

SITE DATA:

OWNER / DEVELOPER: 593 NORTH STATE RD. LLC.
PROJECT LOCATION: 593 NORTH STATE RD.
OSHSING, NY 10510
GB, GENERAL BUSINESS
GB, GENERAL BUSINESS
SECTION 90.11, BLOCK 1, LOT 36
0.697 ACRES (30,368 SF)
PUBLIC SEWERS
PUBLIC WATER FACILITIES

ZONING SCHEDULE:

ZONING DISTRICT: GB, GENERAL BUSINESS			
DIMENSIONAL REGULATIONS:	REQUIRED	PROVIDED	VARIANCE REQUIRED
MINIMUM SIZE OF LOT:			
MINIMUM LOT AREA:	20,000 SF.	30,368 SF.	NONE
MINIMUM LOT WIDTH:	100 FT.	201 FT.	NONE
MINIMUM LOT DEPTH:	130 FT.	132 FT.	NONE
MINIMUM YARD DIMENSIONS:			
PRINCIPAL BUILDING:			
FRONT YARD SETBACK:	30 FT.	55.2 FT.	NONE
REAR YARD SETBACK:	0, 30 FT. (1)	67.8 FT.	NONE
ONE SIDE YARD SETBACK:	0, 30 FT. (1)	22.6 FT.	NONE
COMBINED SIDE YARD SETBACK:	—	—	NONE
ACCESSORY BUILDINGS:			
FRONT YARD SETBACK:	30 FT.	—	NONE
REAR YARD SETBACK:	30 FT. (1)	—	NONE
ONE SIDE YARD SETBACK:	30 FT. (1)	—	NONE
COMBINED SIDE YARD SETBACK:	—	—	NONE
MAXIMUM % OF LOT TO BE OCCUPIED:			
TOTAL BUILDING COVERAGE:	30% OF LOT AREA	5.6 % OF LOT AREA	NONE
MAXIMUM HEIGHT:			
PRINCIPAL BUILDING - FEET:	35 FT.	35 FT. MAX	NONE
PRINCIPAL BUILDING - STORIES:	2	2	NONE
ACCESSORY BUILDING - FEET:	35 FT.	—	NONE
ACCESSORY BUILDING - STORIES:	2	—	NONE

ZONING REGULATION NOTES:
1. SETBACK SHALL BE 30 FT. ALONG ANY RESIDENCE DISTRICT BOUNDARY, 0 FT. OTHERWISE.

PARKING SCHEDULE

REQUIRED PARKING:	1 SPACE PER 200 SF RETAIL FLOOR AREA 1 SPACE PER 300 SF OFFICE FLOOR AREA
RETAIL SPACE:	1691 S.F. @ 1 SPACES/200 S.F. = 9 SPACES
OFFICE SPACE:	1691 S.F. @ 1 SPACES/300 S.F. = 6 SPACES TOTAL = 15 SPACES
PROVIDED PARKING:	2 GARAGE 13 STANDARD 1 HANDICAP
TOTAL PROVIDED PARKING:	16 SPACES
PARKING VARIANCE REQUIRED:	0 SPACES

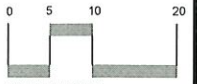
NOTES:
1. THE EXISTING TWO STORY BUILDING SHALL BE USED AS A COMBINATION OFFICE AND SHOW ROOM FOR THE PROPOSED PLUMBING BUSINESS. THE FIRST/BOTTOM FLOOR SHALL BE USED FOR THE SHOW ROOM AND STORAGE SPACE, AND THE SECOND FLOOR SHALL BE USED AS OFFICE SPACE.
2. SITE IS TRIBUTARY TO POCAHONTO RIVER
3. THERE SHALL BE NO OUTDOOR STORAGE OF ANY MATERIALS ON THE LOT.
4. THERE SHALL BE NO OUTDOOR STORAGE OF ANY CONSTRUCTION EQUIPMENT ON THE LOT.
5. ALL LIGHTING SHOWN ON THIS PLAN SHALL BE DIRECTED AND/OR SHIELDED SO AS TO PRECLUDE OBSTACULAR GLARE FROM BEING OBSERVABLE FROM ADJACENT STREETS AND PROPERTIES.
6. ALL VEGETATION SHOWN ON THIS PLAN SHALL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE OF THE SITE. ALL VEGETATION NOT SO MAINTAINED SHALL BE REPLACED WITH NEW COMPARABLE VEGETATION AT THE BEGINNING OF THE NEXT GROWING SEASON.

Gareth Hougham, Chairman
Town of Ossining Planning Board

Date: _____

LEGEND

- 222 --- EXISTING GRADING
- x- 222.8 --- EXISTING SPOT GRADE
- 200 --- PROPOSED GRADING
- --- PROPERTY LINE / RIGHT OF WAY
- --- PROPOSED CURB
- --- 100' WETLAND BUFFER
- --- EXISTING WATER LINE
- --- EXISTING FIRE HYDRANT
- --- PROPOSED DRAINAGE LINE
- --- PROPOSED CATCH BASIN
- --- PROPOSED DRAINAGE MANHOLE
- --- PROPOSED LIMIT OF DISTURBANCE



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NOTE:
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2. 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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JOSEPH L. LUK
Professional Engineer
State of New York
License No. 64431

Revisions:

No.	Date	Comments
1	3/21/18	Initial Plan
2	5/25/18	1st Town Comments
3	6/11/18	1st Town Comments
4	7/26/18	1st Town Comments
5	8/24/18	Amended Site Plan
6	9/27/18	Amended Site Plan
7	10/26/18	1st Town Comments
8	11/18/18	1st Town Comments
9	11/18/18	1st Town Comments

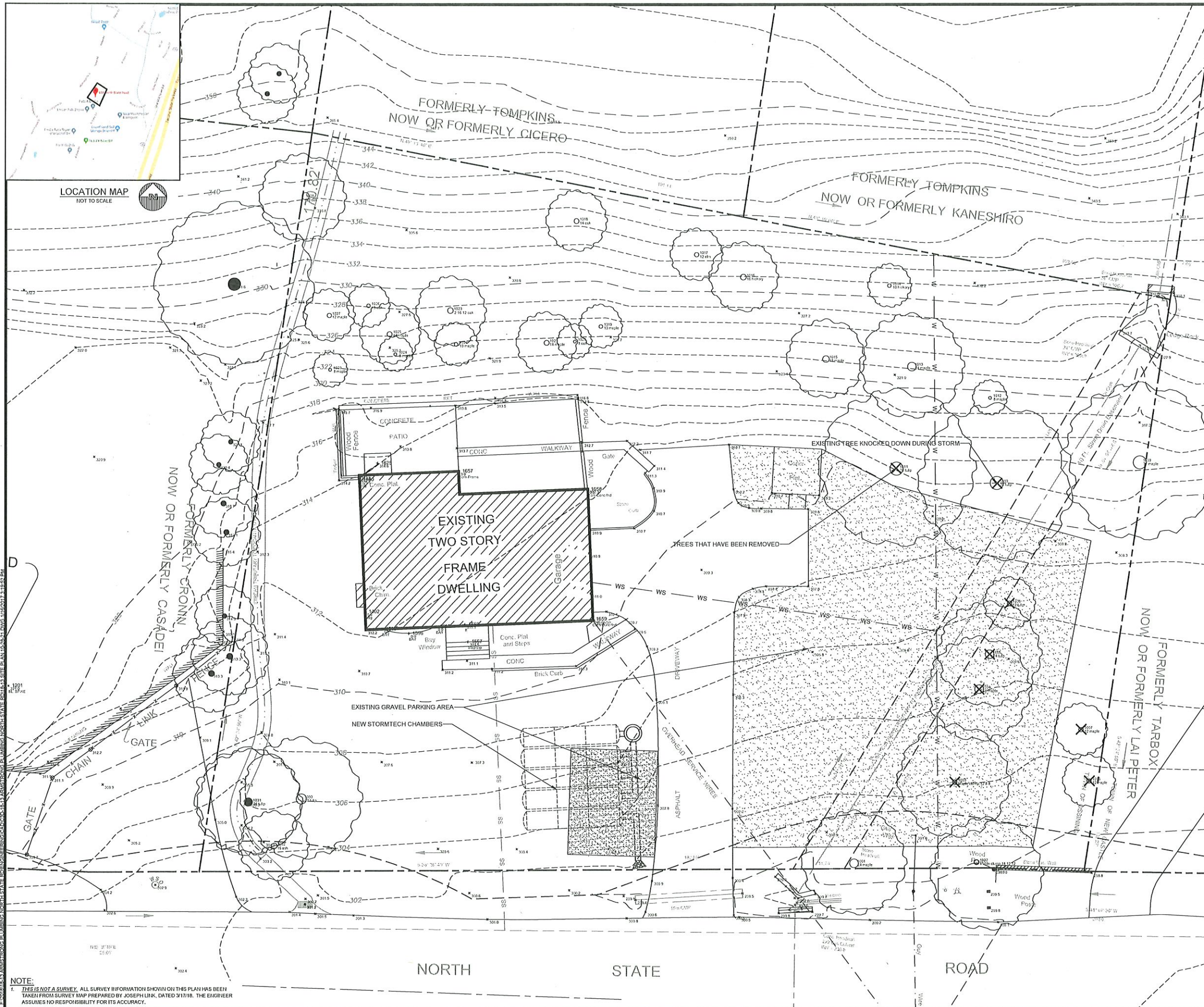
SCALE: 1"=10'-0"

DRAWN BY: TK

DATE: 3/21/18

AMENDED SITE PARKING PLAN
PREPARED FOR
ARMSTRONG PLUMBING LLC
593 NORTH STATE ROAD
Town of Ossining
Westchester County, NY

Sheet 1 of 11



LOCATION MAP
NOT TO SCALE



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Revisions	No.	Description	Comments
1	1	1/17/18	Final Conditions
2	2	2/27/18	Final Conditions
3	3	6/11/18	Final Conditions
4	4	7/26/18	Final Conditions
5	5	8/23/18	Final Conditions
6	6	9/27/18	Final Conditions
7	7	10/25/18	Final Conditions
8	8	11/15/18	Final Conditions
9	9	11/15/18	Final Conditions

SCALE	1" = 10'
DRAWN BY	TK
DATE	3/21/18

CURRENT SITE CONDITIONS

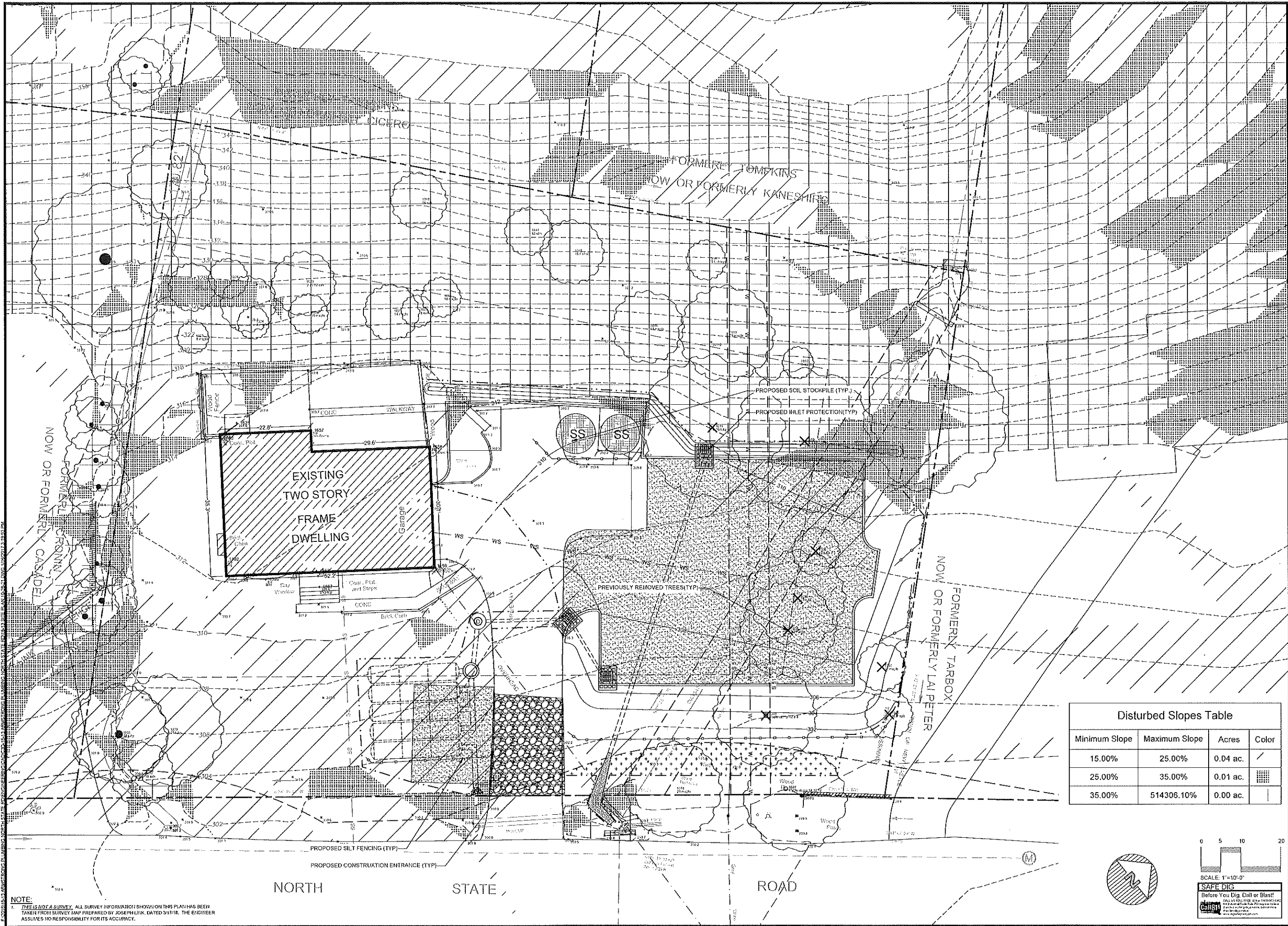
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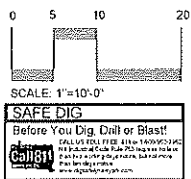


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2. (VOID) HORIZONTAL ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209(1) OF THE NEW YORK STATE EDUCATION LAW.

Disturbed Slopes Table			
Minimum Slope	Maximum Slope	Acres	Color
15.00%	25.00%	0.04 ac.	/
25.00%	35.00%	0.01 ac.	■
35.00%	514306.10%	0.00 ac.	—



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Revisions:
No. Date Comments
1 2/2/18 Initial Design
2 2/2/18 Final Design
3 2/2/18 Final Design
4 2/2/18 Final Design
5 2/2/18 Final Design
6 2/2/18 Final Design
7 2/2/18 Final Design
8 2/2/18 Final Design
9 2/2/18 Final Design

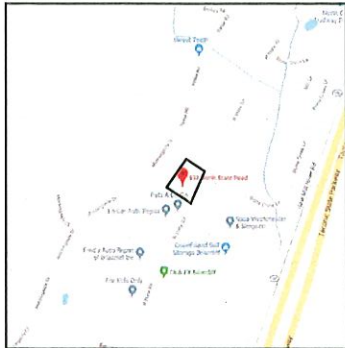
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E&SC PLAN

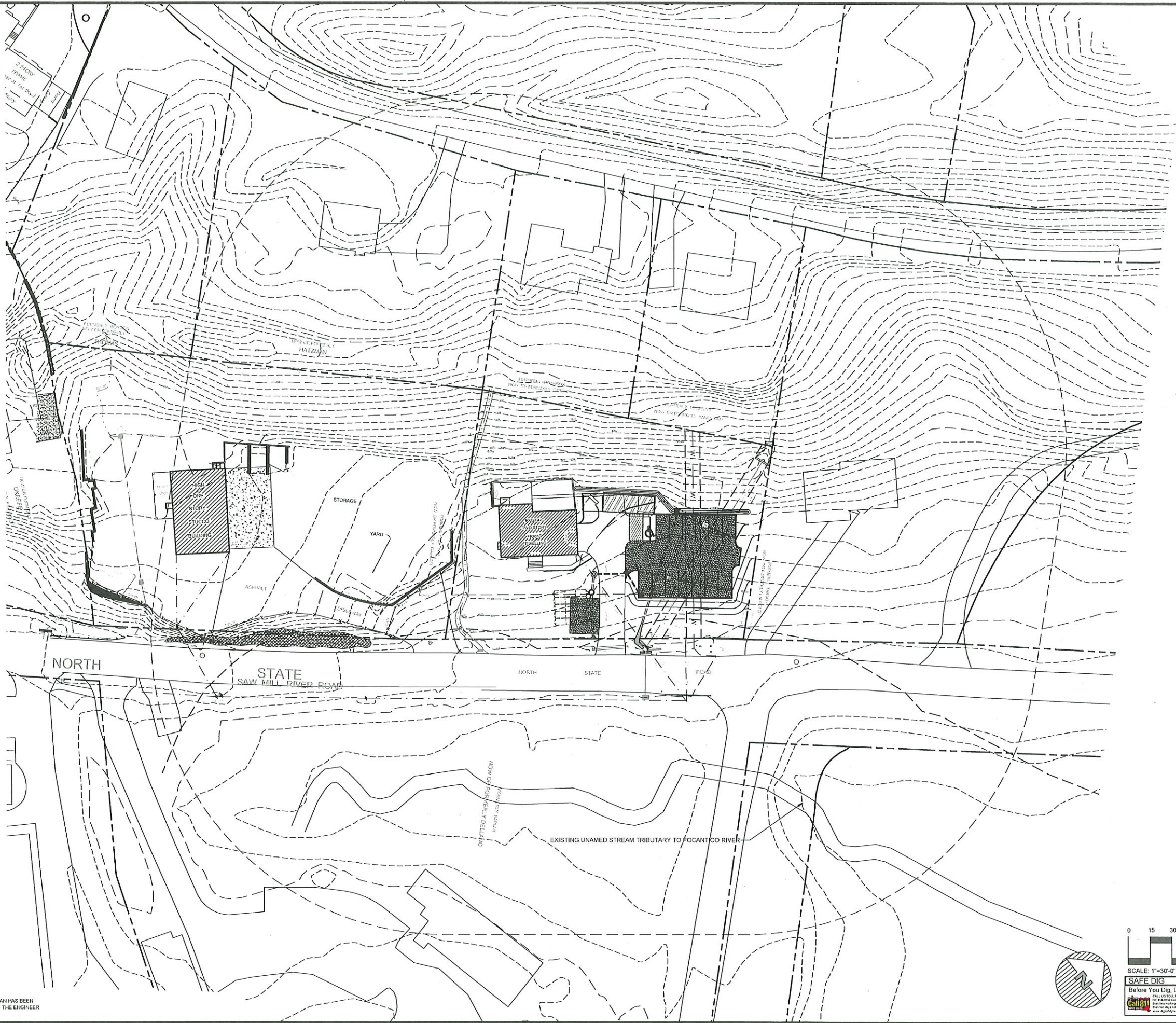
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503 NORTH STATE ROAD
Town of Ossining, Westchester County, NY

Sheet 3 of 11

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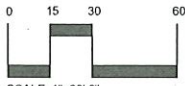


LOCATION MAP
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AMENDED SITE PARKING PLAN
PREPARED FOR

**ARMSTRONG PLUMBING
LLC**

593 NORTH STATE ROAD

Town of Ossining Westchester County, NY

AREA MAP

SCALE:
1"=10'

DRAWN BY
TK

DATE
3/21/18

Revisions:	No.	Date	Comments
	1	5/21/18	Plan Revisions
	2	5/25/18	Town Comments
	3	7/6/18	Town Comments
	4	7/26/18	Town Comments
	5	8/29/18	Town Comments
	6	8/23/21	Amended Site Plan
	7	9/27/21	Amended Site Plan
	8	11/18/21	Town Comments



Site Design Consultants

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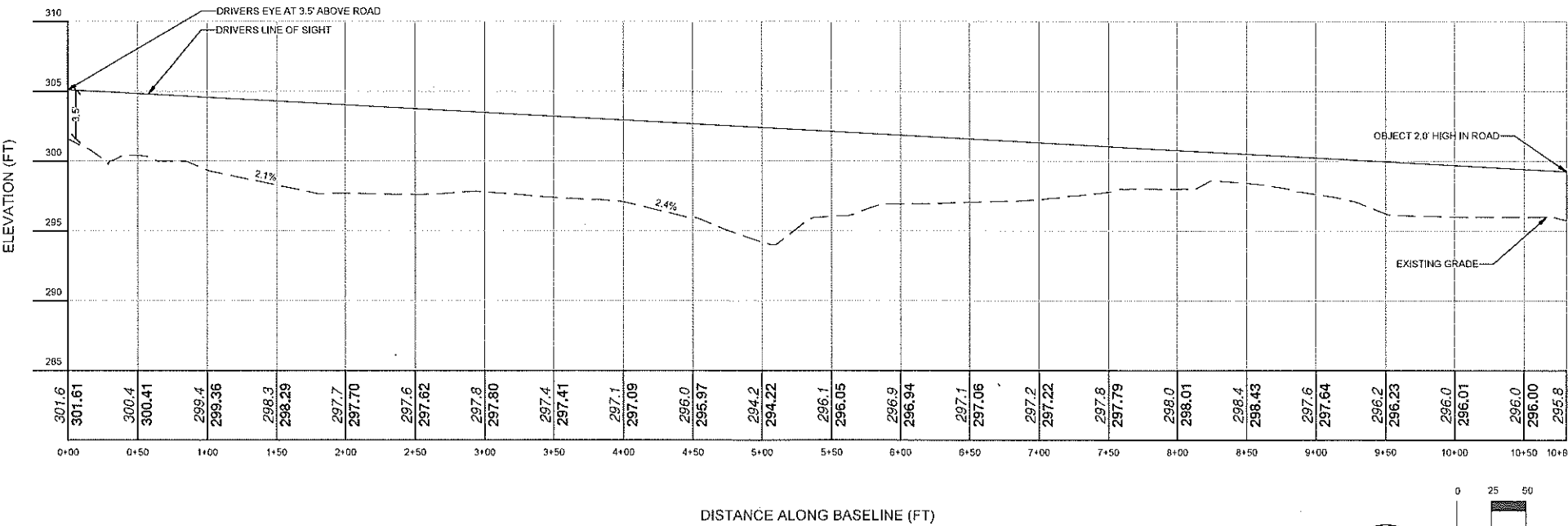
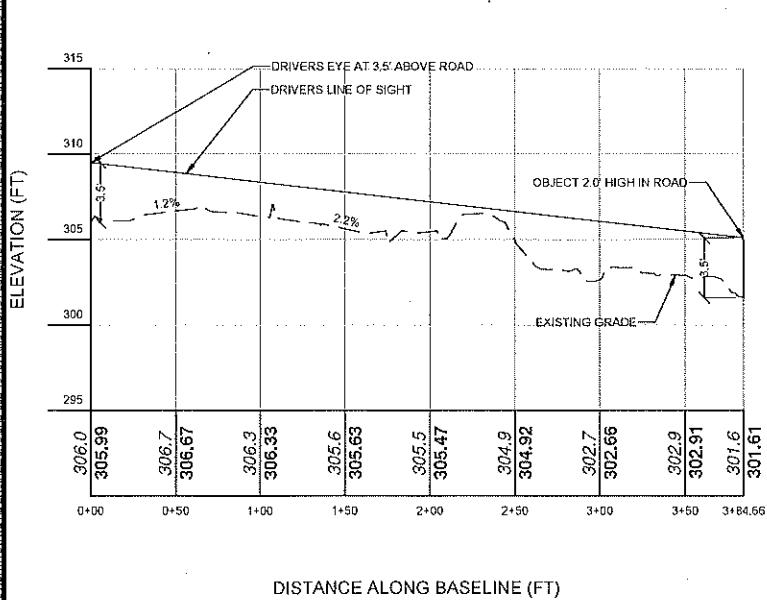
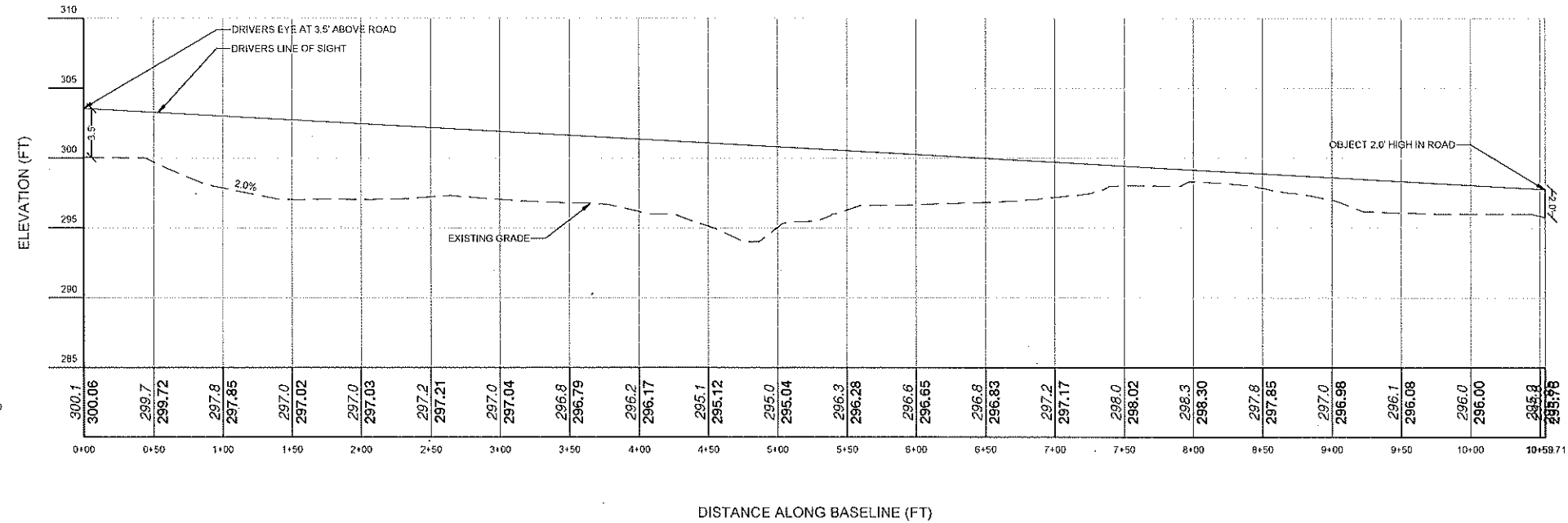
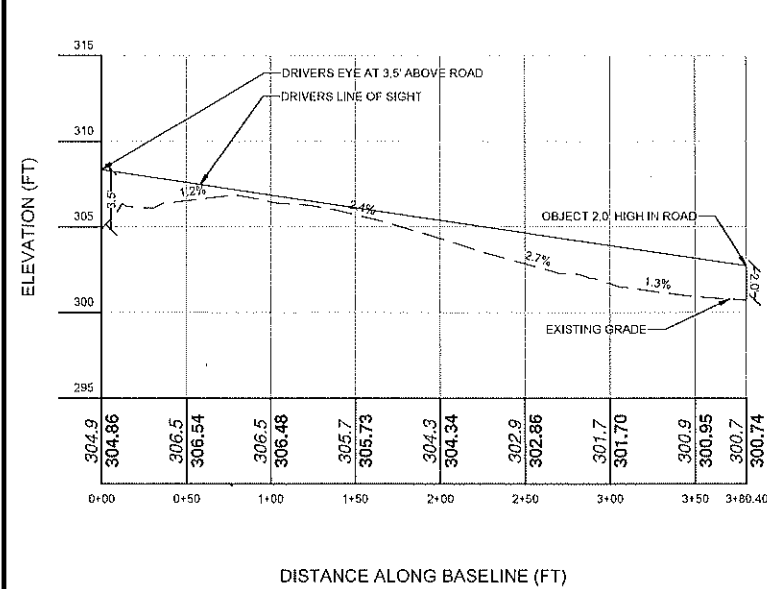
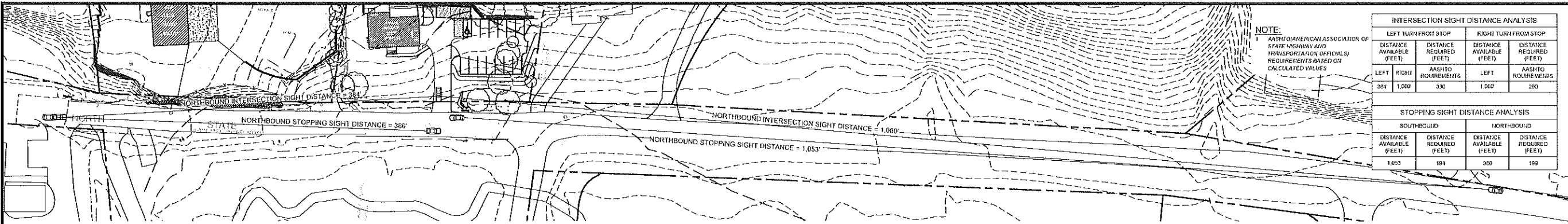
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PROJECT # 18-13

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PROJECT # 18-13

STATE OF NEW YORK
JOSEPH LUK
LICENSED PROFESSIONAL ENGINEER
NYS Lic. No. 6421

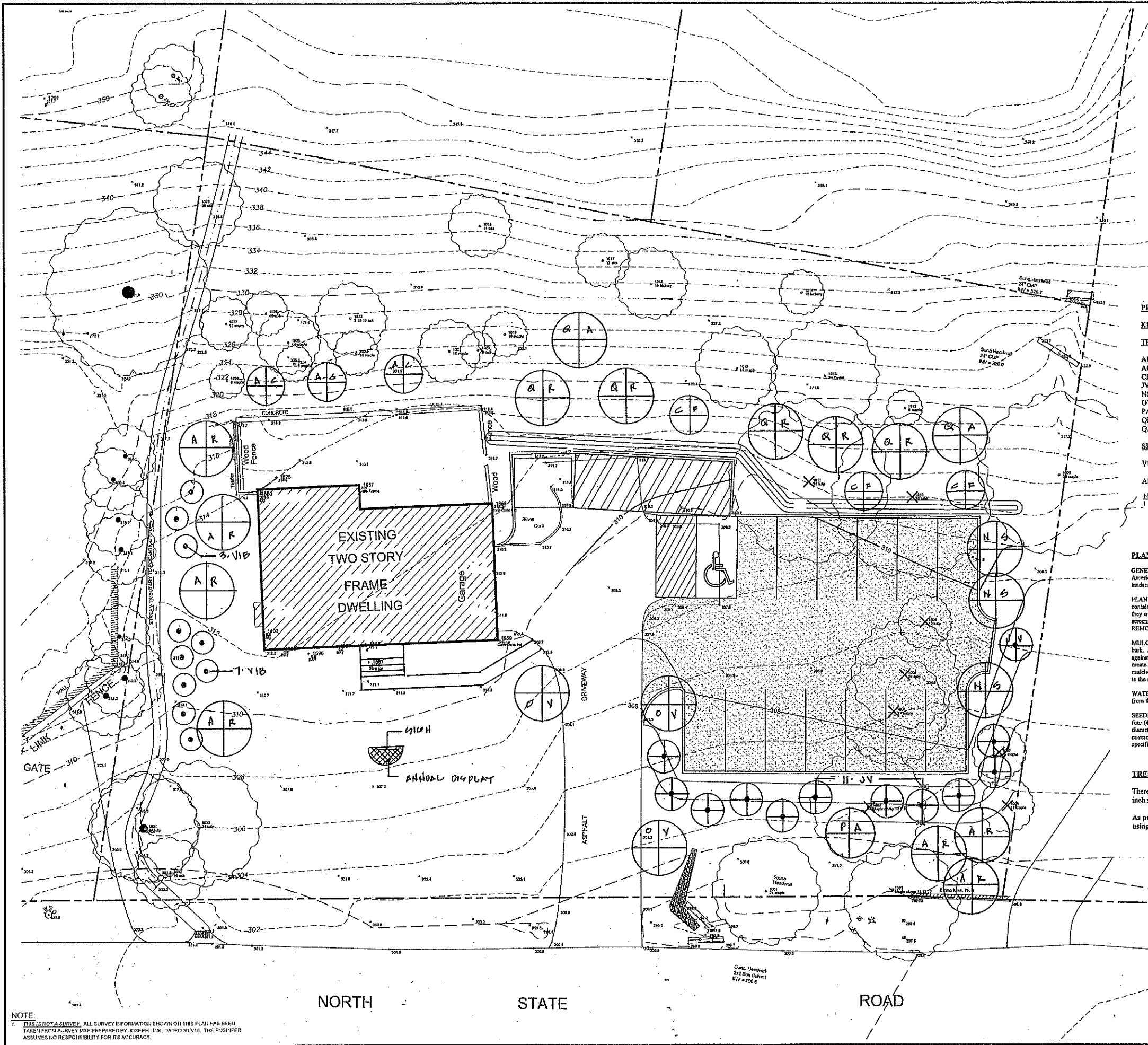
Revisions:
No. Description
1. Initial
2. 3/24/18
3. 4/17/18
4. 7/17/18
5. 8/24/18
6. 9/27/18
7. 10/25/18
8. 11/28/18
9. 1/1/19

DATE: 3/21/18

SIGHT DISTANCE

AMENDED SITE PARKING PLAN
PREPARED FOR
ARMSTRONG PLUMBING LLC
595 NORTH STATE ROAD
Westchester County, NY

Sheet 5 of 11



SEASONAL MAINTENANCE SCHEDULE:

SPRING: Spring clean-up shall begin as soon as ground is no longer frozen. Leaves in planting beds, shall be removed. Organic cedar mulch shall be replenished to a maximum depth of 2" in all planting beds in April as needed.

Lawn mowing shall start as soon as grass reaches a height of 3" and continued to be mowed and maintained at a height of 2 1/2" until frost.

SUMMER: Lawn mowing shall continue as noted above. A mulching mower shall be used.

FALL: Lawn mowing shall continue as noted above. A mulching mower shall be used to mulch leaves into lawn bed. Only leaves in large abundance shall be removed. Leaves can remain in planting beds over winter.

WINTER: Due to the "Low Maintenance" design of this plan. No winter maintenance is required.

PLANT SCHEDULE

KEY	QUAN.	BOTANICAL / COMMON NAME	SIZE
TREES			
AR	7	Acer rubrum - Red Swamp Maple	4"-4 1/2" Cal.
AC	3	Amelanchier canadensis - Shadblow	6'-7' HT.
CF	3	Cornus florida - Flowering Dogwood	3"-3 1/2" Cal.
JV	12	Juniperus virginiana - Eastern Red Cedar	6'-7' HT.
NS	3	Nyssa sylvatica - Tupelo	3"-3 1/2" Cal.
OV	3	Ostrya virginiana - American Hop Hornbeam	3"-3 1/2" Cal.
PA	1	Picea glauca - White Spruce	8'-9' HT.
QR	5	Quercus rubra - Red Oak	4"-4 1/2" Cal.
QA	2	Quercus alba - White Oak	4"-4 1/2" Cal.
SHRUBS:			
VIB	10	Viburnum dentatum (balled and burlapped)	30"-36" HT.

ALL THE ABOVE PLANTS ARE NATIVE TO NEW YORK STATE.

NOTE:
1. The Viburnum Dentatum may be replaced with either Winterberry (Ilex Verticillata) or Spice Bush (Lindera Benzoin).

PLANTING SPECIFICATIONS:

GENERAL: All plants, trees and shrubs, shall meet the specifications for "plant material" as per the American Horticultural Society. All plants shall be guaranteed for three full years from the time the landscaping is formally accepted by the owner and the Town of Ossining.

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 at the same grade as they were in the nursery. Backfill for all planting pits shall be as follows: Two parts native soil, one part screened topsoil and one part compost. All trees and shrubs are "balled and burlapped". REMOVE all String, wire, and other non-burlap material from top 1/4 of the root ball.

MULCHING: All planting beds shall be mulched with a maximum of three (3) inches of shredded cedar bark. All trees shall be mulched as follows: All trees shall be mulched with a 4" ring, and so no mulch is against the trunk of any new or existing tree. The mulch shall be 1/2" deep adjacent to the tree trunk, and create a 3"-4" deep ditch on the outside ring. No "volcano" tree mulching is permitted. All shrubs shall be mulched so no mulch is against the base of any new or existing shrub. The mulch shall be 1/2" deep adjacent to the shrub base.

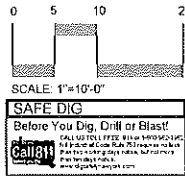
WATERING: The contractor shall water all planted material, until formal acceptance of the landscaping from the owner and the Town of Ossining.

SEEDING LAWN AREAS: All disturbed areas shall be seeded. Seeded areas shall have a minimum of four (4) inches of topsoil as a base. Seed bed shall be fine graded, with all stones and debris over 1" in diameter removed. Seed shall be spread at the rate of 10 pounds per 1000 square feet. Entire area shall be covered with "Pen-Stuff", at the rate of one bag per 700 S.F., and installed as per manufacturers specifications. Seed mix shall be "Northeast" mix by Pennington Seed Company.

TREE REPLACEMENT NOTE:

There will be 154 caliper inches of trees removed. As per Town code 50% caliper inch shall be replaced, hence, 77 caliper inches of trees are required to be replaced.

As per the PLANT SCHEDULE there will be 83 Caliper inches of trees replaced, using the minimum specified caliper for each tree.



PROJECT # 18-13

FRANK GIULIANO - LANDSCAPE ARCHITECT
8 PINE TREE DRIVE, KATONAH, NY 10536
914-954-4110 FGIARCH@AOL.COM

Revisions:	No.	Date	Comments
	1	5/2/18	Final Comments
	2	5/2/18	Final Comments
	3	6/1/18	Final Comments
	4	6/1/18	Final Comments
	5	6/1/18	Final Comments
	6	6/1/18	Final Comments
	7	6/1/18	Final Comments
	8	6/1/18	Final Comments
	9	6/1/18	Final Comments
	10	6/1/18	Final Comments

LANDSCAPE PLAN

AMENDED SITE PARKING PLAN
PREPARED FOR
ARMSTRONG PLUMBING
LLC
593 NORTH STATE ROAD
Town of Ossining
Westchester County, NY

Sheet 7 of 11

CONSTRUCTION SEQUENCE

Recommended Sequence of Construction

Use of erosion and sediment control structures and practices are important for maintaining site stability under runoff and during active construction activities. The Construction Sequence should be followed with erosion and sediment controls, as follows, with all controls in place and implemented prior to respective Infrastructure construction. As construction proceeds, the controls should be monitored, maintained and replaced as needed. Additional controls may be required as needed to address unforeseen situations.

Refer to The Construction Drawings for all plans and details which relate to the Construction Sequence. This Sequence should be followed in conjunction with all Plans, Notes, and the Stormwater Pollution Prevention Plan. Prior to the start of work, the Owner and General Contractor shall read and understand the Sequence for Construction. The Sequence shall be discussed at the time of the Pre-construction Meeting.

During construction of the project, the Contractor is responsible to coordinate all required inspections with various agencies and the Project Engineer.

Construction Sequence

General Sequence: The general sequence applies to the start of all Phases of the project. The requirements in each 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.

- 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.
- 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.
- Cut and clear trees within the phase limits or necessary for the access to be disturbed. Install tree protective measures at marked locations on E&SC Plan.
- 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, diversion swales, sediment traps, 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).
- Timbered trees and woodchips shall be temporarily stored in the stockpile and/or sloping 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).
- Remove existing vegetative cover, cut and clear trees, shrubs, 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. 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.
- Once the tree removal operation is complete stop the topsoil within the limits of disturbance and place excavated topsoil within the limits of disturbance. The excavated topsoil 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.
- Begin rough grading of driveways and adjacent areas. Slope in excess of 3:1:V shall not be left exposed and must be stabilized.
- Cut material shall first be moved to the fill locations required to complete the access drive and parking and bring the area up to final grades. Excess material to be used toward infilling in Phase II shall be stockpiled. Stockpiled rock that is not suitable to remain on site shall be hauled away and properly disposed of.
- Begin installation of subsurface detention chambers within limits of disturbance.
- When the subsurface units are installed, the upstream drainage structure shall be blocked so as to not allow sediment laden water from reaching the subsurface chambers.
- Block off or 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.
- Upon completion of the subsurface chambers, begin installation of proposed Downstream Defender unit. Install storm sewer sloping, catch basins and manholes, working downstream to upstream. 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.
- Once the infiltration system has been installed, grade and install the base course for the driveways and parking areas.

Final Site Stabilization and Completion of New Construction:

- Upon completion of all Phases, the site shall be inspected by the Supervising Engineer and Town Inspector to determine completion of all work and permanent stabilization of the site.
- Any areas deemed incomplete or not properly stabilized shall be done so to the satisfaction to the Supervising Engineer and Town Inspector.
- Once the site is deemed adequately stable the temporary erosion and sediment control measures can be removed including the sediment traps. The area where the sediment trap was located shall be filled, top soiled, seeded and mulched in accordance with the specifications within this plan. At that time if deemed appropriate drainage structures upstream from the subsurface stormwater management systems shall be unblocked to allow for flow of collected surface runoff.

GENERAL EROSION CONTROL NOTES:

- Contractor shall maintain erosion and sediment control practices. The sediment and erosion control practices are to be installed prior to any major site disturbance and maintained until permanent protection is established. Road surface flows from the site shall be directed to appropriate measures during adjacent road shoulder grading. The contractor is responsible for the maintenance of all soil erosion and sedimentation control devices throughout the course of construction.
- Contractor shall maintain all erosion and sedimentation control devices throughout the course of construction. 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.
- 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" (NYSDDEC).
- 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.
- Any disturbed areas that will be left exposed more than 7 days and not subject to construction traffic, shall immediately receive a 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.
- All disturbed areas within 500 feet of an inhabited dwelling shall be seeded as necessary to provide dust control.
- The contractor shall keep the roadways within the project clear of soil and debris and is responsible for any steel cleaning necessary during the course of the project.
- Sediment and erosion control structures shall be removed, and the area stabilized when the drainage area has been properly stabilized by permanent measures.
- All sediment and erosion control measures shall be installed in accordance with current edition of NYSDDEC.
- All graded 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.
- Any slopes graded at 3:1 or greater shall be stabilized with erosion blankets to be staked into place in accordance with the manufacturers requirements. Erosion blankets may also be required at the discretion of the engineer or project engineer. When stockpiled material is utilized for channel stabilization, place all of the volume of seed mix prior to laying net, or as recommended by the manufacturer.
- To prevent heavy construction equipment and trucks from tracking soil off-site, construct a porous crushed stone pad. Locate and construct pads as detailed in these plans.
- Contractor is responsible for controlling dust by sprinkling exposed soil areas periodically with water as required. Contractor to supply all equipment and water.
- Contractor shall be responsible for construction inspections as per NYSDDEC GP-0-15-002 and Town of Ossining code.

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: _____

MAINTENANCE OF TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURES:

NYSD DEC GP-0-15-002 exposure restrictions - states that any exposed earthwork shall be stabilized in accordance with the guidelines of this plan.

- Trees and vegetation shall be protected at all times as shown on the detail drawing and as directed by the engineer.
- Care should be taken so as not to channel concentrated runoff through the areas of construction activity on the site.
- Fill and site disturbances should not be created which causes water to pond off site or on adjacent properties.
- 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.
- 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.
- 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.
- All sites shall be stabilized with erosion control materials within 7 days of final grading.
- 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.	CLEAN/REPLACE	REMOVE
WHEEL CLEARER	CLEAN	---	---	---	REPLACE	REMOVE
PALET 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) shall 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 dam inlets for evidence of structural damage and repaired immediately.

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 flow.

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 functioning of 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 7.8.	2. The organic content shall not be less than 2% or more than 70%.	3. Gradation:
2" PCH	100		
1" RCH	85 TO 100		
1/4" JCH	65 TO 100		
NO. 200 MESH	20 TO 80		

PERMANENT VEGETATIVE COVER:

- Site preparation:
 - Install erosion control measures.
 - Seeds of compacted soil areas.
 - Liming as required to pH 6.5.
 - Fertilize with 10-6-4 4 lbs/1,000 S.F.
 - Incorporate amendments into soil with disc harrow.
- Seed mixtures for use on slopes and cut and fill areas:

ALT. A	KENTUCKY BLUE GRASS	20
ALT. B	CREeping RED FESCUE	20
ALT. C	RYE GRASS OR REDTOP	5
ALT. D	CREeping RED FESCUE	20
ALT. E	TAIL FESCUE/SMOOTH BLOOMGRASS	20

- SEEDING:
 - Prepare seed bed by raking to remove stones, bricks, roots and other foreign material.
 - Apply soil amendments and integrate into soil.
 - Apply seed uniformly by cyclone seeder, cat-grasser or hydro-seeder at rate indicated.
 - Stabilize seeded areas in drainage swales.
 - Integrate to fully saturated soil layer, but not to double plowing soil.
 - Seed between April 1st and May 15th or August 15th and October 15th.
 - Seeding may occur May 15th and August 15th if adequate irrigation is provided.

TEMPORARY VEGETATIVE COVER:

SITE PREPARATION:

- Install erosion control measures.
- Seeds of compacted soil.
- Fertilize with 10-10-10 at 400/lb.
- Liming as required to pH 6.5.

SEED SPECIES:

MIXTURE	LBS/ACRE
Rapidly germinating annual ryegrass (for approved equal)	20
Perennial ryegrass	20
Cereal oats	36

SEEDING:

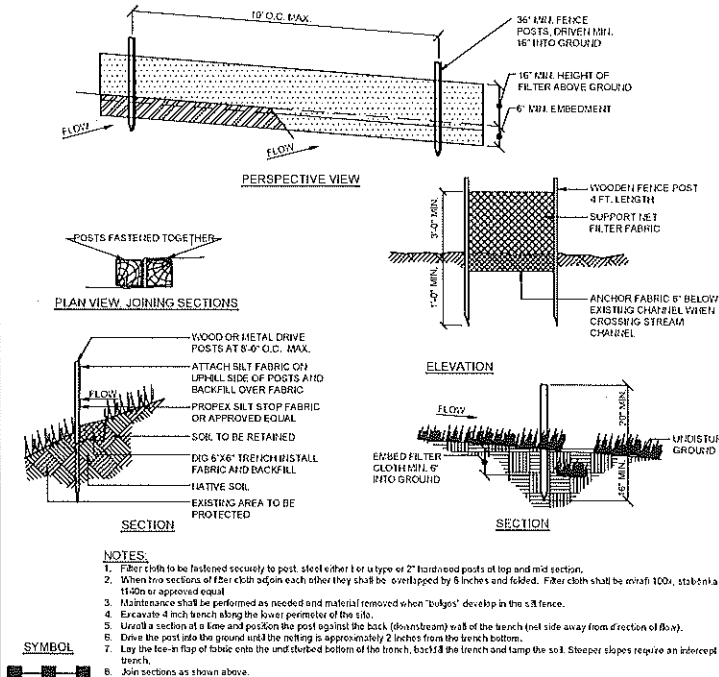
Same as permanent vegetation cover

CONTRACTOR CERTIFICATION STATEMENT

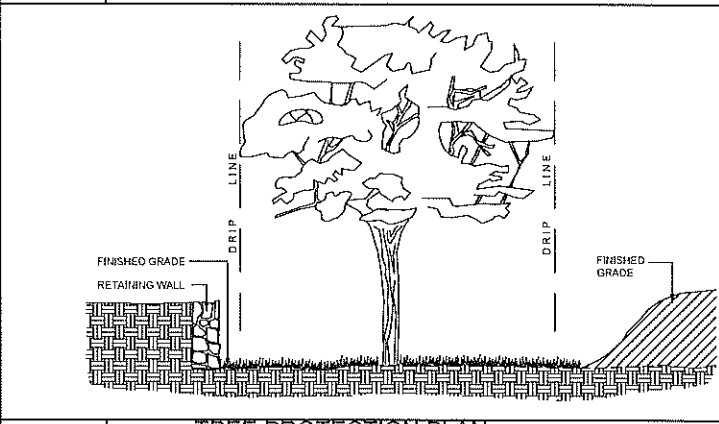
Certification Statement - All contractors and subcontractors as identified in a SWPPP, by the Owner or Operator, in accordance with Part III.A.5 of the SPDES General Permit for Stormwater Runoff from Construction Activity, GP-0-15-002, dated January 12, 2015, Page 10 of 40, shall sign a copy of the following 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."

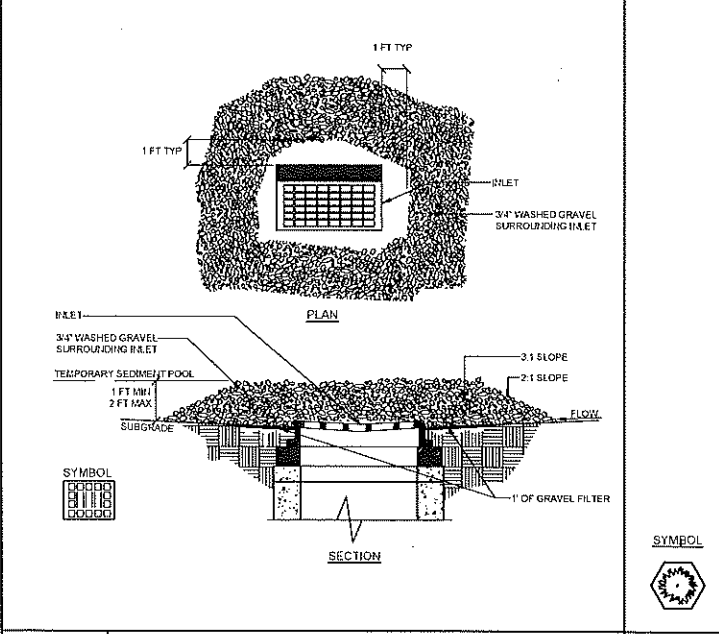
Individual Contractor: _____
Name and Title (please print): _____
Signature of Contractor: _____
Company / Contracting Firm: _____
Name of Company: _____
Address of Company: _____
Telephone Number / Cell Number: _____
Site Information: _____
Address of Site: _____
Today's Date: _____



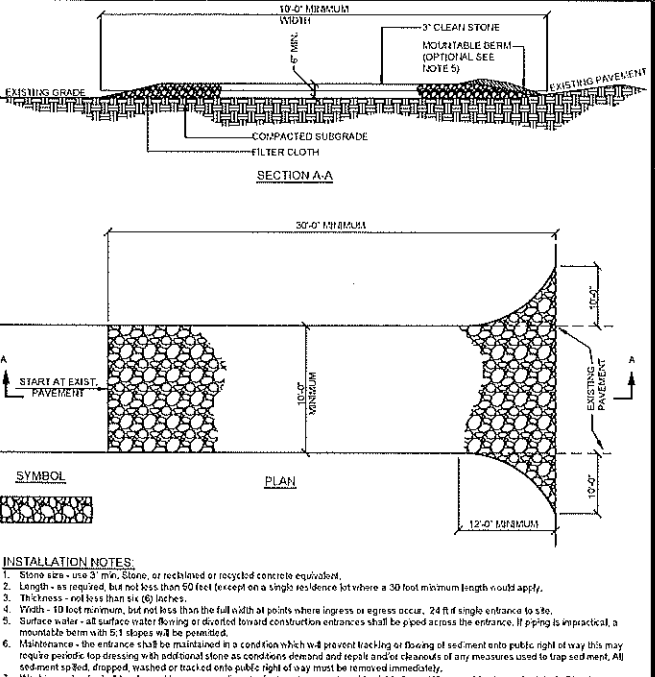
E-1 SILT FENCE DETAIL NOT TO SCALE



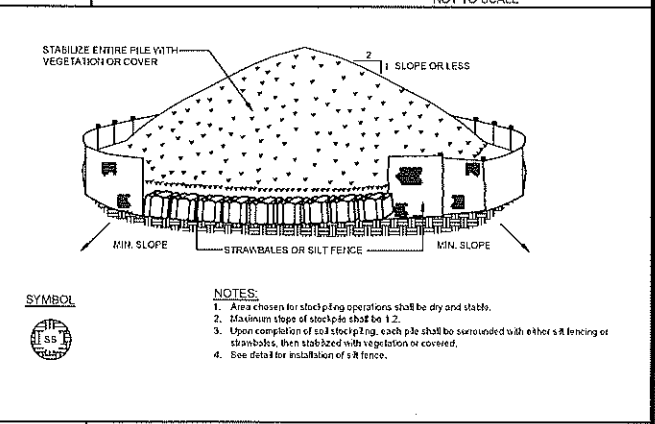
E-3 TREE PROTECTION PLAN FOR GRADE CHANGE DETAIL NOT TO SCALE



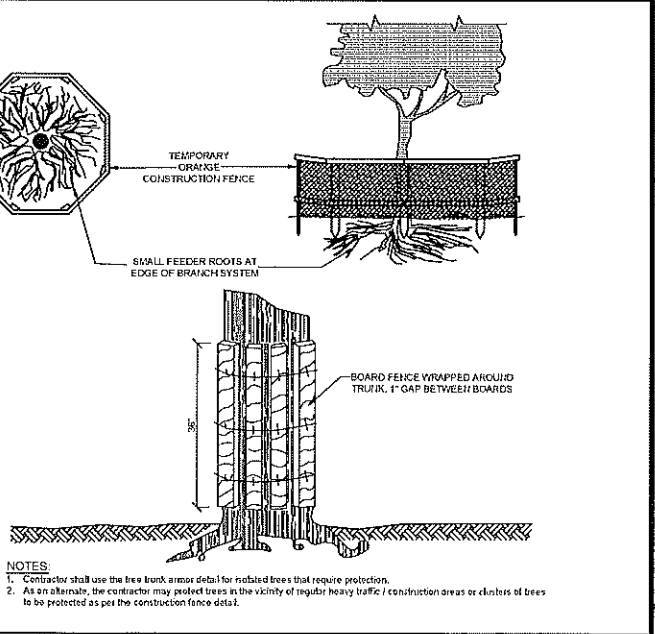
E-5 INLET PROTECTION DETAIL NOT TO SCALE



E-2 STABILIZED CONSTRUCTION ENTRANCE DETAIL NOT TO SCALE



E-4 SOIL STOCKPILE DETAIL NOT TO SCALE



E-6 TREE TRUNK ARMOR / TREE PROTECTION DETAIL NOT TO SCALE

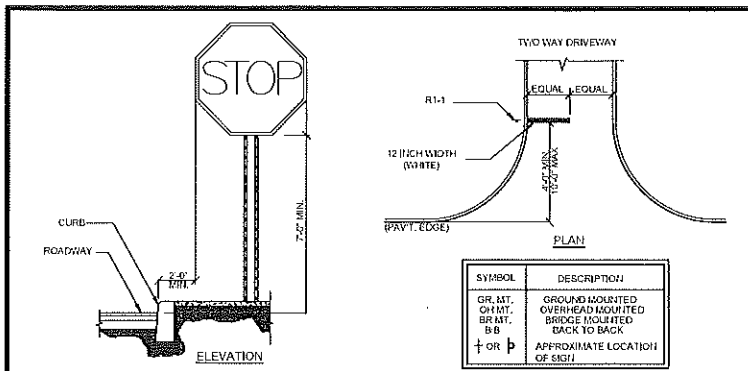
Site Design Consultants
Civil Engineers • Land Planners
251-F Underhill Avenue, Yorktown Heights, NY 10598
(914) 962-4488 • Fax: (914) 962-7386
www.sitedesignconsultants.com

Joseph C. Rima, P.E.
NYS Lic. No. 64431

Revisions:	No.	Date	By	Comments
1	5/21/18	TK	JK	Final Construction
2	6/11/18	TK	JK	Final Construction
3	8/20/18	TK	JK	Final Construction
4	9/27/18	TK	JK	Final Construction
5	10/25/18	TK	JK	Final Construction
6	11/25/18	TK	JK	Final Construction

AMENDED SITE PARKING PLAN
PREPARED FOR
**ARMSTRONG PLUMBING
LLC**
593 NORTH STATE ROAD
Town of Ossining
Westchester County, NY

Sheet 8 of 11



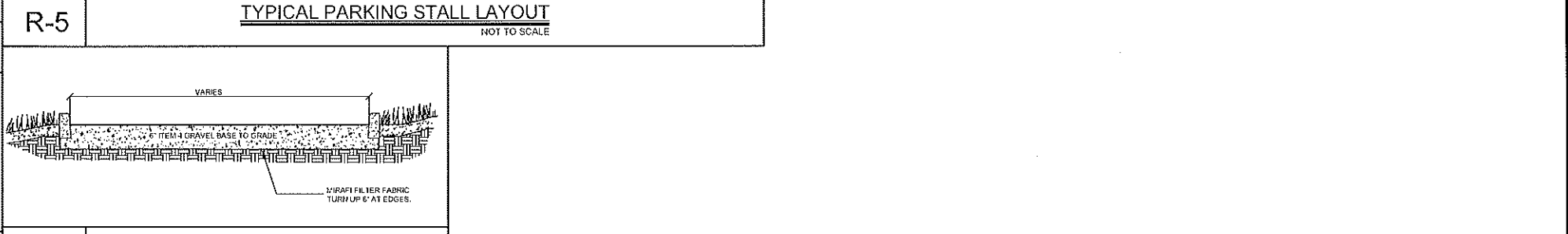
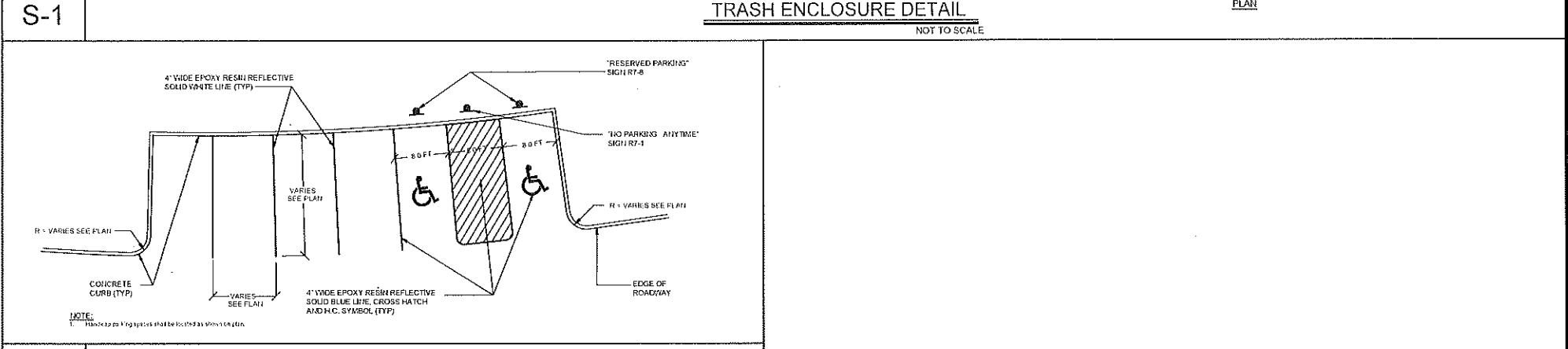
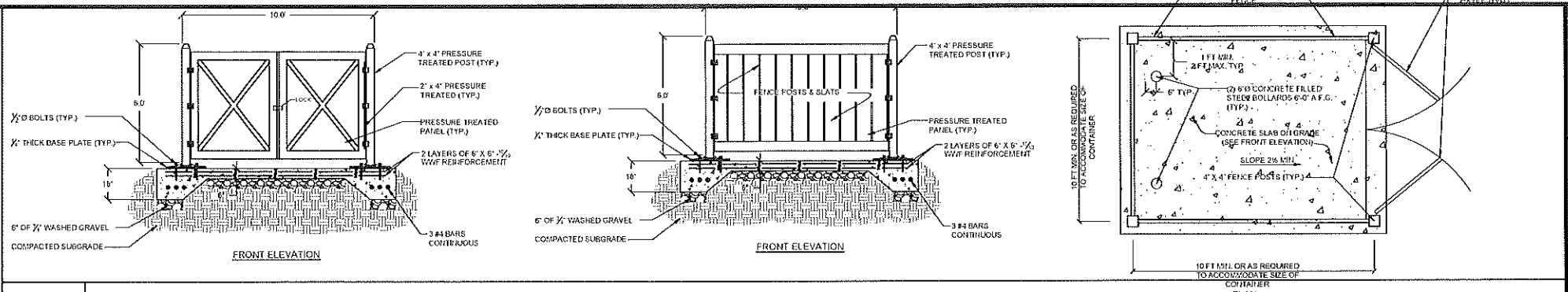
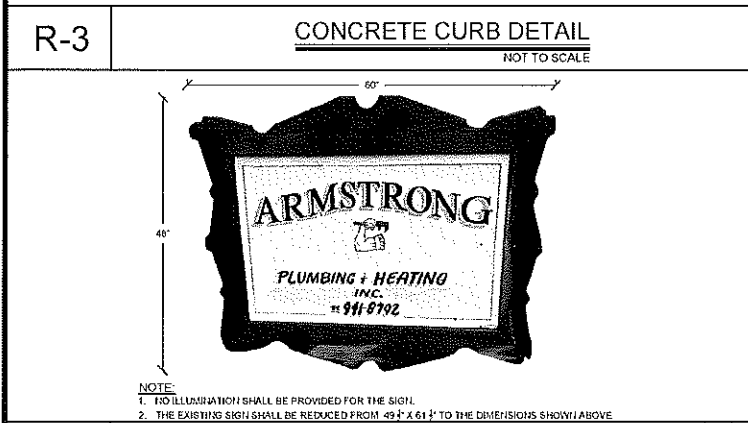
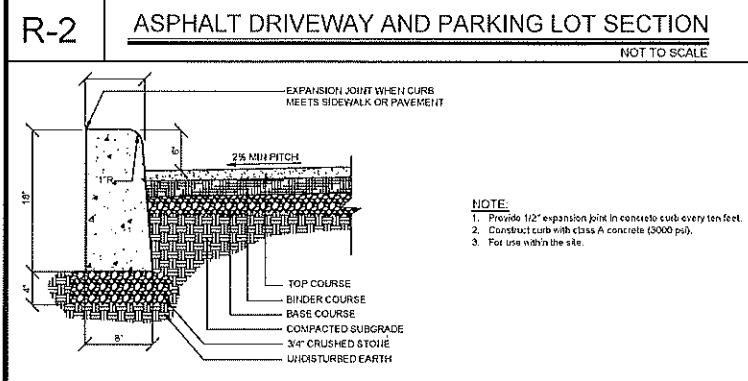
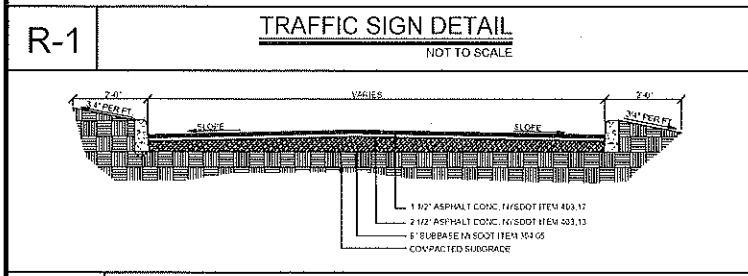
SYMBOL	DESCRIPTION
GR. MT. OH. MT. BR. MT. B.B. + OR -	GROUND MOUNTED OVERHEAD MOUNTED BROCKE MOUNTED BACK TO BACK APPROXIMATE LOCATION OF SIGN

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 LOADING ZONE	R7-6 (SEE NOTE 4)	12" X 18"	GR. MT.

GENERAL NOTES:

- 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
- The type of characters as specified in the standard specifications shall be as follows:
MUTCD CODE LETTER TYPE OF CHARACTER TYPE IV
R.P.W.M. TYPE IV OR V
- 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 any problem areas.
- 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 arrow) and, within the regulation (double-headed arrow), at intervals not to exceed 200 ft.
- 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.
- Placement of W-3-17 sign is prescribed in the General Municipal Law.



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Civil Engineers • Land Planners
251-F Underhill Avenue, Yorktown Heights, NY 10598
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Joseph C. Rina, P.E.
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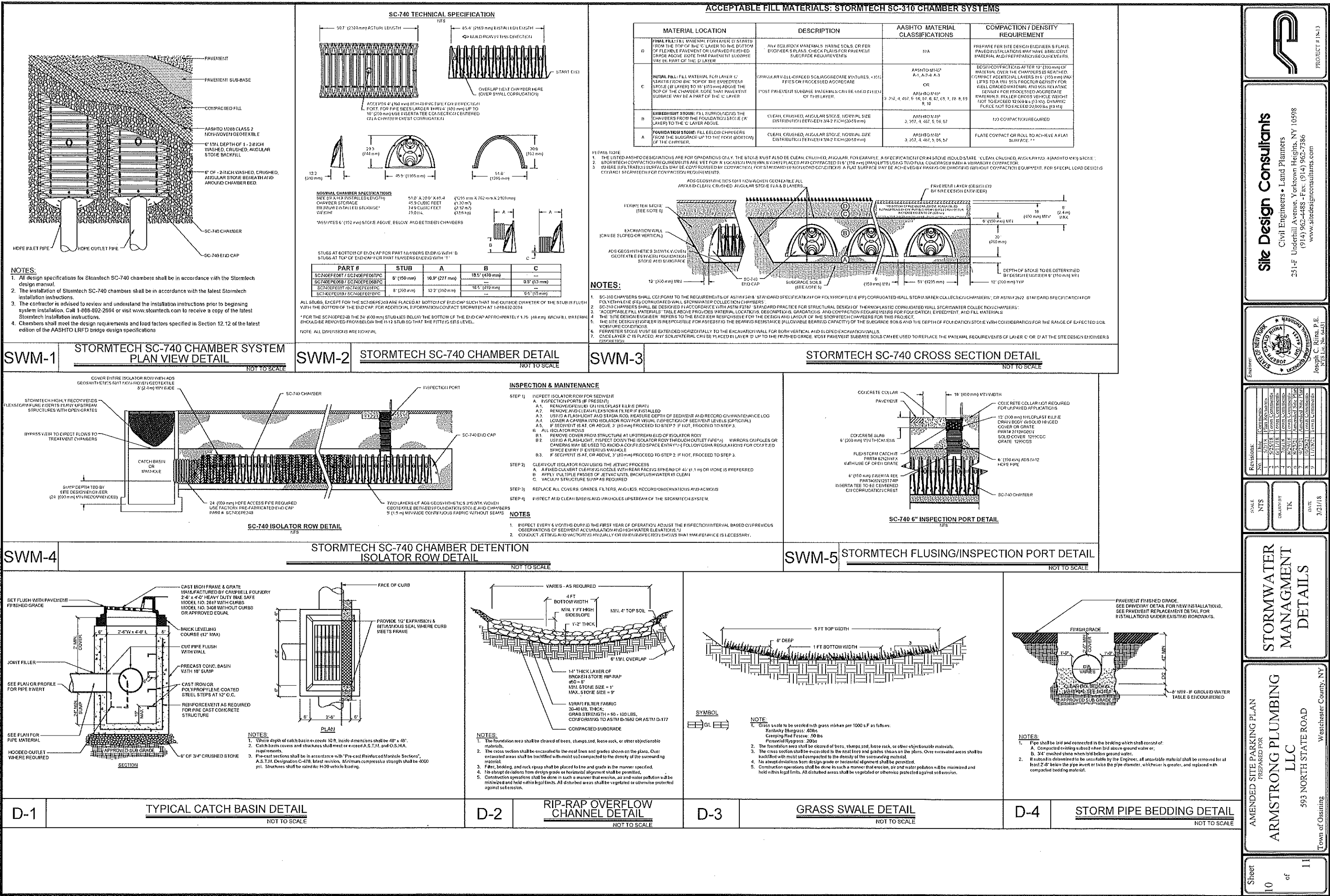
Revisions	NO.	DATE	DESCRIPTION
1	01/18	1/18	1/18
2	02/18	2/18	2/18
3	03/18	3/18	3/18
4	04/18	4/18	4/18
5	05/18	5/18	5/18
6	06/18	6/18	6/18
7	07/18	7/18	7/18
8	08/18	8/18	8/18
9	09/18	9/18	9/18

SCALE	N.T.S.
DRAWN BY	TK
DATE	3/2/18

SITE DETAILS

AMENDED SITE PARKING PLAN
PREPARED FOR
ARMSTRONG PLUMBING LLC
593 NORTH STATE ROAD
Town of Ossining
Westchester County, NY

Sheet 9 of 1



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www.sitedesignconsultants.com

SEAL OF THE STATE OF NEW YORK

JOSEPH C. RINA, P.E.

NYS Lic. No. 64431

Revisions:

NO. DATE BY

1 5/21/18 TK

2 6/11/18 TK

3 8/24/18 TK

4 9/27/18 TK

5 10/1/18 TK

6 10/1/18 TK

SCALE

NTS

DATE

3/21/18

STORMWATER MANAGEMENT DETAILS

AMENDED SITE PARKING PLAN

PREPARED FOR

ARMSTRONG PLUMBING LLC

593 NORTH STATE ROAD

Westchester County, NY

Sheet

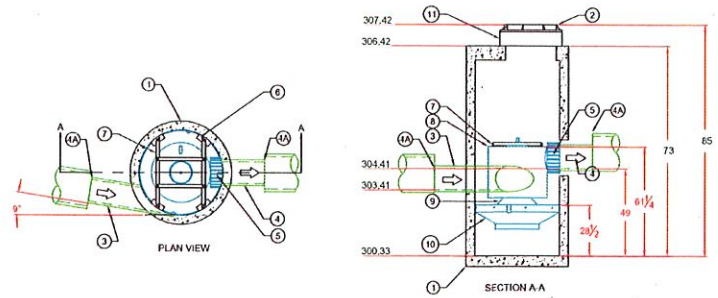
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of

11

PROJECT: 151 ARMSTRONG PLUMBING NORTH STATE RD ENGINEERING CAD/001/151 ARMSTRONG PLUMBING NORTH STATE RD 151 SITE PLAN 10-26-21 DWG

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




PARTS LIST		
ITEM	DESCRIPTION	SIZE
1	PRECAST MANHOLE (BY HYDRO)	48"
2	MANHOLE LID, FRAME AND COVER	30"
3	INLET PIPE (BY ADS OTHERS)	12"
4	OUTLET PIPE (BY ADS OTHERS)	12"
4A	REDUCER EXPANDER (NOT SHOWN FOR DETAIL)	18"x12"
5	PIPE COUPLING (BY ADS OTHERS)	
6	LEADER ANGLE	
7	SUPPORT FRAME	
8	DIP PLATE	
9	CENTER SHAFT & CONE	
10	BENCHING SKIRT	
11	MATERIALS & LABOR TO ACHIEVE FINAL GRADE (BY OTHERS)	

CAPACITIES

1. PEAK TREATMENT FLOW: 3.0 CFS (85 US)
2. SEDIMENT STORAGE CAPACITY: 0.70 YD³ (54 m³)
3. OIL STORAGE CAPACITY: 70 GALLONS (265 LITERS)

ADDITIONAL DESIGN INFORMATION


1. THE OUTLET PIPE SHALL BE A ROTO-MOLDED PRODUCT WITH AN I.D. OF 12" THAT CANNOT BE MODIFIED. TO AVOID THE USE OF A REDUCER OR EXPANDER ON THE OUTLET A 12" OUTLET PIPE SHOULD BE USED IF POSSIBLE.
2. ONLY SMALLER INLET PIPES MAY BE USED. THE INLET PIPE INVERT SHOULD BE PLACED ONE INLET PIPE DIAMETER BELOW THE OUTLET PIPE INVERT. THE I.D. OF THE INLET PIPE SHOULD BE PLACED TANGENT TO THE I.D. OF THE MANHOLE. HEADLOSS AT 3.0 CFS WITH A 12" INLET: 8" (203 mm). HEADLOSS WILL INCREASE WITH SMALLER INLET PIPES.
3. SEDIMENT SHALL BE STORED IN A ZONE THAT IS ISOLATED FROM THE MAIN FLOW PATH AND PROTECTED FROM RE-ENTRANCE BY THE BENCHING SKIRT.



Hydro International
stormwater

APPROVED BY: _____

DATE: _____



ADS
Advanced Drainage Systems

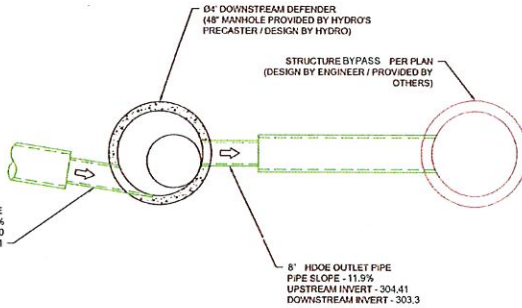
TECHNICAL SERVICES
70 BIRCHWOOD ROAD, SUITE 3
ROCKY HILL, CT 06067
V. 888-882-2854
F. 860-325-8401

ARMSTRONG PLUMBING - NY
4" ONLINE DD - DETAILS

DATE: 05/25/2018 PROJECT: 91772

DRAWN: DWG SCALE: 1/4" = 1"

CHECKED: MRJ PAGE: 2 OF 3




48" DOWNSTREAM DEFENDER
(48" MANHOLE PROVIDED BY HYDRO'S
PRECASTER / DESIGN BY HYDRO)

STRUCTURE BYPASS PER PLAN
(DESIGN BY ENGINEER / PROVIDED BY
OTHERS)

8" HOPE TANGENTIAL INLET PIPE
PIPE SLOPE - 1.0 %
UPSTREAM INVERT - -303.60
DOWNSTREAM INVERT - -303.41


8" HOPE OUTLET PIPE
PIPE SLOPE - 11.9 %
UPSTREAM INVERT - -304.41
DOWNSTREAM INVERT - -303.3



Hydro International
stormwater

APPROVED BY: _____

DATE: _____



ADS
Advanced Drainage Systems

TECHNICAL SERVICES
70 BIRCHWOOD ROAD, SUITE 3
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V. 888-882-2854
F. 860-325-8401

ARMSTRONG PLUMBING - NY
4" ONLINE DD - PLAN VIEW

DATE: 05-27-2015 PROJECT: 91772

DRAWN: DWG SCALE: 1/4" = 1"

CHECKED: MRJ PAGE: 3 OF 3

Page | 4

Downstream Defender® Operation and Maintenance Manual

Operation

Introduction

The Downstream Defender® operates on simple fluid hydraulics. It is self-activating, has no moving parts, no external power requirement and is manufactured from durable non-corrosive components. No manual procedures are required to operate the unit and maintenance is limited to monitoring accumulations of stored pollutants and periodic clean-outs. The Downstream Defender® has been designed to allow for easy and safe access for inspection/monitoring and clean-out procedures. Entry into the unit or removal of the internal components is not necessary for maintenance, thus safety concerns related to confined-space-entry are avoided.

Pollutant Capture and Retention

The internal components of the Downstream Defender® have been designed to protect the oil/floatables and sediment storage volumes so that separator performance is not reduced as pollutants accumulate between clean-outs (Fig 2). The Downstream Defender® vessel remains wet between storm events. Oil and floatables are stored on the water surface in the outer annulus separate from the sediment storage volume in the sump of the unit providing the option for separate oil disposal, and accessories such as adsorbent pads. Since the oil/floatables and sediment storage volumes are isolated from the active separation region, the potential for re-suspension and washout of stored pollutants between clean-outs is minimized.

Wet Sump

The sump of the Downstream Defender® retains a standing water



Fig 2 Pollutant storage volumes of the Downstream Defender®.

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Tel: (207) 756-6200 Fax: (207) 756-6212 Web: www.hydro-int.com

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Downstream Defender® Operation and Maintenance Manual

Inspection Procedures

1. Set up any necessary safety equipment around the access port or grate of the Downstream Defender® as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the lids to the manhole (Fig 4). NOTE: The 4-ft (1.2m) Downstream Defender® will only have one lid.
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities. See Fig 7 and 8 for typical inspection views.
4. Without entering the vessel, use the pole with the skimmer net to remove floatables and loose debris from the outer annulus of the chamber.
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel (Fig 5).
6. On the Maintenance Log (see page 9), record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components or blockages.






Fig 4

Fig 5

Fig 6

Floatables and Sediment Cleanout

Floatables cleanout is typically done in conjunction with sediment removal. A commercially or municipally owned sump-vac is used to remove captured sediment and floatables (Fig 6).

Floatables and loose debris can also be netted with a skimmer and pole. The access port located at the top of the manhole provides unobstructed access for a vector hose and skimmer pole to be lowered to the base of the sump.

Scheduling

- Floatables and sump cleanout are typically conducted once a year during any season.
- If sediment depths are greater than 75% of maximum clean-out depths stated in Table 1, sediment removal is required.
- Floatables and sump cleanout should occur as soon as possible following a spill in the contributing drainage area.





Fig 7 View over center shaft into sediment storage zone.

Fig 8 View of outer annulus of floatables and oil collection zone.

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Downstream Defender® Operation and Maintenance Manual

Inspection Procedures

Inspection is a simple process that does not involve entry into the Downstream Defender®. Maintenance crews should be familiar with the Downstream Defender® and its components prior to inspection.

Scheduling

- It is important to inspect your Downstream Defender® every six months during the first year of operation to determine your site-specific rate of pollutant accumulation
- Typically, inspection may be conducted during any season of the year
- Sediment removal is not required unless sediment depths exceed 75% of maximum clean-out depths stated in Table 1

Recommended Equipment

- Safety Equipment and Personal Protective Equipment (traffic cones, work gloves, etc.)
- Crow bar or other tool to remove grate or lid
- Pole with skimmer or net
- Sediment probe (such as a Sludge Judge®)
- Trash bag for removed floatables
- Downstream Defender® Maintenance Log

Determining Your Maintenance Schedule

The frequency of cleanout is determined in the field after installation. During the first year of operation, the unit should be inspected every six months to determine the rate of sediment and floatables accumulation. A simple probe such as a Sludge Judge® can be used to determine the level of accumulated solids stored in the sump. This information can be recorded in the maintenance log (see page 9) to establish a routine maintenance schedule.

The vector procedure, including both sediment and oil/floatables removal, for a 6-ft (1.8m) Downstream Defender® typically takes less than 30 minutes and removes a combined material volume of about 500 gallons (1900 liters).

Unit Diameter	Total Oil Storage	Oil Clean-out Depth	Total Sediment Storage	Sediment Clean-out Depth	Max. Liquid Volume Removed						
(ft)	(in)	(gal)	(L)	(in)	(cm)	(yd ³)	(m ³)	(in)	(cm)	(gal)	(L)
4	1.2	70	265	<16	<41	0.70	0.53	<18	<45	384	1,454
6	1.8	216	818	<23	<58	2.10	1.61	<24	<61	1,239	4,690
8	2.4	540	2,044	<33	<84	4.65	3.56	<30	<76	2,884	10,917
10	3.0	1,050	3,975	<42	<107	8.70	6.65	<36	<91	5,546	20,994
12	3.7	1,770	6,700	<49	<125	14.70	11.24	<42	<107	9,460	35,810

Fig 3 Watch the Downstream Defender® instructional maintenance video at www.hydro-int.com/products/downstream-defender.

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Downstream Defender® Operation and Maintenance Manual

Recommended Equipment

- Safety Equipment (traffic cones, etc.)
- Crow bar or other tool to remove grate or lid
- Pole with skimmer or net (if only floatables are being removed)
- Sediment probe (such as a Sludge Judge®)
- Vector truck (6-inch/150mm diameter flexible hose recommended)
- Downstream Defender® Maintenance Log

Floatables and Sediment Clean Out Procedures

1. Set up any necessary safety equipment around the access port or grate of the Downstream Defender® as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the lids to the manhole NOTE: The 4-ft (1.2m) Downstream Defender® will only have one lid.
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities.
4. Using the Floatables Port for access, remove oil and floatables stored on the surface of the water with the vector hose or the skimmer net (Fig 9, top).
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel and record it in the Maintenance Log (Pg 9).
6. Once all floatables have been removed, drop the vector hose to the base of the sump via the Central Access Port. Vector out the sediment and gross debris off the sump floor (Fig 6 and 9).

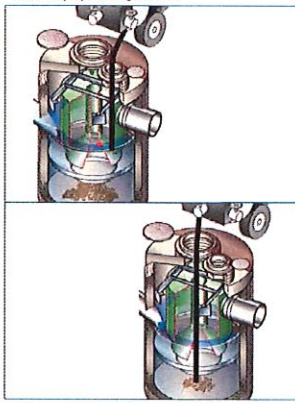


Fig 9 Floatables and sediment are removed with a vector hose


Maintenance at a Glance

Activity	Frequency
Inspection	- Regularly during first year of installation - Every 6 months after the first year of installation
Oil and Floatables Removal	- Once per year, with sediment removal - Following a spill in the drainage area
Sediment Removal	- Once per year or as needed - Following a spill in the drainage area


NOTE: For most cleanouts it is not necessary to remove the entire volume of liquid in the vessel. Only removing the first few inches of oil/floatables and the sediment storage volume is required.

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NOTE: THESE PAGES HAVE BEEN TAKE FROM THE DOWNSTREAM DEFENDER MAINTENANCE AND OPERATIONS MANUAL. THEY ILLUSTRATE THE INSPECTION AND MAINTENANCE PROCEDURE FOR THE SYSTEM



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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. Rima, P.E.
No. 64241

Revisions:	No.	Date	Comments
	1	5/27/18	Plan Revisions
	2	5/25/18	Plan Revisions
	3	7/6/18	Plan Revisions
	4	8/29/18	Plan Revisions
	5	8/23/21	Amended Site Plan
	6	10/28/21	Amended Site Plan
	7	11/18/21	Plan Revisions

SCALE: NTS

DRAWN BY: TK

DATE: 3/21/18

AMENDED SITE PARKING PLAN
PREPARED FOR:
**ARMSTRONG PLUMBING
LLC**
593 NORTH STATE ROAD
Town of Ossining
Westchester County, NY

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