereon obtained from final plat subdivision of property prepared by Baxter Land Surveying dated 7-13-15.
2. Topography shown hereon is based upon aerial photogrammetry provided by Baxter Land Surveying. The contour interval is 2'.
3. Topography shown on N/F Robert Stahmer obtained from Westchester County GIS website.
4. The spot elevation that separates Subcatchment 2.2S, 3.1S and 3.2S along the existing stonewall was visually inspected and verified in the field.
5. The onsite tributary areas associated with subdocuments 1.3S, 3.1S, 3.2S and 3.3S are consistent with what was shown on the approved SWPPP for the subdivision. The SWPPP only evaluates subcatchment 2.1S and 2.2S to demonstrate the revised house footprint and updated cistern (2.1P) still provide the required quality and quantity treatment.

LEGEND

- 2.1S — Subcatchment
- 2.1P — Proposed Stormwater Practice
- R1 — Existing Channel Section Modeled as Reach in Hydrocad
- SF — Time of Concentration Sheet Flow
- SCF — Time of Concentration Shallow Concentrated Flow
- CF — Time of Concentration Channel Flow

SOILS LEGEND

SOILS	DESCRIPTION	HYDROLOGICAL GROUP
CuD	Chatfield–Hollis–Rock outcrop complex, hilly	C
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	C
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	C

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

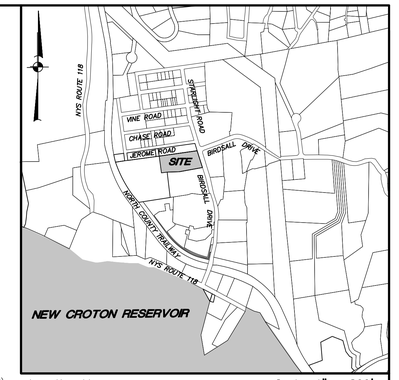
NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(945) 225-9717 fax
www.insite-eng.com

PROJECT:
STAHMER SUBDIVISION
(LOT 1)
BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NY

DRAWING:
POST-DEVELOPMENT DRAINAGE MAP

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.	DRAWING NO. 3	SHEET 3 / 3
DATE	4-21-17	DRAWN BY	J.W.M.		
SCALE	1" = 20'	CHECKED	R.D.W.		



Location Map Scale: 1" = 800'

Owner/Applicant:

Andrew Fiore
37 South 8th Street, Unit #306
Brooklyn, NY 11249

Project Location:

600 Birdsall Drive
Yorktown Heights, NY 10598

Site Data:

Zone: R-80 Residential
Total Acreage 2.7 AC±
Tax Map No.: 59.10-1-10
Watershed Basin: New Croton Reservoir
RS Name: Stahmer Minor Subdivision
RS Lot No.: 10
Filed Map No.: 29353
Date Filed: 12/18/19

General Notes:

1. Property line and existing features shown hereon obtained from final plat subdivision of property prepared by Baxter Land Surveying dated 7-13-15.
2. Topography shown hereon is based upon aerial photogrammetry provided by Baxter Land Surveying. The contour interval is 2'.
3. No soil stockpiles, materials or equipment will be stored in areas to be used for the subsurface sewage treatment system.
4. The electric and communication utilities shall be installed in accordance with the utility provider specifications including but not limited to provided the proper bedding, cover, and detectible warning tape / tracer wire.
6. The rim elevation of the existing catch basin at the corner of Birdsall Drive and Starlight Road was determined by interpolating existing topographic information. The invert was determined by field measurements between the rim and invert and relating the invert to the interpolated rim elevation.

LEGEND

- PROPERTY LINE
- EXISTING PROPERTY LINE TO BE EXTINGUISHED
- EXISTING UTILITY POLE W/ OVERHEAD WIRES
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING WELL
- EXISTING DRAINAGE PIPE
- EMP EXISTING ELECTRIC METER POST
- ø Pole EXISTING UTILITY POLE
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED

TREE LEGEND

	Deciduous Tree
	Evergreen
TRI.	Triple
TW.	Twin
QUAD.	Quadruple
BB	Black Birch
BE	Beech
CH	Cherry
HK	Hickory
OA	Oak
PN	Pine
SP	Spruce
TR	Tree

SOILS LEGEND

SOILS	DESCRIPTION	HYDROLOGICAL GROUP
CuD	Chatfield-Hollis-Rock outcrop complex, hilly	C
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	C
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	C

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

NO.	DATE	REVISION	BY

INSITE
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PROJECT:
FIORE RESIDENCE
600 BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:
EXISTING CONDITIONS & REMOVALS PLAN

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.
DATE	4-28-21	DRAWN BY	J.W.M.
SCALE	1" = 20'	CHECKED BY	R.D.W.

DRAWING NO. EX-1 SHEET 1 / 4

R1-80 Zone Requirements:

	Required:	Provided:
Lot Area: (sf)	80,000	117,530
Lot Width At Main Bldg Line: (ft)	200'	234'±
Lot Depth: (ft)	200'	510'±
Front Yard: (ft)		
Birdsall Drive	75'	225'±
Jerome Road	100' (1)	
Side Yard: (ft)		
Main or Accessory Bldg., Minimum Either Side	30'	80'
Two Combined	80'	140'±
Accessory Bldg. if in Rear Yard, Minimum Either Side	10'	N/A
Rear Yard: (ft)		
Main Bldg.	75'	230'±
Accessory Bldg. or Structure	10'	N/A
Maximum Height: (ft)		
Main Bldg.	35'	<35'
Accessory Bldg.	15'	N/A
Minimum Useable Floor Area of Dwelling Unit: (sf)	1,200	4,300 (AS SHOWN)
Maximum Bldg. Coverage (All Buildings)	10%	2.6% ± (AS SHOWN)
Required Off-Street Parking Spaces Per Dwelling Unit	1	2
Road Frontage: (ft)	200'	235'±

(1) ON STREETS WITH LESS THAN 50-FOOT RIGHT-OF-WAY, THE FRONT YARD SETBACK SHALL BE MEASURED FROM THE CENTER LINE OF THE EXISTING ROADWAY AND 25 FEET SHALL BE ADDED TO THE REQUIRED FRONT YARD SETBACK.

STORMWATER MANAGEMENT PRACTICE TEST RESULTS

DEEP TEST PERFORMED ON AUGUST 28, 29 AND 30, 2017 BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE.

NOTE: NO GROUNDWATER, MOTTLING, OR ROCK ENCOUNTERED UNLESS NOTED.

SW 1: 0"-6": TOPSOIL
6"-144": COMPACT BROWN FINE SAND
GROUNDWATER SEEP @ 132"
GROUNDWATER OR LEDGE ENCOUNTERED @ 144"

SW 2: 0"-6": TOPSOIL
6"-80": LIGHT BROWN FINE SANDY LOAM
SPOT MOTTLING OBSERVED @ 32"
NO GROUNDWATER OR LEDGE ENCOUNTERED

INFILTRATION TEST RESULTS
I-1: 12 INCHES/HOUR

DRAINAGE TABLE

STRUCTURE	RIM	INV.	PIPE SIZE (Diameter (A))	LENGTH (Lineal Feet (L.F.))	SLOPE (Percent (%))
YD 8	422.0	419.5			
DI 7	414.7	410.7 IN 410.2 OUT	6" HDPE	150 L.F.	5.9
CB 6	401.8	398.7	12" HDPE	120 L.F.	9.6
CB 5	392.0	388.5	12" HDPE	123 L.F.	8.3
HDS 3A	395.0	386.1	12" HDPE	19 L.F.	12.6
SMP 2.1P		383.0	12" HDPE	25 L.F.	12.4
YD 7A	413.0	410.5			
DI 7	395.0	408.3	6" HDPE	210 L.F.	1.0
DI 4	391.0	387.5			
DI 3	389.0	385.9 IN 385.2 OUT	12" HDPE	67 L.F.	3.0
DMH 2	388.0	384.5	15" HDPE	38 L.F.	1.8
DI 1	382.0	380.5	15" HDPE	167 L.F.	2.4
SMP 2.1P		385.5			
DMH 2	395.0	385.0	6" HDPE	51 L.F.	1.0
DI 2B	387.9	386.4			
HDS 3A	395.0	386.1	6" HDPE	36 L.F.	0.8

PLANT LIST

QUANTITY	KEY	BOTANICAL/COMMON NAME	SIZE	ROOT/SPACING
3	AF	Acer X Freemanii / Autumn Blaze Maple	2" CAL.	B&B/10' O.C. MIN.
15	TN	Thuja 'North Pole' / Emerald Green Arborvitae	4'-5' HT.	B&B/6' O.C. MIN.

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

NO.	DATE	REVISION	BY

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www.insite-eng.com

PROJECT:
FIORE RESIDENCE
600 BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:
SITE DEVELOPMENT PLAN

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.	DRAWING NO.	SHEET
DATE	4-28-21	DRAWN BY	J.W.M.	SP-1	2 / 4
SCALE	1" = 20'	CHECKED BY	R.D.W.		

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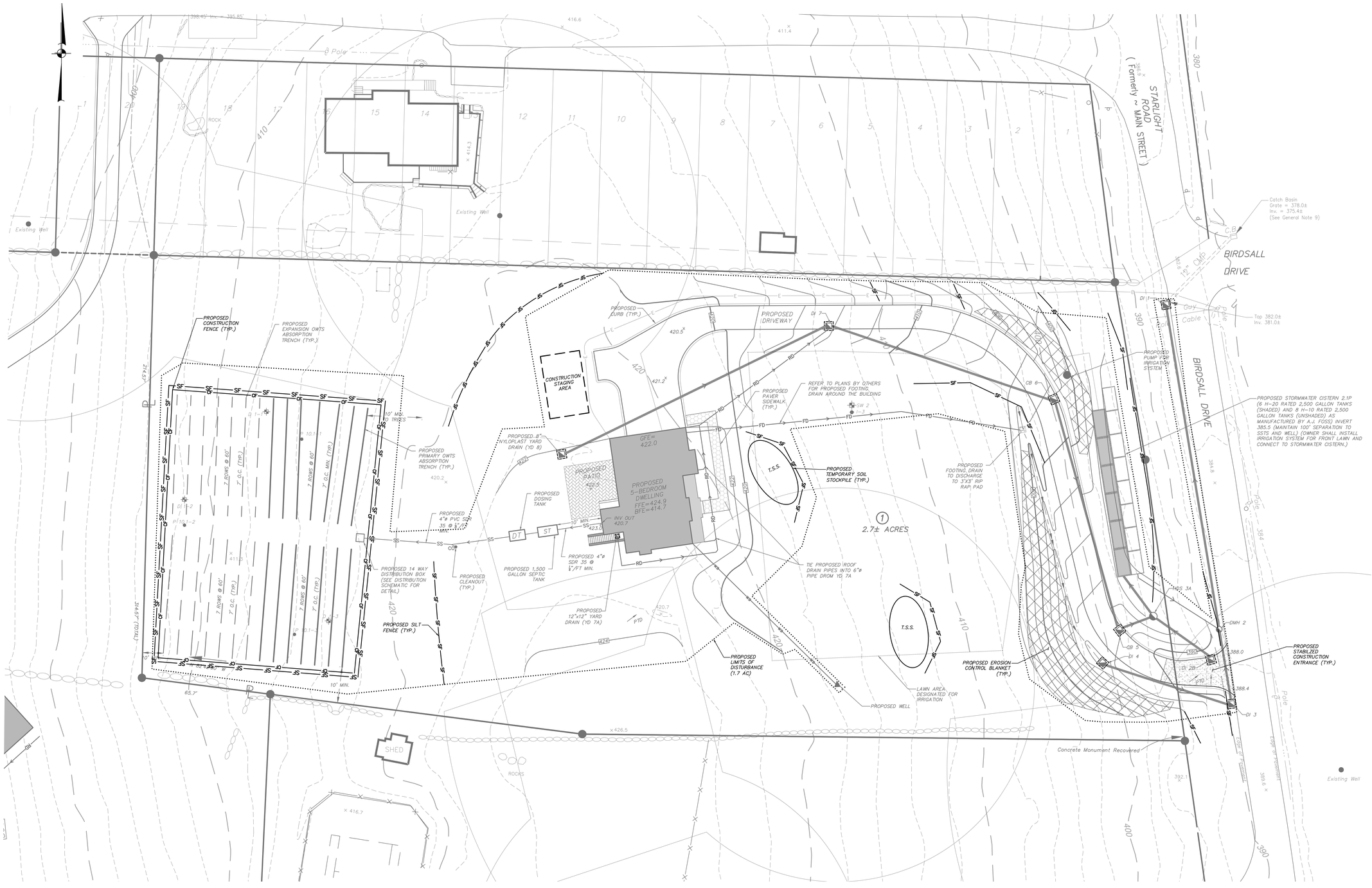

SOIL RESTORATION REQUIREMENTS

TYPE OF DISTURBANCE	SOIL RESTORATION REQUIREMENTS
Areas where topsoil is stripped only – no change in grade	Aerate[1] and apply 6 inches of topsoil
Areas of cut or fill	Apply full Soil Restoration [2]
Heavy traffic areas on site (especially in a zone 5–25 feet around buildings but not within a 5–foot perimeter around foundation walls)	Apply full Soil Restoration (decomposition and compost Enhancement[3])
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.

1. Aeration includes the use of machines suchAeration includes the use of machines such as tractor–drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which functions like a mini–subsoiler.
2. Per "Deep Ripping and De–compaction, DEC 2008".
3. Compost shall be aged, from plant derived materials, free of viable weed seeds, have no visible free water or dust produced when handling, pass through a half inch screen and have a pH suitable to grow desired plants.

REQUIRED POST–CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

1. Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP–0–15–002), all construction projects needing post–construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post–construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part III.B.2a–J and III.B.3.
   a. Identification of all post–construction stormwater management practices to be constructed as part of the project; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
   b. A site map/construction drawing(s) showing the specific location and size of each post–construction stormwater management practice; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
   c. A Stormwater Modeling and Analysis Report including pre–development conditions, post–development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the sizing criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. The required analysis is provided in the project Stormwater Pollution Prevention Plan.
   d. Soil testing results and locations. This SWPPP requirement is shown hereon.
   e. Infiltration testing results. This SWPPP requirement is shown hereon.
   f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post–construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The project Stormwater Pollution Prevention Plan serves to satisfy this requirement.
2. Enhanced Phosphorus Removal Standards – Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post–construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post–construction stormwater management practice component of the SWPPP shall include items 1.a – 1.f above. The permanent stormwater practices for this project have been sized according to chapter 10 of the Design Manual Enhanced Phosphorus Removal Standards. Please see 1.a – 1.f above.

CONSTRUCTION SEQUENCE:

1. Stake out limit of disturbance, establish staging area and mark trees to be removed.
2. Septic Area shall be cordoned off with construction fence prior to start of site work.
3. Install silt fence in general locations indicated on the plan.
4. Install stabilized construction entrance/anti–tracking pad at driveway entrance.
5. Begin clearing and grubbing operations associated with house, driveway and SSTS.
6. Strip and stockpile topsoil on site for later use in lawn and landscape areas.
7. Begin grading and construction of individual driveway.
   7.1. During this step, drainage improvements along Birdsall drive shall be constructed (Specifically installation and associated piping for DI 1, DMH 2 and DI 3).
   7.2. Install remaining utilities and drainage structures (Specifically DI 2B, HDS 3A, DI 4, CB 5, CB 6, DI 7) and associated piping. Install Cistern SMP 2.1P and connect Roof Leader Drains to the structures as shown on the plan. The pipe discharging to the Hydrodynamic Separator (from CB 5 and DI 2B) to be plugged until final stabilization is achieved.
   7.3. Complete Grading for driveway and stabilize associated grading in shoulder areas. Area downhill of footing drains shall be stabilized prior to footing drain installation.
   7.4. Slopes steeper than 2:1 shall be stabilized immediately after grading with Erosion Control Blanket.
   7.5. The Irrigation System shall be installed at the same time as the Cistern.
8. Begin house construction, individual lot grading and installation of SSTS and well. Install Footing Drains and Rip Rap Pads.
9. Upon completion of grading operations, install finished driveway surfaces.
10. Prior to application of topsoil, all areas in the limit of disturbance must undergo soil restoration.
11. Topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this page.
12. Upon achieving final stabilization (as determined by the project qualified professional performing the erosion and sediment control inspections) remove the plugs discharging to the stormwater practices and pretreatment devices.

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

	MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas area permanently stabilized.

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

NO.	DATE	REVISION	BY

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PROJECT:
FIORE RESIDENCE
600 BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:
EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.
DATE	4–28–21	DRAWN BY	J.W.M.
SCALE	1" = 20'	CHECKED BY	R.D.W.

DRAWING NO. SP–2 SHEET 3/4

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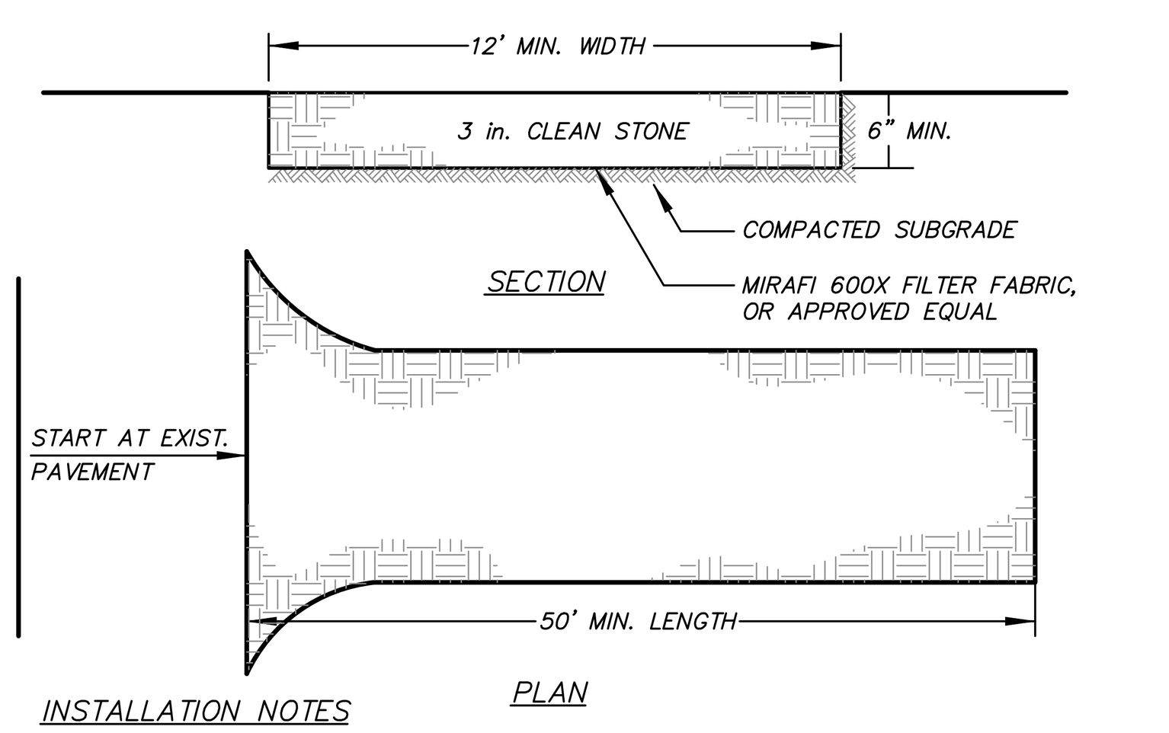
EROSION & SEDIMENT CONTROL NOTES:

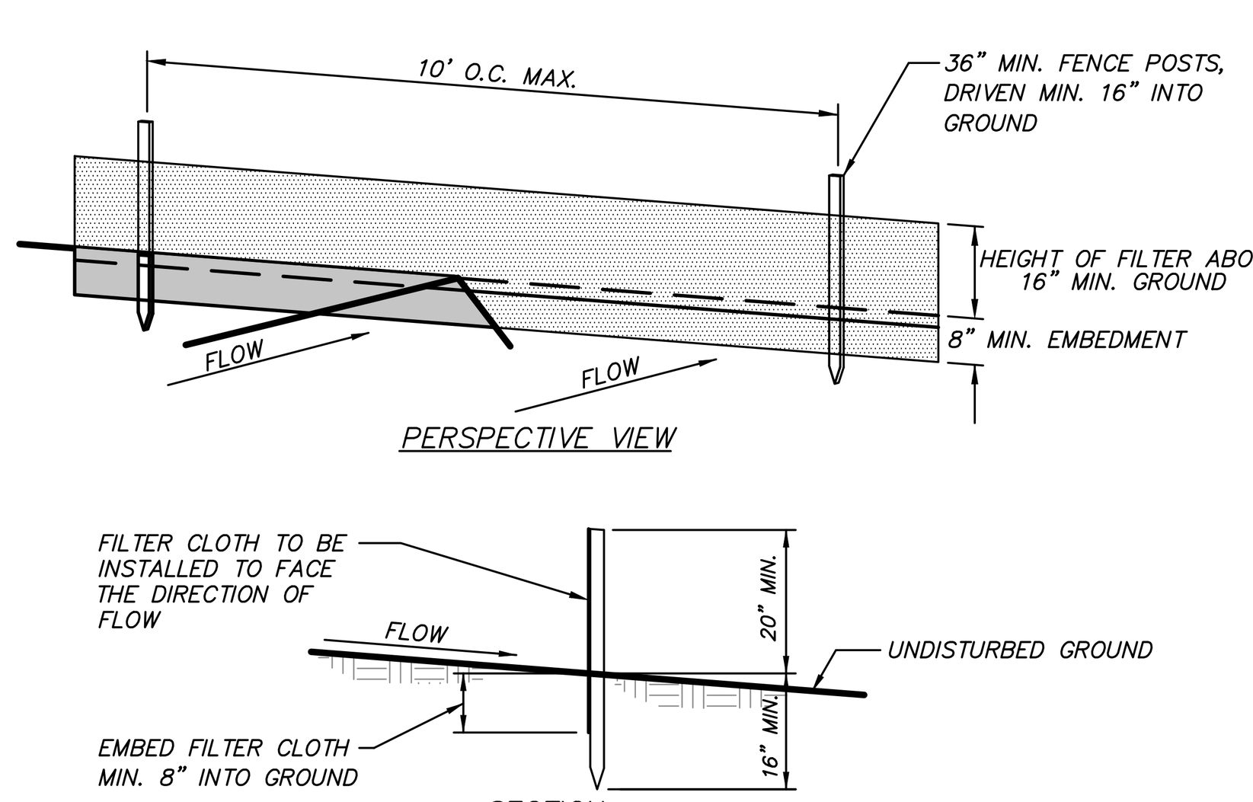
1. The owner's field representative (O.F.R.) will be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
2. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
3. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
4. When land is exposed during development, the exposure shall be kept to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
5. Silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
6. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded for temporary stabilization. Ryegrass (annual or perennial) at a rate of 30 lbs. per acre shall be used for temporary seeding in spring, summer or early fall. 'Aristook' Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.
7. Any disturbed areas not subject to further disturbance or construction traffic, permanent or temporary, shall have soil stabilization measures initiated for permanent vegetation cover in combination with a suitable mulch within 1 business day of final grading. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
   - Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative at a rate of 100 pounds per acre in the following proportions:
     - Kentucky Bluegrass 20%
     - Creeping Red Fescue 40%
     - Perennial Ryegrass 20%
     - Annual Ryegrass 20%
   - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
8. Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Section 209–3.08B". Hydroseeding shall be performed using materials and methods as approved by the site engineer.
9. Cut or fill slopes steeper than 3:1 shall be stabilized immediately after grading with Curlex I Single Net Erosion Control Blanket, or approved equal.
10. Paved roadways shall be kept clean at all times.
11. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
12. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
13. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
14. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.
15. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the O.F.R.
16. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
17. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
18. The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
19. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and/or the Town Engineer shall be installed by the contractor.
20. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.



INSTALLATION NOTES

1. STONE SIZE – USE 3" STONE
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 – 12 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 PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF 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.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
(N.T.S.)



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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

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

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

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE DETAIL
(N.T.S.)

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

REQUIRED EROSION CONTROL SWPPP CONTENTS:

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

a. Background Information: The subject project consists of a single family residential dwelling.

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

c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Paxton Fine Sandy Loam (PnB & PnC), and Chatfield–Hollis, Rock Outcrop (CuD) as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "C".

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

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

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

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

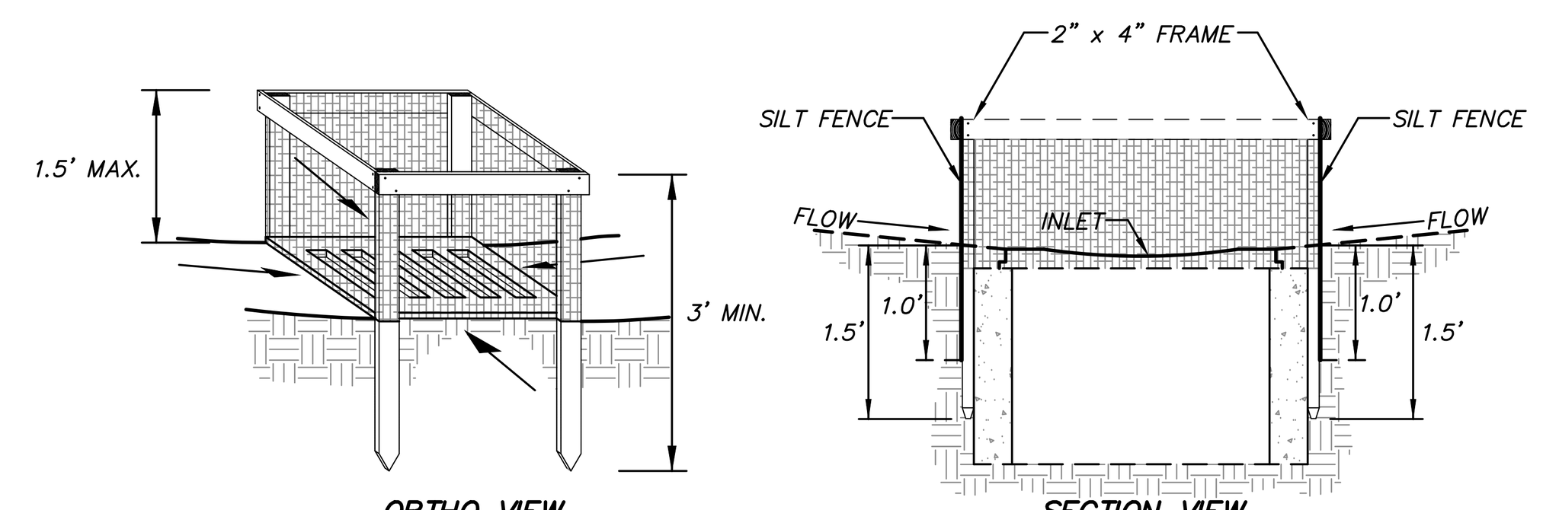
h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details and Erosion and Sediment Control Notes serve to satisfy this SWPPP requirement.

i. An inspection schedule: Inspections are to be performed twice weekly and by a qualified professional as required by the General Permit GP–0–20–001. In addition the NYSDEC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.

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

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

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

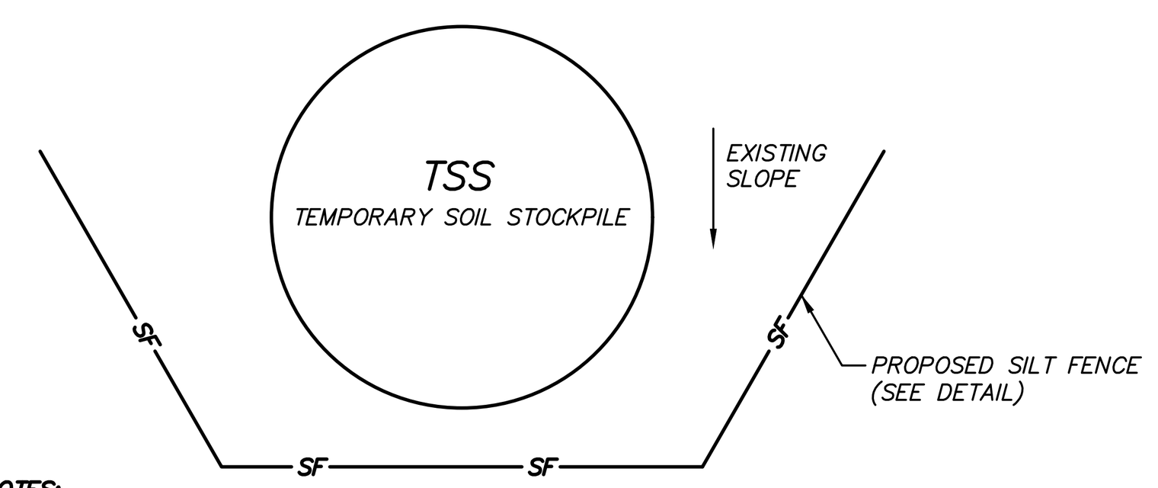


INSTALLATION NOTES

1. FILTER FABRIC SHALL HAVE AN EOS OF 40–85. BURLAP MAYBE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

FILTER FABRIC INLET PROTECTION DETAIL
(N.T.S.)



NOTES:

1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.

TEMPORARY SOIL STOCKPILE DETAIL
(N.T.S.)

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE					
MONITORING REQUIREMENTS				MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
INLET PROTECTION	–	Inspect	Inspect	Clean/Repair/ Replace	Remove
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
SWALES	–	Inspect	Inspect	Clean/Mulch/ Repair	Mow Permanent Grass/Replace/ Repair Rip Rap
CONCRETE DRAINAGE STRUCTURES	–	Inspect	Inspect	Clean Sumps/ Remove Debris/ Repair/Replace	Clean Sumps/ Remove Debris/ Repair/Replace
PAVEMENT	–	Inspect	Inspect	Clean	Clean
*SEDIMENT TRAP	–	Inspect	Inspect	Clean/Mulch/ Repair/Reseed	N/A
STONE CHECK DAM	–	Inspect	Inspect	Remove Silt/Debris and Repair Rip Rap	Remove
CONCRETE TRUCK WASHOUT AREA	–	Inspect	Inspect	Remove Concrete From Site when Full and Re–establish	Remove
LEVEL SPREADER/ ROCK OUTLET PROTECTION	–	Inspect	Inspect	Remove Silt/Debris and Repair Rip Rap	Remove Debris and Repair Rip Rap

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized.

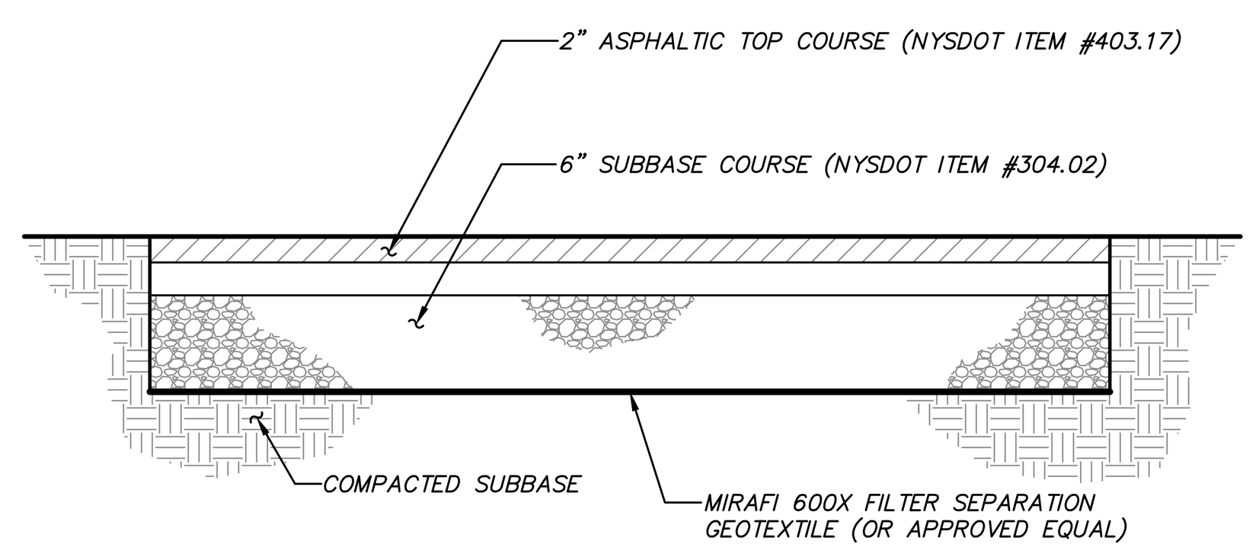
Note: The party responsible for implementation of the maintenance schedule during and after construction, as well as implementation of the long term maintenance plan is:

Andrew Fiore
37 South 8th Street, Unit #306
Brooklyn, NY 11249
and/or the current owner(s) of the subject property.

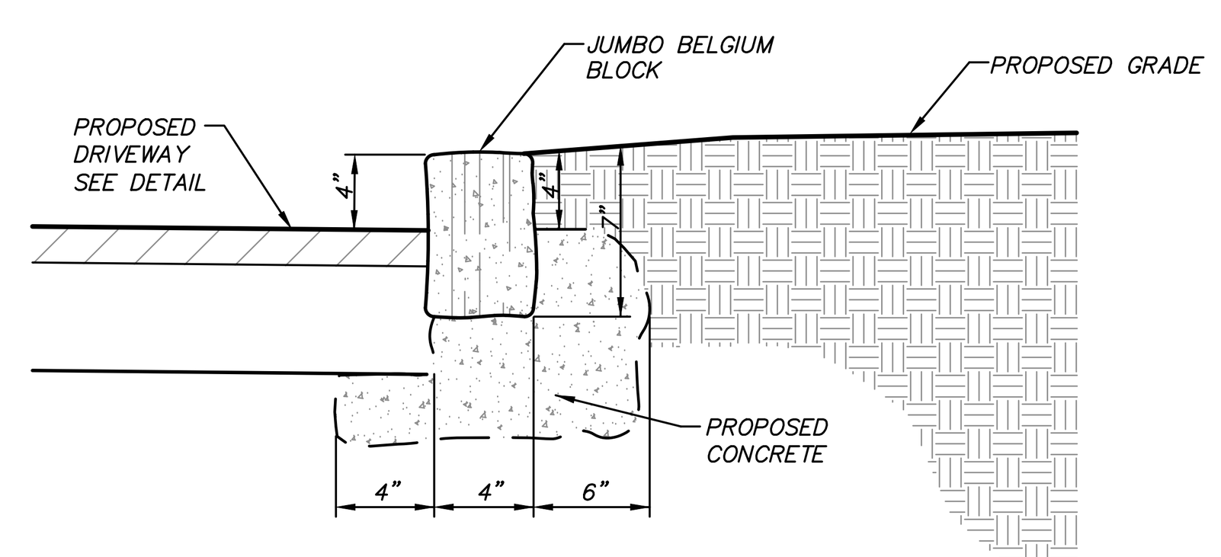
SMP LONG TERM INSPECTION/MAINTENANCE REQUIREMENTS			
PRACTICE ID	MONTHLY INSPECTION/MAINTENANCE REQUIREMENTS	ANNUAL INSPECTION/MAINTENANCE REQUIREMENTS	INSPECTION/MAINTENANCE AFTER MAJOR STORM EVENTS
Stormwater Cistern (2.1P)	Not Applicable	Inspect and clear debris/sediment from units and verify operation. Flush or vacuum units to remove sediment as needed. Inspect orfices, inlets & outlets for clogging, & stabilize and/or repair immediately. The cistern will be manually lowered at the end of fall/beginning of the winter season.	Inspect orfices, inlets & outlets for clogging, & stabilize and/or repair immediately. Inspect sediment depths and general condition of units.
Hydro–dynamic Separator	Not Applicable	Remove cover and Inspect chamber and discharge pipes. Flush or vacuum accumulated sediment as needed. Refer to Attachment D of the project SWPPP for additional information.	Remove cover and Inspect chamber and discharge pipes. Flush or vacuum accumulated sediment as needed. Refer to Attachment D of the project SWPPP for additional information.
Catch Basin / Drain Manhole	Not Applicable	Clean sumps/remove debris, Inspect weir wall for deformation and/or repair immediately	Clean sumps/remove debris, Inspect weir wall for deformation and/or repair immediately
Drain Inlets / Yard Drains	Clean sumps/remove debris	Clean sumps/remove debris	Clean sumps/remove debris
Grass Swales	Inspect first few months after construction for eroding soils & slumpage & repair immediately	Inspect & clean Mow & remove debris & litter. Revegetate as needed. Inspect for & remove accumulated sediment every 5 to 10 years.	Not Applicable
Drainage Pipes	Not Applicable	Clean sumps/remove debris	Clean sumps/remove debris

Note: The party responsible for implementation of the maintenance schedule during and after construction, as well as implementation of the long term maintenance plan is:

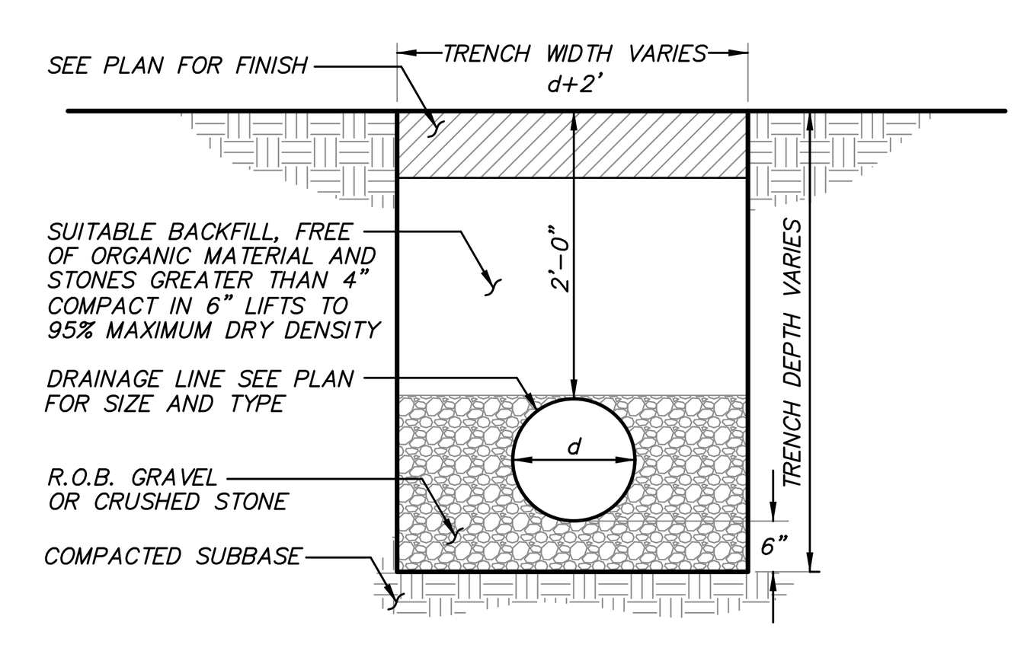
Andrew Fiore
37 South 8th Street, Unit #306
Brooklyn, NY 11249
and/or the current owner(s) of the subject property.



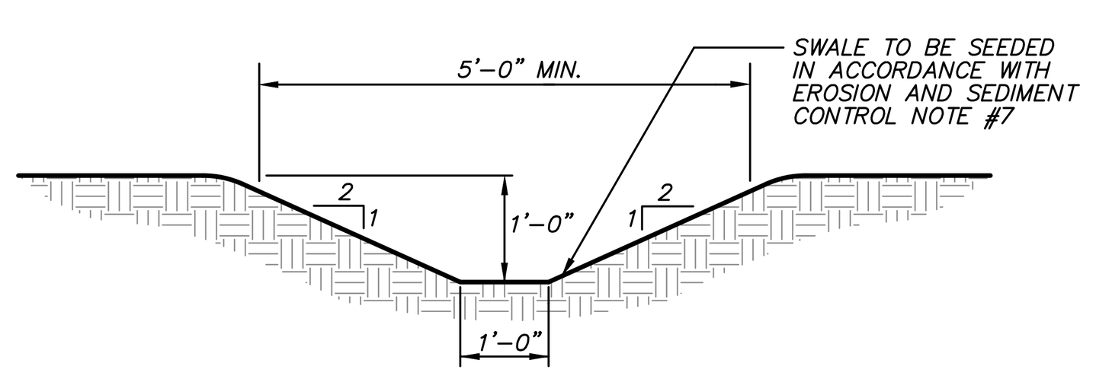
ASPHALT PAVEMENT DETAIL
(N.T.S.)



4" BELGIUM BLOCK CURB DETAIL
(N.T.S.)

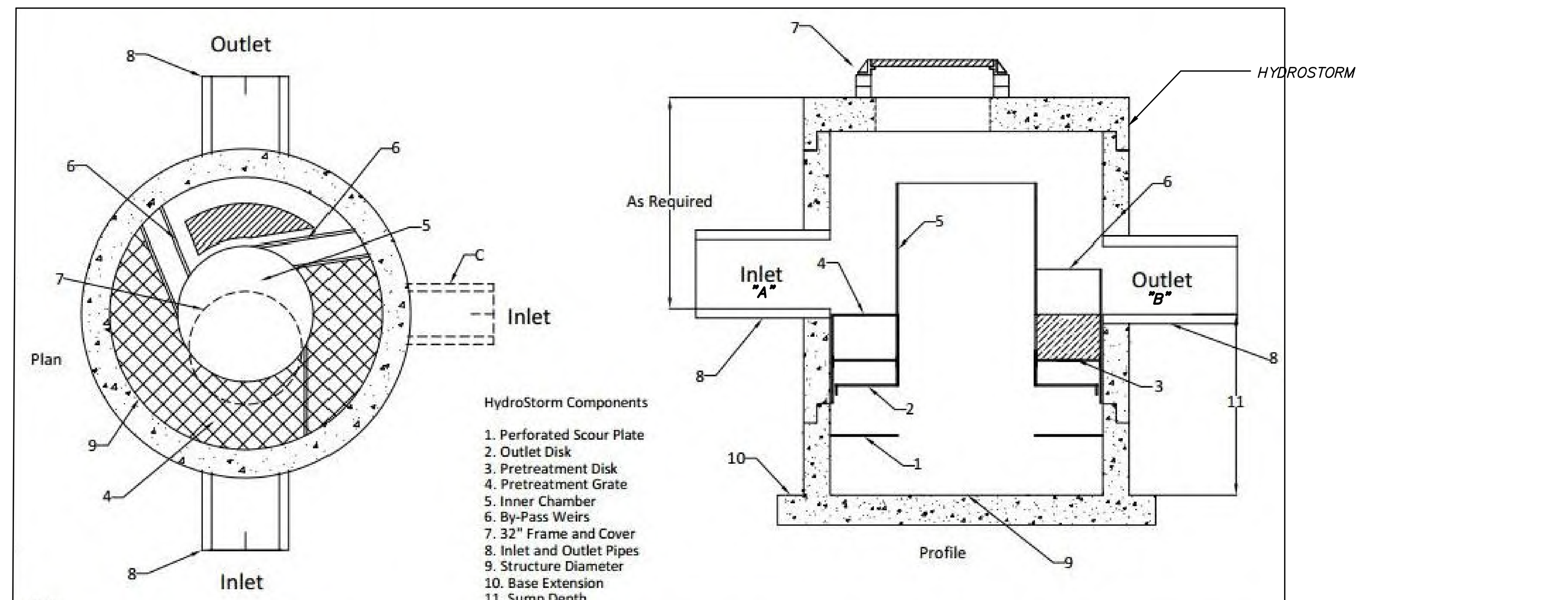


DRAINAGE LINE TRENCH DETAIL
(N.T.S.)



GRASS SWALE TO BE LINED WITH CURLEX I AS MANUFACTURED BY "AMERICAN EXCELSIOR COMPANY" OR APPROVED EQUAL.

GRASS SWALE DETAIL
(N.T.S.)



HydroStorm Components

1. Perforated Scour Plate
2. Outlet Disk
3. Pretreatment Disk
4. Pretreatment Grate
5. Inner Chamber
6. By-Pass Weirs
7. 32" Frame and Cover
8. Inlet and Outlet Pipes
9. Structure Diameter
10. Base Extension
11. Sump Depth

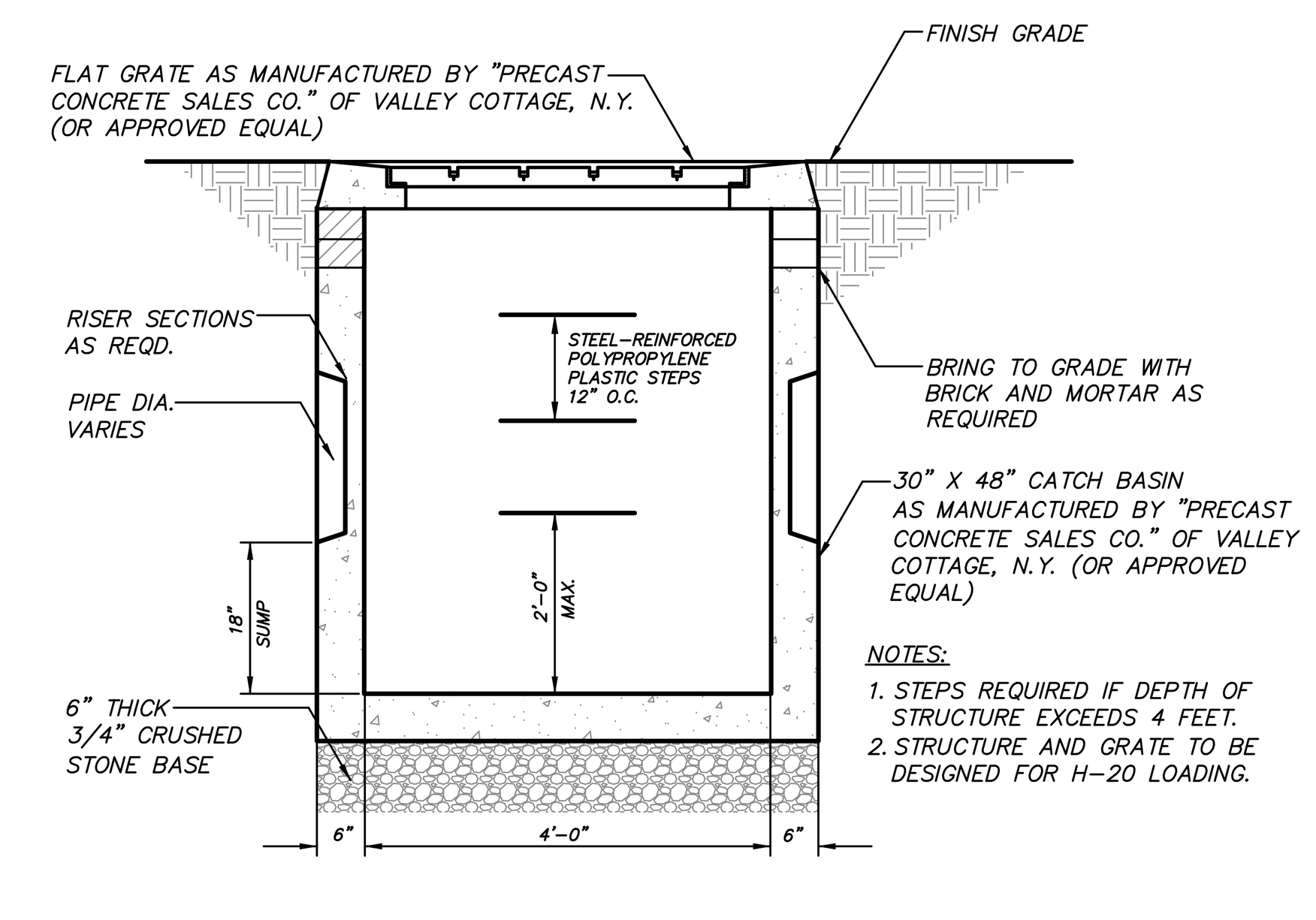
Notes:

A. Use a headloss K factor of 1.04 for hydraulic gradeline calculations
B. Sump depths shown are minimums. Additional depth can be added for site specific capacities
C. Multiple inlet pipes allowed
D. Drops allowed
E. Inlet invert elevations should be the same or higher than the outlet invert elevation. Inlet can be up to 12" lower than outlet if pretreatment area is omitted but 12" must be added to sump depth to maintain overall treatment volume
F. Solid Cover shown. HydroStorm can be desiged with an inlet grate if required.
G. Oil capacities given are spill capacities. Oil should be removed from the unit once an oil depth of 2" or more is measured in the inner chamber
H. Sediment depths are maximum holding capacities and not recommended capacities for regular maintenance. Maintenance is recommended annually or once every 2 years.
I. Capacities are rounded down to nearest 5 gal or ft3

HydroStorm Dimensions / Capacities							
Model	Diameter (ft) (9)	Sump Depth (ft) (11)	Inner Chamber (ft) (5)	Max. Pipe (in) (8)	Volume (gal)	Oil (gal)	Sediment (ft3)
HS 4	4	4	2	24	375	95	30
HS 5	5	4	2.5	30	585	155	45

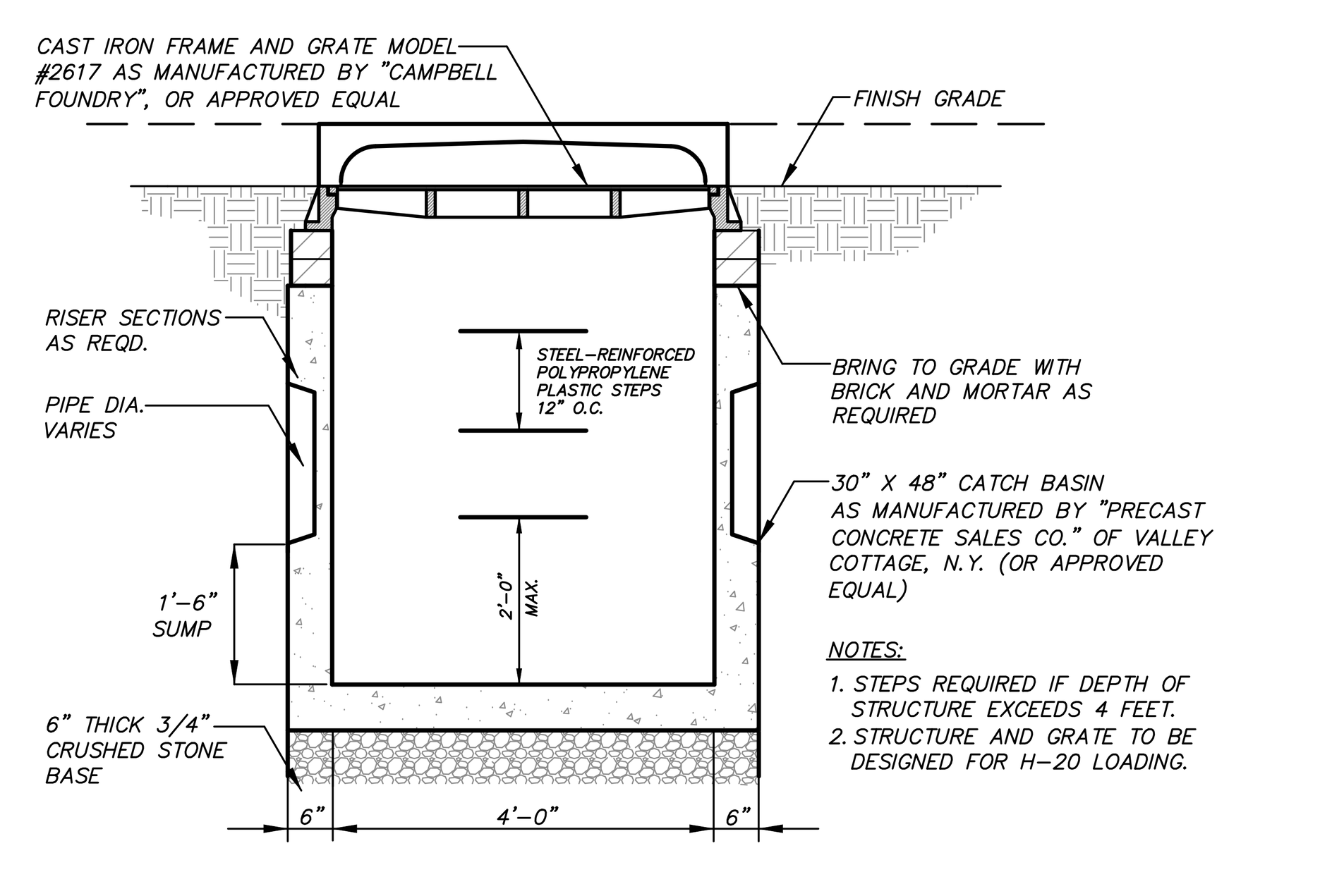
STRUCTURE DESIGNATION	SMP ID	REQUIRED MODEL	DIAMETER (FT)	INLET INV "A"	OUTLET INV "B"
HDS 3A	2.1P	HG 4	48"	386.1	386.0

PROPOSED HYDRODYNAMIC SEPARATOR DETAIL
(N.T.S.)



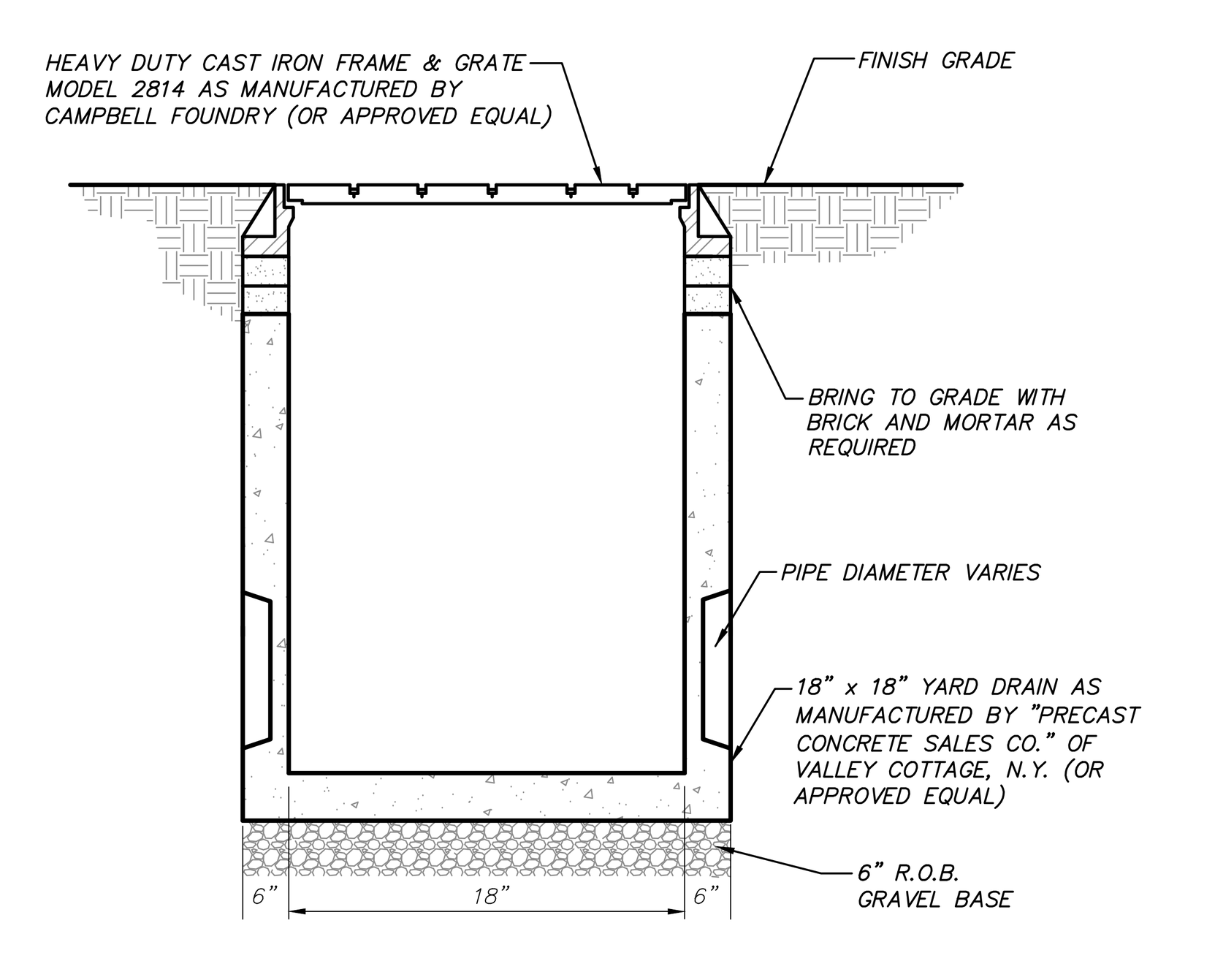
NOTES:
1. STEPS REQUIRED IF DEPTH OF STRUCTURE EXCEEDS 4 FEET.
2. STRUCTURE AND GRATE TO BE DESIGNED FOR H–20 LOADING.

DRAIN INLET DETAIL
(N.T.S.)

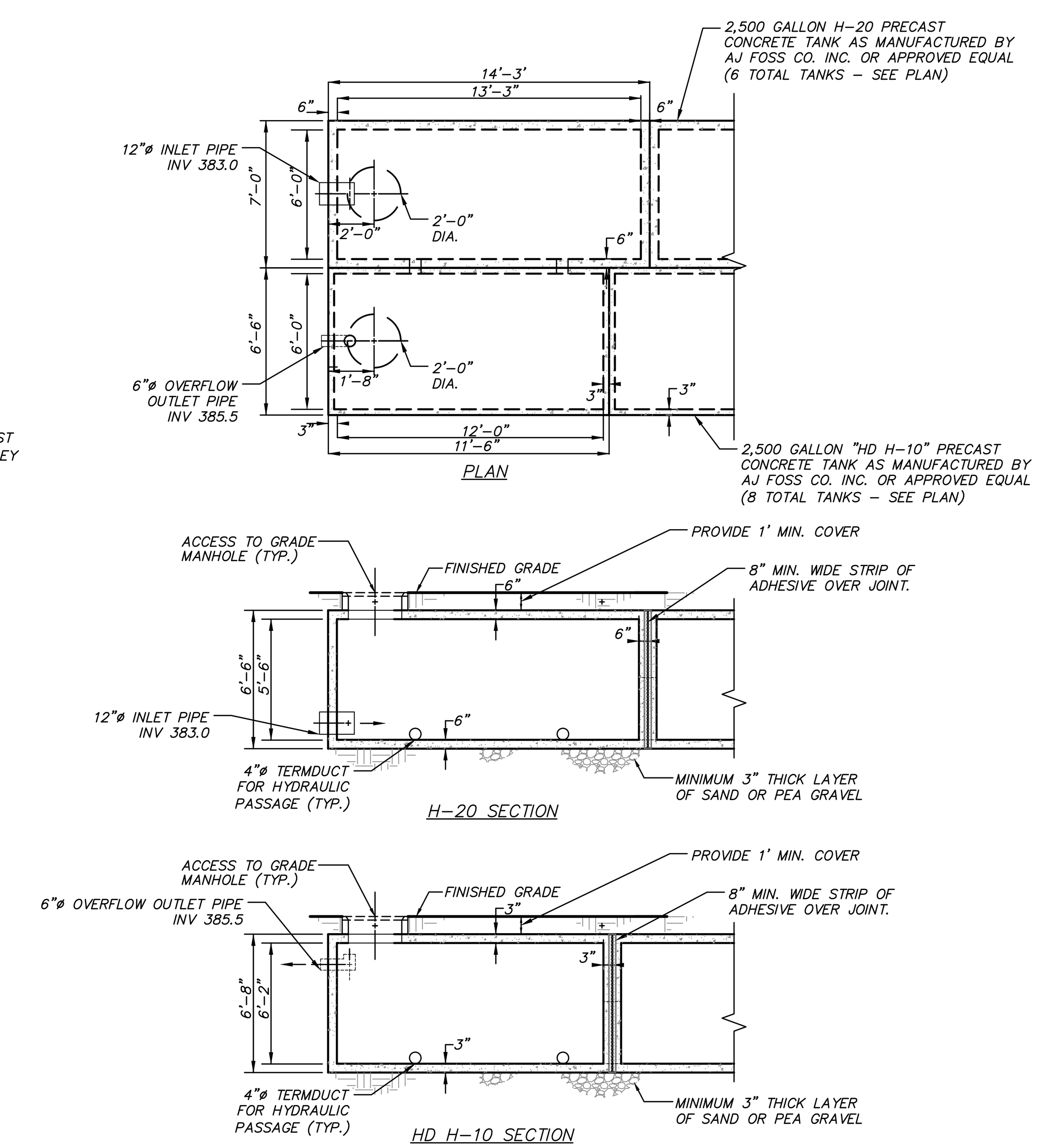


NOTES:
1. STEPS REQUIRED IF DEPTH OF STRUCTURE EXCEEDS 4 FEET.
2. STRUCTURE AND GRATE TO BE DESIGNED FOR H–20 LOADING.

CATCH BASIN DETAIL
(N.T.S.)



18" x 18" YARD DRAIN DETAIL
(N.T.S.)



SMP 2.1P RAINWATER CISTERN DETAIL
(TO BE DESIGNED FOR H–20 LOADING)
(N.T.S.)

IRRIGATION SYSTEM NOTES:

1. Stormwater Cistern (SMP 2.1) shall be installed with a pump and distribution piping capable of servicing Lawn Area as shown on Drawing IPP–1. Final design of the irrigation system by irrigation contractor.
2. Irrigation distribution and piping shall be installed prior to the installation of finished asphalt and concrete surfaces.
3. Irrigation contractor to provide as–built of system to Design Engineer.

CISTERN DEWATERING NOTES:

1. The cistern is proposed to provide the primary source of water to irrigate the lawn area on lot 1.
2. The cistern will be used as the primary source of irrigation water, when available, for the lawn area. An alternate source of irrigation water will be utilized by the owner when the storage in the cistern has been depleted.
3. The Owner will monitor the irrigation system during the growing season to ensure volume within the cistern is provided prior to rainfall events. Should impending weather dictate the need for additional storage within the cistern, a longer duration of pumping than what is contemplated in note #5 below shall be used to lower the static water level in the cistern prior to a rainfall event.
4. A pump with a minimum output of 20 gallons per minute shall be used to dewater the cistern and supply the irrigation system.
5. The anticipated irrigation schedule during the growing season is 2.5 hours a day, every day. As stated above the cistern dewatering pump must be capable to pumping 20 gallons a minute. Therefore it is conservatively estimated that 3,000 gallons will be used during one irrigation cycle. The cistern volume, if completely full, would be depleted in just over 5 irrigation cycles or once every 5 days. Based on the EPA WaterSense New Home Specification tool, the site requires 96,557 gallons/month (24,139 gallons/week, 3,448 gallons/day).
6. Per the recommendations for cisterns in the New York State Stormwater Management Design Manual (Design Manual) the cistern will be manually lowered by the owner at the beginning of and during the winter season. The lowering of the water elevation in the cistern provides the needed storage for spring ice melt and will help prevent possible winter ice damage within the cistern.

NO.	DATE	REVISION	BY

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

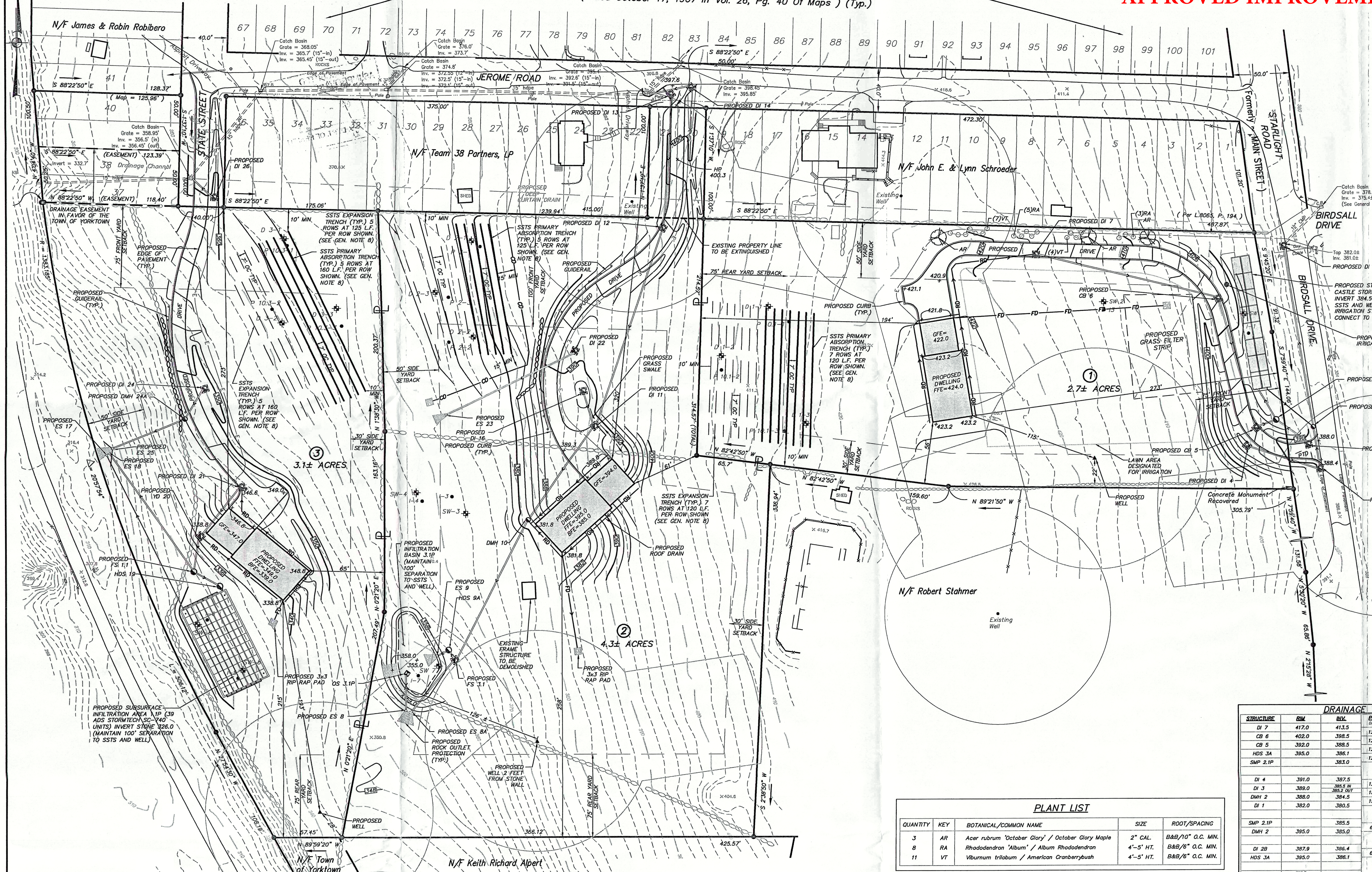
PROJECT: FIORE RESIDENCE

600 BIRDSALL DRIVE TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING: NOTES & DETAILS

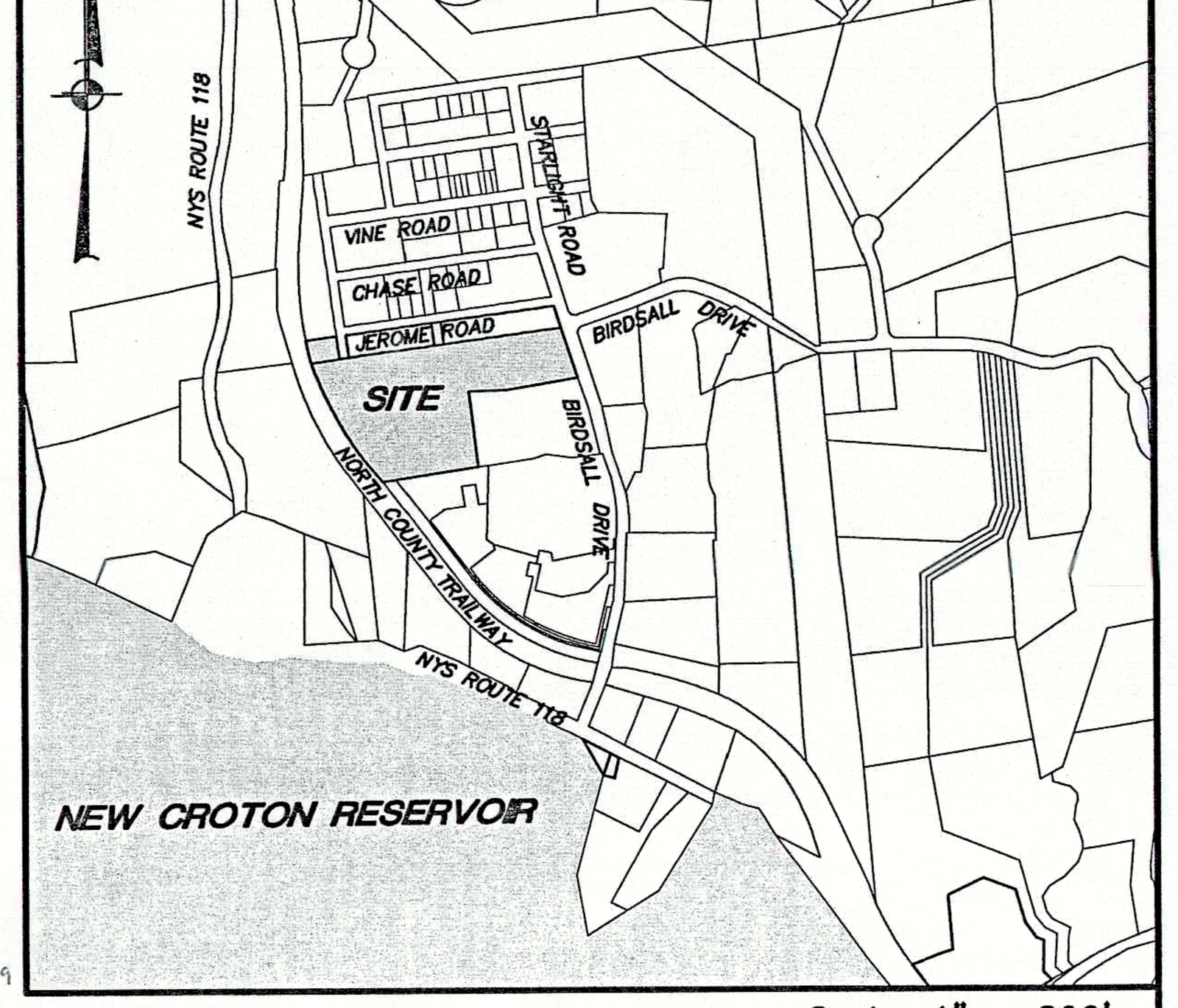
PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.	DRAWING NO.	SHEET
DATE	4–28–21	DRAWN BY	J.W.M.	D–1	4 / 4
SCALE	AS SHOWN	CHECKED BY			

APPROVED IMPROVEMENT PLANS



ACCEPTED AS IMPROVEMENT PLANS
OCT - 4 2019
WEST. CO. DEPT. OF HEALTH
BY

APPROVED
on the 26th day of February 2018
Planning Board, Town of Yorktown, NY
by Resolution Number 18-01
Date 10-21-2019
Chairman
Reapproved #19-03, Feb. 25, 2019
Amendments Approval # 19-19, July 15, 2019



Location Map — Scale: 1" = 800'

Owner/Applicant:

Robert H Stahmer
610 Birdsall Drive
Yorktown Heights, New York 10598

Site Data:

Zone: RI-80 Residential
Total Acreage 10.0 AC±
Tax Map No.: 59.10-1-10, 12 & 16

General Notes:

1. Property line and existing features shown hereon obtained from final plat subdivision of property prepared by Baxter Land Surveying dated 7-13-15.
2. Topography shown hereon is based upon aerial photogrammetry provided by Baxter Land Surveying. The contour interval is 2'.
3. There are no wells within 200' of OWTS unless otherwise shown on plan.
4. There are no OWTS's within 200' of a proposed well unless otherwise shown on plan.
5. No soil stockpiles, materials or equipment will be stored in areas to be used for the stormwater infiltration practice and for the subsurface sewage treatment system.
6. The subdivision Stormwater Pollution Prevention Plan has been designed to treat:
   0.3 Ac. of impervious surfaces on Lot 1
   0.3 Ac. of impervious surfaces on Lot 2
   0.2 Ac. of impervious surfaces on Lot 3.
7. The electric and communication utilities shall be installed in accordance with the utility provider specifications including but not limited to provided the proper bedding, cover, and detectible warning tape / tracer wire.
8. Primary and absorption trenches have been shown for subdivision purposes only. A site specific SSTS Design must be submitted to WCDOH at the time of individual lot construction.
9. The rim elevation of the existing catch basin was determined by interpolating existing topographic information. The invert was determined by field measurements between the rim and invert and relating the invert to the interpolated rim elevation.

R1-80 Zone Requirements:

	Required:	LOT 1	LOT 2	LOT 3
Lot Area: (sf)	80,000	117,530	186,500	133,470
Lot Width At Main Bldg Line: (ft)	200'	234'±	278'±	236'±
Lot Depth: (ft)	200'	510'±	561'±	571'±
Front Yard: (ft)				
Birdsall Drive	75'	273'±		
Jerome Road	100' (1)		320'±	273'±
Side Yard: (ft)				
Main or Accessory Bldg., Minimum Either Side	30'	56'	61'±	65'±
Two Combined	80'	140'±	195'±	132'±
Accessory Bldg. if in Rear Yard, Minimum Either Side	10'	N/A	N/A	N/A
Rear Yard: (ft)				
Main Bldg.	75'	194'±	258'±	215'±
Accessory Bldg. or Structure	10'	N/A	N/A	N/A
Maximum Height: (ft)				
Main Bldg.	35'	<35'	<35'	<35'
Accessory Bldg.	15'	N/A	N/A	N/A
Minimum Useable Floor Area of Dwelling Unit: (sf)	1,200	2,100 (AS SHOWN)	2,100 (AS SHOWN)	2,100 (AS SHOWN)
Maximum Bldg. Coverage (All Buildings)	10%	2.5% ± (AS SHOWN)	1.6% ± (AS SHOWN)	2.4% ± (AS SHOWN)
Required Off-Street Parking Spaces Per Dwelling Unit	1	2	2	2
Road Frontage: (ft)	200'	235'±	50'± (2)	140'± (2)

(1) ON STREETS WITH LESS THAN 50-FOOT RIGHT-OF-WAY, THE FRONT YARD SETBACK SHALL BE MEASURED FROM THE CENTER LINE OF THE EXISTING ROADWAY AND 25 FEET SHALL BE ADDED TO THE REQUIRED FRONT YARD SETBACK.
(2) ZONING VARIANCES FOR FRONTAGE FOR LOTS 2 & 3 GRANTED BY ZONING BOARD OF APPEALS ON 4-27-2006 RESOLUTION #22/06.

SSTS PERCOLATION TEST RESULTS

LOT 1:
(TESTING PERFORMED 8-4-10 BY JACK GOLDSTEIN, P.E. AND WITNESSED BY WCDOH)
P 10.1-1 11 MIN./IN.
P 10.1-2 30 MIN./IN.
P 10.1-3 30 MIN./IN.

LOT 2:
(TESTING PERFORMED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECT ON 9-13-2017)
P 2-1 15 MIN./IN.
P 2-2 15 MIN./IN.
P 2-3 15 MIN./IN.

LOT 3:
(TESTING PERFORMED 7-30-10 BY JACK GOLDSTEIN, P.E. AND WITNESSED BY WCDOH)
P 10.3-1 42 MIN./IN.
P 10.3-2 30 MIN./IN.
P 10.3-3 31 MIN./IN.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

DRAINAGE TABLE

STRUCTURE	RIM	INV.	PIPE SIZE Diameter (ø)	LENGTH Linear Feet (L.F.)	SLOPE Percent (%)
DI 7	417.0	413.5	12" HDPE	166 L.F.	9.0
CB 6	402.0	398.5	12" HDPE	123 L.F.	8.1
CB 5	392.0	388.5	12" HDPE	19 L.F.	12.6
HDS 3A	395.0	386.1	12" HDPE	32 L.F.	9.7
SMP 2.1P		383.0			
DI 4	391.0	387.5	12" HDPE	67 L.F.	3.0
DI 3	389.0	385.5 IN 385.2 OUT	15" HDPE	40 L.F.	1.8
DMH 2	388.0	384.5	15" HDPE	167 L.F.	2.4
DI 1	382.0	380.5			
SMP 2.1P		385.5	6" HDPE	51 L.F.	1.0
DMH 2	395.0	385.0			
DI 2B	387.9	386.4	6" HDPE	36 L.F.	0.8
HDS 3A	395.0	386.1			
OS 3.1P	398.0 0.5' WEIR @ 357.6	354.0	12" HDPE	27 L.F.	3.7
ES 8		353.0			
DI 13	397.5	393.5	12" HDPE	122 L.F.	1.1
DI 12	397.5	392.2	12" HDPE	188 L.F.	4.4
DI 11	387.5	384.0	12" HDPE	105 L.F.	7.3
DMH 10	380.0	376.3	12" HDPE	145 L.F.	14.1
FS 3.1	360.0	355.8	10" HDPE	10 L.F.	8.0
HDS 9A	359.8	355.0	12" HDPE	10 L.F.	10.0
ES 9		354.0			
FS 3.1	360.0	355.8	10" HDPE	58 L.F.	3.1
ES 8A		354.0			
DI 16	387.0	384.5	8" HDPE	32 L.F.	1.6
DI 11	387.5	384.0			
DI 14	398.5	395.5	12" HDPE	37 L.F.	7.3
EX CB	395.4	392.8			
DI 21	346.6	341.0	12" HDPE	57 L.F.	13.2
YD 20	338.0	333.5	12" HDPE	32 L.F.	12.5
FS 1.1	332.5	329.5	12" HDPE	130 L.F.	11.1
ES 18		315.0			
FS 1.1	332.5	328.6	12" HDPE	25 L.F.	4.4
HDS 19	333.0	327.5	12" HDPE	7 L.F.	14.2
INF. 1.1P		326.5			
INF. 1.1P		328.6	6" HDPE	150 L.F.	9.1
ES 17		315.0			
DI 22	391.0	388.0	8" HDPE	130 L.F.	11.9
ES 23		372.5			
DI 24	349.5	345.0	12" HDPE	32 L.F.	9.4
DMH 24A	348.0	342.0	12" HDPE	70 L.F.	39.6
ES 25		315.0			
DI 26	359.5	356.8	12" HDPE	27 L.F.	0.7
EX CB	359.0	356.6			

PLANT LIST

QUANTITY	KEY	BOTANICAL/COMMON NAME	SIZE	ROOT/SPACING
3	AR	Acer rubrum 'October Glory' / October Glory Maple	2" CAL.	B&B/10" O.C. MIN.
8	RA	Rhododendron 'Album' / Album Rhododendron	4'-5' HT.	B&B/6" O.C. MIN.
11	VT	Viburnum trilobum / American Cranberrybush	4'-5' HT.	B&B/6" O.C. MIN.

SSTS SCHEDULE

Lot Number	Lot Area (in s.f)	Deep Test Hole Description	Mottling and/or Ground Water Elevation	Impervious Layer Elevation	Percolation Rate (Min./In.)	% Slope S.S.T.S. Area	Required Amount of Absorption Trenches (lf): 3 Bedroom	4 Bedroom	5 Bedroom	R.O.B. Gravel Fill: Depth	Volume	Curtain Drain: Depth	Length	Remarks
1	117,530	D1-1: 0 to 6" Topsoil. 6" to 60" Sandy loam. 60" to 96" Compact sandy loam. D1-2: 0 to 6" Topsoil. 6" to 90" Sandy loam. D1-3: 0 to 6" Topsoil. 6" to 60" Sandy loam. 60" to 90" Compact sandy loam. (Lot 1 testing performed on 10-13-09 by Jack Goldstein, PE and witnessed by WCDOH.)	N/A	N/A	21 to 30	4%	504	672	840	N/A	N/A	N/A	N/A	• Dosing required for 4 or 5 bedroom. residence.
2	186,500	D2-1: 0 to 6" Topsoil. 6" to 60" Medium brown moderately compact fine sandy loam. 60" to 84" Compacted medium to fine sandy loam. No groundwater or ledge rock encountered. D2-2: 0 to 6" Topsoil. 6" to 60" Medium brown moderately compact fine sandy loam. 60" to 84" Compacted medium to fine sandy loam. No groundwater or ledge rock encountered. D2-3: 0 to 6" Topsoil. 6" to 60" Medium brown moderately compact fine sandy loam. 60" to 84" Compacted medium to fine sandy loam. Groundwater at 78". No ledge rock encountered. (Lot 2 testing performed on 8-28-17 by Insite Engineering, Surveying & Landscape Architecture, P.C.)	Water at 6.5' (D2-3)	N/A	11 to 15	9%	375	500	625	1.5'	800 CY	7'	145'	• Dosing required for 4 or 5 bedroom residence. • 1 ½' ROB fill required. • 7' Curtain drain required.
3	124,784	D3-1: 0 to 6" Topsoil. 6" to 36" Sandy loam. 36" to 84" Compact sandy loam. D3-2: 0 to 6" Topsoil. 6" to 36" Sandy loam. 36" to 84" Compact sandy loam. D3-3: 0 to 6" Topsoil. 6" to 36" Sandy loam. 36" to 84" Compact sandy loam. (Lot 3 testing performed on 10-13-09 by Jack Goldstein, PE and witnessed by WCDOH.)	N/A	N/A	31 to 45	7%	600	800	–	N/A	N/A	N/A	N/A	• Pump system required. • ROB fill for grading.

LEGEND

- PROPOSED PROPERTY LINE
- PROPERTY LINE
- EXISTING STONE WALL
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BELGIUM BLOCK CURB
- 290 PROPOSED 10' CONTOUR
- 292 PROPOSED 2' CONTOUR
- RD PROPOSED 4" PVC SDR 35 ROOF LEADER DRAIN
- FD PROPOSED 4" PVC SDR 35 FOOTING DRAIN
- +611.7 PROPOSED SPOT GRADE
- PROPOSED DRAINAGE MANHOLE
- PROPOSED DRAIN INLET/CATCH BASIN
- PROPOSED YARD DRAIN
- PROPOSED END SECTION
- D4 DEEP TEST HOLE LOCATION
- I-17 INFILTRATION TEST LOCATION
- PROPOSED DRAINAGE PIPE
- E PROPOSED ELECTRICAL LINE
- PROPOSED RIP RAP PAD
- PROPOSED RETAINING WALL
- PROPOSED DRAINAGE SWALE

STORMWATER MANAGEMENT PRACTICE TEST RESULTS

DEEP TEST PERFORMED ON AUGUST 28, 29 AND 30, 2017 BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE.

NOTE: NO GROUNDWATER, MOTTLING, OR ROCK ENCOUNTERED UNLESS NOTED.

SW 1: 0"-6": TOPSOIL
6"-144": COMPACT BROWN FINE SAND
GROUNDWATER SEEP @ 132"
GROUNDWATER OR LEDGE ENCOUNTERED @ 144"

SW 2: 0"-6": TOPSOIL
6"-80": LIGHT BROWN FINE SANDY LOAM
SPOT MOTTLING OBSERVED @ 32"
NO GROUNDWATER OR LEDGE ENCOUNTERED

SW 3: 0"-6": TOPSOIL
6"-96": LIGHT BROWN FINE SANDY LOAM
SPOT MOTTLING OBSERVED @ 32"
NO GROUNDWATER OR LEDGE ENCOUNTERED

SW 4: 0"-6": TOPSOIL
6"-96": LIGHT BROWN FINE SANDY LOAM
SPOT MOTTLING OBSERVED @ 32"
NO GROUNDWATER OR LEDGE ENCOUNTERED

SW 5: 0"-6": TOPSOIL
6"-108": COMPACT RED BROWN SAND WITH TRACE OF SILT AND COBBLES
108"-120": MOTTLED GRAY BLACK SAND WITH SOME SILT
MOTTLING @ 108"
NO GROUNDWATER OR LEDGE ENCOUNTERED

SW 6: 0"-6": TOPSOIL
6"-54": MEDIUM BROWN FINE SAND WITH SILT AND TRACE OF GRAVEL
54"-96": COMPACT MEDIUM BROWN FINE SAND WITH SILT AND TRACE OF GRAVEL
96"-120": DARK GRAY COMPACT SAND WITH SILT
120"-126": DARK GRAY COMPACT SAND WITH SILT
MOTTLING @ 126"
NO GROUNDWATER OR LEDGE ENCOUNTERED

SW 7: 0"-3": TOPSOIL
3"-42": LIGHT BROWN MODERATELY COMPACT FINE SAND WITH TRACE OF SILT
42"-90": COMPACT LIGHT BROWN FINE SAND WITH TRACE OF SILT AND GRAVEL
MOTTLING @ 90"
NO GROUNDWATER OR LEDGE ENCOUNTERED

INFILTRATION TEST RESULTS
I-1: 12 INCHES/HOUR
I-3: 17 INCHES/HOUR
I-4: 21 INCHES/HOUR
I-5: 48 INCHES/HOUR
I-6: 14 INCHES/HOUR
I-7: 16 INCHES/HOUR

Z:\E\16\16140100\01 IPP-1.dwg, 9/4/2019 9:06:09 AM, kmorgan, 1:1

NO.	DATE	REVISION	BY
9	8-27-19	REVISED FOR PLAT COORDINATION	KAM
8	6-4-19	REVISED PER TOWN COMMENTS	JWM
7	4-10-19	REVISED PER DEP COMMENTS	JWM
6	3-19-19	REVISED PER DEP COMMENTS	JWM
5	1-23-19	REVISED PER DEP COMMENTS	JWM
4	11-16-18	REVISED PER DEP COMMENTS	JWM
3	7-09-18	REVISED PER DOH COMMENTS	JJR
2	4-24-18	GENERAL REVISIONS	JLL
1	10-25-17	GENERAL REVISIONS	KMS

INSITE
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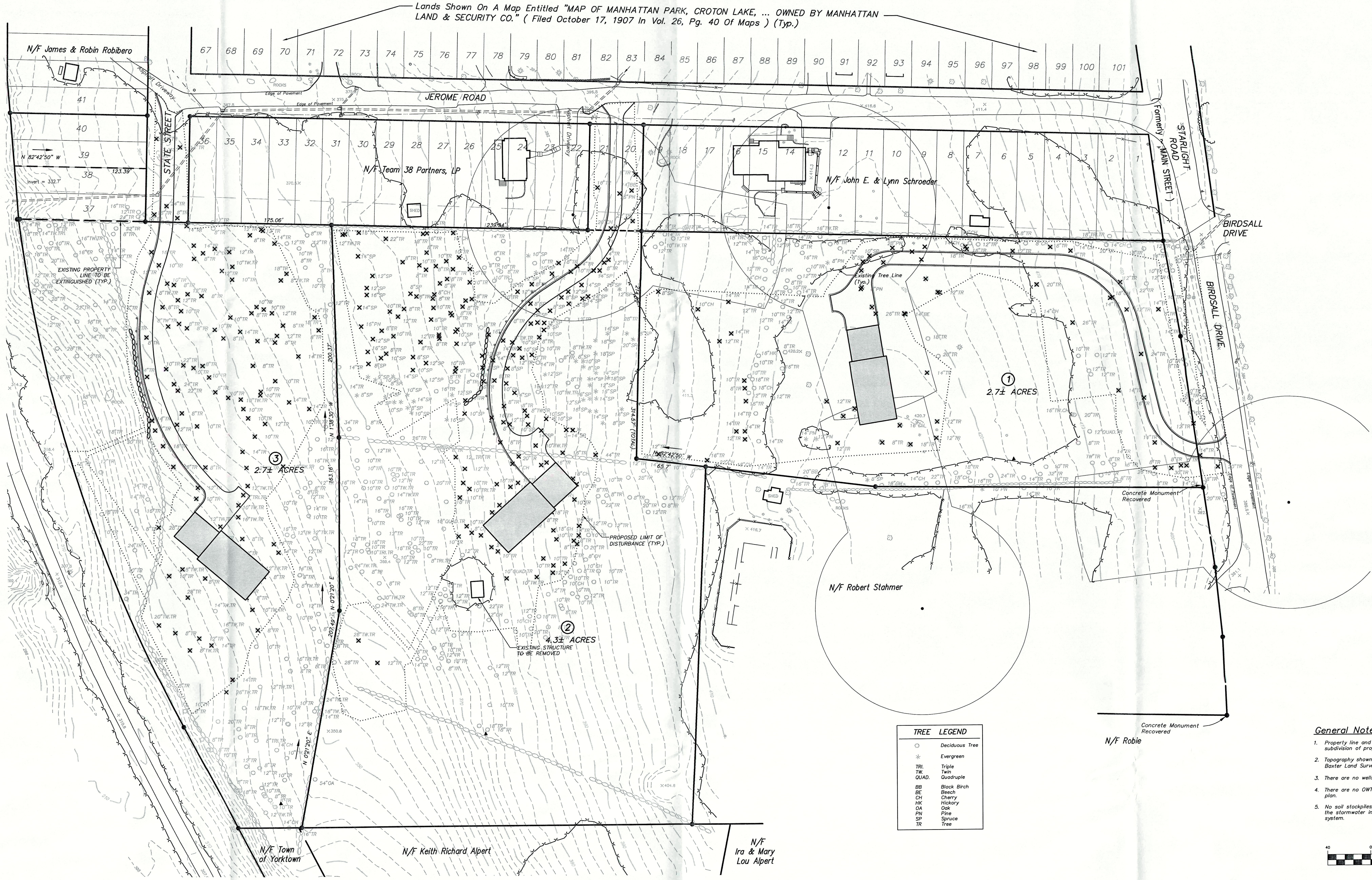
PROJECT:
STAHMER SUBDIVISION
BIRDSALL DRIVE AND JEROME ROAD
TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

STATE OF NEW YORK · RICHARD D. WILLIAMS · LICENSED PROFESSIONAL ENGINEER · 085866

DRAWING:
INTEGRATED PLOT PLAN

PROJECT NUMBER	16140.100	PROJECT MANAGER	R.D.W.	DRAWING NO. IPP-1	SHEET 1/6
DATE	10-5-16	DRAWN BY	C.T.Q.		
SCALE	1" = 40'	CHECKED BY	J.L.L.		

APPROVED IMPROVEMENT PLANS



TREE LEGEND	
○	Deciduous Tree
*	Evergreen
TRI.	Triple
TW.	Twin
QUAD.	Quadruple
BB	Black Birch
BE	Beech
CH	Cherry
HK	Hickory
OA	Oak
PN	Pine
SP	Spruce
TR	Tree

LEGEND	
━━━━	PROPERTY LINE
━ ━ ━	EXISTING PROPERTY LINE TO BE EXTINGUISHED
—··—	EXISTING UTILITY POLE W/ OVERHEAD WIRES
⬭⬭⬭	EXISTING STONE WALL
‿‿‿	EXISTING TREE LINE
▫ EMP	EXISTING ELECTRIC METER POST
⌀	EXISTING UTILITY POLE
○8"TR *10"SP	EXISTING TREE TO REMAIN
✕8"TR ✕10"SP	EXISTING TREE TO BE REMOVED
··········	PROPOSED LIMITS OF DISTURBANCE

General Notes:

1. Property line and existing features shown hereon obtained from final plat subdivision of property prepared by Baxter Land Surveying dated 7–13–15.
2. Topography shown hereon is based upon aerial photogrammetry provided by Baxter Land Surveying. The contour interval is 2'.
3. There are no wells within 200' of OWTS unless otherwise shown on plan.
4. There are no OWTS's within 200' of a proposed well unless otherwise shown on plan.
5. No soil stockpiles, materials or equipment will be stored in areas to be used for the stormwater infiltration practice and for the subsurface sewage treatment system.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISION	BY
7	6–4–19	REVISED PER TOWN COMMENTS	JWM
6	4–10–19	REVISED PER DEP COMMENTS	JWM
5	3–19–19	REVISED PER DEP COMMENTS	JWM
4	1–23–19	REVISED PER DEP COMMENTS	JWM
3	11–16–18	REVISED PER DEP COMMENTS	JWM
2	7–09–18	REVISED PER DOH COMMENTS	JJR
1	4–24–18	GENERAL REVISIONS	JLL

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PROJECT:

STAHMER SUBDIVISION

BIRDSALL DRIVE AND JEROME ROAD
TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:

EXISTING CONDITIONS AND TREE PLAN

STATE OF NEW YORK · RICHARD D. WILLIAMS JR. · 085866 · LICENSED PROFESSIONAL ENGINEER

[illegible]

PROJECT NUMBER	16140.100	PROJECT MANAGER	R.D.W.	DRAWING NO.	SHEET
DATE	10–25–17	DRAWN BY	C.T.Q.	EX–1	2 / 6
SCALE	1" = 40'	CHECKED BY	J.L.L.		

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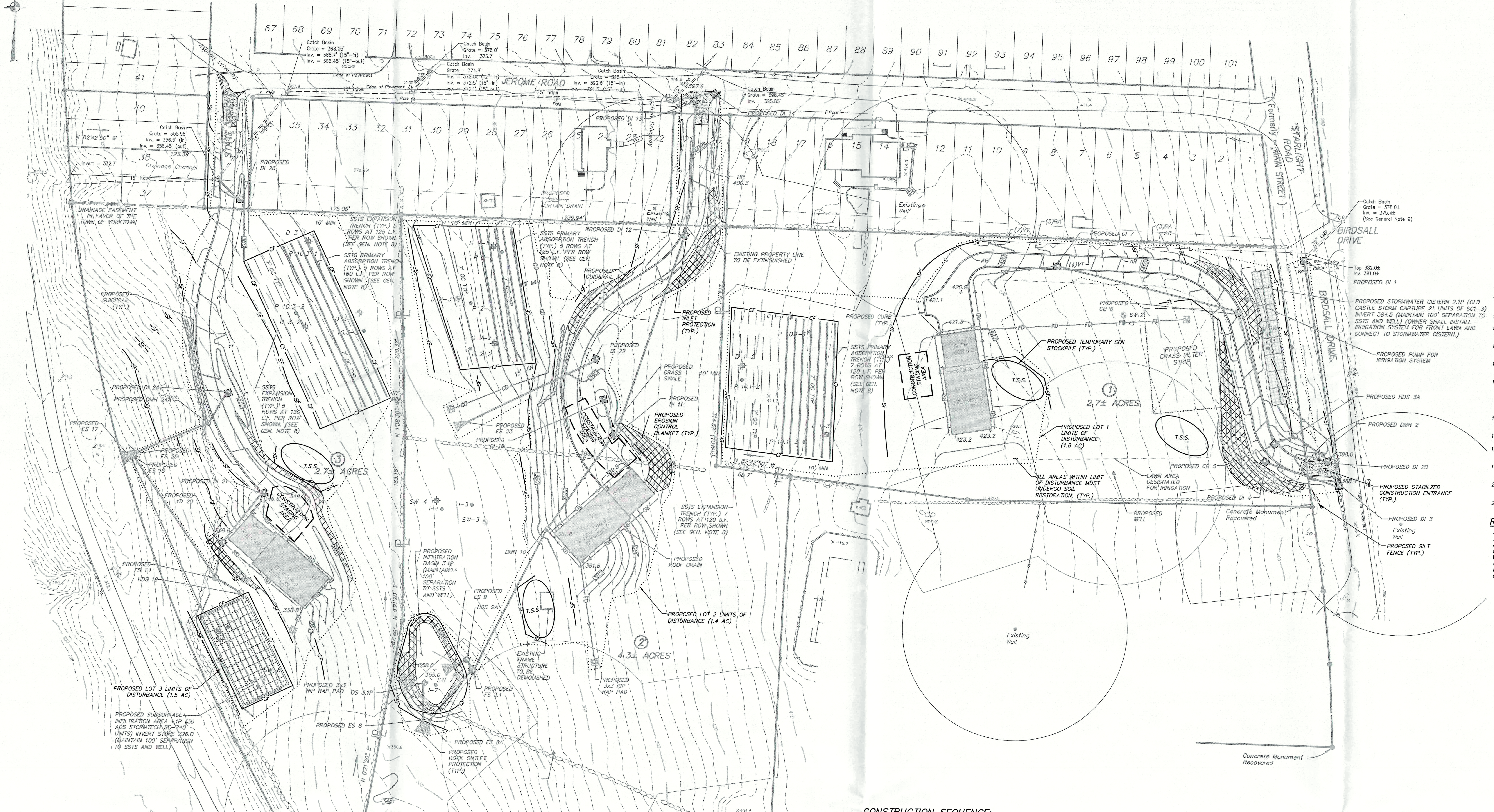
APPROVED IMPROVEMENT PLANS



LEGEND

- PROPERTY LINE
- EXISTING STONE WALL
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- PROPOSED PROPERTY LINE
- ● PROPOSED DRAINAGE MANHOLE
- ■ PROPOSED DRAIN INLET/CATCH BASIN
- ■ PROPOSED YARD DRAIN
- 290 PROPOSED 10' CONTOUR
- 292 PROPOSED 2' CONTOUR
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BELGIUM BLOCK CURB
- ▨ PROPOSED EROSION CONTROL BLANKET
- SF PROPOSED SILT FENCE
- CF PROPOSED CONSTRUCTION FENCE
- PROPOSED LIMITS OF DISTURBANCE
- TSS PROPOSED TEMPORARY SOIL STOCKPILE
- RD PROPOSED 4" PVC SDR 35 ROOF LEADER DRAIN
- FD PROPOSED 4" PVC SDR 35 FOOTING DRAIN
- ▷ PROPOSED END SECTION
- ▨ PROPOSED RIP RAP PAD

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

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SOIL RESTORATION REQUIREMENTS

TYPE OF DISTURBANCE	SOIL RESTORATION REQUIREMENTS
Areas where topsoil is stripped only – no change in grade	Aerate[1] and apply 6 inches of topsoil
Areas of cut or fill	Apply full Soil Restoration [2]
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5-foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost Enhancement[3])
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.

1. Aeration includes the use of machines suchAeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which functions like a mini-subsoiler.
2. Per "Deep Ripping and De-compaction, DEC 2008".
3. Compost shall be aged, from plant derived materials, free of viable weed seeds, have no visible free water or dust produced when handling, pass through a half inch screen and have a pH suitable to grow desired plants.

REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

1. Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all construction projects needing post-construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part III.B.2a-J and III.B.3:
   a. Identification of all post-construction stormwater management practices to be constructed as part of the project; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
   b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
   c. A Stormwater Modeling and Analysis Report including pre-development conditions, post-development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the sizing criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. The required analysis is provided in the project Stormwater Pollution Prevention Plan.
   d. Soil testing results and locations. This SWPPP requirement is shown hereon.
   e. Infiltration testing results. This SWPPP requirement is shown hereon.
   f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The project Stormwater Pollution Prevention Plan serves to satisfy this requirement.
2. Enhanced Phosphorus Removal Standards – Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 1.a – 1.f above. The permanent stormwater practices for this project have been sized according to chapter 10 of the Design Manual Enhanced Phosphorus Removal Standards. Please see 1.a – 1.f above.

CONSTRUCTION SEQUENCE:

The following construction sequence is intended to be used on each lots specific construction. Individual lot construction may occur simultaneously or sequentially.

LOT #1 CONSTRUCTION SEQUENCE:

1. Stake out limit of disturbance, establish staging area and mark trees to be removed.
2. Septic Area shall be cordoned off with construction fence prior to start of site work.
3. Install silt fence in general locations indicated on the plan.
4. Install stabilized construction entrance/anti-tracking pad at driveway entrance.
5. Begin clearing and grubbing operations associated with house, driveway and SSTS.
6. Strip and stockpile topsoil on site for later use in lawn and landscape areas.
7. Begin grading and construction of individual driveway.
   - 7.1. During this step, drainage improvements along Birdsall drive shall be constructed (Specifically installation and associated piping for DI 1, DMH 2 and DI 3).
   - 7.2. Install remaining utilities and drainage structures (Specifically DI 2B, HDS 3A, DI 4, CB 5, CB 6, DI 7) and associated piping. Install Cistern SMP 2.1P and connect Roof Leader Drains to the structures as shown on the plan. The pipe discharging to the Hydrodynamic Separator (from CB 5 and DI 2B) to be plugged until final stabilization is achieved.
   - 7.3. Complete Grading for driveway and stabilize associated grading in shoulder areas. Area downhill of footing drains shall be stabilized prior to footing drain installation.
   - 7.4. Slopes steeper than 2:1 shall be stabilized immediately after grading with Erosion Control Blanket.
   - 7.5. The Irrigation System shall be installed at the same time as the Cistern.
8. Begin house construction, individual lot grading and installation of SSTS and well. Install Footing Drains and Rip Rap Pads.
9. Upon completion of grading operations, install finished driveway surfaces.
10. Prior to application of topsoil, all areas in the limit of disturbance must undergo soil restoration.
11. Topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this page.
12. Upon achieving final stabilization (as determined by the project qualified professional performing the erosion and sediment control inspections) remove the plugs discharging to the stormwater practices and pretreatment devices.

LOT #2 CONSTRUCTION SEQUENCE

1. Stake out limit of disturbance, establish staging area and mark trees to be removed.
2. Septic and Infiltration Basin shall be cordoned off with construction fence prior to start of site work.
3. Install silt fence in general locations indicated on the plan.
4. Install stabilized construction entrance/anti-tracking pad at driveway entrance.
5. Begin clearing and grubbing operations associated with house, driveway and SSTS.
6. Strip and stockpile topsoil on site for later use in lawn and landscape areas.
7. Begin excavation for foundation, individual lot grading, and construction of individual driveway.
   - 7.1. During this step, drainage improvements along Jerome road shall be constructed (Specifically installation and associated piping for DI 13 and DI 14).
   - 7.2. Install Footing Drains and Rip Rap Pads. Area downhill of footing drains shall be stabilized prior to footing drain installation.
   - 7.3. Slopes steeper than 2:1 shall be stabilized immediately after grading with Erosion Control Blanket.
8. Begin house construction and installation of SSTS and well.
9. Install remaining utilities and drainage structures (Specifically DI 12, DI 11, DMH 10, FS 3.1, HDS 9A, DI 16, DI 22 and ES 23) and associated piping. Install Infiltration Basin SMP 3.1P, Outlet Structure OS 3.1P, Rock Outlet Protection (ES 9, ES 8A and ES 8) and associated piping. Connect Roof Leader Drains to the structures as shown on the plan. The pipe discharging to the Infiltration practice from FS 3.1 (between FS 3.1 and HDS 9A) to be plugged until final stabilization is achieved.
10. Upon completion of grading operations, install finished driveway surfaces.
11. Prior to application of topsoil, all areas in the limit of disturbance must undergo soil restoration.
12. Topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this page.
13. Upon achieving final stabilization (as determined by the project qualified professional performing the erosion and sediment control inspections) remove the plugs discharging to the stormwater practices and pretreatment devices.

LOT #3 CONSTRUCTION SEQUENCE

1. Stake out limit of disturbance, establish staging area and mark trees to be removed.
2. Septic and Subsurface Infiltration Areas shall be cordoned off with construction fence prior to start of site work.
3. Install silt fence in general locations indicated on the plan.
4. Install stabilized construction entrance/anti-tracking pad at driveway entrance.
   - 4.1. During this step, the portion of the driveway within the State Street extension shall be constructed.
5. Begin clearing and grubbing operations associated with house, driveway and SSTS.
6. Strip and stockpile topsoil on site for later use in lawn and landscape areas.
7. Begin excavation for foundation, individual lot grading, and construction of individual driveway.
   - 7.1. During this step, drainage improvements along Jerome Road shall be constructed (Specifically the Swale along the State Street extension and installation and associated piping for DI 26)
   - 7.2. Install remaining utilities and drainage structures (Specifically DI 21, YD 20, FS 1.1, HDS 19, DI 24, DMH 24A, DI 26, ES 25, ES 18 and ES 17) and associated piping. Install Subsurface Infiltration System INF 1.1P and connect Roof Leader Drains to the structures as shown on the plan. The pipe discharging to the Infiltration System from FS 1.1 (between FS 1.1 and HDS 19) to be plugged until final stabilization is achieved.
   - 7.3. Install Footing Drains and Rip Rap Pads. Area downhill of footing drains shall be stabilized prior to footing drain installation.
   - 7.4. Slopes steeper than 2:1 shall be stabilized immediately after grading with Erosion Control Blanket.
8. Begin house construction and installation of SSTS and well.
9. Upon completion of grading operations, install finished driveway surfaces.
10. Prior to application of topsoil, all areas in the limit of disturbance must undergo soil restoration.
11. Topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this page.
12. Upon achieving final stabilization (as determined by the project qualified professional performing the erosion and sediment control inspections) remove the plugs discharging to the stormwater practices and pretreatment devices.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

EROSION & SEDIMENT CONTROL NOTES:

1. The owner's field representative (O.F.R.) will be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
2. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
3. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
4. When land is exposed during development, the exposure shall be kept to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
5. Silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
6. All topsoil to be stripped from the area being developed shall be stockpiled and seeded with Lolium perenne aristatum or Lolium perenne multiflorum for temporary stabilization. Lolium perenne aristatum shall be used for winter seeding and Lolium perenne multiflorum shall be used for spring and summer seeding.
7. Any disturbed areas not subject to further disturbance or construction traffic, permanent or temporary, shall have soil stabilization measures initiated for permanent vegetation cover in combination with a suitable mulch within 1 business day of final grading. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
   - Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative at a rate of 100 pounds per acre in the following proportions:
     - Kentucky Bluegrass 20%
     - Creeping Red Fescue 40%
     - Perennial Ryegrass 20%
     - Annual Ryegrass 20%
   - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
8. Any areas requiring temporary stabilization during construction shall be seeded with the following at a rate of 20 lbs per acre:
   Ryegrass (annual or perennial) at a rate of 30 lbs. per acre shall be used for temporary seeding in spring, summer or early fall. 'Aristook' Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.
9. Grass seed mix may be applied by either mechanical or hydroseeding methods. Hydroseeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1".
10. Cut or fill slopes steeper than 2:1 shall be stabilized after grading with Curlex I Single Net Erosion Control Blanket, or approved equal.
11. Paved roadways shall be kept clean at all times.
12. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
13. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
14. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
15. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer within 24 hours.
16. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the O.F.R.
17. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
18. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
19. The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
20. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and/or the Town Engineer shall be installed by the contractor.
21. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.

REQUIRED EROSION CONTROL SWPPP CONTENTS:

Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all Stormwater Pollution Prevention Plan's (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.1a-l of General Permit GP-0-15-002:

a. Background Information: The subject project consists of a 3 lot single family residential subdivision.

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

c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Paxton Fine Sandy Loam (PnB, PnC & PnD), Chatfield-Hollis, Rock Outcrop (CuD), and Charlton-Chatfield Complex (CrC) as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "B" and "C."

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

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

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

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

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

i. An inspection schedule: Inspections are to be performed twice weekly and by a qualified professional as required by the General Permit GP-0-15-002. In addition the NYSDEC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.

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

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

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

NO.	DATE	REVISION	BY
7	6-4-19	REVISED PER TOWN COMMENTS	JWM
6	4-10-19	REVISED PER DEP COMMENTS	JWM
5	3-19-19	REVISED PER DEP COMMENTS	JWM
4	1-23-19	REVISED PER DEP COMMENTS	JWM
3	11-16-18	REVISED PER DEP COMMENTS	JWM
2	4-24-18	GENERAL REVISIONS	JLL
1	10-25-17	GENERAL REVISIONS	KMS

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PROJECT:

STAHMER SUBDIVISION

BIRDSALL DRIVE AND JEROME ROAD
TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

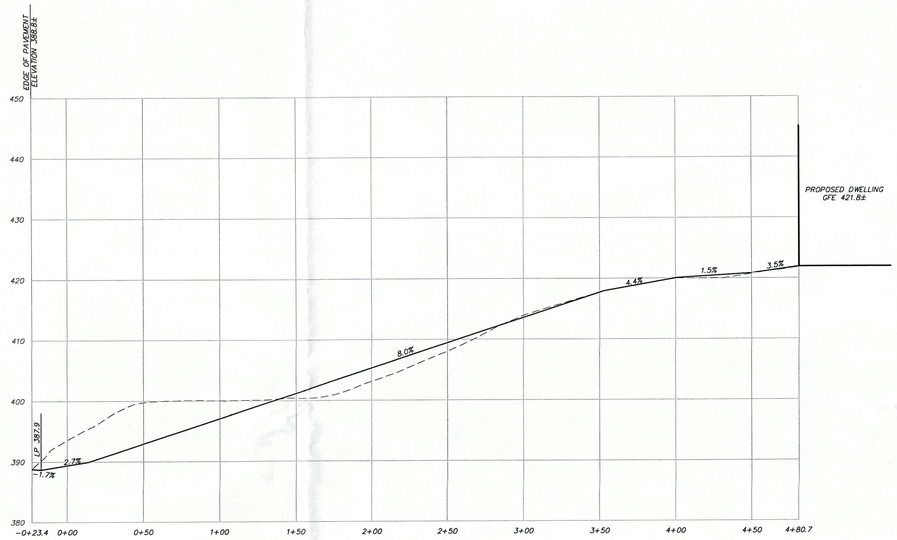
DRAWING:

EROSION & SEDIMENT CONTROL PLAN

STATE OF NEW YORK · RICHARD D. WILLIAMS JR. · 085866 · LICENSED PROFESSIONAL ENGINEER

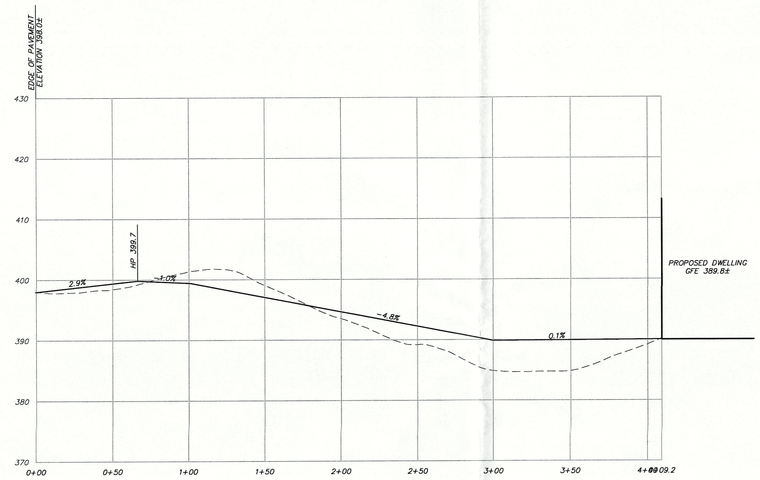
[illegible]

PROJECT NUMBER	16140.100	PROJECT MANAGER	R.D.W.	DRAWING NO.	SHEET
DATE	9-16-16	DRAWN BY	C.T.Q.	EC-1	3/6
SCALE	1" = 40'	CHECKED BY	J.L.L.		



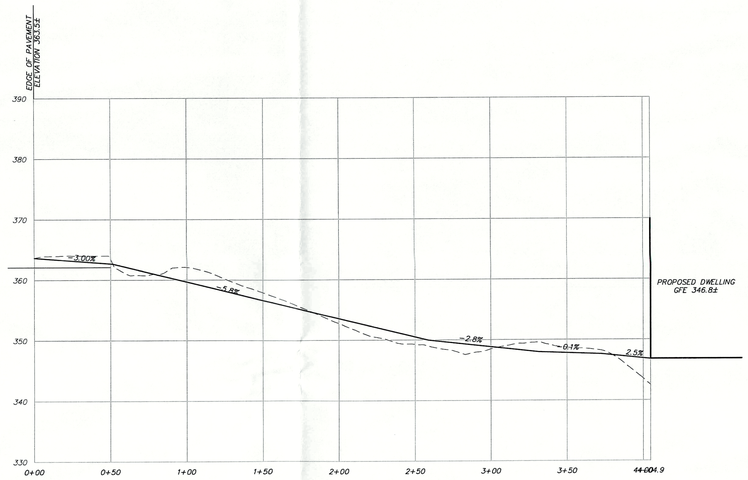
LOT 1 – DRIVEWAY PROFILE

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



LOT 2 – DRIVEWAY PROFILE

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



LOT 3 – DRIVEWAY PROFILE

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'

NO.	DATE	REVISION	BY
5	6-4-19	REVISED PER TOWN COMMENTS	JMM
4	4-10-19	REVISED PER DEP COMMENTS	JMM
3	1-23-19	REVISED PER DEP COMMENTS	JMM
2	11-16-18	REVISED PER DEP COMMENTS	JMM
1	4-24-18	GENERAL REVISIONS	JLL

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PROJECT:

STAHMER SUBDIVISION

BIRDSALL DRIVE AND JEROME ROAD
TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:

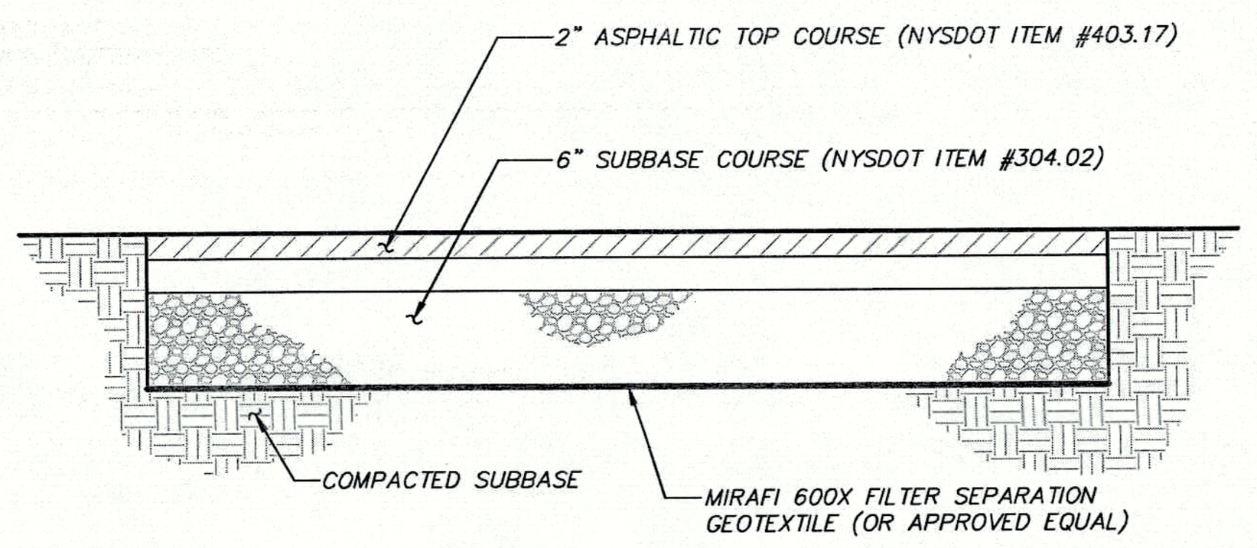
PROFILES

STATE OF NEW YORK
HOWARD D. WILLIAMS
LICENSED PROFESSIONAL ENGINEER

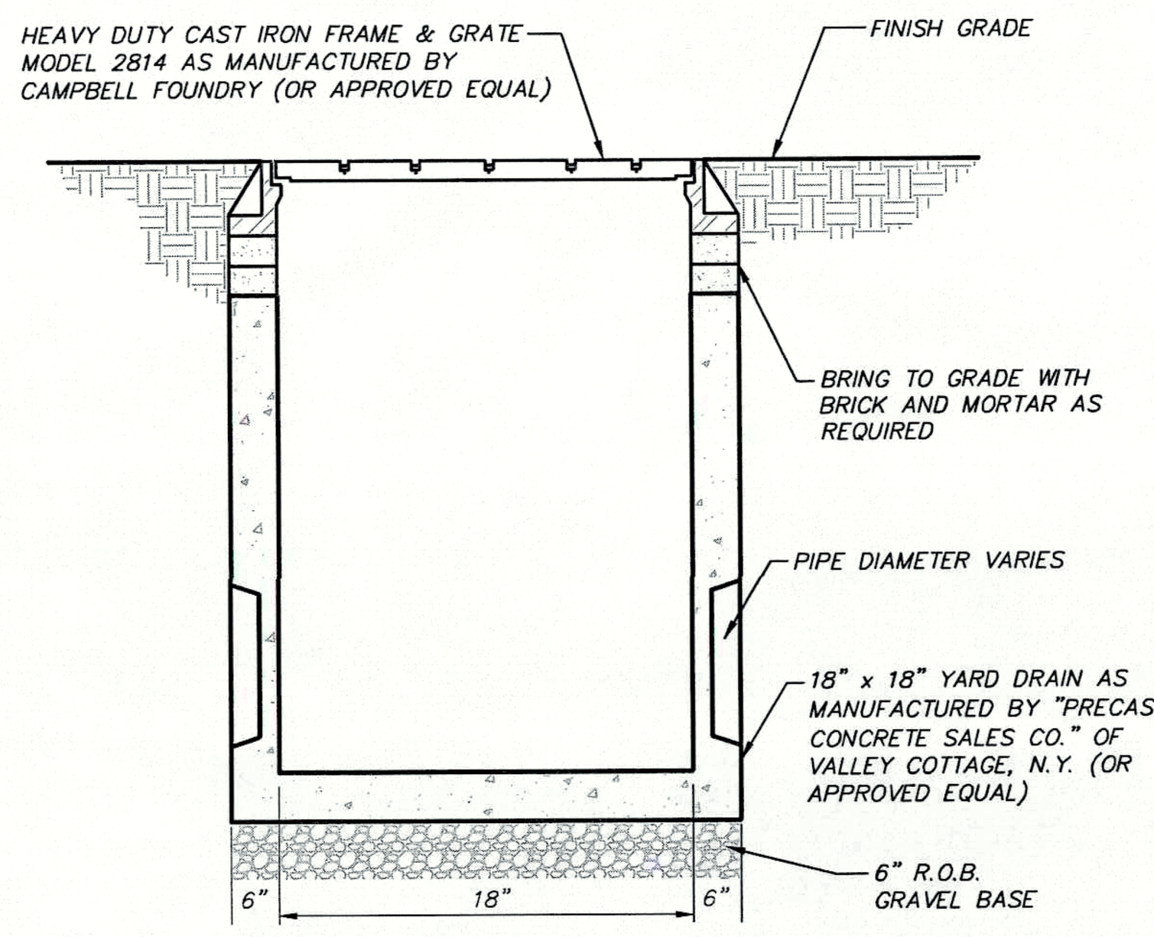
PROJECT NUMBER	16140.100	PROJECT MANAGER	R.D.W.
DATE	10-25-17	DRAWN BY	C.T.O.
SCALE	1" = 40'	CHECKED BY	J.L.L.

DRAWING NO. PR-1

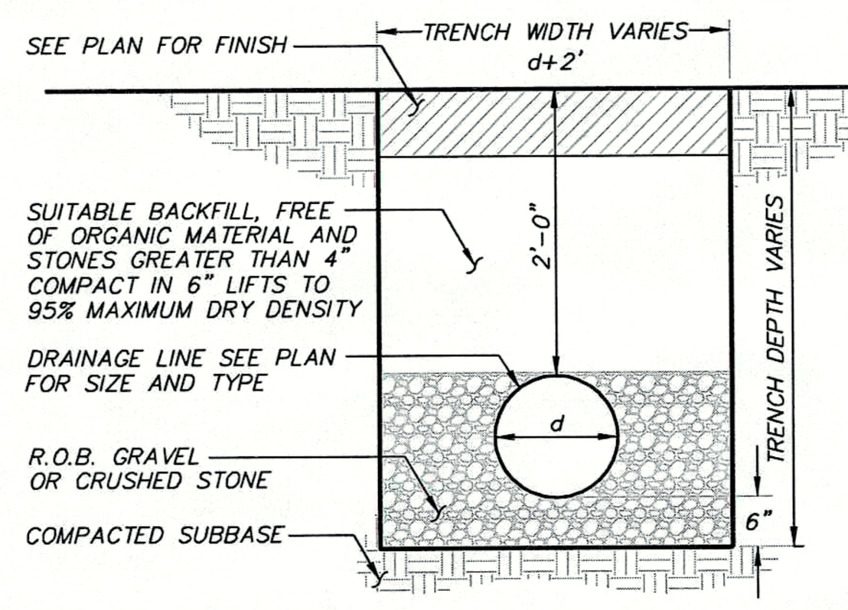
SHEET 4 / 6



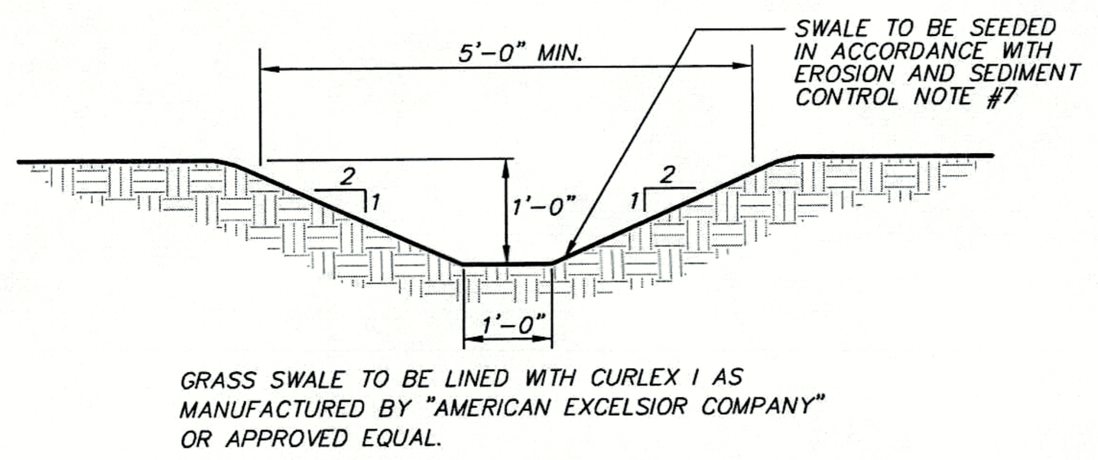
ASPHALT PAVEMENT DETAIL
(N.T.S.)



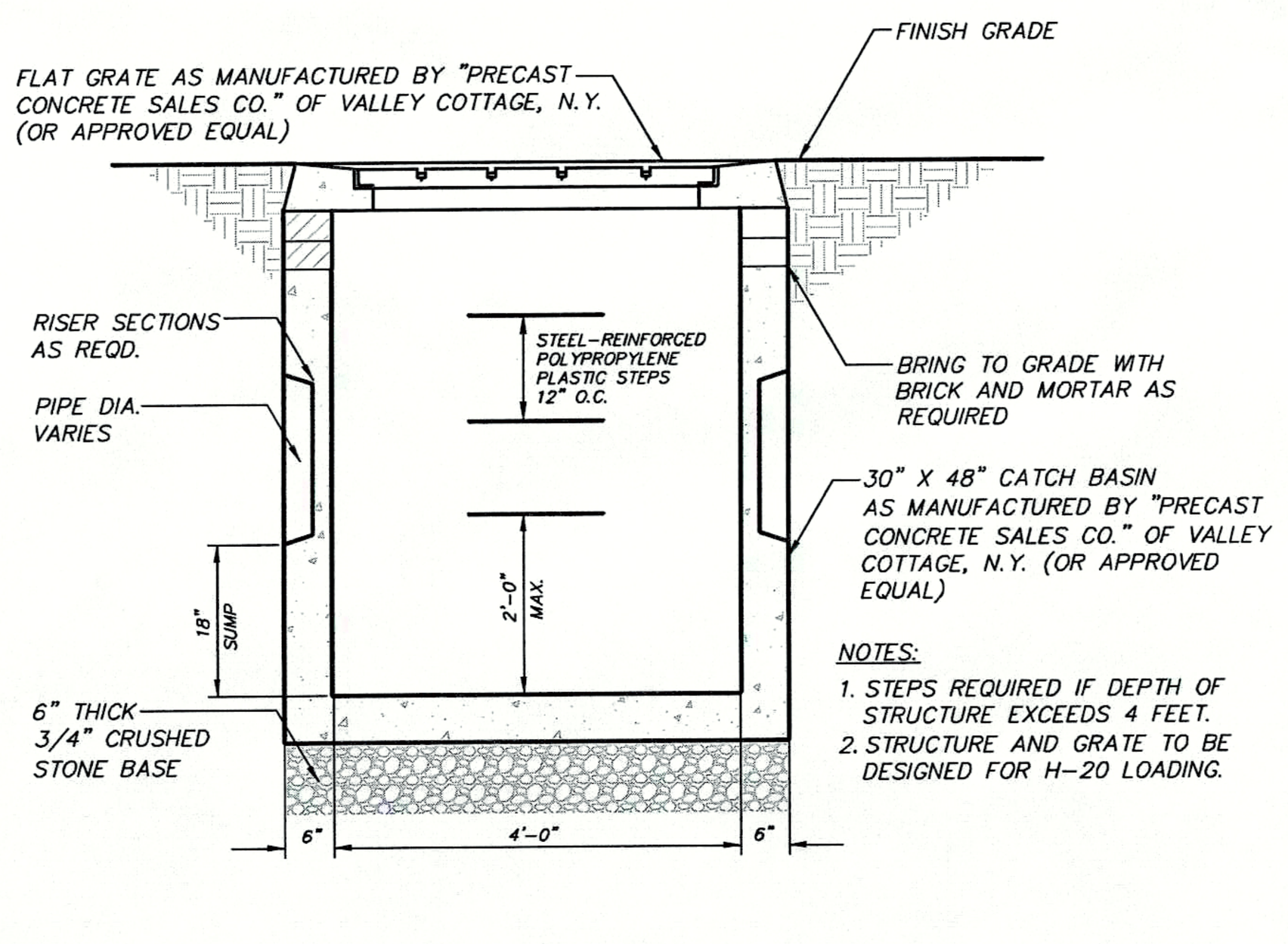
18" X 18" YARD DRAIN DETAIL
(N.T.S.)



DRAINAGE LINE TRENCH DETAIL
(N.T.S.)

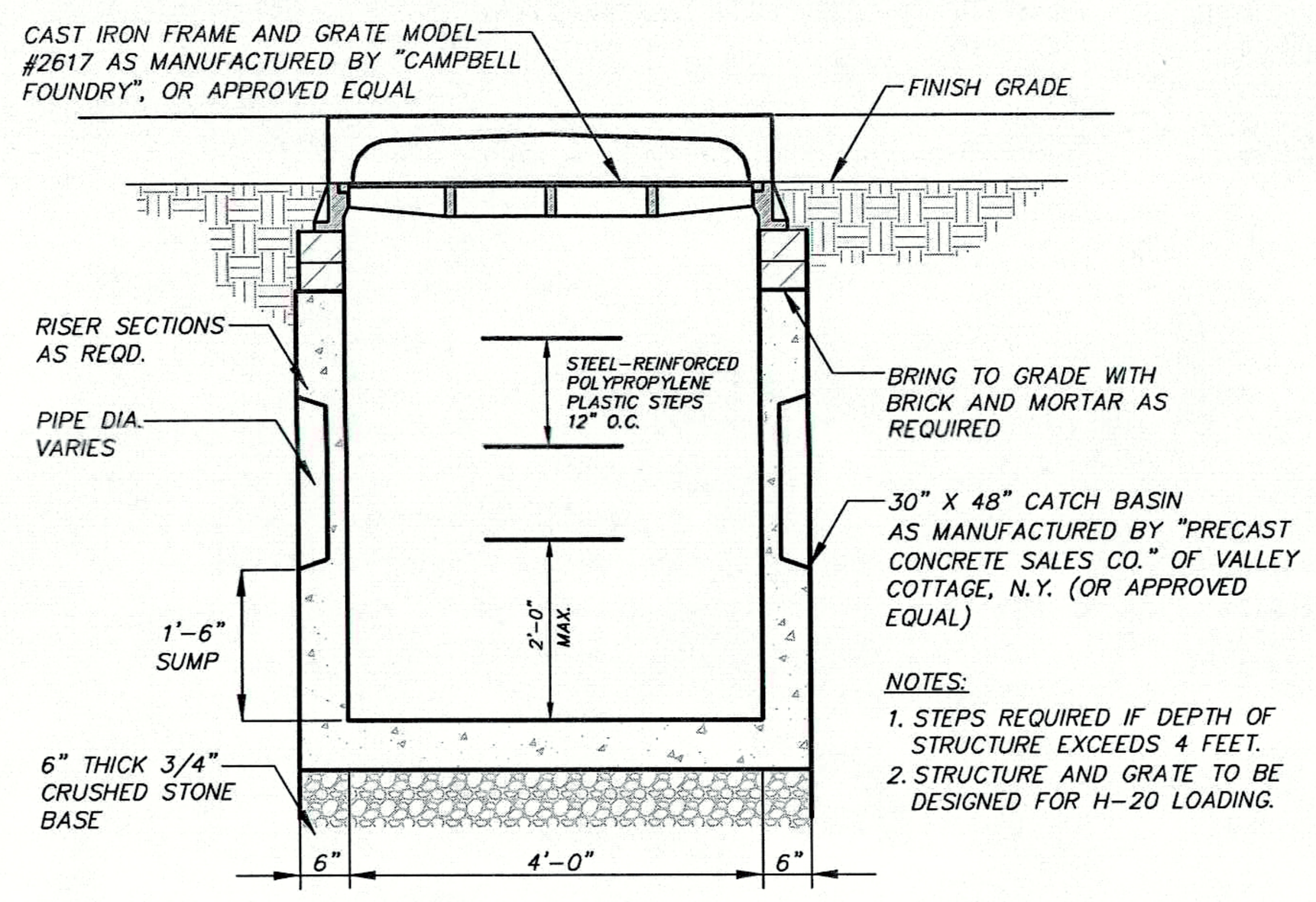


GRASS SWALE DETAIL
(N.T.S.)



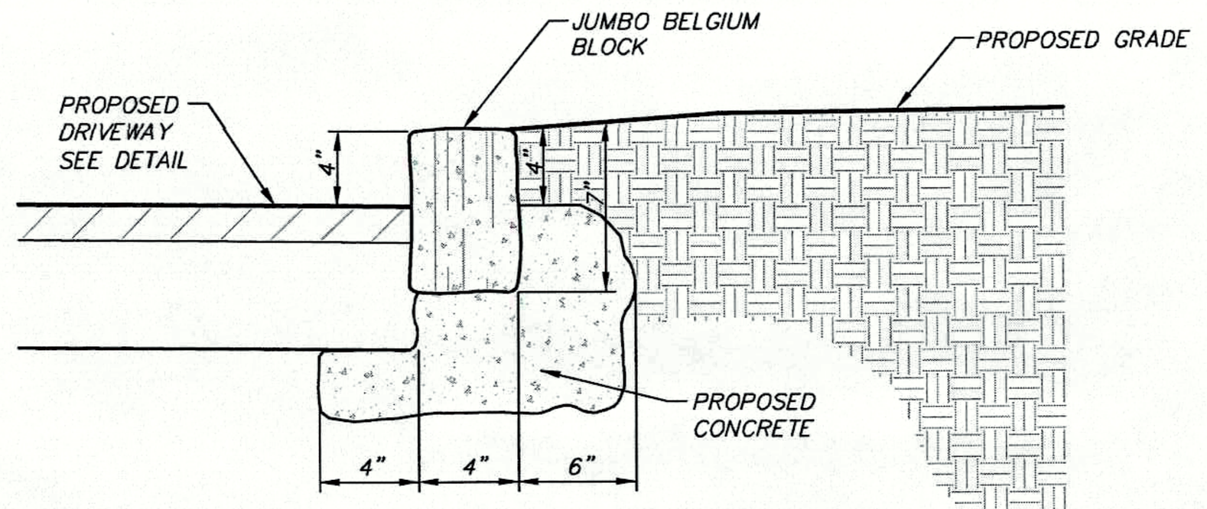
NOTES:
1. STEPS REQUIRED IF DEPTH OF STRUCTURE EXCEEDS 4 FEET.
2. STRUCTURE AND GRATE TO BE DESIGNED FOR H-20 LOADING.

DRAIN INLET DETAIL
(N.T.S.)



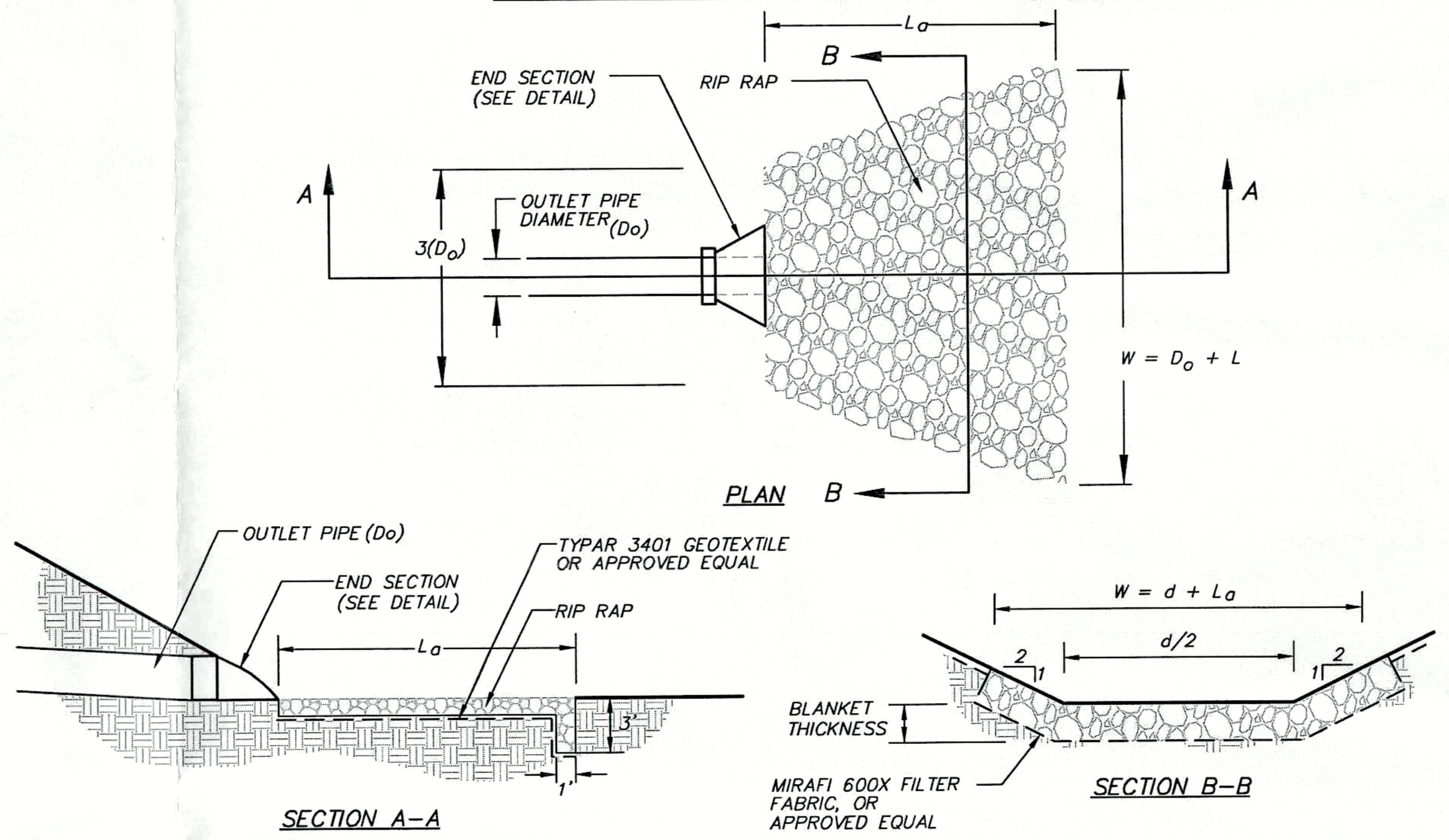
NOTES:
1. STEPS REQUIRED IF DEPTH OF STRUCTURE EXCEEDS 4 FEET.
2. STRUCTURE AND GRATE TO BE DESIGNED FOR H-20 LOADING.

CATCH BASIN DETAIL
(N.T.S.)

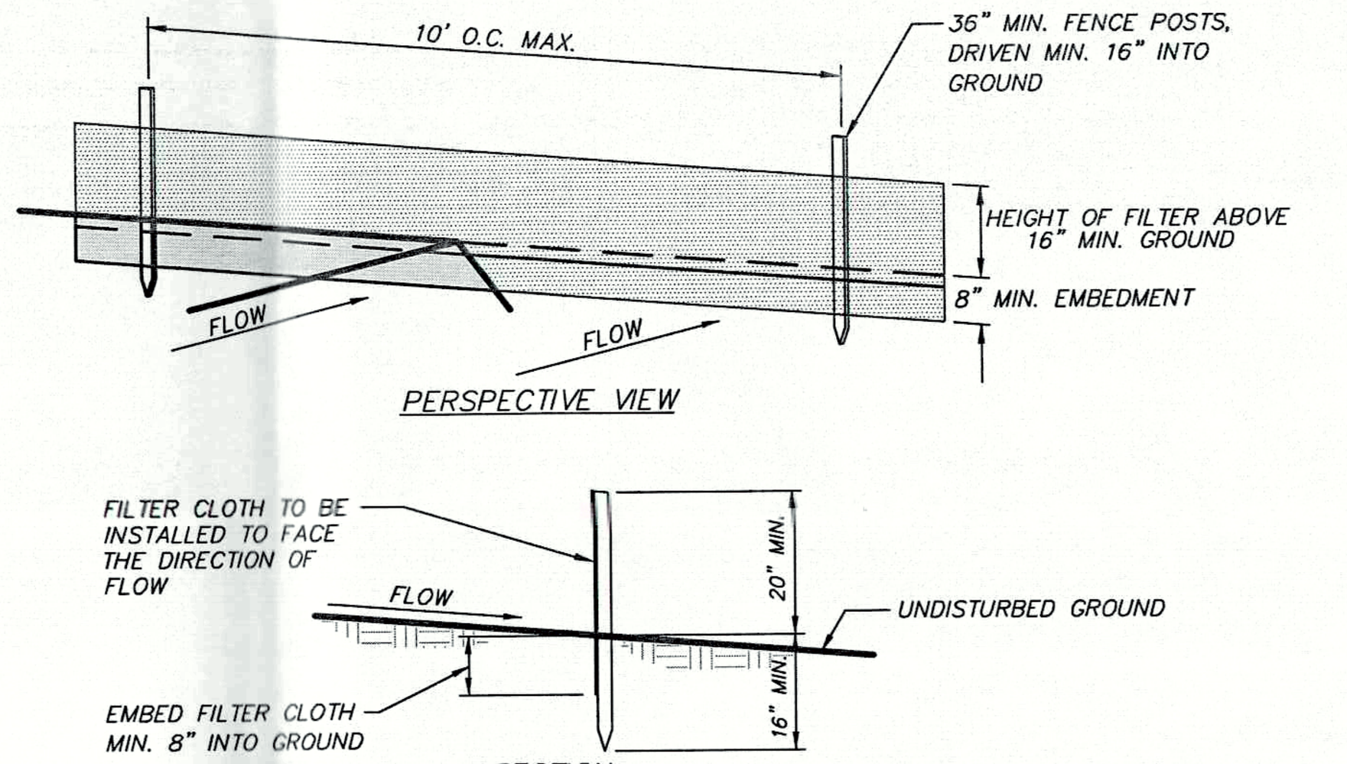


4" BELGIUM BLOCK CURB DETAIL
(N.T.S.)

END SECTION	OUTLET PIPE DIAMETER (Do)	(D_{50}) RIP RAP SIZE	MAX. RIP RAP SIZE	MIN. RIPRAP BLANKET THICKNESS	LA (MIN.)
ES 8	12"	12"	18"	27"	10 FT.
ES 8A	10"	12"	18"	27"	10 FT.
ES 9	12"	12"	18"	27"	10 FT.
ES 17	12"	12"	18"	27"	15 FT.
ES 18	12"	12"	18"	27"	15 FT.
ES 25	6"	12"	18"	27"	15 FT.
ES 23	6"	12"	18"	27"	10 FT.



ROCK OUTLET PROTECTION DETAIL
(N.T.S.)

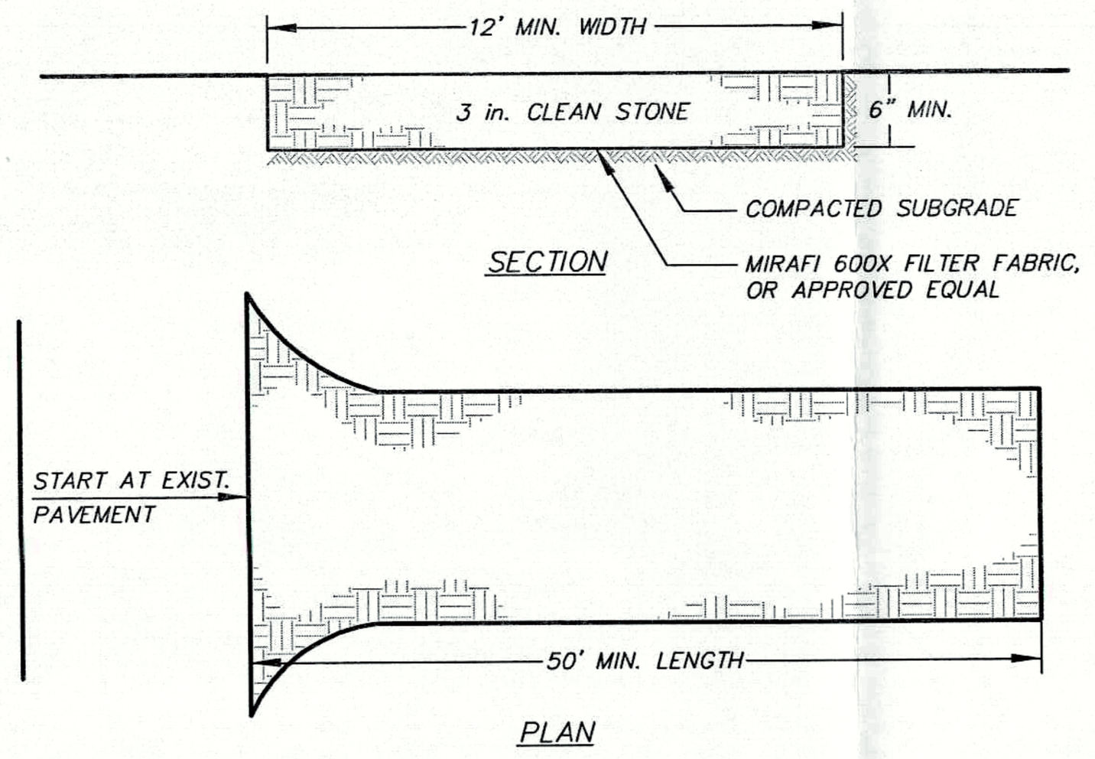


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

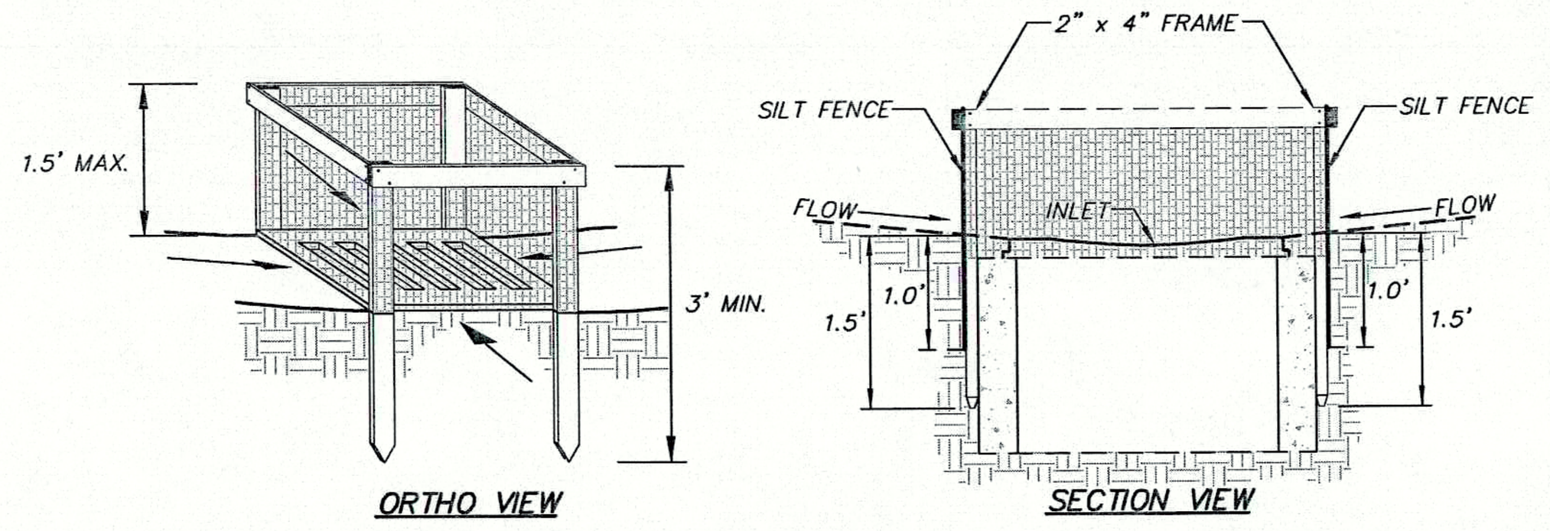
SILT FENCE DETAIL
(N.T.S.)



INSTALLATION NOTES

1. STONE SIZE – USE 3" STONE
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 – 12 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 PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF 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.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
(N.T.S.)



INSTALLATION NOTES

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAYBE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

FILTER FABRIC INLET PROTECTION DETAIL
(N.T.S.)

SMP LONG TERM INSPECTION/MAINTENANCE REQUIREMENTS

PRACTICE ID	MONTHLY INSPECTION/MAINTENANCE REQUIREMENTS	ANNUAL INSPECTION/MAINTENANCE REQUIREMENTS	INSPECTION/MAINTENANCE AFTER MAJOR STORM EVENTS
Infiltration Basin 3.1P	Remove debris. Inspect for evidence of erosion. Mow when grass height is greater than 6 inches. Inspect for evidence of standing water and practice dewaters between storms.	Inspect outlet and overflow spillway for evidence of erosion. Inspect the condition of filter bed.	Inspect outlet and overflow spillway for evidence of erosion.
Infiltration System 1.1P	Not Applicable	Confirm infiltrators dewater within 40 hours	Inspect outlet structures & remove accumulated sediment.
Stormwater Cistern (2.1P)	Not Applicable	Inspect and clear debris/sediment from units and verify operation. Flush or vacuum units to remove sediment as needed. Inspect orfices, inlets & outlets for clogging, & stabilize and/or repair immediately. The cistern will be manually lowered at the end of fall/beginning of the winter season.	Inspect orfices, inlets & outlets for clogging, & stabilize and/or repair immediately. Inspect sediment depths and general condition of units.
Hydro-dynamic Separator	Not Applicable	Remove cover and Inspect chamber and discharge pipes. Flush or vacuum accumulated sediment as needed. Refer to Appendix H of the project SWPPP for additional information.	Remove cover and Inspect chamber and discharge pipes. Flush or vacuum accumulated sediment as needed. Refer to Appendix H of the project SWPPP for additional information.
Catch Basin / Drain Manhole / Flow Splitter	Not Applicable	Clean sumps/remove debris, Inspect weir wall for deformation and/or repair immediately	Clean sumps/remove debris, Inspect weir wall for deformation and/or repair immediately
Drain Inlets / Yard Drains	Clean sumps/remove debris	Clean sumps/remove debris	Clean sumps/remove debris
Grass Swales	Inspect first few months after construction for eroding soils & slumpage & repair immediately	Inspect & clean Mow & remove debris & litter. Revegetate as needed. Inspect for & remove accumulated sediment every 5 to 10 years.	Not Applicable
Drainage Pipes	Not Applicable	Clean sumps/remove debris	Clean sumps/remove debris

Note: The party responsible for implementation of the maintenance schedule during and after construction, as well as implementation of the long term maintenance plan is:

Robert Stahmer or current owner of each lot
610 Bridshall Drive,
Yorktown Heights, NY 10598
(914) 962-2839
and/or the current owner(s) of the subject property.

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

MONITORING REQUIREMENTS				MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
INLET PROTECTION	–	Inspect	Inspect	Clean/Repair/ Replace	Remove
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
SWALES	–	Inspect	Inspect	Clean/Mulch/ Repair	Mow Permanent Grass/Replace/ Repair Rip Rap
CONCRETE DRAINAGE STRUCTURES	–	Inspect	Inspect	Clean Sumps/ Remove Debris/ Repair/Replace	Clean Sumps/ Remove Debris/ Repair/Replace
PAVEMENT	–	Inspect	Inspect	Clean	Clean
*SEDIMENT TRAP	–	Inspect	Inspect	Clean/Mulch/ Repair/Reseed	N/A
STONE CHECK DAM	–	Inspect	Inspect	Remove Silt/Debris and Repair Rip Rap	Remove
CONCRETE TRUCK WASHOUT AREA	–	Inspect	Inspect	Remove Concrete From Site when Full and Re-establish	Remove
LEVEL SPREADER/ ROCK OUTLET PROTECTION	–	Inspect	Inspect	Remove Silt/Debris and Repair Rip Rap	Remove Debris and Repair Rip Rap

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized.

Note: The party responsible for implementation of the maintenance schedule during and after construction, as well as implementation of the long term maintenance plan is:

Robert Stahmer
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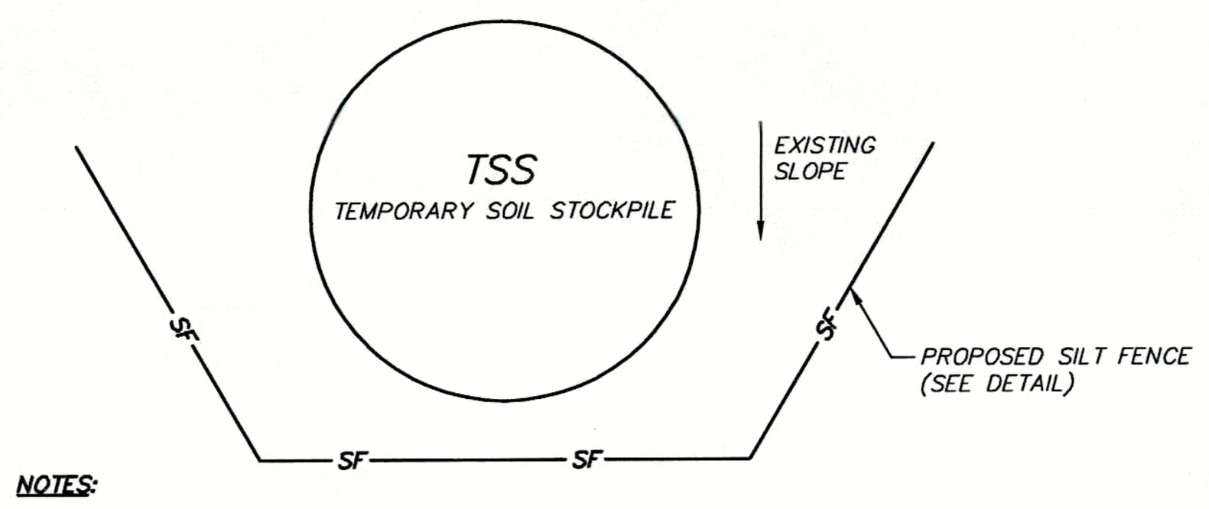
Yorktown Heights, NY 10598
(914) 962-2839
and/or the current owner(s) of the subject property.



NOTES:
1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.

TEMPORARY SOIL STOCKPILE DETAIL
(N.T.S.)

NO.	DATE	REVISION	BY
6	6-4-19	REVISED PER TOWN COMMENTS	JWM
5	4-10-19	REVISED PER DEP COMMENTS	JWM
4	1-23-19	REVISED PER DEP COMMENTS	JWM
3	11-16-18	GENERAL REVISIONS	JWM
2	4-24-18	GENERAL REVISIONS	JLL
1	10-25-17	GENERAL REVISIONS	KMS

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
STAHMER SUBDIVISION
BIRDSALL DRIVE AND JEROME ROAD
TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

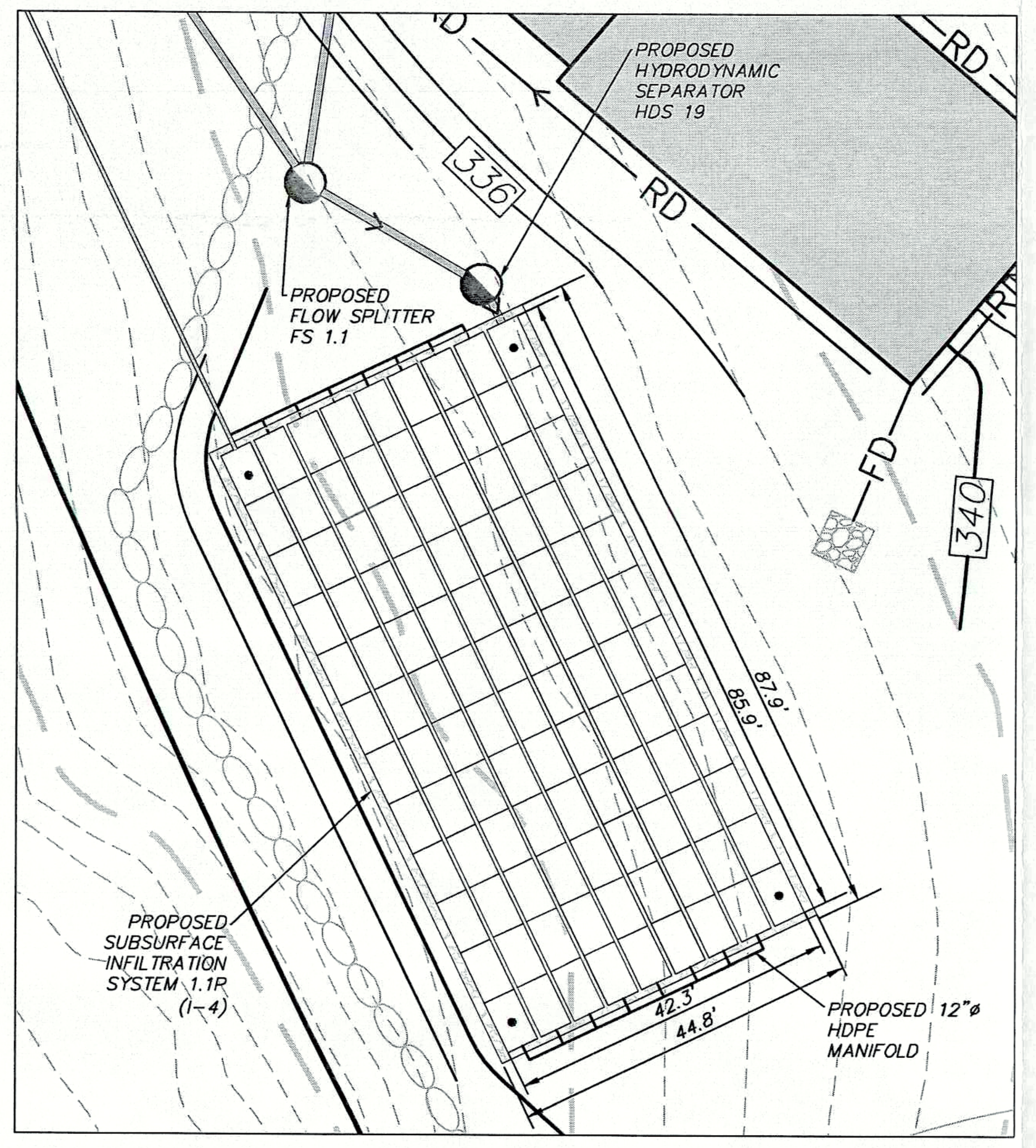
STATE OF NEW YORK · RICHARD D. WILLIAMS JR. · 085866 · LICENSED PROFESSIONAL ENGINEER

DRAWING:
DETAILS

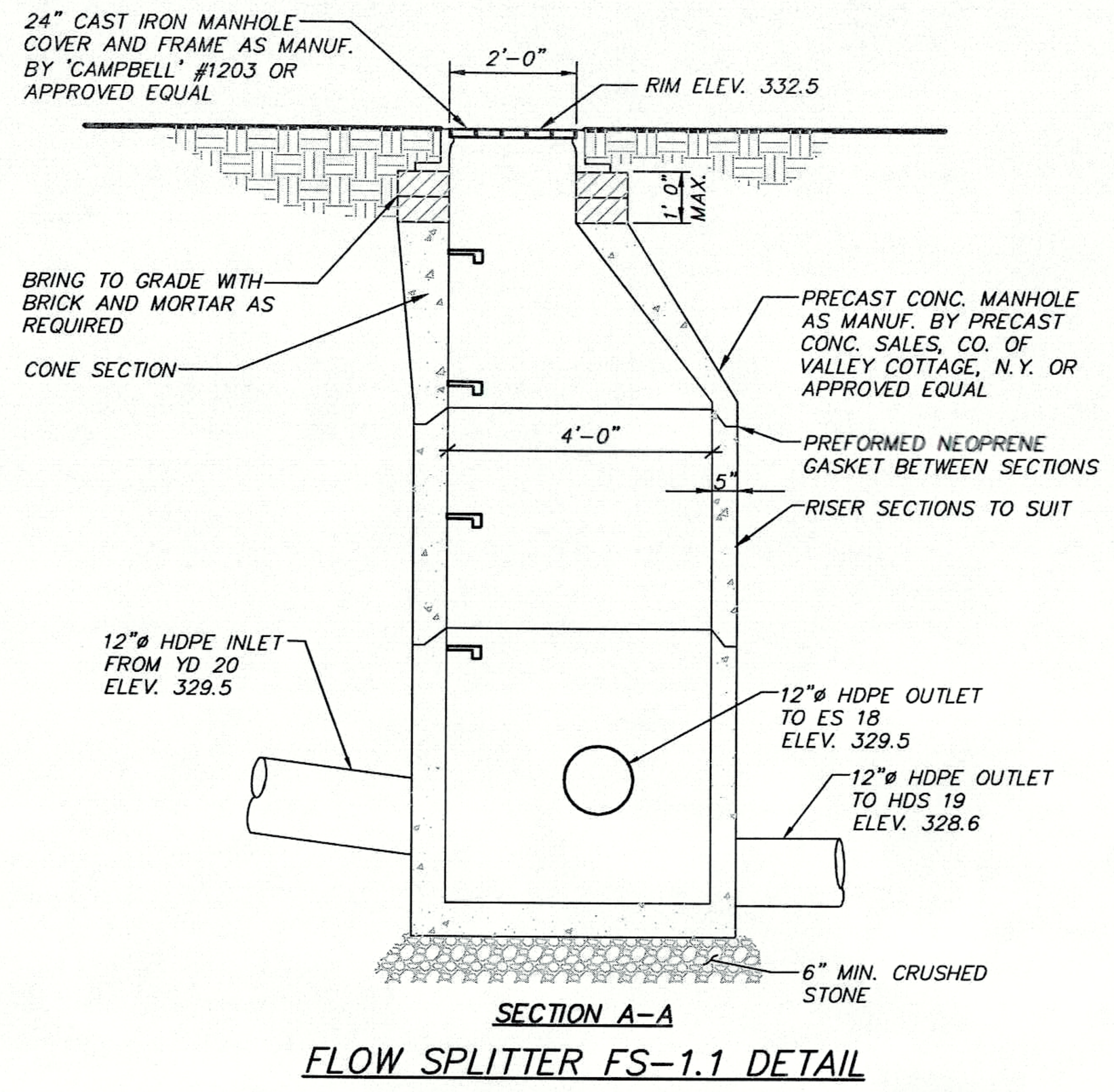
PROJECT NUMBER	16140.100	PROJECT MANAGER	R.D.W.
DATE	10-5-16	DRAWN BY	C.T.Q.
SCALE	1" = 40'	CHECKED BY	J.L.L.

DRAWING NO. D-1
SHEET 5 / 6

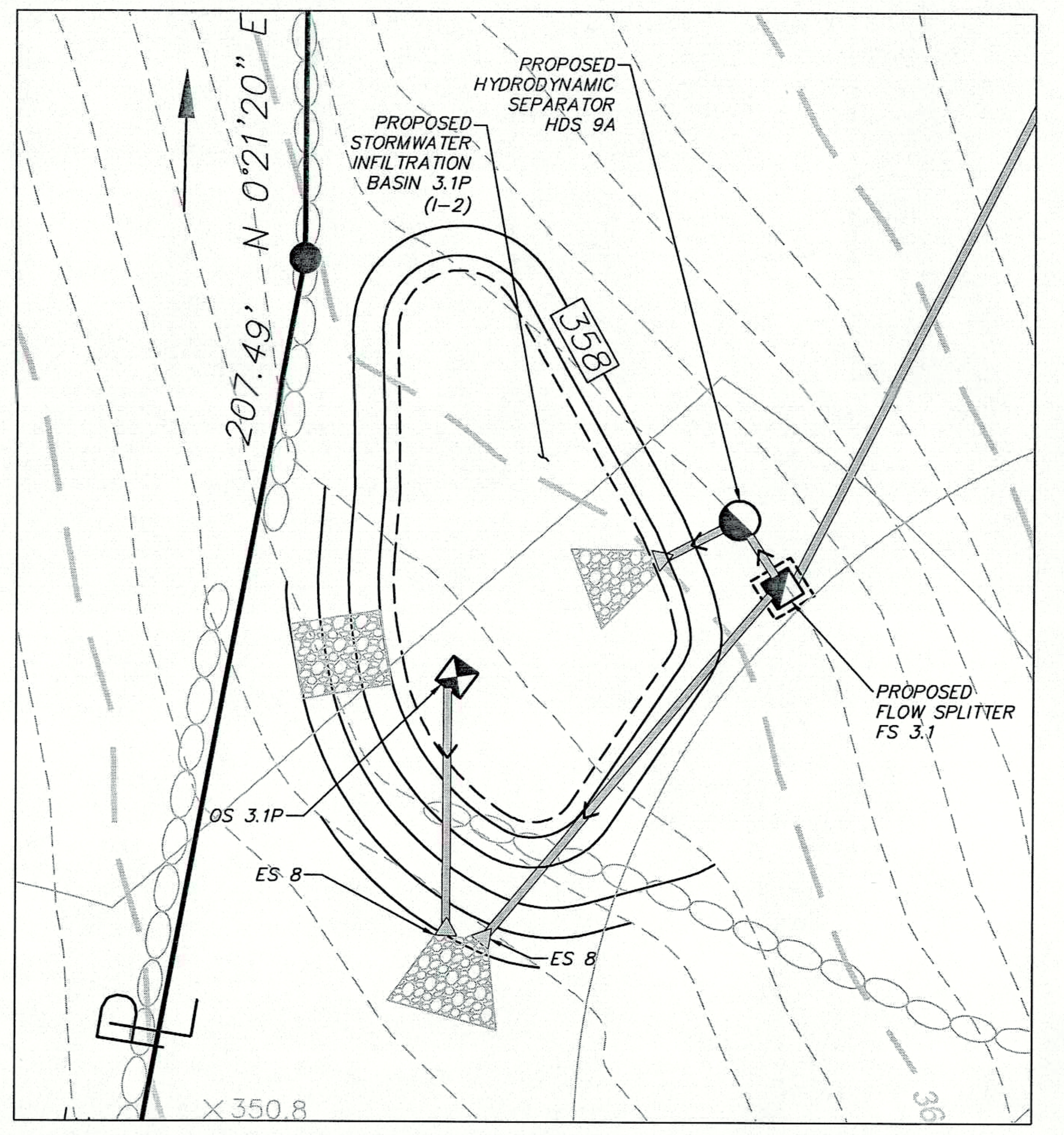
APPROVED IMPROVEMENT PLANS



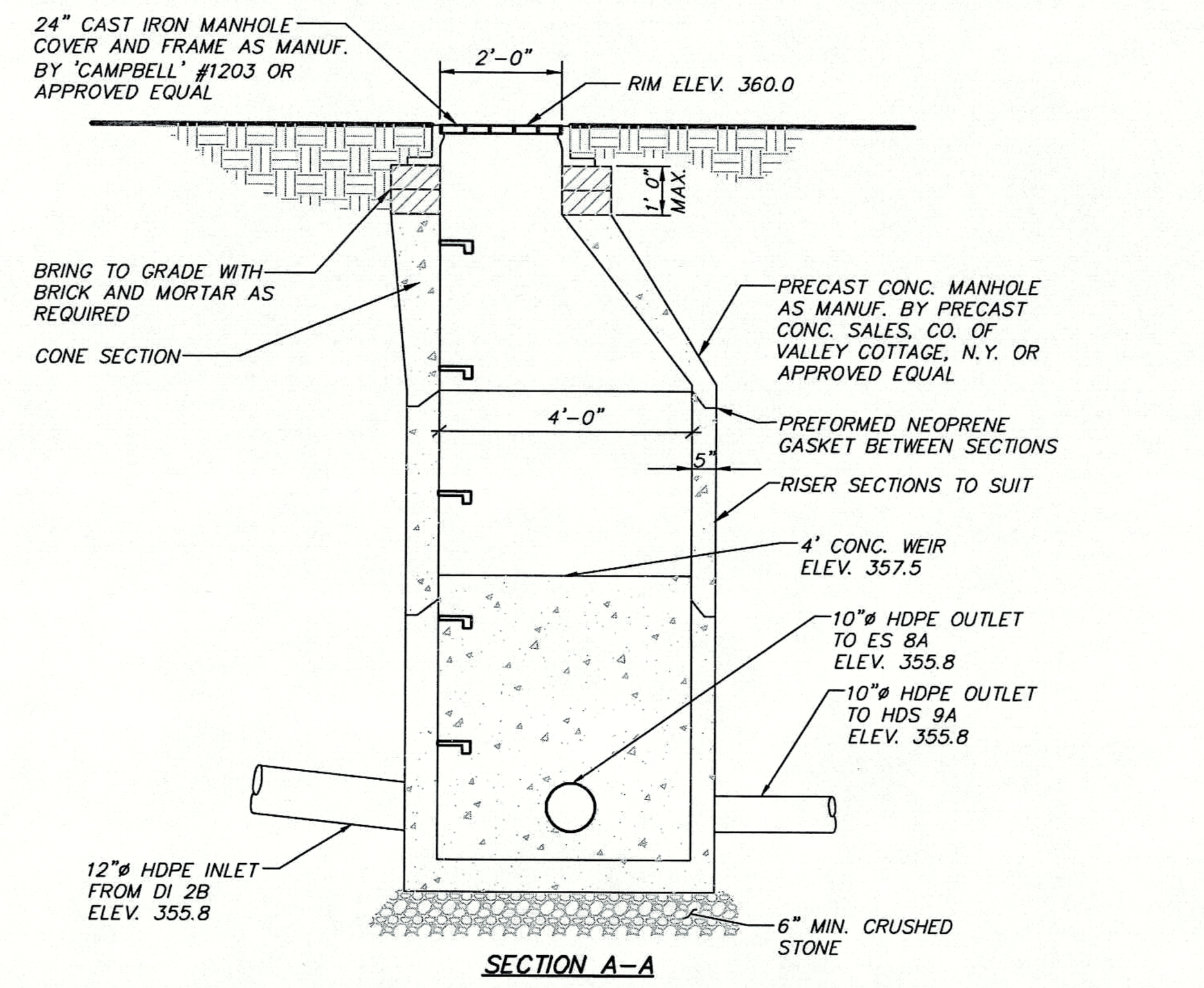
STORMWATER INFILTRATION SYSTEM 1.1P ENLARGED PLAN VIEW
SCALE: 1" = 20'



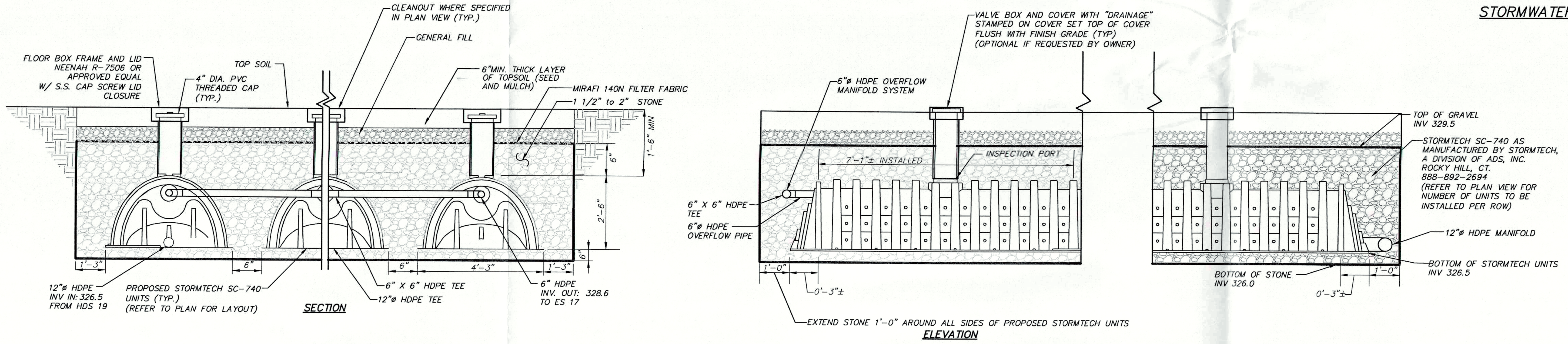
FLOW SPLITTER FS-1.1 DETAIL
(N.T.S.)



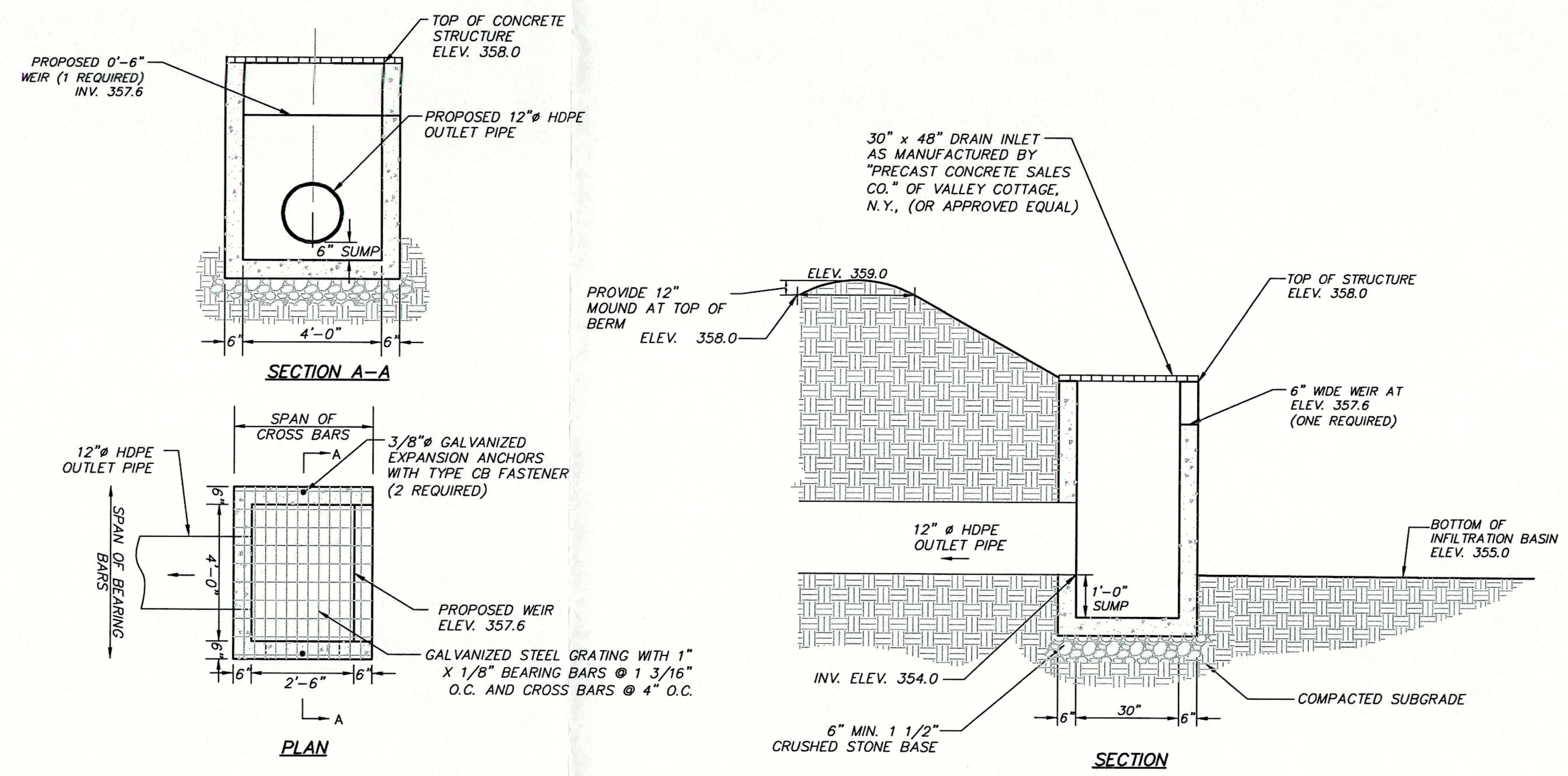
STORMWATER INFILTRATION BASIN 3.1P ENLARGED PLAN VIEW
SCALE: 1" = 20'



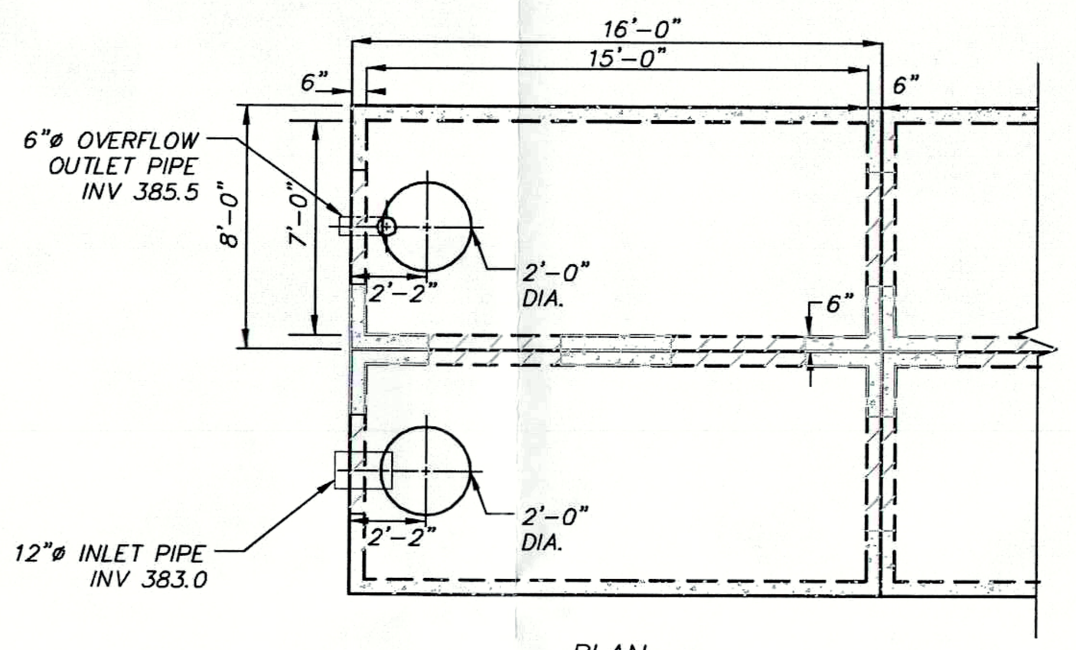
FLOW SPLITTER FS-3.1 DETAIL
(N.T.S.)



STORMWATER INFILTRATION SYSTEM 1.1P (NYSDEC DESIGN I-4) DETAIL
(N.T.S.)



OS 3.1P (NYSDEC DESIGN I-2) OUTLET STRUCTURE DETAIL
(N.T.S.)

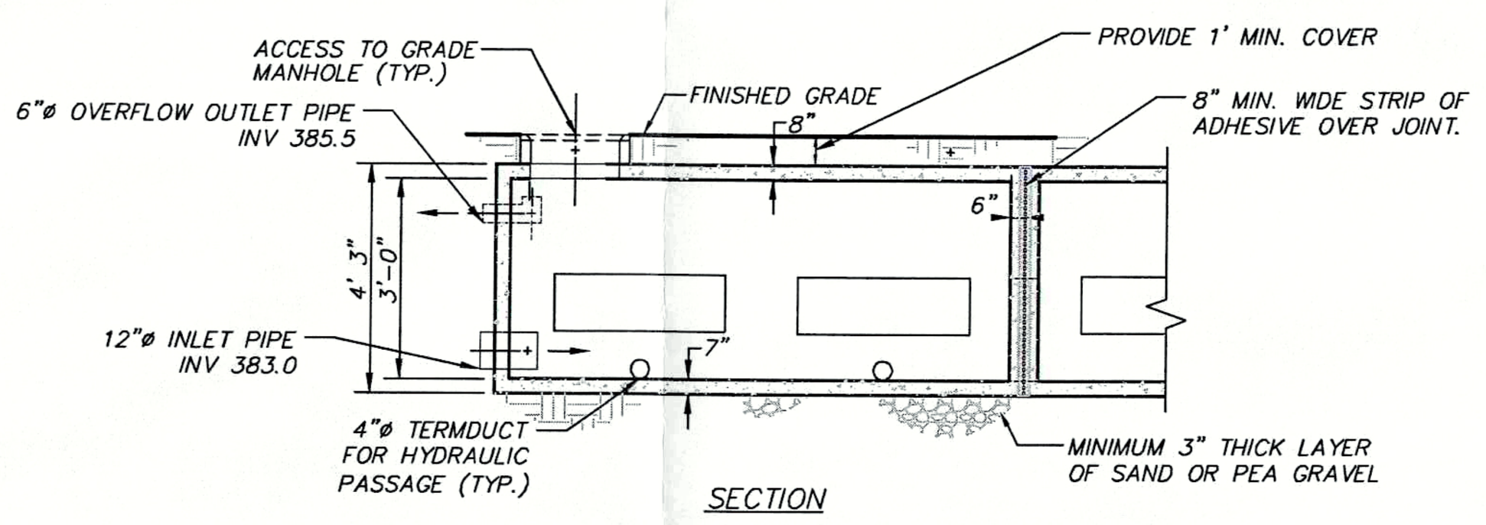


IRRIGATION SYSTEM NOTES:

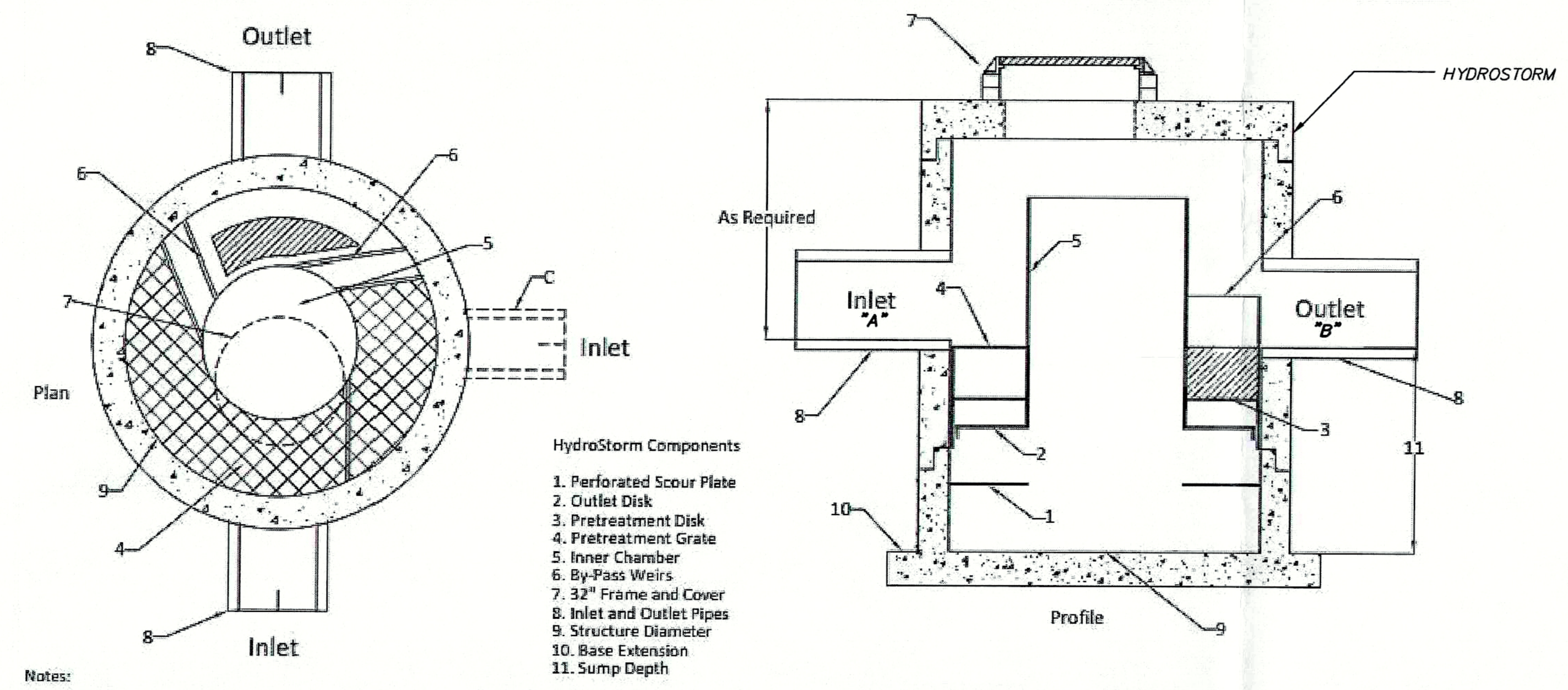
1. Stormwater Cistern (SMP 2.1) shall be installed with a pump and distribution piping capable of servicing Lawn Area as shown on Drawing IPP-1. Final design of the irrigation system by irrigation contractor.
2. Irrigation distribution and piping shall be installed prior to the installation of finished asphalt and concrete surfaces.
3. Irrigation contractor to provide as-built of system to Design Engineer.

CISTERN DEWATERING NOTES:

1. The cistern is proposed to provide the primary source of water to irrigate the lawn area on lot 2.
2. The cistern will be used as the primary source of irrigation water, when available, for the lawn area. An alternate source of irrigation water will be utilized by the owner when the storage in the cistern has been depleted.
3. The Owner will monitor the irrigation system during the growing season to ensure volume within the cistern is provided prior to rainfall events. Should impending weather dictate the need for additional storage within the cistern, a longer duration of pumping than what is contemplated in note #5 below shall be used to lower the static water level in the cistern prior to a rainfall event.
4. A pump with a minimum output of 20 gallons per minute shall be used to dewater the cistern and supply the irrigation system.
5. The anticipated irrigation schedule during the growing season is 2.5 hours a day, every day. As stated above the cistern dewatering pump must be capable to pumping 20 gallons a minute. Therefore it is conservatively estimated that 3,000 gallons will be used during one irrigation cycle. The cistern volume, if completely full, would be depleted in just over 5 irrigation cycles or once every 5 days. Based on the EPA WaterSense New Home Specification tool, the site requires 96,557 gallons/month (24,139 gallons/week, 3,448 gallons/day).
6. Per the recommendations for cisterns in the New York State Stormwater Management Design Manual (Design Manual) the cistern will be manually lowered by the owner at the beginning of and during the winter season. The lowering of the water elevation in the cistern provides the needed storage for spring ice melt and will help prevent possible winter ice damage within the cistern.



38,000 GALLON (2.1P) CISTERN DETAIL
(TO BE DESIGNED FOR H-20 LOADING)
(N.T.S.)



Notes:

A. Use a headloss K factor of 1.04 for hydraulic gradeline calculations
B. Sump depths shown are minimums. Additional depth can be added for site specific capacities
C. Multiple inlet pipes allowed
D. Drops allowed
E. Inlet invert elevations should be the same or higher than the outlet invert elevation. Inlet can be up to 12" lower than outlet if pretreatment area is omitted but 12" must be added to sump depth to maintain overall treatment volume
F. Solid Cover shown. HydroStorm can be desiged with an inlet grate if required.
G. Oil capacities given are spill capacities. Oil should be removed from the unit once an oil depth of 2" or more is measured in the inner chamber
H. Sediment depths are maximum holding capacities and not recommended capacities for regular maintenance. Maintenance is recommended annually or once every 2 years.
I. Capacities are rounded down to nearest 5 gal or ft3

HydroStorm Dimensions / Capacities

Model	Diameter (ft) (9)	Sump Depth (ft) (11)	Inner Chamber (ft) (5)	Max. Pipe (in) (8)	Volume (gal)	Oil (gal)	Sediment (ft3)
HS 4	4	4	2	24	375	95	30
HS 5	5	4	2.5	30	585	155	45

STRUCTURE DESIGNATION	SMP ID	REQUIRED MODEL	DIAMETER (FT)	INLET INV "A"	OUTLET INV "B"
HDS 19	1.1P	HS 5	60"	327.5	327.4
HDS 3A	2.1P	HG 4	48"	386.1	386.0
HDS 9A	3.1P	HG 5	60"	355.0	354.9

PROPOSED HYDRODYNAMIC SEPARATOR DETAIL
(N.T.S.)

NO.	DATE	REVISION	BY
4	6-4-19	REVISED PER TOWN COMMENTS	JWM
3	4-10-19	REVISED PER DEP COMMENTS	JWM
2	3-19-19	REVISED PER DEP COMMENTS	JWM
1	1-23-19	REVISED PER DEP COMMENTS	JWM

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PROJECT:
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DRAWING:
DETAILS

STATE OF NEW YORK · RICHARD D. WILLIAMS JR. · 085866 · LICENSED PROFESSIONAL ENGINEER

PROJECT NUMBER	16140.100	PROJECT MANAGER	R.D.W.
DATE	11-16-18	DRAWN BY	J.W.M.
SCALE	1" = 40'	CHECKED BY	J.L.L.

DRAWING NO. D-2
SHEET 6 / 6

APPROVED IMPROVEMENT PLANS

TOWN OF YORKTOWN - ENGINEERING DEPARTMENT
MS4 STORMWATER MANAGEMENT PERMIT APPLICATION
WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

Section 59.10

Block 1

Lot # 10

Job Site Address: 600 Birdsall Drive

City/State/Zip: Yorktown Heights

New York 10598

Approval Authority: TE [ ] PB [✓] TB [ ]

Application #:

Date Received:

Date Issued:

Date Expires:

Fee Paid: $

FSWPP-T-075-16

NOTE: Application, Fee, Short/Long Form EAF, Map/Survey to be submitted to the Engineering

APPLICANT:

YOUR NAME: Richard D. Williams, Jr., P.E.

COMPANY: Insite Engineering, Surveying & Landscape Architecture P.C

ADDRESS: 3 Garrett Place

Carmel, NY ZIP 10512

PHONE: (845) 225-9690

EMAIL: rwilliams@insite-eng.com

OWNER:

YOUR NAME: Andrew Fiore

COMPANY:

ADDRESS: 37 South 8th Street, Unit #306

Brooklyn, NY ZIP 11249

PHONE: (917) 232-4242

EMAIL: fiorea@coned.com

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

Select One	Type	Approval Authority	Cost
☐	Wetland/Watercourse/Buffer Area Permit (Administrative)	Town Engineer	$800.00
☐	Wetland/Watercourse/Buffer Area Permit	Town Board/Planning Board	$1,800.00
☐	Renewal of Wetlands/Watercourse/Buffer Area Permit (1 Year)	Town Engineer	$150.00
☐	MS4 Stormwater Management Permit (Administrative)	Town Engineer	$300.00
☑	MS4 Stormwater Management Permit	Town Board/Planning Board	~~$1,800.00~~
☐	Renewal of a MS4 Stormwater Management Permit (1 Year)	Town Engineer	$150.00
☐	Tree Permit	Town Engineer	$0.00

Application fees are doubled with issuance of a Stop Work Order/Notice of Violation as per Town Code.

PROPOSED ACTIVITY - If not located in wetland/wetland buffer (skip to 2b)

1. Description of wetlands (check all that apply):

a. Lake/pond	☐	Control area of lake/pond	☐
b. Stream/River/Brook	☐	Control area of stream/river/brook	☐
c. Wetlands	☐	Control area of wetlands	☐

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

Not applicable

2b. Stormwater/Excavation - Description of proposed activity:

This revised application is for Lot 1 of the previously approved Stahmer Subdivision. The lot has been sold to the owner noted above. It is proposed to constructed a single-family residence including a driveway, patio and associated appurtenances. The Addedum to the Stormwater Pollution Prevention Plan has been designed in accordance with Chapter 248 of the Town of Yorktown Code and the New York State SPDES General Permit for Stormwater Discharges from construction activities, GP-0-20-001.

3. Tree Removal:

Amount of trees and/or stumps to be removed: 77
Sizes; approximate DBH: Varies (See Plan)
Species of trees to be removed (i.e. Birch, Spruce - if known): Varies (See Plan)
Reason for removal: Ancillary to site work associated with residential construction
Trees marked In field (trees must be marked prior to inspection): Yes: ☐ **No:** ☐ Unknown
Tree removal contractor: To be determined

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection.

4. PROPERTY OWNER CONSENT: If another entity (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

I, Andrew Fiore **hereby authorize** Richard D. Williams, Insite Engineering **to apply for this Stormwater/Wetland Permit/Tree Permit on my behalf.**

Signature: Richard D. Fiore **Date:** April 28, 2021

No application will be processed without the above-mentioned, required information.

GENERAL CONDITIONS

. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable.

2. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
   a. Scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
   b. Permit was obtained by misrepresentation or failure to disclose relevant facts; or
   c. Newly discovered information or significant physical changes are discovered.

3. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority. Any supplemental information that may be required by the Approval Authority, including forms and fees, must be submitted 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.

4. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.

5. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-wa , which may be required.

6. An modification of this permit granted by the Approval Authority must be in writing and attached hereto.

7. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.

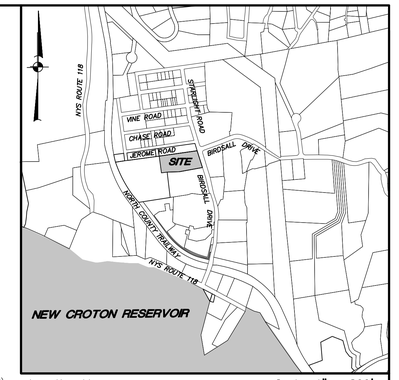
Andrew Fiore

PRINT NAME

SIGNATURE F APPLICANT

April 28, 2021

DATE



Location Map Scale: 1" = 800'

Owner/Applicant:

Andrew Fiore
37 South 8th Street, Unit #306
Brooklyn, NY 11249

Project Location:

600 Birdsall Drive
Yorktown Heights, NY 10598

Site Data:

Zone: R-80 Residential
Total Acreage 2.7 AC±
Tax Map No.: 59.10-1-10
Watershed Basin: New Croton Reservoir
RS Name: Stahmer Minor Subdivision
RS Lot No.: 10
Filed Map No.: 29353
Date Filed: 12/18/19

General Notes:

1. Property line and existing features shown hereon obtained from final plat subdivision of property prepared by Baxter Land Surveying dated 7-13-15.
2. Topography shown hereon is based upon aerial photogrammetry provided by Baxter Land Surveying. The contour interval is 2'.
3. No soil stockpiles, materials or equipment will be stored in areas to be used for the subsurface sewage treatment system.
4. The electric and communication utilities shall be installed in accordance with the utility provider specifications including but not limited to provided the proper bedding, cover, and detectible warning tape / tracer wire.
6. The rim elevation of the existing catch basin at the corner of Birdsall Drive and Starlight Road was determined by interpolating existing topographic information. The invert was determined by field measurements between the rim and invert and relating the invert to the interpolated rim elevation.

LEGEND

- PROPERTY LINE
- EXISTING PROPERTY LINE TO BE EXTINGUISHED
- EXISTING UTILITY POLE W/ OVERHEAD WIRES
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING WELL
- EXISTING DRAINAGE PIPE
- EMP EXISTING ELECTRIC METER POST
- ø Pole EXISTING UTILITY POLE
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED

TREE LEGEND

	Deciduous Tree
	Evergreen
TRI.	Triple
TW.	Twin
QUAD.	Quadruple
BB	Black Birch
BE	Beech
CH	Cherry
HK	Hickory
OA	Oak
PN	Pine
SP	Spruce
TR	Tree

SOILS LEGEND

SOILS	DESCRIPTION	HYDROLOGICAL GROUP
CuD	Chatfield-Hollis-Rock outcrop complex, hilly	C
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	C
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	C

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

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
FIORE RESIDENCE
600 BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:
EXISTING CONDITIONS & REMOVALS PLAN

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.
DATE	4-28-21	DRAWN BY	J.W.M.
SCALE	1" = 20'	CHECKED BY	R.D.W.

DRAWING NO. EX-1 SHEET 1 / 4

R1-80 Zone Requirements:

	Required:	Provided:
Lot Area: (sf)	80,000	117,530
Lot Width At Main Bldg Line: (ft)	200'	234'±
Lot Depth: (ft)	200'	510'±
Front Yard: (ft)		
Birdsall Drive	75'	225'±
Jerome Road	100' (1)	
Side Yard: (ft)		
Main or Accessory Bldg., Minimum Either Side	30'	80'
Two Combined	80'	140'±
Accessory Bldg. if in Rear Yard, Minimum Either Side	10'	N/A
Rear Yard: (ft)		
Main Bldg.	75'	230'±
Accessory Bldg. or Structure	10'	N/A
Maximum Height: (ft)		
Main Bldg.	35'	<35'
Accessory Bldg.	15'	N/A
Minimum Useable Floor Area of Dwelling Unit: (sf)	1,200	4,300 (AS SHOWN)
Maximum Bldg. Coverage (All Buildings)	10%	2.6% ± (AS SHOWN)
Required Off-Street Parking Spaces Per Dwelling Unit	1	2
Road Frontage: (ft)	200'	235'±

(1) ON STREETS WITH LESS THAN 50-FOOT RIGHT-OF-WAY, THE FRONT YARD SETBACK SHALL BE MEASURED FROM THE CENTER LINE OF THE EXISTING ROADWAY AND 25 FEET SHALL BE ADDED TO THE REQUIRED FRONT YARD SETBACK.

STORMWATER MANAGEMENT PRACTICE TEST RESULTS

DEEP TEST PERFORMED ON AUGUST 28, 29 AND 30, 2017 BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE.

NOTE: NO GROUNDWATER, MOTTLING, OR ROCK ENCOUNTERED UNLESS NOTED.

SW 1: 0"-6": TOPSOIL
6"-144": COMPACT BROWN FINE SAND
GROUNDWATER SEEP @ 132"
GROUNDWATER OR LEDGE ENCOUNTERED @ 144"

SW 2: 0"-6": TOPSOIL
6"-80": LIGHT BROWN FINE SANDY LOAM
SPOT MOTTLING OBSERVED @ 32"
NO GROUNDWATER OR LEDGE ENCOUNTERED

INFILTRATION TEST RESULTS
I-1: 12 INCHES/HOUR

DRAINAGE TABLE

STRUCTURE	RIM	INV.	PIPE SIZE (Diameter (A))	LENGTH (Lineal Feet (L.F.))	SLOPE (Percent (%))
YD 8	422.0	419.5			
DI 7	414.7	410.7 IN 410.2 OUT	6" HDPE	150 L.F.	5.9
CB 6	401.8	398.7	12" HDPE	120 L.F.	9.6
CB 5	392.0	388.5	12" HDPE	123 L.F.	8.3
HDS 3A	395.0	386.1	12" HDPE	19 L.F.	12.6
SMP 2.1P		383.0	12" HDPE	25 L.F.	12.4
YD 7A	413.0	410.5			
DI 7	395.0	408.3	6" HDPE	210 L.F.	1.0
DI 4	391.0	387.5			
DI 3	389.0	385.9 IN 385.2 OUT	12" HDPE	67 L.F.	3.0
DMH 2	388.0	384.5	15" HDPE	38 L.F.	1.8
DI 1	382.0	380.5	15" HDPE	167 L.F.	2.4
SMP 2.1P		385.5			
DMH 2	395.0	385.0	6" HDPE	51 L.F.	1.0
DI 2B	387.9	386.4			
HDS 3A	395.0	386.1	6" HDPE	36 L.F.	0.8

PLANT LIST

QUANTITY	KEY	BOTANICAL/COMMON NAME	SIZE	ROOT/SPACING
3	AF	Acer X Freemanii / Autumn Blaze Maple	2" CAL.	B&B/10' O.C. MIN.
15	TN	Thuja 'North Pole' / Emerald Green Arborvitae	4'-5' HT.	B&B/6' O.C. MIN.

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

NO.	DATE	REVISION	BY

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PROJECT:
FIORE RESIDENCE
600 BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:
SITE DEVELOPMENT PLAN

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.	DRAWING NO.	SHEET
DATE	4-28-21	DRAWN BY	J.W.M.	SP-1	2 / 4
SCALE	1" = 20'	CHECKED BY	R.D.W.		

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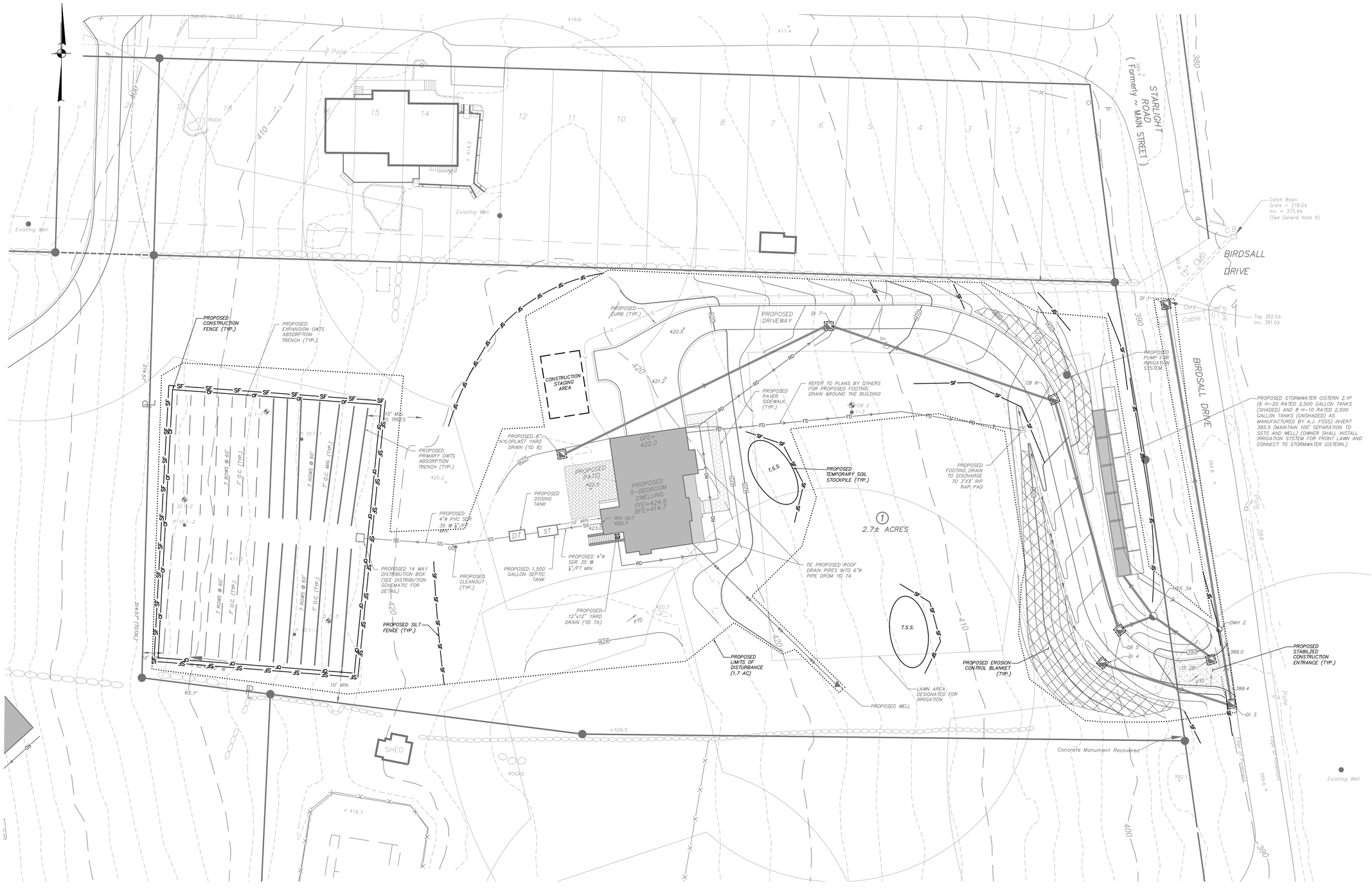

SOIL RESTORATION REQUIREMENTS

TYPE OF DISTURBANCE	SOIL RESTORATION REQUIREMENTS
Areas where topsoil is stripped only – no change in grade	Aerate[1] and apply 6 inches of topsoil
Areas of cut or fill	Apply full Soil Restoration [2]
Heavy traffic areas on site (especially in a zone 5–25 feet around buildings but not within a 5–foot perimeter around foundation walls)	Apply full Soil Restoration (decomposition and compost Enhancement[3])
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.

1. Aeration includes the use of machines suchAeration includes the use of machines such as tractor–drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which functions like a mini–subsoiler.
2. Per "Deep Ripping and De–compaction, DEC 2008".
3. Compost shall be aged, from plant derived materials, free of viable weed seeds, have no visible free water or dust produced when handling, pass through a half inch screen and have a pH suitable to grow desired plants.

REQUIRED POST–CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

1. Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP–0–15–002), all construction projects needing post–construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post–construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part III.B.2a–J and III.B.3.
   a. Identification of all post–construction stormwater management practices to be constructed as part of the project; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
   b. A site map/construction drawing(s) showing the specific location and size of each post–construction stormwater management practice; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
   c. A Stormwater Modeling and Analysis Report including pre–development conditions, post–development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the sizing criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. The required analysis is provided in the project Stormwater Pollution Prevention Plan.
   d. Soil testing results and locations. This SWPPP requirement is shown hereon.
   e. Infiltration testing results. This SWPPP requirement is shown hereon.
   f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post–construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The project Stormwater Pollution Prevention Plan serves to satisfy this requirement.
2. Enhanced Phosphorus Removal Standards – Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post–construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post–construction stormwater management practice component of the SWPPP shall include items 1.a – 1.f above. The permanent stormwater practices for this project have been sized according to chapter 10 of the Design Manual Enhanced Phosphorus Removal Standards. Please see 1.a – 1.f above.

CONSTRUCTION SEQUENCE:

1. Stake out limit of disturbance, establish staging area and mark trees to be removed.
2. Septic Area shall be cordoned off with construction fence prior to start of site work.
3. Install silt fence in general locations indicated on the plan.
4. Install stabilized construction entrance/anti–tracking pad at driveway entrance.
5. Begin clearing and grubbing operations associated with house, driveway and SSTS.
6. Strip and stockpile topsoil on site for later use in lawn and landscape areas.
7. Begin grading and construction of individual driveway.
   7.1. During this step, drainage improvements along Birdsall drive shall be constructed (Specifically installation and associated piping for DI 1, DMH 2 and DI 3).
   7.2. Install remaining utilities and drainage structures (Specifically DI 2B, HDS 3A, DI 4, CB 5, CB 6, DI 7) and associated piping. Install Cistern SMP 2.1P and connect Roof Leader Drains to the structures as shown on the plan. The pipe discharging to the Hydrodynamic Separator (from CB 5 and DI 2B) to be plugged until final stabilization is achieved.
   7.3. Complete Grading for driveway and stabilize associated grading in shoulder areas. Area downhill of footing drains shall be stabilized prior to footing drain installation.
   7.4. Slopes steeper than 2:1 shall be stabilized immediately after grading with Erosion Control Blanket.
   7.5. The Irrigation System shall be installed at the same time as the Cistern.
8. Begin house construction, individual lot grading and installation of SSTS and well. Install Footing Drains and Rip Rap Pads.
9. Upon completion of grading operations, install finished driveway surfaces.
10. Prior to application of topsoil, all areas in the limit of disturbance must undergo soil restoration.
11. Topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this page.
12. Upon achieving final stabilization (as determined by the project qualified professional performing the erosion and sediment control inspections) remove the plugs discharging to the stormwater practices and pretreatment devices.

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

	MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas area permanently stabilized.

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

NO.	DATE	REVISION	BY

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PROJECT:
FIORE RESIDENCE
600 BIRDSALL DRIVE, TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING:
EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.
DATE	4–28–21	DRAWN BY	J.W.M.
SCALE	1" = 20'	CHECKED BY	R.D.W.

DRAWING NO. SP–2 SHEET 3/4

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EROSION & SEDIMENT CONTROL NOTES:

1. The owner's field representative (O.F.R.) will be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.

2. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.

3. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.

4. When land is exposed during development, the exposure shall be kept to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.

5. Silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.

6. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded for temporary stabilization. Ryegrass (annual or perennial) at a rate of 30 lbs. per acre shall be used for temporary seeding in spring, summer or early fall. 'Aristook' Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.

7. Any disturbed areas not subject to further disturbance or construction traffic, permanent or temporary, shall have soil stabilization measures initiated for permanent vegetation cover in combination with a suitable mulch within 1 business day of final grading. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
   - Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative at a rate of 100 pounds per acre in the following proportions:
     - Kentucky Bluegrass 20%
     - Creeping Red Fescue 40%
     - Perennial Ryegrass 20%
     - Annual Ryegrass 20%
   - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.

8. Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Section 209–3.08B". Hydroseeding shall be performed using materials and methods as approved by the site engineer.

9. Cut or fill slopes steeper than 3:1 shall be stabilized immediately after grading with Curlex I Single Net Erosion Control Blanket, or approved equal.

10. Paved roadways shall be kept clean at all times.

11. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.

12. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.

13. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.

14. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.

15. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the O.F.R.

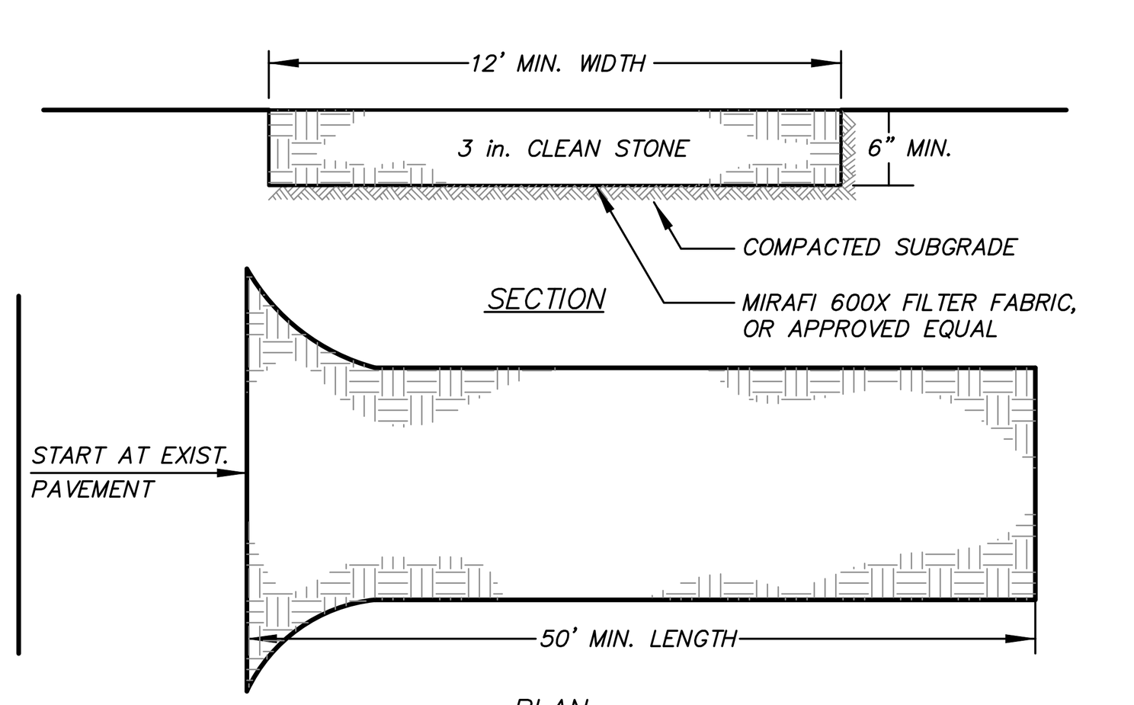
16. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.

17. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.

18. The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.

19. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and/or the Town Engineer shall be installed by the contractor.

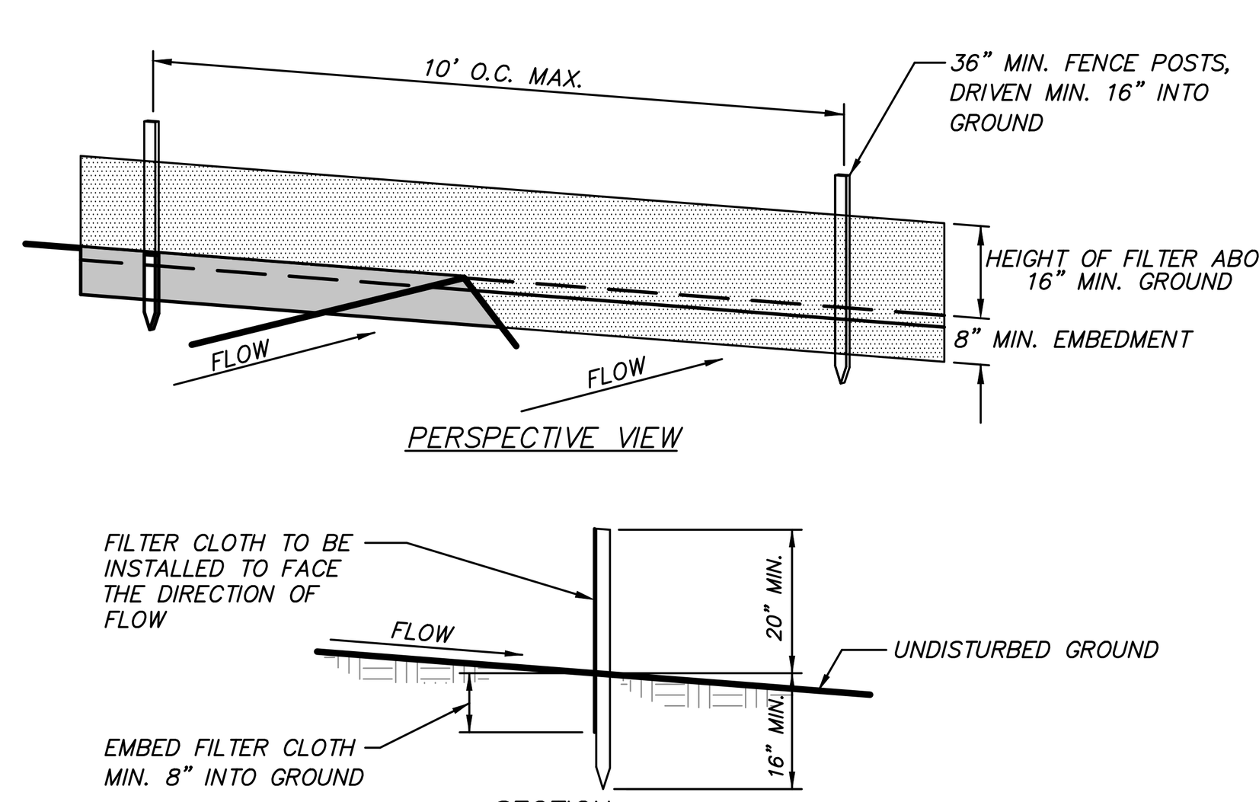
20. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.



INSTALLATION NOTES

1. STONE SIZE – USE 3" STONE
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 – 12 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 PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF 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.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
(N.T.S.)



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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

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

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

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE DETAIL
(N.T.S.)

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

REQUIRED EROSION CONTROL SWPPP CONTENTS:

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

a. Background Information: The subject project consists of a single family residential dwelling.

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

c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Paxton Fine Sandy Loam (PnB & PnC), and Chatfield–Hollis, Rock Outcrop (CuD) as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "C".

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

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

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

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

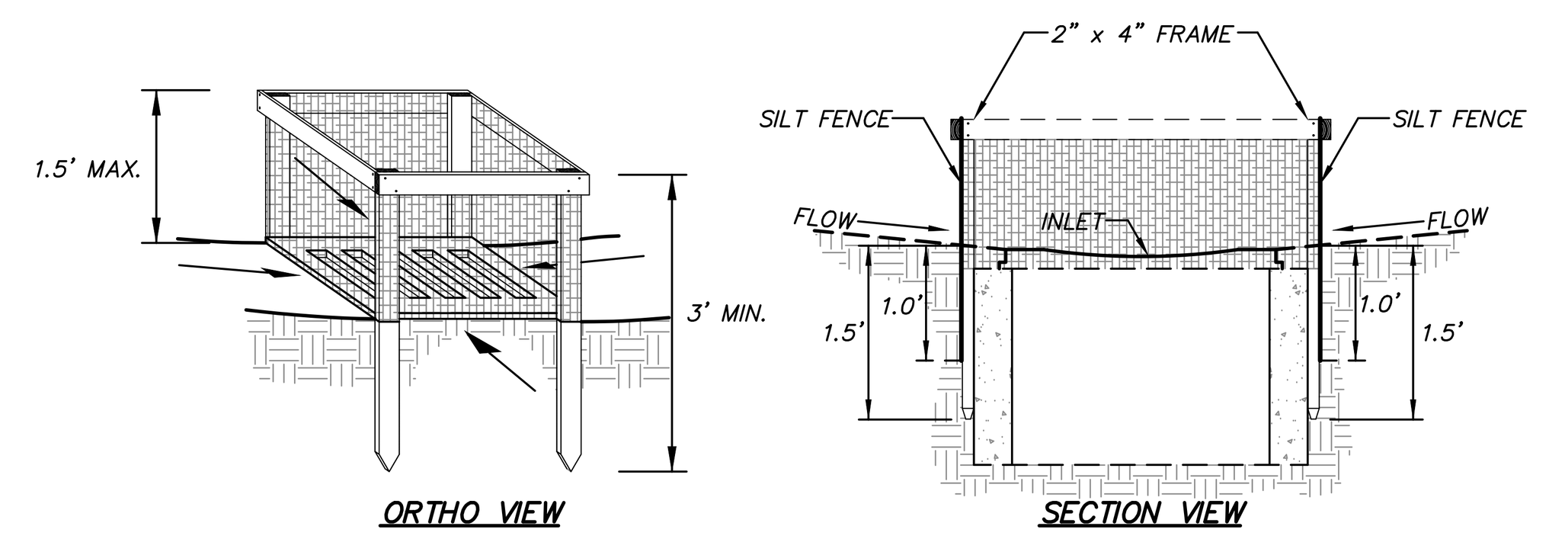
h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details and Erosion and Sediment Control Notes serve to satisfy this SWPPP requirement.

i. An inspection schedule: Inspections are to be performed twice weekly and by a qualified professional as required by the General Permit GP–0–20–001. In addition the NYSDEC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.

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

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

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

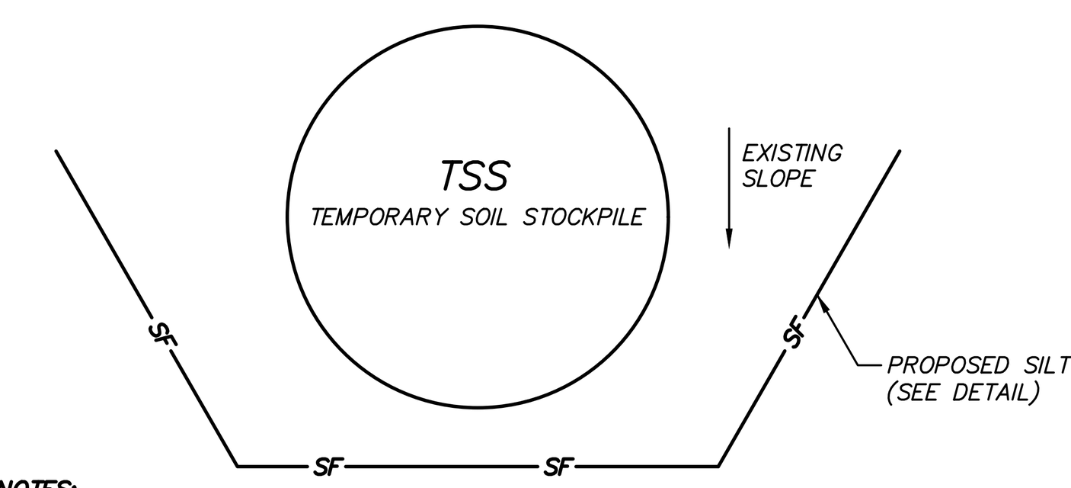


INSTALLATION NOTES

1. FILTER FABRIC SHALL HAVE AN EOS OF 40–85. BURLAP MAYBE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

FILTER FABRIC INLET PROTECTION DETAIL
(N.T.S.)



NOTES:

1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.

TEMPORARY SOIL STOCKPILE DETAIL
(N.T.S.)

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE					
MONITORING REQUIREMENTS				MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
INLET PROTECTION	–	Inspect	Inspect	Clean/Repair/ Replace	Remove
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
SWALES	–	Inspect	Inspect	Clean/Mulch/ Repair	Mow Permanent Grass/Replace/ Repair Rip Rap
CONCRETE DRAINAGE STRUCTURES	–	Inspect	Inspect	Clean Sumps/ Remove Debris/ Repair/Replace	Clean Sumps/ Remove Debris/ Repair/Replace
PAVEMENT	–	Inspect	Inspect	Clean	Clean
*SEDIMENT TRAP	–	Inspect	Inspect	Clean/Mulch/ Repair/Reseed	N/A
STONE CHECK DAM	–	Inspect	Inspect	Remove Silt/Debris and Repair Rip Rap	Remove
CONCRETE TRUCK WASHOUT AREA	–	Inspect	Inspect	Remove Concrete From Site when Full and Re–establish	Remove
LEVEL SPREADER/ ROCK OUTLET PROTECTION	–	Inspect	Inspect	Remove Silt/Debris and Repair Rip Rap	Remove Debris and Repair Rip Rap

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized.

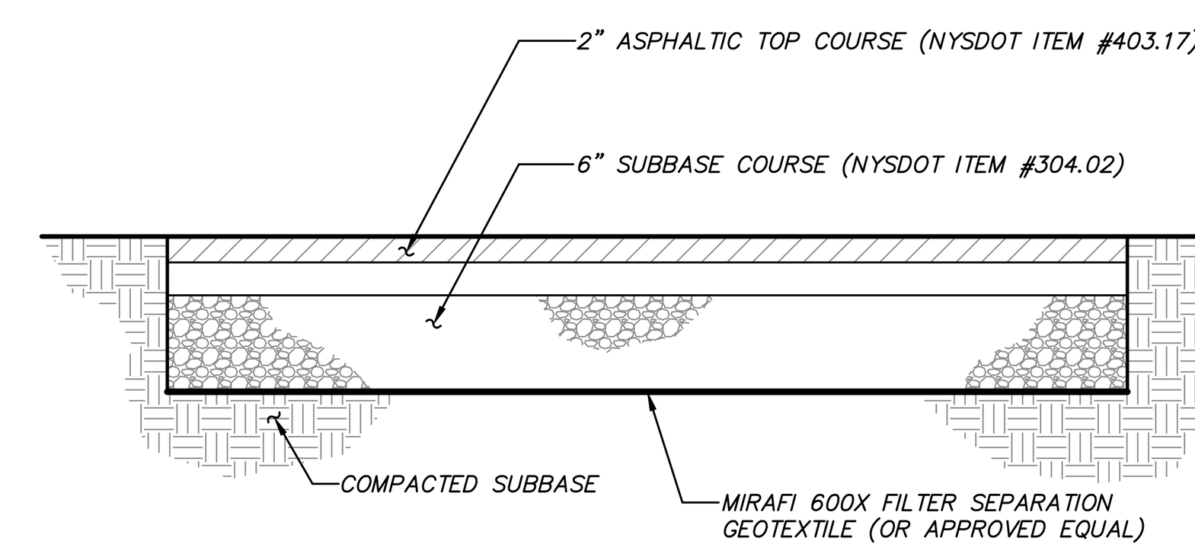
Note: The party responsible for implementation of the maintenance schedule during and after construction, as well as implementation of the long term maintenance plan is:

Andrew Fiore
37 South 8th Street, Unit #306
Brooklyn, NY 11249
and/or the current owner(s) of the subject property.

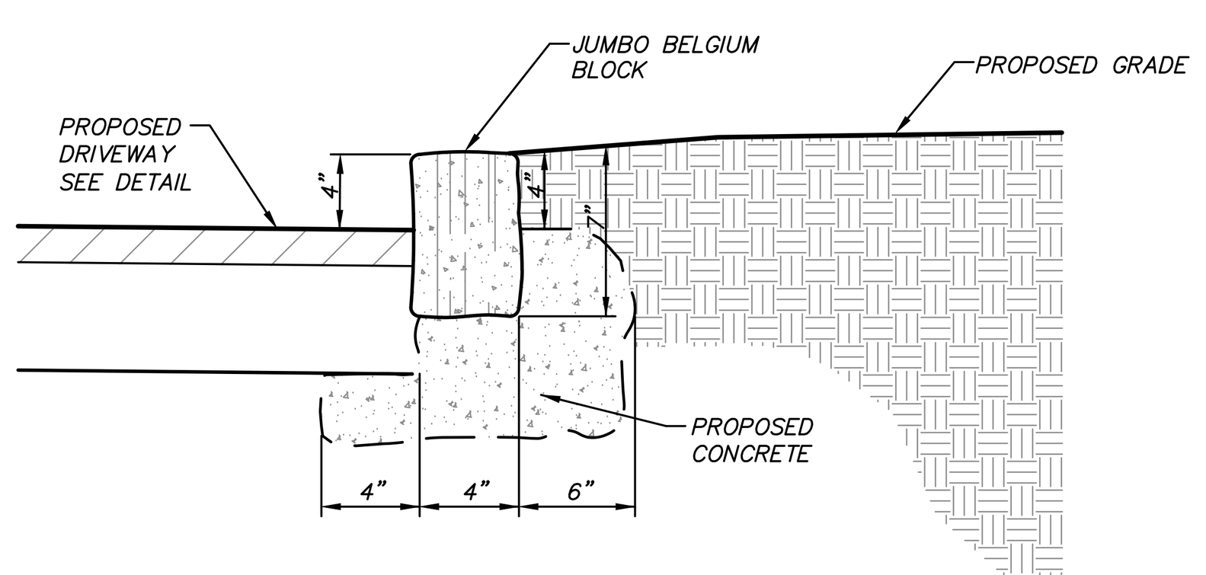
SMP LONG TERM INSPECTION/MAINTENANCE REQUIREMENTS			
PRACTICE ID	MONTHLY INSPECTION/MAINTENANCE REQUIREMENTS	ANNUAL INSPECTION/MAINTENANCE REQUIREMENTS	INSPECTION/MAINTENANCE AFTER MAJOR STORM EVENTS
Stormwater Cistern (2.1P)	Not Applicable	Inspect and clear debris/sediment from units and verify operation. Flush or vacuum units to remove sediment as needed. Inspect orfices, inlets & outlets for clogging, & stabilize and/or repair immediately. The cistern will be manually lowered at the end of fall/beginning of the winter season.	Inspect orfices, inlets & outlets for clogging, & stabilize and/or repair immediately. Inspect sediment depths and general condition of units.
Hydro–dynamic Separator	Not Applicable	Remove cover and Inspect chamber and discharge pipes. Flush or vacuum accumulated sediment as needed. Refer to Attachment D of the project SWPPP for additional information.	Remove cover and Inspect chamber and discharge pipes. Flush or vacuum accumulated sediment as needed. Refer to Attachment D of the project SWPPP for additional information.
Catch Basin / Drain Manhole	Not Applicable	Clean sumps/remove debris, Inspect weir wall for deformation and/or repair immediately	Clean sumps/remove debris, Inspect weir wall for deformation and/or repair immediately
Drain Inlets / Yard Drains	Clean sumps/remove debris	Clean sumps/remove debris	Clean sumps/remove debris
Grass Swales	Inspect first few months after construction for eroding soils & slumpage & repair immediately	Inspect & clean Mow & remove debris & litter. Revegetate as needed. Inspect for & remove accumulated sediment every 5 to 10 years.	Not Applicable
Drainage Pipes	Not Applicable	Clean sumps/remove debris	Clean sumps/remove debris

Note: The party responsible for implementation of the maintenance schedule during and after construction, as well as implementation of the long term maintenance plan is:

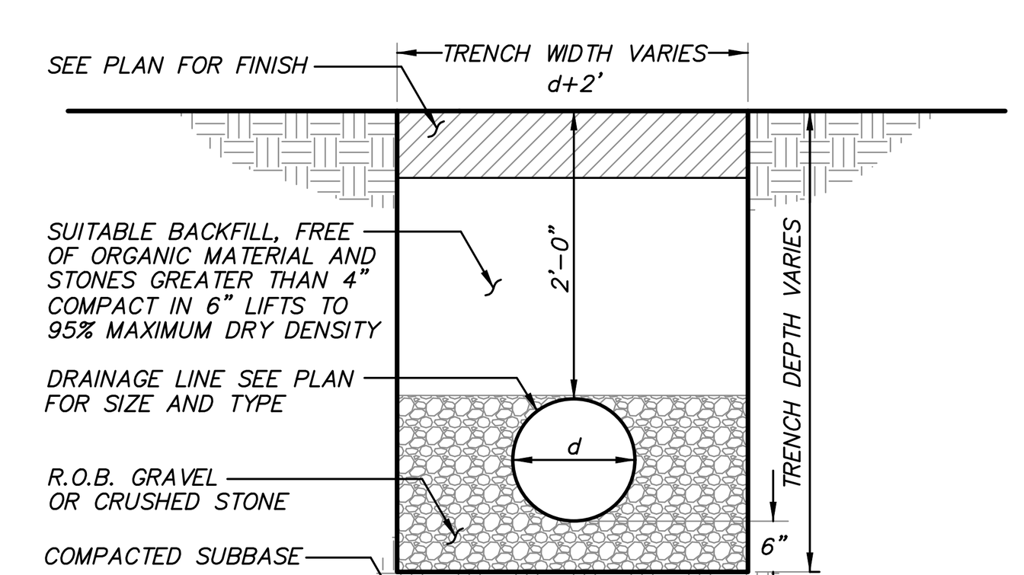
Andrew Fiore
37 South 8th Street, Unit #306
Brooklyn, NY 11249
and/or the current owner(s) of the subject property.



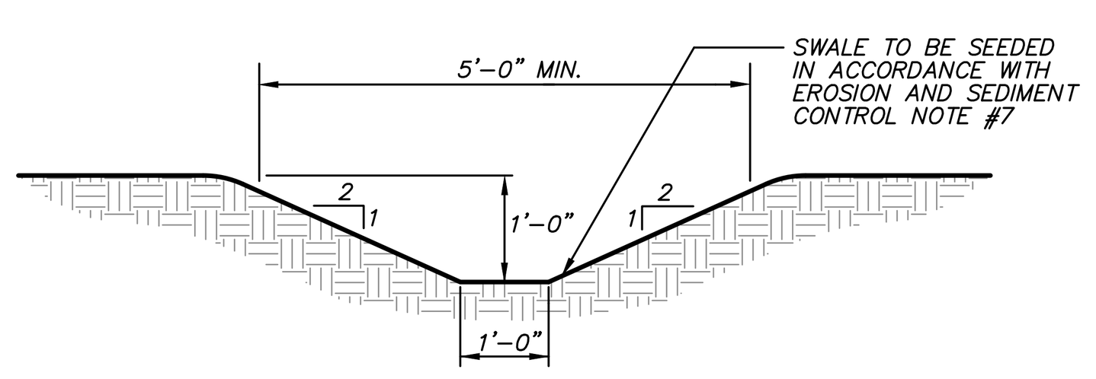
ASPHALT PAVEMENT DETAIL
(N.T.S.)



4" BELGIUM BLOCK CURB DETAIL
(N.T.S.)

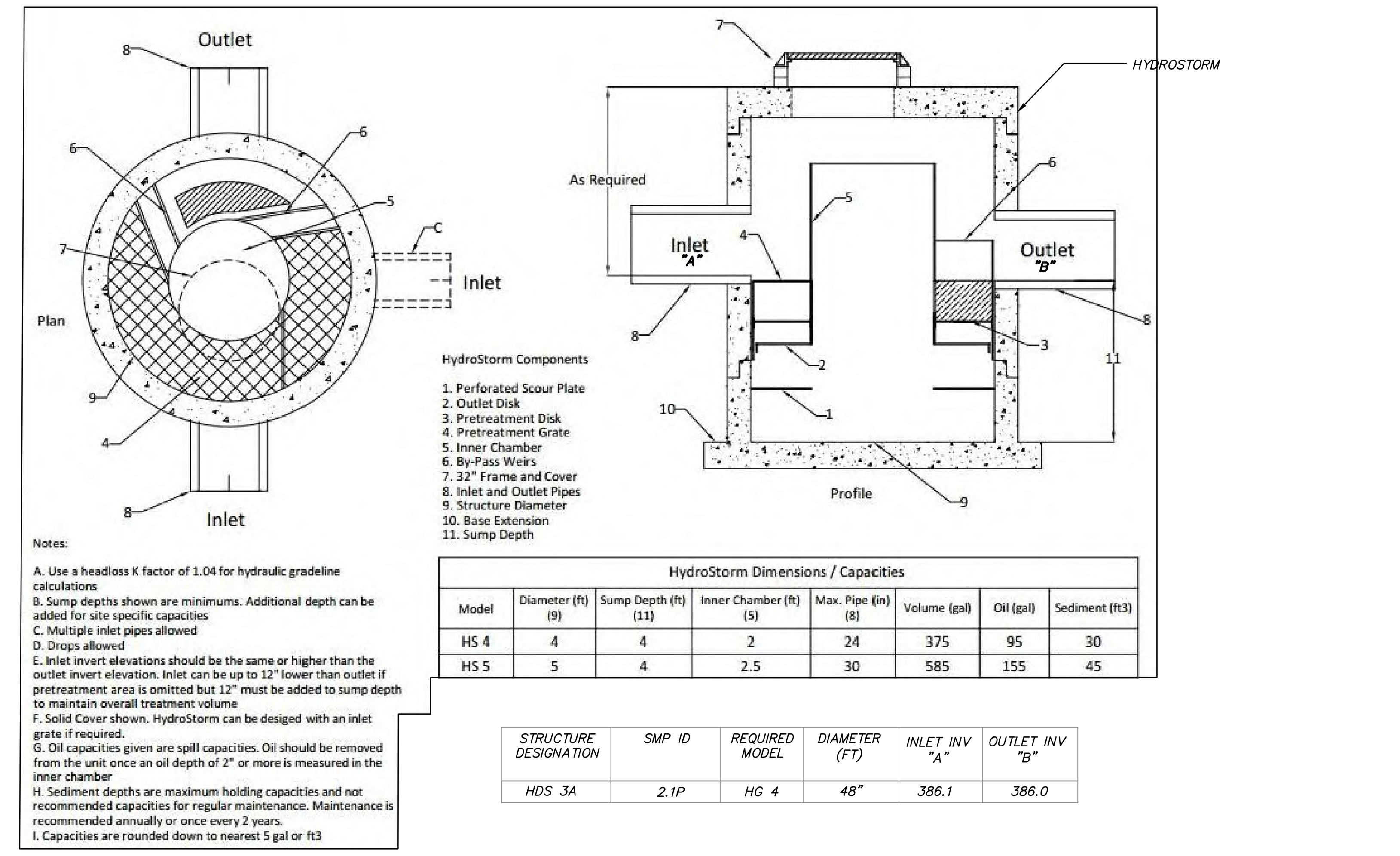


DRAINAGE LINE TRENCH DETAIL
(N.T.S.)



GRASS SWALE TO BE LINED WITH CURLEX I AS MANUFACTURED BY "AMERICAN EXCELSIOR COMPANY" OR APPROVED EQUAL.

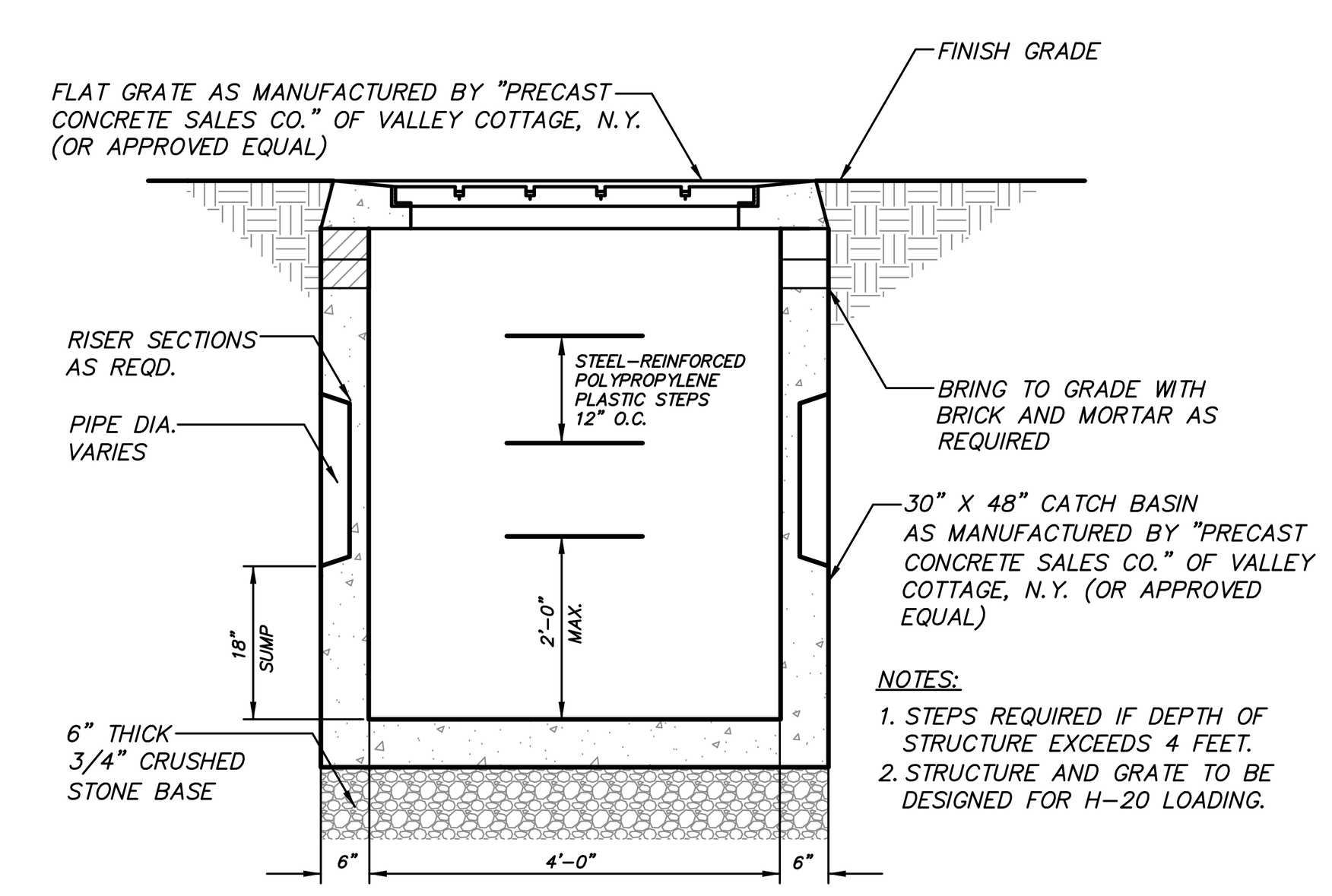
GRASS SWALE DETAIL
(N.T.S.)



HydroStorm Dimensions / Capacities							
Model	Diameter (ft) (9)	Sump Depth (ft) (11)	Inner Chamber (ft) (5)	Max. Pipe (in) (8)	Volume (gal)	Oil (gal)	Sediment (ft3)
HS 4	4	4	2	24	375	95	30
HS 5	5	4	2.5	30	585	155	45

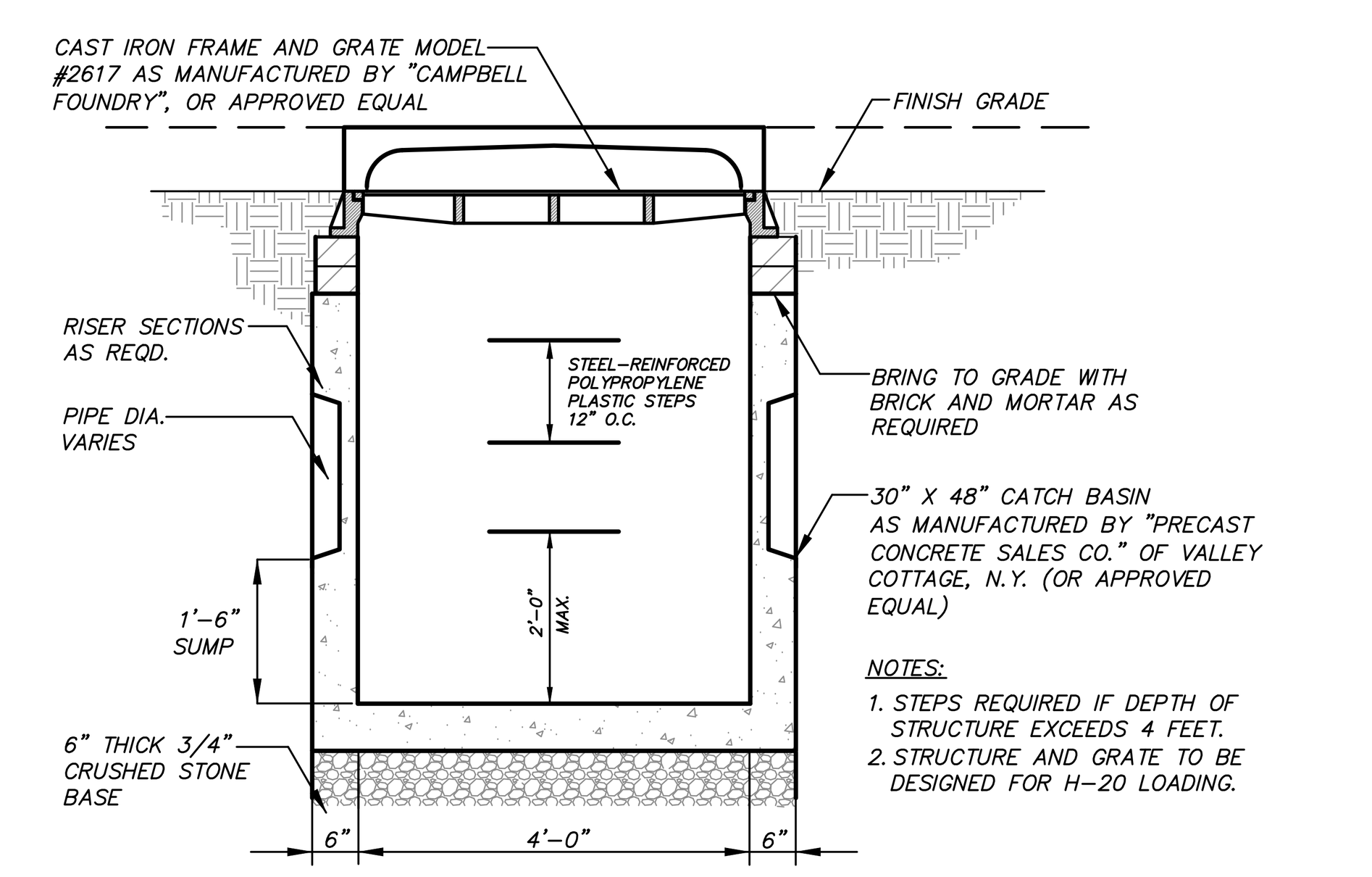
STRUCTURE DESIGNATION	SMP ID	REQUIRED MODEL	DIAMETER (FT)	INLET INV "A"	OUTLET INV "B"
HDS 3A	2.1P	HG 4	48"	386.1	386.0

PROPOSED HYDRODYNAMIC SEPARATOR DETAIL
(N.T.S.)



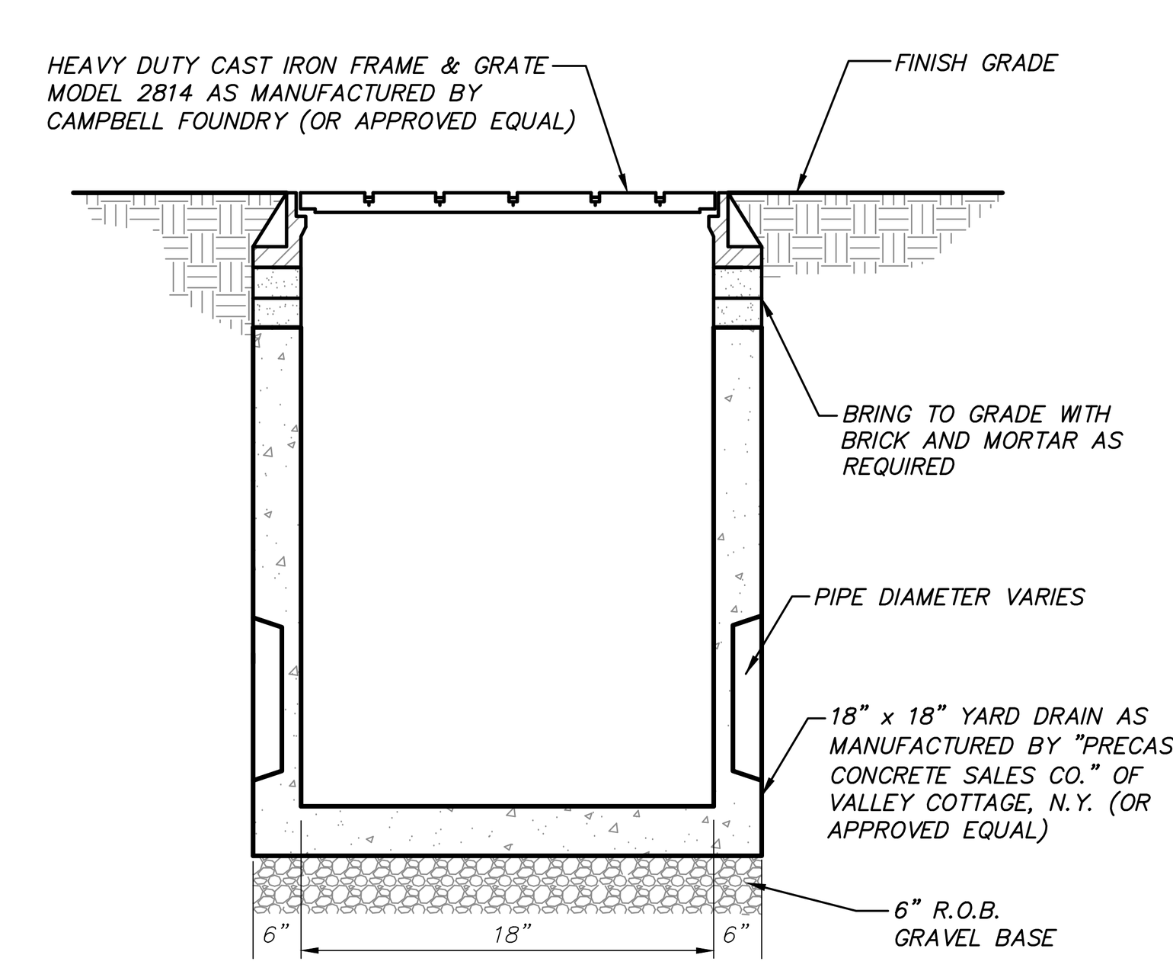
NOTES:
1. STEPS REQUIRED IF DEPTH OF STRUCTURE EXCEEDS 4 FEET.
2. STRUCTURE AND GRATE TO BE DESIGNED FOR H–20 LOADING.

DRAIN INLET DETAIL
(N.T.S.)

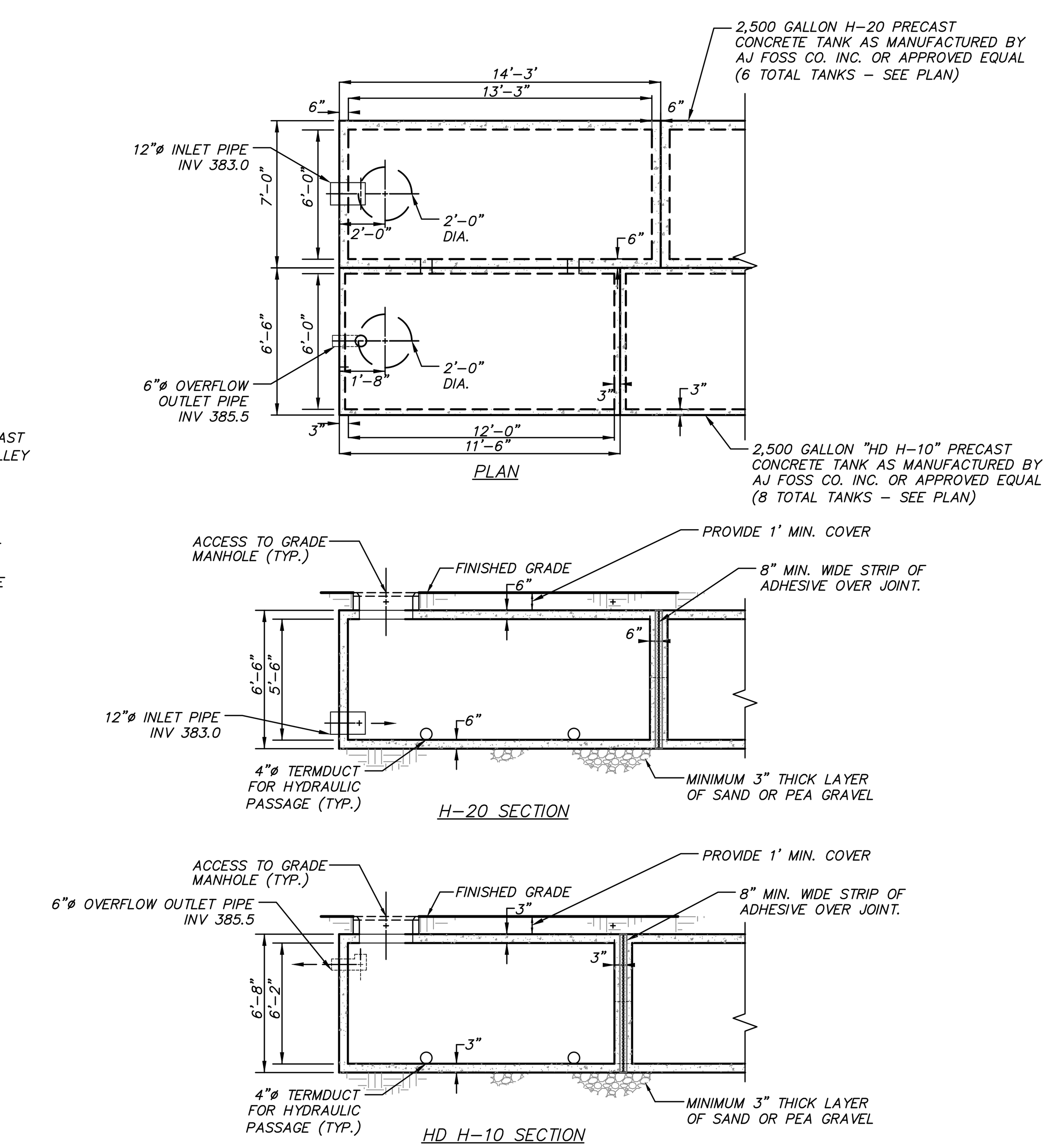


NOTES:
1. STEPS REQUIRED IF DEPTH OF STRUCTURE EXCEEDS 4 FEET.
2. STRUCTURE AND GRATE TO BE DESIGNED FOR H–20 LOADING.

CATCH BASIN DETAIL
(N.T.S.)



18" X 18" YARD DRAIN DETAIL
(N.T.S.)



SMP 2.1P RAINWATER CISTERN DETAIL
(TO BE DESIGNED FOR H–20 LOADING)
(N.T.S.)

IRRIGATION SYSTEM NOTES:

1. Stormwater Cistern (SMP 2.1) shall be installed with a pump and distribution piping capable of servicing Lawn Area as shown on Drawing IPP–1. Final design of the irrigation system by irrigation contractor.
2. Irrigation distribution and piping shall be installed prior to the installation of finished asphalt and concrete surfaces.
3. Irrigation contractor to provide as–built of system to Design Engineer.

CISTERN DEWATERING NOTES:

1. The cistern is proposed to provide the primary source of water to irrigate the lawn area on lot 1.
2. The cistern will be used as the primary source of irrigation water, when available, for the lawn area. An alternate source of irrigation water will be utilized by the owner when the storage in the cistern has been depleted.
3. The Owner will monitor the irrigation system during the growing season to ensure volume within the cistern is provided prior to rainfall events. Should impending weather dictate the need for additional storage within the cistern, a longer duration of pumping than what is contemplated in note #5 below shall be used to lower the static water level in the cistern prior to a rainfall event.
4. A pump with a minimum output of 20 gallons per minute shall be used to dewater the cistern and supply the irrigation system.
5. The anticipated irrigation schedule during the growing season is 2.5 hours a day, every day. As stated above the cistern dewatering pump must be capable to pumping 20 gallons a minute. Therefore it is conservatively estimated that 3,000 gallons will be used during one irrigation cycle. The cistern volume, if completely full, would be depleted in just over 5 irrigation cycles or once every 5 days. Based on the EPA WaterSense New Home Specification tool, the site requires 96,557 gallons/month (24,139 gallons/week, 3,448 gallons/day).
6. Per the recommendations for cisterns in the New York State Stormwater Management Design Manual (Design Manual) the cistern will be manually lowered by the owner at the beginning of and during the winter season. The lowering of the water elevation in the cistern provides the needed storage for spring ice melt and will help prevent possible winter ice damage within the cistern.

NO.	DATE	REVISION	BY

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225–9690
(845) 225–9717 fax
www.insite–eng.com

PROJECT: FIORE RESIDENCE

600 BIRDSALL DRIVE TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

DRAWING: NOTES & DETAILS

PROJECT NUMBER	20213.100	PROJECT MANAGER	R.D.W.	DRAWING NO.	SHEET
DATE	4–28–21	DRAWN BY	J.W.M.	D–1	4/4
SCALE	AS SHOWN	CHECKED BY			

Wells Fargo Lighting Shrub Oak

Christopher Taormina, RA
Chairman

Matthew Slater
Town Supervisor

TOWN OF YORKTOWN

ADVISORY BOARD ON ARCHITECTURE & COMMUNITY APPEARANCE (*ABACA*)

Albert A. Capellini Community and Cultural Center, 1974 Commerce Street, Yorktown Heights, New York 10598, Phone (914) 962-6565

To: Planning Department
From: ABACA
Date: June 10, 2021
Subject: **Wells Fargo Bank, Shrub Oak – Review of Alternate Lighting Fixture**
SBL: 16.09-2-14; 1342 East Main Street, Shrub Oak

Documents Reviewed:

Title:	Date:	Produced By:
Wells Fargo, Shrub Oak – Review of alternate lighting fixture	6-2-2021	Wells Fargo, GMR

The Advisory Board on Architecture and Community Appearance reviewed the above referenced subject via video conference at the Board meeting held on Tuesday, June 8, 2021. Alex Andrup, Associate Project Manager of GMR was present.

The ABACA has the following comments:

1. As discussed at the previous meeting of 5/18/2021, the applicant submitted an alternate lighting fixture to work better with the building architecture and still provide the required illumination. Based on the proposed fixture submitted and attached, the ABACA has no objection to the proposed lighting fixture for this location.

Christopher Taormina
Christopher Taormina, RA
Chairman

/nc
Attachment
cc: Applicant

Christopher Taormina, RA
Chairman

Matthew Slater
Town Supervisor

TOWN OF YORKTOWN

ADVISORY BOARD ON ARCHITECTURE & COMMUNITY APPEARANCE (*ABACA*)

Albert A. Capellini Community and Cultural Center, 1974 Commerce Street, Yorktown Heights, New York 10598, Phone (914) 962-6565

Wells Fargo, Shrub Oak – Proposed Lighting Fixture

TYPE UU1

ECM-E04-LED-E1-T4-SO-BL-BK-A

Invue

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

DESCRIPTION

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

GC TO VERIFY THAT FIXTURES CAN BE MOUNTED PER PLAN AND ALL NECESSARY HARDWARE IS SPECIFIED FOR INSTALLATION PRIOR TO PURCHASING

SPECIFICATION FEATURES

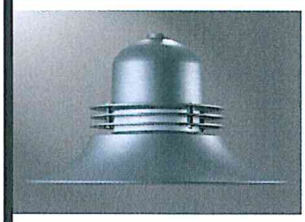
Construction
TOP: Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). MIDSECTION: Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. DOORFRAME: Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

Optics
Choice of twelve patented, high-efficiency AccuLED Optic™ technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CC. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less that 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Finish
Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.

Warranty
Five-year warranty.



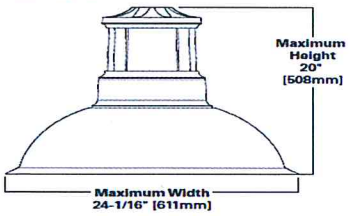
ECM/EMM
EPIC MEDIUM LED

1 - 4 LightBARs
Solid State LED

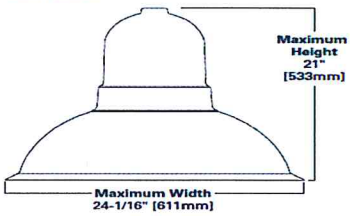
DECORATIVE AREA LUMINAIRE

DIMENSIONS

ECM Classical



EMM Modern



See configurations for more detailed information.

CERTIFICATION DATA
UL/cUL Listed
DesignLights Consortium® Qualified*
IP66 LightBARs
LM79 / LM80 Compliant
2G Vibration Tested
ISO 9001

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

EPA
Effective Projected Area: (Sq. Ft.) 0.94

SHIPPING DATA
Approximate Net Weight:
45 lbs. [20 kgs.]

COOPER Lighting Solutions

*www.designlights.org

TD500028EN
July 31, 2020 1:14 PM

12-12-79 (3/99)-9c

SEQR

State Environmental Quality Review

NEGATIVE DECLARATION

Notice of Determination of Non-Significance

Project Number N/A Date:

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

The Town of Yorktown, Planning Board, as lead agency, has determined that the proposed action described below will not have a significant environmental impact and a Draft Impact Statement will not be prepared.

Name of Action:

Lighting Plan for the Wells Fargo Bank, Shrub Oak

SEQR Status: Type 1 ☐
Unlisted ☑

Conditioned Negative Declaration: ☐ Yes
☑ No

Description of Action:

It is proposed to upgrade or install new LED Lighting with higher efficiency that complies with NYS ATM lighting requirements.

The site is located at the address 1342 East Main Street, Shrub Oak, Town of Yorktown

Section 16.09, Block 2, Lot 14

Location: (Include street address and the name of the municipality/county. A location map of appropriate scale is also recommended.)

1342 East Main Street, Shrub Oak, Yorktown, Westchester County

Reasons Supporting This Determination:
(See 617.7(a)-(c) for requirements of this determination ; see 617.7(d) for Conditioned Negative Declaration)

1) This negative declaration is based on a Short Environmental Assessment Form dated _____.

2) There is no increase in impervious surface.

3) There is no increase in the area of disturbance.

4) There is no increase for demand in Town services.

5) Proposed lighting complies with Town Code Chapter 200 Lighting, Outdoor and will not cause any significant adverse impacts.

If Conditioned Negative Declaration, provide on attachment the specific mitigation measures imposed, and identify comment period (not less than 30 days from date of pubication In the ENB)

For Further Information:

Contact Person: Robyn Steinberg, Town Planner

Address: 1974 Commerce Street, Yorktown Heights, NY 10598

Telephone Number: 914-962-6565

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

Chief Executive Officer , Town / City / Village of

Other involved agencies (If any)

Applicant (If any)

Environmental Notice Bulletin, 625 Broadway, Albany, NY 12233-1750 (Type One Actions only)

Reset Form

PLANNING BOARD
TOWN OF YORKTOWN

RESOLUTION APPROVING
AMENDED LIGHTING PLAN FOR
WELLS FARGO BANK
LOCATED WITHIN THE SHRUB OAK SHOPPING CENTER

RESOLUTION NUMBER: #21-00 **DATE:**

On motion of _____, seconded by _____, and unanimously voted in favor by Fon, LaScala, Bock, Garrigan, Visconti, the following resolution was adopted:

WHEREAS pursuant to Chapter 200-7, of the Town Code lighting plan approval is to follow the procedure of a site plan approval process; and

WHEREAS in accordance with the Town's Land Development Regulations, Town of Yorktown Town Code Chapter 195, adopted February 4, 1969 and as amended, a formal application for the approval of an amended lighting plan, prepared by Independence Engineering, LLC, dated February 13, 2020 and last revised December 8, 2020, was submitted to the Planning Board on behalf of Wells Fargo (hereinafter referred to as "the Applicant"); and

WHEREAS the property is located at 1342 East Main Street, Shrub Oak, also known as Section 16.09, Block 2, Lot 14 on the Town of Yorktown Tax Map (hereinafter referred to as "the Property"), and the applicant has represented to this board that they are the lawful owners of the land represented on said lighting plan; and

WHEREAS pursuant to SEQRA:
1. The action has been identified as an Unlisted action.
2. The Planning Board has been declared lead agency on _____.
3. A negative declaration has been adopted on _____, on the basis of a Short EAF dated _____.

WHEREAS the Applicant has submitted as part of his application the following maps and documents:

Additional Documents & Reports
1. A cover sheet, titled "Wells Fargo 2019 Lighting Design," prepared by GMR Facility Analysis & Engineering, dated _____; and
2. A drawing, sheet LU-1, titled "General Notes," prepared by GMR Facility Analysis & Engineering, dated _____; and
3. A drawing, sheet LU-2, titled "Luminaire Schedule," prepared by GMR Facility Analysis & Engineering, dated _____; and

4. A drawing, sheet LU-3, titled "Overall Site Plan," prepared by GMR Facility Analysis & Engineering, dated _____; and
5. A drawing, sheet LU-4, titled "Full Site Photometrics," prepared by GMR Facility Analysis & Engineering, dated _____; and
6. A drawing, sheet LU-5, titled "Fixture Removal & Dimensioning Plan," prepared by GMR Facility Analysis & Engineering, dated _____; and
7. A drawing, sheet LU-6, titled "ATM Compliance Area Photometrics Plan," prepared by GMR Facility Analysis & Engineering, dated _____; and

WHEREAS the Planning Board has referred this application to the following boards and agencies and has received and considered reports of the following:

Boards & Agencies **Report Date**
ABACA

WHEREAS the requirements of this Board's Land Development Regulations, Town Code Chapter 195, have been met; and

WHEREAS a Public Informational Hearing and Public Hearing were waived by the Planning Board; and

BE IT NOW RESOLVED that the application of Beatrice and Charles DeMilo for the approval of an amended lighting plan, prepared by Titan LED Lighting Solutions, dated and last revised September, 2019, be approved subject to the modifications and conditions listed below, and that the Chairman of this Board be and hereby is authorized to endorse this Board's approval of said plan upon compliance by the applicant with such modifications and requirements as noted below:

Modify plans to show:

1. _____

Additional requirements prior to signature by the Planning Board Chairman:

1. Submission of 5 full size plans to the Planning Department to the satisfaction of the Planning Director.

Additional requirements:

8. Proposed plan must comply with all current applicable ADA standards.

9. Applicant must obtain all necessary permits from outside agencies.

BE IT FURTHER RESOLVED that unless a building permit has been issued by **_____,** or a time extension has been granted by the Planning Board, this approval will be null and void.

TYPE UC-AG

ARE-EDG-4M-DA-10-E-UL-BZ-525-30K

SEE GC NOTES BELOW

THE EDGE® Series

LED Area/Flood Luminaire

Rev. Date: V9 04/01/2020

Product Description

THE EDGE® Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

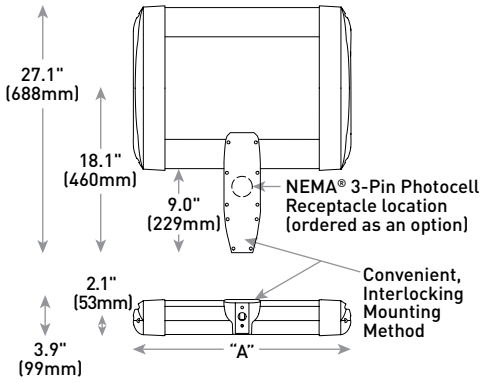
GC TO VERIFY THAT FIXTURES CAN BE MOUNTED PER PLAN AND ALL NECESSARY HARDWARE IS SPECIFIED FOR INSTALLATION PRIOR TO PURCHASING

Performance Summary

- Patented NanoOptic® Product Technology
- Assembled in the U.S.A. of U.S. and imported parts
- **CRI:** Minimum 70 CRI
- **CCT:** 4000K (+/- 300K), 5700K (+/- 500K) standard
- **Limited Warranty†:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

†See http://creelighting.com/warranty for warranty terms

DA Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

AA/DL/SA Mount - see page 22 for weight & dimensions

Accessories

Field-Installed	
Bird Spikes XA-BRDSPK **Hand-Held Remote** XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	**Backlight Control Shields** XA-20BLS-4 - Four-pack - Unpainted stainless steel **Shorting Cap** XA-XSLSHRT

GC TO VERIFY □□ □□□□ □□ □□D□□□□□□□□□□□□□□ □□□□D□□□□□□□□□D□ □□□D□□□□ □□

GC TO REFERENCE PLANS FOR COLOR DESIGNATION

Ordering Information

Example: ARE-EDG-2M-AA-12-E-UL-SV-350

					E				
Product	**Optic**			**Mounting***	**LED Count (x10)**	**Series**	**Voltage**	**Color Options**	**Drive Current**	**Options**
ARE-EDG	**2M** Type II Medium **2MB** Type II Medium w/BLS **2MP** Type II Medium w/Partial BLS **3M** Type III Medium	**3MB** Type III Medium w/BLS **3MP** Type III Medium w/Partial BLS **4M** Type IV Medium **4MB** Type IV Medium w/BLS	**4MP** Type IV Medium w/Partial BLS **5M** Type V Medium **5S** Type V Short	**AA** Adjustable Arm **DA** Direct Arm **DL** Direct Long Arm	**02** **04** **06** **08** **10** **12** **14** **16**	**E**	**UL** Universal 120-277V **UH** Universal 347-480V	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**350** 350mA **525** 525mA **700** 700mA - Available with 20-60 LEDs	**DIM 0-10V Dimming** - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current - Not available with PML options **HL Hi/Low (Dual Circuit Input)** - Refer to HL spec sheet for details - Sensor not included **P Photocell** - Refer to PML spec sheet for availability with PML options - Available with UL voltage only **PML Programmable Multi-Level, 20-40' Mounting Height** - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt **PML2 Programmable Multi-Level, 10-30' Mounting Height** - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt **R NEMA® 3-Pin Photocell Receptacle** - 3-pin receptacle per ANSI C136.10 - Not available with SA mount - Intended for downlight applications with maximum 45° tilt - Requires photocell or shorting cap by others - Refer to PML spec sheet for availability with PML options **40K 4000K Color Temperature** - Minimum 70 CRI - Color temperature per luminaire
FLD-EDG	**25** 25° Flood **40** 40° Flood	**70** 70° Flood **SN** Sign	**N6** NEMA® 6	**AA** Adjustable Arm **SA** Side Arm - Available with 20-60 LEDs						

* Reference EPA and pole configuration suitability data beginning on page 19

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance heat sinks
- DA and DL mount utilizes convenient interlocking mounting method. Mounting is rugged die cast aluminum, mounts to 3-6" (76-152mm) square or round pole and secures to pole with 5/16-18 UNC bolts spaced on 2" (51mm) centers
- AA and SA mounts are rugged die cast aluminum and mount to 2" (51mm) IP, 2.375" (60mm) O.D. tenons
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Charts on pages 1 and 22

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- DA and DL mounts designed with integral weathertight electrical box with terminal strips (12Ga–20Ga) for easy power hookup
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Consult factory if in-luminaire fusing is required
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20 LED (525 & 700mA) and 40-80 LED: 0.15mA; 100-160 LED: 0.30mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without P or R options
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards when ordered with AA, DA and DL mounts
- ANSI C136.2 10kV surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified with select SKUs. Refer to https://www.designlights.org/search/ for most current information
- Meets Buy American requirements within ARRA
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Electrical Data*

LED Count (x10)	System Watts 120-480V	Total Current (A)					
		120V	208V	240V	277V	347V	480V
350mA							
02	25	0.21	0.13	0.11	0.10	0.08	0.07
04	46	0.36	0.23	0.21	0.20	0.15	0.12
06	66	0.52	0.31	0.28	0.26	0.20	0.15
08	90	0.75	0.44	0.38	0.34	0.26	0.20
10	110	0.92	0.53	0.47	0.41	0.32	0.24
12	130	1.10	0.63	0.55	0.48	0.38	0.28
14	158	1.32	0.77	0.68	0.62	0.47	0.35
16	179	1.49	0.87	0.77	0.68	0.53	0.39
525mA							
02	37	0.30	0.19	0.17	0.16	0.12	0.10
04	70	0.58	0.34	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
08	133	1.13	0.66	0.58	0.51	0.39	0.28
10	171	1.43	0.83	0.74	0.66	0.50	0.38
12	202	1.69	0.98	0.86	0.77	0.59	0.44
14	232	1.94	1.12	0.98	0.87	0.68	0.50
16	263	2.21	1.27	1.11	0.97	0.77	0.56
700mA							
02	50	0.41	0.25	0.22	0.20	0.15	0.12
04	93	0.78	0.46	0.40	0.36	0.27	0.20
06	134	1.14	0.65	0.57	0.50	0.39	0.29

* Electrical data at 25˚C (77˚F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

THE EDGE® Series Ambient Adjusted Lumen Maintenance[1]

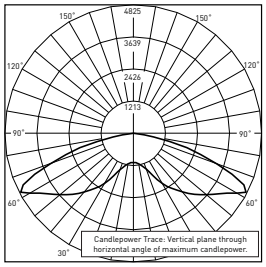
Ambient	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Estimated[3] LMF	100K hr Estimated[3] LMF
5˚C (41˚F)	1.04	1.01	0.99	0.98	0.96
10˚C (50˚F)	1.03	1.00	0.98	0.97	0.95
15˚C (59˚F)	1.02	0.99	0.97	0.96	0.94
20˚C (68˚F)	1.01	0.98	0.96	0.95	0.93
25˚C (77˚F)	1.00	0.97	0.95	0.94	0.92

[1] Lumen maintenance values at 25˚C (77˚F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Zone Reference Document for outdoor average nighttime ambient conditions
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED
[3] Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED

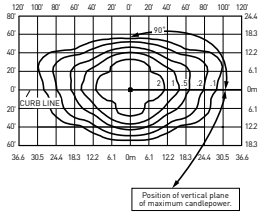
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

2M



RESTL Test Report #: PL10270-004B
ARE-EDG-2M-**-06-E-UL-525-40K
Initial Delivered Lumens: 10,053



ARE-EDG-2M-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 17,504
Initial FC at grade

Type II Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,501	B1 U0 G1	2,551	B1 U0 G1
04	5,003	B1 U0 G1	5,102	B1 U0 G1
06	7,418	B2 U0 G2	7,565	B2 U0 G2
08	9,891	B2 U0 G2	10,087	B2 U0 G2
10	12,334	B2 U0 G2	12,578	B2 U0 G2
12	14,801	B3 U0 G3	15,094	B3 U0 G3
14	17,158	B3 U0 G3	17,498	B3 U0 G3
16	19,609	B3 U0 G3	19,998	B3 U0 G3
525mA				
02	3,550	B1 U0 G1	3,624	B1 U0 G1
04	7,099	B2 U0 G2	7,248	B2 U0 G2
06	10,527	B2 U0 G2	10,748	B2 U0 G2
08	14,037	B3 U0 G3	14,331	B3 U0 G3
10	17,504	B3 U0 G3	17,870	B3 U0 G3
12	21,004	B3 U0 G3	21,444	B3 U0 G3
14	24,350	B3 U0 G3	24,860	B3 U0 G3
16	27,828	B4 U0 G3	28,411	B4 U0 G3
700mA				
02	4,189	B1 U0 G1	4,275	B1 U0 G1
04	8,379	B2 U0 G2	8,549	B2 U0 G2
06	12,425	B2 U0 G2	12,678	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

Photometry

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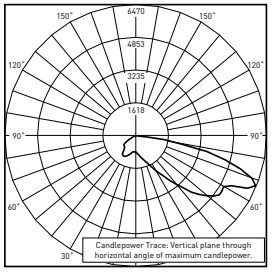
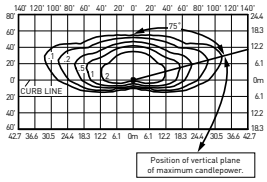
2MB



RESTL Test Report #: PL10023-003B
ARE-EDG-2MB-**-06-E-UL-525-40K
Initial Delivered Lumens: 7,784



ARE-EDG-2MB-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,185
Initial FC at grade

Type II Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,884	B0 U0 G1	1,921	B0 U0 G1
04	3,768	B1 U0 G1	3,843	B1 U0 G1
06	5,588	B1 U0 G1	5,698	B1 U0 G1
08	7,450	B1 U0 G2	7,598	B1 U0 G2
10	9,291	B1 U0 G2	9,475	B1 U0 G2
12	11,149	B1 U0 G2	11,370	B1 U0 G2
14	12,924	B1 U0 G2	13,181	B1 U0 G2
16	14,771	B1 U0 G2	15,063	B1 U0 G2
525mA				
02	2,674	B0 U0 G1	2,730	B0 U0 G1
04	5,348	B1 U0 G1	5,460	B1 U0 G1
06	7,930	B1 U0 G2	8,096	B1 U0 G2
08	10,573	B1 U0 G2	10,794	B1 U0 G2
10	13,185	B1 U0 G2	13,461	B1 U0 G2
12	15,821	B2 U0 G2	16,153	B2 U0 G3
14	18,341	B2 U0 G3	18,726	B2 U0 G3
16	20,962	B2 U0 G3	21,401	B2 U0 G3
700mA				
02	3,156	B0 U0 G1	3,220	B0 U0 G1
04	6,311	B1 U0 G1	6,440	B1 U0 G1
06	9,359	B1 U0 G2	9,549	B1 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

Photometry

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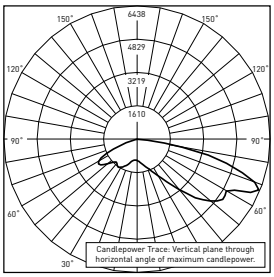
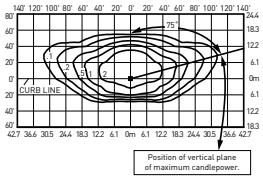
2MP



RESTL Test Report #: PL10097-001B
ARE-EDG-2MP-**-06-E-UL-525-40K
Initial Delivered Lumens: 9,149



ARE-EDG-2MP-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,458
Initial FC at grade

Type II Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,209	B1 U0 G1	2,253	B1 U0 G1
04	4,418	B1 U0 G1	4,505	B1 U0 G1
06	6,551	B2 U0 G1	6,681	B2 U0 G1
08	8,735	B2 U0 G2	8,908	B2 U0 G2
10	10,892	B2 U0 G2	11,108	B2 U0 G2
12	13,071	B2 U0 G2	13,330	B2 U0 G2
14	15,153	B2 U0 G2	15,453	B2 U0 G3
16	17,317	B3 U0 G3	17,661	B3 U0 G3
525mA				
02	3,135	B1 U0 G1	3,200	B1 U0 G1
04	6,270	B1 U0 G1	6,401	B2 U0 G1
06	9,297	B2 U0 G2	9,492	B2 U0 G2
08	12,396	B2 U0 G2	12,656	B2 U0 G2
10	15,458	B2 U0 G3	15,782	B2 U0 G3
12	18,549	B3 U0 G3	18,938	B3 U0 G3
14	21,504	B3 U0 G3	21,954	B3 U0 G3
16	24,576	B3 U0 G3	25,091	B3 U0 G3
700mA				
02	3,700	B1 U0 G1	3,775	B1 U0 G1
04	7,400	B2 U0 G2	7,550	B2 U0 G2
06	10,973	B2 U0 G2	11,196	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

Photometry

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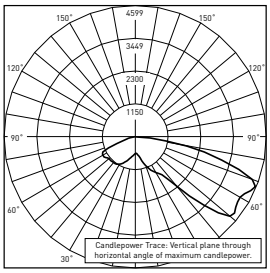
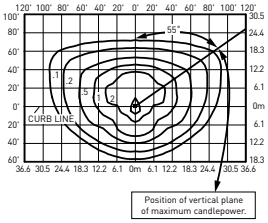
3M



RESTL Test Report #: PL09405-001A
ARE-EDG-3M-**-06-E-UL-525-40K
Initial Delivered Lumens: 9,460



ARE-EDG-3M-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,594
Initial FC at grade

Type III Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,371	B1 U0 G1	2,418	B1 U0 G1
04	4,743	B1 U0 G1	4,837	B1 U0 G1
06	7,033	B2 U0 G2	7,172	B2 U0 G2
08	9,377	B2 U0 G2	9,563	B2 U0 G2
10	11,693	B3 U0 G3	11,925	B3 U0 G3
12	14,032	B3 U0 G3	14,310	B3 U0 G3
14	16,267	B3 U0 G3	16,589	B3 U0 G3
16	18,591	B3 U0 G3	18,959	B3 U0 G3
525mA				
02	3,365	B1 U0 G1	3,436	B1 U0 G1
04	6,731	B2 U0 G2	6,872	B2 U0 G2
06	9,981	B3 U0 G3	10,190	B3 U0 G3
08	13,307	B3 U0 G3	13,586	B3 U0 G3
10	16,594	B3 U0 G3	16,942	B3 U0 G3
12	19,913	B3 U0 G3	20,330	B3 U0 G3
14	23,085	B3 U0 G3	23,569	B3 U0 G3
16	26,383	B4 U0 G4	26,936	B4 U0 G4
700mA				
02	3,972	B1 U0 G1	4,053	B1 U0 G1
04	7,944	B2 U0 G2	8,105	B2 U0 G2
06	11,779	B3 U0 G3	12,019	B3 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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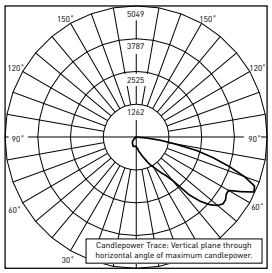
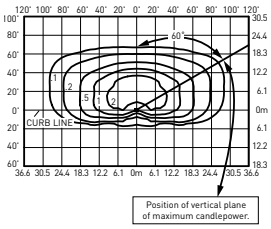
3MB



RESTL Test Report #: PL10023-001B
ARE-EDG-3MB-**-06-E-UL-525-40K
Initial Delivered Lumens: 7,602



ARE-EDG-3MB-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 12,275
Initial FC at grade

Type III Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,754	B0 U0 G1	1,789	B0 U0 G1
04	3,508	B1 U0 G1	3,578	B1 U0 G1
06	5,202	B1 U0 G2	5,305	B1 U0 G2
08	6,936	B1 U0 G2	7,074	B1 U0 G2
10	8,650	B1 U0 G2	8,821	B1 U0 G2
12	10,380	B1 U0 G3	10,585	B1 U0 G3
14	12,033	B1 U0 G3	12,272	B1 U0 G3
16	13,752	B2 U0 G3	14,025	B2 U0 G3
525mA				
02	2,489	B0 U0 G1	2,542	B0 U0 G1
04	4,979	B1 U0 G2	5,083	B1 U0 G2
06	7,383	B1 U0 G2	7,538	B1 U0 G2
08	9,844	B1 U0 G2	10,050	B1 U0 G3
10	12,275	B1 U0 G3	12,532	B1 U0 G3
12	14,730	B2 U0 G3	15,039	B2 U0 G3
14	17,077	B2 U0 G3	17,434	B2 U0 G3
16	19,516	B2 U0 G3	19,925	B2 U0 G3
700mA				
02	2,938	B1 U0 G1	2,998	B1 U0 G1
04	5,876	B1 U0 G2	5,996	B1 U0 G2
06	8,714	B1 U0 G2	8,891	B1 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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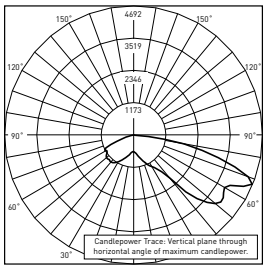
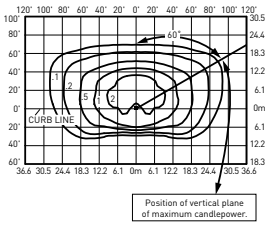
3MP



RESTL Test Report #: PL10097-002B
ARE-EDG-3MP-**-06-E-UL-525-40K
Initial Delivered Lumens: 8,670



ARE-EDG-3MP-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 14,548
Initial FC at grade

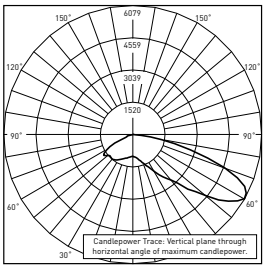
Type III Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,079	B1 U0 G1	2,120	B1 U0 G1
04	4,158	B1 U0 G1	4,240	B1 U0 G1
06	6,166	B1 U0 G2	6,288	B1 U0 G2
08	8,221	B2 U0 G2	8,384	B2 U0 G2
10	10,252	B2 U0 G2	10,455	B2 U0 G3
12	12,302	B2 U0 G3	12,546	B2 U0 G3
14	14,261	B3 U0 G3	14,544	B3 U0 G3
16	16,299	B3 U0 G3	16,622	B3 U0 G3
525mA				
02	2,950	B1 U0 G1	3,012	B1 U0 G1
04	5,901	B1 U0 G2	6,024	B1 U0 G2
06	8,750	B2 U0 G2	8,933	B2 U0 G2
08	11,667	B2 U0 G3	11,911	B2 U0 G3
10	14,548	B3 U0 G3	14,853	B3 U0 G3
12	17,458	B3 U0 G3	17,824	B3 U0 G3
14	20,239	B3 U0 G3	20,663	B3 U0 G3
16	23,130	B3 U0 G4	23,615	B3 U0 G4
700mA				
02	3,482	B1 U0 G1	3,553	B1 U0 G1
04	6,964	B2 U0 G2	7,106	B2 U0 G2
06	10,327	B2 U0 G2	10,537	B2 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

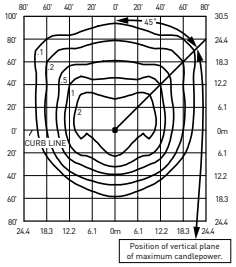
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

4M



RESTL Test Report #: PL10270-001B
ARE-EDG-4M-**-06-E-UL-525-40K
Initial Delivered Lumens: 10,483



ARE-EDG-4M-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 17,504
Initial FC at grade

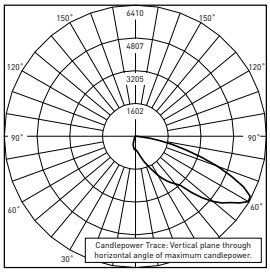
Type IV Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,501	B1 U0 G1	2,551	B1 U0 G1
04	5,003	B2 U0 G1	5,102	B2 U0 G1
06	7,418	B2 U0 G2	7,565	B2 U0 G2
08	9,891	B2 U0 G2	10,087	B2 U0 G2
10	12,334	B3 U0 G3	12,578	B3 U0 G3
12	14,801	B3 U0 G3	15,094	B3 U0 G3
14	17,158	B3 U0 G3	17,498	B3 U0 G3
16	19,609	B3 U0 G3	19,998	B3 U0 G3
525mA				
02	3,550	B1 U0 G1	3,624	B1 U0 G1
04	7,099	B2 U0 G2	7,248	B2 U0 G2
06	10,527	B2 U0 G2	10,748	B2 U0 G2
08	14,037	B3 U0 G3	14,331	B3 U0 G3
10	17,504	B3 U0 G3	17,870	B3 U0 G3
12	21,004	B3 U0 G3	21,444	B3 U0 G3
14	24,350	B4 U0 G3	24,860	B4 U0 G3
16	27,828	B4 U0 G3	28,411	B4 U0 G3
700mA				
02	4,189	B1 U0 G1	4,275	B1 U0 G1
04	8,379	B2 U0 G2	8,549	B2 U0 G2
06	12,425	B3 U0 G3	12,678	B3 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

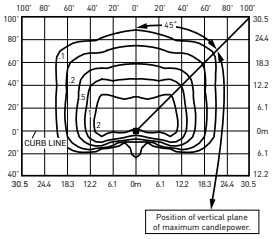
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

4MB



RESTL Test Report #: PL01023-002B
ARE-EDG-4MB-**-06-E-UL-525-40K
Initial Delivered Lumens: 7,985



ARE-EDG-4MB-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,185
Initial FC at grade

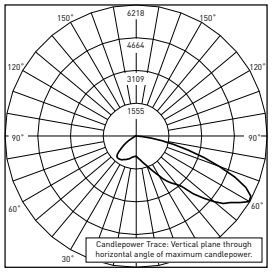
Type IV Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,884	B0 U0 G1	1,921	B0 U0 G1
04	3,768	B1 U0 G1	3,843	B1 U0 G1
06	5,588	B1 U0 G1	5,698	B1 U0 G2
08	7,450	B1 U0 G2	7,598	B1 U0 G2
10	9,291	B1 U0 G2	9,475	B1 U0 G2
12	11,149	B1 U0 G2	11,370	B1 U0 G2
14	12,924	B1 U0 G2	13,181	B1 U0 G2
16	14,771	B2 U0 G2	15,063	B2 U0 G2
525mA				
02	2,674	B0 U0 G1	2,730	B0 U0 G1
04	5,348	B1 U0 G1	5,460	B1 U0 G1
06	7,930	B1 U0 G2	8,096	B1 U0 G2
08	10,573	B1 U0 G2	10,794	B1 U0 G2
10	13,185	B1 U0 G2	13,461	B1 U0 G2
12	15,821	B2 U0 G3	16,153	B2 U0 G3
14	18,341	B2 U0 G3	18,726	B2 U0 G3
16	20,962	B2 U0 G3	21,401	B2 U0 G3
700mA				
02	3,156	B1 U0 G1	3,220	B1 U0 G1
04	6,311	B1 U0 G2	6,440	B1 U0 G2
06	9,359	B1 U0 G2	9,549	B1 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

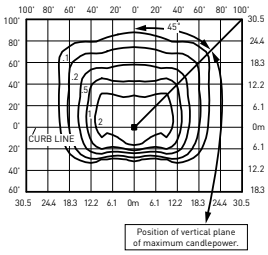
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

4MP



RESTL Test Report #: PL10097-003B
ARE-EDG-4MP-**-06-E-UL-525-40K
Initial Delivered Lumens: 9,410



ARE-EDG-4MP-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,458
Initial FC at grade

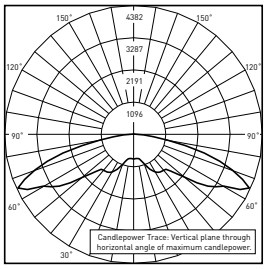
Type IV Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,209	B1 U0 G1	2,253	B1 U0 G1
04	4,418	B1 U0 G1	4,505	B1 U0 G1
06	6,551	B2 U0 G1	6,681	B2 U0 G1
08	8,735	B2 U0 G2	8,908	B2 U0 G2
10	10,892	B2 U0 G2	11,108	B2 U0 G2
12	13,071	B2 U0 G2	13,330	B2 U0 G2
14	15,153	B3 U0 G2	15,453	B3 U0 G2
16	17,317	B3 U0 G2	17,661	B3 U0 G2
525mA				
02	3,135	B1 U0 G1	3,200	B1 U0 G1
04	6,270	B2 U0 G1	6,401	B2 U0 G1
06	9,297	B2 U0 G2	9,492	B2 U0 G2
08	12,396	B2 U0 G2	12,656	B2 U0 G2
10	15,458	B3 U0 G2	15,782	B3 U0 G2
12	18,549	B3 U0 G2	18,938	B3 U0 G3
14	21,504	B3 U0 G3	21,954	B3 U0 G3
16	24,576	B3 U0 G3	25,091	B3 U0 G3
700mA				
02	3,700	B1 U0 G1	3,775	B1 U0 G1
04	7,400	B2 U0 G2	7,550	B2 U0 G2
06	10,973	B2 U0 G2	11,196	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

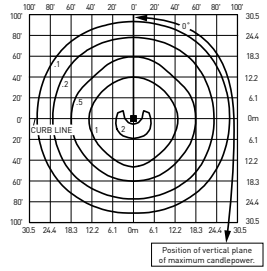
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

5M



RESTL Test Report #: PL09285-001
ARE-EDG-5M-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,136



ARE-EDG-5M-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 18,413
Initial FC at grade

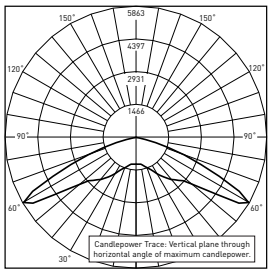
Type V Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,631	B2 U0 G1	2,683	B2 U0 G1
04	5,262	B3 U0 G1	5,367	B3 U0 G1
06	7,804	B3 U0 G2	7,958	B3 U0 G2
08	10,405	B4 U0 G2	10,611	B4 U0 G2
10	12,975	B4 U0 G2	13,232	B4 U0 G2
12	15,570	B4 U0 G3	15,878	B4 U0 G3
14	18,049	B4 U0 G3	18,407	B4 U0 G3
16	20,628	B5 U0 G3	21,037	B5 U0 G3
525mA				
02	3,734	B2 U0 G1	3,812	B2 U0 G1
04	7,468	B3 U0 G2	7,625	B3 U0 G2
06	11,074	B4 U0 G2	11,306	B4 U0 G2
08	14,766	B4 U0 G2	15,075	B4 U0 G3
10	18,413	B4 U0 G3	18,799	B4 U0 G3
12	22,096	B5 U0 G3	22,558	B5 U0 G3
14	25,615	B5 U0 G3	26,151	B5 U0 G3
16	29,274	B5 U0 G3	29,887	B5 U0 G3
700mA				
02	4,407	B3 U0 G1	4,497	B3 U0 G1
04	8,814	B3 U0 G2	8,993	B3 U0 G2
06	13,070	B4 U0 G2	13,336	B4 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

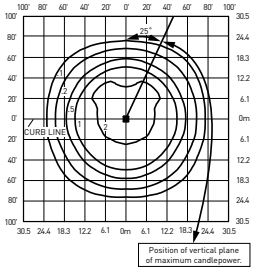
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

5S



RESTL Test Report #: PL09286-001A
ARE-EDG-5S-**-06-E-UL-700-40K
Initial Delivered Lumens: 14,123



ARE-EDG-5S-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 20,459
Initial FC at grade

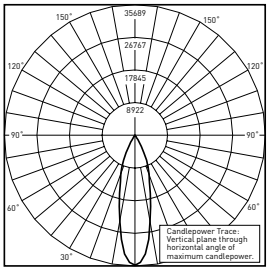
Type V Short Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,924	B2 U0 G0	2,982	B2 U0 G0
04	5,847	B3 U0 G1	5,963	B3 U0 G1
06	8,671	B3 U0 G1	8,842	B3 U0 G1
08	11,561	B3 U0 G2	11,790	B3 U0 G2
10	14,416	B4 U0 G2	14,702	B4 U0 G2
12	17,300	B4 U0 G2	17,642	B4 U0 G2
14	20,055	B4 U0 G2	20,453	B4 U0 G2
16	22,920	B4 U0 G2	23,374	B4 U0 G2
525mA				
02	4,149	B2 U0 G1	4,236	B2 U0 G1
04	8,298	B3 U0 G1	8,472	B3 U0 G1
06	12,305	B3 U0 G2	12,563	B3 U0 G2
08	16,406	B4 U0 G2	16,750	B4 U0 G2
10	20,459	B4 U0 G2	20,887	B4 U0 G2
12	24,551	B4 U0 G2	25,065	B4 U0 G2
14	28,461	B5 U0 G3	29,057	B5 U0 G3
16	32,527	B5 U0 G3	33,208	B5 U0 G3
700mA				
02	4,897	B2 U0 G1	4,996	B2 U0 G1
04	9,793	B3 U0 G1	9,993	B3 U0 G2
06	14,523	B4 U0 G2	14,818	B4 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

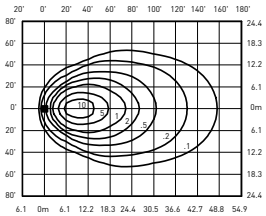
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

25˚



RESTL Test Report #: PL09832-003B
FLD-EDG-25-**-06-E-UL-700-40K
Initial Delivered Lumens: 14,998



FLD-EDG-25-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 20,913
Initial FC at grade

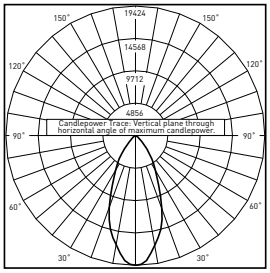
25˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,989	3,048
04	5,977	6,096
06	8,863	9,039
08	11,818	12,052
10	14,737	15,029
12	17,684	18,035
14	20,501	20,907
16	23,429	23,894
525mA		
02	4,241	4,330
04	8,482	8,660
06	12,578	12,842
08	16,771	17,122
10	20,913	21,352
12	25,096	25,622
14	29,093	29,703
16	33,250	33,946
700mA		
02	5,006	5,107
04	10,011	10,215
06	14,845	15,147

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens

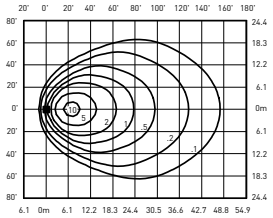
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

40˚



RESTL Test Report #: PL09832-002B
FLD-EDG-40-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,808



FLD-EDG-40-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 20,459
Initial FC at grade

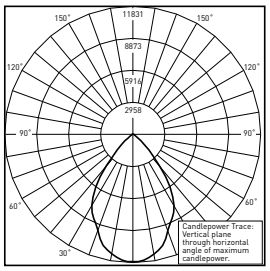
40˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,924	2,982
04	5,847	5,963
06	8,671	8,842
08	11,561	11,790
10	14,416	14,702
12	17,300	17,642
14	20,055	20,453
16	22,920	23,374
525mA		
02	4,149	4,236
04	8,298	8,472
06	12,305	12,563
08	16,406	16,750
10	20,459	20,887
12	24,551	25,065
14	28,461	29,057
16	32,527	33,208
700mA		
02	4,897	4,996
04	9,793	9,993
06	14,523	14,818

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens

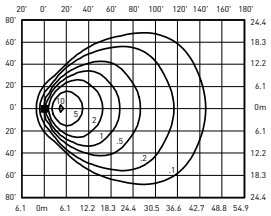
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult:

70˚



RESTL Test Report #: PL09832-001B
FLD-EDG-70-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,888



FLD-EDG-70-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 18,640
Initial FC at grade

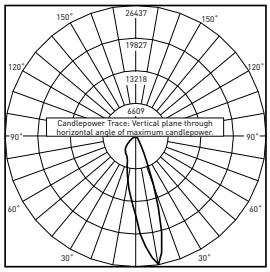
70˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,664	2,716
04	5,327	5,433
06	7,900	8,056
08	10,533	10,742
10	13,135	13,395
12	15,762	16,074
14	18,272	18,635
16	20,883	21,297
525mA		
02	3,780	3,859
04	7,560	7,719
06	11,211	11,446
08	14,948	15,261
10	18,640	19,031
12	22,368	22,837
14	25,931	26,474
16	29,636	30,256
700mA		
02	4,461	4,552
04	8,923	9,104
06	13,232	13,501

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens

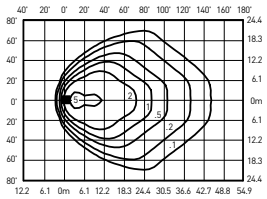
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

SN



RESTL Test Report #: PL10142-001B
FLD-EDG-SN-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,701



FLD-EDG-SN-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 18,868
Initial FC at grade

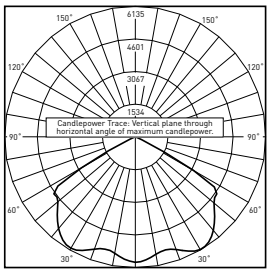
SN Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,696	2,750
04	5,392	5,499
06	7,996	8,155
08	10,662	10,873
10	13,295	13,559
12	15,954	16,270
14	18,495	18,862
16	21,137	21,556
525mA		
02	3,826	3,906
04	7,653	7,813
06	11,348	11,585
08	15,130	15,447
10	18,868	19,263
12	22,641	23,115
14	26,247	26,797
16	29,997	30,625
700mA		
02	4,516	4,608
04	9,032	9,215
06	13,393	13,665

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

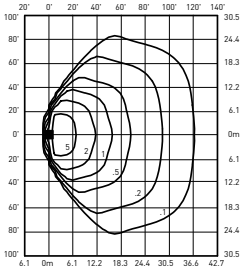
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/area/cree-edge-series-1

N6



RESTL Test Report #: PL09832-004B
FLD-EDG-N6-**-06-E-UL-700-40K
Initial Delivered Lumens: 15,251



FLD-EDG-N6-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 20,913
Initial FC at grade

NEMA® 6 Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,989	3,048
04	5,977	6,096
06	8,863	9,039
08	11,818	12,052
10	14,737	15,029
12	17,684	18,035
14	20,501	20,907
16	23,429	23,894
525mA		
02	4,241	4,330
04	8,482	8,660
06	12,578	12,842
08	16,771	17,122
10	20,913	21,352
12	25,096	25,622
14	29,093	29,703
16	33,250	33,946
700mA		
02	5,006	5,107
04	10,011	10,215
06	14,845	15,147

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

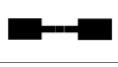
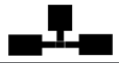
Luminaire EPA

Fixed Arm Mount – ARE-EDG-DA						
LED Count (x10)	Single	2 @ 90˚	2 @ 180˚	3 @ 90˚	3 @ 120˚	4 @ 90˚
						
02	0.60	0.87	1.20	1.47	1.47	1.75
04	0.60	0.87	1.20	1.47	1.47	1.75
06	0.60	0.92	1.20	1.51	1.51	1.83
08	0.60	0.96 N/A with 3" poles	1.20	1.55 N/A with 3" poles	1.55	1.91 N/A with 3" poles
10	0.60	1.00 N/A with 3" poles	1.20	1.60 N/A with 3" poles	1.60	2.00 N/A with 3" poles
12	0.60	1.04 N/A with 3" poles	1.20	1.64 N/A with 3" poles	1.64	2.08 N/A with 3" poles
14	0.60	1.08 N/A with 3" or 4" poles	1.20	1.68 N/A with 3" or 4" poles	1.68	2.16 N/A with 3" or 4" poles
16	0.60	1.12 N/A with 3" or 4" poles	1.20	1.72 N/A with 3" or 4" poles	1.72	2.24 N/A with 3" or 4" poles
Fixed Arm Mount – ARE-EDG-DL						
02	0.75	1.02	1.50	1.77	1.77	1.91
04	0.75	1.02	1.50	1.77	1.77	1.91
06	0.75	1.07	1.50	1.82	1.82	1.98
08	0.75	1.11	1.50	1.86	1.86	2.04
10	0.75	1.15	1.50	1.90	1.90	2.10
12	0.75	1.19	1.50	1.94	1.94	2.16
14	0.75	1.23	1.50	1.98	1.98	2.22
16	0.75	1.27	1.50	2.02	2.02	2.28

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90˚	2 @ 180˚	In-Line 2 @ 180˚	3 @ 90˚	3 @ 120˚	In-Line 3 @ 180˚	4 @ 90˚	In-Line 4 @ 180˚
Tenon Configuration If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
0˚ Tilt									
02	0.66	0.98	1.32	1.32	1.77	1.64	1.98	1.91	2.64
04	0.66	0.98	1.32	1.32	1.64	1.64	1.98	1.97	2.64
06	0.66	1.02	1.32	1.32	1.68	1.68	1.98	2.05	2.64
08	0.66	1.07	1.32	1.32	1.80	1.72	1.98	2.29	2.64
10	0.66	1.11	1.32	1.32	1.76	1.76	1.98	2.21	2.64
12	0.66	1.15	1.32	1.32	1.80	1.80	1.98	2.29	2.64
14	0.66	1.19	1.32	1.32	1.84	1.84	1.98	2.38	2.64
16	0.66	1.23	1.32	N/A	1.89	1.89	N/A	2.46	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Luminaire EPA

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90°	2 @ 180°	In-Line 2 @ 180°	3 @ 90°	3 @ 120°	In-Line 3 @ 180°	4 @ 90°	In-Line 4 @ 180°
Tenon Configuration If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
30˚ Tilt									
02	0.71	1.37	1.42	1.42	2.08	2.08	2.13	2.73	2.84
04	0.71	1.37	1.42	1.42	2.08	2.08	2.13	2.73	2.84
06	0.82	1.48	1.64	1.64	2.30	2.30	2.46	2.95	3.28
08	0.93	1.59	1.86	1.86	2.52	2.52	2.79	3.17	3.72
10	1.04	1.70	2.08	2.08	2.74	2.74	3.12	3.40	4.16
12	1.15	1.81	2.30	2.30	2.96	2.96	3.45	3.62	4.60
14	1.26	1.92	2.52	2.52	3.18	3.18	3.78	3.84	5.04
16	1.37	2.03	2.74	N/A	3.40	3.40	N/A	4.06	N/A
45˚ Tilt									
02	0.89	1.55	1.78	1.78	2.45	2.45	2.67	3.10	3.56
04	0.89	1.55	1.78	1.78	2.45	2.45	2.67	3.10	3.56
06	1.03	1.69	2.06	2.06	2.72	2.72	3.09	3.38	4.12
08	1.17	1.83	2.34	2.34	3.00	3.00	3.51	3.66	4.68
10	1.31	1.97	2.62	2.62	3.28	3.28	3.93	3.94	5.24
12	1.45	2.11	2.90	2.90	3.56	3.56	4.35	4.21	5.80
14	1.59	2.25	3.18	3.18	3.83	3.83	4.77	4.49	6.36
16	1.73	2.38	3.46	N/A	4.11	4.11	N/A	4.77	N/A
60˚ Tilt									
02	1.20	1.86	2.40	2.40	3.06	3.06	3.60	3.72	4.80
04	1.20	1.86	2.40	2.40	3.06	3.06	3.60	3.72	4.80
06	1.39	2.05	2.78	2.78	3.44	3.44	4.17	4.10	5.56
08	1.58	2.23	3.16	3.16	3.81	3.81	4.74	4.47	6.32
10	1.77	2.42	3.54	3.54	4.19	4.19	5.31	4.84	7.08
12	1.95	2.61	3.90	3.90	4.56	4.56	5.85	5.22	7.80
14	2.14	2.80	4.28	4.28	4.94	4.94	6.42	5.59	8.56
16	2.33	2.98	4.66	N/A	5.31	5.31	N/A	5.97	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Luminaire EPA

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90°	2 @ 180°	In-Line 2 @ 180°	3 @ 90°	3 @ 120°	In-Line 3 @ 180°	4 @ 90°	In-Line 4 @ 180°
Tenon Configuration If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
90° Tilt									
02	1.85	2.51	3.70	3.64	4.36	4.36	5.55	5.02	7.40
04	1.85	2.51	3.70	3.64	4.36	4.36	5.55	5.02	7.40
06	2.14	2.80	4.28	4.22	4.94	4.94	6.42	5.59	8.56
08	2.43	3.09	4.86	4.78	5.51	5.51	7.29	6.17 N/A with horizontal tenon	9.72
10	2.71	3.37	5.42	5.34	6.08	6.08	8.13	6.74 N/A with horizontal tenon	10.84
12	3.00	3.66	6.00	5.90	6.66	6.66	9.00	7.31 N/A with horizontal tenon	12.00
14	3.29	3.95 N/A with PW-2A3**	6.58	6.48	7.23	7.23	9.87	7.89 N/A with horizontal tenon	13.16
16	3.57	4.23 N/A with PW-2A3**	7.14	N/A	7.81	7.81	N/A	8.46 N/A with horizontal tenon	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenon EPA

Part Number	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-3R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25
WM-DM	None

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenons and Brackets‡ (must specify color)

Square Internal Mount Vertical Tenons (Steel)
- Mounts to 3-6" (76-152mm) square aluminum or steel poles

PB-1A* – Single
PB-2A* – 180° Twin
PB-3A* – 180° Triple
PB-4A*(90) – 90° Quad
PB-4A*(180) – 180° Quad

Square Internal Mount Horizontal Tenons (Aluminum)
- Mounts to 4" (102mm) square aluminum or steel poles

PD-2A4(90) – 90° Twin
PD-2A4(180) – 180° Twin
PD-3A4(90) – 90° Triple
PD-4A4(90) – 90° Quad

Wall Mount Brackets
- Mounts to wall or roof

WM-2 – Horizontal for AA and SA mounts
WM-4 – L-Shape for AA and SA mounts
WM-DM – Plate for DA and DL mounts

Round External Mount Vertical Tenons (Steel)
- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons

PB-2R2.375 – Twin
PB-3R2.375 – Triple
PB-4R2.375 – Quad

Round External Mount Horizontal Tenons (Aluminum)
- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons
- Mounts to square pole with PB-1A* tenon

PT-1 – Single (Vertical)
PT-2(90) – 90° Twin
PT-2(180) – 180° Twin
PT-3(90) – 90° Triple
PT-3(120) – 120° Triple
PT-4(90) – 90° Quad

Mid-Pole Bracket
- Mounts to square pole

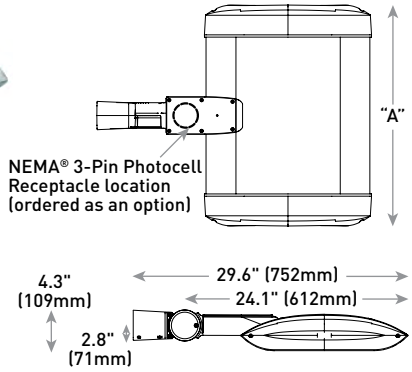
PW-1A3** – Single
PW-2A3** – Double

Ground Mount Post
- For ground mounted flood luminaires

PGM-1
- For use with AA and SA mounts

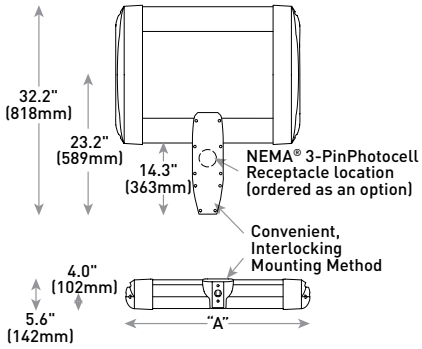
‡ Refer to the Bracket and Tenons spec sheet for more details

AA Mount



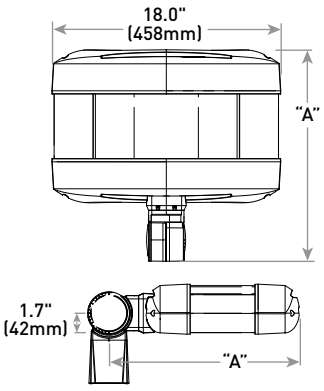
LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

DL Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	23 lbs. (10kg)
04	12.1" (306mm)	26 lbs. (12kg)
06	14.1" (357mm)	29 lbs. (13kg)
08	16.1" (408mm)	30 lbs. (14kg)
10	18.1" (459mm)	34 lbs. (15kg)
12	20.1" (510mm)	36 lbs. (16kg)
14	22.1" (560mm)	42 lbs. (19kg)
16	24.1" (611mm)	44 lbs. (20kg)

SA Mount



LED Count (x10)	Dim. "A"	Weight
02	16.0" (406mm)	25 lbs. (11kg)
04	18.0" (457mm)	26 lbs. (12kg)
06	20.0" (508mm)	28 lbs. (13kg)

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

A COMPANY OF *IDEAL INDUSTRIES, INC.*

Nantucket Sound Sons Site Plan

To: Yorktown Planning Board
From: Yorktown Tree Conservation Advisory Commission (TCAC)
Date: May 24, 2021
cc: Yorktown Planning Dept. (J. Tegeder, R. Steinberg, N. Calicchia); Conservation Board (K. Hughes); Town Supervisor (M. Slater); Town Clerk (D. Quast); Engineering Dept. (L. Kobiliak)

Re: TCAC queries/comments on Nantucket Sound Sons, LLC (Kear St.) mitigation plan

Dear Chairman Fon and members of the Planning Board:

1. Who is the owner(s) of the proposed off-site work area and by what criteria was it chosen? What are the dimensions of the proposed work area?

2. As the proposed work area appears to be along and adjacent to the Mohansic Trailway, the TCAC suggests, if it has not already done so, that the Yorktown Trail Town Committee review the mitigation proposal.

3. Assuming that The New York-New Jersey Trail Conference (NY-NJTC) will have maintenance responsibilities for this section of trail under the trail management agreement with the Town, the NY-NJTC should be consulted about the proposed mitigation plan. The NY-NJTC has developed a highly regarded program of invasive species mitigation for its trail network.

Sincerely,

Bill Kellner, Chair, Tree Conservation Advisory Commission
Lawrence W. Klein, PE, Member
Keith Schepart, ISA, Member
Tom Schmitt, Member

TOWN OF YORKTOWN
CONSERVATION BOARD

Town of Yorktown Town Hall, 363 Underhill Avenue, Yorktown Heights, New York 10598, Phone (914) 962-5722

MEMORANDUM

To: **Planning Board**

From: **Conservation Board**

Date: **May 20, 2021**

Re: **Nantucket Sound LLC Kear Street**

The Conservation Board at its May 19, 2021 meeting discussed Nantucket Sound LLC located on Kear Street with Joe Riina of Site Designs and Frank Giuliano. The Conservation Board has the following comments:

The applicant put forward a tree mitigation plan for off-site mitigation along the trail extension that leads from Rt. 118 into FDR State Park. The applicant proposes to remove invasive species and plant native trees, shrubs and an appropriate seed mix. The Conservation Board finds this as acceptable mitigation. The Board would like to see a completed landscape and tree mitigation plan.

Respectfully submitted:

Phyllis Bock

For the Conservation Board

CC: Town Board
Planning Board
Supervisors Office
Engineering Dept.
Applicant

12-12-79 (3/99)-9c

SEQR

State Environmental Quality Review

NEGATIVE DECLARATION

Notice of Determination of Non-Significance

Project Number: N/A Date:

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

The Town of Yorktown Planning Board as lead agency, has determined that the proposed action described below will not have a significant environmental impact and a Draft Impact Statement will not be prepared.

Name of Action:

Nantucket Sound Sons Site Plan

SEQR Status: Type 1 ☐
Unlisted ☑

Conditioned Negative Declaration: ☐ Yes
☑ No

Description of Action:

The applicant has proposed to construct a three-story 8,169 sf building with 2,567 sf retail space on the first floor facing Kear Street and 3 apartments on each of the upper two floors.

Location: Location: 385 Kear Street, Town of Yorktown, County of Westchester
Section 37.12, Block 2, Lot 86

Reasons Supporting This Determination:
(See 617.7(a)-(c) for requirements of this determination ; see 617.7(d) for Conditioned Negative Declaration)

1) This negative declaration is based on a Short Environmental Assessment Form dated February 10, 2020.

2) The plan conforms to the Town's Land Use and Zoning Policies.

3) For reason of its size this project will not have an impact on Town services.

4) After evaluating the relevant areas of environmental concern, the Planning Board concludes that there will be no significant adverse impacts on the environment as a result of the approval of the proposed development of the subject site.

If Conditioned Negative Declaration, provide on attachment the specific mitigation measures imposed, and identify comment period (not less than 30 days from date of pubication In the ENB)

For Further Information:

Contact Person: Robyn Steinberg

Address: 1974 Commerce Street, Yorktown Heights, NY 10598

Telephone Number: (914) 962-6565

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

- Commissioner, Department of Environmental Conservation, 50 Wolf Road, Albany, New York 12233-0001
- Appropriate Regional Office of the DEC
- Office of the Chief Executive Officer of the political subdivision in which the action will be principally located.
- Applicant
- Other involved Agencies (if any)

Environmental Notice Bulletin, 625 Broadway, Albany, NY 12233-1750 (Type One Actions only)

PLANNING BOARD
TOWN OF YORKTOWN

RESOLUTION APPROVING
SITE PLAN, A STORMATER MANAGEMENT PLAN,
AND A TREE REMOVAL PERMITFOR
NANTUCKET SOUND SONS, LLC AT 355 KEAR STREET

RESOLUTION NUMBER: #00-00 DATE:

On motion of _____, seconded by _____, and unanimously voted in favor by Fon, LaScala, Bock, Garrigan, and Visconti, the following resolution was adopted:

WHEREAS in accordance with the Planning Board's Land Development Regulations, Town of Yorktown Town Code Chapter 195, adopted February 4, 1969 and as amended, a formal application for the approval of a site plan titled "Site Plan," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020, was submitted to the Planning Board on behalf of Nantucket Sound Sons, LLC (hereinafter referred to as "the Applicant"); and

WHEREAS the property owned by the Applicant is located at 355 Kear Street, Yorktown Heights, also known as Section 37.18, Block 2, Lot 86 on the Town of Yorktown Tax Map (hereinafter referred to as "the Property"), and the applicant has represented to this board that they are the lawful owners of the land within said site plan; and

WHEREAS an application fee of $4,080.00 covering 0.36 acres has NOT been received by this Board; and

WHEREAS pursuant to SEQRA:
1. The action has been identified as an Unlisted action.
2. The Planning Board has been declared Lead Agency on _____.
3. A Negative Declaration has been adopted on _____ on the basis of a Short EAF dated February 10, 2020.

WHEREAS the applicant has submitted as part of his application the following maps and documents:

Site Plans
1. A map, Sheet 1 of 12, titled "Site Plan," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
2. A map, Sheet 2 of 12, titled "Existing Conditions," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
3. A map, Sheet 3 of 12, titled "E&SC Plan," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and

4. A map, Sheet 4 of 12, titled "Improvement Plan," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
5. A map, Sheet 5 of 12, titled "Lighting," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
6. A map, Sheet 6 of 12, titled "Landscape Plan," prepared by Site Design Consultants, dated February 20, 2020, and last revised August 25, 2020; and
7. A map, Sheet 7 of 12, titled "Profiles," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
8. A map, Sheet 8 of 12, titled "E&SC Notes & Details," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
9. A map, Sheet 9 of 12, titled "Site Details," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
10. A map, Sheet 10 of 12, titled "Site Details 2," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
11. A map, Sheet 11 of 12, titled "Drainage Details," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and
12. A map, Sheet 12 of 12, titled "Stormwater Details," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020; and

Architectural Plans

13. A drawing, Sheet AR0.01 titled "Kear Street Building," prepared by Joseph G. Thompson Architect, PLLC, dated and last revised February 10, 2020; and
14. A drawing, Sheet A1.01 titled "Kear Street Building," prepared by Joseph G. Thompson Architect, PLLC, dated and last revised February 10, 2020; and
15. A drawing, Sheet A1.02 titled "Kear Street Building," prepared by Joseph G. Thompson Architect, PLLC, dated and last revised February 10, 2020; and
16. A drawing, Sheet A2.01 titled "Kear Street Building," prepared by Joseph G. Thompson Architect, PLLC, dated and last revised February 10, 2020; and
17.

Additional Documents & Reports

18. A report, titled "Stormwater Management Plan," prepared by Site Design Consultants, dated and last revised June, 2020; and

WHEREAS the building materials and colors have been reviewed by the Advisory Board on Architecture & Community Appearance and recommended for approval by this Board, pursuant to their memo dated _____; and

WHEREAS as per Section §300-21D(10)(a)[1][2] mixed use development is an allowed use in the C2-R Zone (Commercial Hamlet Center District); and

WHEREAS pursuant to Section §300-182A(1)&(3) of the Town of Yorktown Town Code,

the applicant has provided 2.2 parking spaces for every residential dwelling and four (4) parking spaces for every 1,000 square feet of GFA designated as retail use, thereby requiring a total of 23 parking spaces as shown on the site plan; and

WHEREAS the Property is located within a Designated Main Street Area and must receive approval from the New York City Department of Environmental Protection before the site plan is signed by the Planning Board Chairman; and

WHEREAS in accordance with Town Code Chapter 248, "Stormwater Management and Erosion Sediment Control", the applicant has proposed catch basins running to Downstream Defenders for Stormwater treatment and has provided details in the plan set. The stormwater is then stored in the proposed stormtech chambers after being treated by the Downstream Defenders. There is to be a drainage pipe that will be constructed in one day to prevent sediment from the property from flowing into the Kear Street drainage system as noted in the plan set. There are also details for the soil stock pile area, as noted in the plan set; and

WHEREAS pursuant to Town Code Chapter 270, "Trees", the is proposing to remove 43 trees totaling 514.94 inches and as shown on the Landscape Plan, Sheet 6 of 12 listed herein, the applicant is proposing to plant 93 trees and 155 shrubs/groundcovers of different species to mitigate the removed trees and landscape the property; and

WHEREAS the Planning Board has referred this application to the following boards and agencies and has received and considered reports of the following:

Boards & Agencies	**Report Date**
ABACA	03/19/20, 08/26/20
Conservation Board	07/16/20, 05/20/21
Fire Inspector	07/09/20
Planning Department	05/03/19, 10/04/19, 02/04/20, 07/10/20
Town Engineer	09/09/20
Tree Conservation Advisory Commission	04/27/20, 07/13/20, 05/24/21
NYC DEP	04/28/20
Westchester County Planning Board	04/24/20

WHEREAS the requirements of this Board's Land Development Regulations, Town Code Chapter 195, have been met; and

WHEREAS a Public Informational Hearing was held via video conference in accordance with §195-39(B)(1) of the Yorktown Town Code on the said site plan application on April 27, 2020; and

WHEREAS having reviewed all current site plans, building plans, environmental plans and

reports, comments and reports from Town professional staff, the public, and other interested and involved agencies associated with the application before it; and having conducted a public hearing via video conference held in accordance with §195-39(B)(2) of the Yorktown Town Code on the said site plan application commencing and closing on March 8, 2021;

BE IT NOW RESOLVED that the application of Nantucket Sound Sons, LLC for the approval of a site plan titled "Site Plan," prepared by Site Design Consultants, dated March 14, 2020, and last revised August 25, 2020, be approved subject to the modifications and conditions listed below, and that the Chairman of this Board be and hereby is authorized to endorse this Board's approval of said plan upon compliance by the applicant with such modifications and requirements as noted below:

Modify plans to show:

1. _____

2. _____

Additional requirements prior to signature by the Planning Board Chairman:

1. Submission of a Final Stormwater Pollution Prevention Plan acceptable to the Town Engineer and approved by the Planning Board.

2. Submission of fees as per town requirements in the form of separate checks made payable to the Town of Yorktown:

Application Fee	$4,080.00
ABACA Review	$810.20
General Development	$392.00

3. Submission of inspection fees and security to the Engineering Department to the satisfaction of the Planning Board.

Additional requirements:

4. Proposed plan must comply with all current applicable ADA standards.

5. Prior to the issuance of a building permit, submission of all legal documents to effectuate the offers of cession, road dedications, easement, and other agreements set forth on the map or its notes, in form satisfactory to the Town Attorney.

6. Applicant must obtain all necessary permits from outside agencies.

7. Upon completion of the project, the Applicant must submit an as-built survey, on paper and in digital AutoCAD DWG readable format, showing all improvements on the site.

BE IT NOW RESOLVED that in accordance with Chapter 248, the Planning Board finds the stormwater mitigation in this site plan to be compliant and to the Board's satisfaction; and

BE IT RESOLVED that in accordance with Chapter 270, the Planning Board finds the Tree mitigation in this site plan to be compliant and to the Board's satisfaction; and

BE IT FURTHER RESOLVED, that in accordance with Chapter 248 and Chapter 270, the application of Nantucket Sound Sons, LLC for the approval of Stormwater Pollution Prevention Plan and Tree Removal Permit **#FSWPP-T-000-00** is approved subject to the conditions listed therein; and

BE IT RESOLVED, Permit **#FSWPP-T-000-00** shall not be valid until it has been signed by the Chairman of this Board;

BE IT RESOLVED the Applicant will retain an independent third-party Environmental Systems Planner, a "Qualified Inspector" as defined by the New York State Department of Environmental Conservation in the SPDES General Permit for Stormwater Discharges from Construction Activity, to supervise and be present during the construction of the erosion control measures, and which Environmental Systems Planner will provide bi-weekly inspection reports regarding the status of erosion control measures to the approval authority via the Environmental Inspector and the Planning Department throughout construction; and

BE IT RESOLVED the Applicant must notify the Planning Board in writing stating the name of the Environmental Systems Planner or Firm that will be completing the bi-weekly inspection reports and shall notify the Planning Board in writing if this Planner or Firm changes; and

BE IT FURTHER RESOLVED that unless a building permit has been issued by _____, or a time extension has been granted by the Planning Board, this approval will be null and void.

TOWN OF YORKTOWN - ENGINEERING DEPARTMENT
MS4 STORMWATER MANAGEMENT PERMIT APPLICATION
WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

RECEIVED
PLANNING DEPARTMENT
MAR 6 2020
TOWN OF YORKTOWN

Section 37.18
Block 2
Lot # 86

Approval Authority: TE [ ] PB [ ] TB [ ]
Application #: _____
Date Received: _____
Date Issued: _____
Date Expires: _____
Fee Paid: $_____

Job Site Address: _____
City/State/Zip: Yorktown Heights NY 10598

NOTE: Application, Fee, Short/Long Form EAF, Map/Survey to be submitted to the Engineering

APPLICANT:

YOUR NAME: Paul Guillaro/Patrick Murphy
COMPANY: Nantucket Sound Sons Inc.
ADDRESS: _____
10 Julian Lane, Cold Spring, NY ZIP 10516
PHONE: (845) 809-5969
EMAIL: pguillaro@unicorncontracting.com

OWNER:

YOUR NAME: Applicant
COMPANY: _____
ADDRESS: _____
_____ ZIP _____
PHONE: (___) _____
EMAIL: _____

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

Select One	Type	Approval Authority	Cost
☐	Wetland/Watercourse/Buffer Area Permit (Administrative)	Town Engineer	$800.00
☐	Wetland/Watercourse/Buffer Area Permit	Town Board/Planning Board	$1,800.00
☐	Renewal of Wetlands/Watercourse/Buffer Area Permit (1 Year)	Town Engineer	$150.00
☐	MS4 Stormwater Management Permit (Administrative)	Town Engineer	$300.00
☑	MS4 Stormwater Management Permit	Town Board/Planning Board	$1,500.00
☐	Renewal of a MS4 Stormwater Management Permit (1 Year)	Town Engineer	$150.00
☑	Tree Permit	Town Engineer	$0.00

Application fees are doubled with issuance of a Stop Work Order as per Town Code.

PROPOSED ACTIVITY - If not located in wetland/wetland buffer (skip to 2b)

1. Description of wetlands (check all that apply):

a. Lake/pond	☐	**Control area of lake/pond**	☐
b. Stream/River/Brook	☐	**Control area of stream/river/brook**	☐
c. Wetlands	☐	**Control area of wetlands**	☐

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

2b. Stormwater/Excavation - Description of proposed activity:

Construction of a 3-story building which has a 2,800 SF footprint and associated parking. Excavation will exceed 200 CY.

3. Tree Removal: To be Determined

Amount of trees and/or stumps to be removed: _____
Sizes; approximate DBH: _____
Species of trees to be removed (i.e. Birch, Spruce - if known): _____
Reason for removal: _____
Trees marked In field (trees must be marked prior to inspection): Yes: ☐ **No:** ☐
Tree removal contractor: _____
_____
_____

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection.

4. PROPERTY OWNER CONSENT: If another entity (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

I, _____ **hereby authorize** _____ **to apply for this Stormwater/Wetland Permit/Tree Permit on my behalf.**

Signature: _____ **Date:** _____

No application will be processed without the above-mentioned, required information.

GENERAL CONDITIONS

1. **The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable.**

2. **The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:**
   a. **Scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or**
   b. **Permit was obtained by misrepresentation or failure to disclose relevant facts; or**
   c. **Newly discovered information or significant physical changes are discovered.**

3. **The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority. Any supplemental information that may be required by the Approval Authority, including forms and fees, must be submitted 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.**

4. **This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.**

5. **The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.**

6. **Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.**

7. **Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.**

Patrick J. Murphy

PRINT NAME

SIGNATURE OF APPLICANT

3/6/20

DATE

Michael Quinn, P.E.
Town Engineer

Michael Grace
Town Supervisor

TOWN OF YORKTOWN
ENGINEERING DEPARTMENT

Town of Yorktown Town Hall, 363 Underhill Avenue, Yorktown Heights, New York 10598

CERTIFICATION OF PROJECT COMPLETION

Date: _____

Project Name: _____

Project Location: _____

Permit Number(s): _____

Check/Bond # & Amount _____
(If Applicable)

Street Name(s) To Be Dedicated _____
(If Applicable)

The undersigned hereby certifies that the work for the above referenced project has been completed in accordance with the terms and conditions of the Town approval resolution and/or the Town permit terms and conditions.

Owner, Engineer or Authorized Representative:

(signed)_____
Printed Name:
Title:
Company:

Yorktown Engineering Department

Date Received: _____

Date Accepted: _____

Disposition: _____

617.20
Appendix B
Short Environmental Assessment Form

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information

Nantucket Sound, LLC

Name of Action or Project:
Nantucket Sound, LLC

Project Location (describe, and attach a location map):
Kear Street and Route 118, Yorktown Heights, NY

Brief Description of Proposed Action:
The property owner is proposing an approximate three story commercial/residential building to accommodate 2,567 SF retail and six residential apartment units providing the required parking, driveway, and stormwater management. The project is located in a C2-R zone and consists of 0.363 acres. The building will be serviced by Town water and sewer.

Name of Applicant or Sponsor:	Telephone: 914-962-4488
Joseph C. Riina, P.E., Site Design Consultants	E-Mail: jriina@sitedesignconsultants.com

Address:
251-F Underhill Avenue

City/PO:	State:	Zip Code:
Yorktown Heights	NY	10598

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:	☑	☐

3.a. Total acreage of the site of the proposed action? 0.363 acres
b. Total acreage to be physically disturbed? 0.363 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.363 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☑ Commercial ☐ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____
☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO ☐	YES ☑	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify:	NO ☑	YES ☐	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO ☑	YES ☐	
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☐	☑	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: All new construction will be in accordance with NYS Code.	NO ☐	YES ☑	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water:	NO ☐	YES ☑	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment:	NO ☐	YES ☑	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO ☑	YES ☐	
b. Is the proposed action located in an archeological sensitive area?	☑	☐	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO ☑	YES ☐	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:	☑	☐	

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:
☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional
☐ Wetland ☐ Urban ☑ Suburban

15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO ☑	YES ☐
16. Is the project site located in the 100 year flood plain?	NO ☑	YES ☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? ☑ NO ☐ YES	NO ☐	YES ☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☑ YES Stormwater Management facilities will be in place.		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	☑	☐

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Joseph C. Riina Date: 2-10-20

Signature: _____

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☐	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☐	☐
3. Will the proposed action impair the character or quality of the existing community?	☐	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☐	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☐	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☐	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☐	☐
b. public / private wastewater treatment utilities?	☐	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☐	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☐	☐

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☐	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☐	☐

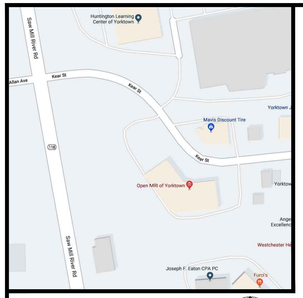
Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT



LOCATION MAP
NOT TO SCALE

N

PROP. 5' WIDE CONCRETE SIDEWALK CONNECTION

RETAINING WALL AS REQUIRED

ADD PARKING SPACE

R1-1

10 Spaces

EXTEND ACCESS EASEMENT

0+00

65.3'

22.0'

8'X14' TWO 4 CY CONTAINER TRASH ENCLOSURE

0+92

42" HIGH ALUMINUM OPEN PICKET STYLE RAILING

AREAS TO BE LANDSCAPED

8 Spaces

8.0'

8.0'

8.5' TYP.

18.5' TYP.

ALUMINUM PICKET STYLE RAILING W/ GRASPABLE HAND RAIL (TYP.)

PROP. 5' WIDE CONCRETE STEPS TO SIDEWALK CONNECTION

CROSSWALK

R7-8

42" HIGH ALUMINUM OPEN PICKET STYLE RAILING

PROP. BRICK PAVER SIDEWALK

ALUMINUM PICKET STYLE RAILING W/ GRASPABLE HAND RAIL (TYP.)

PROP. 5' WIDE CONCRETE STEPS TO SIDEWALK CONNECTION

REMOVE SIDEWALK AT ENTRANACE AND INSTALL ADA RAMPS

10.0'

PROPOSED 3 STORY BUILDING
2,567 SF LOWER LEVEL
BF FL. ELEV. 448.25
2,801 SF UPPER LEVELS
FF FL. ELEV. 459.25

PROPOSED BIKE RACK (TYP.)

42" HIGH ALUMINUM OPEN PICKET STYLE RAILING ABOVE REATINING WALL

BRICK PAVER PATIO

NO PARKING FIRE ZONE

ACCESS AND UTILITY EASEMENT

FRONT WALL OF BOTTOM FLOOR
ENTRY TO BOTTOM FLOOR

15.0'

42" HIGH ALUMINUM OPEN PICKET STYLE RAILING

R7-6

ADA RAMP

PROPOSED HANDICAP PARKING SIGNS TO BE AFFIXED TO THE SIDE OF BUILDING

SIDEWALK UNDER OVERHANG

PROPOSED BIKE RACK (TYP.)

REMOVE SIDEWALK AT ENTRANACE AND INSTALL ADA RAMPS

R1-1

8.0'

8.0'

8.5' TYP.

18.5' TYP.

5 Spaces

22.0'

8'X10' 8 YD CONTAINER TRASH ENCLOSURE

LOADING ZONE

8.0'

25.0'

EXISTING SIGHT DISTANCE EASEMENT

RETAINING WALL (TYP)

42" HIGH ALUMINUM OPEN PICKET STYLE RAILING

TIMBER GUARD RAIL

167.67'

STREET

KEAR

NOTE:
1. *THIS IS NOT A SURVEY.* ALL SURVEY INFORMATION SHOWN ON THIS PLAN HAS BEEN TAKEN FROM SURVEY MAP PREPARED BY ROBERT E. BAXTER, DATED 04/07/16, AND THE SURVEY MAP PREPARED BY BADEY AND WATSON DATED 09/09/19. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

SITE DATA:

OWNER / DEVELOPER:	NANTUCKET SOUND SONS, LLC. 1672 MORNINGVIEW DRIVE YORKTOWN, NY, 10598
PROJECT LOCATION:	KEAR STREET TOWN OF YORKTOWN
EXISTING TOWN ZONING:	C2-R
PROPOSED USE:	C2-R
TOWN TAX MAP DATA:	SECTION 37.12, BLOCK 2, LOT 86
SITE AREA :	0.36 ACRES (15,807 SF)
SEWAGE FACILITIES:	PUBLIC SEWERS
WATER FACILITIES:	PUBLIC WATER FACILITIES

ZONING SCHEDULE:

ZONING DISTRICT:	C-2R, COMMERCIAL HAMLET CENTER DISTRICT		
DIMENSIONAL REGULATIONS:	REQUIRED	PROVIDED	VARIANCE REQUIRED
MINIMUM SIZE OF LOT:			
MINIMUM LOT AREA:	NONE	15,807 S.F.	NONE
MINIMUM LOT WIDTH:	NONE	60 FT.	NONE
MINIMUM YARD DIMENSIONS:			
PRINCIPAL BUILDING:			
FRONT YARD SETBACK:	*15 FT.	15 FT.	NONE
REAR YARD SETBACK:	30 FT.	N/A	NONE
ONE SIDE YARD SETBACK:	**0 FT.	10 FT.	NONE
COMBINED SIDE YARD SETBACK:	NONE	N/A	NONE
ACCESSORY BUILDINGS:			
FRONT YARD SETBACK:	50 FT.	NONE	NONE
REAR YARD SETBACK:	30 FT.	NONE	NONE
ONE SIDE YARD SETBACK:	NONE	NONE	NONE
COMBINED SIDE YARD SETBACK:	NONE	NONE	NONE
MAXIMUM % OF LOT TO BE OCCUPIED:			
PRINCIPAL BUILDING COVERAGE:	30% OF LOT AREA	17.72 % OF LOT AREA	NONE
ACCESSORY BUILDING COVERAGE:	30% OF LOT AREA	N/A	NONE
MAXIMUM HEIGHT:			
PRINCIPAL BUILDING - FEET:	35 FEET	34 FT.	NONE
ACCESSORY BUILDING - FEET:	20 FEET	NONE	NONE
ACCESSORY BUILDING - STORIES:	2 1/2	NONE	NONE

NOTE:
1. PARKING PLAN APPROVAL REQUIRED IN ACCORDANCE WITH §§ 300-179 THROUGH 300-182 AND 300-183 THROUGH 300-186. SEPARATE STRUCTURES LESS THAN 500 SQUARE FEET SHALL NOT BE PERMITTED.

*FRONT YARD SETBACK IS 75 FEET WITH PARKING.
**NONE, BUT IF PROVIDED SHALL BE 10 FEET; IF USED AS ONE-WAY VEHICULAR ACCESS, SHALL BE 17 FEET; TWO-WAY VEHICULAR ACCESS, 25 FEET; IF ADJOINS AN R DISTRICT, SHALL BE 50 FEET.

PARKING SCHEDULE

REQUIRED PARKING BUSINESS: RESIDENTIAL:	 4 SPACES PER 1000 SF OF BUILDING 2.2 SPACES PER RESIDENTIAL UNIT
BUSINESS BUILDING: RESIDENTIAL BUILDING:	2,567 S.F. @ 4 SPACES/1000 S.F. = 10 SPACES 6 UNITS @ 2.2 SPACES/1 UNIT = 13 SPACES TOTAL REQUIRED: 23 SPACES
PROVIDED PARKING:	21 STANDARD 2 HANDICAP
TOTAL PROVIDED PARKING:	23 SPACES
PARKING VARIANCE REQUIRED:	NONE

0 5 10 20
SCALE: 1"=10'-0"

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PROJECT # 19-10

JOSEPH CARLO RITNA — LICENSED PROFESSIONAL ENGINEER — STATE OF NEW YORK
Engineer: Joseph C. Ritna, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
1	6/17/20	Planning Board Review Comments
2	8/25/20	Town's Comments

SCALE: 1" = 10'
DRAWN BY: TK
DATE: 3/14/20

SITE PLAN

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

Sheet 1 of 12

F:\2019\19-10 NANTUCKET SOUND LLC - MURPHY\ENGINEERING\CAD\C3D-19-10 NANTUCKET SOUND LLC - MURPHY\DWG\19-10 MURPHY SITE PLAN 8-25-20.DWG 1/16/2017 3:19:52 PM

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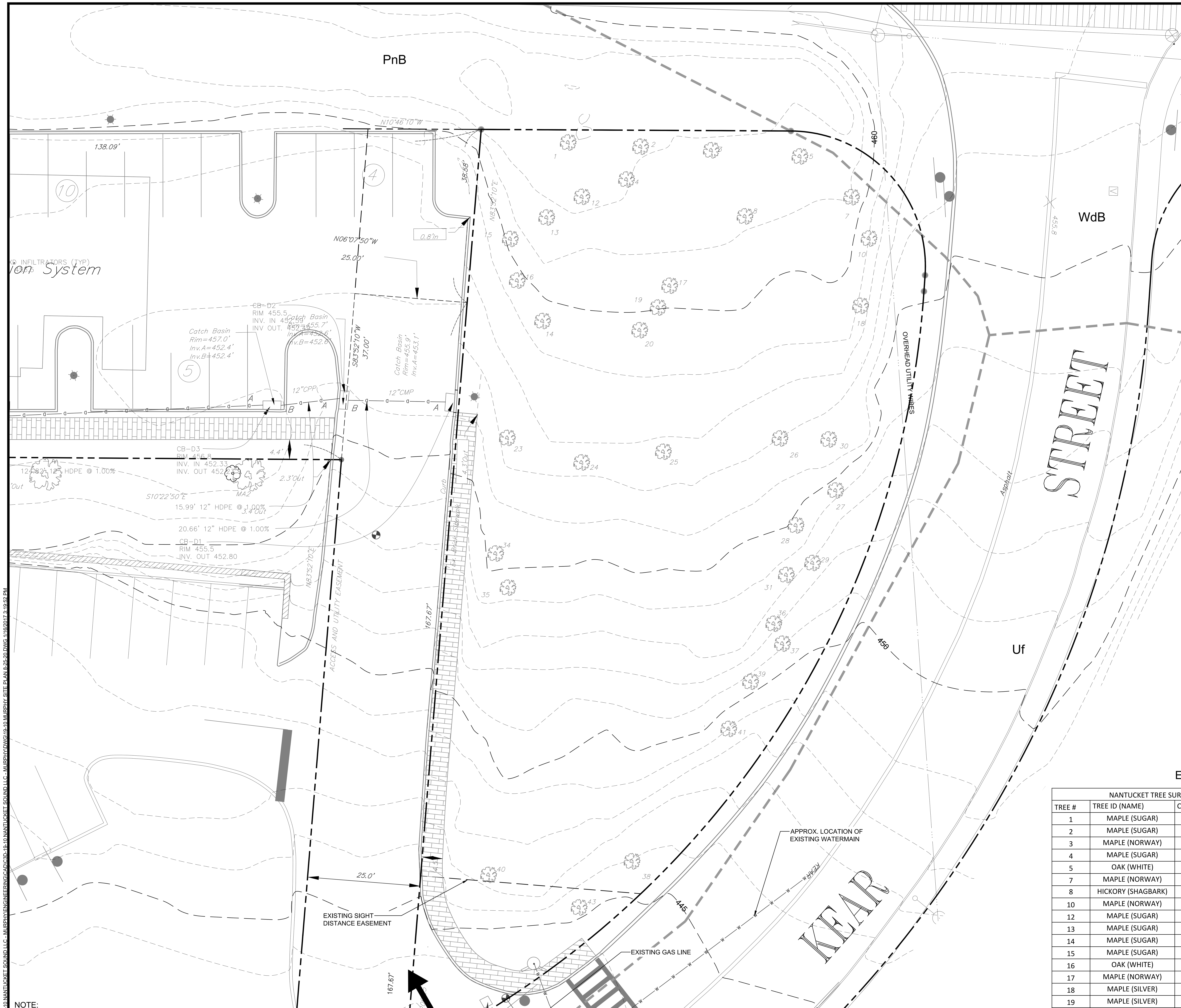

EXISTING TREE LIST

NANTUCKET TREE SURVEY					NANTUCKET TREE SURVEY			
TREE #	TREE ID (NAME)	CIR. (")	DIA. (")		TREE #	TREE ID (NAME)	CIR. (")	DIA. (")
1	MAPLE (SUGAR)	44	14.01		24	MAPLE (SILVER)	51	16.24
2	MAPLE (SUGAR)	38	12.1		25	MAPLE (SUGAR)	42	13.38
3	MAPLE (NORWAY)	36	11.46		26	MAPLE (SUGAR)	60	19.11
4	MAPLE (SUGAR)	28	8.92		27	MAPLE (SILVER)	30	9.55
5	OAK (WHITE)	118	37.58		28	BLACK BIRCH	39	12.42
7	MAPLE (NORWAY)	66	21.02		29	CHERRY (BIRCH)	27	8.6
8	HICKORY (SHAGBARK)	30	9.55		30	LOCUST (BLACK)	61	19.43
10	MAPLE (NORWAY)	27	8.6		31	MAPLE (SUGAR)	44	14.01
12	MAPLE (SUGAR)	28	8.92		34	LOCUST (BLACK)	63	20.06
13	MAPLE (SUGAR)	27	8.6		35	MAPLE (SUGAR)	67	21.34
14	MAPLE (SUGAR)	32	10.19		36	MAPLE (SUGAR)	69	21.97
15	MAPLE (SUGAR)	44	14.01		37	MAPLE (SILVER)	32	10.19
16	OAK (WHITE)	46	14.65		38	MAPLE (SUGAR)	60	19.11
17	MAPLE (NORWAY)	26	8.28		39	MAPLE (SUGAR)	34	10.83
18	MAPLE (SILVER)	79	25.16		40	BEECH (AMERICAN)	52	16.56
19	MAPLE (SILVER)	31	9.87		41	MAPLE (SUGAR)	59	18.79
20	MAPLE (SILVER)	33	10.51		43	OAK (WHITE)	58	18.47
23	MAPLE (SUGAR)	36	11.46					

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PROJECT # 19-10

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Engineer: Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
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SCALE: 1" = 10'

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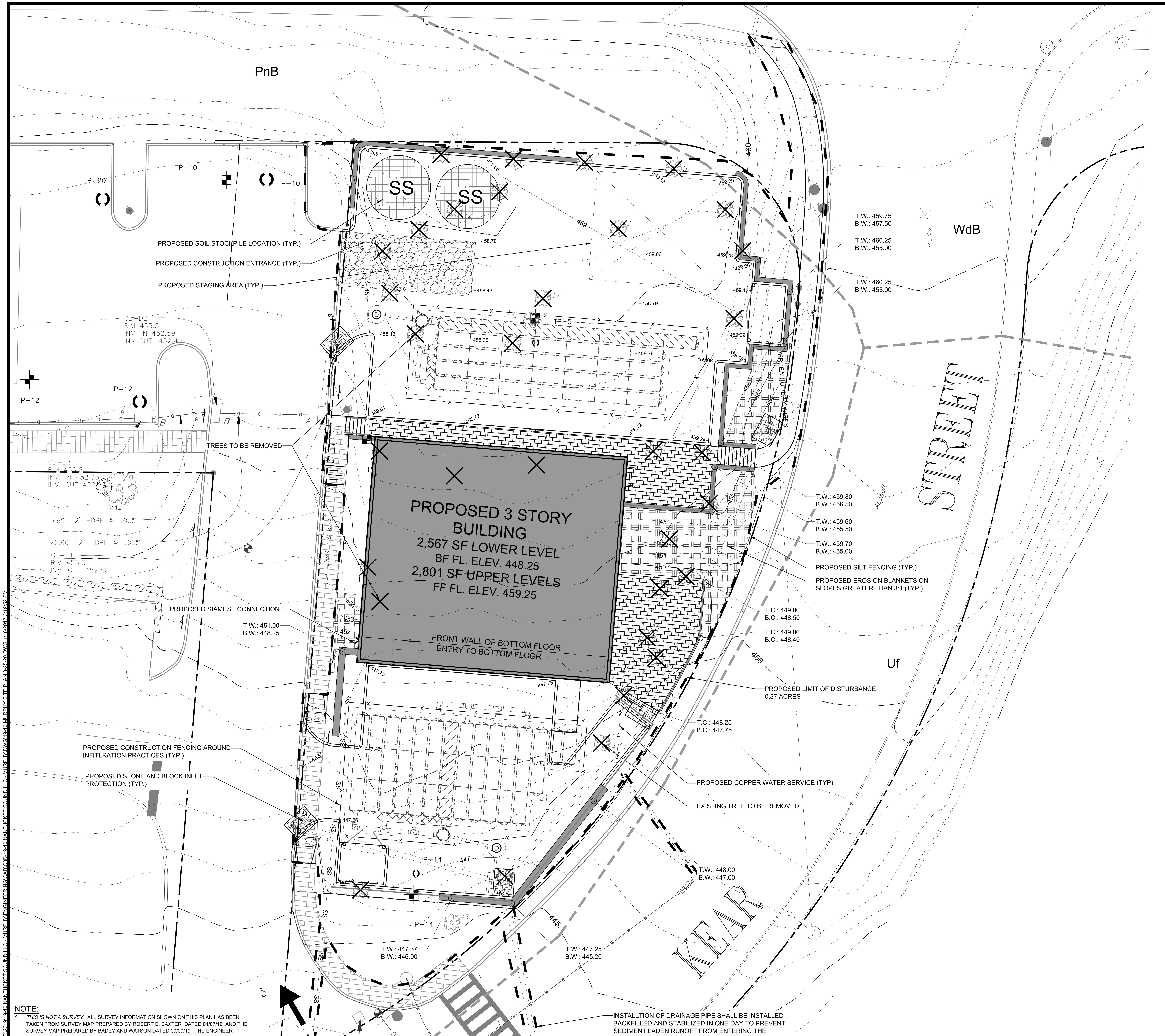
EXISTING CONDITIONS

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

Sheet 2 of 12


PnB
WdB
Uf
STREET
KEAR
PROPOSED 3 STORY BUILDING
2,567 SF LOWER LEVEL
BF FL. ELEV. 448.25
2,801 SF UPPER LEVELS
FF FL. ELEV. 459.25
FRONT WALL OF BOTTOM FLOOR
ENTRY TO BOTTOM FLOOR
PROPOSED SOIL STOCKPILE LOCATION (TYP.)
PROPOSED CONSTRUCTION ENTRANCE (TYP.)
PROPOSED STAGING AREA (TYP.)
TREES TO BE REMOVED
PROPOSED SIAMESE CONNECTION
T.W.: 451.00
B.W.: 448.25
PROPOSED CONSTRUCTION FENCING AROUND INFILTRATION PRACTICES (TYP.)
PROPOSED STONE AND BLOCK INLET PROTECTION (TYP.)
T.W.: 459.75
B.W.: 457.50
T.W.: 460.25
B.W.: 455.00
T.W.: 460.25
B.W.: 455.00
T.W.: 459.80
B.W.: 456.50
T.W.: 459.60
B.W.: 455.50
T.W.: 459.70
B.W.: 455.00
PROPOSED SILT FENCING (TYP.)
PROPOSED EROSION BLANKETS ON SLOPES GREATER THAN 3:1 (TYP.)
T.C.: 449.00
B.C.: 448.50
T.C.: 449.00
B.C.: 448.40
PROPOSED LIMIT OF DISTURBANCE 0.37 ACRES
T.C.: 448.25
B.C.: 447.75
PROPOSED COPPER WATER SERVICE (TYP)
EXISTING TREE TO BE REMOVED
T.W.: 448.00
B.W.: 447.00
T.W.: 447.37
B.W.: 446.00
T.W.: 447.25
B.W.: 445.20
INSTALLTION OF DRAINAGE PIPE SHALL BE INSTALLED BACKFILLED AND STABILIZED IN ONE DAY TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE DRAINAGE SYSTEM IN KEAR STREET
CB-D2
RIM 455.5
INV. IN 452.59
INV OUT 452.49
CB-D3
RIM 456.8
INV. IN 452.33
CB-D1
RIM 455.5
INV. OUT 452.80
15.99' 12" HDPE @ 1.00%
20.66' 12" HDPE @ 1.00%
TP-10
TP-12
TP-14
P-20
P-10
P-12
P-14
TP-5
SS
Asphalt
SCALE: 1"=10'-0"
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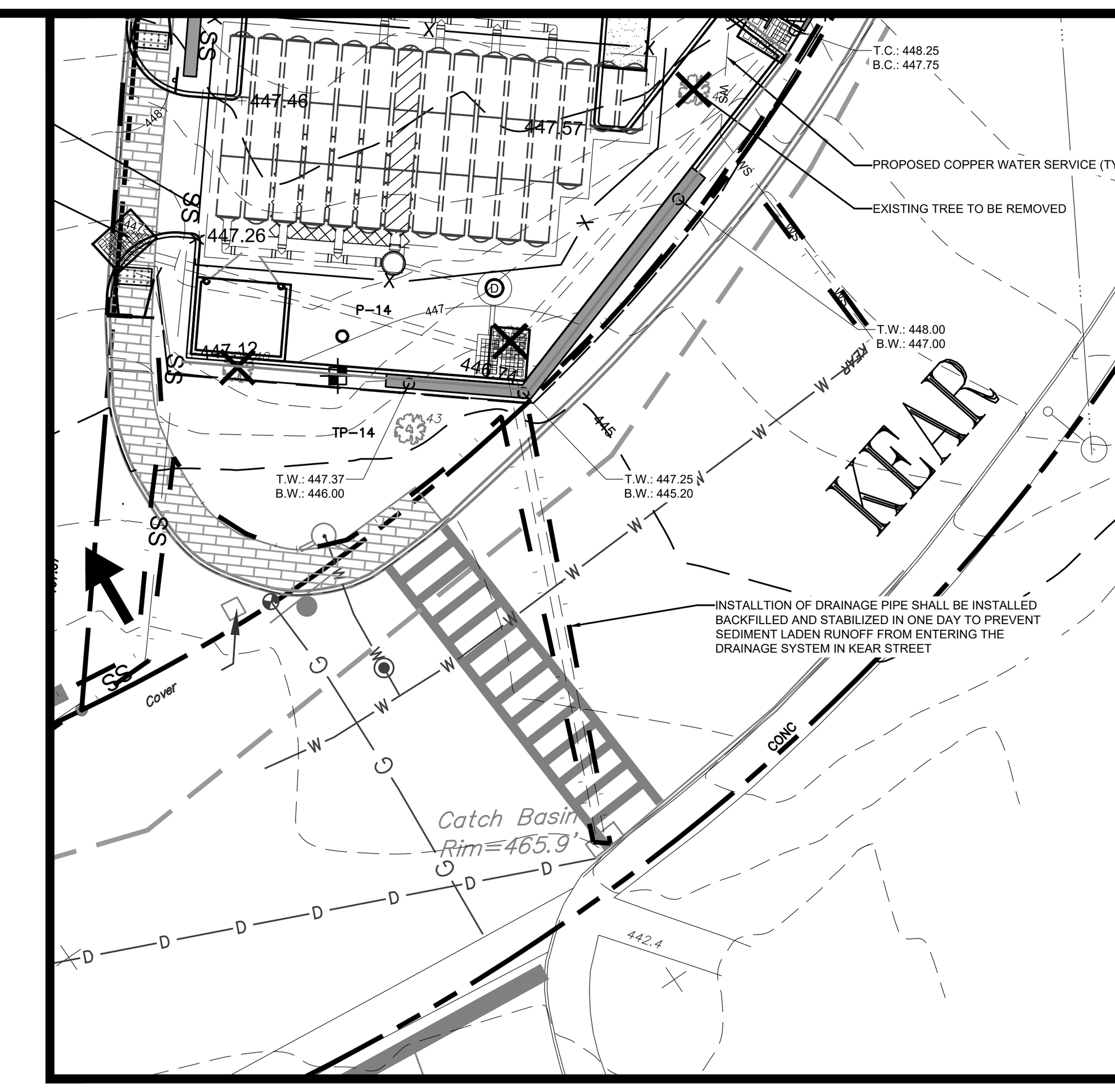
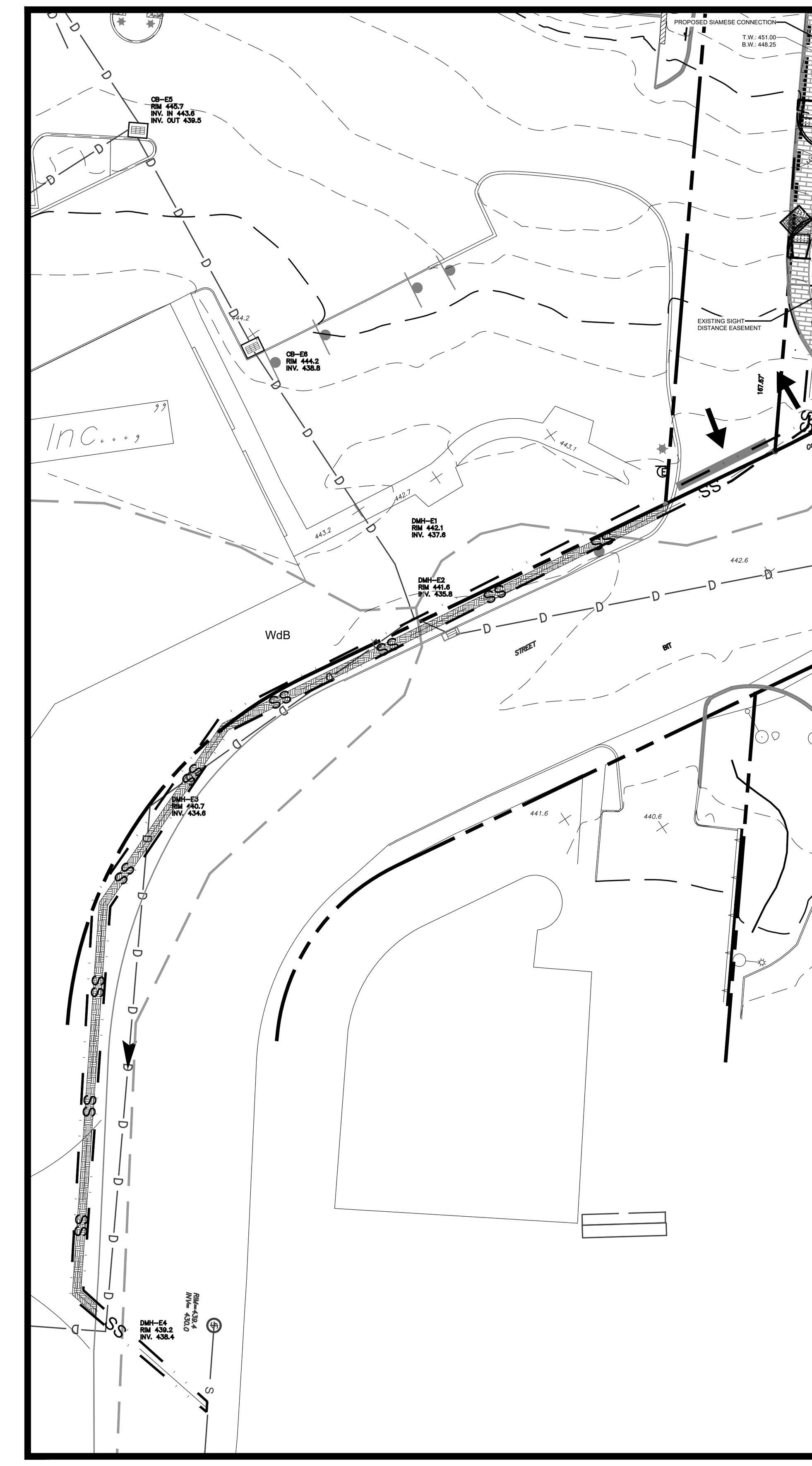


INSET 1
SCALE 1" = 10'



INSET 2
SCALE 1" = 30'

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PROJECT # 19-10

Engineer: Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions: No.	Date	Comments:
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SCALE: 1" = 10'
DRAWN BY: TK
DATE: 3/14/20

E&SC PLAN

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

Sheet 3 of 12

PnB

WdB

Uf

TP-10

P-20

P-10

P-12

TP-5

TP-14

SC-310 STORMTECH CHAMBERS 1
BOTTOM OF STONE: 452.83
BOTTOM OF CHAMBER: 453.33
TOP OF CHAMBER: 454.66
TOP OF STONE: 455.16

6" HDPE PIPE
L = 7.4', S = 1.0%

DOWNSTREAM DEFENDER 1
RIM: 458.11
INV. IN: 452.77
INV. OUT: 453.77

6" HDPE PIPE
L = 6.79', S = 1.0%

BYPASS-1
RIM: 446.86
INV. OUT: 452.88, 452.96
WEIR: 455.16

12" HDPE PIPE
L = 12.31', S = 1.0%

CB-D2
RIM 455.5
INV. IN 452.59
INV OUT. 452.49

CB-D3
RIM 456.8
INV. IN 452.33
INV. OUT 452.23

15.99' 12" HDPE @ 1.00%

20.66' 12" HDPE @ 1.00%

CB-D1
RIM 455.5
INV. OUT 452.80

PROPOSED 3 STORY BUILDING
2,567 SF LOWER LEVEL
BF FL. ELEV. 448.25
2,801 SF UPPER LEVELS
FF FL. ELEV. 459.25

FRONT WALL OF BOTTOM FLOOR
ENTRY TO BOTTOM FLOOR

PROPOSED SIAMESE CONNECTION

T.W.: 451.00
B.W.: 448.25

12" HDPE PIPE
L = 42.93', S = 0.5%

CB-3
RIM: 446.77
INV. OUT: 443.77

LOCATION OF DEEP AND INIFILTRATION TEST (TYP.)

T.W.: 447.37
B.W.: 446.00

T.W.: 459.75
B.W.: 457.50

T.W.: 460.25
B.W.: 455.00

T.W.: 460.25
B.W.: 455.00

DI-1
RIM: 453.35
INV. OUT: 448.29

T.W.: 459.80
B.W.: 456.50

T.W.: 459.60
B.W.: 455.50

T.W.: 459.70
B.W.: 455.00

T.C.: 449.00
B.C.: 448.50

T.C.: 449.00
B.C.: 448.40

12" HDPE PIPE
L = 66.36', S = 5.2%

T.C.: 448.25
B.C.: 447.75

CB-2
RIM: 448.23
INV. IN: 444.75
INV. OUT: 444.50

PROPOSED COPPER WATER SERVICE (TYP)

12" HDPE PIPE
L = 46.71', S = 1.9%

SC-310 STORMTECH CHAMBERS 2
BOTTOM OF STONE: 443.44
BOTTOM OF CHAMBER: 443.94
TOP OF CHAMBER: 445.27
TOP OF STONE: 445.77

T.W.: 448.00
B.W.: 447.00

DOWNSTREAM DEFENDER 2
RIM: 447.08
INV. IN: 443.50
INV. OUT: 444.00

6" HDPE PIPE
L = 9.36', S = 0.5%

6" HDPE PIPE
L = 4.67', S = 0.5%

T.W.: 447.25
B.W.: 445.20

BYPASS-2
RIM: 446.86
INV. IN: 443.53, 443.54
INV. OUT: 443.54, 442.00
WEIR: 446.44

12" HDPE PIPE
L = 55.38', S = 3.3%

KEAR STREET

SHEPHERD HILL ROAD

Curb

Asphalt

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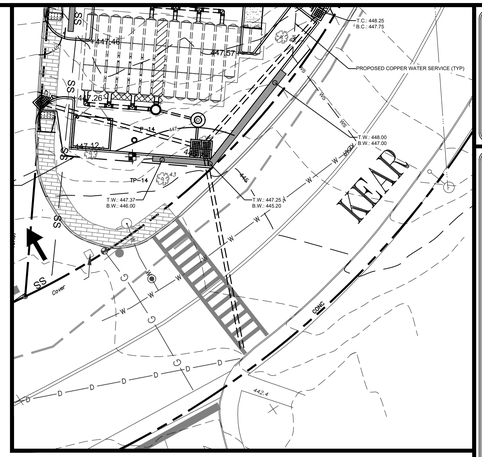
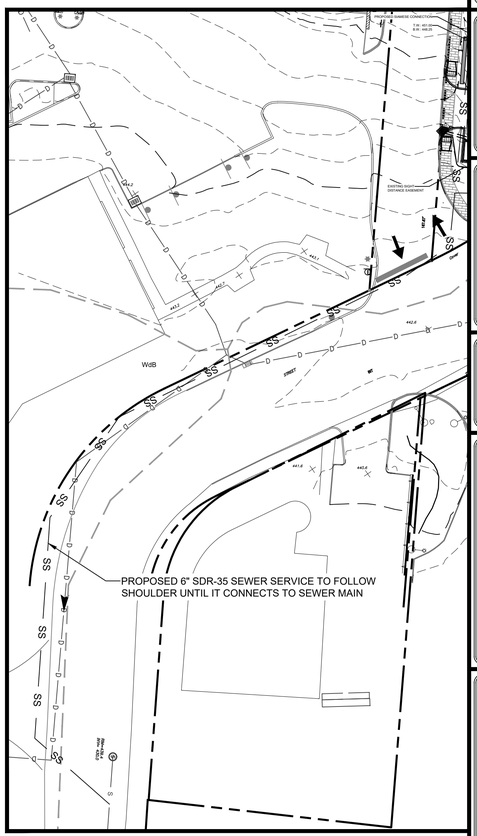


INSET 1
SCALE 1" = 10'



INSET 2
SCALE 1" = 30'

0 5 10 20

SCALE: 1"=10'-0"

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PROJECT # 19-10

Engineer:
JOSEPH CARLO RITACCO
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
Joseph C. Ritacco, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
1	6/17/20	Dept. Comments
2	8/25/20	Town's Comments

SCALE: 1" = 30'

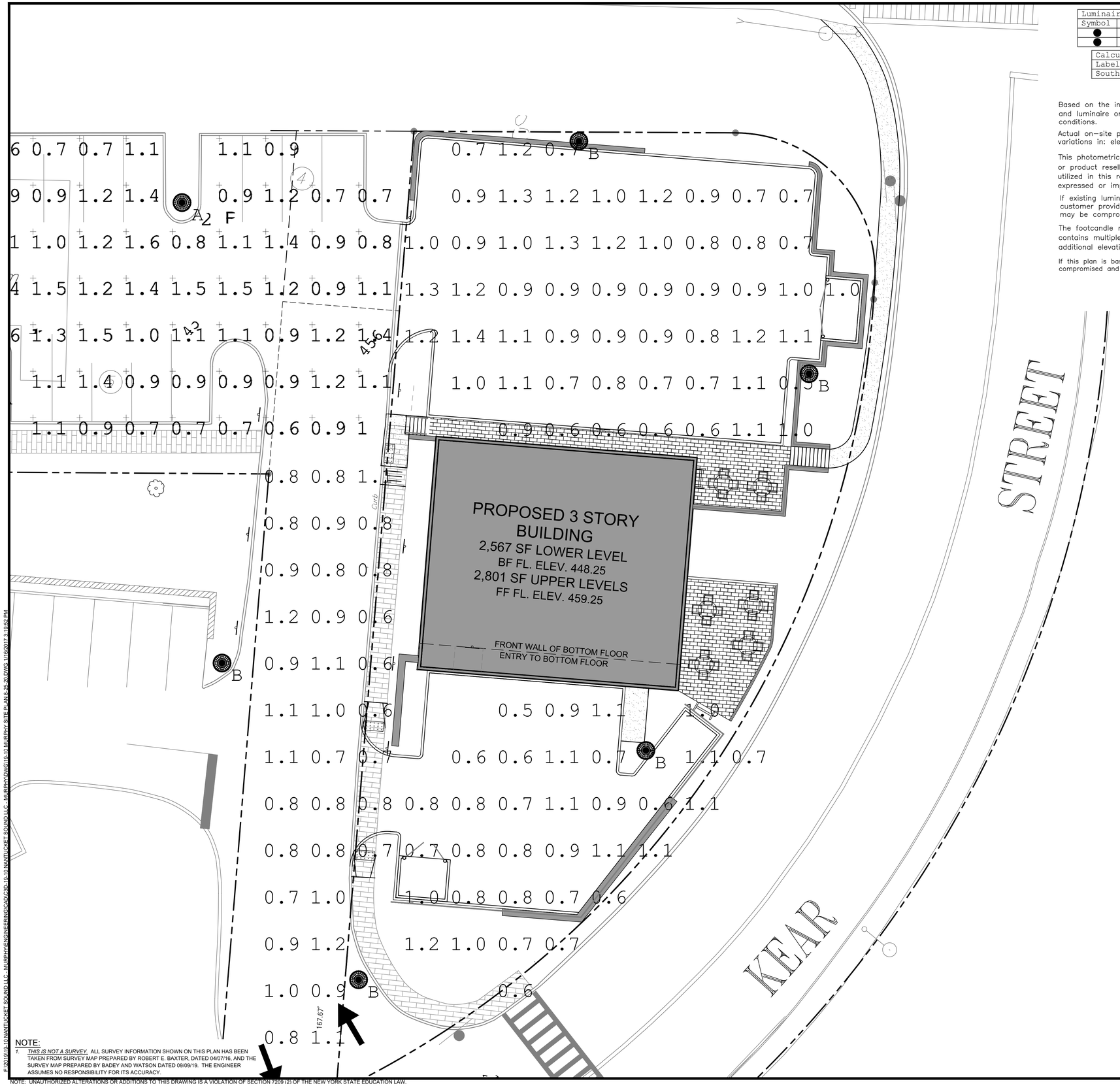
DRAWN BY: TK

DATE: 3/14/20

IMPROVEMENT PLAN

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

Sheet 4 of 12



Luminaire Schedule					
Symbol	Qty	Label	Arrangement	LLF	Description
●	29	A	SINGLE	1.000	Existing 91T5-65 LED-15DIA-X-34H-POLE TOP@16' AG
●	5	B	SINGLE	1.000	New 91T5-65 LED-15DIA-X-34H-POLE TOP@16' AG

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
South & East CalcPts	Illuminance	Fc	0.88	1.4	0.5	1.76	2.80

Based on the information provided, all dimensions and luminaire locations shown represent recommended placement and luminaire orientation. The engineer and/or architect must determine applicability of the layout to relevant field conditions.

Actual on-site performance of any manufacturer's luminaires may vary from laboratory test results due to variations in: electrical voltage, tolerance in lamps, and other variable field conditions.

This photometric analysis may be based on ies data files that were provided or recommended by the manufacturer or product reseller and thus it is beyond the control of the creator of this report to ensure that the ies file(s) utilized in this report represent the actual product provided. Due to this fact, the creator of this report makes no expressed or implied warranty that the results of this report will occur at the project site.

If existing luminaires are included in this report, their illumination characteristics are based upon a combination of customer provided specifications and our best estimations. Due to this fact, the resulting footcandle accuracy may be compromised.

The footcandle readings on this report depict all of the readings as being on the same vertical plane. If this site contains multiple elevations, please notify Sterling Innovations LLC and request an updated report that includes the additional elevation based photometry.

If this plan is based on an original non-scaled CAD drawing, by virtue of that fact, the scale of the drawing will have been compromised and thus the resulting figures and calculations on this document will also be compromised.

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PROJECT # 19-10

Engineer: JOSEPH CARLO RITINA, STATE OF NEW YORK, LICENSED PROFESSIONAL ENGINEER
Joseph C. Ritina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
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2	8/25/20	Town's Comments

SCALE: 1" = 10'
DRAWN BY: TK
DATE: 3/14/20

LIGHTING

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

Sheet 5 of 12

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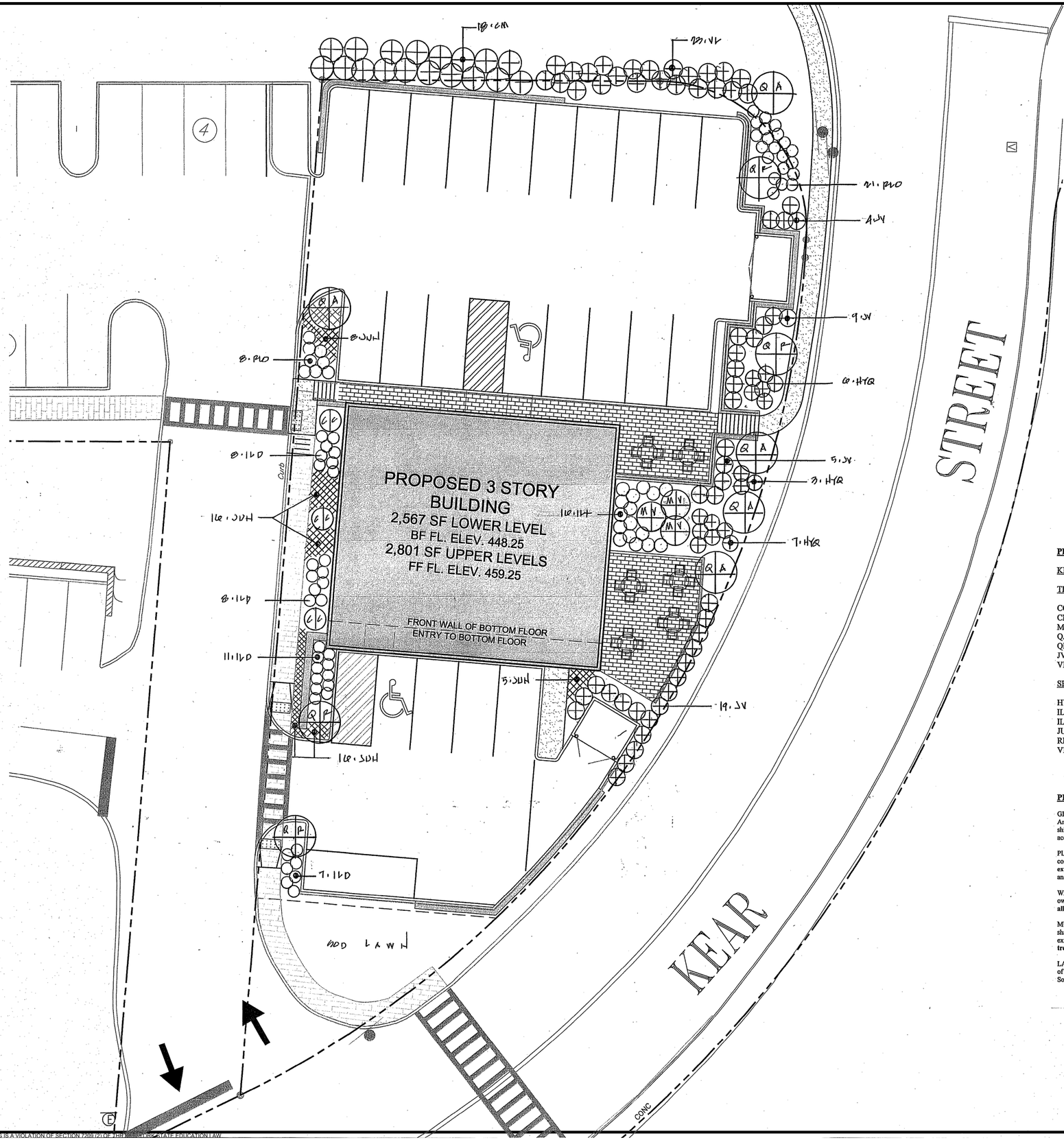


PLANT SCHEDULE

KEY	QUAN.	BOTANICAL / COMMON NAME	SIZE
TREES			
CC	3	Carpinus caroliniana "Fire Spire" Native Hornbeam	25 Gal.
CM	18	Cornus mas - Cornelian Cherry (Multi-stem)	15 Gal.
MV	3	Magnolia virginiana – Sweetbay Magnolia	25 Gal.
QA	5	Quercus alba - White Oak	3 1/2"-4" Cal.
QR	4	Quercus rubra – Red Oak	3 1/2"-4" Cal.
JV	37	Juniperus virginiana "Taylor" – Taylor Red Cedar	5'-6' HT.
VL	23	Viburnum lentago – Nannyberry	15 Gal.
SHRUBS AND GROUNDCOVERS:			
HYQ	16	Hydrangea **"Quick Fire"** – Quick Fire Hydrangea	5 Gal.
ILD	34	Ilex glabra **"Densa"**- Densa Inkberry	5 Gal
ILX	16	Ilex glabra **"Shamrock"** _ Shamrock Inkberry	5 Gal.
JUN	45	Juniperus **"Parsonii"** -Parsons Juniper	3 Gal.
RLO	29	Rhus a. **"Gro-Low"** – Gro-Low Native Sumac	5 Gal.
VIB	15	Viburnum dentatum**"Chicago Lustre"**-Arrowwood	5 Gal.

PLANTING SPECIFICATIONS:

GENERAL: All plants, shrubs and vines, shall meet the specifications for "plant material" as per the American Horticultural Society. The landscape architect reserves the right to inspect all plants prior to shipping. All plants shall be guaranteed for one full year from the time the landscaping is formally accepted by the owner and the Town of Yorktown, NY.

PLANTING: All plants shall be planted in planting pits two times the diameter of the plant ball or container, and 12" deeper than the plant ball or container. **The plants shall be planted so the root flare is exposed.** Backfill for all planting pits shall be as follows: Two parts native soil, one - part screened topsoil and one - part humus. "Roots Plus" shall be added to all backfill, as per label directions.

WATERING: Landscape contractor shall keep all plantings well-watered until final approval by the owner. **Thereafter, the owner shall install a drip irrigation system, or hand water all plantings until all plantings are established (approx. two years).**

MULCHING: All planting beds shall be mulched with three (3) inches of shredded Cedar bark. All trees shall be mulched with three (3) inches of shredded bark in a four (4) foot diameter circle around each existing tree. **No colored wood chip mulch. Mulch should not come in direct contact with the trunk of trees or basal stems of shrubs.**

LAWN AREAS: All disturbed areas shall be sodded. All sodded shall have a minimum of four (4) inches of topsoil as a base. Sod bed shall be fine graded, with all stones and debris over 1" in diameter removed. Sod shall be farm grown and meet the specifications of the American Sod Growers Association.

N

0 5 10 20

SCALE: 1"=10'-0"

FRANK GIULIANO - LANDSCAPE ARCHITECT
8 PINETREE DRIVE KATONAH, NY 10536
914-962-3690
FG1ARCH@AOL.COM

Landscape Architect:

FRANK GIULIANO LANDSCAPE ARCHITECT REGISTERED LANDSCAPE ARCHITECT NEW YORK
Frank Giuliano
NYS Lic. No. 000809-1

Revisions:

No.	Date	Comments:
1	6/17/20	Planning Comments
2	8/24/20	Town Comments

SCALE: 1" = 10'

DRAWN BY: FG

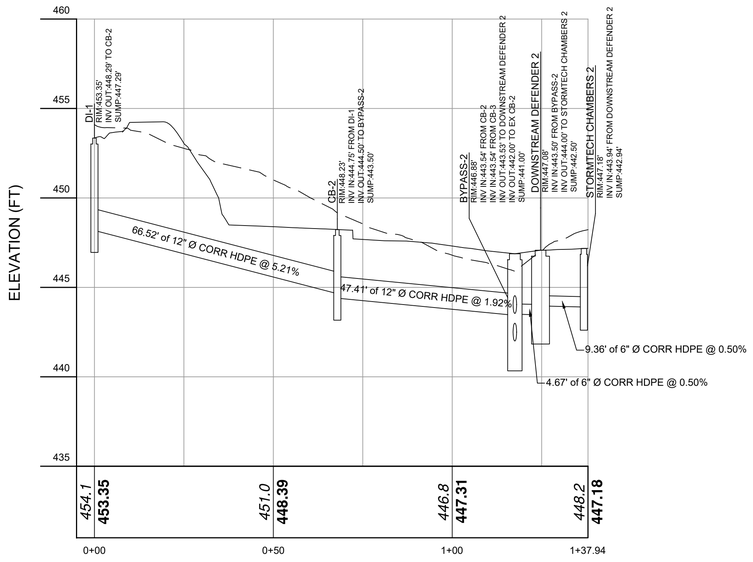
DATE: 2-20-20

LANDSCAPE PLAN

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

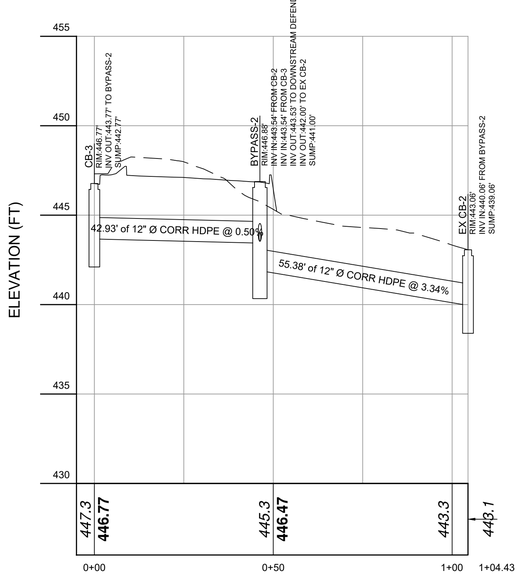
Sheet 6 of 12

F:\2019\19-10 NANTUCKET SOUND LLC - MURPHY\ENGINEERING\CAD\C3D\19-10 NANTUCKET SOUND LLC - MURPHY.DWG\19-10 MURPHY SITE PLAN 8-25-20.DWG 1/16/2017 3:19:52 PM



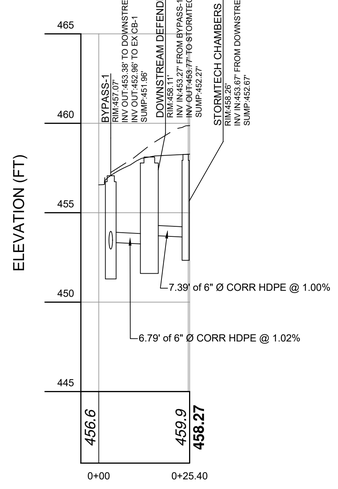
DISTANCE ALONG BASELINE (FT)

DI-1 TO STORMTECH CHAMBERS 2
VERT. SCALE: 1" = 4
HORIZ. SCALE: 1" = 20



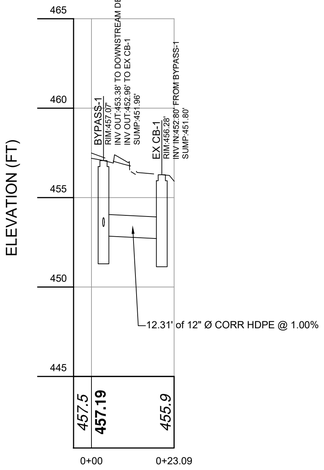
DISTANCE ALONG BASELINE (FT)

CB-3 TO EX CB-2
VERT. SCALE: 1" = 4
HORIZ. SCALE: 1" = 20



DISTANCE ALONG BASELINE (FT)

BYPASS-1 TO STORMTECH CHAMBERS 1
VERT. SCALE: 1" = 4
HORIZ. SCALE: 1" = 20



DISTANCE ALONG BASELINE (FT)

BYPASS-1 TO EX CB-1
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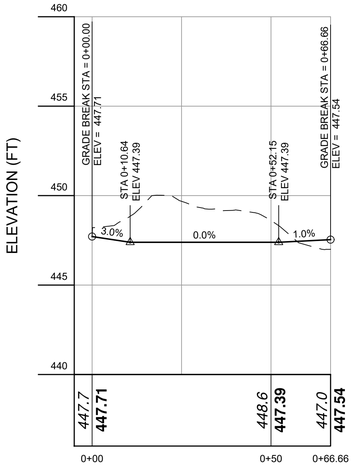
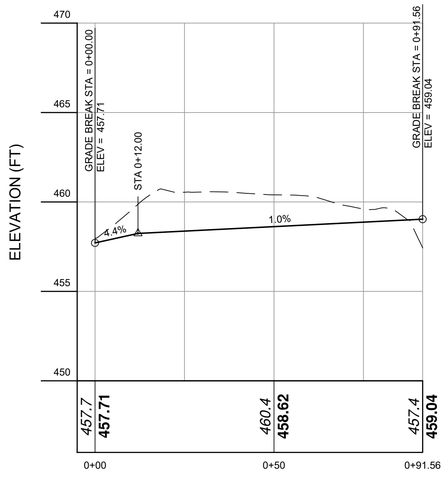
HORIZ. SCALE: 1" = 20



DISTANCE ALONG BASELINE (FT)

ALT A LOWER PARKING LOT
VERT. SCALE: 1" = 4
HORIZ. SCALE: 1" = 20



DISTANCE ALONG BASELINE (FT)

ALT A UPPER PARKING LOT
VERT. SCALE: 1" = 4
HORIZ. SCALE: 1" = 20

NOTE:

1. *THIS IS NOT A SURVEY.* ALL SURVEY INFORMATION SHOWN ON THIS PLAN HAS BEEN TAKEN FROM SURVEY MAP PREPARED BY ROBERT E. BAXTER, DATED 04/07/16, AND THE SURVEY MAP PREPARED BY BADEY AND WATSON DATED 09/09/19. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

NOTE: UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

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Civil Engineers • Land Planners
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www.sitedesignconsultants.com

PROJECT # 19-10

Engineer: JOSEPH CARLO FRINA — LICENSED PROFESSIONAL ENGINEER — STATE OF NEW YORK
Joseph C. Frina, P.E.
N.Y.S Lic. No. 64431

Revisions:

No:	Date:	Comments:
1	6/17/20	Town Comments
2	8/25/20	Town Comments

SCALE: 1" = 10'

DRAWN BY: TK

DATE: 3/14/20

PROFILES

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown — Westchester County, NY

Sheet 7 of 12

GENERAL EROSION CONTROL NOTES:

1. Contractor shall be responsible for compliance with all sediment and erosion control practices. The sediment and erosion control practices are to be installed prior to any major soil disturbances, and maintained until permanent protection is established. Road surface flows from the site should be dissipated with tracking pad or appropriate measures during adjacent road shoulder regrading. Contractor is responsible for the installation and maintenance of all soil erosion and sedimentation control devices throughout the course of construction.
2. Catch basin inlet protection must be installed and operating at all times until tributary areas have been stabilized. When possible flows should be stabilized before reaching inlet protection structure. Timely maintenance of sediment control structures is the responsibility of the Contractor.
3. All structures shall be maintained in good working order at all times. The sediment level in all sediment traps shall be closely monitored and sediment removed promptly when maximum levels are reached or as ordered by the engineer. All sediment control structures shall be inspected on a regular basis, and after each heavy rain to insure proper operation as designed. An inspection schedule shall be set forth prior to the start of construction.
4. The locations and the installation times of the sediment capturing standards shall be as specified in these plans, as ordered by the Engineer, and in accordance with the latest edition of the "New York Standards and Specifications for Erosion and Sediment Control" (NYSSESC).
5. All topsoil shall be placed in a stabilized stockpile for reuse on the site. All stockpile material required for final grading and stored on site shall be temporarily seeded and mulched within 7 days. Refer to soil stockpile details.
6. Any disturbed areas that will be left exposed more than 7 days and not subject to construction traffic, shall immediately receive temporary seeding. Mulch shall be used if the season prevents the establishment of a temporary cover. Disturbed areas shall not be limed and fertilized prior to temporary seeding.
7. All disturbed areas within 500 feet of an inhabited dwelling shall be wetted as necessary to provide dust control.
8. The contractor shall keep the roadways within the project clear of soil and debris and is responsible for any street cleaning necessary during the course of the project.
9. Sediment and erosion control structures shall be removed and the area stabilized when the drainage area has been properly stabilized by permanent measures.
10. All sediment and erosion control measures shall be installed in accordance with current edition of NYSSESC.
11. All regraded areas must be stabilized appropriately prior to any rock blasting, cutting, and/or filling of soils. Special care should be taken during construction to insure stability during maintenance and integrity of control structures.
12. Any slopes graded at 3:1 or greater shall be stabilized with erosion blankets to be staked into place in accordance with the manufactures requirements. Erosion blankets may also be required at the discretion of Town officials or Project Engineer. When stabilized blanket is utilized for channel stabilization, place all of the volume of seed mix prior to laying net, or as recommended by the manufacturer.
13. To prevent heavy construction equipment and trucks from tracking soil off-site, construct a pervious crushed stone pad. Locate and construct pads as detailed in these plans.
14. Contractor is responsible for controlling dust by sprinkling exposed soil areas periodically with water as required. Contractor to supply all equipment and water.
15. Contractor shall be responsible for construction inspections as per NYSDEC GP-0-15-002 and Town of Yorktown Code.

MAINTENANCE OF TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURES:

N.Y.S.D.E.C. GP-0-15-002 EXPOSURE RESTRICTIONS - States that any exposed earthwork shall be stabilized in accordance with the guidelines of this plan.

1. Trees and vegetation shall be protected at all times as shown on the detail drawing and as directed by the Engineer.
2. Care should be taken so as not to channel concentrated runoff through the areas of construction activity on the site.
3. Fill and site disturbances should not be created which causes water to pond off site or on adjacent properties.
4. Runoff from land disturbances shall not be discharged or have the potential to discharge off site without first being intercepted by a control structure, such as a sediment trap or silt fence. Sediment shall be removed before exceeding 50% of the retention structure's capacity.
5. For finished grading, adequate grade shall be provided so that water will not pond on lawns for more than 24 hours after rainfall, except in swale flow areas which may drain for as long as 48 hours after rainfall.
6. All swales and other areas of concentrated flow shall be properly stabilized with temporary control measures to prevent erosion and sediment travel. Surface flows over cut and fill areas shall be stabilized at all times.
7. All sites shall be stabilized with erosion control materials within 7 days of final grading.
8. Temporary sediment trapping devices shall be removed from the site within 30 days of final stabilization.

MAINTENANCE SCHEDULE:

	DAILY	WEEKLY	MONTHLY	AFTER RAINFALL	NECESSARY TO MAINTAIN FUNCTION	AFTER APPROVAL OF INSPECTOR
SILT FENCE	– – –	INSP.	INSP.	INSP.	CLEAN/ REPLACE	REMOVE
WHEEL CLEANER	CLEAN	– – – –	– – – –	– – – –	REPLACE	REMOVE
INLET PROTECTION	– – –	INSP.	INSP.	CLEAN	REPLACE	REMOVE

MAINTENANCE OF PERMANENT CONTROL STRUCTURES DURING CONSTRUCTION:

The stormwater management system and outlet structure shall be inspected on a regular basis and after every rainfall event. Sediment build up shall be removed from the inlet protection regularly to insure detention capacity and proper drainage. Outlet structure shall be free of obstructions. All piping and drain inlets shall be free of obstruction. Any sediment build up shall be removed.

MAINTENANCE OF CONTROLS AFTER CONSTRUCTION:

Controls (including respective outlet structures) should be inspected periodically for the first few months after construction and on an annual basis thereafter. They should also be inspected after major storm events.

DEBRIS AND LITTER REMOVAL:

Twice a year, inspect outlet structure and drain inlets for accumulated debris. Also, remove any accumulations during each mowing operation.

STRUCTURAL REPAIR/REPLACEMENT:

Outlet structure must be inspected twice a year for evidence of structural damage and repaired immediately.

EROSION CONTROL:

Unstable areas tributary to the basin shall immediately be stabilized with vegetation or other appropriate erosion control measures.

SEDIMENT REMOVAL:

Sediment should be removed after it has reached a maximum depth of five inches above the stormwater management system floor.

TOPSOIL:

Existing topsoil will be removed and stored in piles sufficiently as to avoid mixing with other excavation. Stockpiles shall be surrounded by erosion control as outlined on these plans. The furnishing of new topsoil shall be of a better or equal to the following criteria (SS713.01 NYSDOT):

1. The pH of the material shall be 5.5 to 7.6.
2. The organic content shall not be less than 2% or more than 70%.
3. Gradation:

SIEVE SIZE	% PASSING BY WGT.
2 INCH	100
1 INCH	85 TO 100
1/4 INCH	65 TO 100
NO. 200 MESH	20 TO 80

PERMANENT VEGETATIVE COVER:

1. Site preparation:
   - 1.1. Install erosion control measures.
   - 1.2. Scarify compacted soil areas.
   - 1.3. Lime as required to ph 6.5.
   - 1.4. Fertilize with 10-6-4 4 lbs/1,000 S.F.
   - 1.5. Incorporate amendments into soil with disc harrow.
2. Seed mixtures for use on swales and cut and fill areas.

MIXTURE		LBS./ACRE
ALT. A	KENTUCKY BLUE GRASS	20
	CREEPING RED FESCUE	28
	RYE GRASS OR REDTOP	5
ALT. B	CREEPING RED FESCUE	20
	REDTOP	2
	TALL FESCUE/SMOOTH BLOOMGRASS	20

3. SEEDING
   - 3.1. Prepare seed bed by raking to remove stones, twigs, roots and other foreign material.
   - 3.2. Apply soil amendments and integrate into soil.
   - 3.3. Apply seed uniformly by cyclone seeder culti-packer or hydro-seeder at rate indicated.
   - 3.4. Stabilize seeded areas in drainage swales.
   - 3.5. Irrigate to fully saturate soil layer, but not to dislodge planting soil.
   - 3.6. Seed between April 1st and May 15th or August 15th and October 15th.
   - 3.7. Seeding may occur May 15th and August 15th if adequate irrigation is provided.

TEMPORARY VEGETATIVE COVER:

SITE PREPARATION:

1. Install erosion control measures.
2. Scarify areas of compacted soil.
3. Fertilize with 10-10-10 at 400/acre.
4. Lime as required to ph 6.5.

SEED SPECIES:

MIXTURE	LBS./ACRE
Rapidly germinating annual ryegrass (or approved equal)	20
Perennial ryegrass	20
Cereal oats	36

SEEDING:
Same as permanent vegetative cover

CONSTRUCTION SEQUENCE:

General sequence: the general sequence applies to the start of all phases of the project. The requirements in such shall be applied as appropriate in that phase and shall be assumed in place prior to the start of the work outlined in the sequence for each phase.

1. Prior to the beginning of any site work the major features of the construction must be field staked by a licensed surveyor. These include the building, limits of disturbance, utility lines, and stormwater practices.
2. Prior to the start of the project, an on-site pre-construction meeting will be held. This will be attended by the project owner, the operator responsible for complying with the approved construction drawings including the erosion and sediment control (e&sc) plan and details, the design engineer, the engineer responsible for e&sc monitoring during construction, town representatives from the engineering department and code enforcement, and a representative from the NYC DEP. The DEP shall be notified 48 hrs prior to the start of the meeting.
3. Cut and clear trees within the phase limits as necessary for the areas to be disturbed.
4. Install all temporary erosion control measures as shown on the erosion and sediment control plan for the project's immediate disturbance areas. This shall include, but not limited to silt fence, stabilized construction entrances, construction fence, etc. This sequence must be followed to insure proper implementation of the erosion and sediment control plan (e&sc) and stormwater pollution prevention plan (swppp).
5. Timbered trees and woodchips shall be temporarily stored in the stockpile and/or staging area if necessary before being removed off-site. Woodchips may be used for mulch to stabilize disturbed areas. Woodchip mulch shall be applied at a minimum rate of 500 lbs. Per 1000 sf (2" thick minimum).
6. Remove existing vegetative cover, cut and clear trees, grub, remove stumps and other surface features in the limit of construction only. Any disturbance that results from tree clearing and grubbing shall be immediately stabilized with woodchips mulch, hydro-mulch, or straw and seed. Timbered trees, wood chips, and stumps shall be removed off-site unless otherwise directed. As stated woodchips may be stockpiled for use as stabilizing ground cover. These stockpiles shall be separate from soil stockpiles. Demolish and/or remove existing features, i.e.; fence, concrete slab, asphalt etc., and dispose of or stockpile as required by the owner. All construction debris shall be properly disposed of in accordance with all federal, state, and local requirements.

Standard sequence notes for building construction

1. The surveyor shall stake-out the proposed driveway centerlines and the limits of cut and fill
2. Implement the general sequence notes 1 through 6 where applicable prior to continuing.
3. Once the tree removal operation is complete strip the topsoil within the work boundary and place excavated topsoil within the identified stockpile locations. Any soils so deemed by the design or monitoring engineer shall be stockpiled for future use as landscaped area topsoil. Contractor shall take every precaution feasible to reduce the amount of disturbed/exposed soils during construction.
4. Any disturbed area that will not be further disturbed within seven (7) days shall be immediately stabilized with woodchips, hydro-mulch, or straw and seed.
5. Prior to starting the work install all erosion and sediment controls including the installation of the stabilized construction entrance.
6. Begin rough grading of driveways within work limits and adjacent areas. Slopes in excess of 3h:1v shall not be left exposed and must be stabilized.
7. Stake-out the location of utilities and utility structures. Begin installation of subsurface infiltration chambers.
8. Backfill as installation is complete and stabilize the area. If trenches are to be left open, place excavated material on the up-slope sides of the trench and protect and stabilize if it is to remain open for an extended period of seven (7) days or more.
9. Upon completion of the subsurface chambers, Place construction fencing around the system to prevent compaction during the remainder of construction.
10. Begin installation of proposed bypass and outlet structures. Install storm sewer piping, catch basins and manholes, working downstream to upstream. The upstream drainage structure shall be blocked so as to not allow sediment laden water from reaching the subsurface chambers. During the installation of catch basins, install inlet protection as per e&sc plan to assure that sediment laden water will not enter the storm system. Once the final grade above the system is achieved, put into place the final topsoil cover, seed mix, and erosion control blanket, or hydro-mulch. Refer to the landscape plan for the seed mix requirements.

Note: no stormwater is permitted to enter the infiltration system from the upstream conveyance system and shall be blocked until the completion and stabilization of all phases tributary to the basin. An area shall be considered to have achieved final stabilization when it has a minimum uniform 80% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.

11. Begin excavation of the building foundation for the building and adjacent areas.
12. Install or check condition of all temporary erosion control measures as shown on the erosion and sediment control plan.
13. Begin construction of the foundation. Upon completion and after proper curing time is achieved, backfill the foundation and bring site to rough grade. Areas which are to remain undisturbed for more than seven (7) days shall be stabilized with temporary seeding or mulch.
14. Proceed with the construction of the buildings. This includes the building structure itself, retaining walls, and rough grades. At any point during this begin installation of the utilities including the water and sewer connections, power utilities.
15. Once the utilities have been brought up to the building foundation, grade and install the base course for the driveways and parking areas.
16. Complete construction of the buildings and remaining retaining walls.
17. Stake out and install curbing as per plan. Once curbing is completed around catch basins, re-install inlet protection within catch basins. As curbing is complete, backfill with topsoil. Areas that are filled with topsoil are to be raked, seeded, and hay mulched.
18. Upon completion of the majority of the infrastructure, install pavement binder course to the thickness and elevation as per the construction plans.
19. As work is at the completion stage install final asphalt surface in the locations shown.
20. Install hardscape such as patios, walks steps etc., and final vegetation including sod and landscaping. Refer to landscape plans for location and identification of ground cover and plantings. Clear site of debris and all unwanted materials. Disposal shall be in accordance with all federal, state, and local requirements.
21. During the final phase of building construction, finish grade, topsoil, rake, and seed all areas as required. Where required or recommended, hydro-mulch or install erosion control blankets.
22. Upon completion of work, the contractor shall be required to stabilize disturbed soils in the event the disturbed area will remain not worked for greater than seven (7) days, at the direction of the engineer of record or permitting entity inspector, and when significant precipitation is in the immediate forecast. All disturbed areas shall be temporarily stabilized with hydro-mulch or where appropriate woodchips. It is recommended that any grading that is at the finish stage will receive no further disturbance and that permanent stabilization such as topsoil, seed, mulching or blankets as per the plan be installed.

Final site stabilization and completion of new construction:

23. Upon completion of all work, the site shall be inspected by the supervising engineer and town inspector to determine completion of all work and permanent stabilization of the site.
24. Any areas deemed incomplete or not properly stabilized shall be done so to the satisfaction to the supervising engineer and town inspector.
25. Once the site is deemed adequately stable the temporary erosion and sediment control measures can be removed. At that time if deemed appropriate drainage structures upstream from the subsurface stormwater management systems shall be cleaned of sediment and debris. They can then be unblocked to allow for flow of collected surface runoff.

Contact information during and after construction:

Terrence Murphy
1672 Morningview Drive
Yorktown, NY 10598
914-224-8348

Winter Stabilization Notes:

If construction activities are expected to extend into or occur during the winter season the contractor shall anticipate proper stabilization and sequencing. Construction shall be sequenced such that wherever possible areas of disturbance that can be completed and permanently stabilized shall be done by applying and establishing permanent vegetative cover before the first frost. Areas subject to temporary disturbance that will not be worked for an extended period of time shall be treated with temporary seed, mulch, and/or erosion blankets.

OWNER / OPERATOR CERTIFICATION

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

Name (please print): _____

Title: _____

Date: _____

Address: _____

Phone: _____

E-mail: _____

Signature: _____

POST CONSTRUCTION MAINTENANCE SCHEDULE:

Control to be Inspected	Inspection Frequency	Maintenance Threshold Criteria	Maintenance Procedure
Drain Inlets	Quarterly	3" + Accumulated Sediment	Remove debris and sediment.
Infiltration Chambers	Bi-annually	3" + Accumulated Sediment	JetVac debris and sediment
Downstream Defender	Bi-annually	18" + Accumulated Sediment	Vaccum debris and sediment

CONTRACTOR CERTIFICATION STATEMENT

Certification Statement - All contractors and subcontractors as identified in a SWPPP, by the Owner or Operator, in accordance with Part III.A.5 of the SPDES General Permit for Stormwater Runoff from Construction Activity, GP-0-15-002, dated January 29, 2015, Page 10 of 40, shall sign a copy of the following Certification Statement before undertaking any construction activity at the Site identified in the SWPPP:

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the Qualified Inspector during a site inspection. I also understand that the Owner or Operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharge from Construction Activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Individual Contractor: _____

Name and Title (please print): _____

Signature of Contractor: _____

Company / Contracting Firm: _____

Name of Company: _____

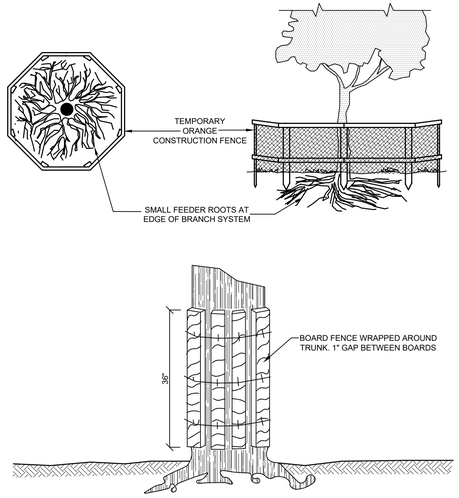
Address of Company: _____

Telephone Number / Cell Number: _____

Site Information: _____

Address of Site: _____

Today's Date: _____

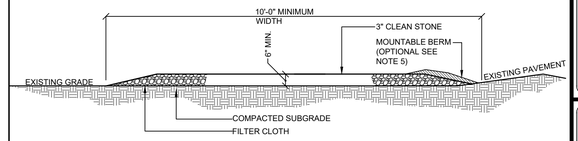


SYMBOL

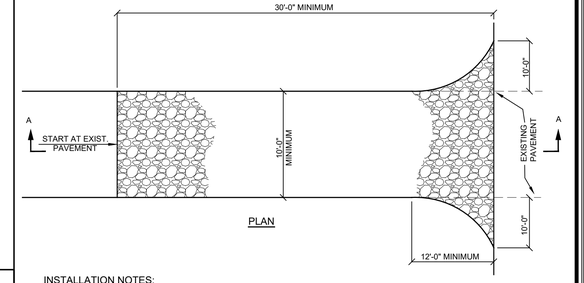
NOTES:
1. Contractor shall use the tree trunk armor detail for isolated trees that require protection.
2. As an alternate, the contractor may protect trees in the vicinity of regular heavy traffic / construction areas or clusters of trees to be protected as per the construction fence detail.

E-1 TREE PROTECTION DETAIL

NOT TO SCALE



SECTION A-A



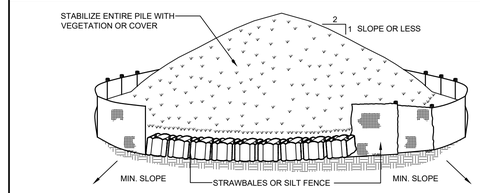
PLAN

INSTALLATION NOTES:
1. Stone size - use 3" min. 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 - 10 foot minimum, but not less than the full width at points where ingress or egress occur. 24 ft if single entrance to site.
5. Surface water - all surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
6. 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 cleanouts of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right of way must be removed immediately.
7. 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.
8. Periodic inspection and needed maintenance shall be provided after each rain

SYMBOL

E-4 STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



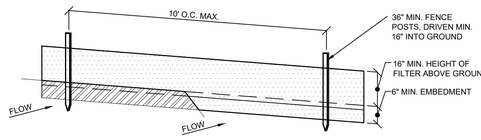
NOTES:
1. Area chosen for stockpiling operations shall be dry and stable.
2. Maximum slope of stockpile shall be 1:2.
3. Upon completion of soil stockpiling, each pile shall be surrounded with either silt fencing or strawbales, then stabilized with vegetation or covered.
4. See detail for installation of silt fence.

SYMBOL

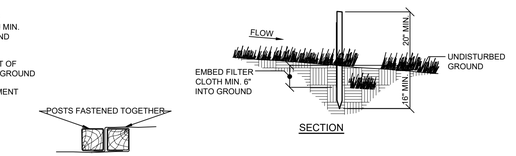
SS

E-5 SOIL STOCKPILE DETAIL

NOT TO SCALE



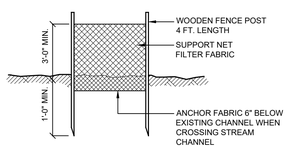
PERSPECTIVE VIEW



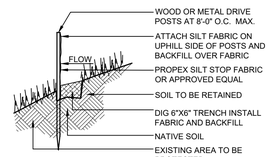
SECTION

PLAN VIEW: JOINING SECTIONS

NOTES:
1. Filter cloth to be fastened securely to post: steel either t or u type or 2" hardwood posts at top and mid section.
2. When two sections of filter cloth adjoin each other they shall be overlapped by 6 inches and folded. Filter cloth shall be mirafi 100x, stabilinka t140n or approved equal
3. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.
4. Excavate 4 inch trench along the lower perimeter of the site.
5. Unroll a section at a time and position the post against the back (downstream) wall of the trench (net side away from direction of flow).
6. Drive the post into the ground until the netting is approximately 2 inches from the trench bottom.
7. 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.
8. Join sections as shown above.



ELEVATION



SECTION

SYMBOL

E-3 SILT FENCE DETAIL

NOT TO SCALE

Site Design Consultants
Civil Engineers • Land Planners
251-F Underhill Avenue, Yorktown Heights, NY 10598
(914) 962-4488 - Fax: (914) 962-7386
www.sitedesignconsultants.com

PROJECT # 19-10

Engineer: Joseph C. Rina, P.E. NYS Lic. No. 64431

Revisions:

No.	Date	Comments
1	6/25/20	Town Comments
2	8/25/20	Town Comments

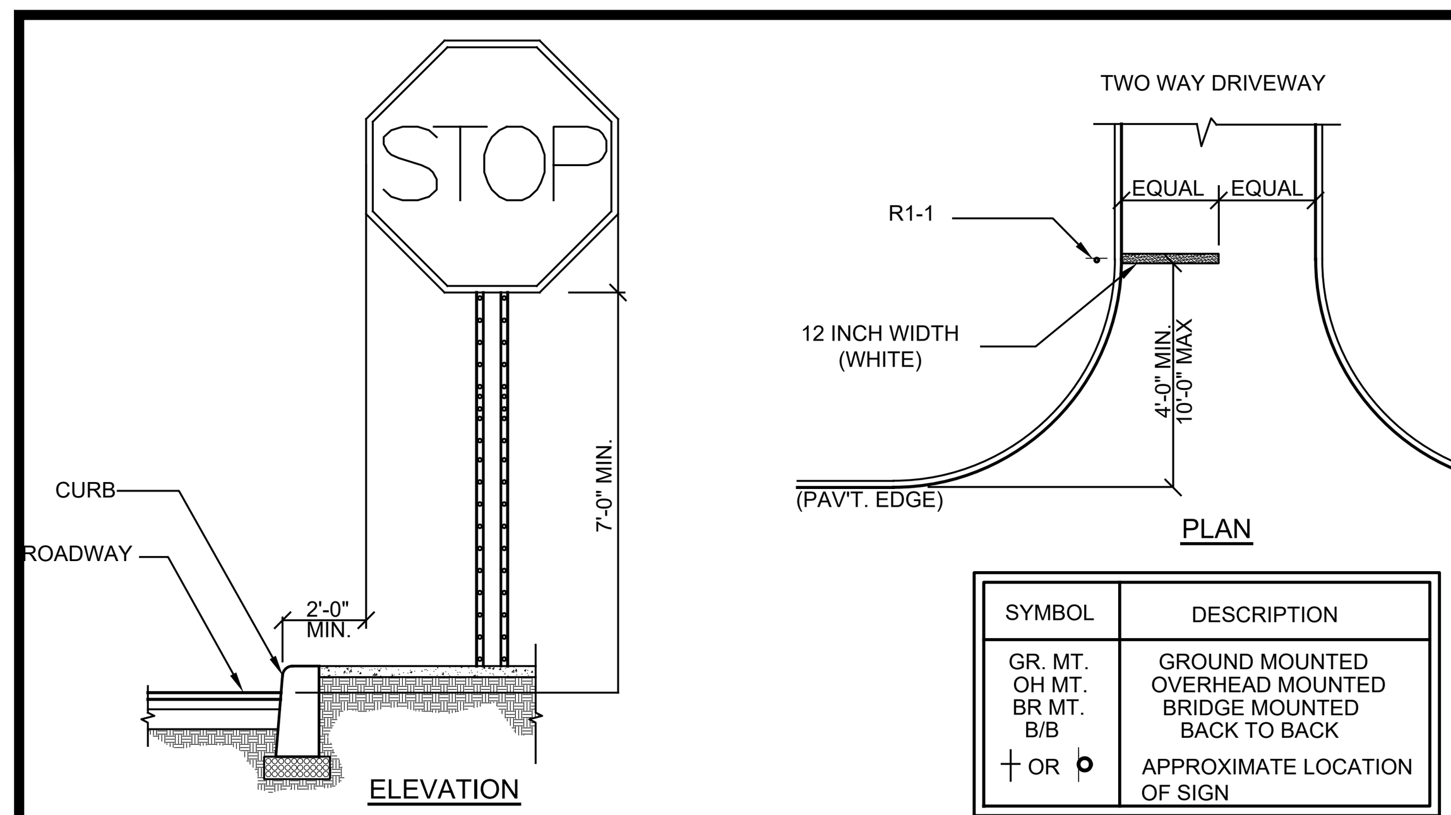
SCALE: NTS
DRAWN BY: TK
DATE: 3/14/20

E&SC NOTES & DETAILS

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

Sheet 8 of 12

F:\2019\19-10 NANTUCKET SOUND LLC - MURPHY\ENGINEERING\CAD\C3D-19-10 NANTUCKET SOUND LLC - MURPHY\DWG\19-10 DETAILS 8-25-20.DWG



SYMBOL	DESCRIPTION
GR. MT.	GROUND MOUNTED
OH MT.	OVERHEAD MOUNTED
BR MT.	BRIDGE MOUNTED
B/B	BACK TO BACK
OR	APPROXIMATE LOCATION OF SIGN

TYPICAL INSTALLATION GUIDELINES

SIGN	M.U.T.C.D. NUMBER	SIZE OF SIGN	TYPE OF MOUNT
STOP	R1-1	18" X 18"	GR. MT.
RESERVED PARKING	R7-8	12" X 18"	GR. MT.

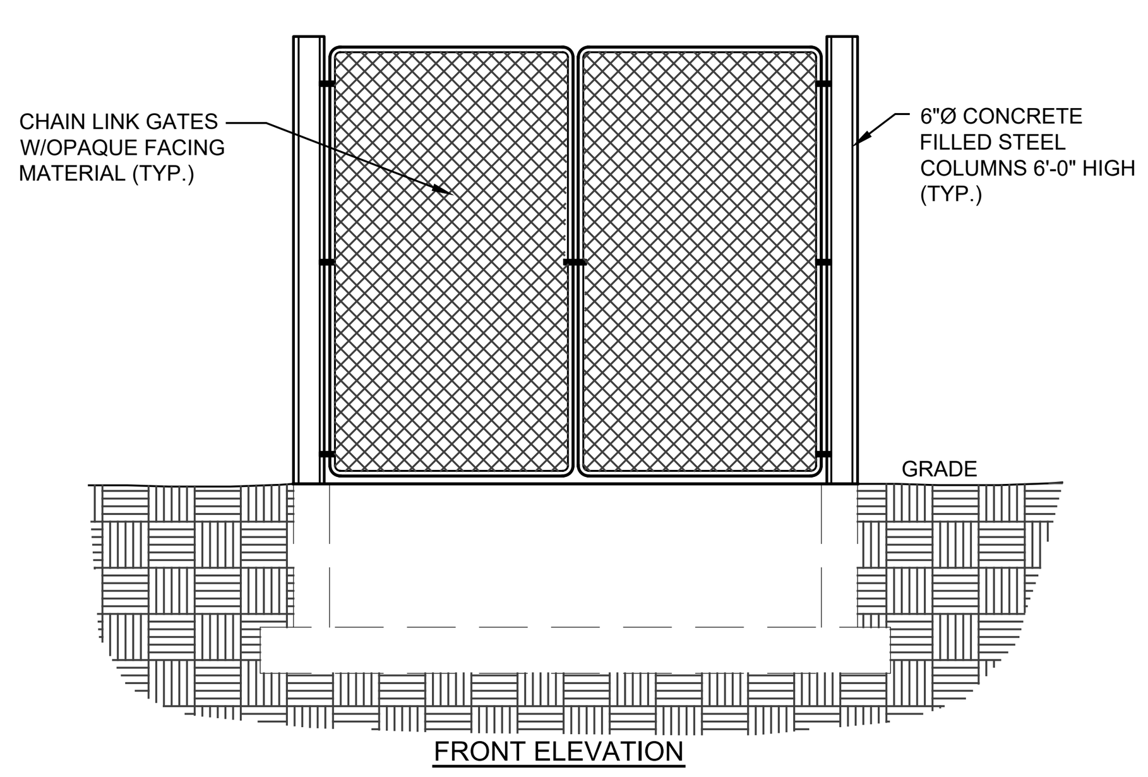
SIGN	M.U.T.C.D. NUMBER	SIZE OF SIGN	TYPE OF MOUNT
NO PARKING ANY TIME	P1-2 (SEE NOTE 4)	12" X 18"	GR. MT.
NO PARKING FIRE ZONE	R7-6	12" X 18"	GR. MT.

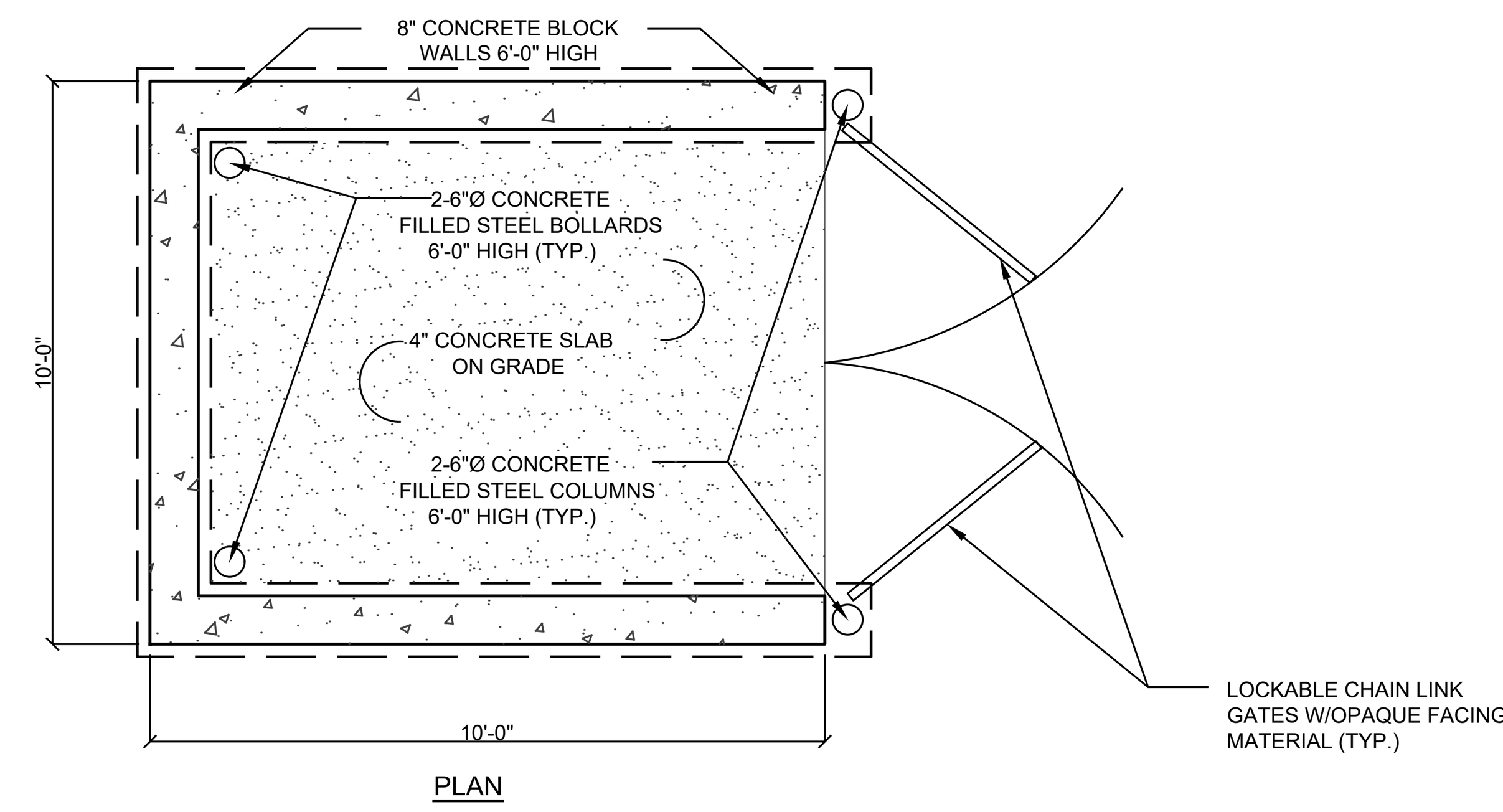
GENERAL NOTES:
1. All signage shall be in accordance with the latest edition of the national MUTCD and the N.Y.S Supplement (MUTCD), September 2007, including the following:
   A. Letter size and series
   B. Legend and background color
   C. Reflectivity
   D. Size of sign
2. The type of characters as specified in the standard specifications shall be as follows:

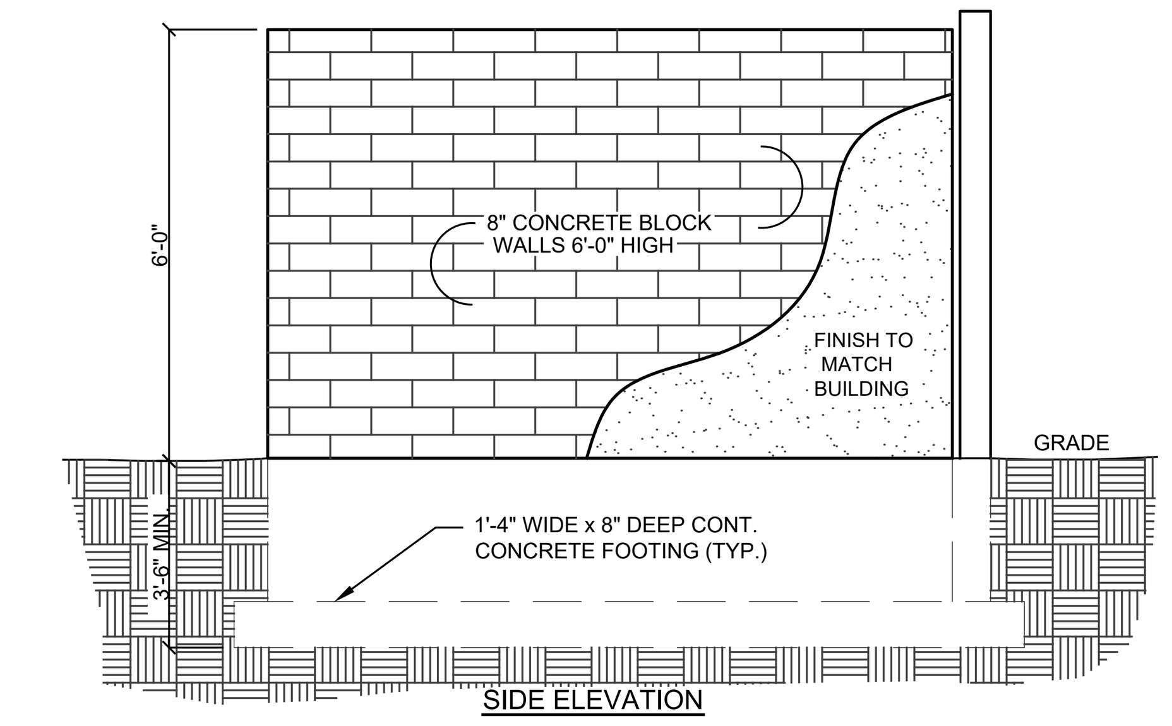
MUTCD CODE LETTER	TYPE OF CHARACTER
G.I.	TYPE IV
R.P.W.M.	TYPE IV OR V.

3. Sign locations as shown on plans are approximate. The Contractor shall relocate existing signs and install new signs in accordance with the MUTCD, latest edition. The Contractor shall contact the Town Engineer to discuss/resolve problem areas.
4. Except where otherwise specified, parking signs shall be placed facing approaching traffic at an angle of between 30 and 45 degrees with the line of traffic flow. Parking signs shall be placed at each end of a regulation (single-headed arrows) and, within the regulation (double-headed arrows), at intervals not to exceed 200 ft
5. Where new signs are installed the Contractor shall affix a label to the back of the sign panel. This label will show the date of installation and identification numbers.
6. Placement of W3-17 sign is prescribed in the General Municipal Law.

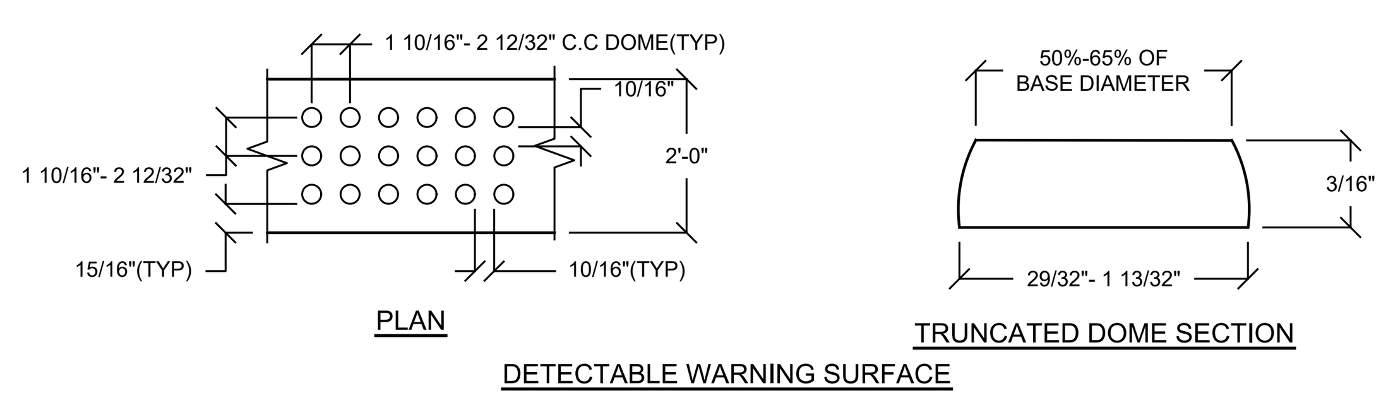
R-1 TRAFFIC SIGN DETAIL
NOT TO SCALE

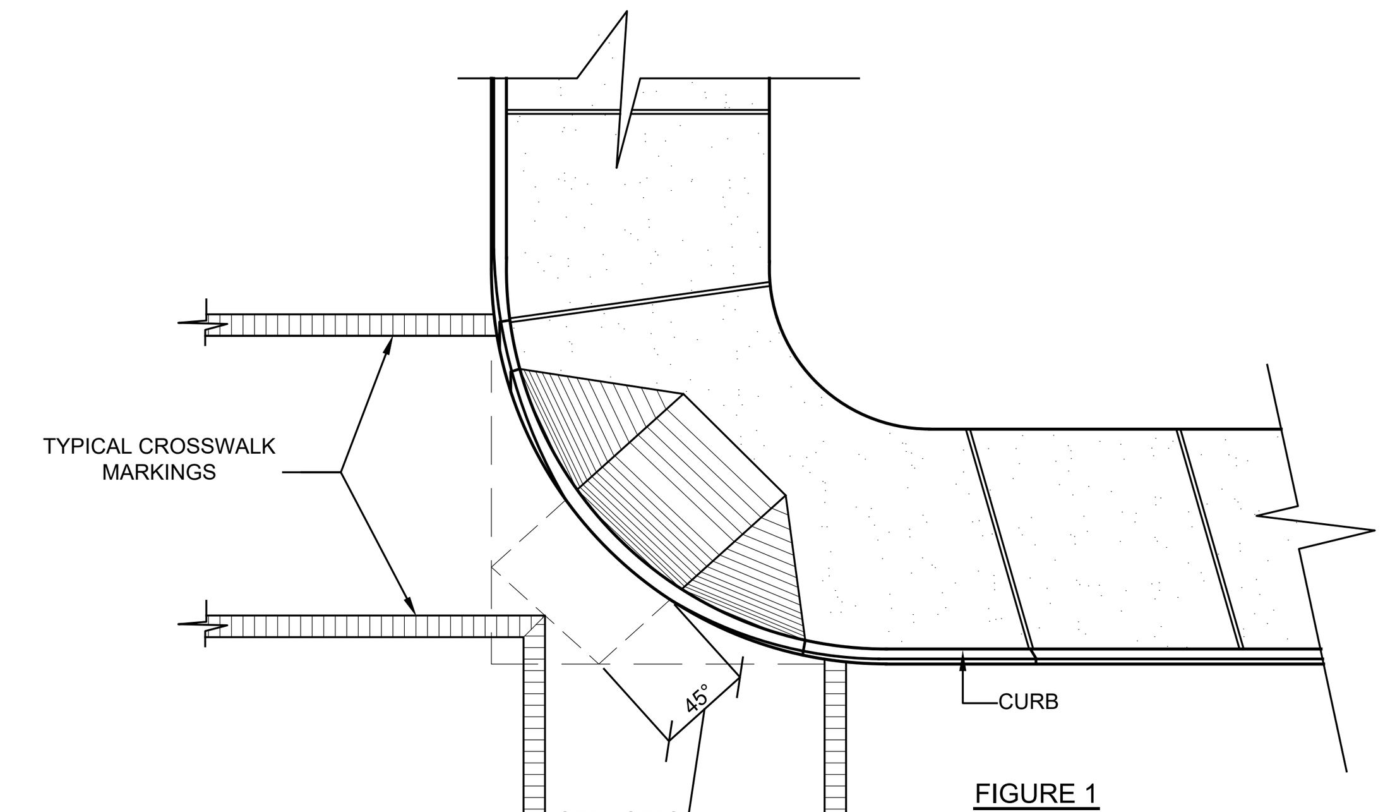






F-1 TRASH ENCLOSURE
NOT TO SCALE





NOTES:

GENERAL:
1. Sidewalk curb ramp type and location are as shown on the plans or as directed.
2. All sidewalk curb ramp types may be used as straight or curved curb sections.
3. Sidewalk curb ramp types may be different at each location within an intersection.

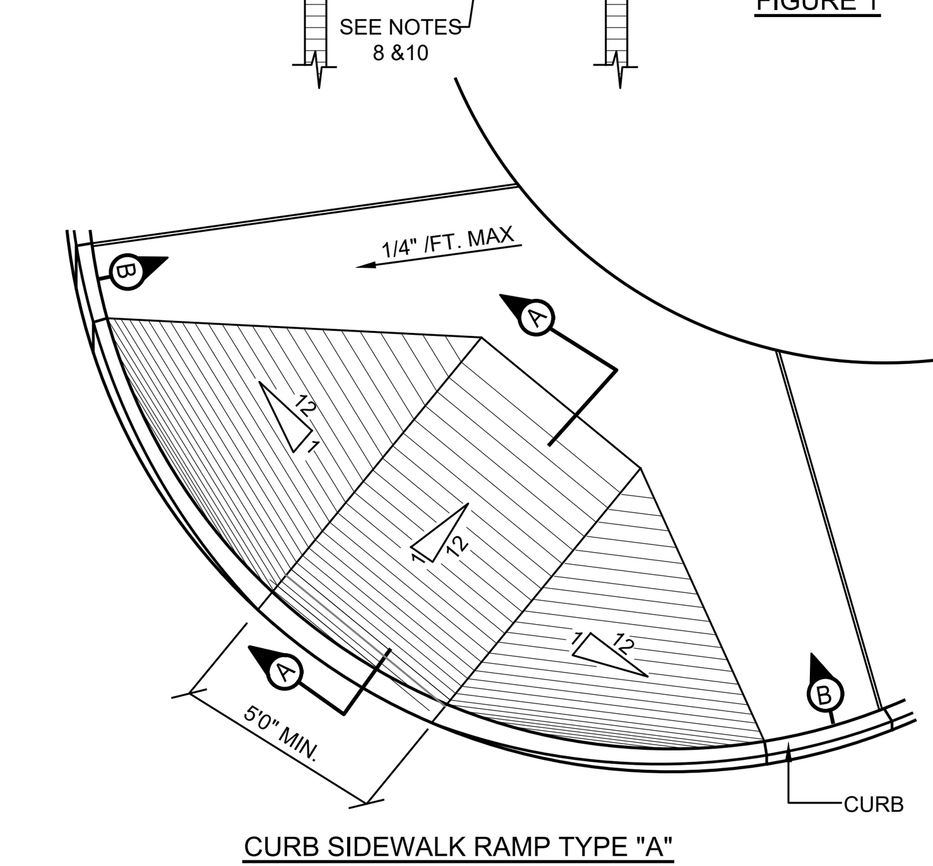
SIDEWALK CURB RAMP CRITERIA:
4. The maximum slope of a sidewalk curb ramp shall be 1:12.
5. The maximum width of a sidewalk curb ramp shall be five feet. Exclusive of flared sides.
6. All sidewalk curb ramps shall have flush, smooth transitions to the adjacent street or highway surface.

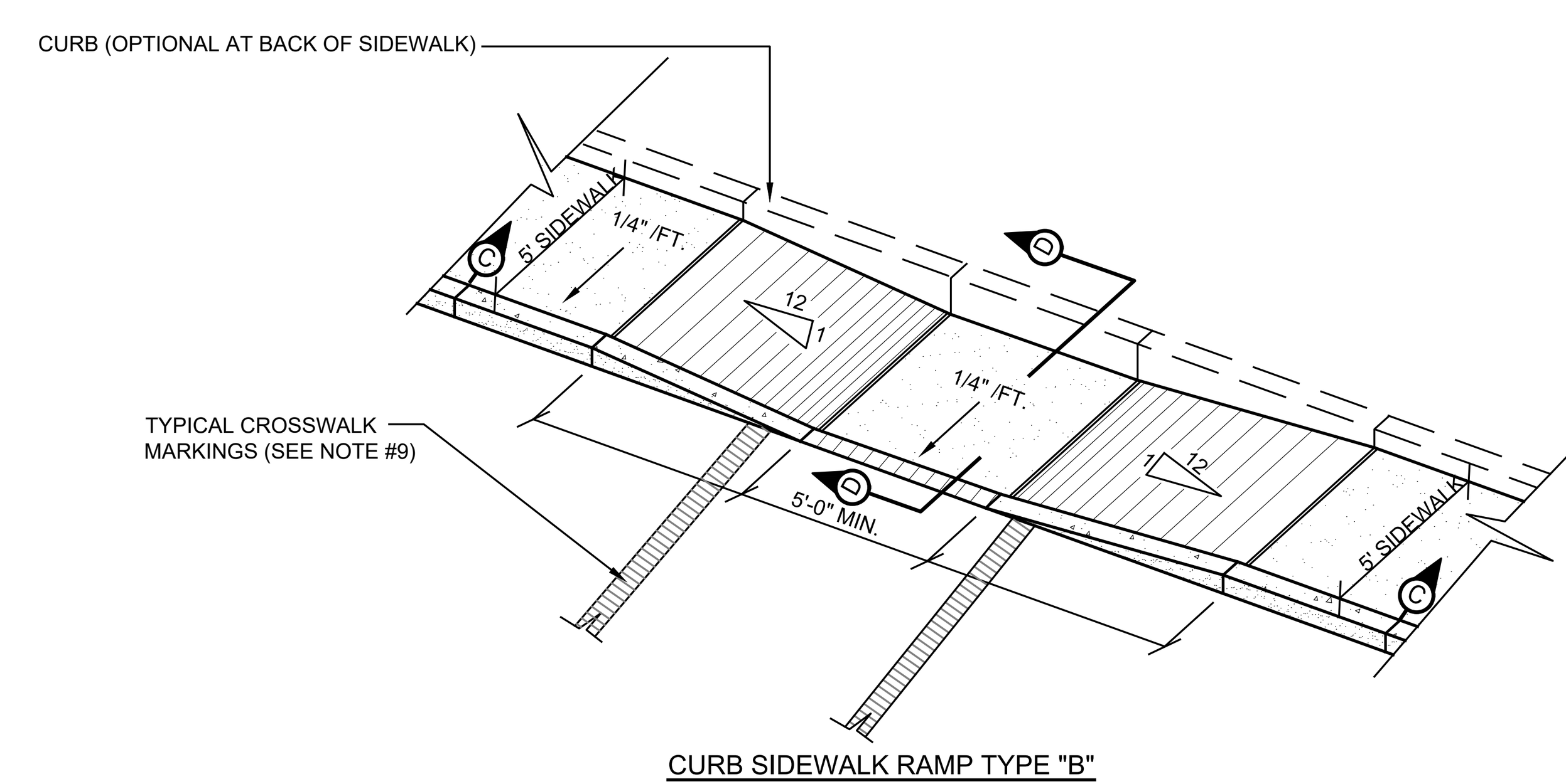
SURFACE FINISH:
7. The surface of all sidewalk curb ramps shall be stable, firm, and slip resistant (E.G. A coarse broom finish perpendicular to the ramp slope is acceptable on cement concrete curb ramps.)
8. All proposed sidewalk curb ramps shall have a detectable warning surface installed from the back of the curb for a distance of 2 feet in the direction of travel on the ramp and extending the full width of the ramp, excluding the ramp sides or flares. The detectable warning surface shall comply with the requirements of section 4.29.2 of the Americans with Disabilities Act accessibility guidelines (ADAAG).

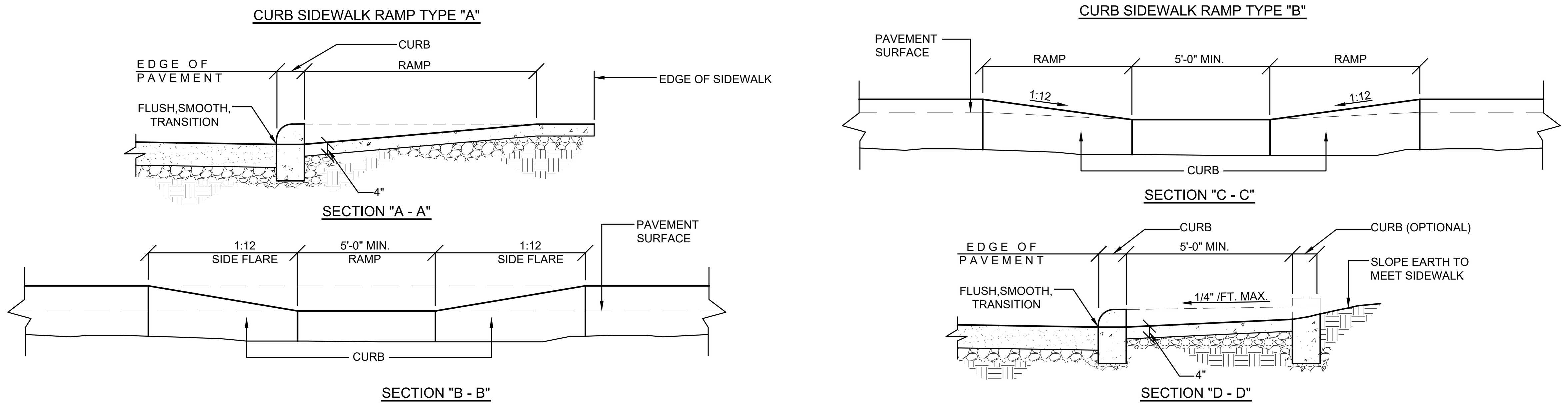
SIDEWALK CURB RAMP PLACEMENT:
9. At a corner, where the curb radius is 25-feet or less, a single ramp (either type a or b) located diagonally can often serve crosswalks in two directions. However, a single ramp shall only be used where there is a minimum clear space of 48" falling entirely within the projection of the intersection curbs (see figure 1). Where the radius exceeds 25' or the minimum 48" clear space is not achievable, then separate ramps should be provided for each crosswalk.

PAVEMENT MARKINGS AT CROSSWALKS:
10. Sidewalk curb ramps at marked crossings shall be wholly contained within the markings excluding any flared sides.
11. At a corner where a single ramp (either type a or b; located diagonally serves two crosswalks, this shall be a 48" minimum clear space at the ramp bottom wholly contained within the intersection crosswalk markings (see figure 1).
12. Where stop lines are necessary, they shall be located in advance of sidewalk curb ramps.

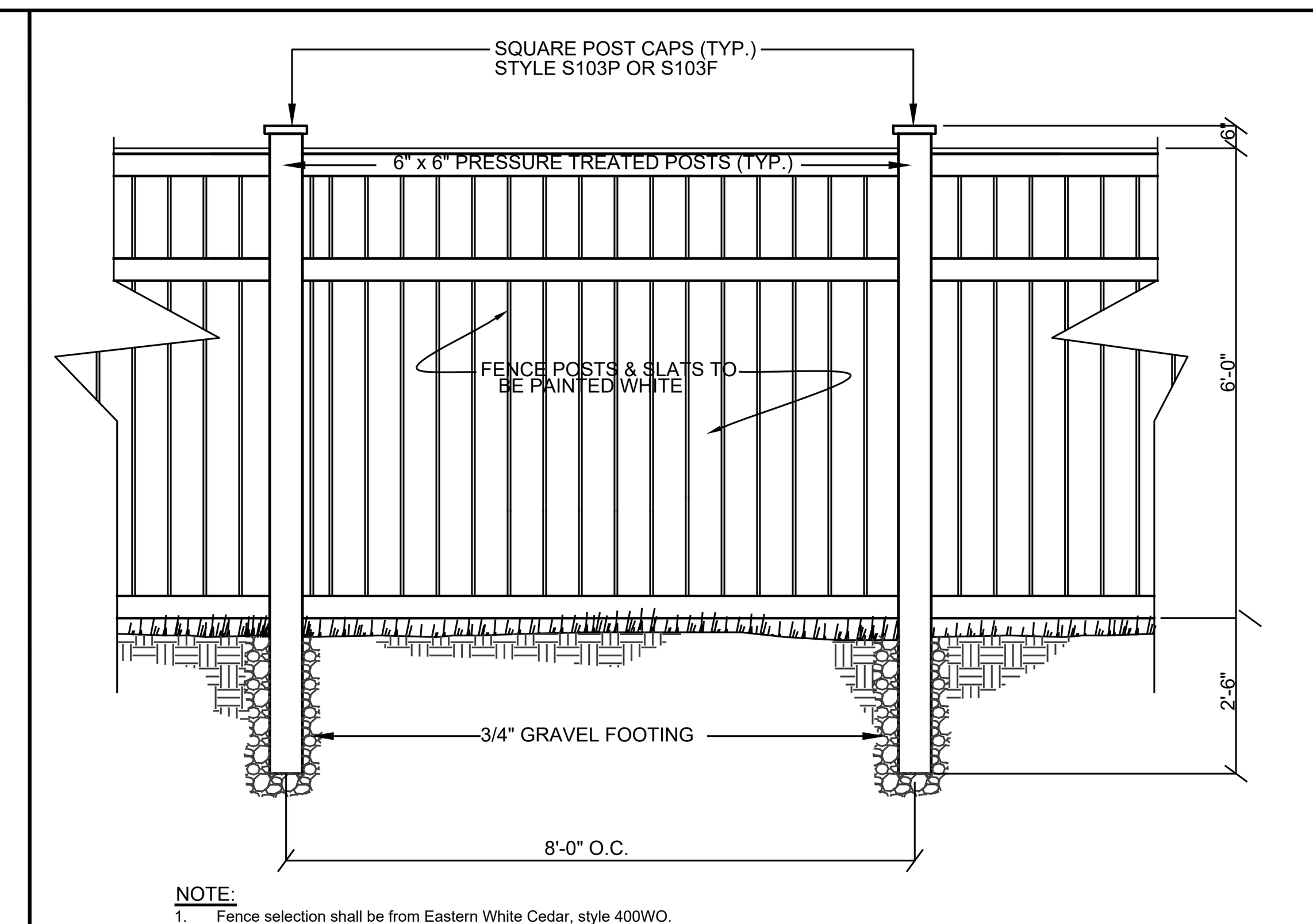
UTILITIES - DRAINAGE INLETS OR GRATES:
13. Where feasible, provide for drainage inlets or grates immediately upstream from the curb ramps. Reticuline or rectangular drainage grates are to be used in the area of curb ramps.
14. Do not place signal poles, sign posts, utility poles, fire hydrants, etc., within the ramp or side flare areas.





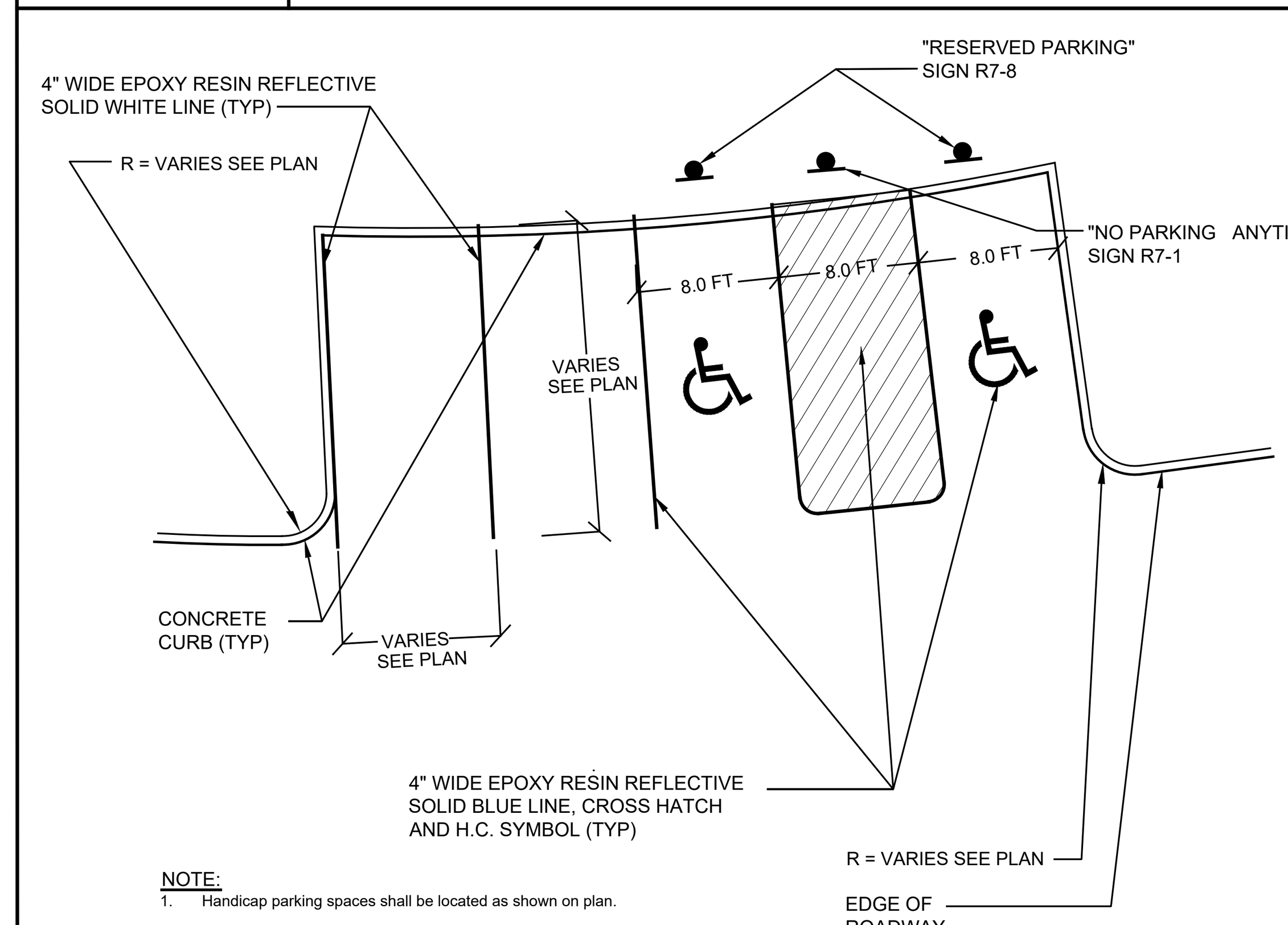


R-4 SIDEWALK CURB-RAMP DETAIL
NOT TO SCALE



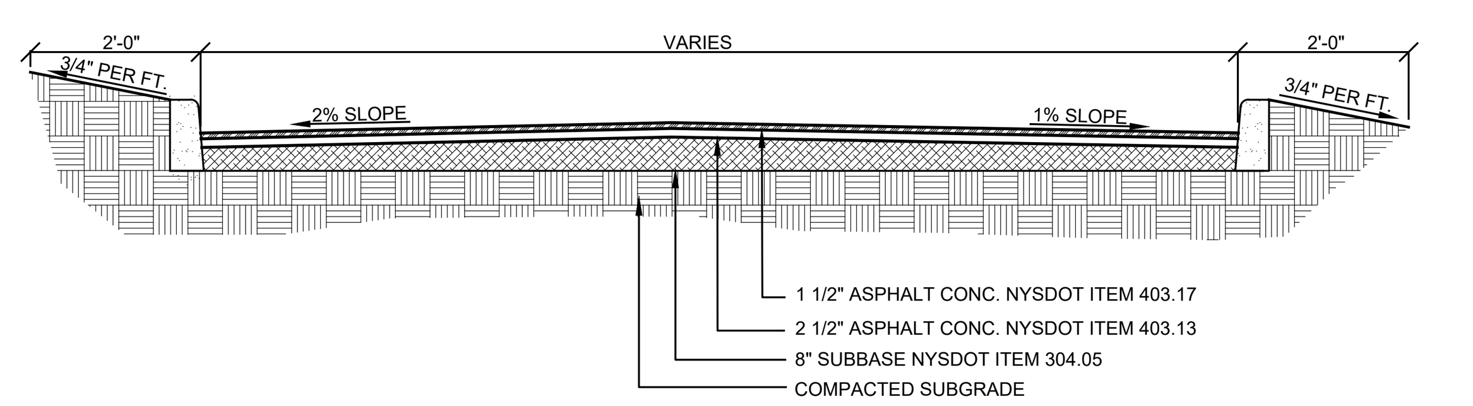
NOTE:
1. Fence selection shall be from Eastern White Cedar, style 400WO.

F-2 FENCE SCREENING DETAIL
NOT TO SCALE

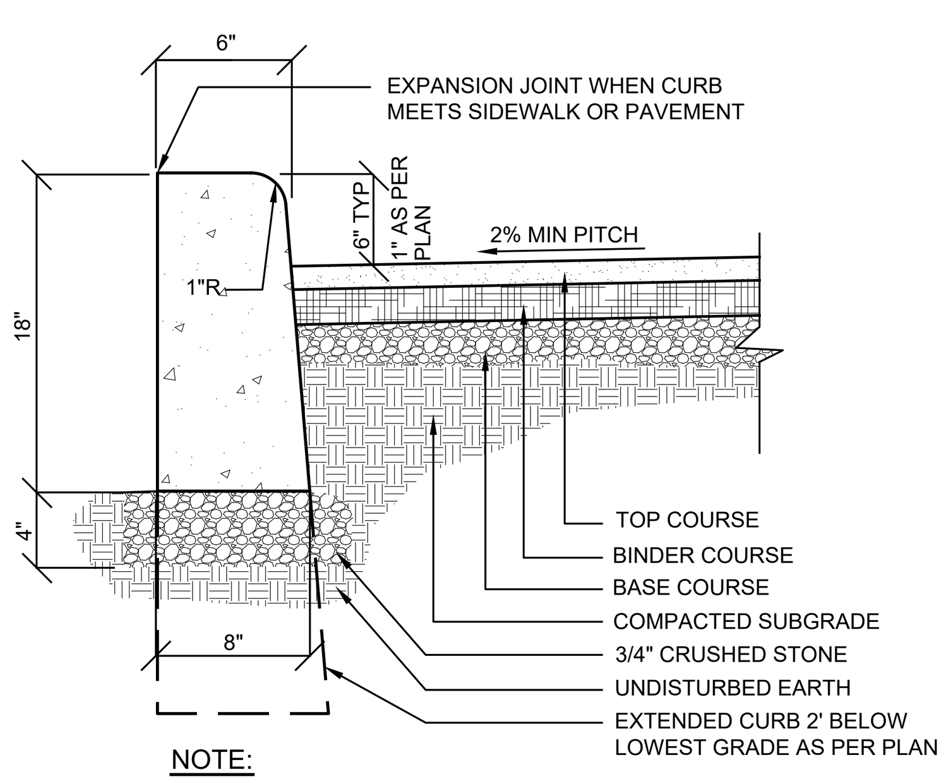


NOTE:
1. Handicap parking spaces shall be located as shown on plan.

R-5 TYPICAL PARKING STALL LAYOUT
NOT TO SCALE



R-2 TYPICAL DRIVEWAY AND PARKING LOT SECTION
NOT TO SCALE



NOTE:
1. Provide 1/2" expansion joint in concrete curb every ten feet.
2. Construct curb with class A concrete (3000 psi).
3. For use within the site.

R-3 CONCRETE CURB DETAIL
NOT TO SCALE

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PROJECT # 19-10

Engineer: Joseph C. Riina, P.E. NYS Lic. No. 66431

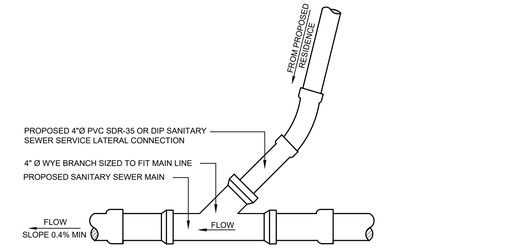
No.	Date	Comments:
1	6/2/20	Plan Revisions
2	8/25/20	Town Comments

SCALE: NTS
DRAWN BY: TK
DATE: 3/14/20

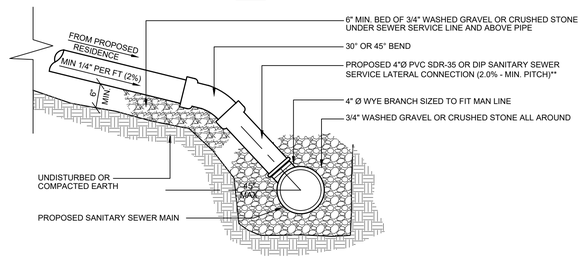
SITE DETAILS

SITE PLAN PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

Sheet 9 of 12



PLAN



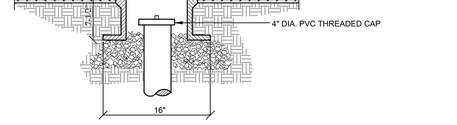
SECTION

NOTES:

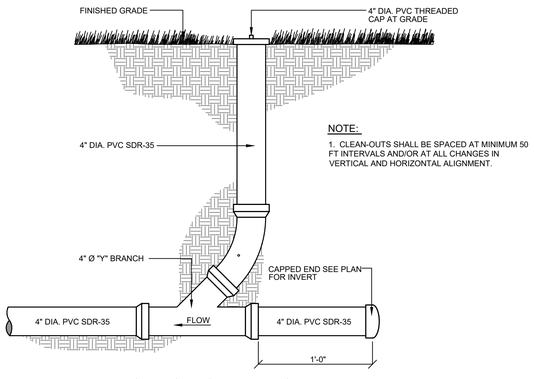
1. PROVIDE CLEANOUT AS REQUIRED (SEE DETAIL).
2. CONTRACTOR TO FOLLOW MANUFACTURE'S INSTALLATION GUIDE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PERSONS DURING CONSTRUCTION FROM HARM IN ACCORDANCE WITH ALL APPLICABLE CODES, RULES & REGULATIONS, STANDARDS AND GOOD PRACTICES.
4. CONTRACTOR TO NOTIFY TOWN OF CORTLANDT 48 HOURS IN ADVANCE FOR TRENCH INSPECTION.
5. ALL FITTINGS TO BE WHITE H.D. AS MANUFACTURED BY GPK PRODUCTS INC. OR PROVED EQUAL.
6. FOR BACKFILLING REQUIREMENTS OF SEWER SERVICE SEE "SEWER MAIN/SEWER SERVICE TRENCH DETAIL".
7. **LOT 6-USE 6" PVC SDR 23 (1.0% MIN. PITCH)

S-1 SEWER CONNECTION TO PROPOSED MAIN-LINE DETAIL

NOT TO SCALE



ACCESS FRAME & COVER DETAIL FOR CLEANOUT UNDER PAVEMENT



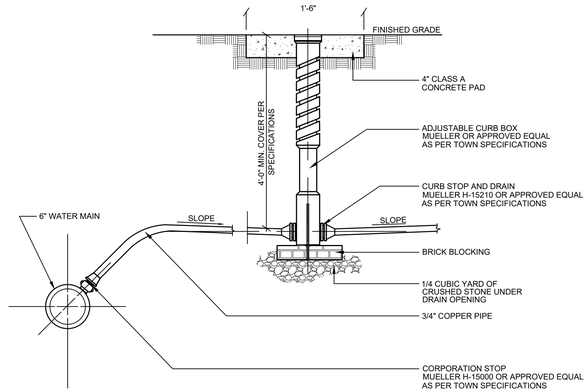
NOTE:

1. CLEAN-OUTS SHALL BE SPACED AT MINIMUM 50 FT INTERVALS AND/OR AT ALL CHANGES IN VERTICAL AND HORIZONTAL ALIGNMENT.

SEWER CLEANOUT DETAIL AT GRADE

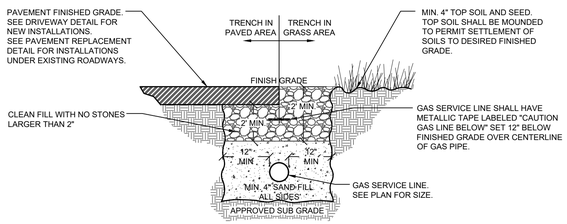
S-2 GRAVITY SEWER CLEAN-OUT DETAIL

NOT TO SCALE



W-1 WATER SERVICE CONNECTION DETAIL

NOT TO SCALE

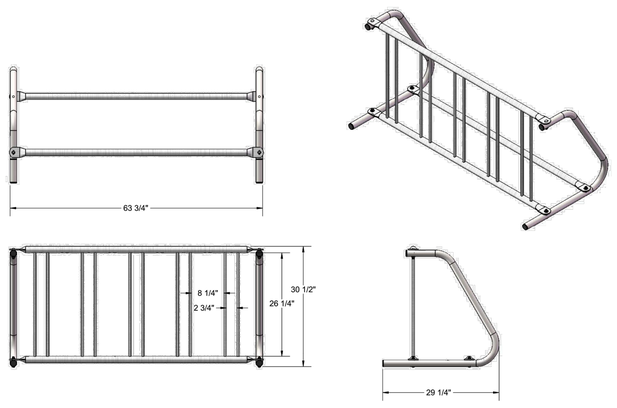


NOTES:

1. Contractor shall coordinate installation with utility owner. All materials and installation procedures shall meet or exceed minimal requirements of the utility owner.
2. Pipe shall be laid and connected in the bedding which shall consist of:
   A. Compacted existing subsoil when laid above ground water or;
   B. 3/4" crushed stone when laid below ground water.
3. If subsoil is determined to be unsuitable by the engineer, all unsuitable material shall be removed for at least 2'-6" below the pipe invert or twice the pipe diameter, whichever is greater, and replaced with compacted bedding material.

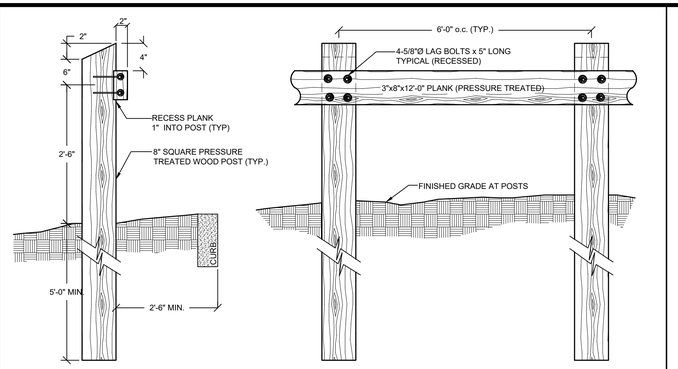
G-1 GAS SERVICE BEDDING DETAIL

NOT TO SCALE

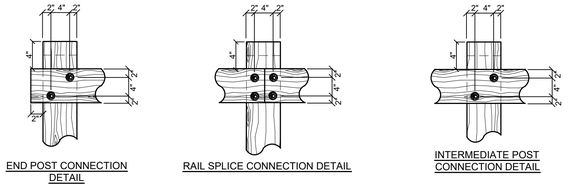


R-7 BIKE RACK DETAIL

NOT TO SCALE

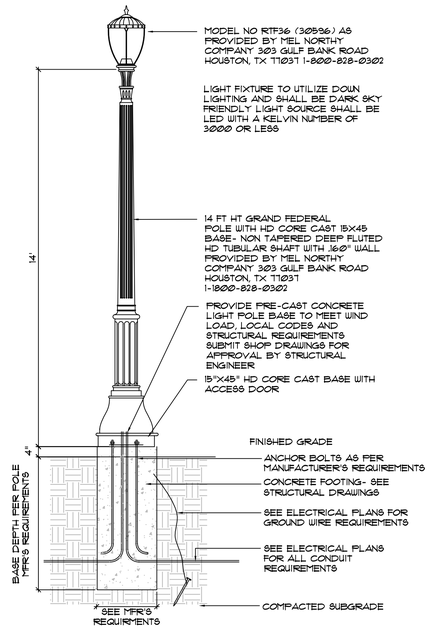


SECTION ELEVATION



R-6 TIMBER GUARDRAIL DETAIL

NOT TO SCALE



L-1 LIGHT POLE DETAIL

NOT TO SCALE

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(914) 962-4488 - Fax: (914) 962-7386
www.sitedesignconsultants.com

PROJECT # 19-10

Engineer: JOSEPH C. RIINA — STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER

Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No:	Date	Comments:
1	6/17/20	Planning Board Comments
2	8/25/20	Town Comments

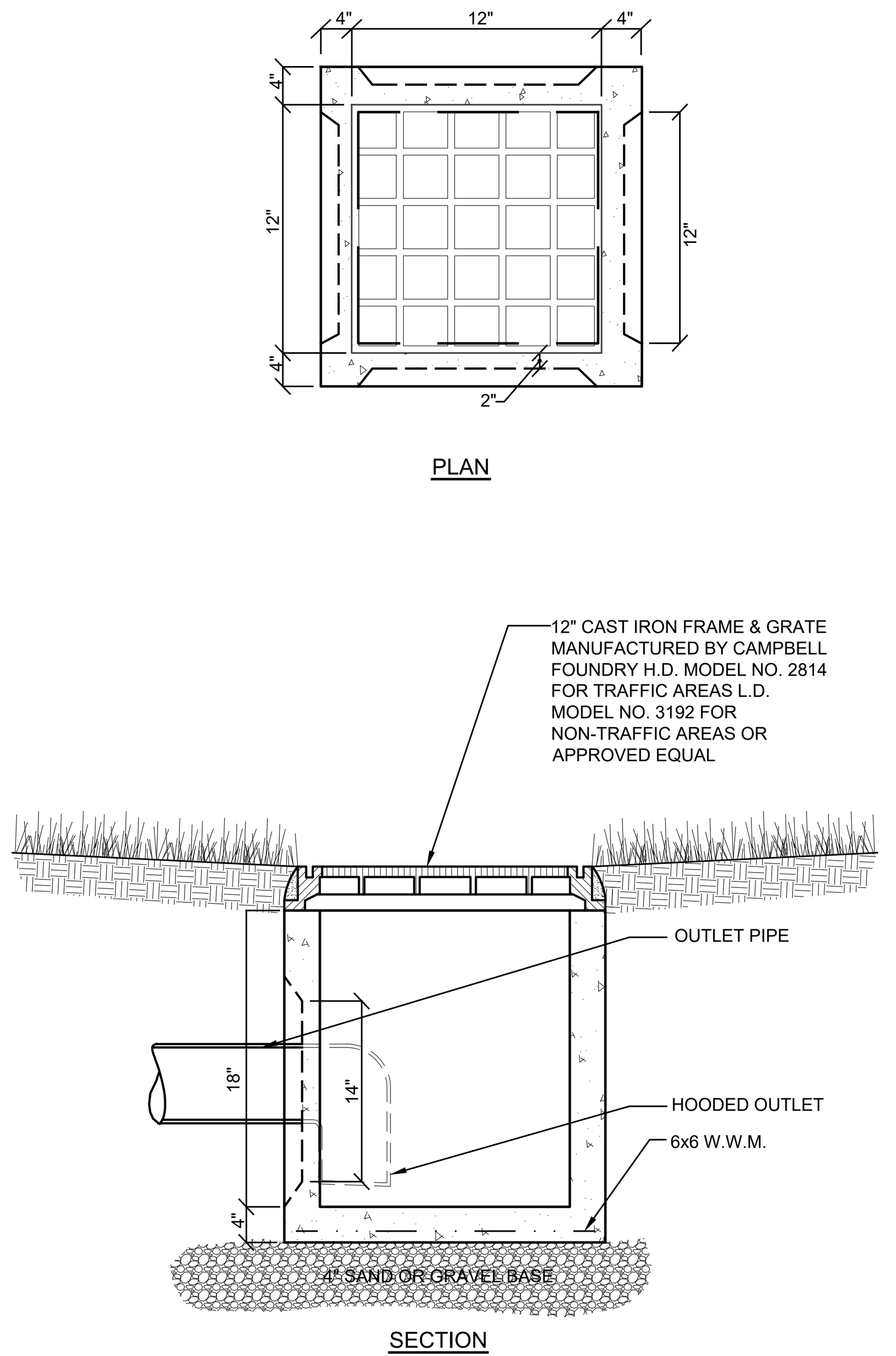
SCALE: NTS
DRAWN BY: TK
DATE: 3/14/20

SITE DETAILS 2

SITE PLAN
PREPARED FOR
NANTUCKET SOUND SONS, LLC.
KEAR STREET
Town of Yorktown Westchester County, NY

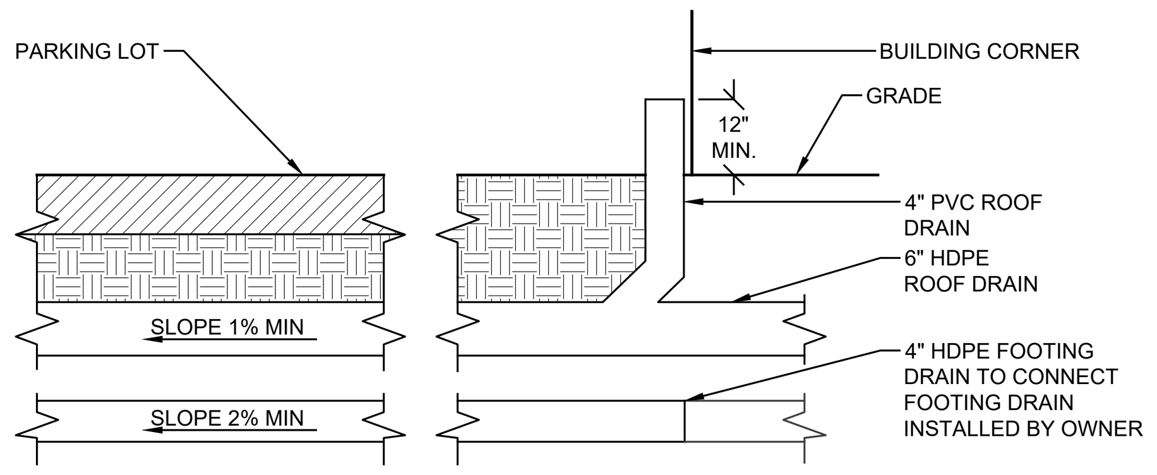
Sheet 10 of 12

F:\2019\19-10 NANTUCKET SOUND LLC - MURPHY\ENGINEERING\CAD\C3D-19-10 NANTUCKET SOUND LLC - MURPHY\DWG\19-10 DETAILS 8-25-20.DWG



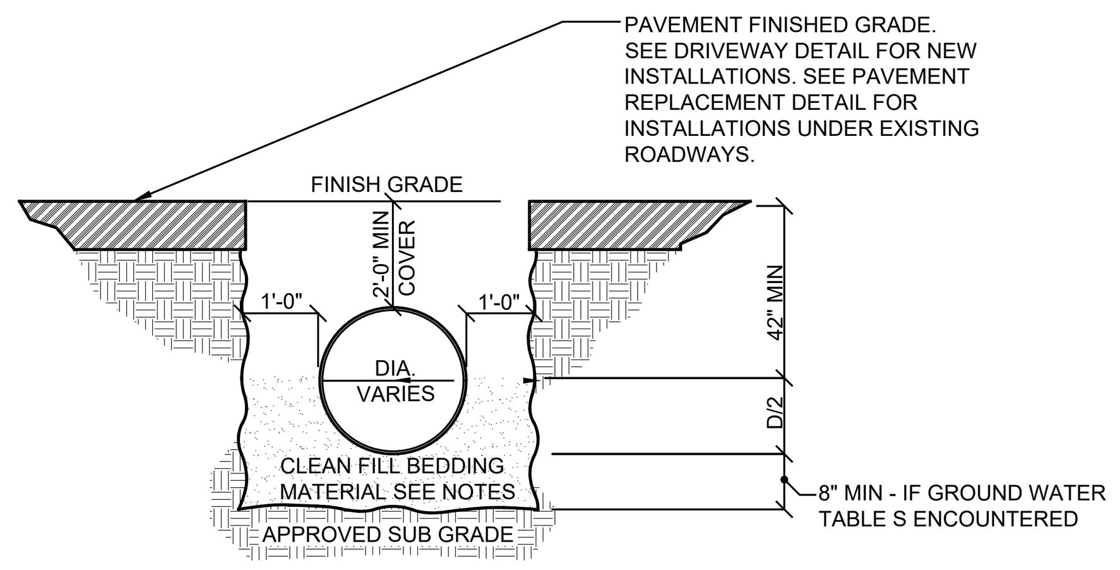
D-1 PRECAST DRAIN INLET DETAIL

NOT TO SCALE



D-2 ROOF & FOOTING DRAIN CONNECTION DETAIL

NOT TO SCALE

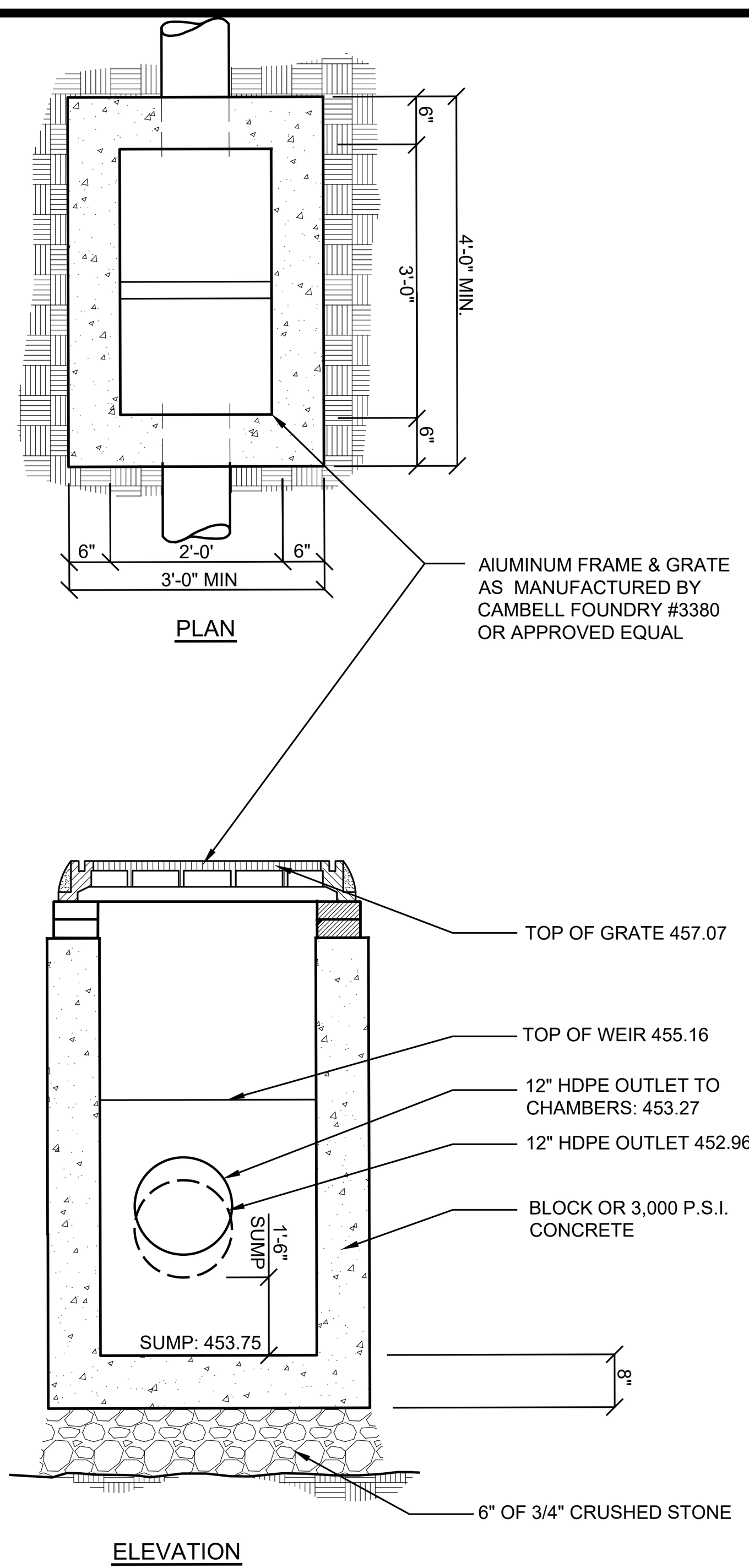


NOTES:

1. Pipe shall be laid and connected in the bedding which shall consist of:
   A. Compacted existing subsoil when laid above ground water or;
   B. 3/4" crushed stone when laid below ground water.
2. If subsoil is determined to be unsuitable by the Engineer, all unsuitable material shall be removed for at least 2'-6" below the pipe invert or twice the pipe diameter, whichever is greater, and replaced with compacted bedding material.

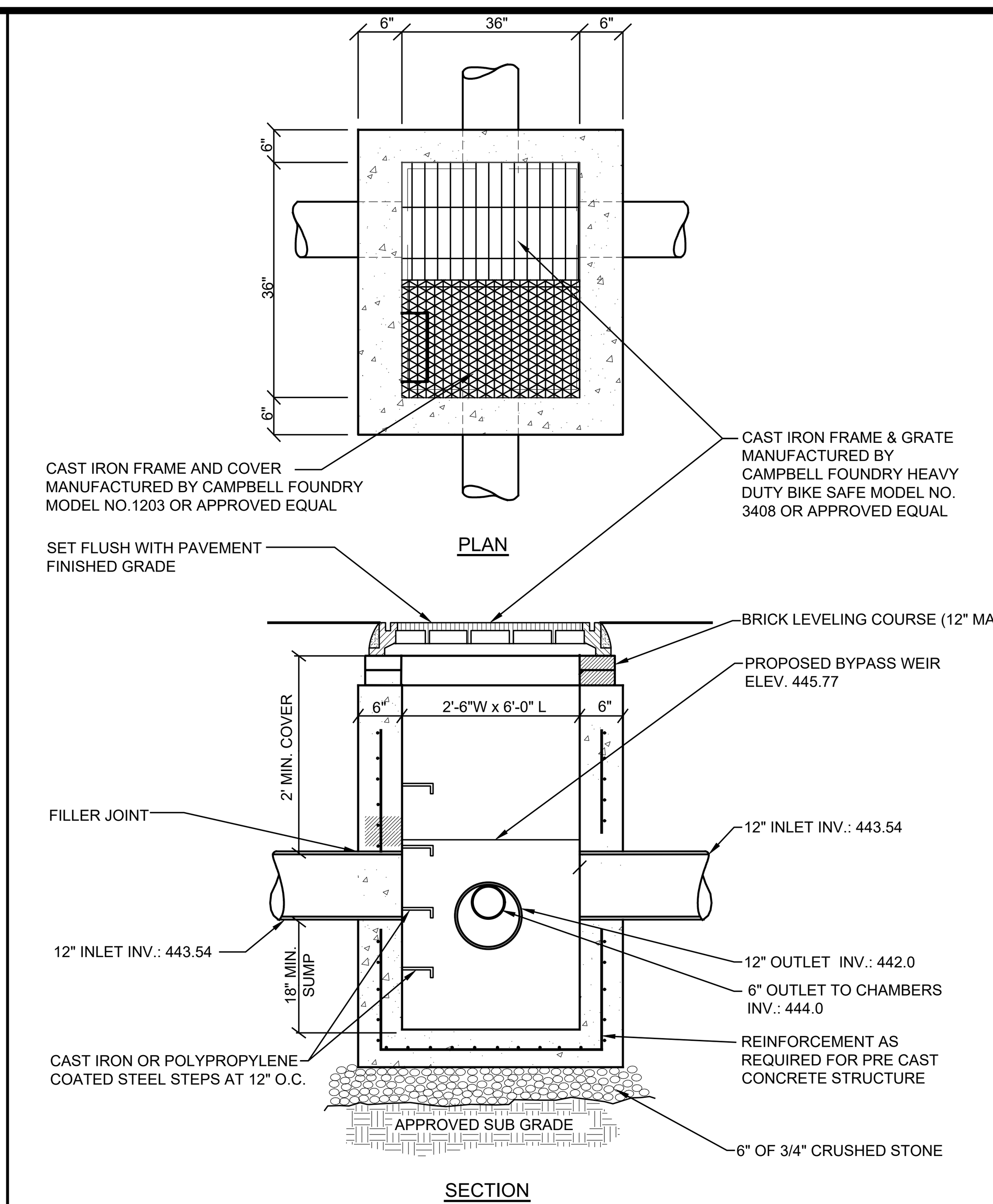
D-3 STORM PIPE BEDDING DETAIL

NOT TO SCALE



D-4 BYPASS STRUCTURE 1 DETAIL

NOT TO SCALE



NOTES:

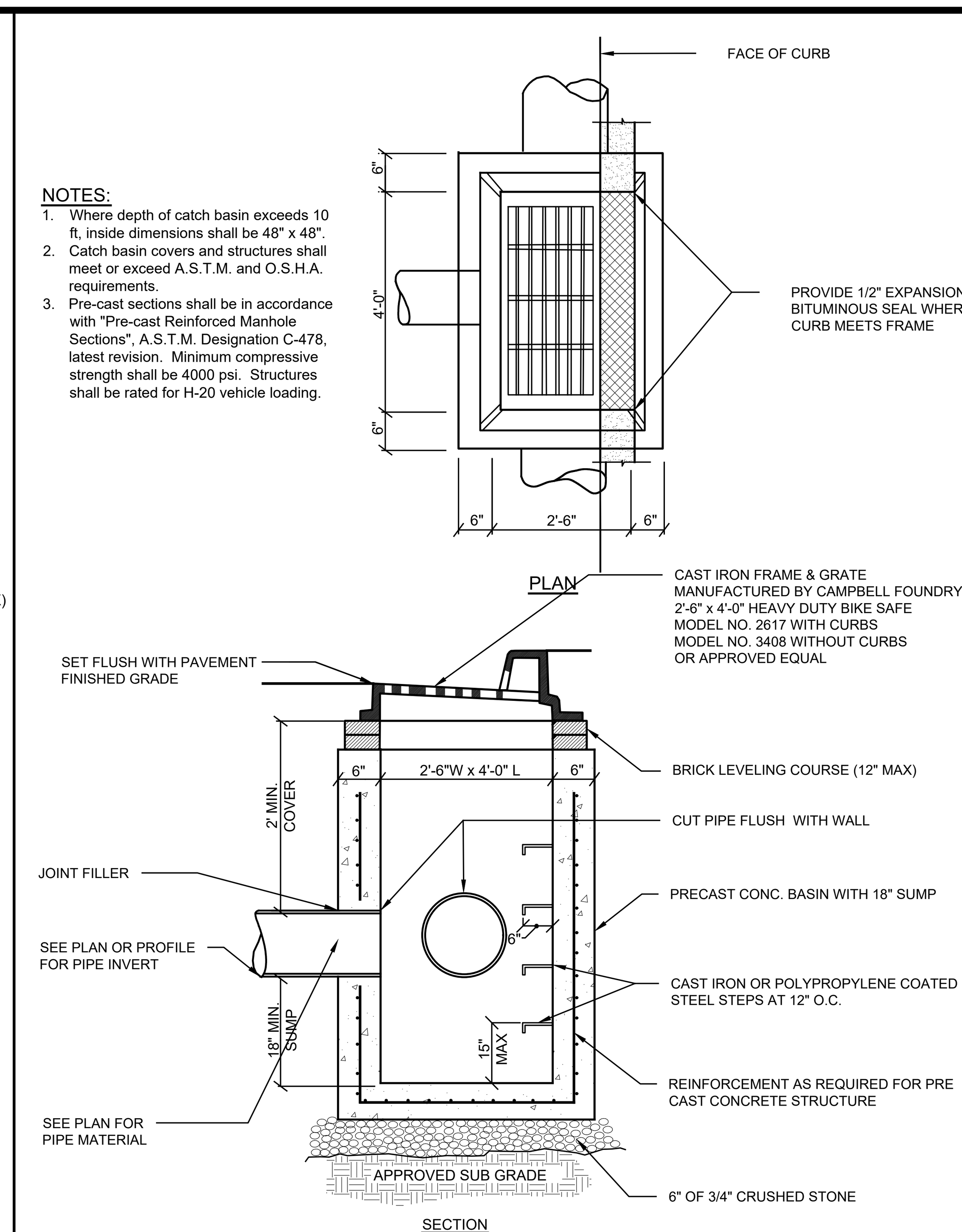
1. Where depth of catch basin exceeds 10 ft, inside dimensions shall be 48" x 48".
2. Top of basin shall be built with precast concrete structural slab designed for H-20 loading.

D-5 BYPASS STRUCTURE 2 DETAIL

NOT TO SCALE

NOTES:

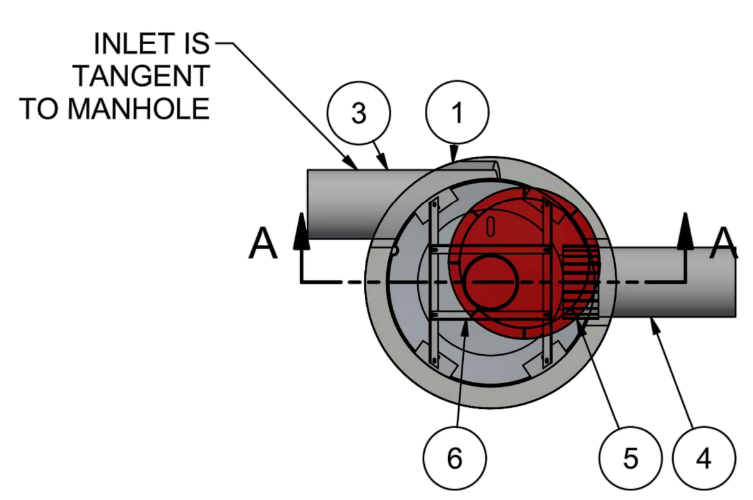
1. Where depth of catch basin exceeds 10 ft, inside dimensions shall be 48" x 48".
2. Catch basin covers and structures shall meet or exceed A.S.T.M. and O.S.H.A. requirements.
3. Pre-cast sections shall be in accordance with "Pre-cast Reinforced Manhole Sections", A.S.T.M. Designation C-478, latest revision. Minimum compressive strength shall be 4000 psi. Structures shall be rated for H-20 vehicle loading.

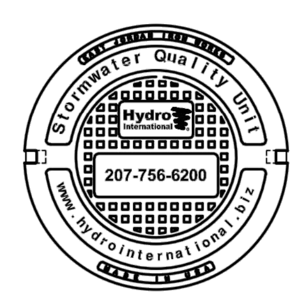


D-6 TYPICAL CATCH BASIN DETAIL

NOT TO SCALE

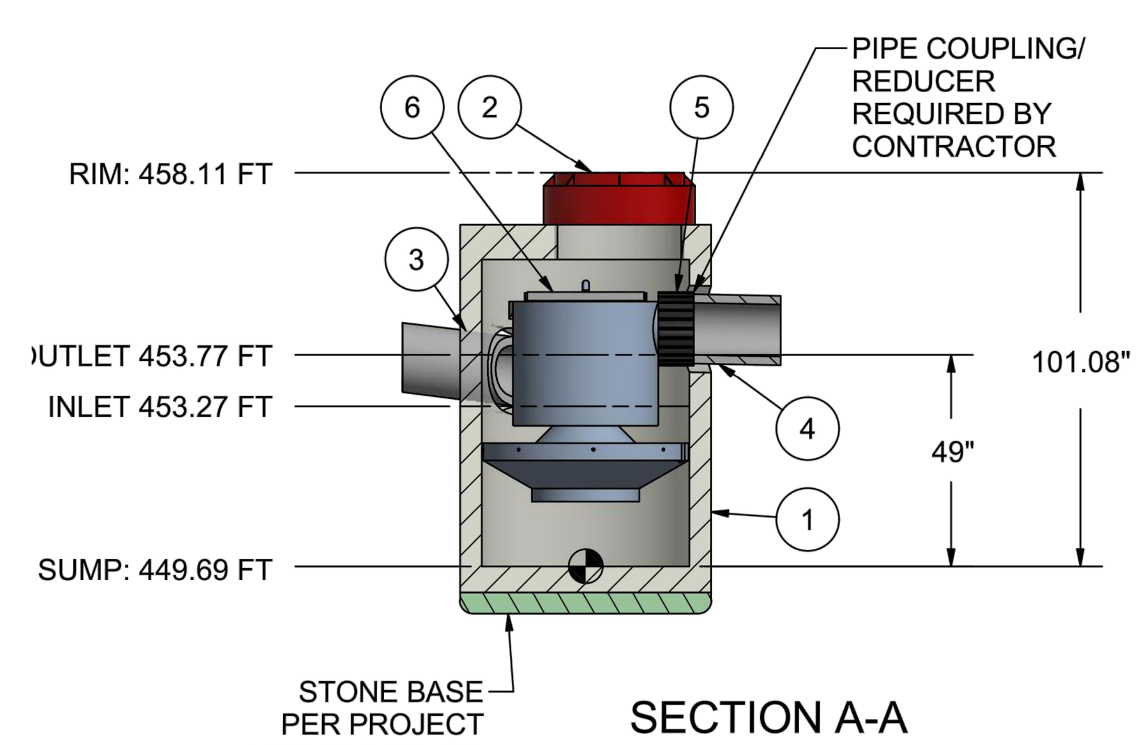
OUTLET STUB ID: 12" (300 mm)
OUTLET STUB OD: 12.5" (318 mm)





HYDRO FRAME AND COVER (INCLUDED)

GRADE RINGS BY OTHERS AS REQUIRED



SECTION A-A

NOTE: NOT FOR CONSTRUCTION. CONTACT HYDRO FOR SITE SPECIFIC DETAIL

PROJECTION

IF IN DOUBT ASK

COMMENTS:

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.

2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING DOWNSTREAM DEFENDER MANHOLE.

REVISION HISTORY

REV	BY	DESCRIPTION	DATE
-		FIRST RELEASE	

DATE: | SCALE: NTS

DRAWN BY: | CHECKED BY: | APPROVED BY:

Title: 4 FT DOWNSTREAM DEFENDER®

Site: Nantucket Sound LLC.

Structure No: Downstream Defender 1

Hydro International

hydro-int.com

HYDRO INTERNATIONAL

WEIGHT: N/A | MATERIAL:

REFERENCE NUMBER:

DRAWING NO.:

SHEET SIZE: B | SHEET: 1 OF 1 | Rev: -

PARTS LIST

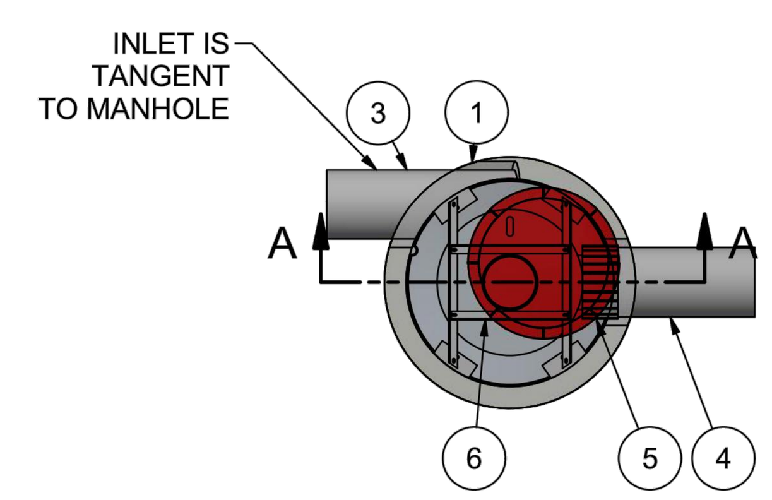
ITEM	DESCRIPTION	SIZE (in)
1	PRECAST MANHOLE (BY HYDRO VIA PRECASTER)	48
2	FRAME AND COVER	30
3	INLET PIPE (BY OTHERS)	6
4	OUTLET PIPE (BY OTHERS)	6
5	PIPE COUPLING (BY OTHERS)	
6	INTERNAL COMPONENTS (PRE-INTALLED)	

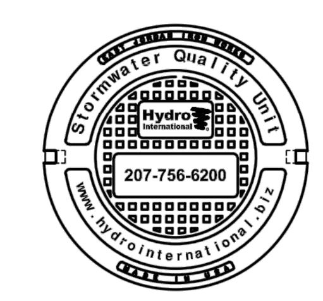
EQUIPMENT PERFORMANCE

The stormwater treatment unit shall adhere to the hydraulic parameters given in the chart below and provide the removal efficiencies and storage capacities as follows:

1. Peak Hydraulic Capacity: 0.35 cfs
2. Sediment Storage Capacity: 0.7 yd3
3. Continuous Oil Storage Capacity: 70 gal
4 Sediment shall be stored in a zone that is isolated from the main flow path and protected from reintrainment by a benching skirt.

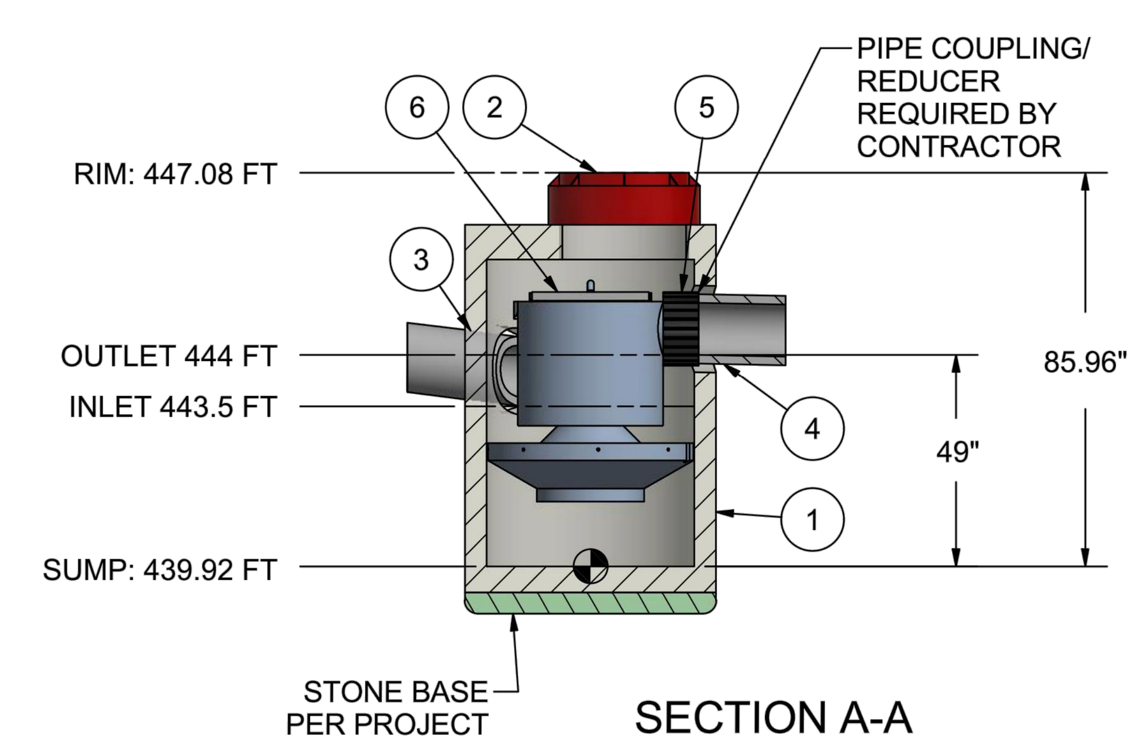
OUTLET STUB ID: 12" (300 mm)
OUTLET STUB OD: 12.5" (318 mm)





HYDRO FRAME AND COVER (INCLUDED)

GRADE RINGS BY OTHERS AS REQUIRED



SECTION A-A

NOTE: NOT FOR CONSTRUCTION. CONTACT HYDRO FOR SITE SPECIFIC DETAIL

PROJECTION

IF IN DOUBT ASK

COMMENTS:

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.

2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING DOWNSTREAM DEFENDER MANHOLE.

REVISION HISTORY

REV	BY	DESCRIPTION	DATE
-		FIRST RELEASE	

DATE: | SCALE: NTS

DRAWN BY: | CHECKED BY: | APPROVED BY:

Title: 4 FT DOWNSTREAM DEFENDER®

Site: Nantucket Sound

Structure No: Downstream Defender 2

Hydro International

hydro-int.com

HYDRO INTERNATIONAL

WEIGHT: N/A | MATERIAL:

REFERENCE NUMBER: 20_12_1956

DRAWING NO.:

SHEET SIZE: B | SHEET: 1 OF 1 | Rev: -

PARTS LIST

ITEM	DESCRIPTION	SIZE (in)
1	PRECAST MANHOLE (BY HYDRO VIA PRECASTER)	48
2	FRAME AND COVER	30
3	INLET PIPE (BY OTHERS)	6
4	OUTLET PIPE (BY OTHERS)	6
5	PIPE COUPLING (BY OTHERS)	
6	INTERNAL COMPONENTS (PRE-INTALLED)	

EQUIPMENT PERFORMANCE

The stormwater treatment unit shall adhere to the hydraulic parameters given in the chart below and provide the removal efficiencies and storage capacities as follows:

1. Peak Hydraulic Capacity: 0.4 cfs
2. Sediment Storage Capacity: 0.7 yd3
3. Continuous Oil Storage Capacity: 70 gal
4 Sediment shall be stored in a zone that is isolated from the main flow path and protected from reintrainment by a benching skirt.

PROJECT # 19-10

Site Design Consultants
Civil Engineers • Land Planners
251-F Underhill Avenue, Yorktown Heights, NY 10598
(914) 962-4488 - Fax: (914) 962-7386
www.sitedesignconsultants.com

Engineer: Joseph C. Riina, P.E. NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
1	6/17/20	Plan Revisions
2	8/25/20	Town Comments

SCALE: NTS

DRAWN BY: TK

DATE: 3/14/20

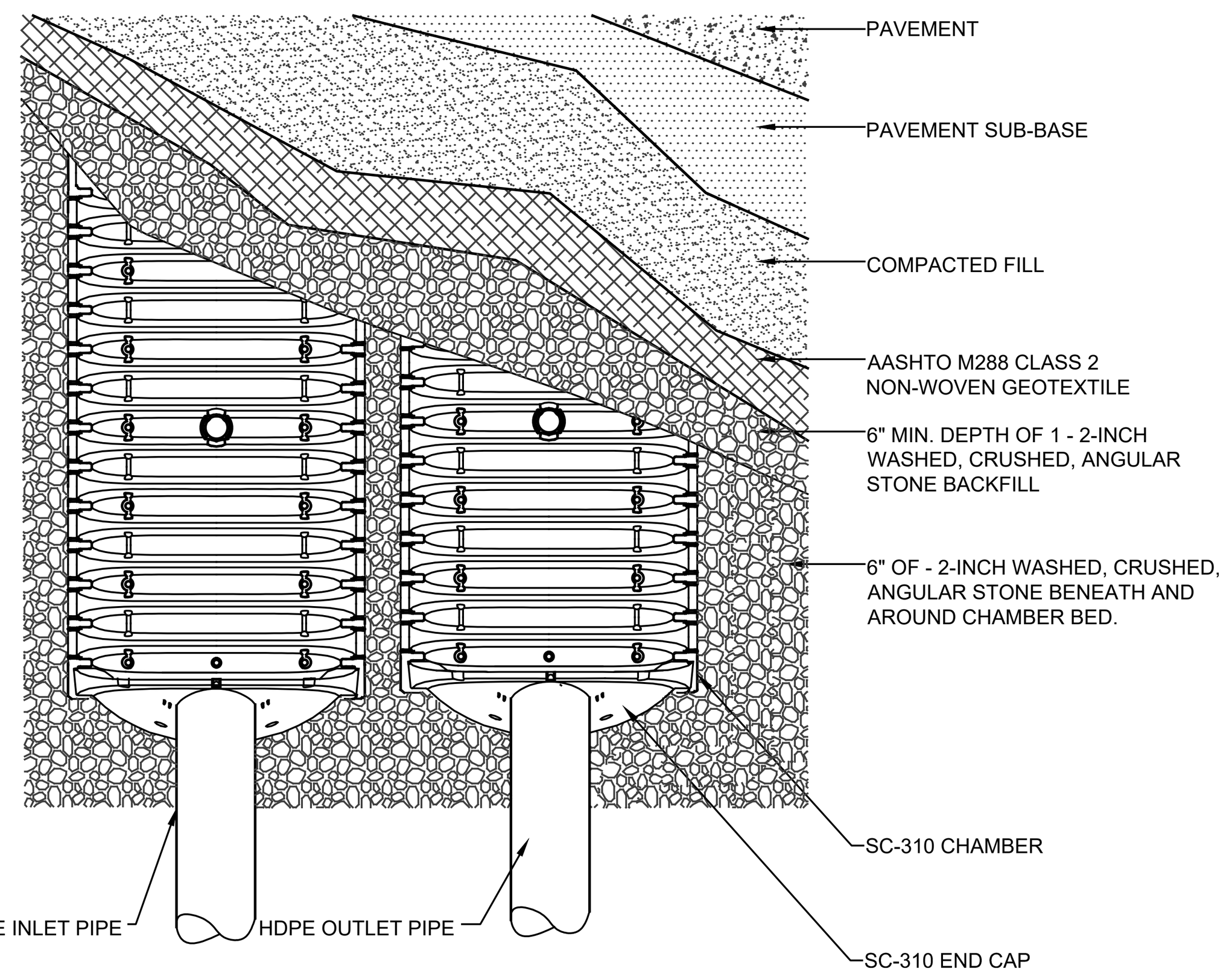
DRAINAGE DETAILS

SITE PLAN PREPARED FOR NANTUCKET SOUND SONS, LLC.

KEAR STREET

Town of Yorktown, Westchester County, NY

Sheet 11 of 12



NOTES:

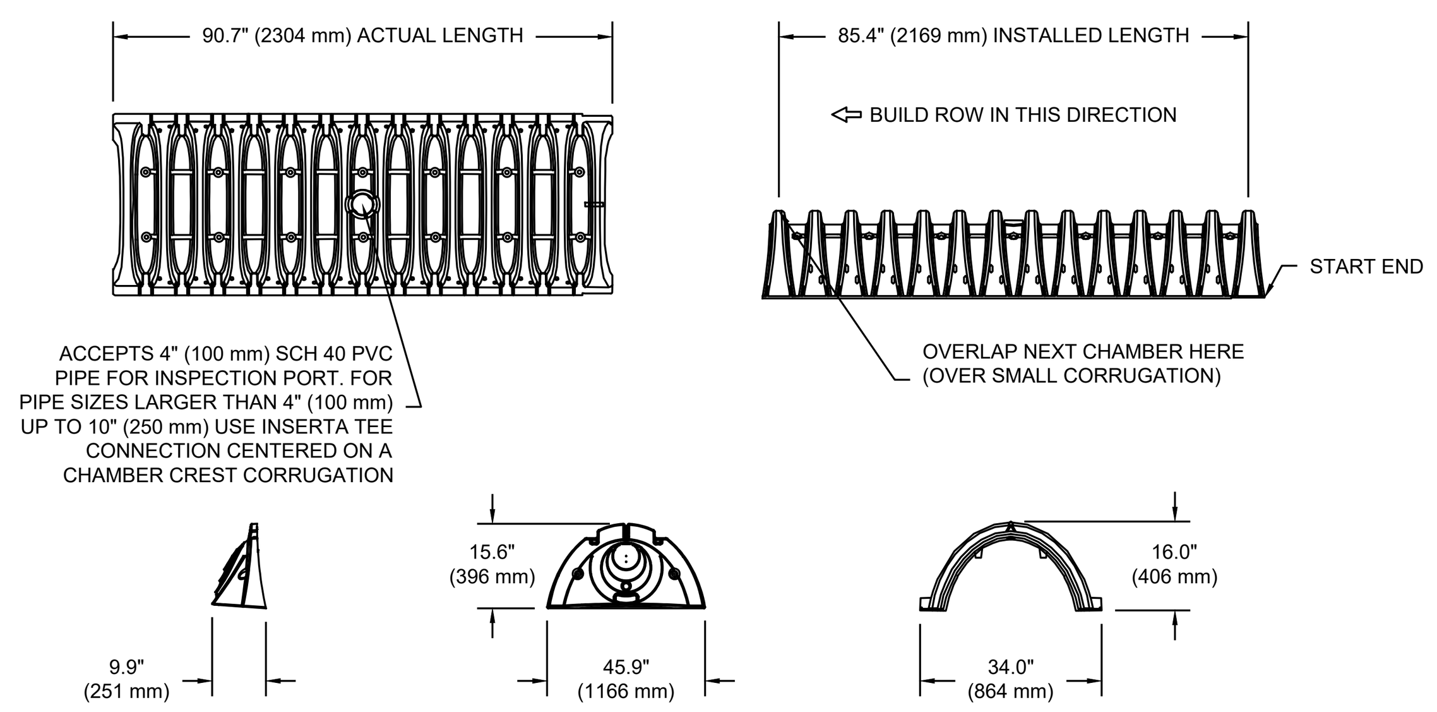
1. All design specifications for Stormtech SC-310 chambers shall be in accordance with the Stormtech design manual.
2. The installation of Stormtech SC-310 chambers shall be in accordance with the latest Stormtech installation instructions.
3. The contractor is advised to review and understand the installation instructions prior to beginning system installation. Call 1-888-892-2694 or visit www.stormtech.com to receive a copy of the latest Stormtech installation instructions.
4. Chambers shall meet the design requirements and load factors specified in Section 12.12 of the latest edition of the AASHTO LRFD bridge design specifications

SWM-1 STORMTECH SC-310 CHAMBER SYSTEM PLAN VIEW DETAIL

NOT TO SCALE

SC-310 TECHNICAL SPECIFICATION

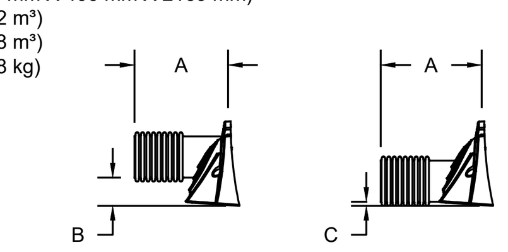
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	($0.42\ m^3$)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	($0.88\ m^3$)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

SWM-2 STORMTECH SC-310 CHAMBER DETAIL

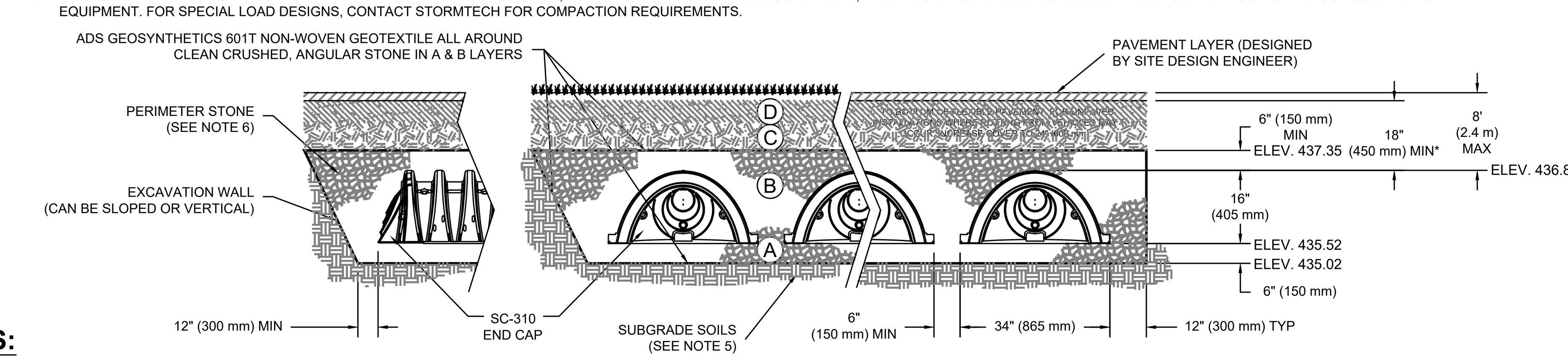
NOT TO SCALE

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2] [3]

PLEASE NOTE:

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

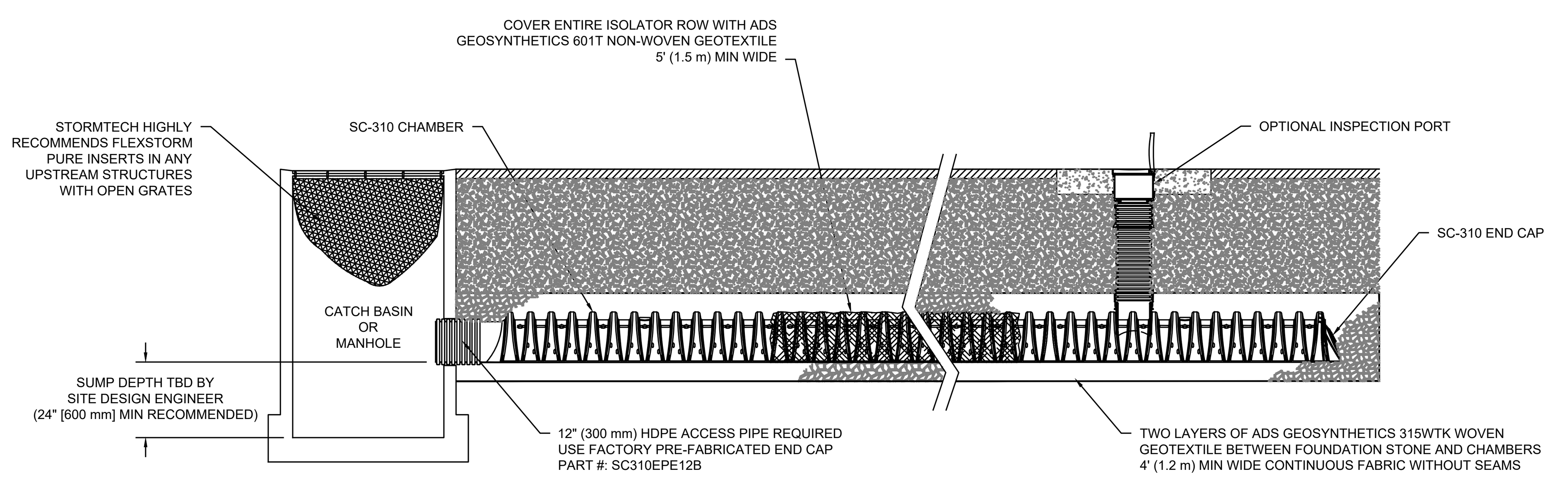


NOTES:

1. SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
7. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

SWM-3 STORMTECH SC-310 CROSS SECTION DETAIL

NOT TO SCALE



SC-310 ISOLATOR ROW DETAIL

NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

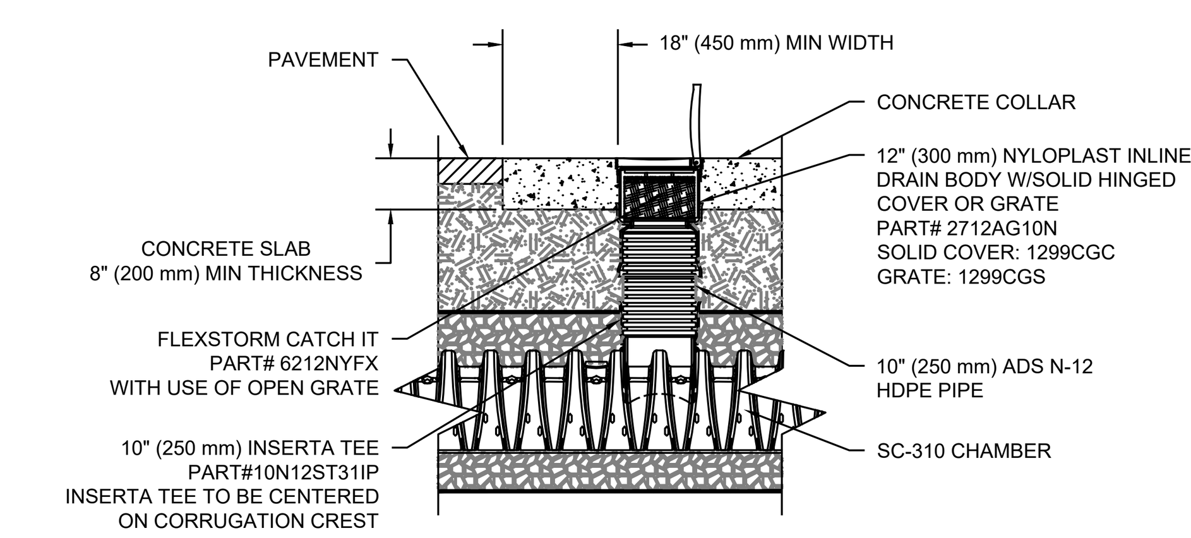
STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

SWM-4 STORMTECH SC-310 CHAMBER DETENTION ISOLATOR ROW DETAIL

NOT TO SCALE



SC-310 INSPECTION PORT DETAIL

NTS

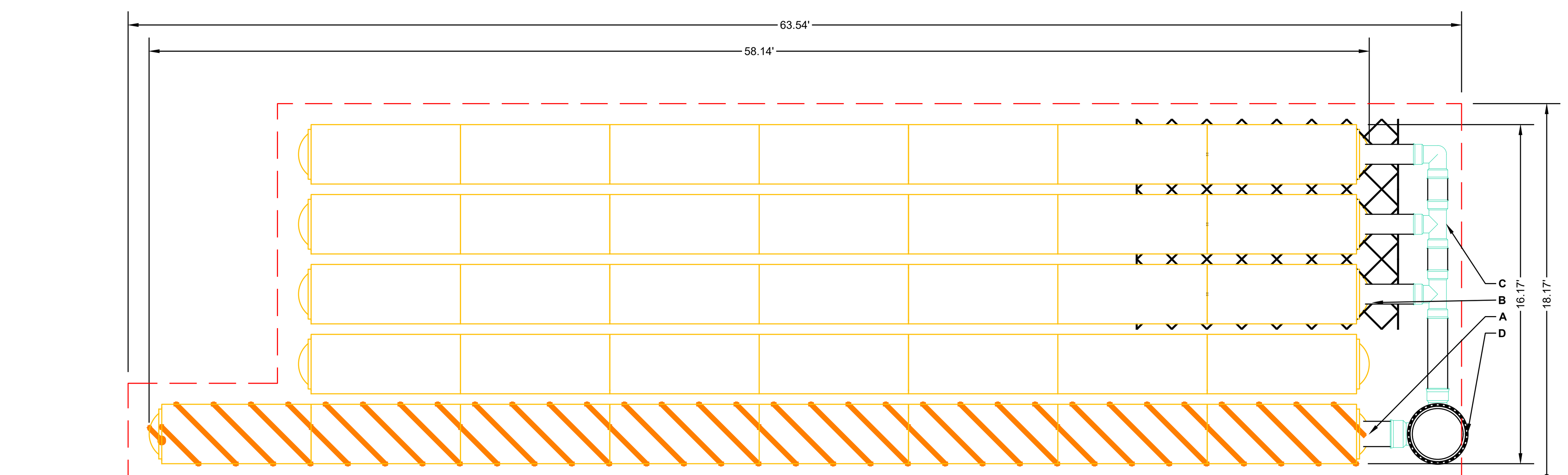
SWM-5 STORMTECH FLUSING/INSPECTION PORT DETAIL

NOT TO SCALE

PROPOSED LAYOUT		PROPOSED ELEVATIONS	
36	STORMTECH SC-310 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	462.66
10	STORMTECH SC-310 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	456.66
6	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	456.16
6	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	456.16
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	456.16
1308	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	455.16
		TOP OF SC-310 CHAMBER:	454.66
		10" x 10" TOP MANIFOLD INVERT:	453.45
		12" ISOLATOR ROW INVERT:	453.41
1059	SYSTEM AREA (SF)	BOTTOM OF SC-310 CHAMBER:	453.33
163.4	SYSTEM PERIMETER (ft)	BOTTOM OF STONE:	452.83

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	12" BOTTOM PREFABRICATED END CAP/TYP OF ALL 12" BOTTOM CONNECTIONS AND ISOLATOR ROWS	0.90"	
PREFABRICATED END CAP	B	10" TOP PREFABRICATED END CAP/TYP OF ALL 10" TOP CONNECTIONS	1.40"	
MANIFOLD	C	10" x 10" TOP MANIFOLD, MOLDED FITTINGS	1.40"	
NYLOPLAST (INLET W/ ISO ROW)	D	30" DIAMETER (24.00" SUMP MIN)		3.7 CFS IN



ISOLATOR ROW (SEE DETAIL)

PLACE MINIMUM 12.50' OF ADS GEOSYNTHETICS 315WTK WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

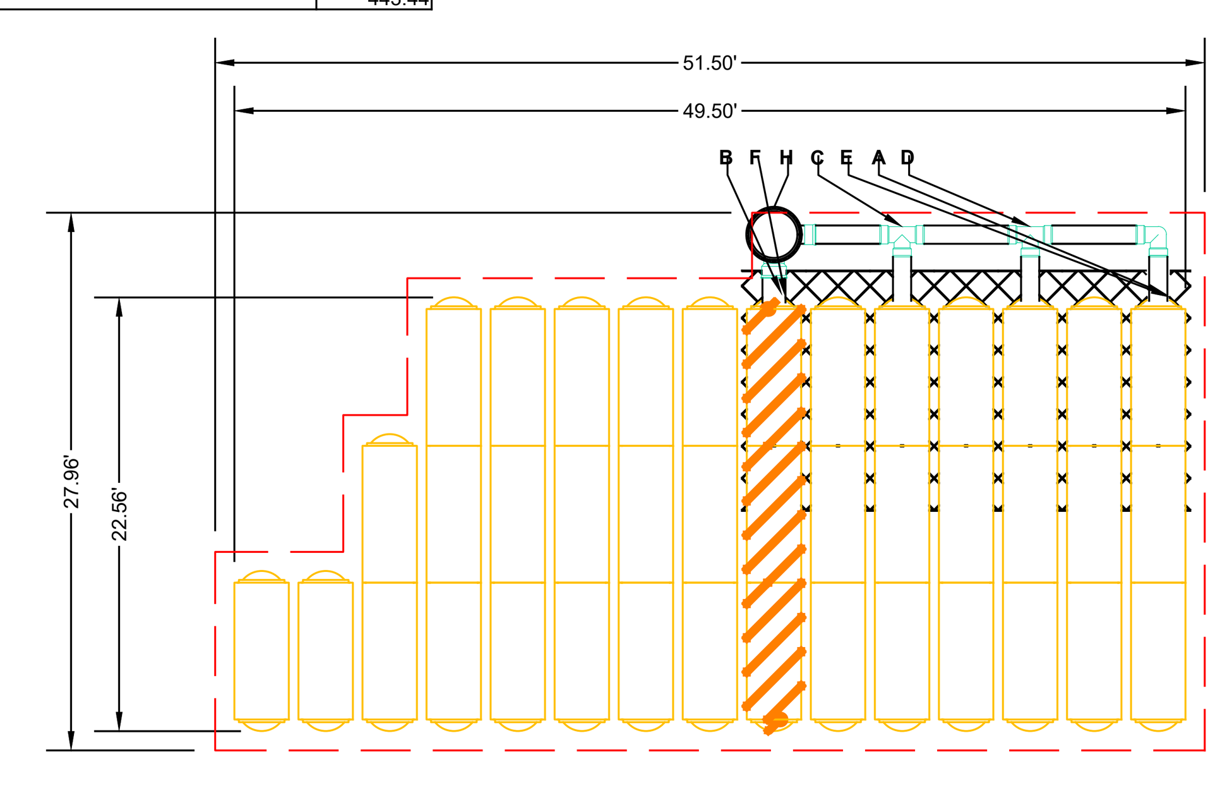
SWM-4 STORMTECH SC-310 CHAMBER DETENTION ISOLATOR ROW DETAIL

NOT TO SCALE

PROPOSED LAYOUT		PROPOSED ELEVATIONS	
40	STORMTECH SC-310 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	453.27
30	STORMTECH SC-310 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	447.27
6	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	446.77
6	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	446.77
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	446.77
1499	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	445.77
		TOP OF SC-310 CHAMBER:	445.27
		10" x 10" TOP MANIFOLD INVERT:	444.05
		10" x 10" TOP MANIFOLD INVERT:	444.05
1226	SYSTEM AREA (SF)	12" ISOLATOR ROW INVERT:	444.01
158.9	SYSTEM PERIMETER (ft)	12" ISOLATOR ROW INVERT:	444.01
		BOTTOM OF SC-310 CHAMBER:	443.94
		BOTTOM OF STONE:	443.44

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	12" BOTTOM PREFABRICATED END CAP/TYP OF ALL 12" BOTTOM CONNECTIONS	0.90"	
PREFABRICATED END CAP	B	10" TOP PREFABRICATED END CAP/TYP OF ALL 10" TOP CONNECTIONS AND ISOLATOR ROWS	1.40"	
MANIFOLD	C	10" x 10" TOP MANIFOLD, MOLDED FITTINGS	1.40"	
MANIFOLD	D	10" x 10" TOP MANIFOLD, MOLDED FITTINGS	1.40"	
PIPE CONNECTION	E	12" BOTTOM CONNECTION	0.90"	
PIPE CONNECTION	F	12" BOTTOM CONNECTION	0.90"	
NYLOPLAST (INLET W/ ISO ROW)	G	30" DIAMETER (24.00" SUMP MIN)		3.7 CFS IN
NYLOPLAST (INLET W/ ISO ROW)	H	30" DIAMETER (24.00" SUMP MIN)		3.7 CFS IN



ISOLATOR ROW (SEE DETAIL)

PLACE MINIMUM 12.50' OF ADS GEOSYNTHETICS 315WTK WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES

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- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
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SWM-4 STORMTECH SC-310 CHAMBER DETENTION ISOLATOR ROW DETAIL

NOT TO SCALE

F:\2019\19-10 NANTUCKET SOUND LLC - MURPHY\ENGINEERING\CAD\DWG\19-10 DETAILS 8-25-20.DWG

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www.sitedesignconsultants.com

PROJECT # 19-10

Engineer: Joseph C. Riina, P.E. NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
1	6/17/20	Plan Revisions
2	8/25/20	Town Comments

SCALE: NTS

DRAWN BY: TK

DATE: 3/14/20

STORMWATER DETAILS

SITE PLAN PREPARED FOR NANTUCKET SOUND SONS, LLC.

KEAR STREET

Town of Yorktown Westchester County, NY

Sheet 12 of 12

JAMES HARDIE
"HEATHERED MOSS"
SIDING

JAMES HARDIE
"NAVAJO BEIGE"
TRIM

BENJAMIN MOORE HC-166
"KENDALL CHARCOAL"
STOREFRONT TRIM

BENJAMIN MOORE
HC-168 "CHELSEA GREY"
PANEL MOULDING

BENJAMIN MOORE
HC-115 "REVERE PEWTER"
STOREFRONT PANELS

TAMKO
"VIRGINIA SLATE"
ROOF SHINGLES

MBCI
"CHARCOAL GRAY"
METAL ROOFING

MARVIN
"BRONZE"
WINDOWS

JTA
JOSEPH THOMPSON
ARCHITECT

Joseph G. Thompson Architect, PLLC
1006 Brown Street, Suite 212
Peekskill, New York 10566

PH: (845)532-8156
EM: jgthompsonarchitect@gmail.com

SEAL

Joseph G. Thompson, RA
New York State License #036057

KEAR STREET BUILDING

Nantucket Sound Sons, LLC
Kear Street
Yorktown Heights, New York 10516
S-B-L: 37.12-2-86
Town of Yorktown - Westchester County

FOR PLANNING BOARD REVIEW & APPROVAL

Date: August 25, 2020

Revisions:

1
2
3
4
5

AR0.01

JTA
JOSEPH THOMPSON
ARCHITECT

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NOTES:

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT OR ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ARCHITECT OR ENGINEER IS ALTERED, THE ALTERING ARCHITECT OR ENGINEER SHALL AFFIX TO HIS ITEM THE SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.

REGISTERED ARCHITECT
JOSEPH G. THOMPSON
036057
STATE OF NEW YORK

SEAL

Joseph G. Thompson, RA
New York State License #036057

KEAR STREET BUILDING

Nantucket Sound Sons, LLC
Kear Street
Yorktown Heights, New York 10516
S-B-L: 37.12-2-86
Town of Yorktown - Westchester County

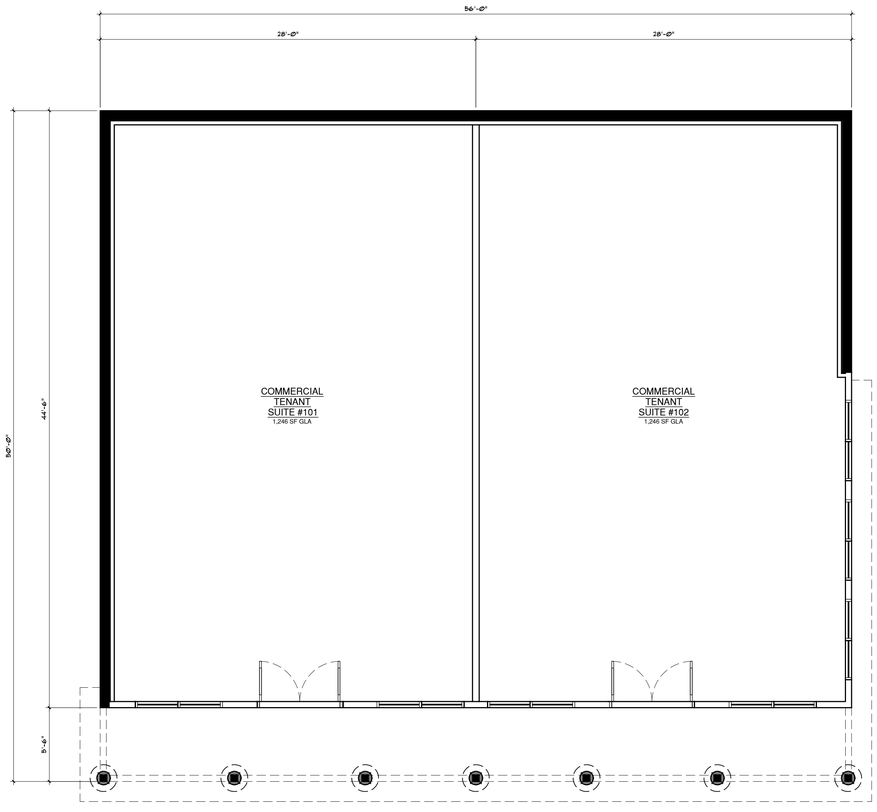
FOR PLANNING BOARD REVIEW & APPROVAL

Date: August 25, 2020

Revisions:

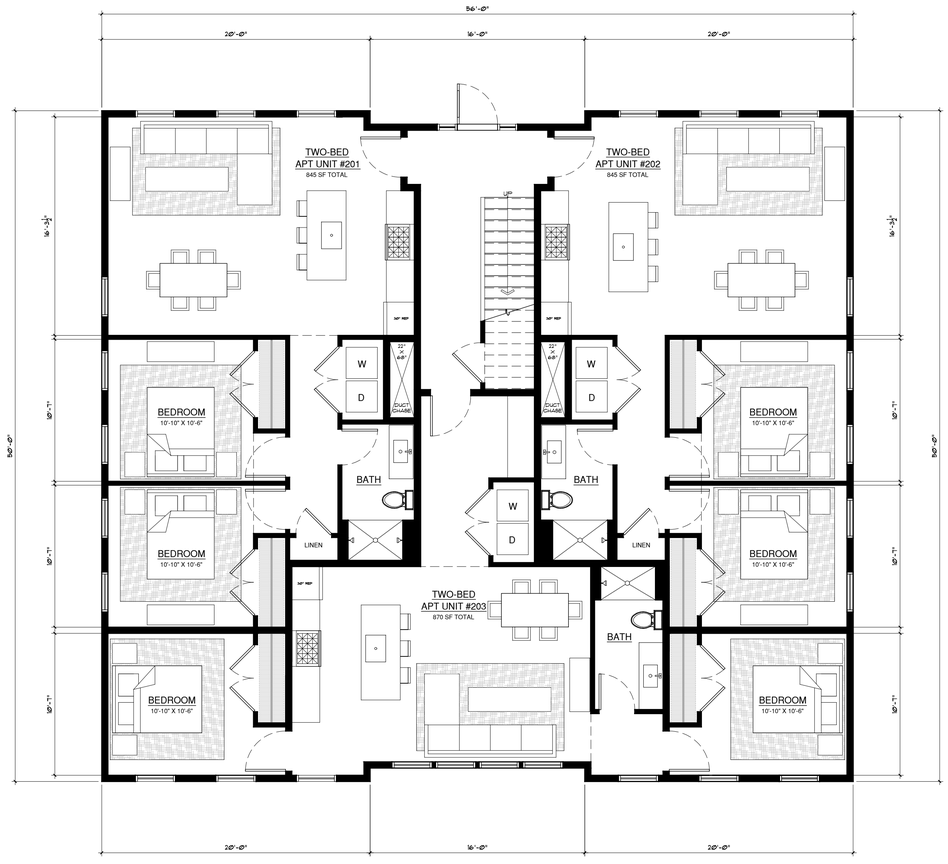
1.
2.
3.
4.
5.

AR0.02



1 A1.01 First Floor Architectural Plan (2,492 SF Footprint)

Scale: 3/16" = 1'-0"



2 A1.01 Second Floor Architectural Plan (2,768 SF Footprint)

Scale: 3/16" = 1'-0"

JTA
JOSEPH THOMPSON ARCHITECT

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DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.

REGISTERED ARCHITECT
JOSEPH G. THOMPSON
036057
STATE OF NEW YORK

SEAL

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New York State License #036057

KEAR STREET BUILDING

Nantucket Sound Sons, LLC
Kear Street
Yorktown Heights, New York 10516
S-B-L: 37.12-2-46
Town of Yorktown - Westchester County

FOR PLANNING BOARD REVIEW & APPROVAL

Date: August 25, 2020

Revisions:

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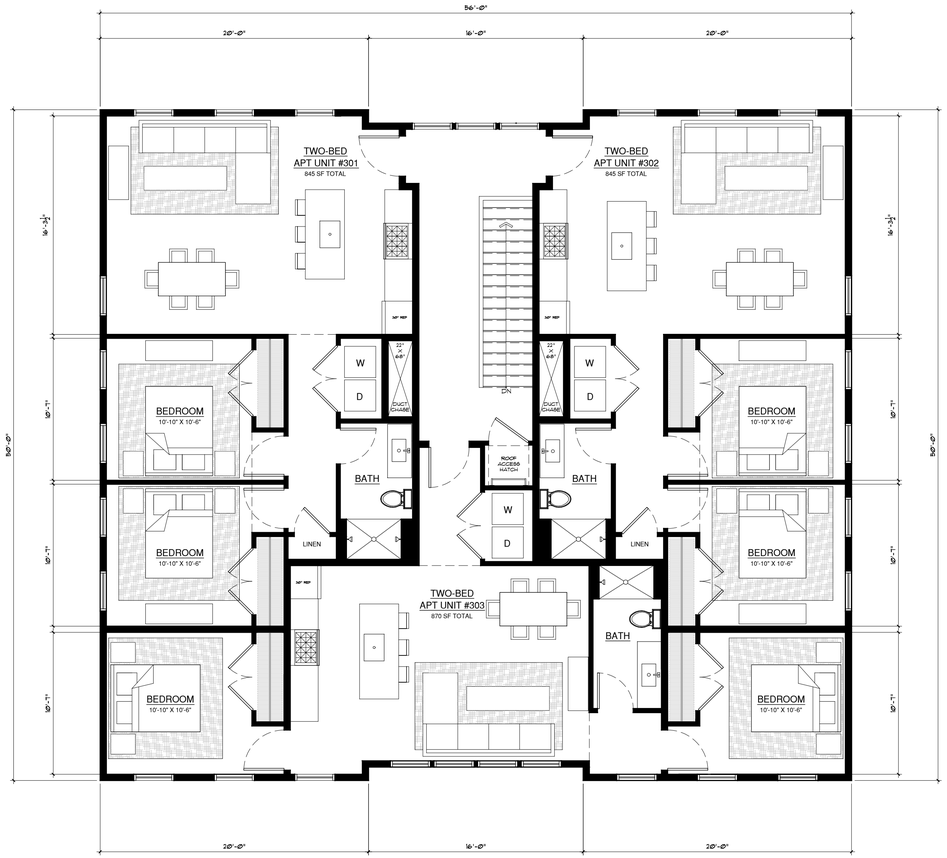
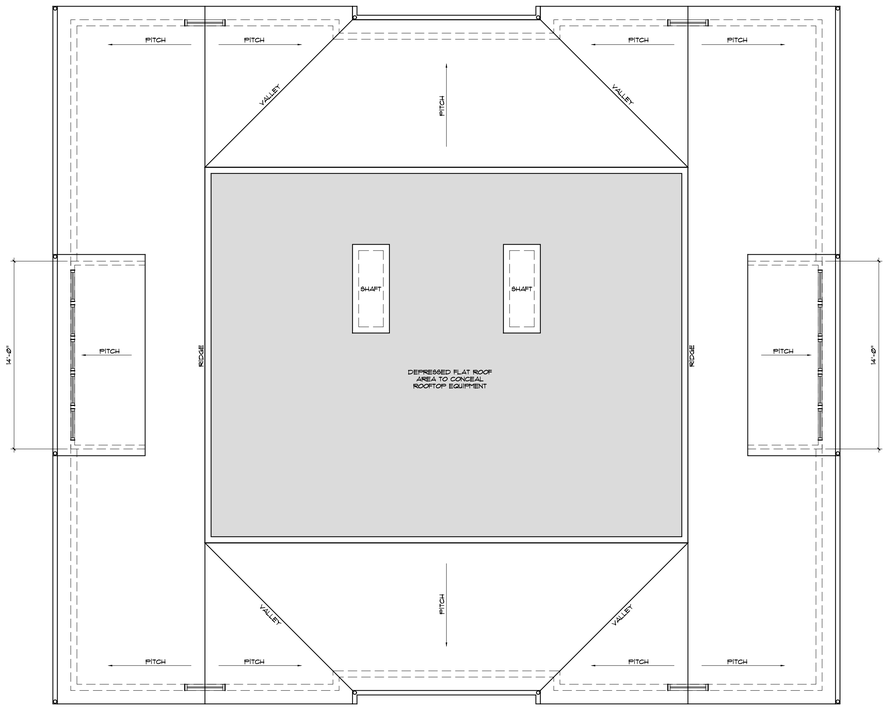
A1.01



1 A1.02 Third Floor Architectural Plan (2,768 SF Footprint)

Scale: 3/16" = 1'-0"



2 A1.02 Roof Plan

Scale: 3/16" = 1'-0"

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Nantucket Sound Sons, LLC
Kear Street
Yorktown Heights, New York 10516
S-B-L: 37.12-2-86
Town of Yorktown - Westchester County

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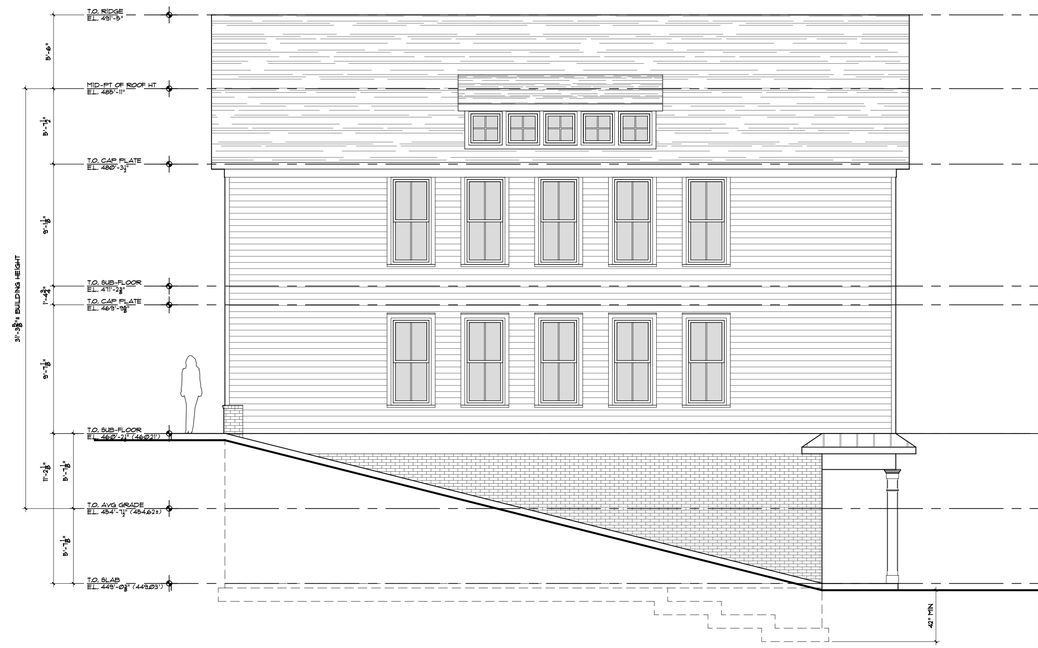
A1.02

1 A2.01

South Elevation

Scale: 3/16" = 1'-0"



2 A2.01

West Elevation

Scale: 3/16" = 1'-0"

3 A2.01

North Elevation

Scale: 3/16" = 1'-0"

4 A2.01

East Elevation

Scale: 3/16" = 1'-0"

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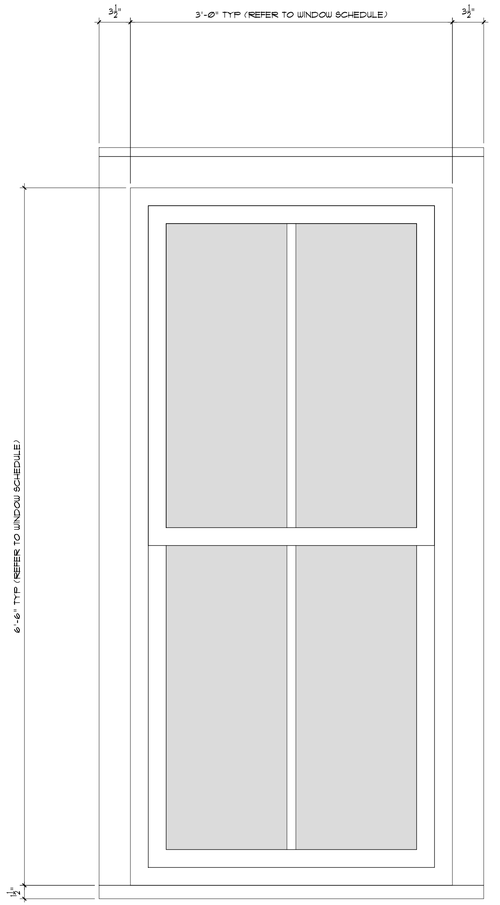
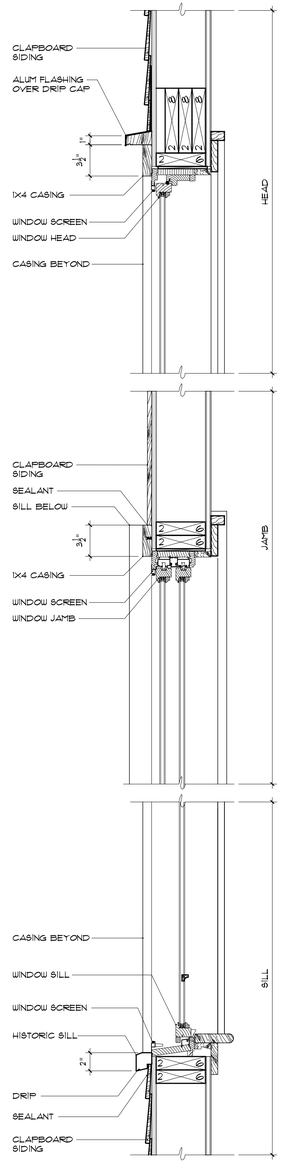


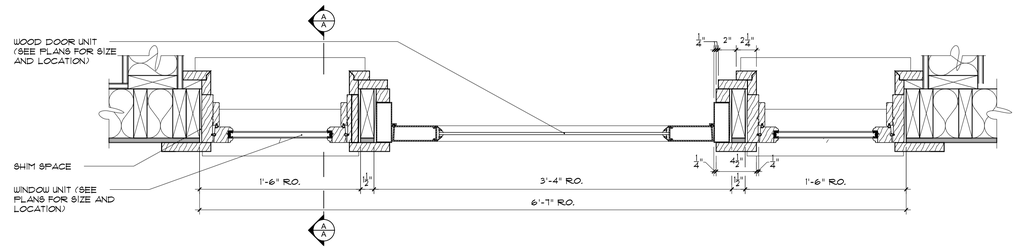


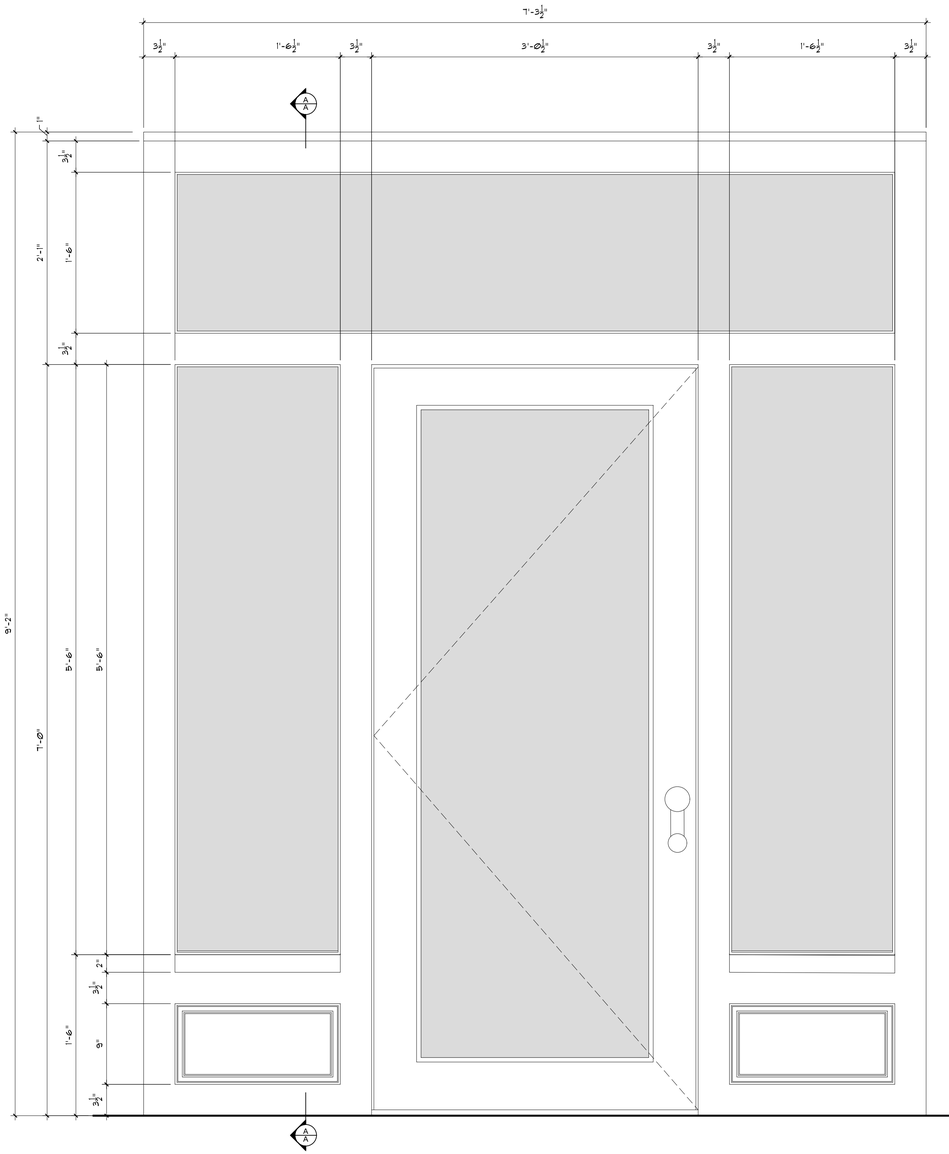
WINDOW NOTES:

1. WINDOWS SHALL BE SOLID WOOD CONSTRUCTION WITH PAINTED WOOD INTERIOR AND ALUMINUM CLAD EXTERIOR FINISH ULTIMATE SERIES AS MANUFACTURED BY MARVIN OR EQUAL.
2. TYPICAL WINDOW FUNCTION SHALL BE DOUBLE HUNG.
3. WINDOW LITE PATTERN SHALL BE 2 OVER 2.
4. GRILLES SHALL BE SDL (SIMULATED DIVIDED LITE) TYPE.
5. CASING SHALL BE 1X4 WITH HISTORIC SILL AND DRIP CAP.

1 A5.01 New Typical Window Detail

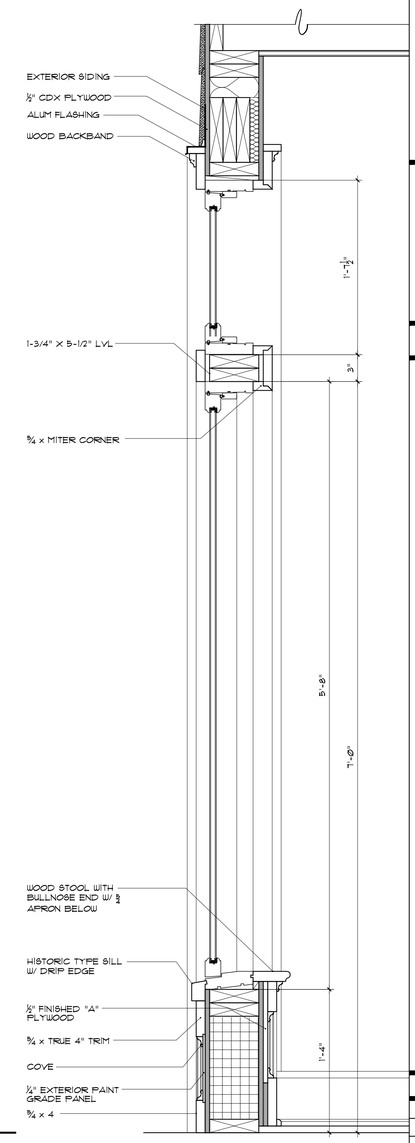
Scale: 1-1/2" = 1'-0"





2 A5.01 New Entrance Door Detail

Scale: 1-1/2" = 1'-0"



SECTION A-A

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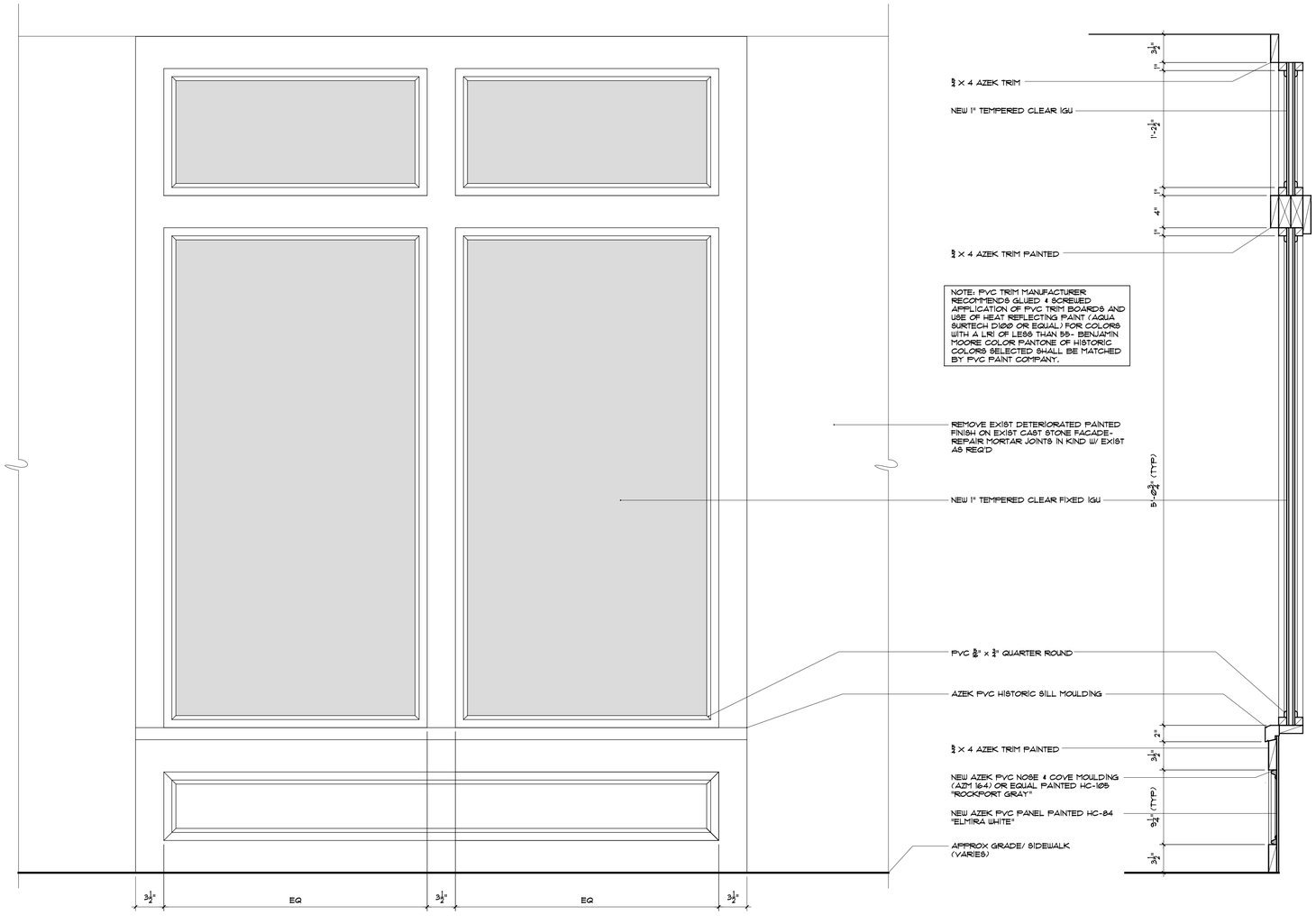

1 / A5.02 Typical New Storefront Detail

Scale: 1-1/2" = 1'-0"

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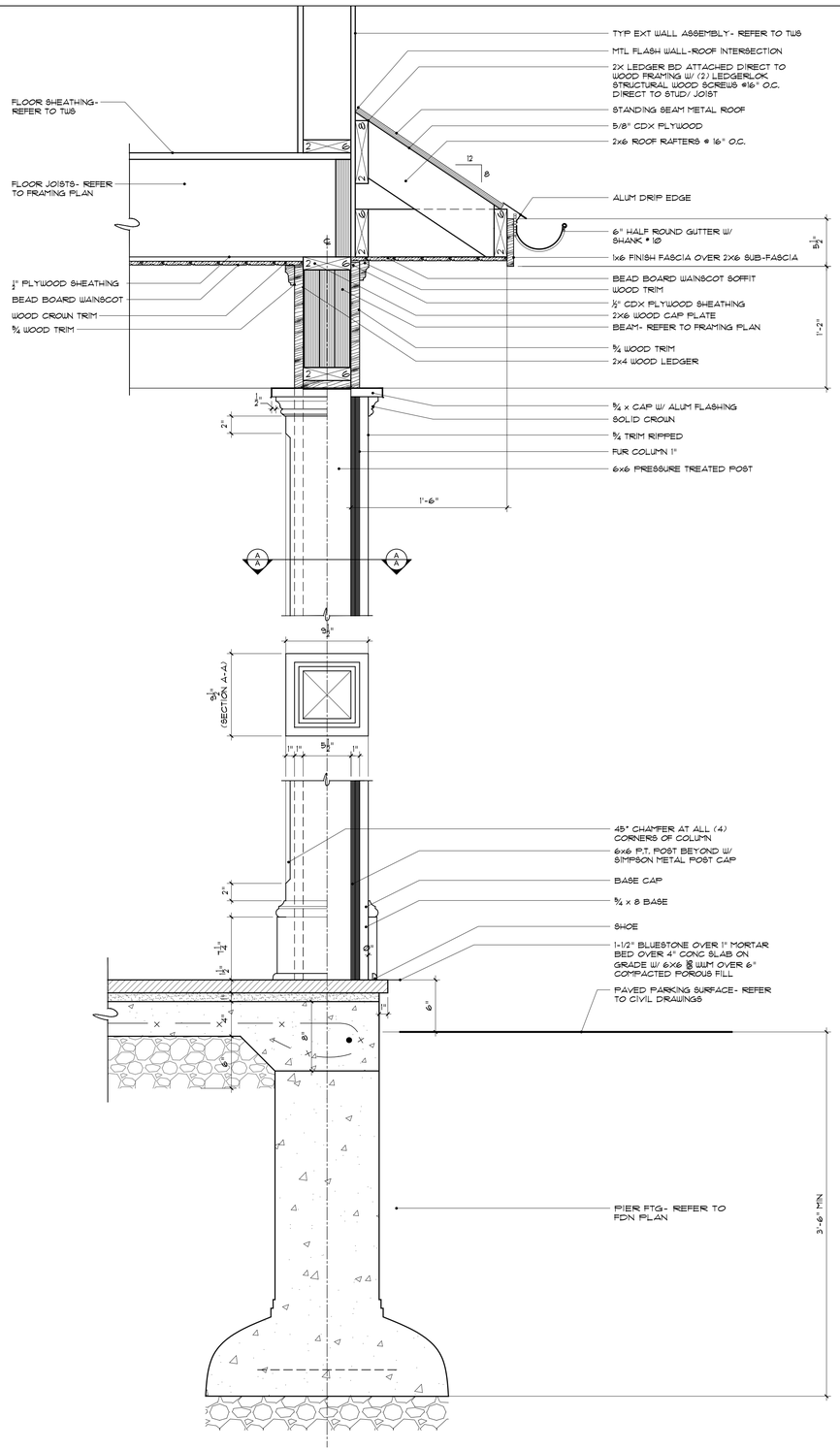


1 A5.03 Typical Covered Porch Detail

Scale: 1-1/2" = 1'-0"

TBD BY FUTURE TENANT

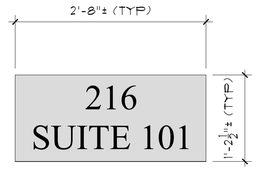
10"

NEW TENANT SIGNAGE

NOTE: DARK BRONZE ANODIZED ALUM "TIMES NEW ROMAN" FONT EXTERNALLY ILLUMINATED W/ VISUALLY CONCEALED 3,500K LED STRIP LIGHTING CONTROLLED VIA ASTRONOMICAL TIMER- PROJECTED JAMB NUT MOUNTED W/ SS THREADED RODS ATTACHED TO NEW SIGN BOARD AND SS JAMB NUTS TO SET SIGN DEPTH. SIGNAGE SHALL BE UNIFORM FOR ALL TENANTS. TEXT TBD BY FUTURE TENANT.

2 A5.03 New Typical Storefront Signage Detail

Scale: 1" = 1'-0"

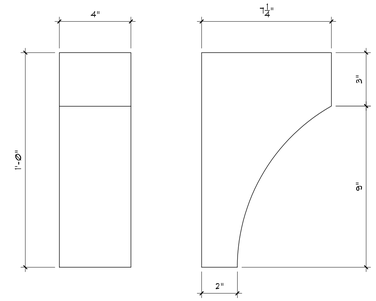


NEW TYPICAL TENANT SIGN NOTES:

1. SIGNAGE SHALL BE CUT VINYL GRAPHIC TYPE SURFACE APPLIED TO NEW TRANSOM GLAZING.
2. FONT TYPE SHALL BE "TIMES NEW ROMAN".
3. SIGN SIZE SHALL NOT EXCEED DIMENSIONS OF TRANSOM PANEL.
4. LETTER SHALL BE WHITE.
5. ALL NEW TENANT SIGNAGE SHALL CONFORM TO THE REQUIREMENTS NOTED ON THIS PLAN.
6. 4" HT LETTERS DEPICTED BUT MAY VARY.

3 A5.03 Transom Signage Detail

Scale: 1" = 1'-0"



PVC BRACKET #BKT1X12X4 AS MANUF BY FYPON OR EQ

4 A5.03 Gable Bracket Detail

Scale: 3" = 1'-0"

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