



**TOWN OF NEWBURGH  
PLANNING BOARD  
TECHNICAL REVIEW COMMENTS**

**PROJECT NAME:** GARDNER RIDGE  
**PROJECT NO.:** 02-29  
**PROJECT LOCATION:** GARDNERTOWN ROAD NEAR GIDNEY AVENUE  
SECTION 75, BLOCK 1, LOT 4.12  
**REVIEW DATE:** 10 NOVEMBER 2023  
**MEETING DATE:** 16 NOVEMBER 2023  
**PROJECT REPRESENTATIVE:** DARREN DOCE, P.E.

1. A meeting has been scheduled with the Highway Superintendent to review the re-alignment of Creek Run Road and the project access drive as well as improvements to Gardnertown Road.
2. The time frame for Lead Agency determination has lapsed. Lead Agency re-circulation occurred on 5 October 2023.
3. The applicant's representative have identified on the 2 November meeting that the site is a balanced site and a significant amount of material will not be exported.
4. This office provided the applicants legal counsel with copies of the "well monitoring Plan" for the Route 300 Matrix Project.
5. Health Department approval for water main extension with hydrants is required.
6. Hydrant locations should be evaluated by Code Enforcement and Jurisdictional Emergency Services. Additional hydrants should be evaluated at the Senior Complex.
7. Previous discussions regarding potential for looping of the water system for operation and maintenance improvements as well as fire flow requirements should be addressed.
8. Hydrant placement along the access drive should be consistent with "Ten States Standards".
9. Legal documents must be provided to the Town for review regarding compliance with all sections of the Senior Housing Code Section 185-48.
10. Cost estimates for Stormwater Management, landscaping, tree preservation are required to determine security amount.

**NEW YORK OFFICE**

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845-567-3100 | F: 845-567-3232 | mheny@mhepc.com

**PENNSYLVANIA OFFICE**

111 Wheatfield Drive, Suite 1, Milford, PA 18337  
570-296-2765 | F: 570-296-2767 | mhempa@mhepc.com

11. The Planning Board should address whether a Public Hearing should be held for the project based on changes to the project and the time frame involved since the initial submission of the project in 2002.

Respectfully submitted,

**MHE Engineering, D.P.C.**

A handwritten signature in blue ink that reads "Patrick J. Hines". The signature is written in a cursive, flowing style.

Patrick J. Hines  
Principal

PJH/kbw

**Thomas B. Olley, P.E., P.L.L.C.**  
***Engineering & Land Planning***  
***152 Orange Avenue • Walden, NY 12586***  
***(845) 778-5638 • Fax (845) 778-1137***

October 20, 2023

Mr. John Ewasutyn, Chairman  
Town of Newburgh Planning Board  
308 Gardnertown Road  
Newburgh, NY 12550

Re: ***Gardner Ridge***  
Gardnertown Road  
Section 75, Block 1, Lot 4.12

Dear Mr. Ewasutyn:

We are submitting twelve (12) copies of the revised Amended Site Plan sheets on behalf of Gardner Ridge Associates.

The plans address the most recent consultant and Planning Board Comments.

A Brief response to the consultants' most recent comments are provided below. Collier Engineering will address the Traffic Consultant comments related to their plans under separate cover.

**MHE Engineering Comment Memo July 28, 2023**

1. A Tree Survey has been conducted in accordance with the Town's Tree Preservation Code. The results of the tree survey and the required calculations are shown on a newly added Sheet 16 of the Site Plan Set.
2. Highway Supervisor comments have been addressed in separate correspondence from Collier's Engineering.
3. The Project has been resubmitted for County Planning review.
4. The Project has been re-circulated under SEQRA.
5. Health Department Approval will be renewed following the Board's SEQRA determination.
6. All work has been relocated outside of the 100 Year flood Boundary.
7. Access gates have been shown on the site plan for both the emergency and maintenance access drives. The location of the gates along Gardnertown Road are situated to allow emergency or maintenance vehicles to pull in and not block Gardnertown Road.

8. The Water and Sewer notes (found on the detail sheets) have been updated.
9. A stormwater Facilities Maintenance Agreement will be executed prior to Final Approval.
10. All Drainage and Water Main Crossings of the Sanitary Sewer Main have been added to the Profile Sheets.
11. The labels for the Sanitary sewer pipe between manholes 10 and 12 have been corrected.
12. Missing Pipes and labels have been corrected for the storm drainage bioretention systems.
13. Outlet Structure 1 has been clarified on the plans.
14. An emergency spillway has been added to the extended detention basin.
15. All Drainage and Water Main Crossings of the Sanitary Sewer Main have been added to the Profile Sheets.
16. The details of CB-3 have been updated.
17. Fencing has been shown around the plunge pools. These are the only permanent water features.
18. Access gates have been added to the maintenance roads.
19. The wetland outlet pipe has been labeled.
20. The design of the bioretention area to the north of the Senior Apartments has been updated.
21. The sewer line to the rear of Buildings 1 and 2 has been fully labeled.
22. The rip-rap steepened slope has been redesigned as a vegetated steepened slope.

**Creighton Manning Engineering Comment Memo August 1, 2023**

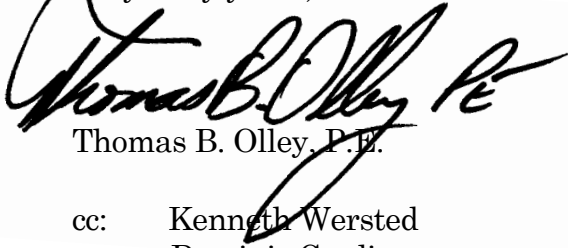
1. The emergency access gate near Gardnertown Road has been positioned to provide for an emergency vehicle to be pulled completely off the public roadway .
2. The maintenance road will have a similar gate. It also has been positioned to allow maintenance vehicles and equipment to fully clear Gardnertown Road.
3. The suggested super-elevation has been incorporated into the design of the intersection of the main Road and the west Rowad at Station 12+36.
4. The intersections of West Road have been indicated on the profiles.

Comments 5 through 11 are address by Collier's Engineering under separate cover.

We believe that all of the Consultant's comments have been fully addressed in the submission.

Please feel free to contact me should you have any questions regarding this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read "Thomas B. Olley P.E.", is written over a light gray rectangular background.

Thomas B. Olley, P.E.

cc: Kenneth Wersted  
Dominic Cordisco  
Patrick Hines  
Joseph Millstein  
Vince Doce

October 19, 2023

Chairman John Ewasutyn  
Town of Newburgh Planning Board  
21 Hudson Valley Professional Plaza  
Newburgh, NY 12550

Gardner Ridge  
Town of Newburgh, Orange County, New York  
Colliers Engineering & Design Project No. 14000375B

Dear Chairman Ewasutyn and Members of the Planning Board:

The following items are in response to comments contained in the Creighton Manning (CME) letter dated August 1, 2023 as well as those discussed with the Planning Board at the August 3, 2023 meeting.

#### **Proposed Site Plan Amendment**

1. The revised site plan adds an emergency access point approximately 440 feet west (uphill) of the main entrance. The access is proposed to be grass pavers similar to that used across the street at Gardnertown Commons (Farrell). A detail of the emergency gate is provided, and it is noted in the letter to the planning board that there will be a gate installed at both ends of the emergency access, but they are not depicted on the plans. We suggest the gate near Gardnertown Road be located far enough off the road to allow an emergency vehicle to pull off the road before stopping and opening the gate.

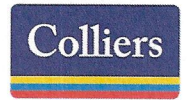
**Response: The gates and detail for such are now indicated on the site plans. The gate on the Gardnertown Road side is positioned to allow a fire truck to pull in off the road when opening the gate.**

2. A stormwater basin access road is proposed about 60 feet east (downhill) of the main entrance. This will be a stabilized but grassed access "road". Will this be gated as well? If so, the gate should allow room for a service vehicle to pull off the road to open the gate.

**Response: A gate will be installed as noted at this location.**

3. The junction of the Entrance Road intersects the West Road at station 12+50(+/-) where the grades transition from a +10% to a +1% grade. West Road enters on a -10% grade. Consider super elevating the road to be reverse crown, banked 2% to the left so it is an easier transition from West Road to Entrance Road.

**Response: The site plan has been revised to reflect the superelevation for that portion of the road.**



Engineering  
& Design

4. Add callout to Entrance Road profile showing location of intersection with West Road.

**Response: The callout has been added to the site plan.**

#### **Conceptual Improvement Plan**

5. Plans show guide rail on both sides of realigned Creek Run Road, specify type of guide rail and end assembly types.

**Response: A box beam guiderail (Item No. 606.10) similar to that which currently exists on Gardnertown Road west of the site, is now specified along both sides of the realigned Creek Run Road.**

6. Stone apron detail lists incorrect item for light stone fill and shows a 4' length of stone apron but stone apron lengths vary based on pipe size and velocity of storm flow. Also, detail lists geotextile bedding under light stone fill but this is no longer an approved method, a stone bedding material shall be installed, detail should be updated.

**Response: The item number for the stone fill has been corrected. Please note the detail provided is a generic detail for a stone lined apron and further detail will be provided for each outlet location upon completion of the final drainage design.**

7. A detour plan is provided for when Creek Run Road is closed to be reconstructed between Stony Run Road and Gardnertown Road. What is the approximate duration of closure?

**Response: Most of the work for the realigned Creek Run Road can be advanced while maintaining the existing roadway operation. The final work connecting the new portion of roadway to the remaining existing portion of Creek Run Road is expected to require a closure for less than a week to complete and open it again to traffic.**

8. Taft Ave is the primary route for eastbound and westbound traffic on Creek Run Road. Road names should be labeled on the plan.

**Response: Road names have been added to the detour plan.**

9. Consider a "Road Closed ½ Mile Ahead, Local Traffic Only" or a "Road Closed to Thru Traffic" sign at Creek Run Road and Taft Ave. Consider a "Detour [Straight Arrow]" sign on the Taft Ave NB approach to Creek Run. Consider a second "Road Closed" sign on Creek Run Rd at Stony Run Rd to deter drivers from reaching the actual hard closure and turning around in the driveway of house #42 and #44. The six houses beyond this intersection can drive around it.

**Response: The recommended signing additions have been added to the revised plans.**



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10. The westbound detour carries traffic up Gardnertown Road, south on Taft Ave, then into the neighborhood on N. Dix Avenue then Hill Run Road. Consider simplifying the detour by carrying traffic south on Taft and ending the detour at Creek Run Road. Residents in the neighborhood can find their way back to their street, but through traffic shouldn't be carried into the neighborhood.

**Response: Comment noted. The detour plan has been revised accordingly to reflect this suggested change.**

11. The above comments (see attached plan comments) should be considered in consultation with the Town's Highway Supervisor. Ultimately his direction should be followed.

**Response: The revised plans have been forwarded to the Town Highway Supervisor and we will continue to coordinate with him, and the work will be implemented as per his direction.**

In addition, responses to the verbal comment from the Planning Board are attached to this letter.

Sincerely,

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

A handwritten signature in black ink, appearing to read "Philip Greal".

Philip Greal, Ph.D., P.E.  
Geographic Discipline Leader



Project No. 14000375B  
October 19, 2023

At the August 3, 2023 Planning Board meeting, the details of the proposed access improvement plans were presented, and several verbal comments were received from the Planning Board Members as follows:

- Frank Gallo – Will the work require a closure of Gardnertown Road? How long will the duration be?

**Response:** Gardnertown Road will remain open during the construction and use of flagmen and other traffic control measures will be used. The road closure would only involve the last portion of the connection of the new Creek Run Road to the remaining portion of Creek Run Road and closure of the old roadbed. The traffic diversion plans have been developed and Taft Avenue would be used for vehicles to and from the neighborhoods along Creek Run Road and for any other through traffic. All comments received from CME have been incorporated into the plans. The other construction work related with the new portion of Creek Run Road can be completed while the remaining Creek Run Road stays open.

- David Dominic – Had questions regarding the sight distances and how much they would be improved.

**Response:** The clearing of vegetation and widening improvements would significantly improve sight distance and coming down the hill vehicles will be able to see all the way to the area of the bridge culvert on the approach to the intersection with Gidney Avenue. This is more than double that which is available under current conditions.

- Stephanie Delucca – Comments regarding the traffic control, queuing, and the alignment of the new Creek Run Road.

**Response:** The alignment of Gardnertown Road would remain as. The widening that will provide the left turn lanes, pavement resurfacing, and sight distance improvements are those items that will be completed by the Applicant. The site driveway approach and the Creek Run Road approach would be stop-sign controlled at their intersection with Gardnertown Road and Gardnertown Road traffic would remain having the right-of-way.

- Questions regarding the queuing at Gidney Avenue.

**Response:** The queue lengths would be improved by the widening and there would be a separate left turn lane for vehicles turning into the site as well as for those turning onto Creek Run Road, which would improve the overall traffic operations and flow.

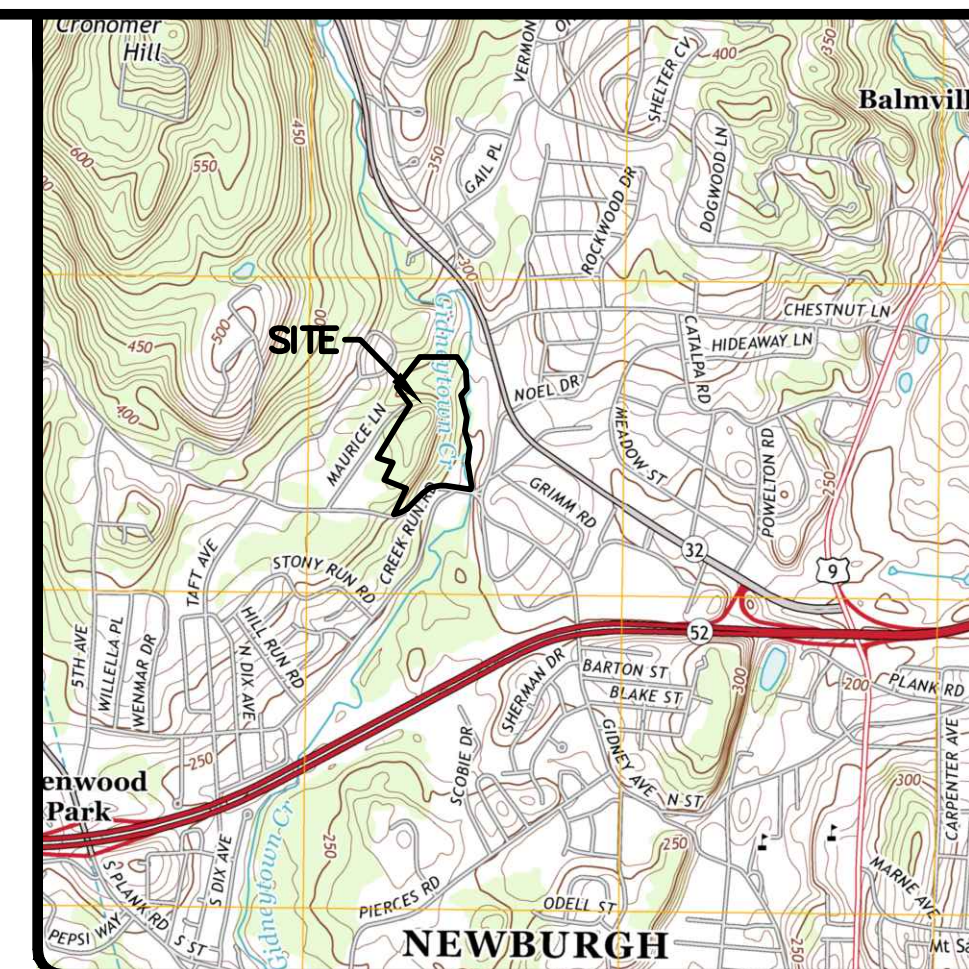
- Ken Mennerich – Recommended that instead of the riprap that a vegetative alternative be explored.

**Response:** The rip rap has been removed from the plans. We will finalize the treatment in this area with the Highway Superintendent to ensure that nothing significant will grow in that area to block sight distance.

- John Ward – No further comments.
- Cliff Browne – No further comments.
- John Ewasutyn – Suggested that salt tolerant plantings be used along the roadway.

**Response:** The drainage is being improved to capture runoff and we will ensure that salt tolerant plantings are used. This will be coordinated with the Town Highway Superintendent and other Town consultants.

# SITE PLAN GARDNER RIDGE APARTMENTS GARDNERTOWN ROAD TOWN OF NEWBURGH, ORANGE COUNTY, NY



LOCATION MAP  
NEWBURGH QUADRANGLE  
SCALE: 1"=2000'

JANUARY 28, 2016  
REVISED OCTOBER 20, 2023

**DENSITY CALCULATIONS:**

TOTAL PARCEL AREA = 23.4± AC.  
 LESS WETLANDS, EASEMENTS/R.O.W.s, 100-YR FLOODPLAINS AND SLOPES 25% OR GREATER = 7.4± AC.  
 USEABLE AREA = 16.0± AC.

MULTIPLE FAMILY DWELLINGS MAXIMUM ALLOWABLE DENSITY= 6 DU/ACRE  
 ALLOWABLE NUMBER OF UNITS= 96 DWELLING UNITS

DENSITY BONUS FOR PROJECTS CONSISTING OF SENIOR CITIZEN MULTIPLE DWELLING UNITS AND NON-SENIOR- CITIZEN MULTIPLE DWELLING UNITS:  
 MAXIMUM DENSITY= 9 DU/ACRE  
 MAXIMUM ALLOWABLE UNITS= 144 UNITS  
 BONUS UNITS = 144 UNITS - 96 UNITS = 48 UNITS  
 SENIOR HOUSING UNITS REQUIRED = 48 UNITS/3 = 16 UNITS

TOTAL UNITS PROPOSED =144 UNITS  
 BONUS UNITS PROPOSED = 144 UNITS - 96 UNITS = 48 UNITS  
 SENIOR HOUSING UNITS REQUIRED = 48 BONUS UNITS/3 = 16 UNITS  
 NON-SENIOR APARTMENTS PROPOSED = 108 UNITS  
 SENIOR HOUSING PROPOSED = 36 UNITS

**PARKING CALCULATIONS:**

108 NON-SENIOR APARTMENTS  
 SPACES REQUIRED (2 SPACES/DU REQ.)= 216 SPACES

SPACES PROVIDED:  
 GARAGES = 60 SPACES  
 DRIVEWAY = 60 SPACES  
 PARKING LOT SPACES = 101 SPACES

NON-SENIOR APARTMENTS: SPACES PROPOSED = 221 SPACES

36 SENIOR HOUSING APARTMENTS  
 SPACES REQUIRED (2 SPACES/DU REQ.)= 72 SPACES

SPACES PROVIDED:  
 PARKING LOT SPACES = 72 SPACES

CLUBHOUSE  
 SPACES PROVIDED = 9 SPACES

TOTAL PARKING PROVIDED: 307 SPACES

ACCESSIBLE PARKING SPACES (NY'S BUILDING CODE SECTION 1106):  
 SPACES REQUIRED 301 -400 SPACES = 8 SPACES  
 SPACES PROVIDED: 16 SPACES

PROVISIONS SHALL BE PLACED IN EACH LEASE AGREEMENT THAT REQUIRES EACH TENANT WITH A GARAGE TO MAINTAIN THAT GARAGE FOR THE PURPOSE OF PARKING A VEHICLE.

**SHEET INDEX**

SHEET NO.	DESCRIPTION
CS	COVER SHEET
1	EXISTING CONDITIONS
2	OVERALL SITE PLAN
3	LAYOUT & DIMENSION PLAN
4	GRADING PLAN
5	ROCK REMOVAL PLAN
6	UTILITY PLAN
7	EROSION & SEDIMENT CONTROL PLAN
8	ROAD PROFILES
9	ROAD PROFILES
10	SANITARY SEWER PROFILES
11	SITE DETAILS
12	WATER DETAILS
13	SEWER DETAILS
14	DRAINAGE DETAILS
15	EROSION CONTROL DETAILS
16	TREE SURVEY

**RECORD OWNER**

GARDNER RIDGE ASSOCIATES  
 134 FAIRVIEW ROAD  
 ROCKAWAY, NJ 07866

**CONSULTING ENGINEER**

THOMAS B. OLLEY, PE, PLLC  
 152 ORANGE AVENUE  
 WALDEN, NY 12586  
 CONTACT: THOMAS B. OLLEY, PE  
 (845) 778-5638

**SURVEYOR:**

MARTIN F. ANTHONISEN JR., PLS  
 1422 LONG MEADOW ROAD,  
 TUXEDO, NY

**NOTES:**

- SENIOR CITIZEN UNITS ARE LIMITED TO 1000 S.F. MAXIMUM IN ACCORDANCE WITH TOWN OF NEWBURGH ZONING CODE SECTION 185-48 (4).
- SENIOR CITIZEN UNITS SHALL BE DESIGNED AND CONSTRUCTED FOR THE NEEDS OF SENIORS AND IS SUBJECT TO THE MANAGEMENT OR OTHER LEGAL RESTRICTIONS THAT REQUIRE ALL UNITS DESIGNATED AS SENIOR CITIZEN HOUSING UNITS TO BE OCCUPIED BY PERSONS 55 YEARS OF AGE OR OLDER. NOTWITHSTANDING THE FOREGOING, ADULTS UNDER 55 YEARS OF AGE AND CHILDREN MAY RESIDE IN THE UNITS WHERE:
  - THE ADULT IS THE SPOUSE OF A PERSON 55 YEARS OF AGE OR OLDER;
  - THE ADULT'S PRESENCE IS ESSENTIAL FOR THE PHYSICAL CARE OF A PERSON 55 YEARS OF AGE OR OLDER;
  - THE MINOR CHILDREN ARE RESIDING WITH THEIR PARENT, PARENTS OR LEGAL GUARDIANS WHERE THEIR PARENT, PARENTS OR LEGAL GUARDIANS ARE 55 YEARS OF AGE OR OLDER, AND THE MINOR CHILDREN RESIDING THEREIN ARE UNDER A PHYSICAL OR OTHER DISABILITY AND CANNOT CARE FOR THEMSELVES.

REV.	DATE	DESCRIPTION
7	10/20/23	CONSULTANT COMMENTS
6	7/6/23	EMERGENCY ACCESS AND DRAINAGE REVISIONS
5	6/6/22	CONSULTANT COMMENTS
4	6/6/22	LAYOUT REVISION
3	6/2/17	ENGINEERS COMMENTS
2	5/15/16	ENGINEERS COMMENTS
1	3/15/16	ENGINEERS COMMENTS

*Thomas B. Olley, PE*

**THOMAS B. OLLEY, PE, PLLC.**  
**ENGINEERS AND PLANNERS**

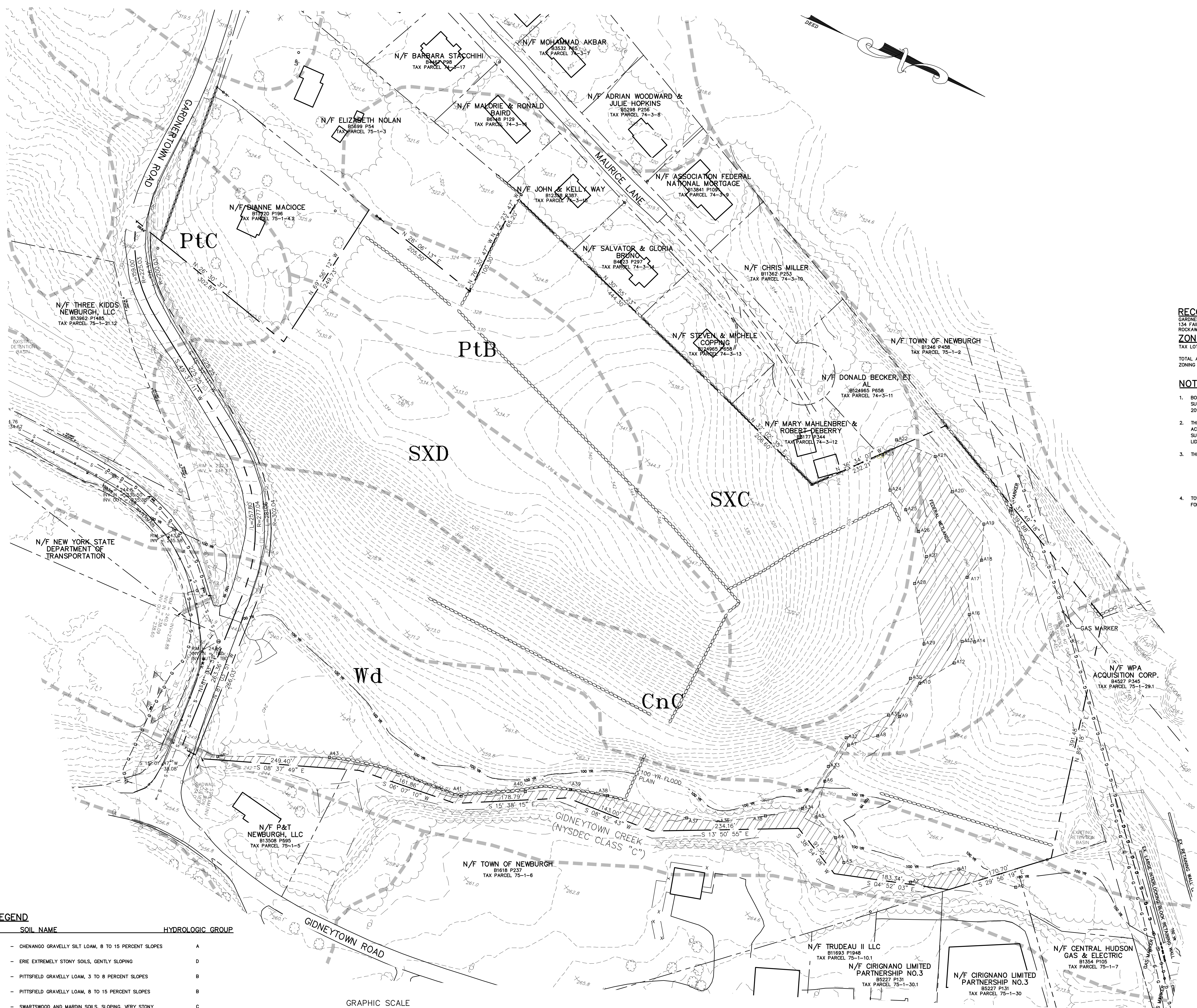
152 ORANGE AVENUE  
 WALDEN, NY 12586  
 PHONE: (845) 778-5638  
 FAX: (845) 778-3107

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EXISTING CONDITIONS  
**GARDNER RIDGE  
 GARDNERTOWN ROAD**

TOWN OF NEWBURGH, ORANGE COUNTY, NY

C:\Users\jbolley\OneDrive\Documents\Projects\Newburgh\SitePlan\CONTRACT\CONTRACT.dwg, 10/20/2023, 4:42:29 PM



**LEGEND**

- EXISTING CONTOURS
- EXISTING SITE BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING TREES AND/OR BUSHES
- EXISTING STREAM
- EXISTING BUILDINGS
- EXISTING UTILITY POLE
- EXISTING STREET SIGN
- EXISTING WATER MAIN
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING CLEANOUT
- EXISTING CURB STOP
- EXISTING SEWER MAIN AND MANHOLE
- EXISTING PAVED ROAD/DRIVEWAY
- EXISTING GRAVEL ROAD/DRIVEWAY
- SOILS BOUNDARY
- EXISTING FEDERAL WETLANDS BOUNDARY
- 100 YR FLOODPLAIN BOUNDARY

**RECORD OWNER:**  
GARDNER RIDGE ASSOCIATES, LLC  
134 FAIRVIEW RD  
ROCKAWAY NJ, 08766

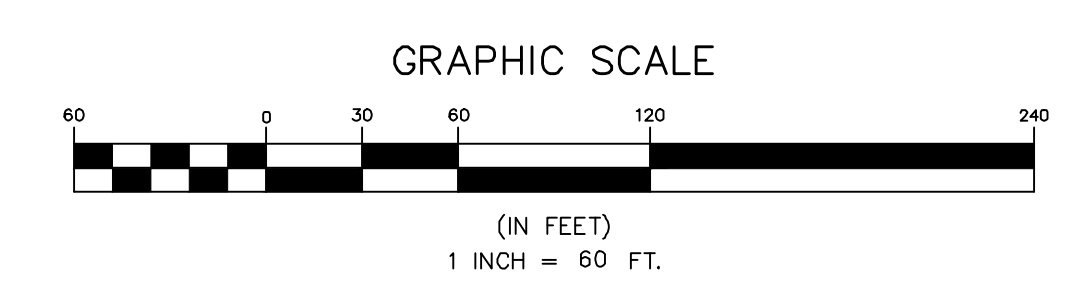
**ZONING INFORMATION:**  
TAX LOT DATA: 75-1-4.12  
TOTAL ACREAGE: 23.4 ACRES ±  
ZONING DISTRICT: R-3

**NOTES:**

1. BOUNDARY SURVEY SHOWN HEREIN IS FROM AN ACTUAL FIELD SURVEY PREPARED BY MARTIN F ANTHONISEN JR. ON DECEMBER 24, 2015.
2. THE TOPOGRAPHIC SURVEY SHOWN HEREIN IS THE RESULT OF AN ACTUAL FIELD SURVEY PREPARED BY VINCENT DOCE ENGINEERING & SURVEYING IN APRIL 2003 AND SUPPLEMENTED WITH USGS 1 METER LIDAR (2014).
3. THE PROJECT SITE IS LOCATED WITHIN THE FOLLOWING DISTRICTS:  
A. NEWBURGH SCHOOL DISTRICT.  
B. CROMMER FIRE DISTRICT.  
C. CONSOLIDATED LIGHTING.  
D. CONSOLIDATED WATER DISTRICT 1.  
E. CONSOLIDATED WATER DISTRICT 2.
4. TOWN OF NEWBURGH SEWER AND WATER SERVICES ARE PROVIDED FOR THIS PROPERTY.

**SOILS LEGEND**

SYMBOL	SOIL NAME	HYDROLOGIC GROUP
CnC	- CHENANGO GRAVELLY SILT LOAM, 8 TO 15 PERCENT SLOPES	A
ESB	- ERIE EXTREMELY STONY SOILS, GENTLY SLOPING	D
PtB	- PITTSFIELD GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES	B
PtC	- PITTSFIELD GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES	B
SxC	- SWARTSWOOD AND HARDIN SOILS, SLOPING, VERY STONY	C
SxD	- SWARTSWOOD AND HARDIN SOILS, MODERATELY STEEP, VERY STONY	C
Wd	- WAYLAND SOILS COMPLEX, NONCALCAREOUS SUBSTRATUM, 0 TO 3 PERCENT SLOPES, FREQUENTLY FLOODED	C

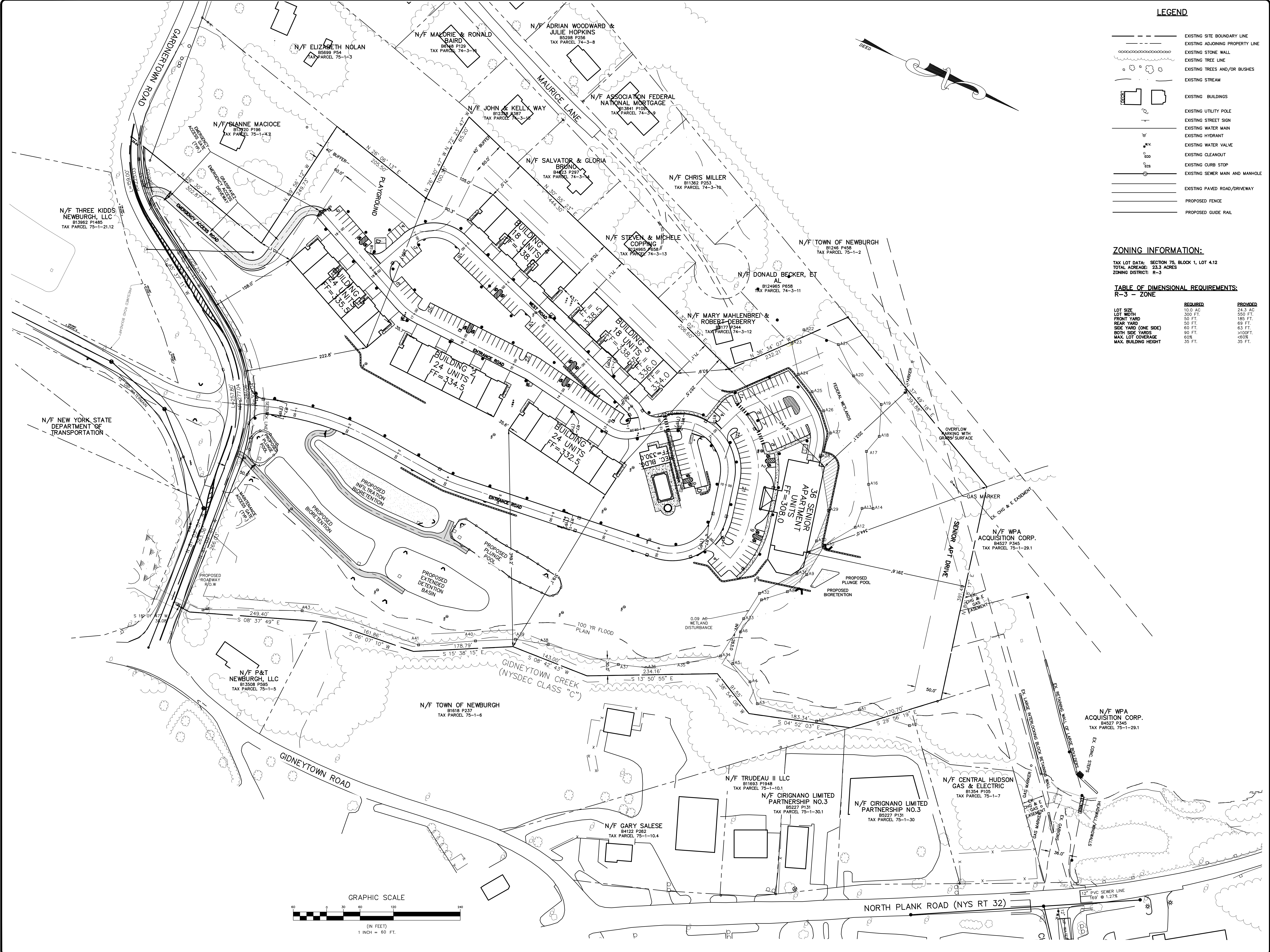


NO.	DATE	DESCRIPTION
1	3/15/18	ENGINEERS COMMENTS
2	3/15/18	MIS
3	6/27/17	ENGINEERS COMMENTS
4	6/9/17	ENGINEERS REVISIONS
5	7/6/17	EMERGENCY ACCESS AND DRAINAGE REVISIONS
6	10/20/17	CONSULTANT COMMENTS

*Thomas B. Olley*

**THOMAS B. OLLEY, P.E., PLLC.**  
ENGINEERS AND PLANNERS  
151 ORANGE AVENUE  
WALDEN, NY 12586  
PHONE: 845 785-5838  
FAX: 845 778-3177

EXISTING CONDITIONS  
**GARDNER RIDGE**  
**GARDNERTOWN ROAD**  
TOWN OF NEWBURGH, ORANGE COUNTY, NY



**LEGEND**

- EXISTING SITE BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING TREES AND/OR BUSHES
- EXISTING STREAM
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- EXISTING STREET SIGN
- EXISTING WATER MAIN
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING CLEANOUT
- EXISTING CURB STOP
- EXISTING SEWER MAN AND MANHOLE
- EXISTING PAVED ROAD/DRIVEWAY
- PROPOSED FENCE
- PROPOSED GUIDE RAIL

**ZONING INFORMATION:**

TAX LOT DATA: SECTION 75, BLOCK 1, LOT 4.12  
 TOTAL ACREAGE: 23.3 ACRES  
 ZONING DISTRICT: R-3

**TABLE OF DIMENSIONAL REQUIREMENTS:  
 R-3 - ZONE**

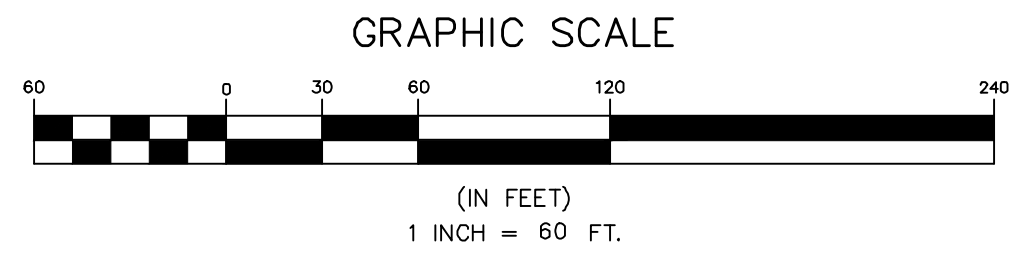
	REQUIRED	PROVIDED
LOT SIZE	10.0 AC	24.3 AC
FRONT YARD	300 FT.	550 FT.
REAR YARD	50 FT.	185 FT.
SIDE YARD (ONE SIDE)	60 FT.	63 FT.
BOTH SIDE YARDS	90 FT.	>100 FT.
MAX. LOT COVERAGE	60%	<60%
MAX. BUILDING HEIGHT	35 FT.	35 FT.

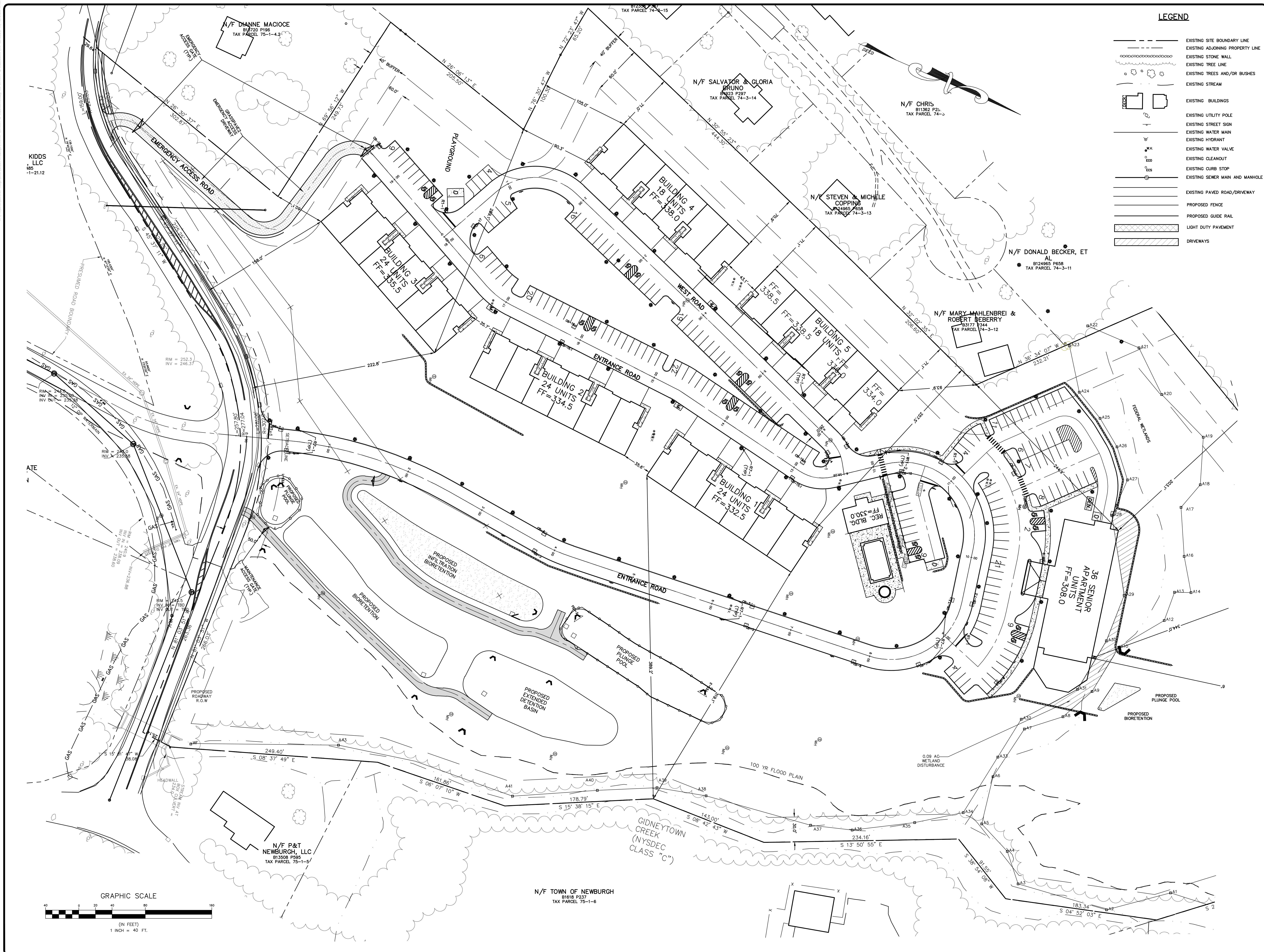
NO.	DATE	REVISIONS
1	10/20/23	CONSULTANT COMMENTS
2	11/02/23	CLIENT COMMENTS
3	01/23/24	CONSULTANT COMMENTS
4	02/22/24	CLIENT COMMENTS
5	03/22/24	CONSULTANT COMMENTS
6	04/22/24	CLIENT COMMENTS
7	05/22/24	CONSULTANT COMMENTS
8	06/22/24	CLIENT COMMENTS
9	07/22/24	CONSULTANT COMMENTS
10	08/22/24	CLIENT COMMENTS
11	09/22/24	CONSULTANT COMMENTS
12	10/22/24	CLIENT COMMENTS
13	11/22/24	CONSULTANT COMMENTS
14	12/22/24	CLIENT COMMENTS
15	01/22/25	CONSULTANT COMMENTS
16	02/22/25	CLIENT COMMENTS
17	03/22/25	CONSULTANT COMMENTS
18	04/22/25	CLIENT COMMENTS
19	05/22/25	CONSULTANT COMMENTS
20	06/22/25	CLIENT COMMENTS

*Thomas B. Olley, P.E.*

**THOMAS B. OLLEY, P.E., P.L.L.C.**  
 ENGINEERS AND PLANNERS  
 15 ORANGE AVENUE  
 NEWBURGH, NY 10994  
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 FAX: (845) 798-2827

OVERALL SITE PLAN  
**GARDNER RIDGE**  
 GARDNERTOWN ROAD  
 TOWN OF NEWBURGH, ORANGE COUNTY, NY





**LEGEND**

- EXISTING SITE BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING TREES AND/OR BUSHES
- EXISTING STREAM
- EXISTING BUILDINGS
- EXISTING UTILITY POLE
- EXISTING STREET SIGN
- EXISTING HYDRANT
- EXISTING WATER MAIN
- EXISTING WATER VALVE
- EXISTING CLEANOUT
- EXISTING CURB STOP
- EXISTING SEWER MAIN AND MANHOLE
- EXISTING PAVED ROAD/DRIVEWAY
- PROPOSED FENCE
- PROPOSED GUIDE RAIL
- LIGHT DUTY PAVEMENT
- DRIVEWAYS

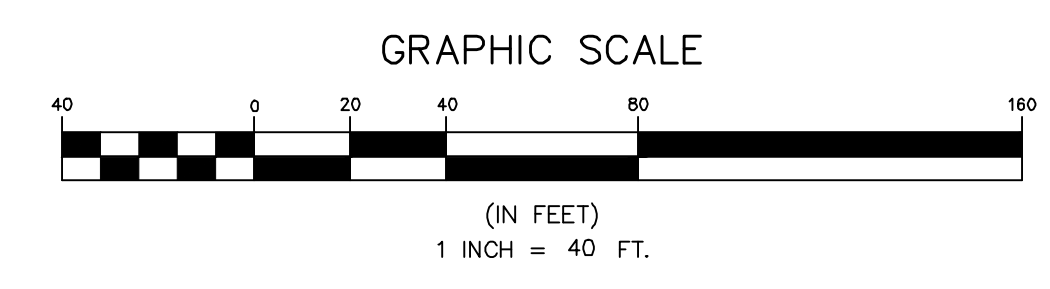
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6	7/6/23	EMERGENCY ACCESS AND DRAINAGE REVISIONS
5	9/6/22	CONSULTANT COMMENTS
4	6/9/22	LAYOUT REVISION
3	6/9/22	LAYOUT REVISION
2	5/31/17	ENGINEERS COMMENTS
1	3/15/16	ENGINEERS COMMENTS

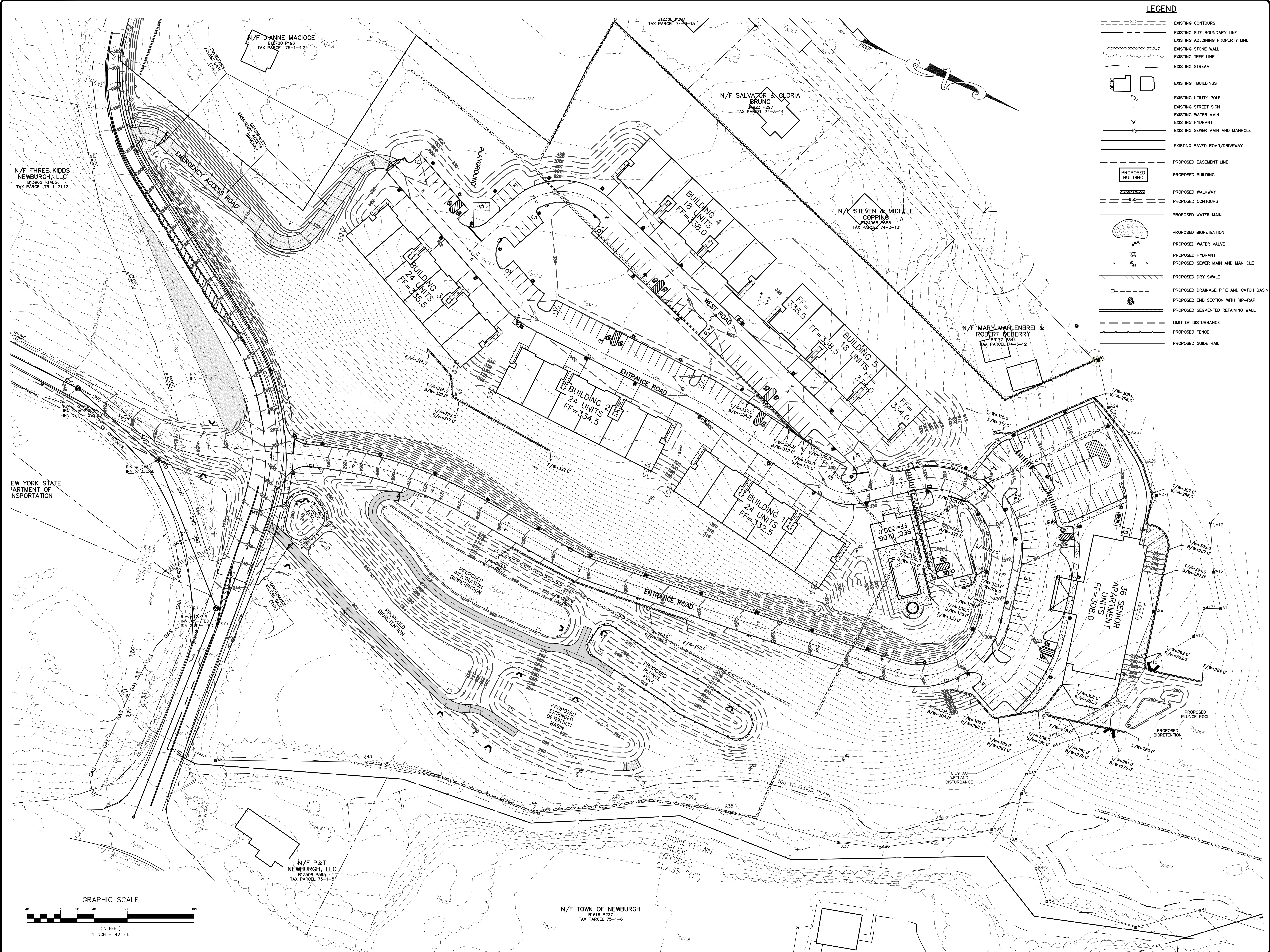
*Thomas B. Olley, PE, PLLC*

**THOMAS B. OLLEY, PE, PLLC**  
 ENGINEERS AND PLANNERS  
 12 ORANGE AVENUE  
 WALDEN, NY 12586  
 PHONE: 646 78-8338 FAX: 646 78-8117

LAYOUT & DIMENSION  
**GARDNER RIDGE**  
 GARDNERTOWN ROAD  
 TOWN OF NEWBURGH, ORANGE COUNTY, NY

SHEET NO.  
**3 OF 16**  
 DATE: JANUARY 28, 2016  
 FILE NO.





**LEGEND**

	EXISTING CONTOURS
	EXISTING SITE BOUNDARY LINE
	EXISTING ADJOINING PROPERTY LINE
	EXISTING STONE WALL
	EXISTING TREE LINE
	EXISTING STREAM
	EXISTING BUILDINGS
	EXISTING UTILITY POLE
	EXISTING STREET SIGN
	EXISTING WATER MAIN
	EXISTING HYDRANT
	EXISTING SEWER MAIN AND MANHOLE
	EXISTING PAVED ROAD/DRIVEWAY
	PROPOSED EASEMENT LINE
	PROPOSED BUILDING
	PROPOSED CONTOURS
	PROPOSED WATER MAIN
	PROPOSED BIORETENTION
	PROPOSED WATER VALVE
	PROPOSED HYDRANT
	PROPOSED SEWER MAIN AND MANHOLE
	PROPOSED DRY SWALE
	PROPOSED DRAINAGE PIPE AND CATCH BASIN
	PROPOSED END SECTION WITH RIP-RAP
	PROPOSED SEGMENTED RETAINING WALL
	LIMIT OF DISTURBANCE
	PROPOSED FENCE
	PROPOSED GUIDE RAIL

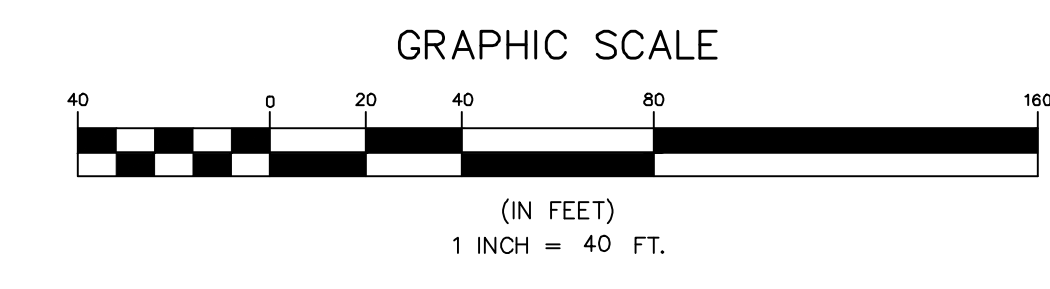
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1	10/20/23	CONSULTANT COMMENTS
2	7/6/23	EMERGENCY ACCESS AND DRAINAGE REVISIONS
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4	6/22/23	CONTRACTOR COMMENTS
5	6/22/23	LAYOUT REVISION
6	6/22/23	ENGINEERS COMMENTS
7	5/25/23	ENGINEERS COMMENTS
8	5/25/23	ENGINEERS COMMENTS

*Thomas B. Oley, P.E.*

**THOMAS B. OLEY, P.E., P.L.L.C.**  
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 15 GRANITE AVENUE  
 WALKERVILLE, NY 12587  
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 FAX: 845 778-2277

GRADING PLAN  
**GARDNER RIDGE**  
 GARDNERTOWN ROAD  
 TOWN OF NEWBURGH, ORANGE COUNTY, NY

SHEET NO.  
**4 OF 16**  
 DATE: JANUARY 28, 2016  
 FILE NO.



N/F TOWN OF NEWBURGH  
 B1618 P237  
 TAX PARCEL 75-1-6

N/F P&T NEWBURGH, LLC  
 B13508 P595  
 TAX PARCEL 75-1-5

N/F THREE KIDS NEWBURGH, LLC  
 B13962 P1485  
 TAX PARCEL 75-1-2112

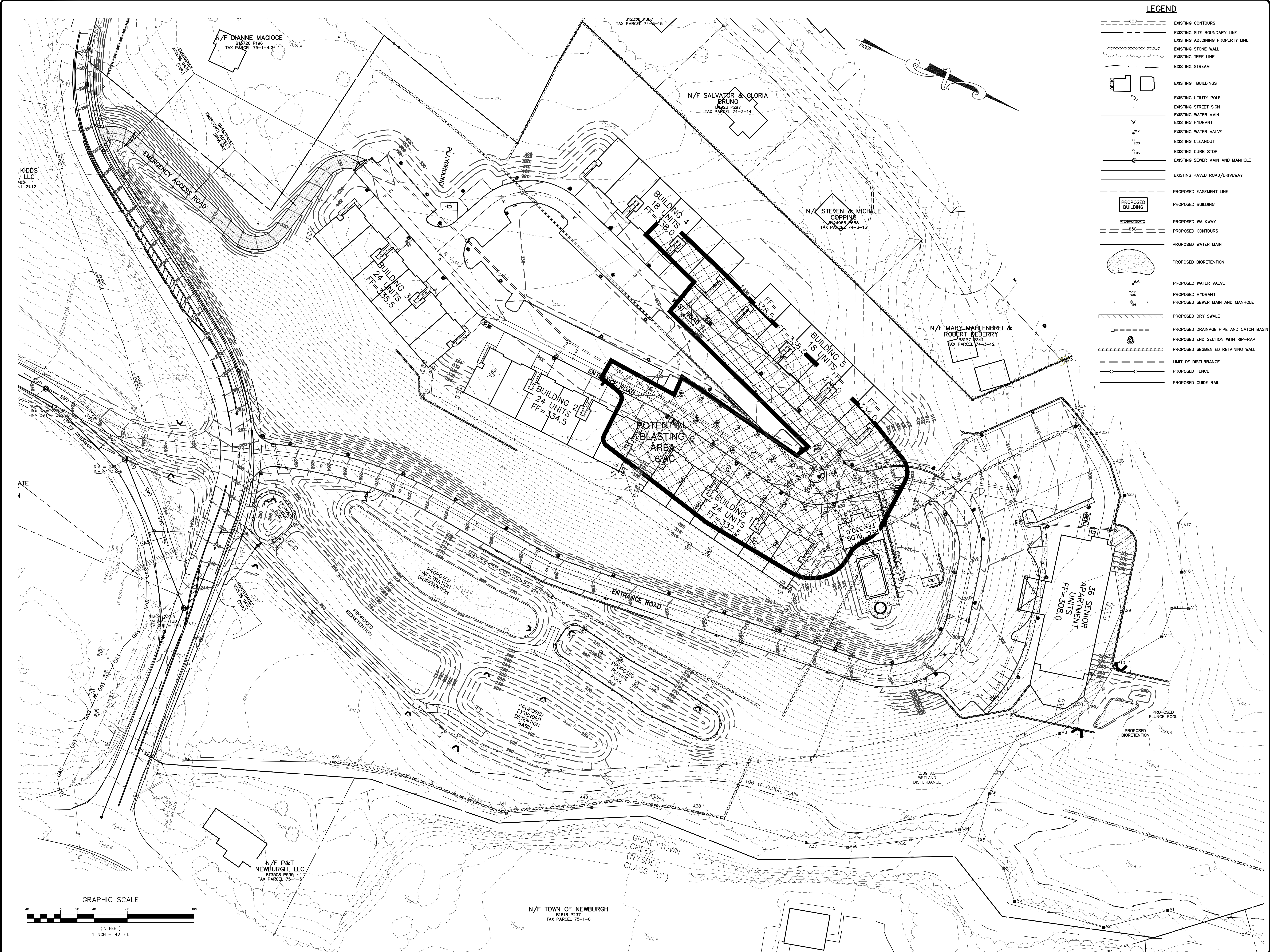
N/F DIANNE MACIOCE  
 B1720 P198  
 TAX PARCEL 75-1-4.2

N/F SALVATOR & GLORIA BRUNO  
 B923 P297  
 TAX PARCEL 74-3-14

N/F STEVEN & MICHELE COPPIN  
 B24965 P658  
 TAX PARCEL 74-3-13

N/F MARY MAHLENBREY & ROBERT DEBERRY  
 B2117 P344  
 TAX PARCEL 74-3-12

NEW YORK STATE DEPARTMENT OF TRANSPORTATION



**LEGEND**

- EXISTING CONTOURS
- EXISTING SITE BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING STREAM
- EXISTING BUILDINGS
- EXISTING UTILITY POLE
- EXISTING STREET SIGN
- EXISTING WATER MAIN
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING CLEANOUT
- EXISTING CURB STOP
- EXISTING SEWER MAIN AND MANHOLE
- EXISTING PAVED ROAD/DRIVEWAY
- PROPOSED EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED WALKWAY
- PROPOSED CONTOURS
- PROPOSED WATER MAIN
- PROPOSED BIORETENTION
- PROPOSED WATER VALVE
- PROPOSED HYDRANT
- PROPOSED SEWER MAIN AND MANHOLE
- PROPOSED DRY SWALE
- PROPOSED DRAINAGE PIPE AND CATCH BASIN
- PROPOSED END SECTION WITH RIP-RAP
- PROPOSED SEGMENTED RETAINING WALL
- LIMIT OF DISTURBANCE
- PROPOSED FENCE
- PROPOSED GUIDE RAIL

KIDD'S  
LLC  
189-2112

N/F DIANNE MACIOCE  
B1720 P198  
TAX PARCEL 75-1-4.2

B12398 P197  
TAX PARCEL 74-3-15

N/F SALVATOR & GLORIA  
BRUNO  
B1823 P297  
TAX PARCEL 74-3-14

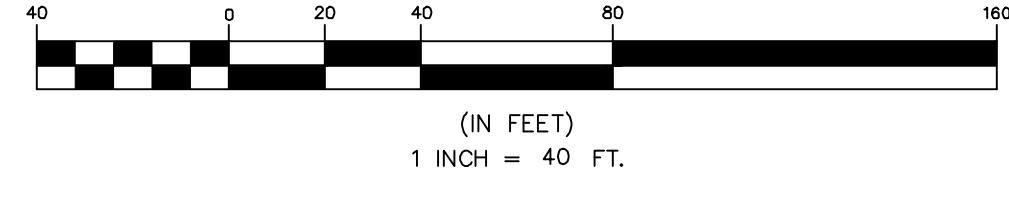
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COOPING  
B124965 P658  
TAX PARCEL 74-3-13

N/F MARY MAHLENBREI &  
ROBERT DEBERRY  
B2177 P344  
TAX PARCEL 74-3-12

N/F P&T  
NEWBURGH, LLC  
B13508 P595  
TAX PARCEL 75-1-5

N/F TOWN OF NEWBURGH  
B1618 P237  
TAX PARCEL 75-1-6

**GRAPHIC SCALE**



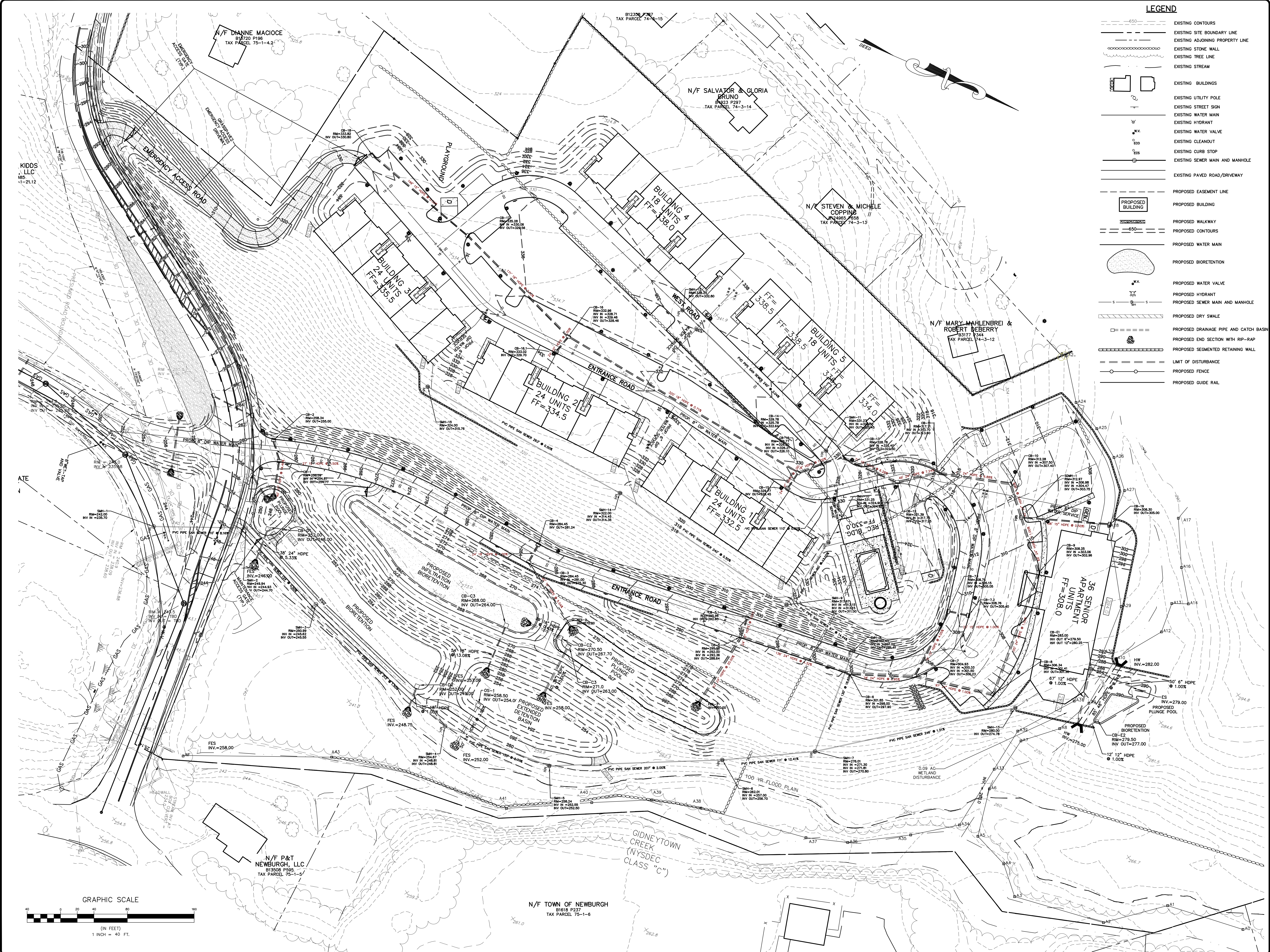
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6	06/22/23	CONSULTANT COMMENTS
5	06/22/23	CONSULTANT COMMENTS
4	06/22/23	LAYOUT REVISIONS
3	06/21/23	ENGINEERS COMMENTS
2	5/25/23	ENGINEERS COMMENTS
1	5/25/23	ENGINEERS COMMENTS

*Thomas B. Olley, P.E.*

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FAX: 518 778 8277  
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ROCK REMOVAL PLAN  
GARDNER RIDGE  
GARDNERTOWN ROAD  
TOWN OF NEWBURGH, ORANGE COUNTY, NY





**LEGEND**

	EXISTING CONTOURS
	EXISTING SITE BOUNDARY LINE
	EXISTING ADJOINING PROPERTY LINE
	EXISTING STONE WALL
	EXISTING TREE LINE
	EXISTING STREAM
	EXISTING BUILDINGS
	EXISTING UTILITY POLE
	EXISTING STREET SIGN
	EXISTING WATER MAIN
	EXISTING HYDRANT
	EXISTING WATER VALVE
	EXISTING CLEANOUT
	EXISTING CURB STOP
	EXISTING SEWER MAIN AND MANHOLE
	EXISTING PAVED ROAD/DRIVEWAY
	PROPOSED EASEMENT LINE
	PROPOSED BUILDING
	PROPOSED WALKWAY
	PROPOSED CONTOURS
	PROPOSED WATER MAIN
	PROPOSED BIORETENTION
	PROPOSED WATER VALVE
	PROPOSED HYDRANT
	PROPOSED SEWER MAIN AND MANHOLE
	PROPOSED DRY SWALE
	PROPOSED DRAINAGE PIPE AND CATCH BASIN
	PROPOSED END SECTION WITH RIP-RAP
	PROPOSED SEGMENTED RETAINING WALL
	LIMIT OF DISTURBANCE
	PROPOSED FENCE
	PROPOSED GUIDE RAIL

NO.	DATE	BY	DESCRIPTION
1	10/20/23	MS	CONSULTANT COMMENTS
2	11/02/23	MS	DRAINAGE REVISIONS
3	01/22/24	MS	CONSULTANT COMMENTS
4	02/22/24	MS	LAYOUT REVISIONS
5	03/22/24	MS	ENGINEERS COMMENTS
6	04/22/24	MS	ENGINEERS COMMENTS
7	05/22/24	MS	ENGINEERS COMMENTS

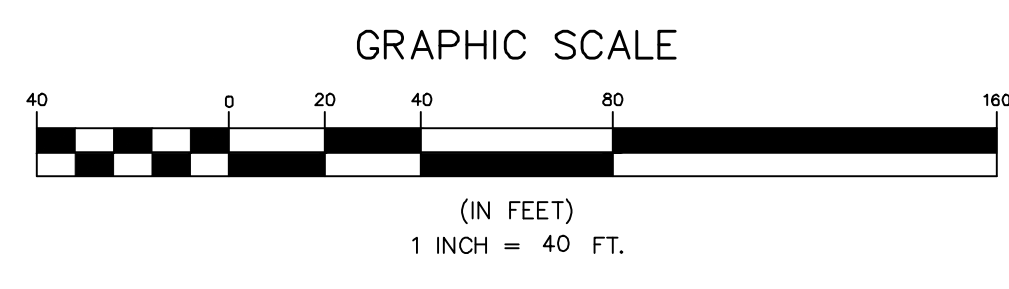
*Thomas B. Olley, P.E.*

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 FAX: 518 778 0207

UTILITY PLAN  
**GARDNER RIDGE**  
 GARDNER TOWN ROAD  
 TOWN OF NEWBURGH, ORANGE COUNTY, NY

SHEET NO.  
**6 OF 16**

DATE: JANUARY 28, 2016  
 FILE NO.



N/F TOWN OF NEWBURGH  
 B1618 P237  
 TAX PARCEL 75-1-6

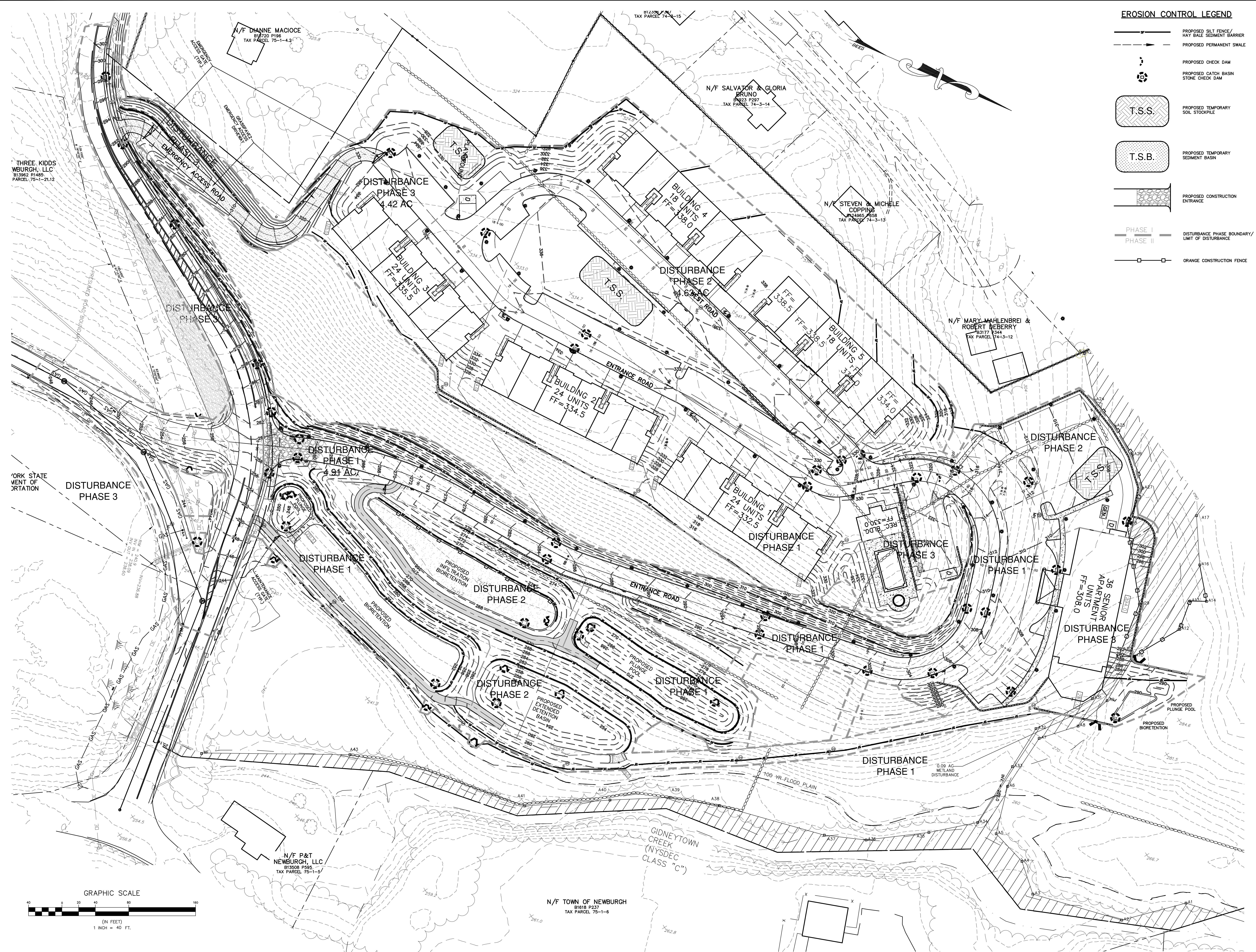
N/F P&T  
 NEWBURGH, LLC  
 B11008 P1005  
 TAX PARCEL 75-1-5

N/F DHANNE MACIOCE  
 B1720 P196  
 TAX PARCEL 75-1-4.2

N/F SALVATOR & GLORIA  
 BRUNO  
 B1223 P297  
 TAX PARCEL 74-3-14

N/F STEVEN & MICHELE  
 COPPING  
 B1465 P638  
 TAX PARCEL 74-3-13

N/F MARY MAHLENBREI &  
 ROBERT DEBERRY  
 B3177 P344  
 TAX PARCEL 74-3-12



**EROSION CONTROL LEGEND**

- PROPOSED SILT FENCE/HAY BALE SEDIMENT BARRIER
- PROPOSED PERMANENT SWALE
- PROPOSED CHECK DAM
- PROPOSED CATCH BASIN STONE CHECK DAM
- PROPOSED TEMPORARY SOIL STOCKPILE
- PROPOSED TEMPORARY SEDIMENT BASIN
- PROPOSED CONSTRUCTION ENTRANCE
- PHASE I  
PHASE II  
DISTURBANCE PHASE BOUNDARY/LIMIT OF DISTURBANCE
- ORANGE CONSTRUCTION FENCE

REV.	DATE	DESCRIPTION
7	10/20/23	CONSULTANT COMMENTS
6	09/22/23	OWNER AND DRAINAGE REVISIONS
5	07/23/23	CONSULTANT COMMENTS
4	06/22/23	LAYOUT REVISIONS
3	06/21/23	ENGINEERS COMMENTS
2	05/25/23	ENGINEERS COMMENTS
1	05/25/23	ENGINEERS COMMENTS

*Thomas B. Oley*

**THOMAS B. OLEY, P.E., P.L.L.C.**  
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EROSION & SEDIMENT CONTROL PLAN  
**GARDNER RIDGE**  
 GARDNERTOWN ROAD  
 TOWN OF NEWBURGH, ORANGE COUNTY, NY

SHEET NO.  
**7 OF 16**  
 DATE: JANUARY 28, 2016  
 FILE NO.

THREE KIDS WBURGH, LLC  
 B13962 P1485  
 PARCEL 75-1-21,12

N/F DIANNE MACIOCE  
 B1770 P196  
 TAX PARCEL 75-1-4,2

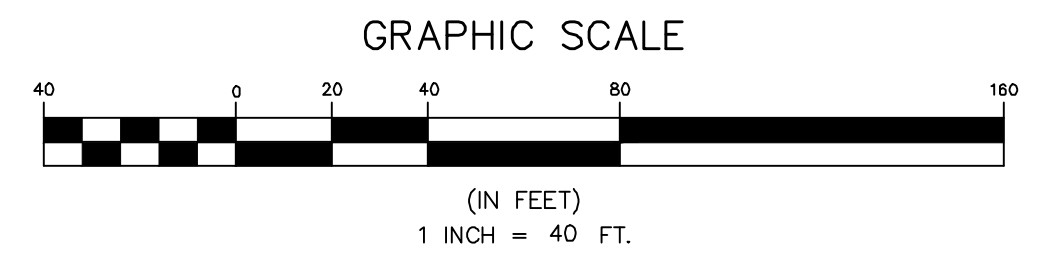
N/F SALVATOR & GLORIA BRUNO  
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 TAX PARCEL 74-3-14

N/F STEVEN & MICHELE COPPING  
 B14985 P558  
 TAX PARCEL 74-3-13

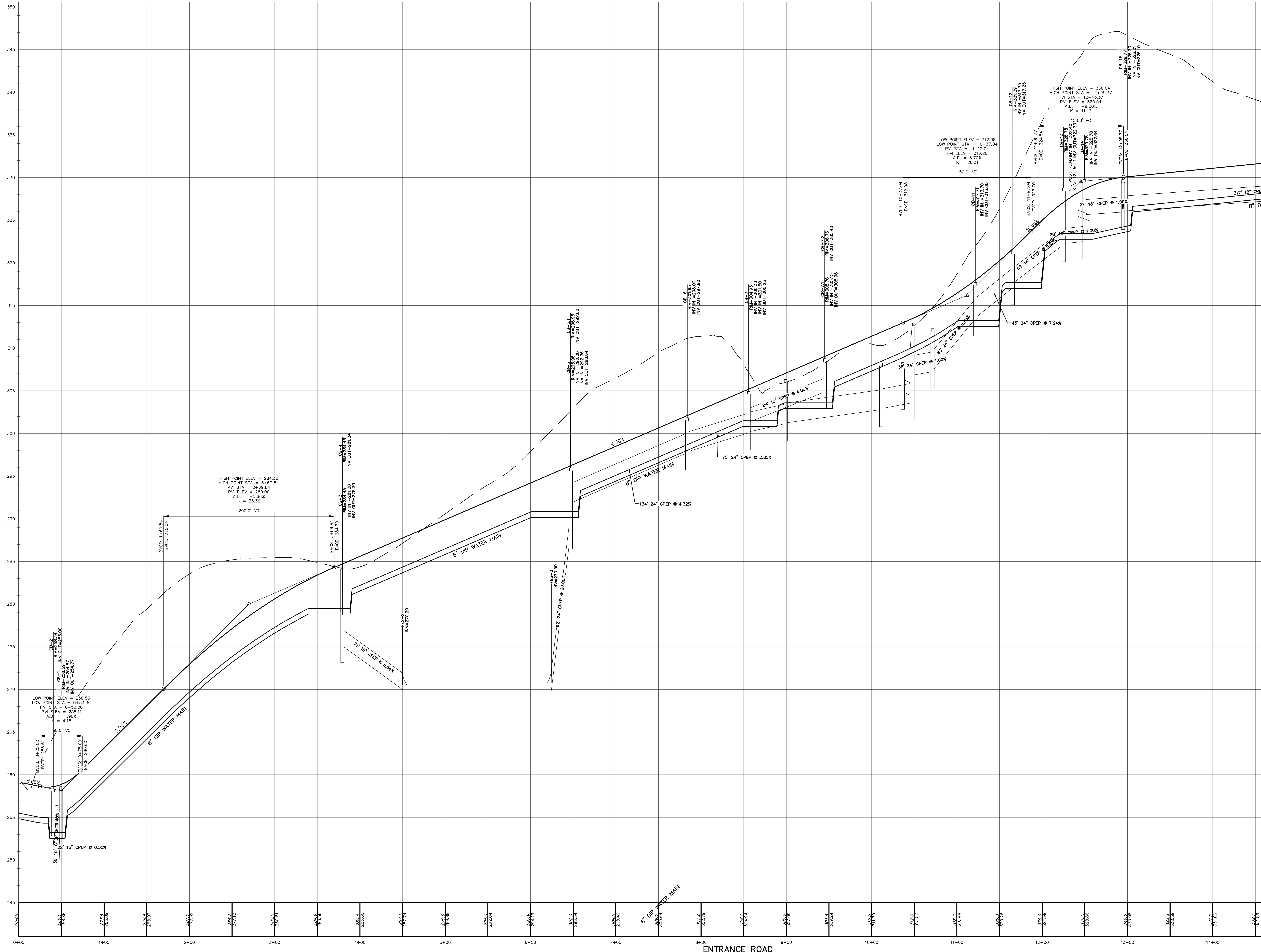
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 B1317 P344  
 TAX PARCEL 74-3-12

N/F P&T NEWBURGH, LLC  
 B13508 P595  
 TAX PARCEL 75-1-5/1

N/F TOWN OF NEWBURGH  
 B1619 P237  
 TAX PARCEL 75-1-6



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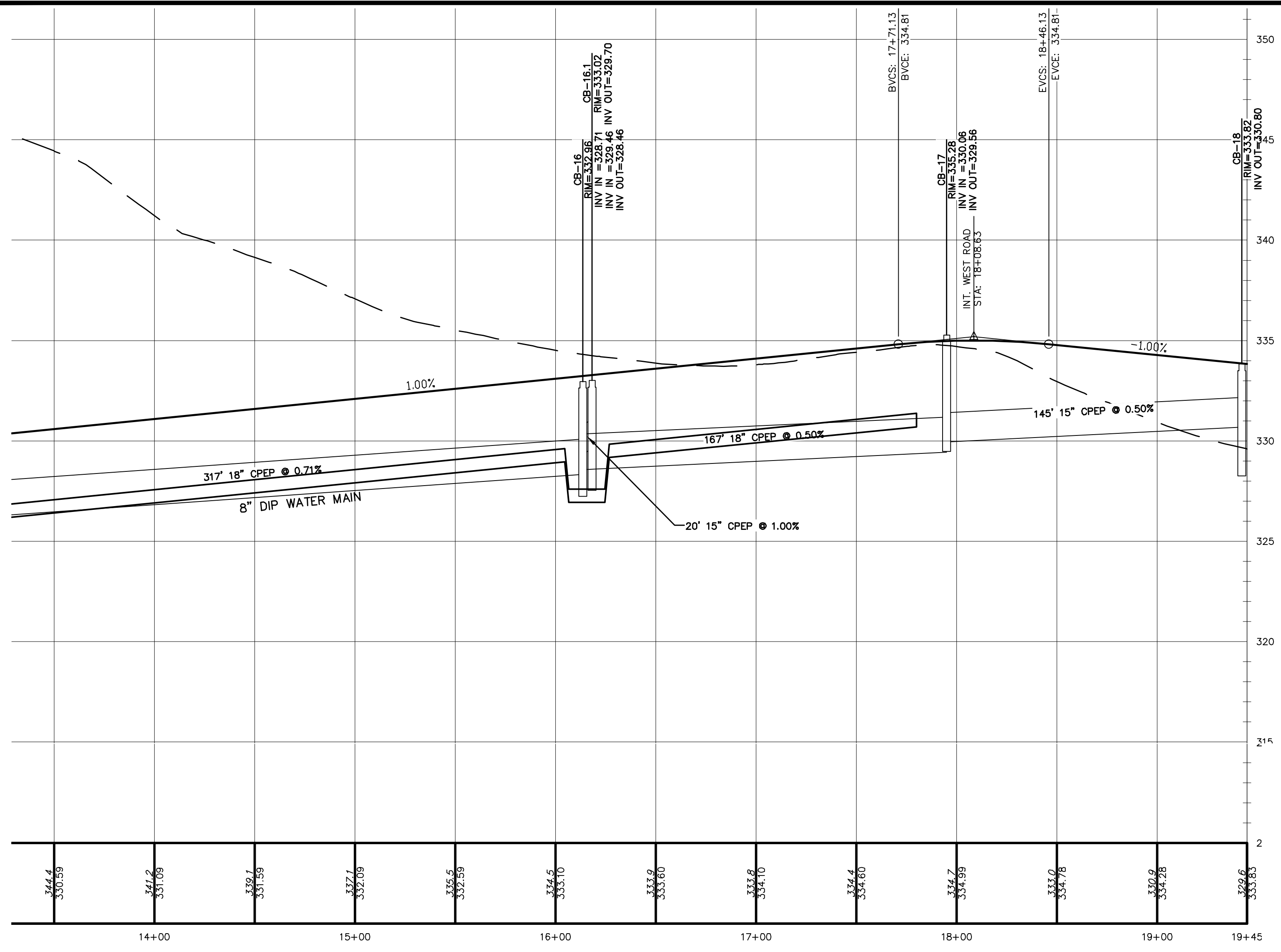
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5	6/16/23	CLIENT COMMENTS
4	6/8/22	LAYOUT REVISIONS
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2	5/25/17	ENGINEERS COMMENTS
1	3/15/16	ENGINEERS COMMENTS

*Thomas B. Olley, P.E.*

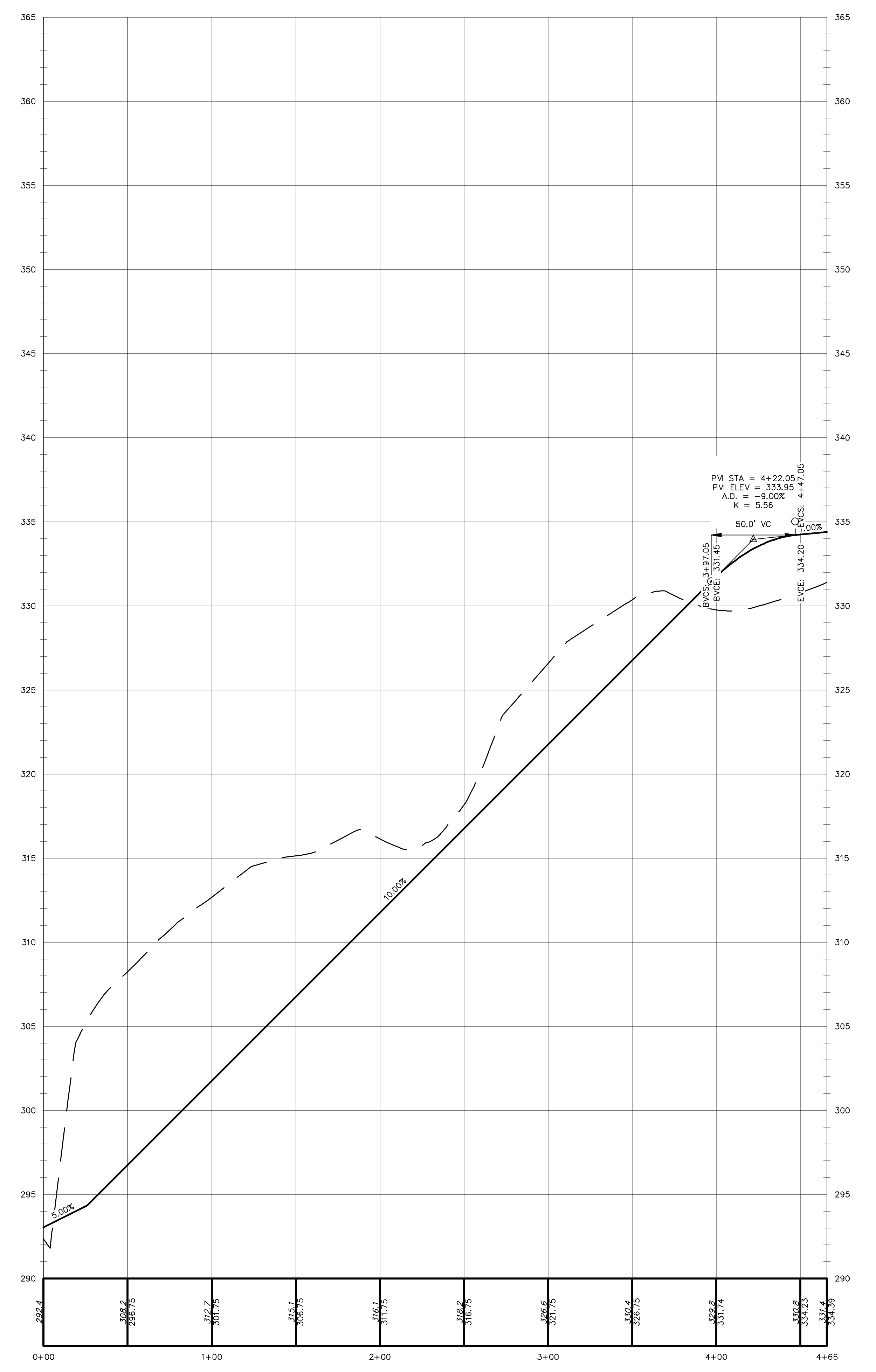
**THOMAS B. OLLEY, P.E., P.L.L.C.**  
 ENGINEERS AND PLANNERS  
 15 ORANGE AVENUE  
 PALM BEACH, FL 33480  
 PHONE (407) 798-8888  
 FAX (407) 798-2007

THE PROFESSIONAL SEAL OF THE ENGINEER IS REQUIRED FOR ALL PROFESSIONAL SERVICES. THE PROFESSIONAL SEAL OF THE ARCHITECT IS REQUIRED FOR ALL ARCHITECTURAL SERVICES. THE PROFESSIONAL SEAL OF THE LAND SURVEYOR IS REQUIRED FOR ALL SURVEYING SERVICES. THE PROFESSIONAL SEAL OF THE CIVIL ENGINEER IS REQUIRED FOR ALL CIVIL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE ELECTRICAL ENGINEER IS REQUIRED FOR ALL ELECTRICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE MECHANICAL ENGINEER IS REQUIRED FOR ALL MECHANICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE CHEMICAL ENGINEER IS REQUIRED FOR ALL CHEMICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE ENVIRONMENTAL ENGINEER IS REQUIRED FOR ALL ENVIRONMENTAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE INDUSTRIAL ENGINEER IS REQUIRED FOR ALL INDUSTRIAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE AERONAUTICAL AND NAUTICAL ENGINEER IS REQUIRED FOR ALL AERONAUTICAL AND NAUTICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE AGRICULTURAL ENGINEER IS REQUIRED FOR ALL AGRICULTURAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE METALLURGICAL ENGINEER IS REQUIRED FOR ALL METALLURGICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE MINING ENGINEER IS REQUIRED FOR ALL MINING ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE PETROLEUM ENGINEER IS REQUIRED FOR ALL PETROLEUM ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE CHEMICAL ENGINEER IS REQUIRED FOR ALL CHEMICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE ENVIRONMENTAL ENGINEER IS REQUIRED FOR ALL ENVIRONMENTAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE INDUSTRIAL ENGINEER IS REQUIRED FOR ALL INDUSTRIAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE AERONAUTICAL AND NAUTICAL ENGINEER IS REQUIRED FOR ALL AERONAUTICAL AND NAUTICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE AGRICULTURAL ENGINEER IS REQUIRED FOR ALL AGRICULTURAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE METALLURGICAL ENGINEER IS REQUIRED FOR ALL METALLURGICAL ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE MINING ENGINEER IS REQUIRED FOR ALL MINING ENGINEERING SERVICES. THE PROFESSIONAL SEAL OF THE PETROLEUM ENGINEER IS REQUIRED FOR ALL PETROLEUM ENGINEERING SERVICES.

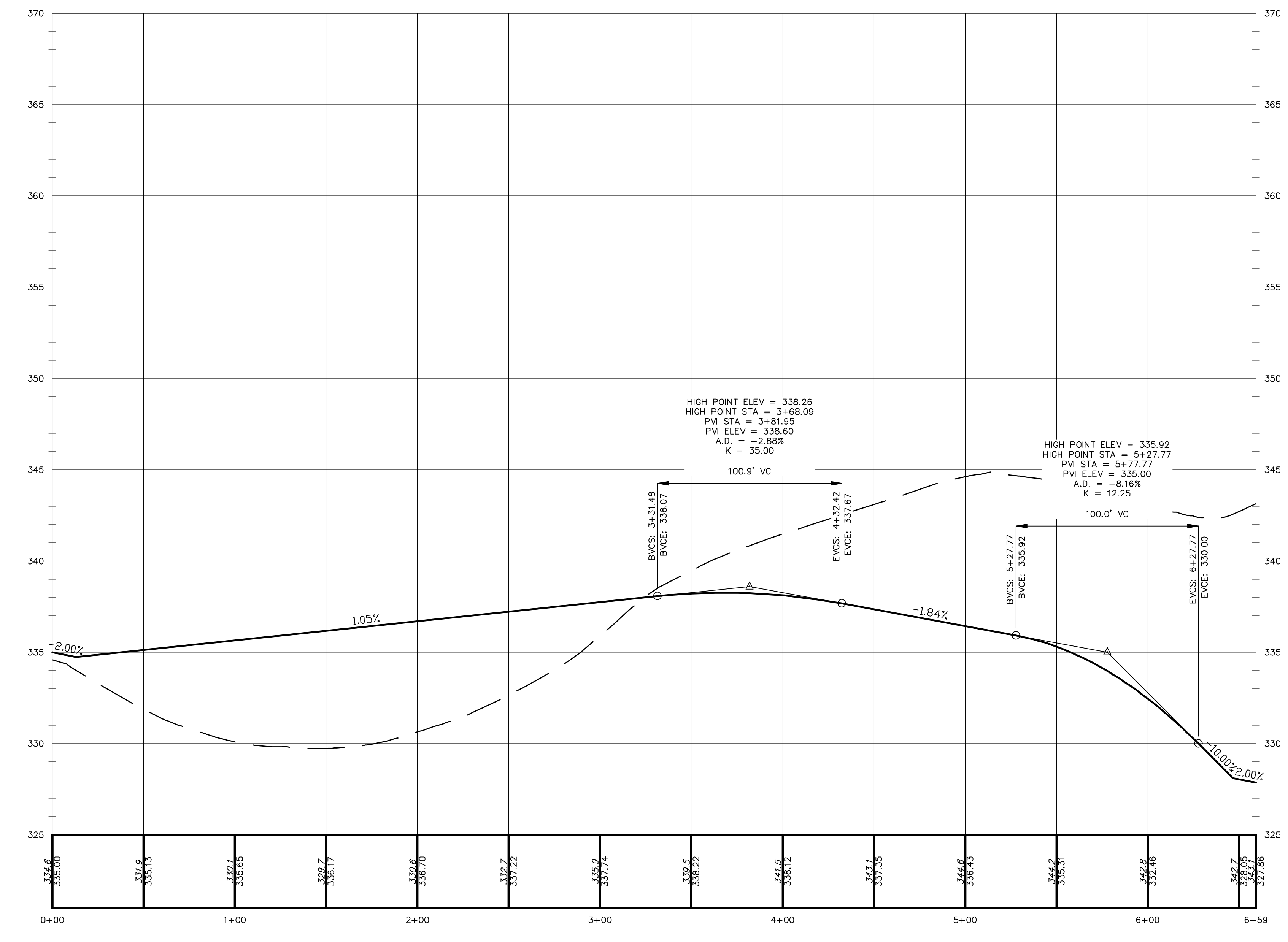
ROAD PROFILES  
**GARDNER RIDGE**  
 GARDNERTOWN ROAD  
 TOWN OF NEWBURGH, ORANGE COUNTY, NY



**ENTRANCE ROAD (2)**  
SCALE: 1"=4' VERT.  
1"=40' HOR.



**EMERGENCY ACCESS DRIVE**  
SCALE: 1"=4' VERT.  
1"=40' HOR.



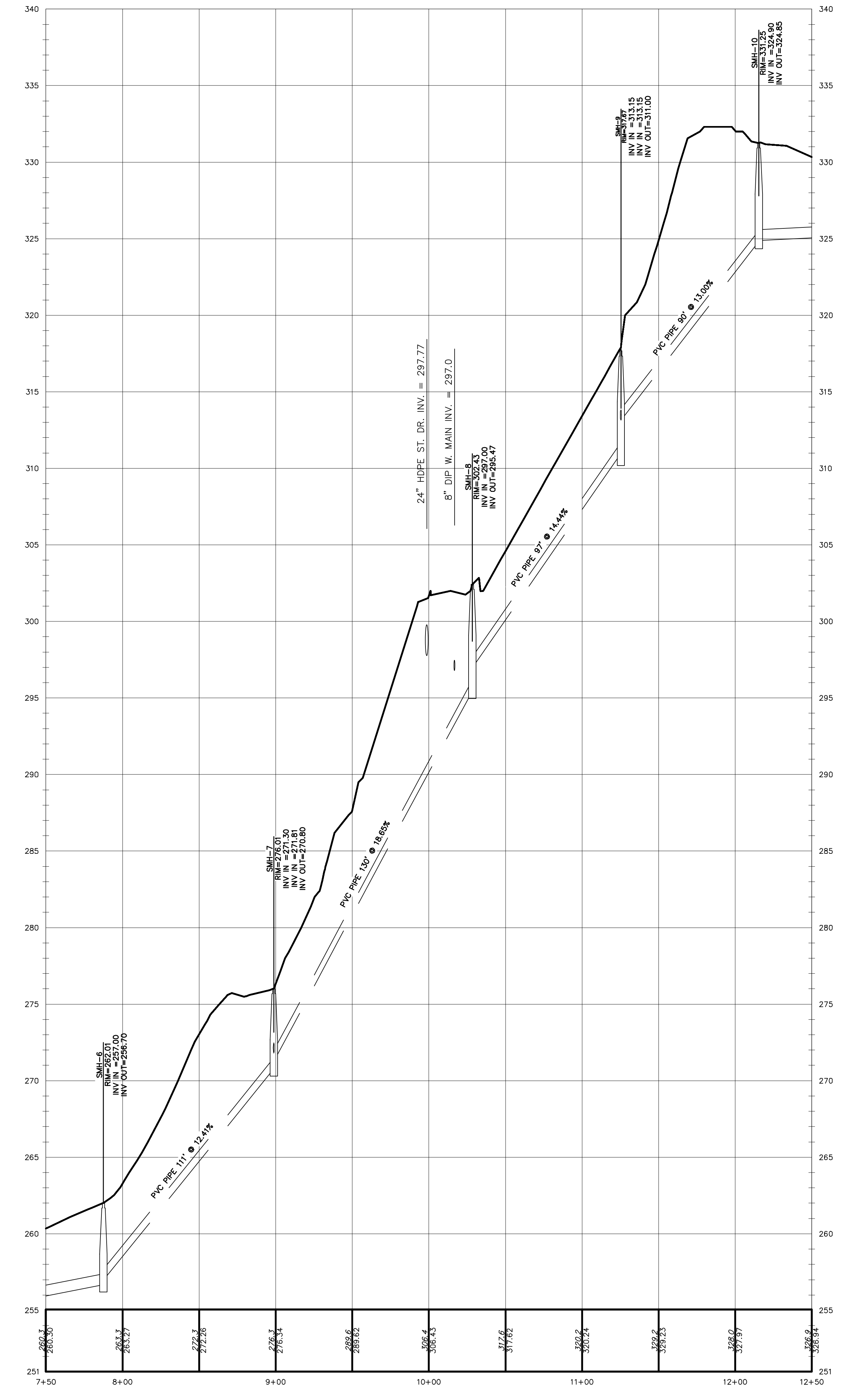
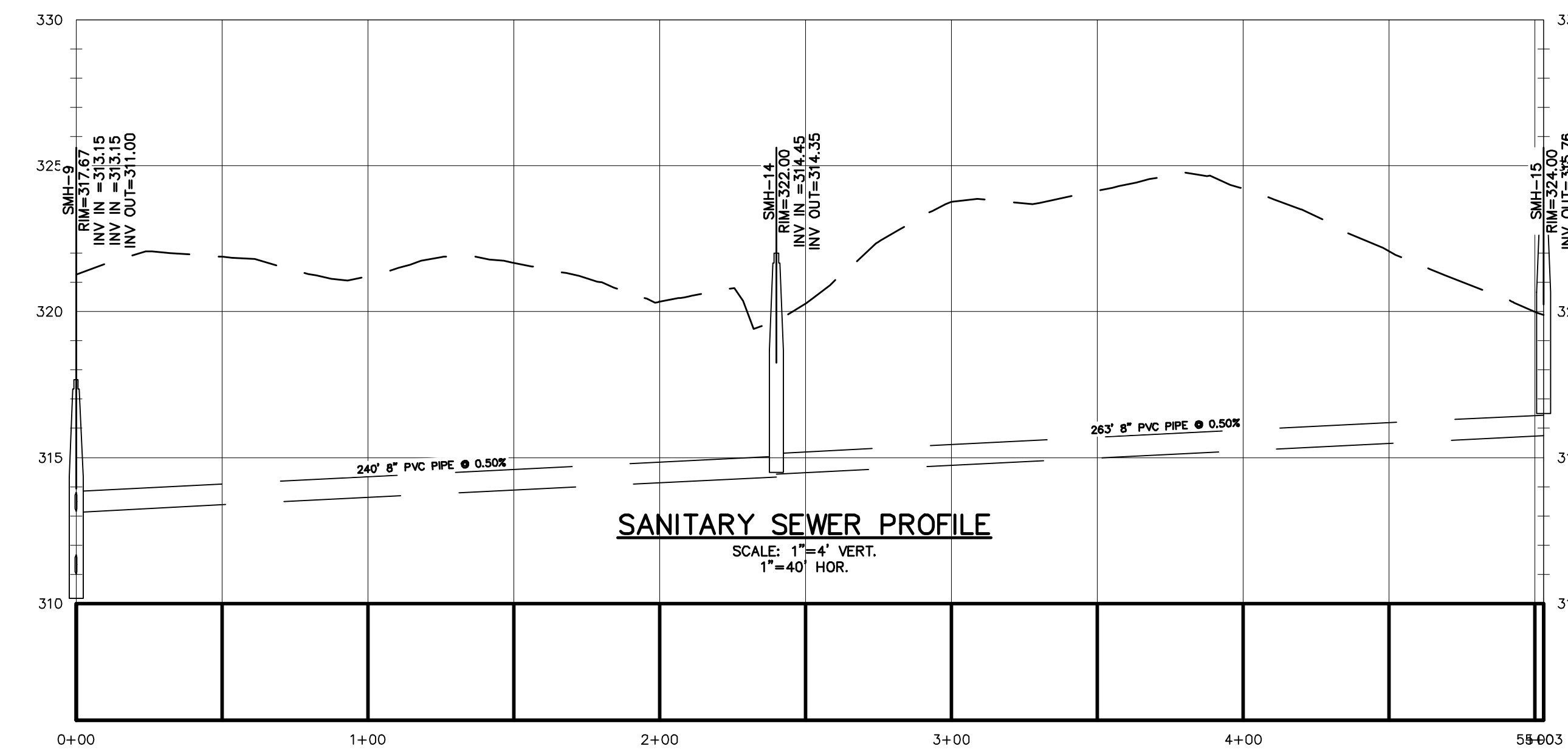
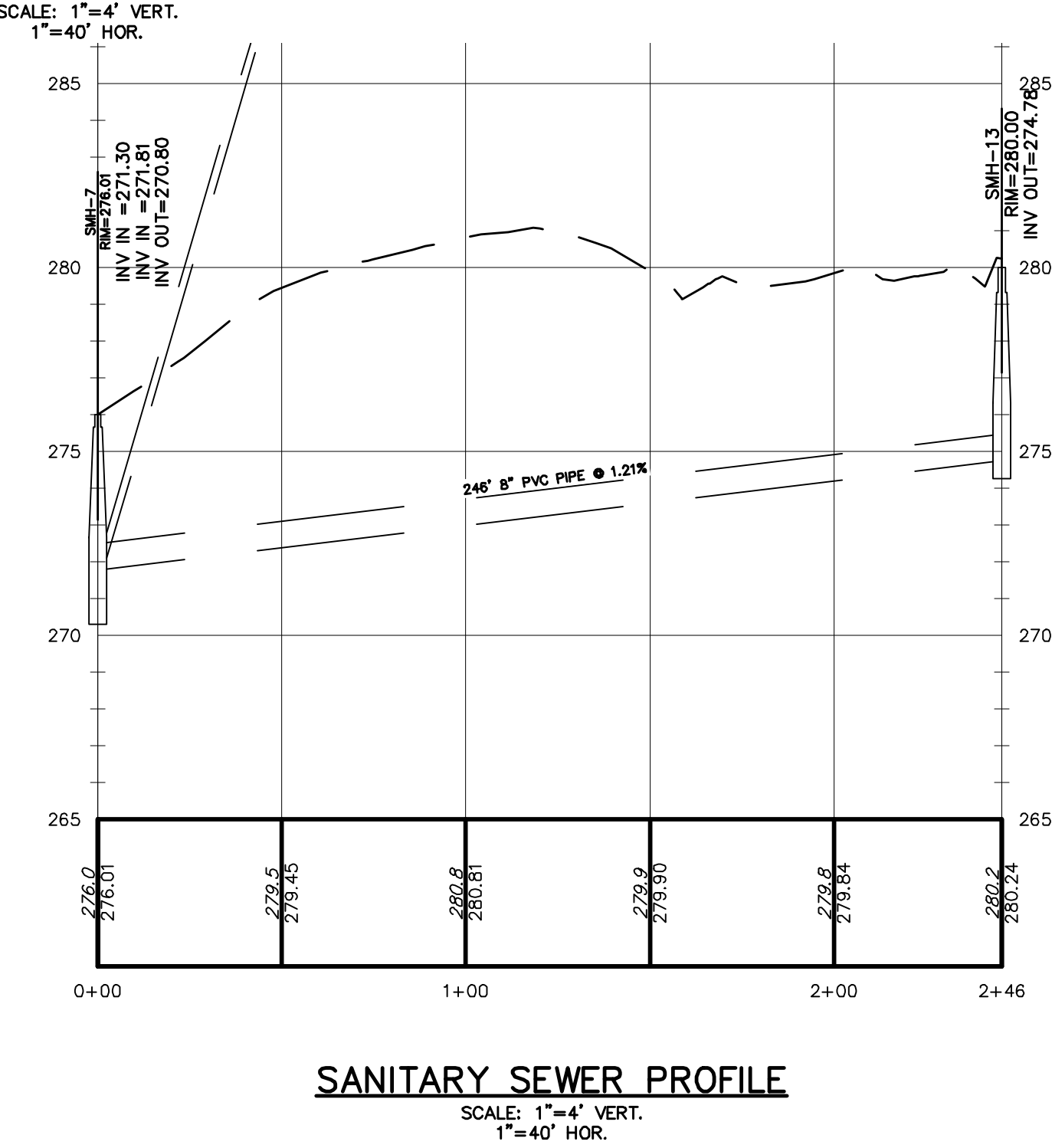
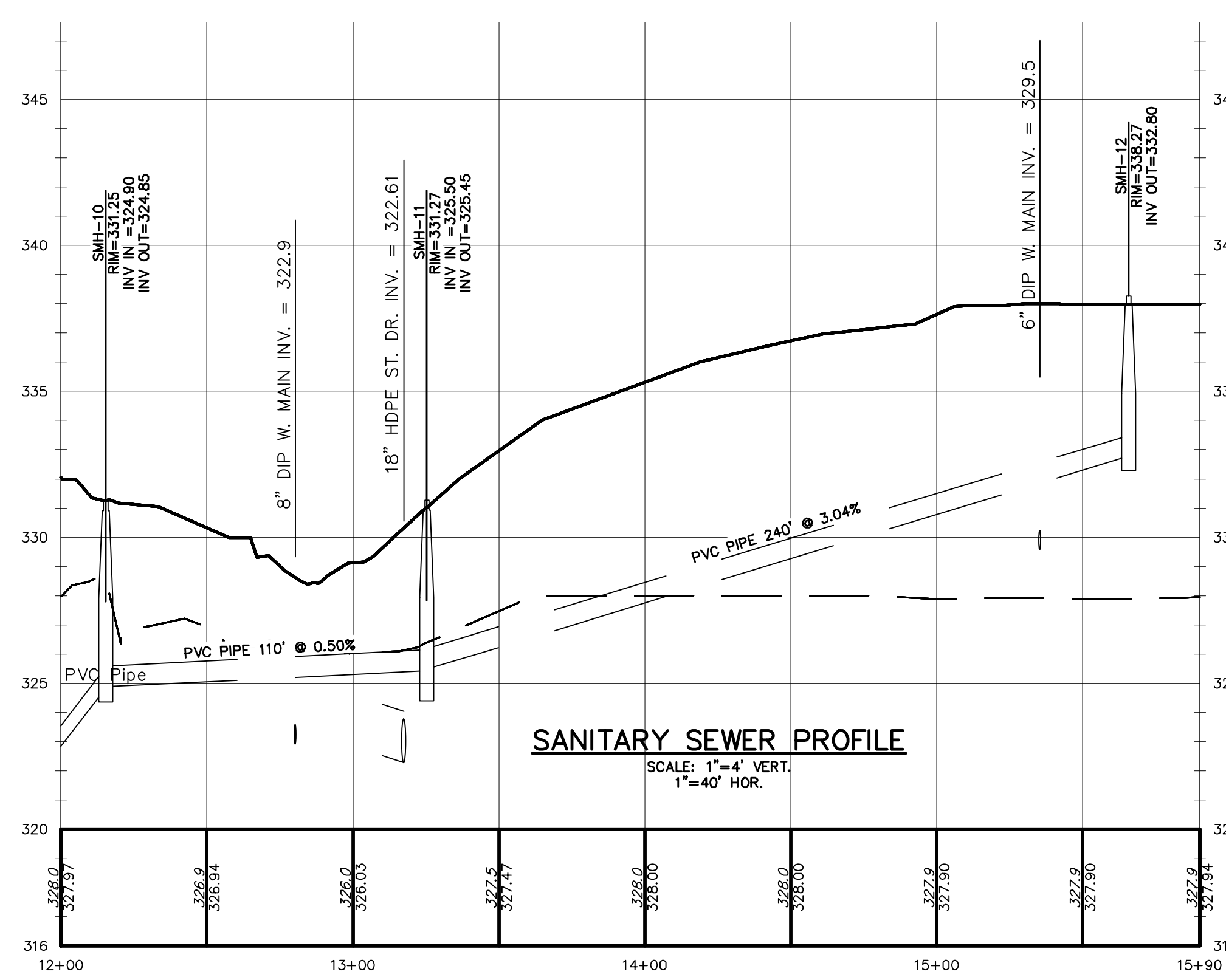
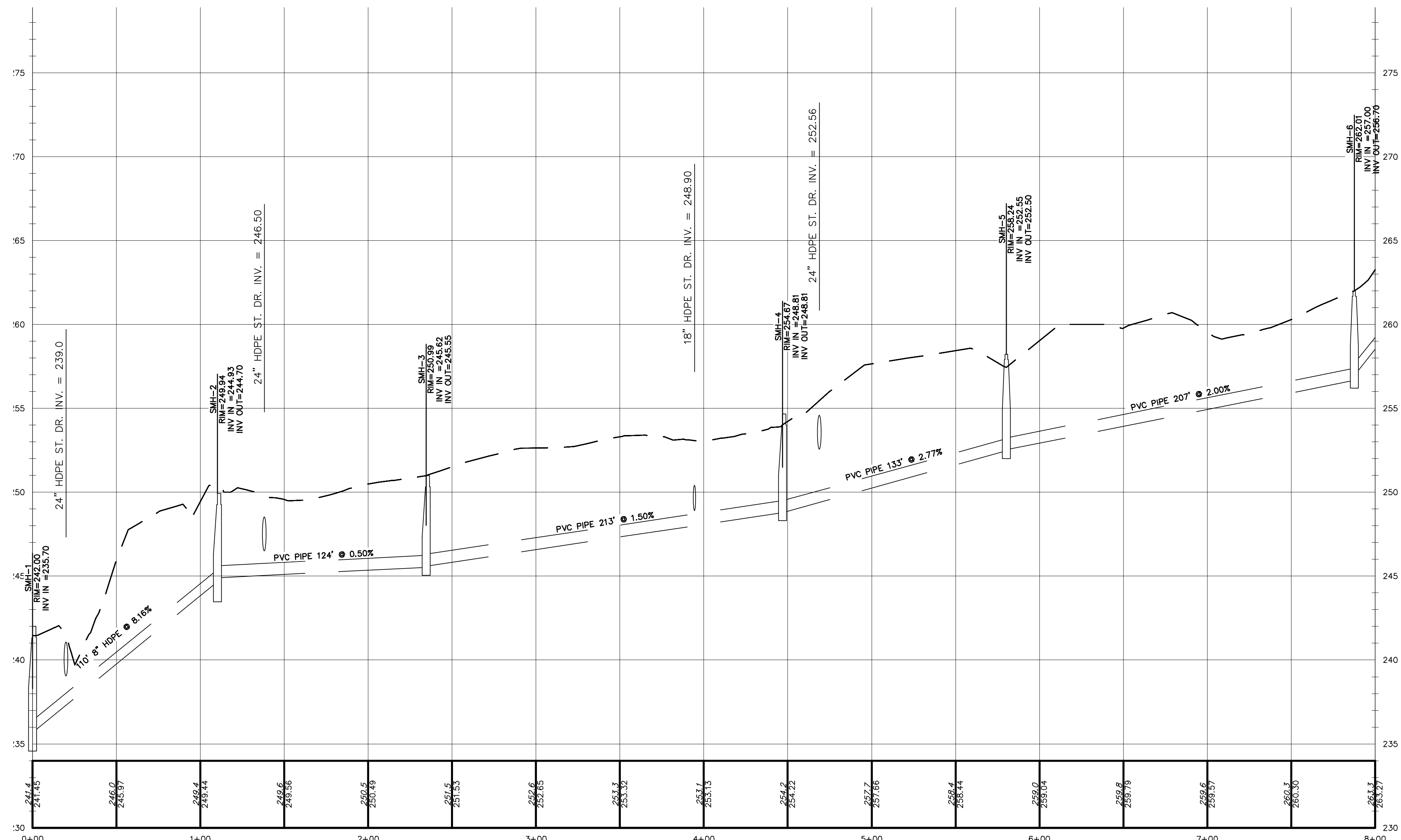
**WEST ROADWAY**  
SCALE: 1"=4' VERT.  
1"=40' HOR.

NO.	DATE	DESCRIPTION
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6	7/6/23	EMERGENCY ACCESS AND DRAINAGE REVISIONS
5	6/1/23	LAYOUT REVISIONS
4	6/6/22	LAYOUT REVISION
3	6/21/17	ENGINEERS COMMENTS
1	3/15/16	ENGINEERS COMMENTS

*Thomas B. Olley, P.E.*

**THOMAS B. OLLEY, P.E., P.L.L.C.**  
ENGINEERS AND PLANNERS  
FRANK AND FRANK  
PAUL AND FRANK  
22 ORANGE AVENUE  
PALISADE NY 12456  
AS AN INDISPENSABLE PART OF ANY CONTRACT, HEREOF IS PROVIDED WITHOUT THE WRITTEN PERMISSION OF THE FIRM ENGINEER, SURVEYOR OR ARCHITECT, THAT THE ENGINEER, SURVEYOR OR ARCHITECT SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PROJECT AND THE QUALITY OF THE WORKMANSHIP OF THE CONTRACTOR. THE DESIGN PROFESSIONAL SHALL BE CONSIDERED TO BE A GOOD WISE COPY.

ROAD PROFILES  
**GARDNER RIDGE**  
GARDNERTOWN ROAD  
TOWN OF NEWBURGH, ORANGE COUNTY, NY



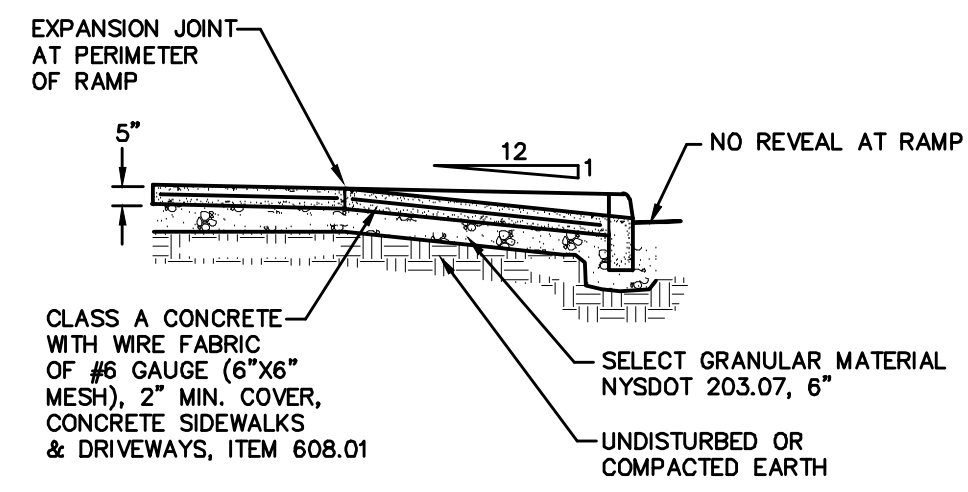
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2	7/19/17	ENGINEERS COMMENTS
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4	6/8/17	LAYOUT REVISION
5	6/8/17	EMERGENCY COMMENTS
6	6/8/17	EXCESS AND DRAINAGE REVISIONS
7	10/20/23	CONSULTANT COMMENTS

*Thomas B. Olley, P.E.*

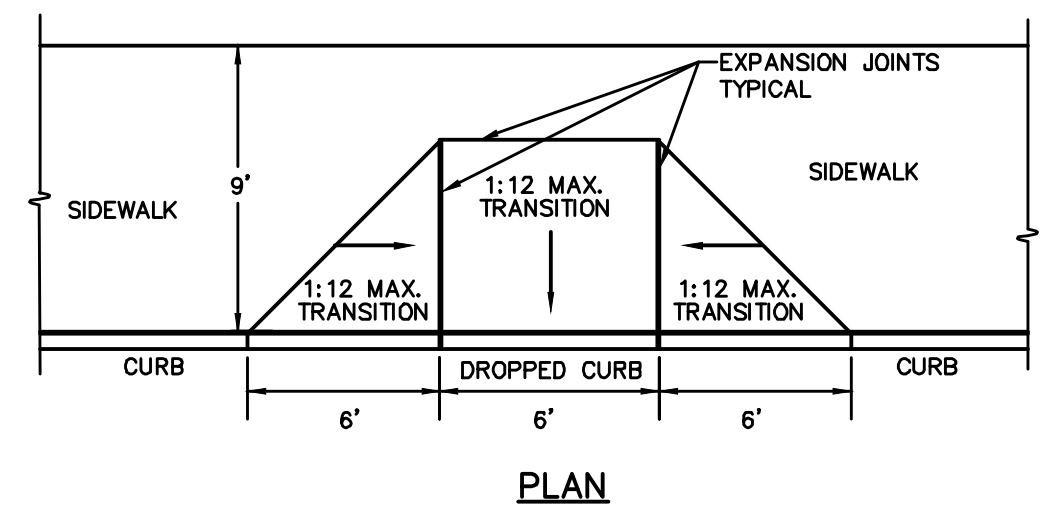
**THOMAS B. OLLEY, P.E., P.L.L.C.**  
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ORANGE AVENUE  
MILBURN, NJ 07048  
PHONE (908) 798-3837  
FAX (908) 798-3207

AS AN INDICATION OF THE QUALITY OF THE SERVICE PROVIDED, THE PROFESSIONAL ENGINEER'S SIGNATURE AND SEAL ARE REQUIRED ON ALL DRAWINGS AND SPECIFICATIONS. THE PROFESSIONAL ENGINEER'S SIGNATURE AND SEAL ARE REQUIRED ON ALL DRAWINGS AND SPECIFICATIONS. THE PROFESSIONAL ENGINEER'S SIGNATURE AND SEAL ARE REQUIRED ON ALL DRAWINGS AND SPECIFICATIONS.

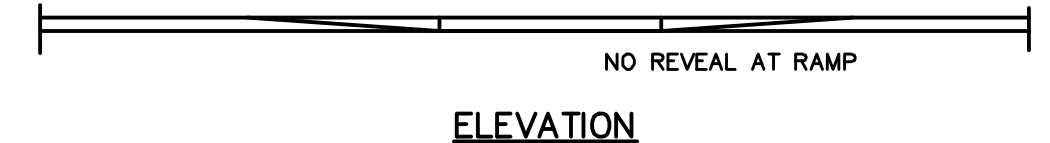
ROAD PROFILES  
**GARDNER RIDGE**  
GARDNERTOWN ROAD  
TOWN OF NEWBURGH, ORANGE COUNTY, NY



**PEDESTRIAN RAMP - SECTION**  
NOT TO SCALE

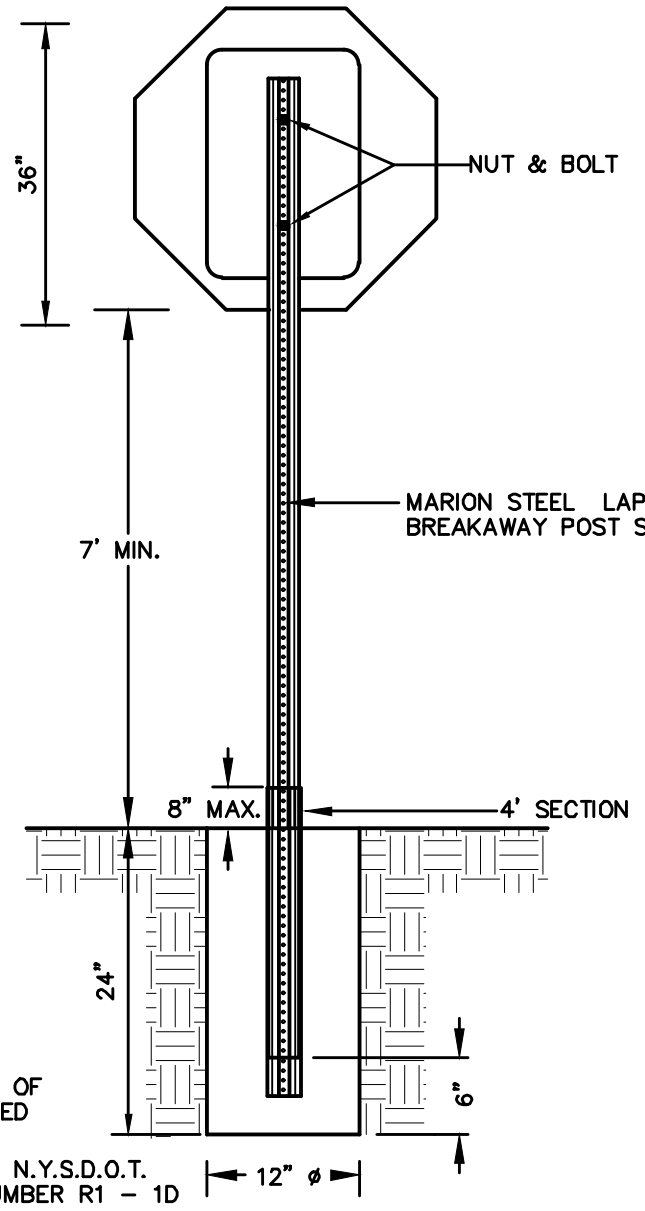
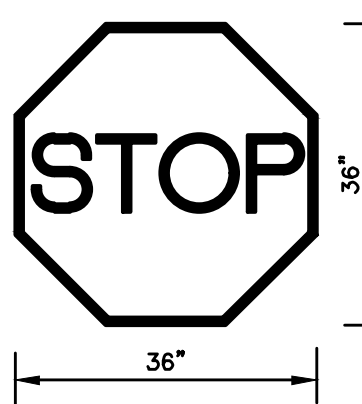


**PLAN**

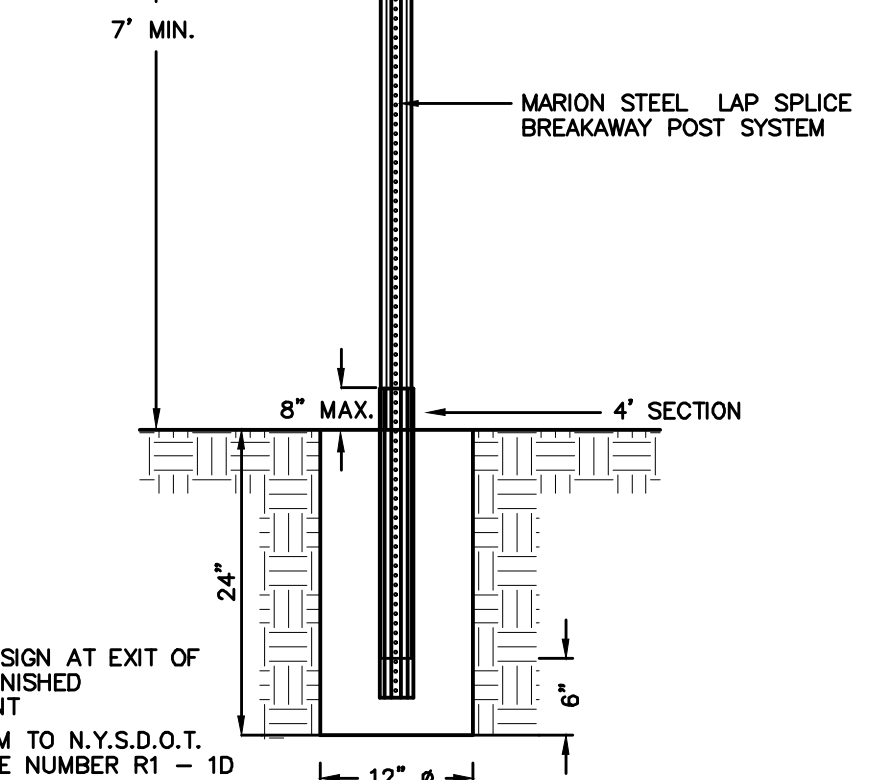
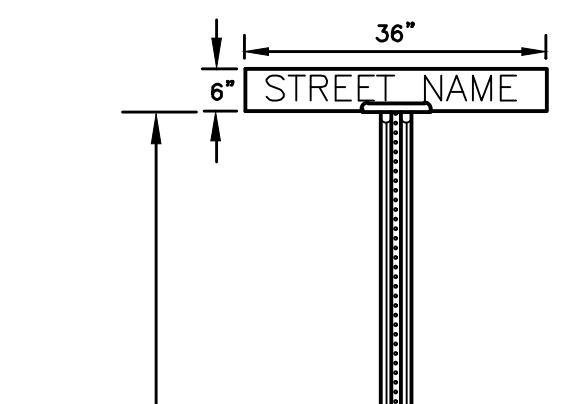


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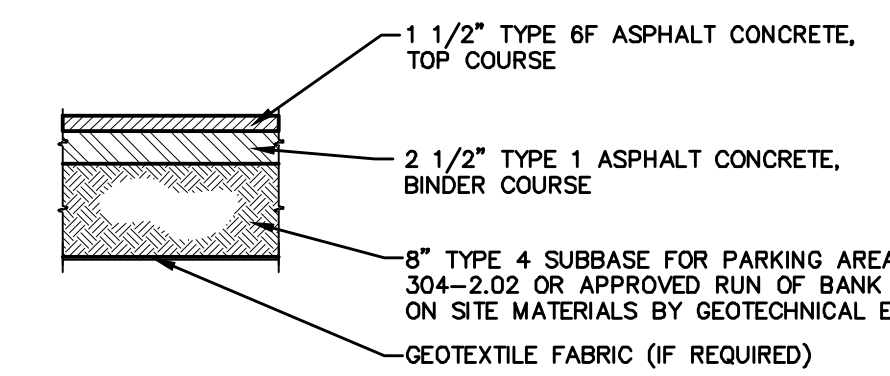
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NOT TO SCALE



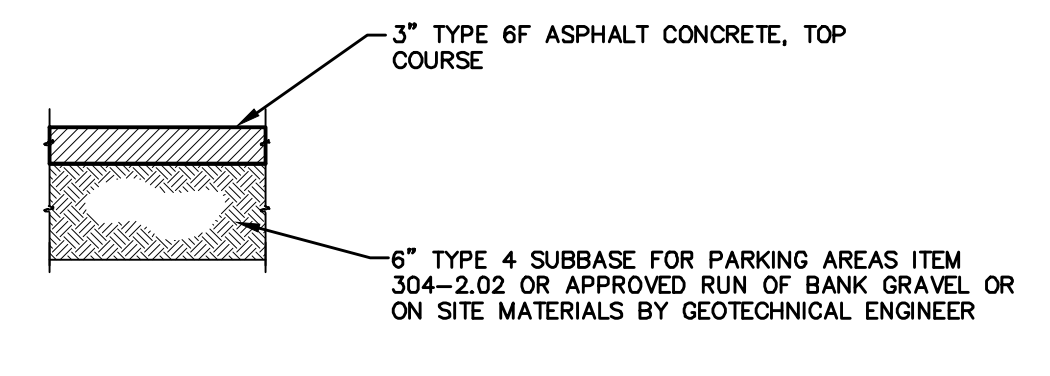
**STREET SIGN INSTALLATION DETAIL**  
NOT TO SCALE



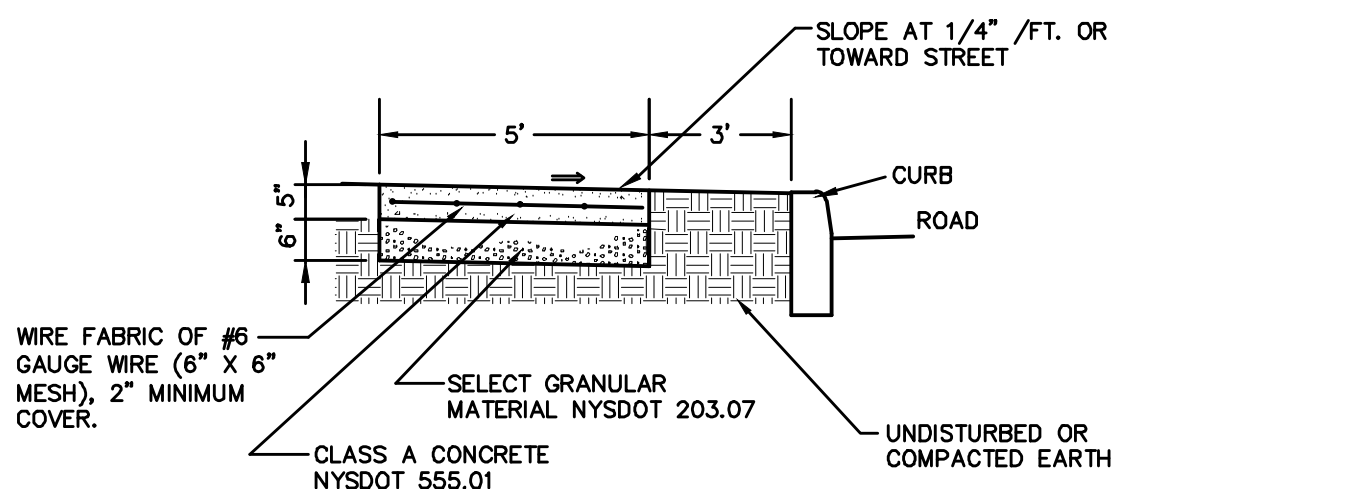
**STREET SIGN INSTALLATION DETAIL**  
NOT TO SCALE



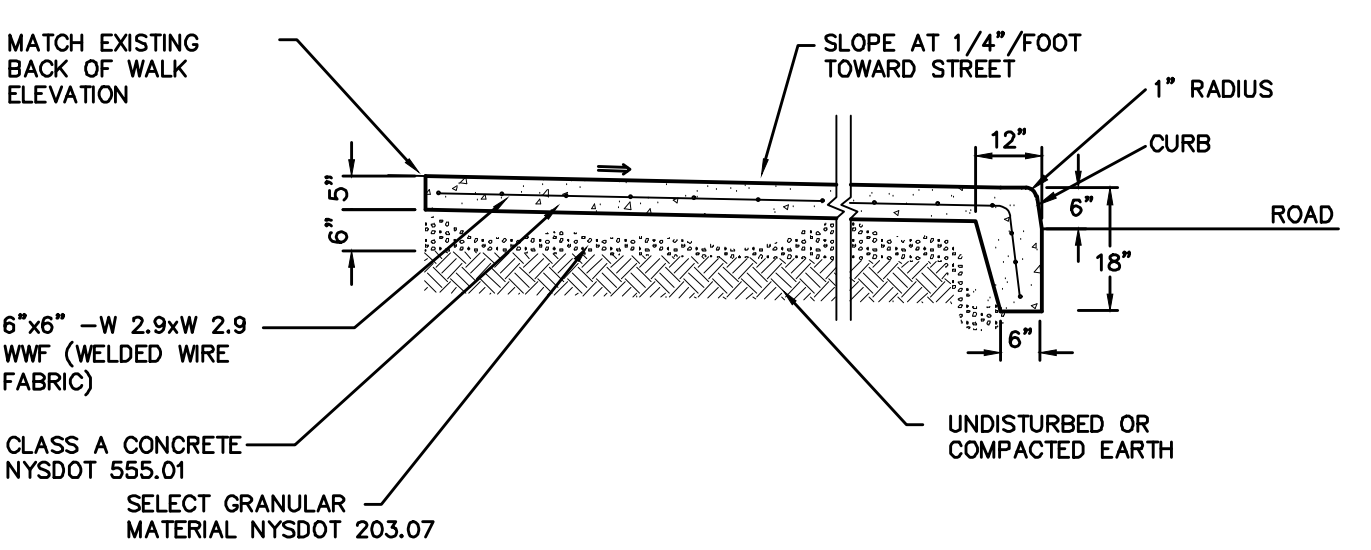
**LIGHT DUTY PAVEMENT**  
NOT TO SCALE



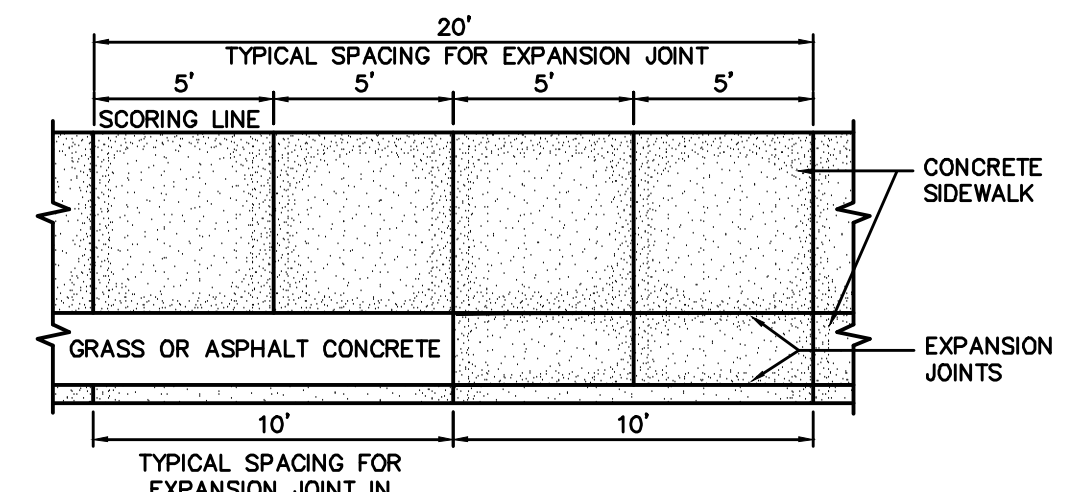
**DRIVEWAY PAVEMENT**  
NOT TO SCALE



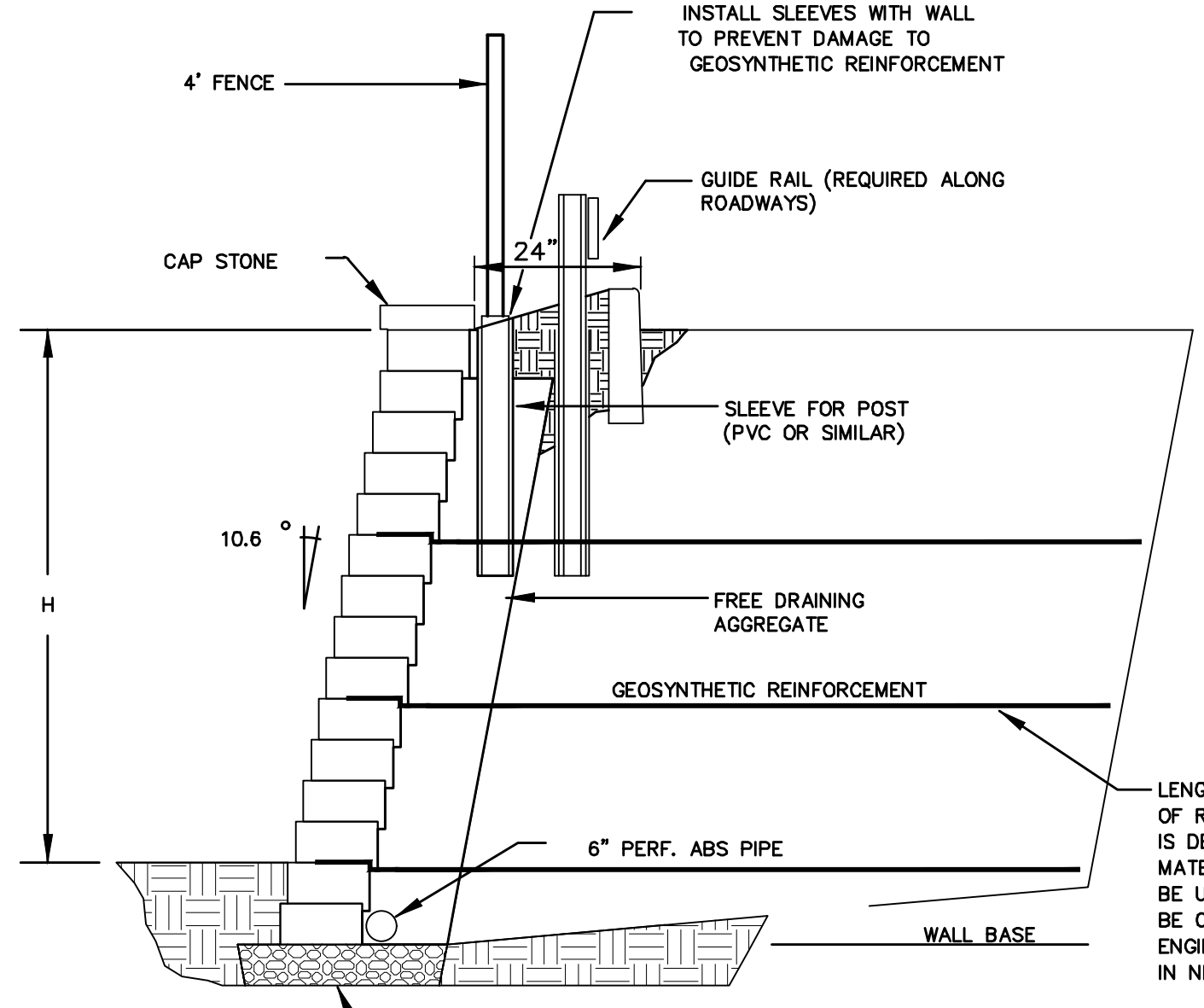
**CONCRETE SIDEWALK**  
NOT TO SCALE



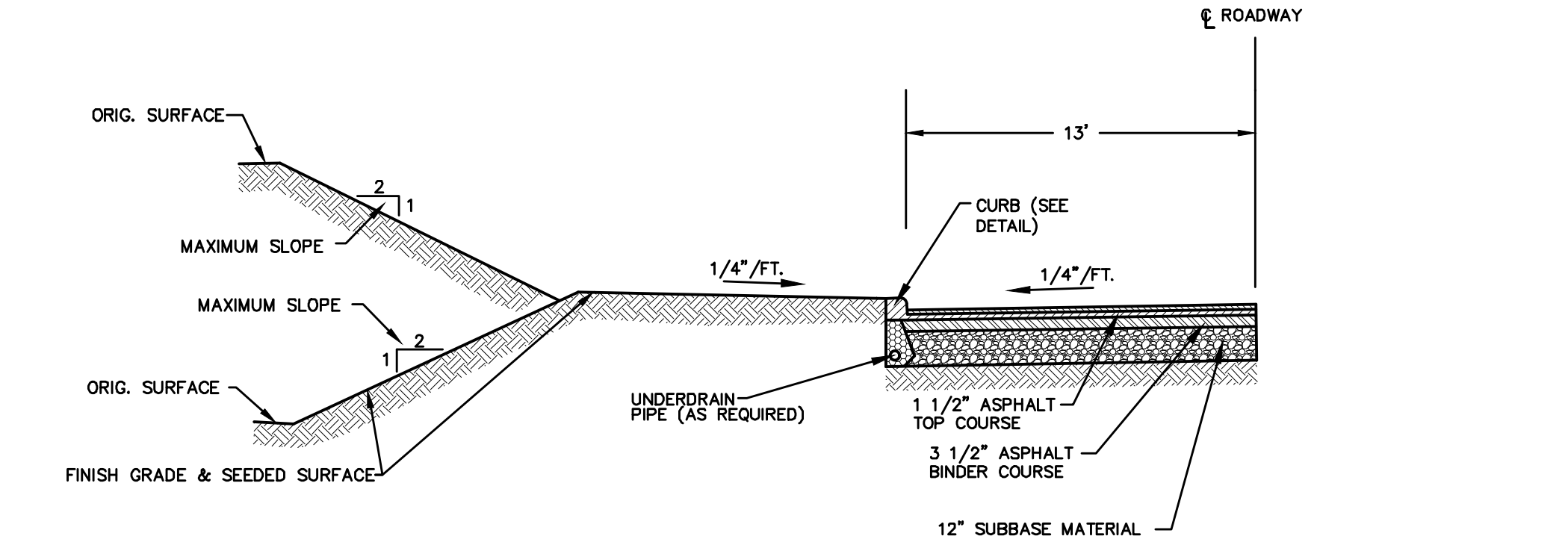
**CONCRETE SIDEWALK WITH INTEGRAL CURB**  
NOT TO SCALE



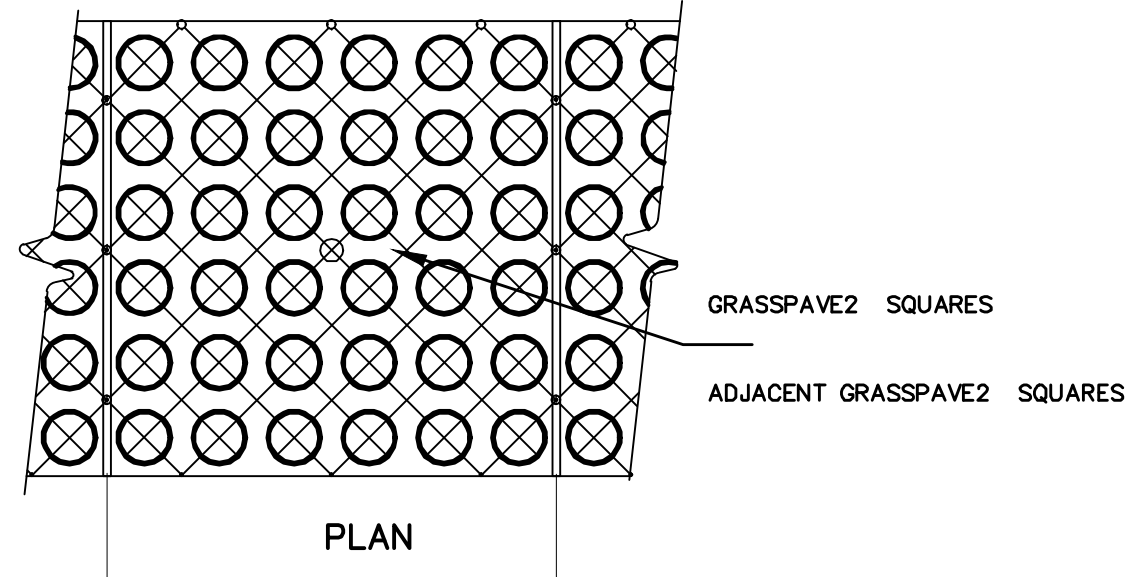
**CONCRETE SIDEWALK AND CURB - PLAN OF SCORING AND EXPANSION JOINTS**  
NOT TO SCALE



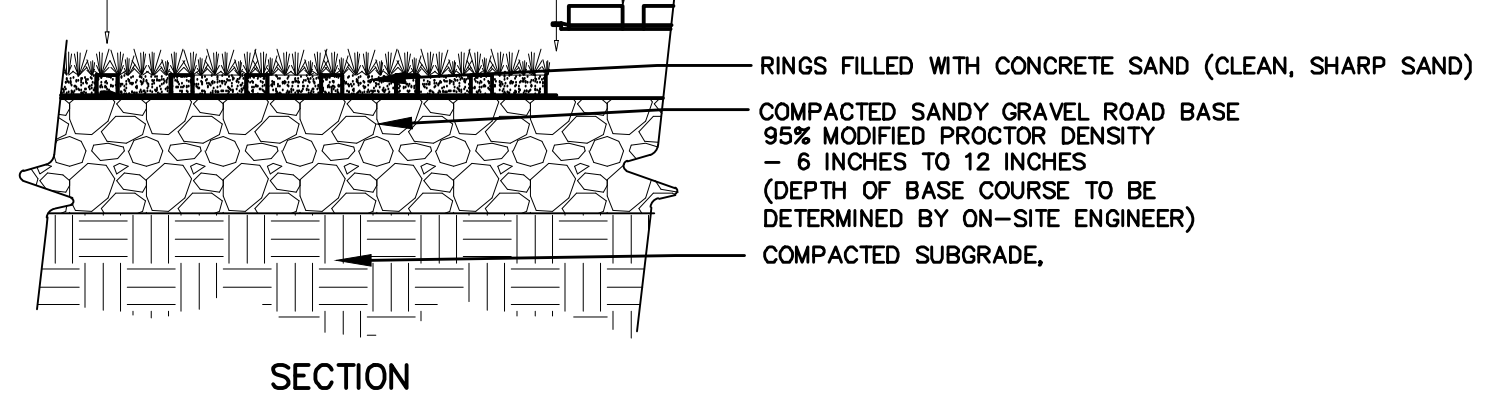
**SEGMENTAL RETAINING WALL WITH GUIDE RAIL & FENCE**  
NOT TO SCALE



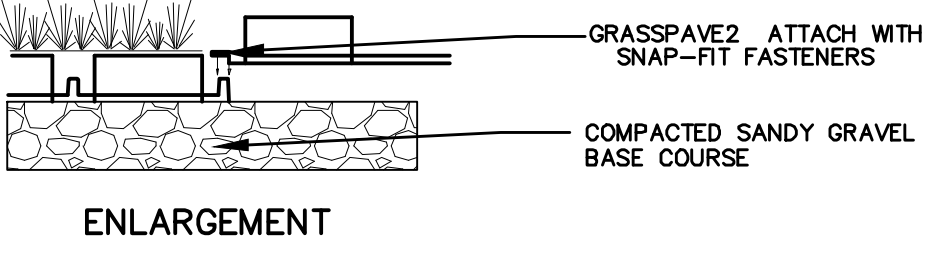
**TYPICAL ROAD CROSS SECTION**  
NOT TO SCALE



**PLAN**

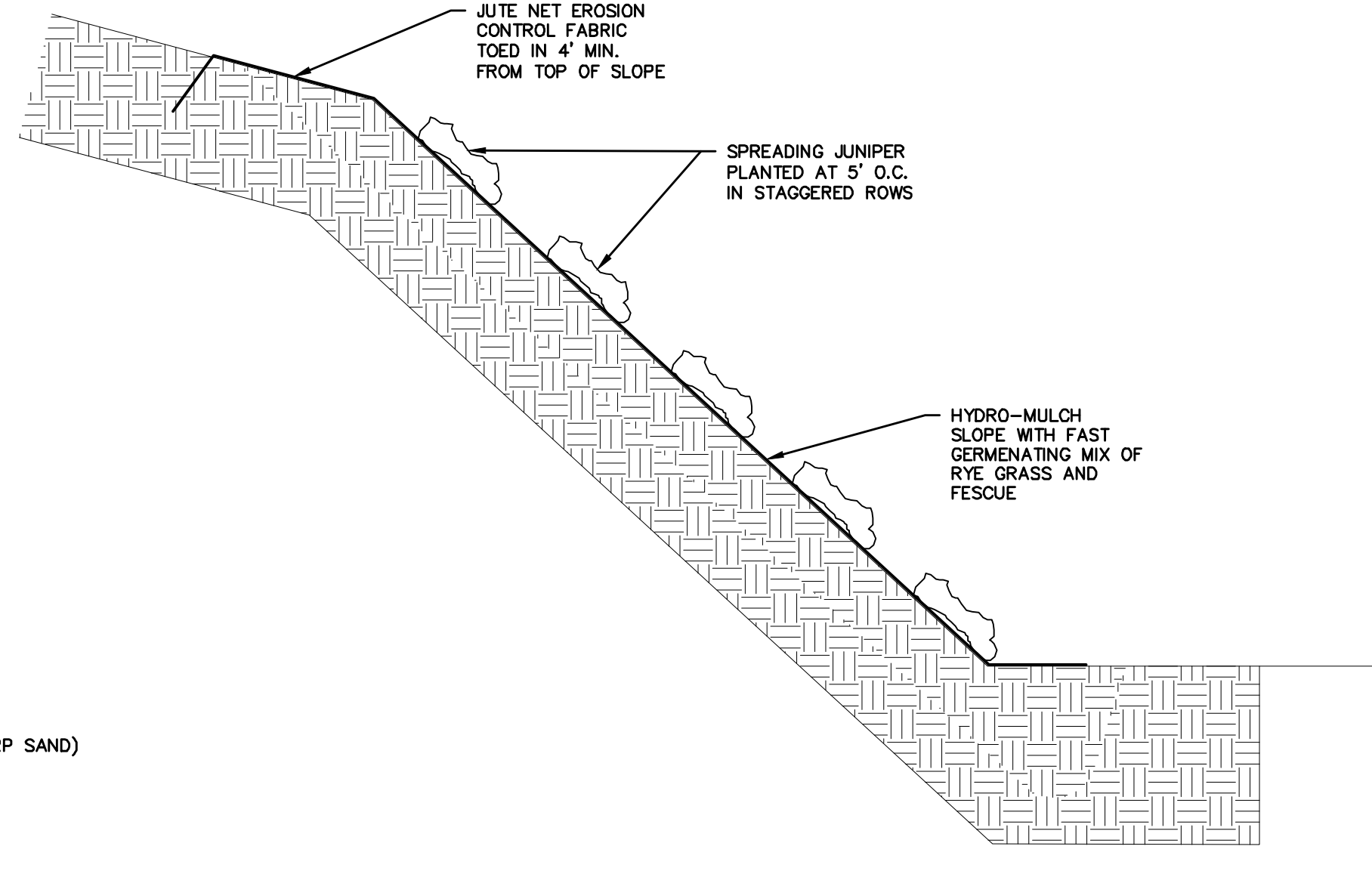


**SECTION**

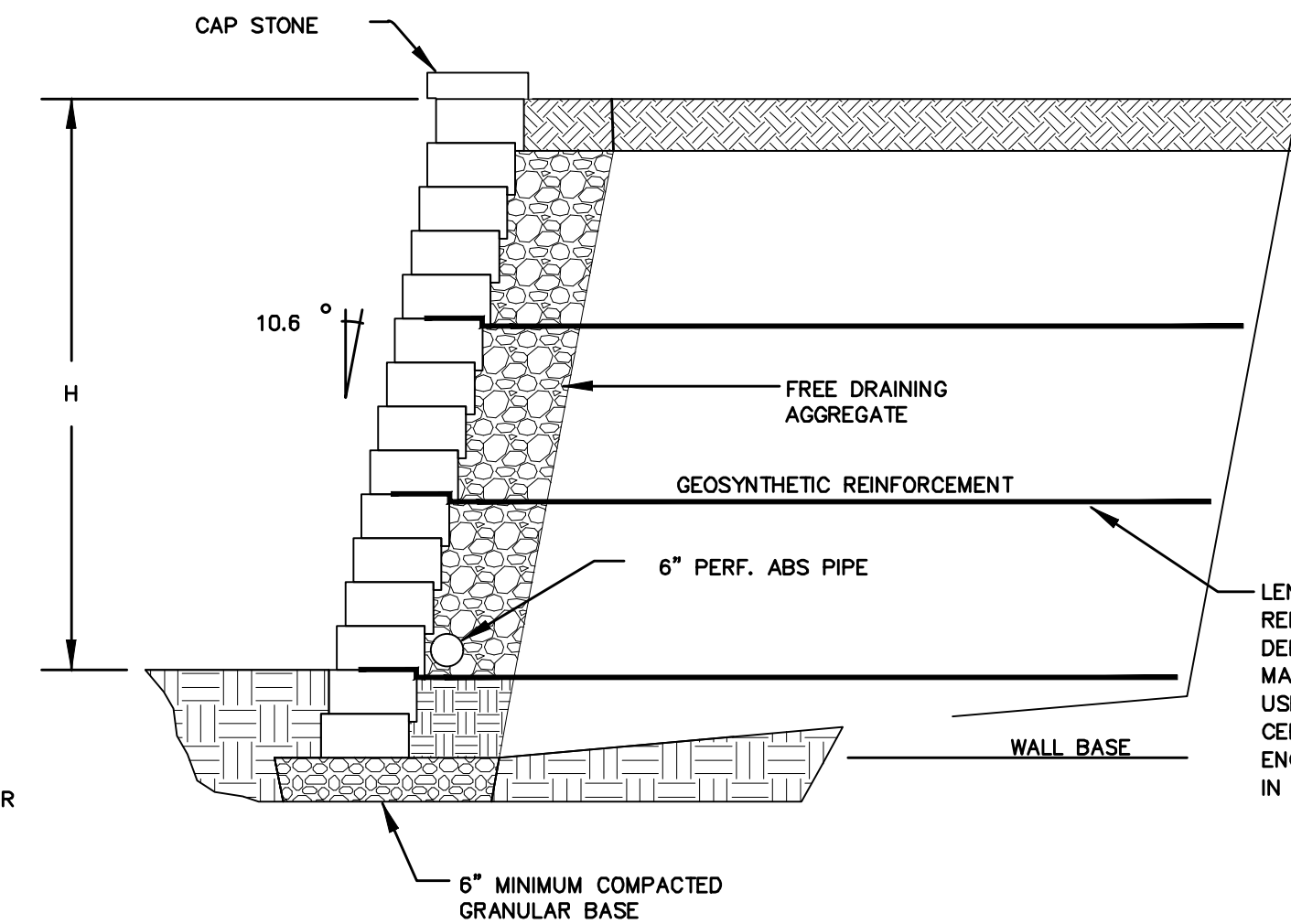


**ENLARGEMENT**

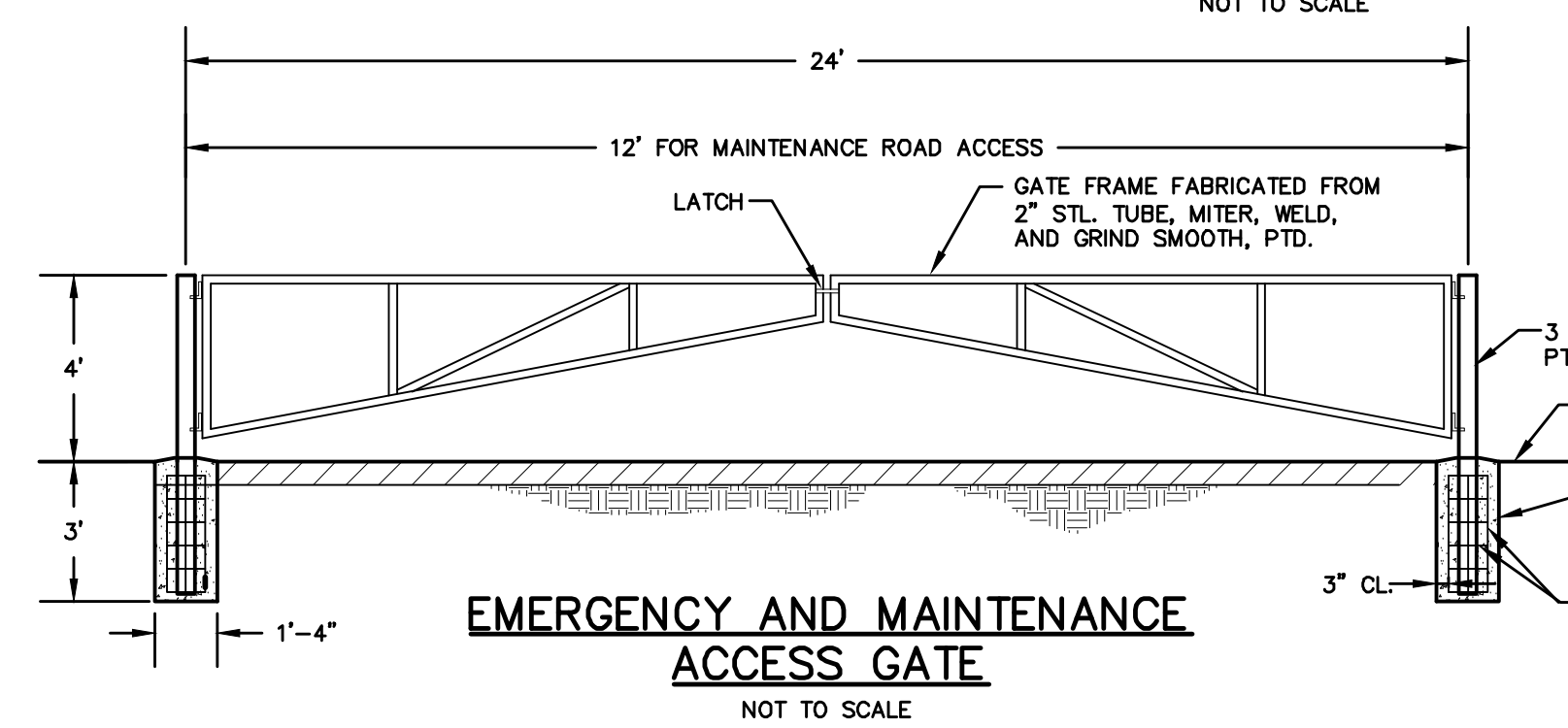
**TYPICAL GRASSPAVE2 DETAIL**  
NOT TO SCALE



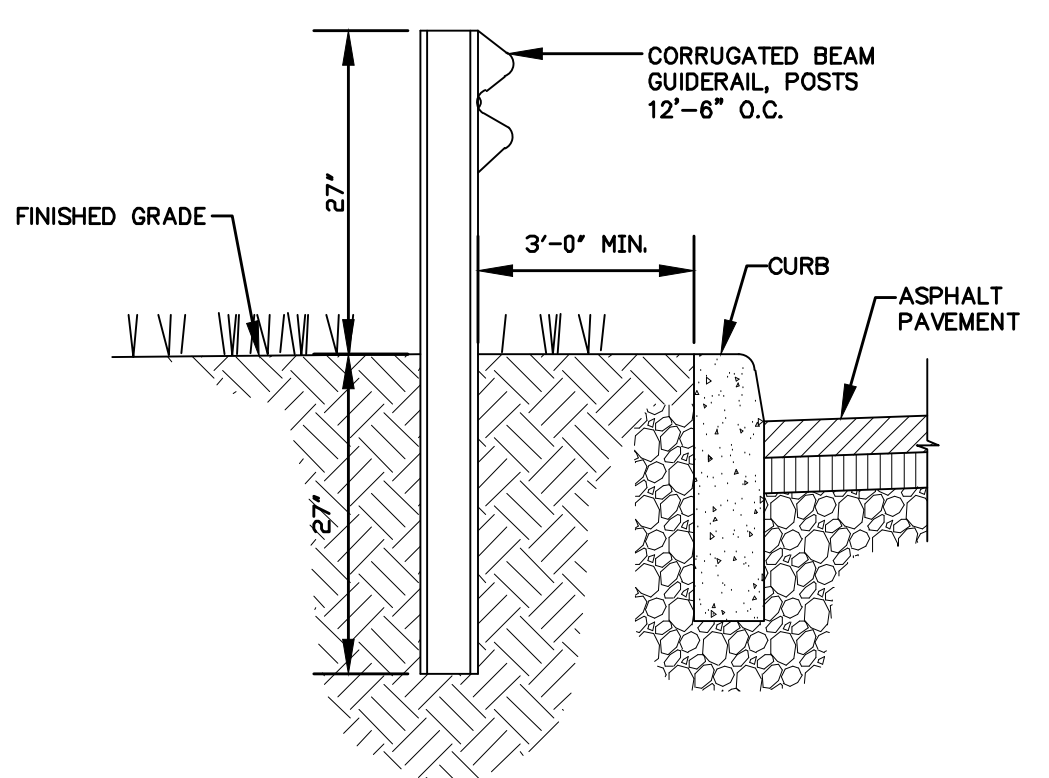
**VEGETATION STABILIZED SLOPE**  
NOT TO SCALE



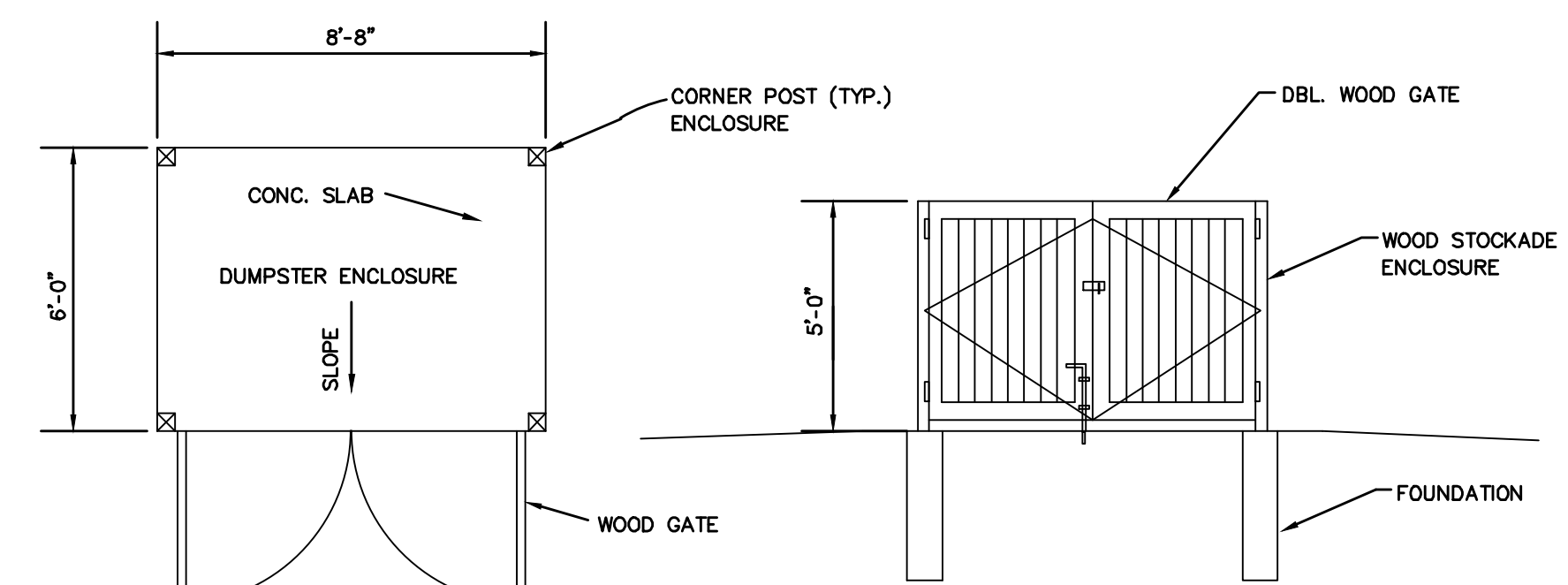
**SEGMENTAL RETAINING WALL**  
NOT TO SCALE



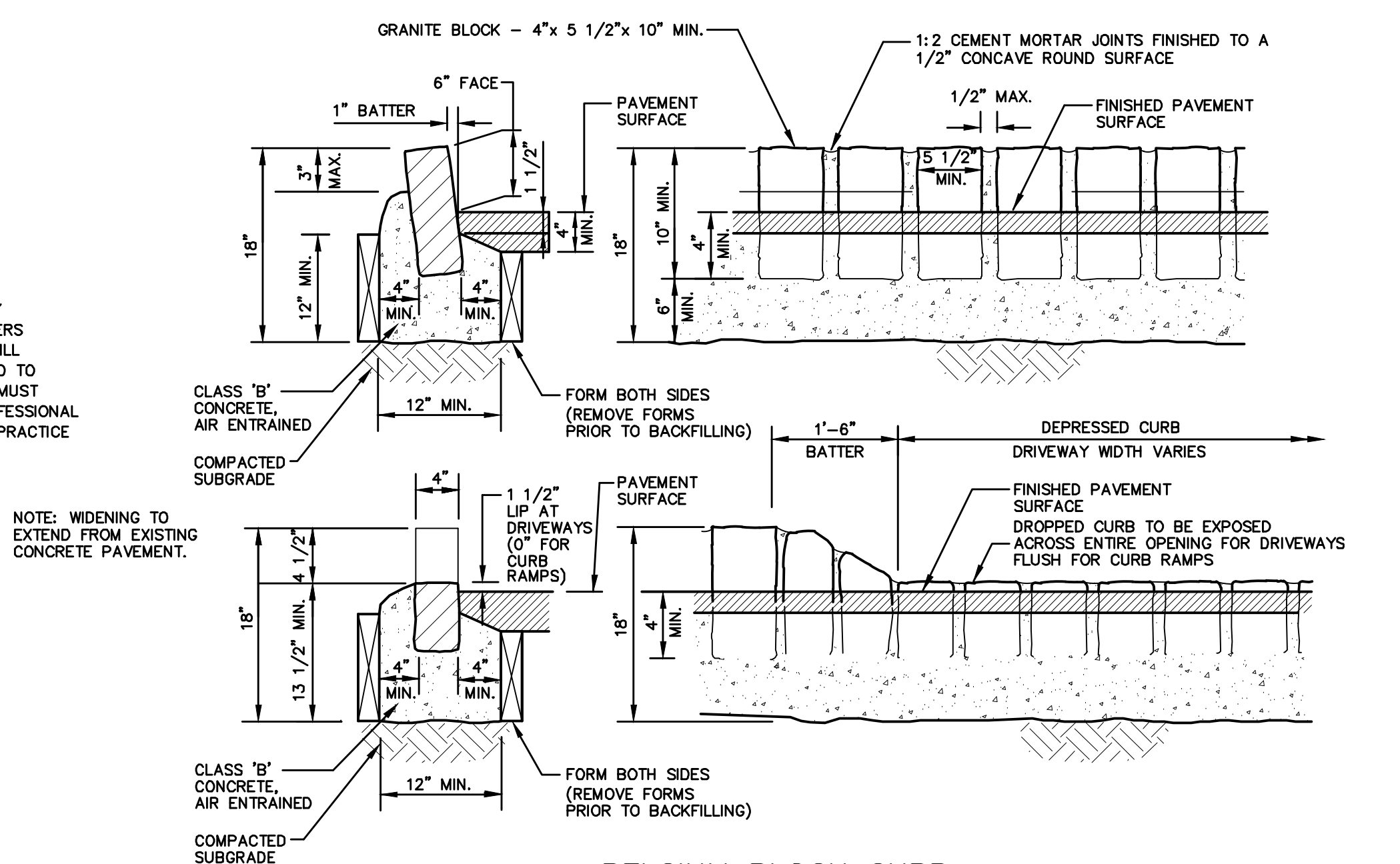
**EMERGENCY AND MAINTENANCE ACCESS GATE**  
NOT TO SCALE



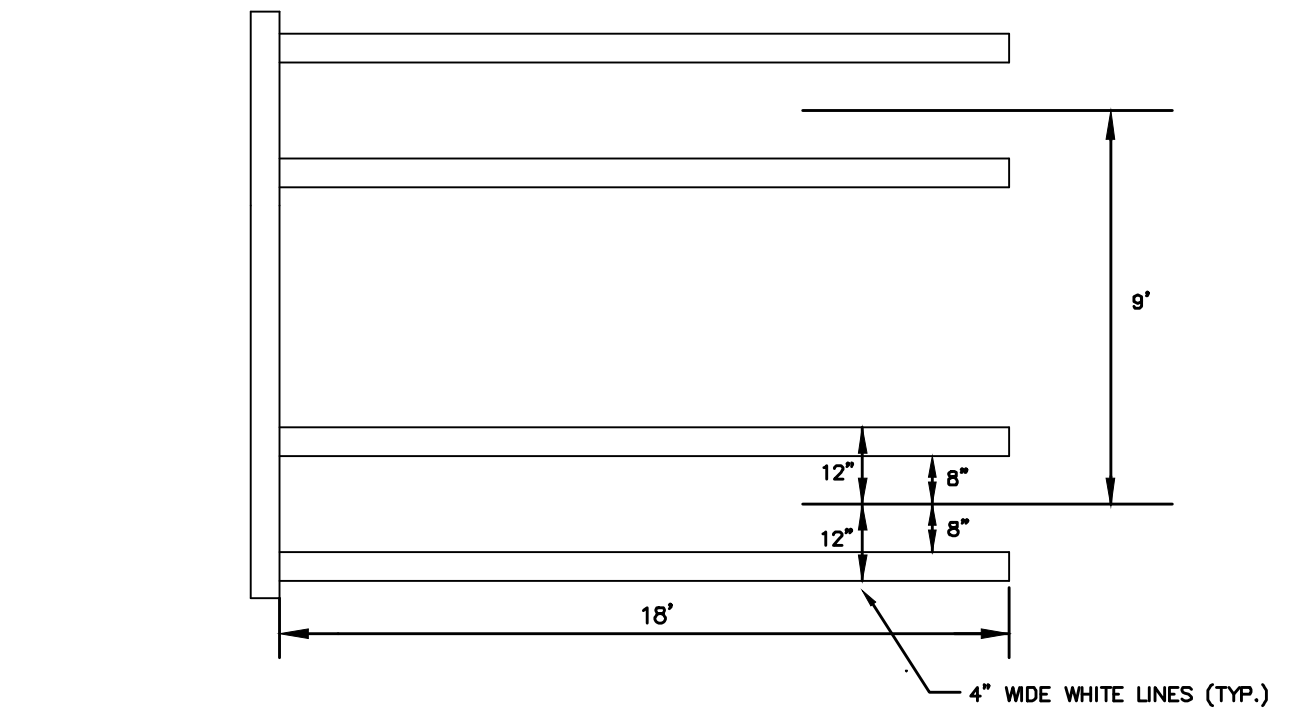
**GUIDE RAIL**  
NOT TO SCALE



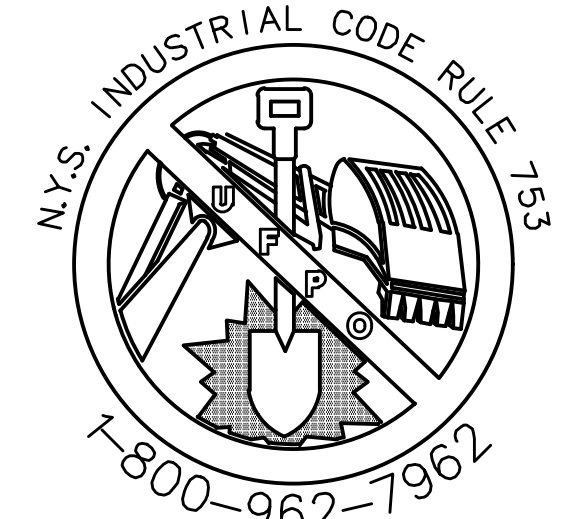
**DETAIL OF DUMPSTER ENCLOSURE**  
NOT TO SCALE



**BELGIUM BLOCK CURB**  
NOT TO SCALE



**PARKING SPACE MARKING DETAIL**  
SCALE: NONE



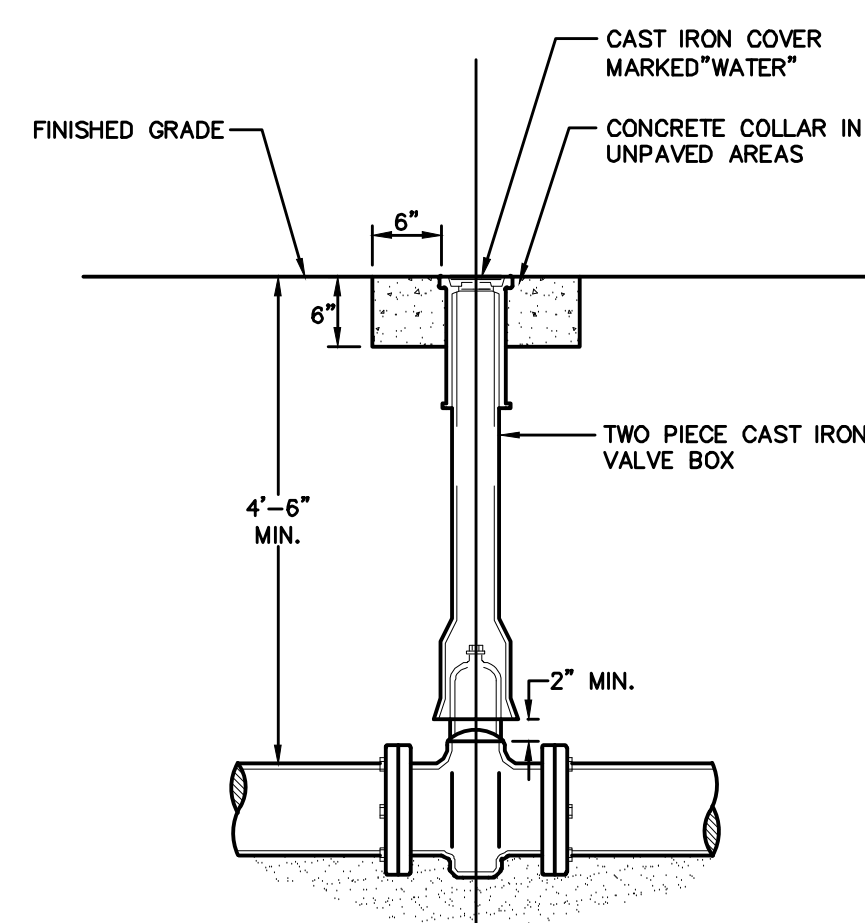
CALL BEFORE YOU DIG, DRILL OR BLAST  
NO LESS THAN TWO WORKING DAYS NOTICE  
**IT'S THE LAW!**

NO.	DATE	REVISION	DESCRIPTION
1	3/7/18	ENGINEERS COMMENTS	
2	5/25/17	ENGINEERS COMMENTS	
3	6/21/17	NO REVISIONS THIS SHEET	
4	6/2/17	REVISIONS	
5	7/6/17	LAYOUT REVISIONS	
6	7/6/17	EMERGENCY ACCESS AND DRAINAGE REVISIONS	
7	10/20/13	CONSULTANT COMMENTS	

*Thomas B. Olley, P.E.*

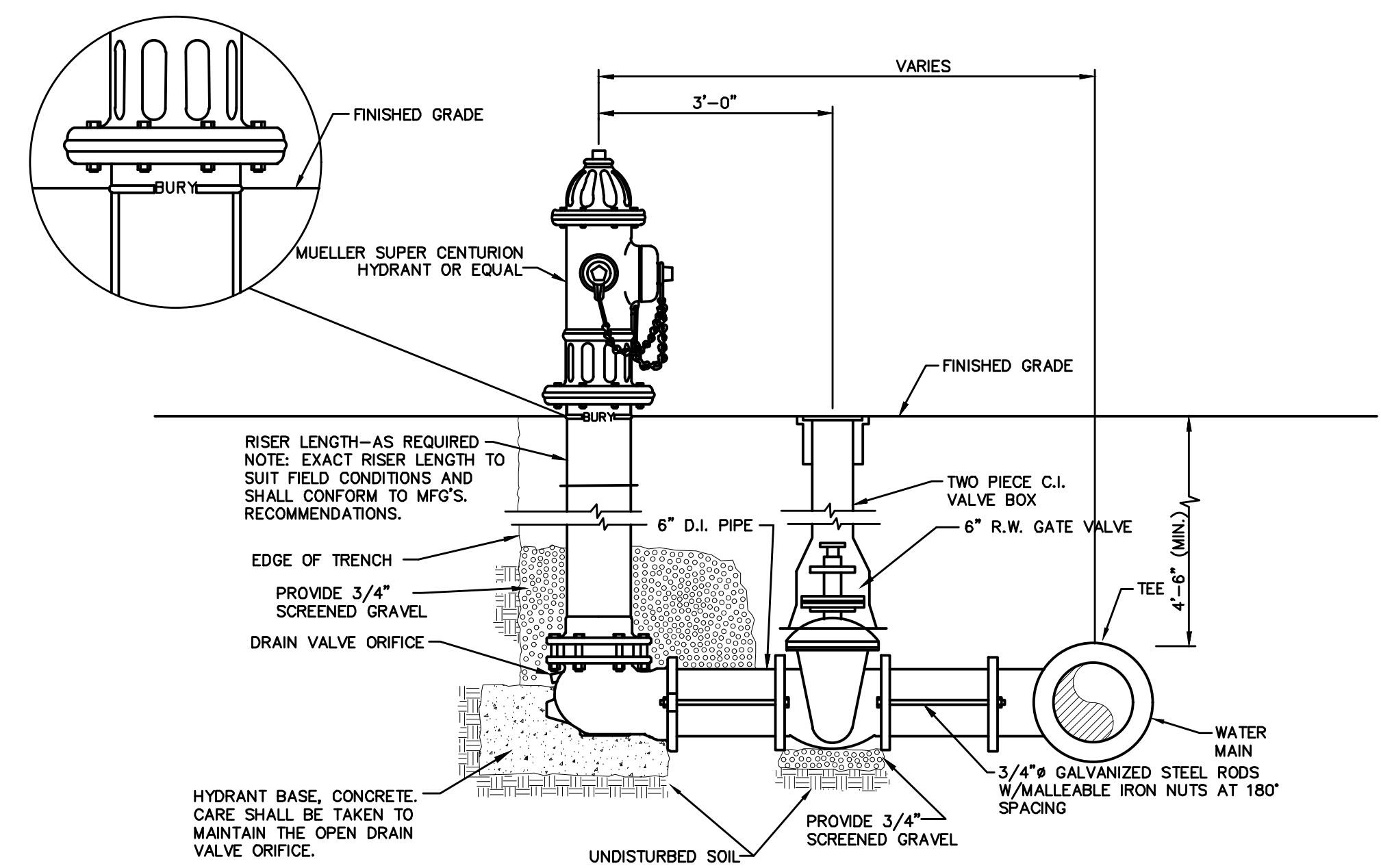
**THOMAS B. OLLEY, P.E., P.L.L.C.**  
ENGINEERS AND PLANNERS  
62 ORANGE AVENUE  
WALDEN, NY 12586  
PHONE: (845) 778-5838  
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**SITE DETAILS**  
**GARDNER RIDGE**  
**GARDNERTOWN ROAD**  
TOWN OF NEWBURGH, ORANGE COUNTY, NY

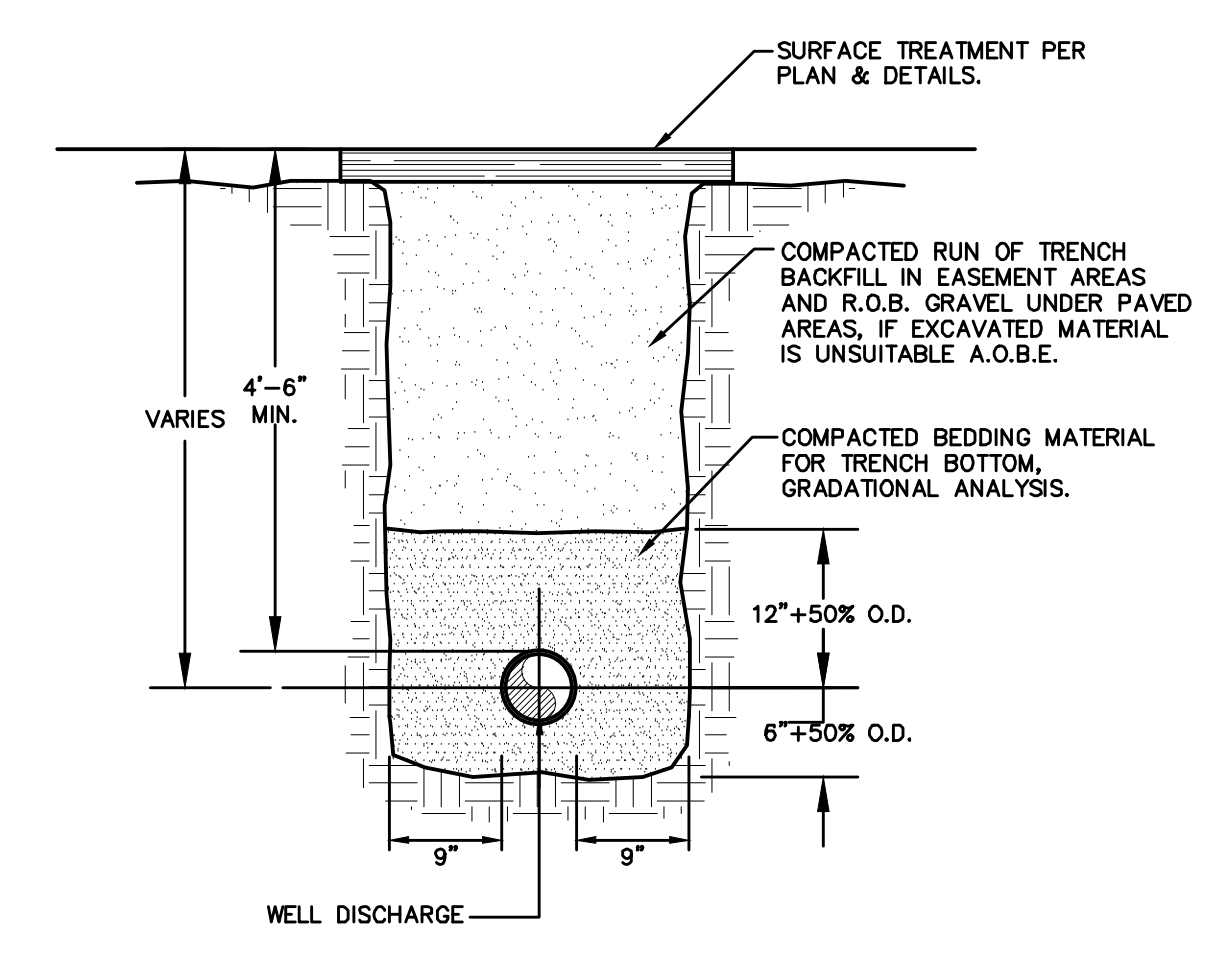


- NOTES:**
- NON-RISING STEM RESILIENT WEDGE GATE VALVE, OPERATING DIRECTION AND MODEL TO CONFORM WITH WATER DEPARTMENT STANDARDS.
  - IF VALVE IS TO BE RODDED, PROVIDE VALVE WITH RODDING FLANGES OR EYEBOLTS. (2) 3/4" GALVANIZED STEEL RODS WITH MALLEABLE IRON NUTS AT 180" SPACING SHALL BE USED FOR RODDING VALVES.

**GATE VALVE DETAIL**  
NOT TO SCALE

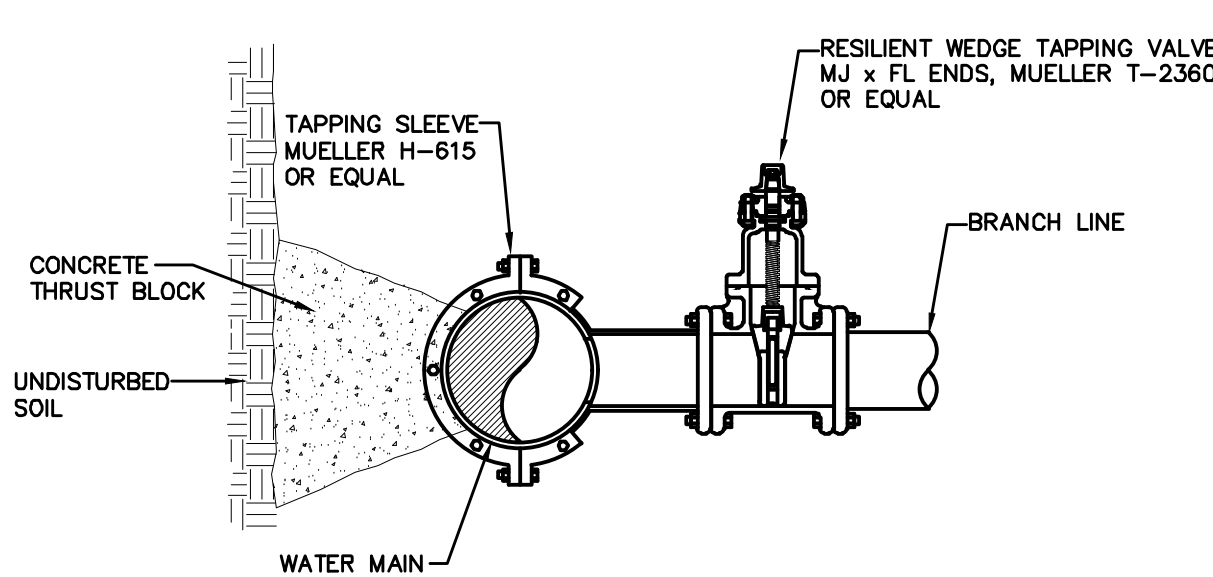


**HYDRANT DETAIL**  
NOT TO SCALE

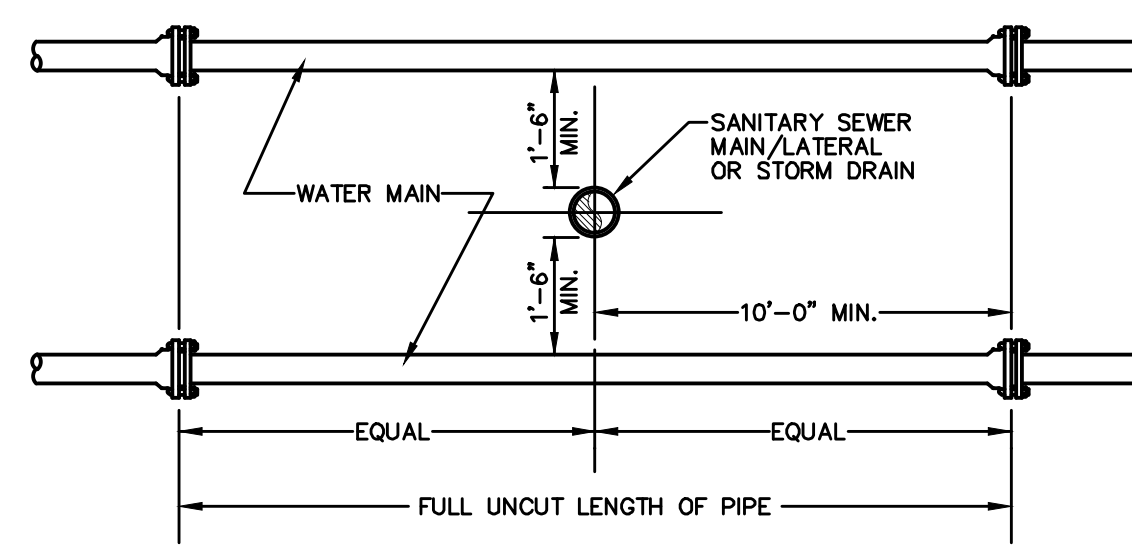


- NOTES:**
- PIPE BEDDING SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND GRADED FROM FINE TO COARSE PARTICLES, OR A GRADED MIXTURE OF CRUSHED STONE OR CRUSHED GRAVEL BEDDING MATERIAL OR STONE GRADATIONS USED SHALL BE APPROVED BY THE ENGINEER.
  - INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND WATER SERVICE PIPING. LOCATE TAPE 12\"/>
  - THE PROPOSED WATERMANS SHALL BE INSTALLED WITH A MINIMUM COVER OF 4.5 FEET AND SHALL BE CEMENT LINED DUCTILE IRON, CLASS 52.
  - SHEETING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.

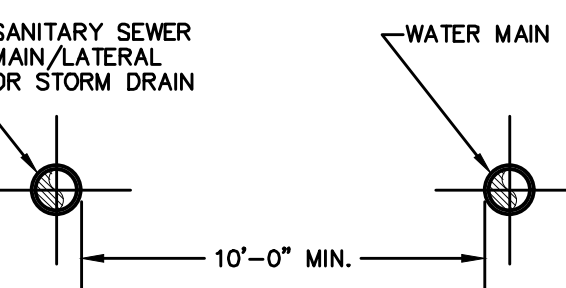
**WATER PIPE TRENCH DETAIL**  
NOT TO SCALE



**WET TAP DETAIL**  
NOT TO SCALE



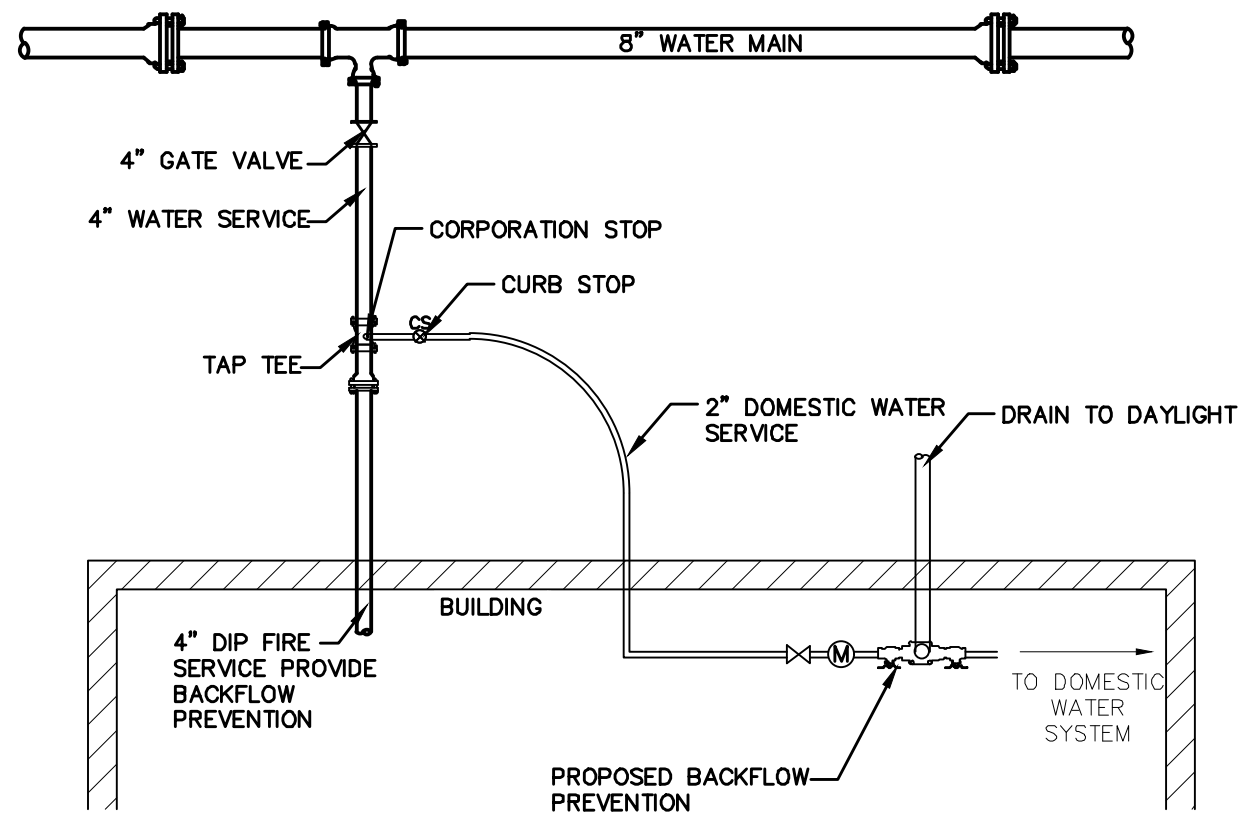
**VERTICAL SEPARATION**



**HORIZONTAL SEPARATION**

- NOTE:**
- NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DEPARTMENT OF HEALTH.

**SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL**  
NOT TO SCALE



- NOTE:**
- SERVICE LINE SHALL HAVE NO JOINTS BETWEEN THE WATER MAIN AND BUILDING.
  - CORPORATION STOP SHALL BE MANUFACTURED BY MUELLER CO. OR EQUAL.
  - BACKFLOW PREVENTION IS NEEDED ON WATER SERVICES CONNECTIONS AND SHOULD BE APPROVED WITH THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE TOWN OF NEWBURGH WATER DEPARTMENT.

**WATER SERVICE CONNECTION DETAIL**  
NOT TO SCALE

**SCHEDULE OF JOINT RESTRAINT**  
DUCTILE IRON PIPE (DIP)  
(NO. OF PIPE LENGTHS = 18' LENGTH)

PIPE SIZE (INCHES)	FITTING				
	90°	45°	22 1/2°	TEE	INLINE VALVE
12"	2	1	1	4	4
10"	2	1	1	4	4
8"	2	1	1	3	3
6"	1	1	1	2	2

- NOTE:**
- LENGTH OF PIPE TO BE RESTRAINED IS LENGTH FOR EACH SIDE OF THE FITTING, I.E., FOR A 90° BEND A 90° BEND SHALL BE RESTRAINED 2 LENGTHS ON EACH SIDE OF THE BEND.
  - JOINTS ARE TO BE RESTRAINED TYPE USING RESTRAINED GLANDS OR TIE RODS, IN ACCORDANCE WITH THE LENGTHS SHOWN IN THE TABLE ABOVE.
  - DEAD ENDS MUST BE FULLY BACKFILLED BEFORE PRESSURE TESTING AND MUST HAVE BLOCKING (CONCRETE BLOCK) TO UNDISTURBED TRENCH WALL.
  - THIS TABLE IS FOR COMPACTED R.O.B. GRAVEL PIPE BEDDING BELOW THE PIPE TO ONE FOOT ABOVE THE PIPE (AWWA TYPE 4 OR 5 LAYING CONDITIONS).

**TOWN OF NEWBURGH WATER SYSTEM NOTES**

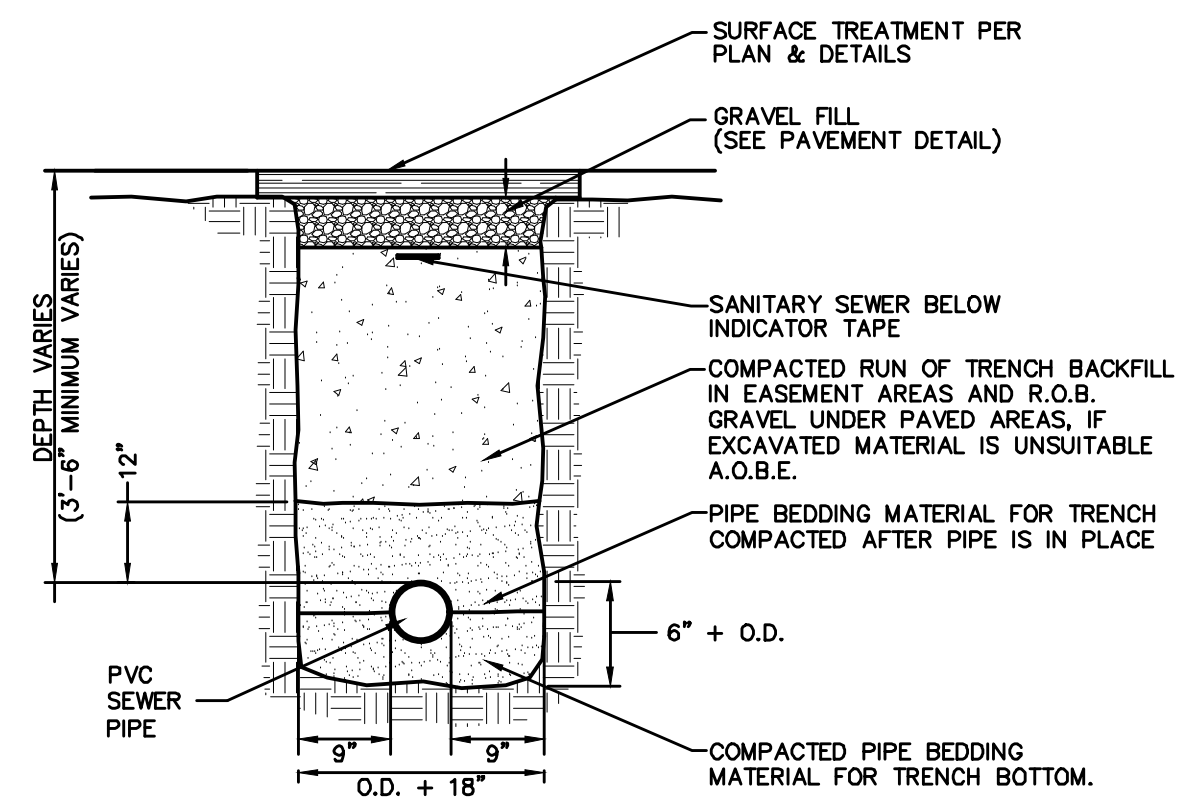
- \*CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL REQUIREMENTS SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDOH AND THE TOWN OF NEWBURGH.
- ALL WATER SERVICE LINES FOUR (4) INCHES AND LARGER IN DIAMETER SHALL BE CEMENT CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51-91 FOR DUCTILE IRON PIPE. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS REQUIRED.
- THRUST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF JOINT RESTRAINT. THRUST BLOCKS ARE NOT ACCEPTABLE. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETAINER GLANDS. ALL FITTINGS AND VALVES SHALL ALSO BE INSTALLED WITH RETAINER GLANDS FOR JOINT RESTRAINT. RETAINER GLANDS SHALL BE EBBA IRON MEGALUG SERIES 1100 OR APPROVED EQUAL. THE USE OF A MANUFACTURED RESTRAINED JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE WATER DEPARTMENT.
- ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA C101/A21.10-87 FOR DUCTILE AND GRAY IRON FITTINGS OR ANSI/AWWA C153/A21.53-84 FOR DUCTILE IRON COMPACT FITTINGS.
- ALL VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509 SUCH AS MUELLER MODEL A-2360-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT (COUNTERCLOCKWISE).
- TAPPING SLEEVES SHALL BE MECHANICAL JOINT SUCH AS MUELLER H-615 OR EQUAL. TAPPING VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509 SUCH AS MUELLER MODEL T-2360-19 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO CUTTING PIPE.
- ALL WATER SERVICE LINES TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING. CORPORATION STOPS SHALL BE MUELLER H-15020 FOR 3/4 AND 1 INCH, MUELLER H-15000 OR B-25000 FOR 1 1/2 AND 2 INCH SIZES. CURB VALVES SHALL BE MUELLER H-1501-2 FOR 3/4 AND 1 INCH AND MUELLER B-25004 FOR 1 1/2 AND 2 INCH SIZES. CURB BOXES SHALL BE MUELLER H-10312 FOR 3/4 AND 1 INCH AND MUELLER H-10310 FOR 1 1/2 AND 2 INCH SIZES.
- HYDRANTS SHALL BE CLOW-EDDY F 2640 MEETING THE FOLLOWING REQUIREMENTS:
  - ONE 4-1/2 INCH PUMPER NOZZLES;
  - TWO 2-1/2 INCH HOSE NOZZLES;
  - NOZZLE THREADS SHALL BE NPT;
  - OPEN LEFT (COUNTER-CLOCKWISE);
  - 6 INCH INLET WITH 5-1/4 INCH MAIN VALVE;
  - PAINTED EQUIPMENT YELLOW; AND
  - 1-1/2 INCH PENTAGON OPERATING NUTS.
- ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT.
- THE WATER MAIN SHALL BE TESTED, DISINFECTED AND FLUSHED IN ACCORDANCE WITH THE TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING, DISINFECTION AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT. PRIOR TO PUTTING THE WATER MAIN IN SERVICE SATISFACTORY SANITARY RESULTS FROM A CERTIFIED LAB MUST BE SUBMITTED TO THE TOWN OF NEWBURGH WATER DEPARTMENT. THE TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY AND WITNESSED BY THE TOWN OF NEWBURGH WATER DEPARTMENT.
- THE FINAL LAYOUT OF PROPOSED WATER AND/OR SEWER CONNECTIONS, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.

NO.	DATE	DESCRIPTION
1	3/15/16	ENGINEERS COMMENTS
2	5/25/17	ENGINEERS COMMENTS
3	6/21/17	ENGINEERS COMMENTS
4	6/2/22	LAYOUT REVISIONS
5	6/2/22	COMMENTS
6	7/6/23	EMERGENCY ACCESS AND DRAINAGE REVISIONS
7	10/20/23	CONSULTANT COMMENTS

*Thomas B. Olley, P.E.*

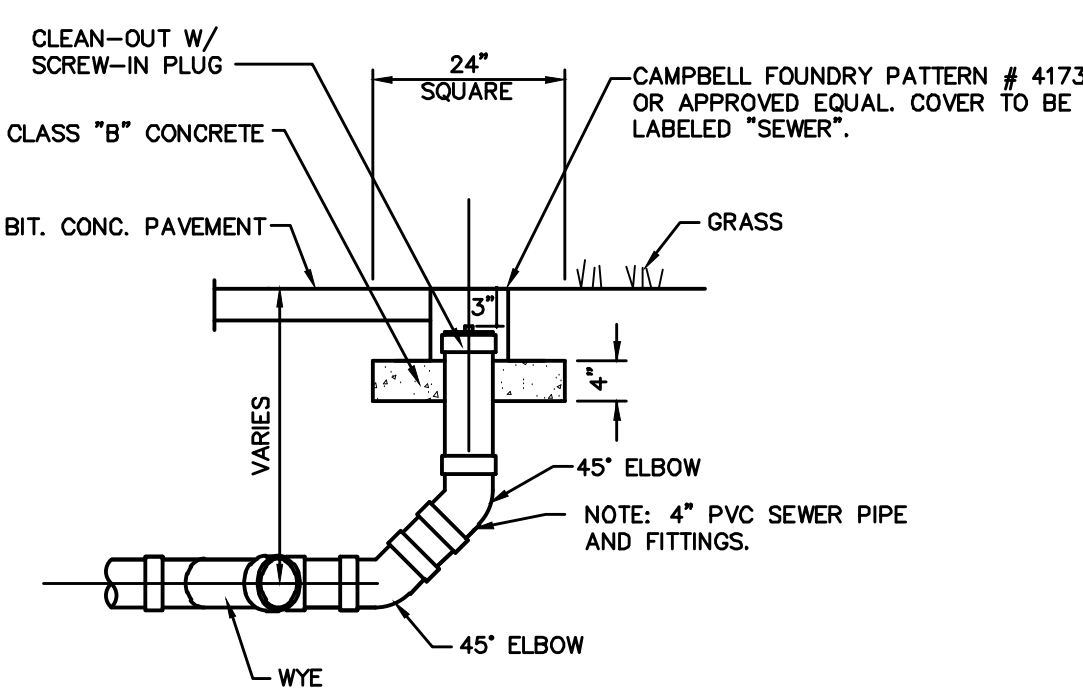
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**WATER DETAILS**  
**GARDNER RIDGE**  
**GARDNERTOWN ROAD**  
TOWN OF NEWBURGH, ORANGE COUNTY, NY

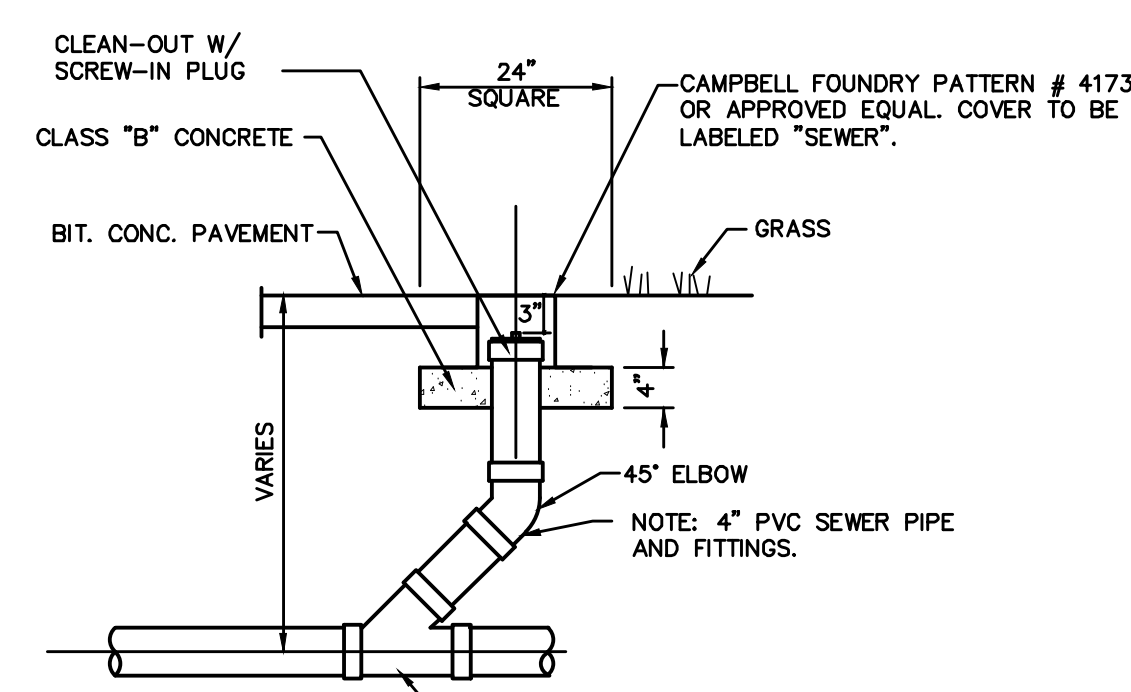


- NOTES:**
- PIPE BEDDING MATERIAL SHALL BE COMPOSED OF CRUSHED STONE OR GRAVEL FREE OF SOFT NONDURABLE PARTICLES, ORGANIC MATERIALS AND THIN OR ELONGATED PARTICLES WITH THE FOLLOWING GRADATION REQUIREMENTS:
- | SIEVE DESIGNATION | % PASSING |
|-------------------|-----------|
| 2"                | 100       |
| 1"                | 95 - 100  |
| 1/4"              | 0 - 15    |
| No. 40            | 0 - 5     |
- BEDDING MATERIAL SHALL BE STOCKPILED.
  - INSTALL CONTINUOUS PLASTIC UNDERGROUND WARNING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND SANITARY SERVICE PIPING. LOCATE 12 INCHES BELOW FINISHED GRADE, DIRECTLY OVER PIPING. IN PAVEMENT AREAS PLACE TAPE UNDER FOUNDATION COURSE.

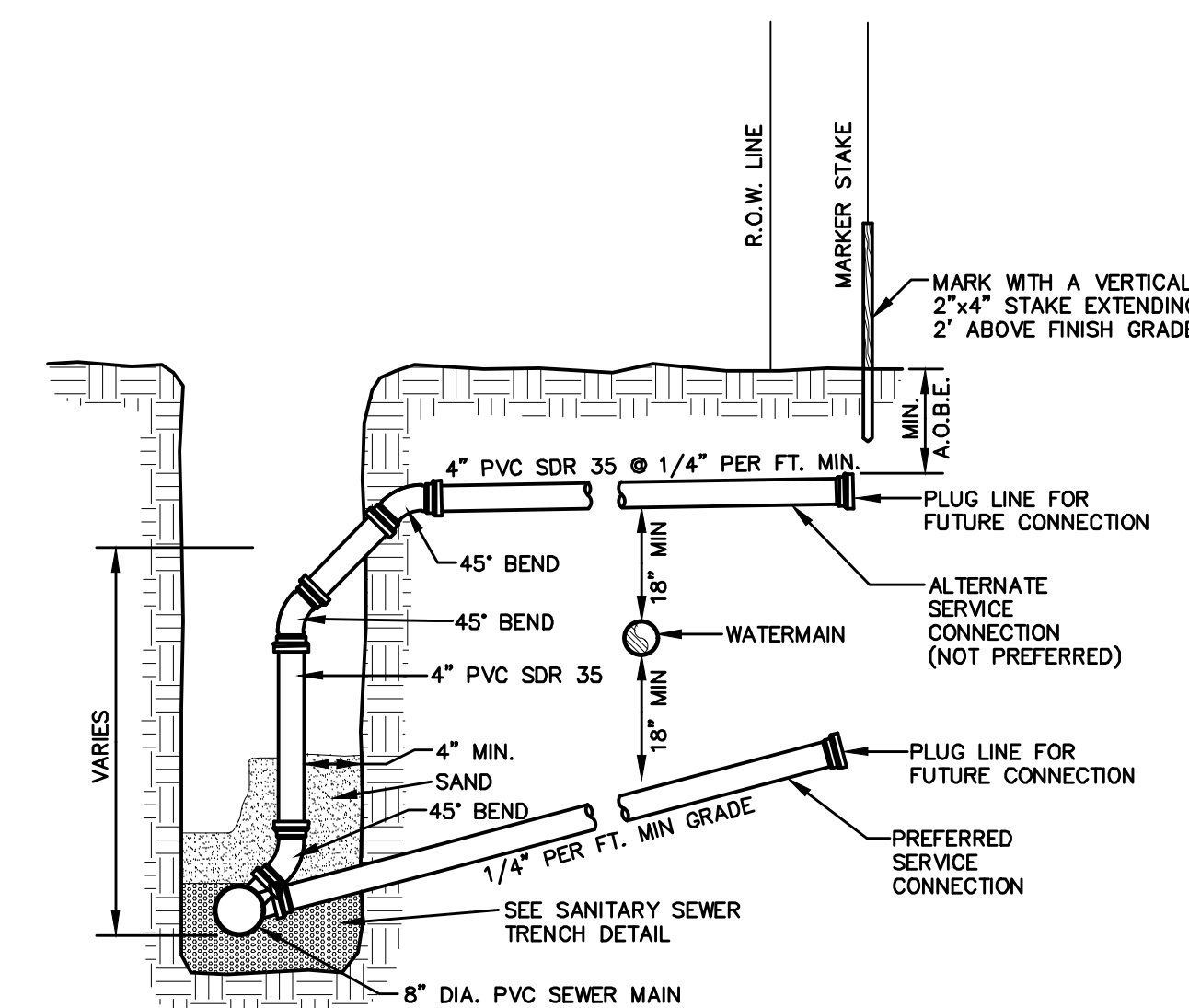
**SEWER PIPE TRENCH DETAIL**  
NOT TO SCALE



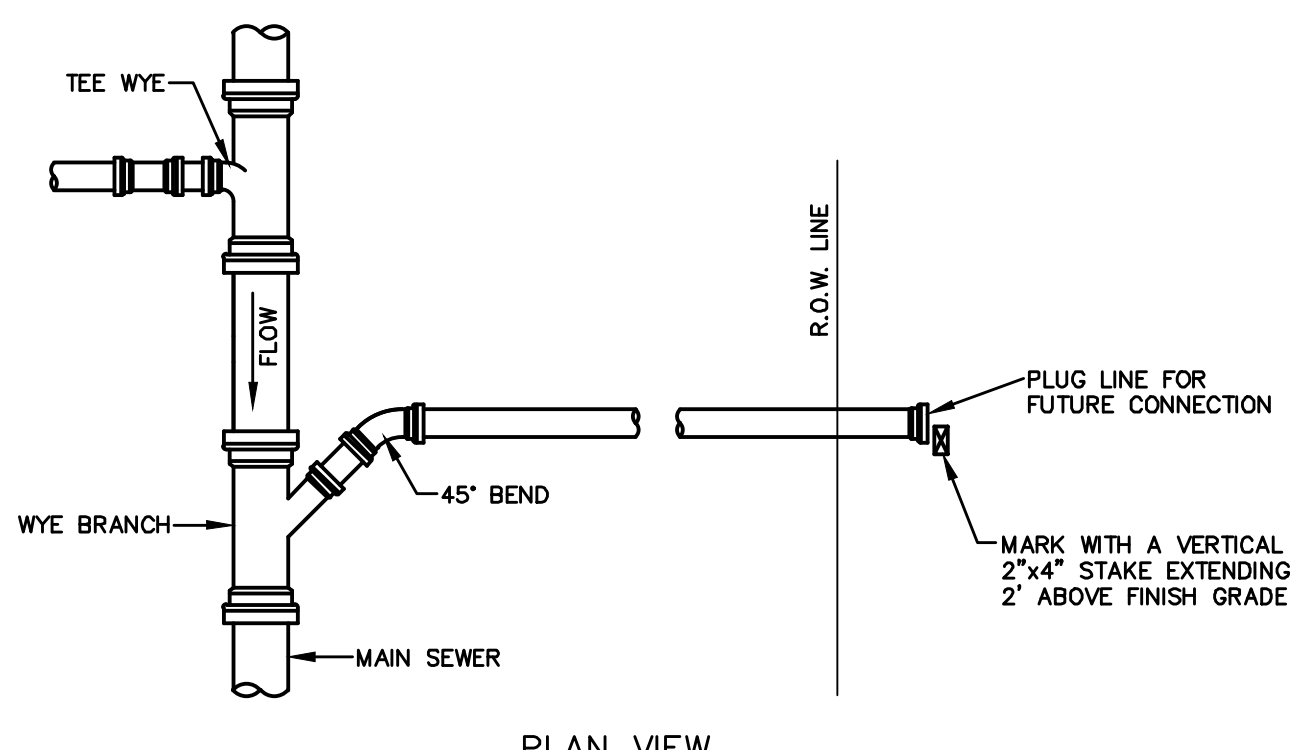
**SANITARY SEWER CLEANOUT AT BEND**  
NOT TO SCALE



**SANITARY SEWER CLEANOUT INLINE**  
NOT TO SCALE

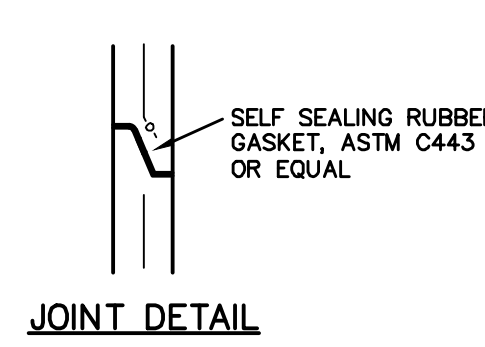


**SECTION VIEW**

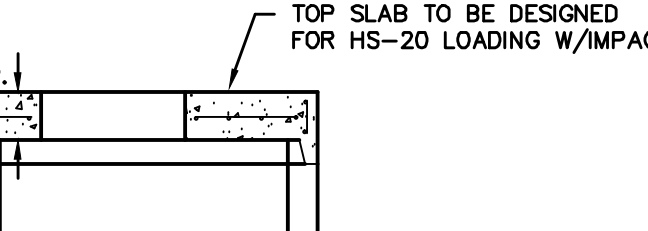


**PLAN VIEW**

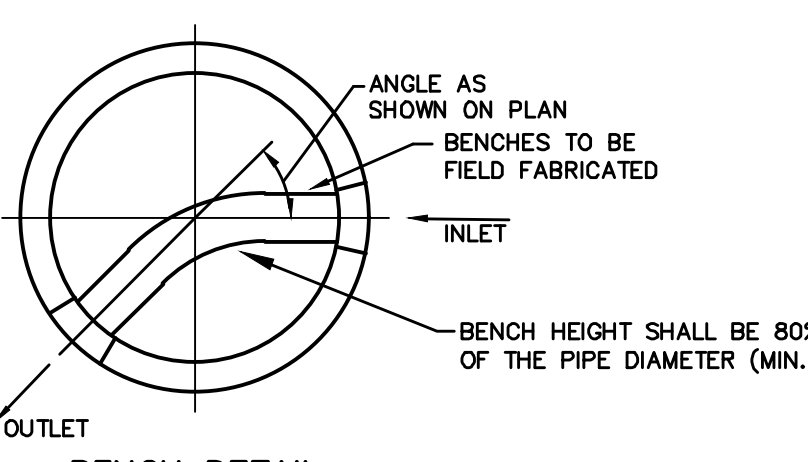
**SEWER LATERAL CONNECTION DETAIL**  
NOT TO SCALE



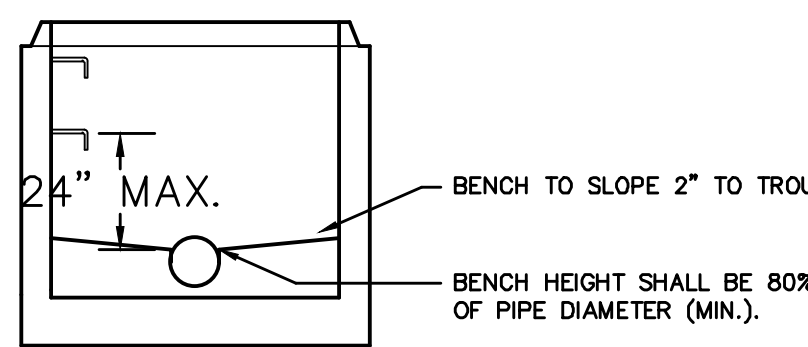
**JOINT DETAIL**



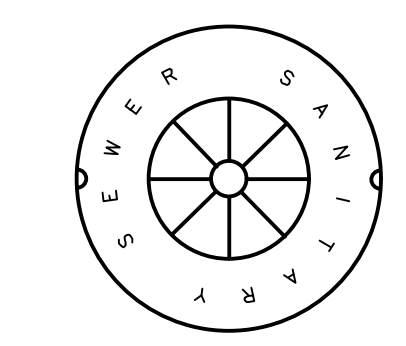
**MANHOLE SLAB TOP**



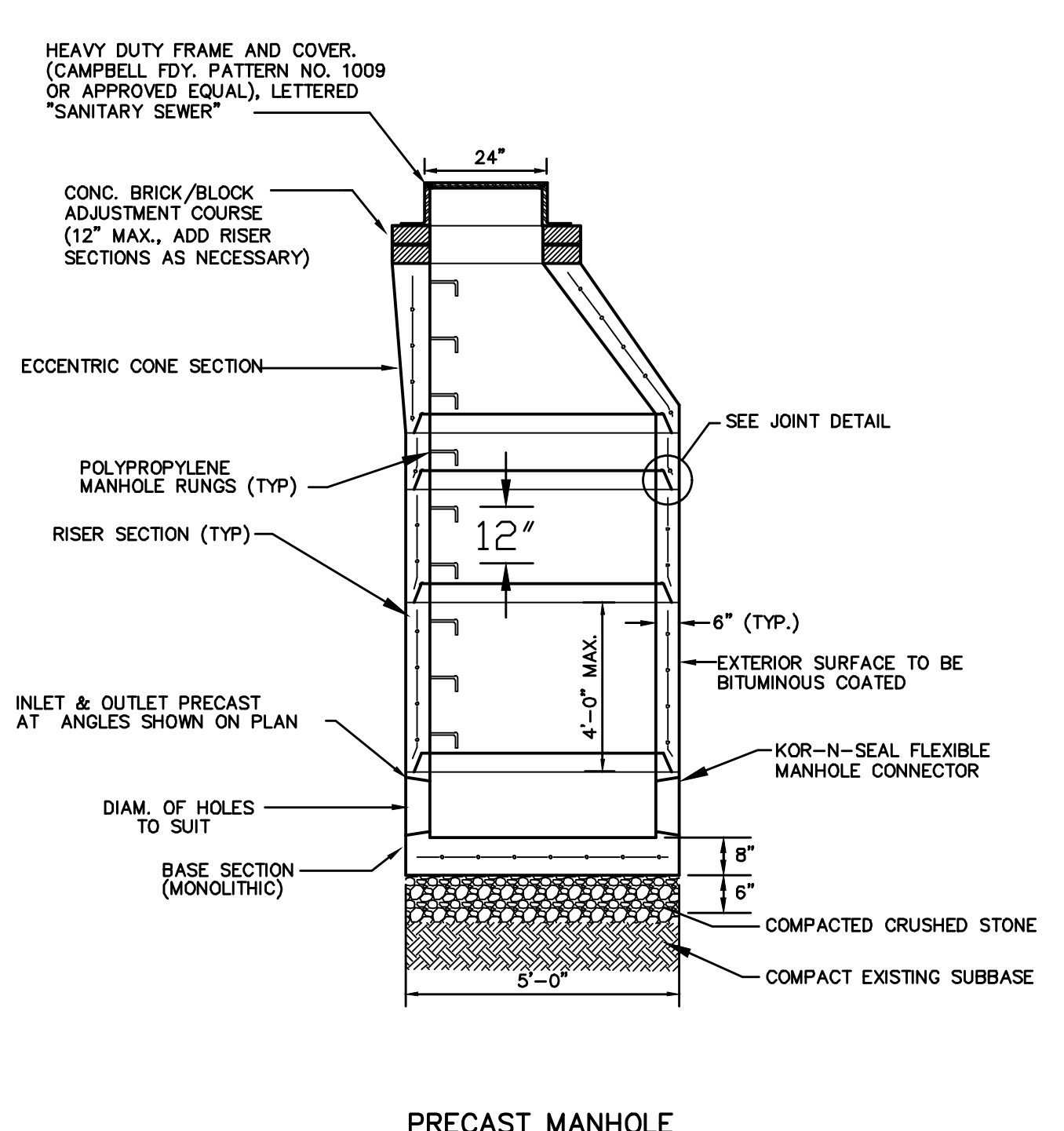
**BENCH DETAIL**



**TROUGH DETAIL**

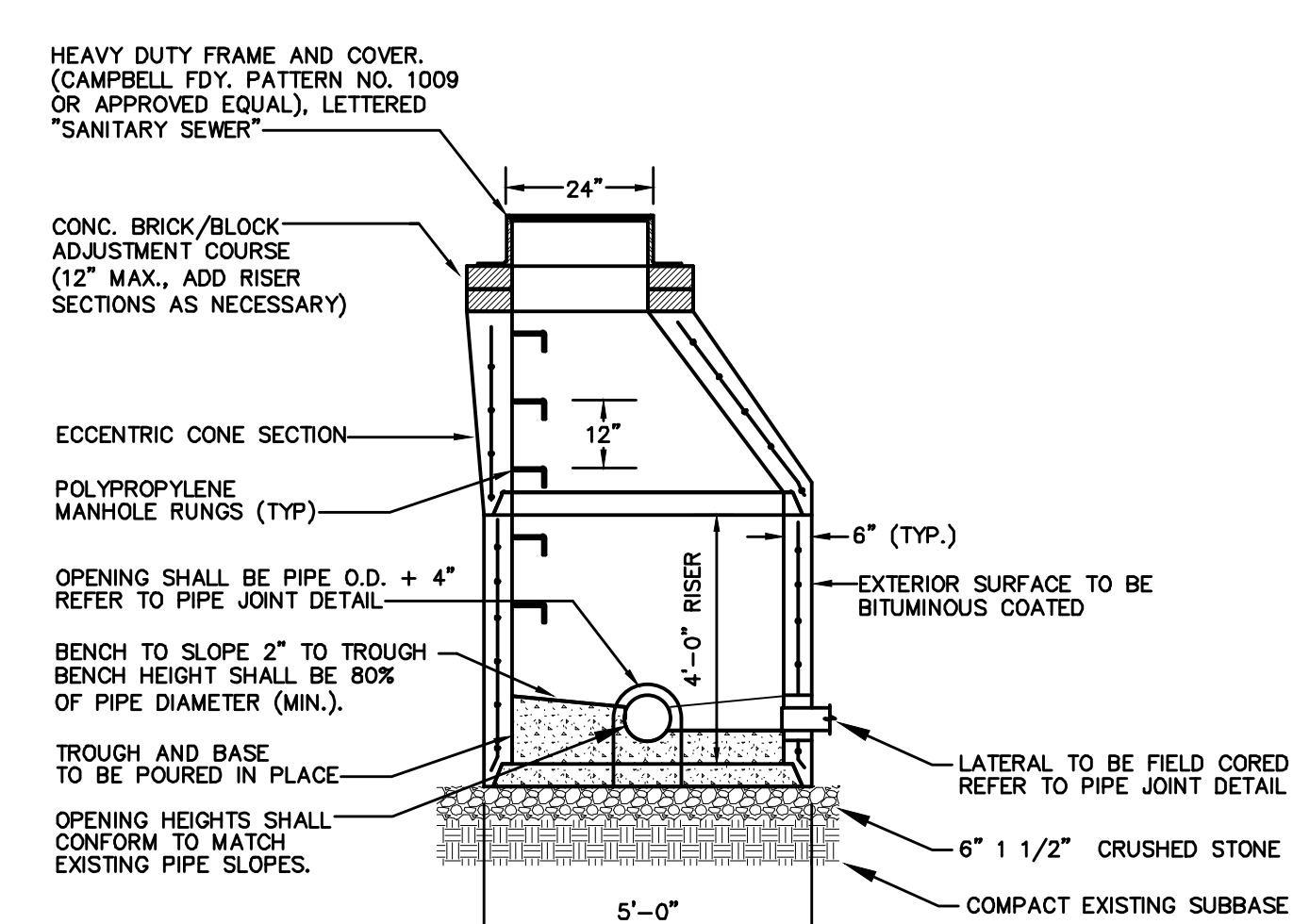


**SANITARY MANHOLE LID DETAIL**  
NOT TO SCALE



**PRECAST MANHOLE DETAILS**  
NOT TO SCALE

- NOTES:**
- INVERTS SHALL BE POURED IN PLACE.
  - REINFORCEMENT FOR ALL COMPONENTS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN NEW YORK STATE. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. STRUCTURE SHALL BE DESIGNED FOR HS-20 VEHICULAR LOADING WITH 25% IMPACT LOAD.
  - COMPRESSION STRENGTH OF CONCRETE SHALL BE 4000 P.S.I. AT 28 DAYS IN CONFORMANCE WITH A.S.T.M. C-478-88.
  - THE TROUGH (BENCH) SHALL PROVIDE A SMOOTH SWEEP BETWEEN INLET AND OUTLET. A HALF PIPE MAY BE USED FOR STRAIGHT RUNS ONLY.
  - THE MANHOLE EXTERIOR SHALL RECEIVE TWO COATS OF BITUMINOUS.
  - FRAME AND COVER SHALL BE DESIGNED FOR HS-20 VEHICLE LOADING AND 25% IMPACT LOAD. FRAMES AND COVERS TO BE INSTALLED WITHIN A FLOOD PLAIN SHALL BE WATER-TIGHT (CAMPBELL FDY. NO. 1502 OR EQUAL).
  - REFER TO PLANS FOR ELEVATIONS AND ANGLES OF PIPES AND FOR RIM ELEVATIONS.
  - MANHOLE FRAMES ARE TO BE SET AT THE SAME GRADE AS THE ADJOINING PAVEMENT OR GROUND SURFACE.



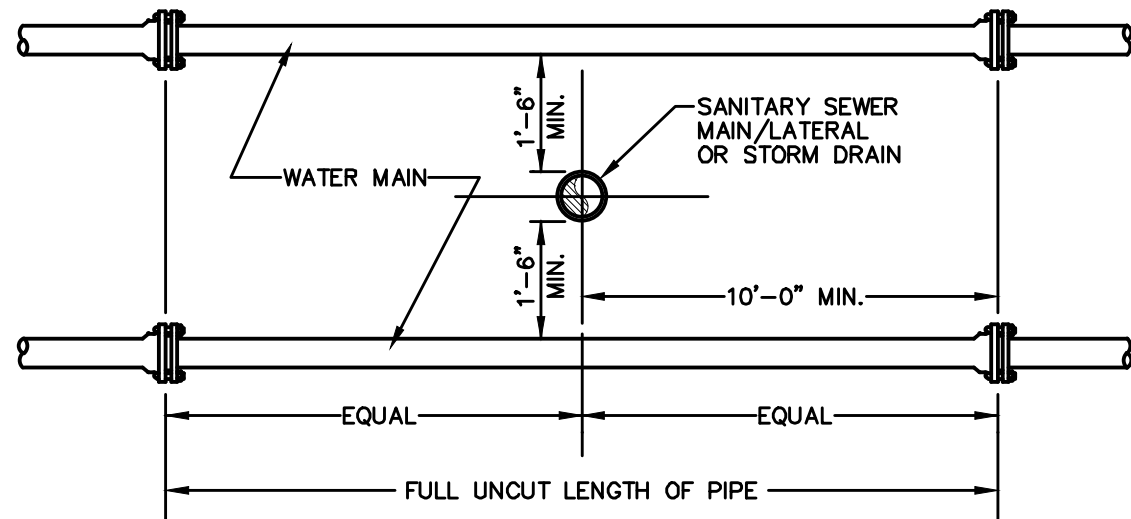
**DOGHOUSE MANHOLE DETAIL**  
NOT TO SCALE

**SANITARY SEWER NOTES:**

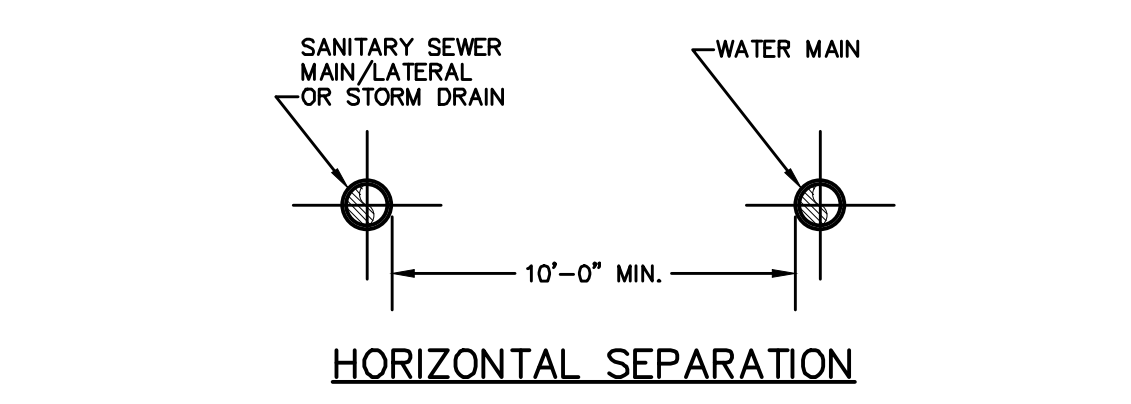
- ALL SANITARY GRAVITY PIPE SHALL BE SDR 35 PVC UNLESS OTHERWISE NOTED. ALL SANITARY SEWER MAINS AND SERVICE LATERALS SHALL BE SEPARATED FROM THE WATER MAINS AND WATER SERVICE CONNECTIONS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY OR 18 INCHES VERTICALLY IF HORIZONTAL SEPARATION IS NOT POSSIBLE.
- ALL NEW SANITARY SEWER LINES SHALL PASS A LOW PRESSURE AIR TEST AND ALL NEW SANITARY SEWER MANHOLES SHALL PASS HYDROSTATIC TESTS OR VACUUM TESTING.
- ALL NEW SANITARY SEWER MANHOLE COVERS SHALL BE 24" DIAMETER CAST IRON AND SHALL READ "SANITARY SEWER".
- ALL SANITARY SEWER CONSTRUCTION SHALL BE SUBJECT TO INSPECTION BY THE MUNICIPAL SEWER SUPERINTENDENT PRIOR TO BACKFILLING.
- THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:
  - "NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND ULSTER COUNTY DEPARTMENT OF HEALTH POLICIES, PROCEDURES AND STANDARDS."
  - "ORANGE COUNTY DEPARTMENT OF HEALTH SANITARY CODE."
  - "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, 2014", GLUMBR.
  - "DESIGN STANDARDS FOR WASTEWATER TREATMENT WORKS, 2014", NYSDEC
- ALL WELLS AND SUBSURFACE SEWAGE DISPOSAL SYSTEMS EXISTING OR APPROVED WITHIN 200' OF THE PROPOSED WATER AND SEWAGE UTILITIES ARE SHOWN ON THIS PLAN ALONG WITH ANY OTHER KNOWN ENVIRONMENTAL HAZARDS IN THE AREA THAT MAY AFFECT THE DESIGN AND FUNCTIONAL ABILITY OF THE WATER AND SEWAGE UTILITIES.
- NO CELLAR, ROOF OR FOOTING DRAINS SHALL BE DISCHARGED INTO THE SEWAGE SYSTEM.

**TOWN OF NEWBURGH SANITARY SEWER SYSTEM NOTES**

- CONSTRUCTION OF SANITARY SEWER FACILITIES AND CONNECTION TO THE TOWN OF NEWBURGH SANITARY SEWER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH SEWER DEPARTMENT. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDEC AND THE TOWN OF NEWBURGH.
- ALL SEWER PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH SEWER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
- ALL GRAVITY SANITARY SEWER SERVICE LINES SHALL BE 4 INCHES IN DIAMETER OR LARGER AND SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034-89. JOINTS SHALL BE PUSH-ON WITH ELASTOMERIC RING GASKET CONFORMING TO ASTM D-3212. FITTINGS SHALL BE AS MANUFACTURED BY THE PIPE SUPPLIER OR EQUAL AND SHALL HAVE A BELL AND SPIGOT CONFIGURATION COMPATIBLE WITH THE PIPE.
- THE SEWER MAIN SHALL BE TESTED IN ACCORDANCE WITH TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
- THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.



**VERTICAL SEPARATION**



**HORIZONTAL SEPARATION**

- NOTE:**
- NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DEPARTMENT OF HEALTH.

**SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL**  
NOT TO SCALE

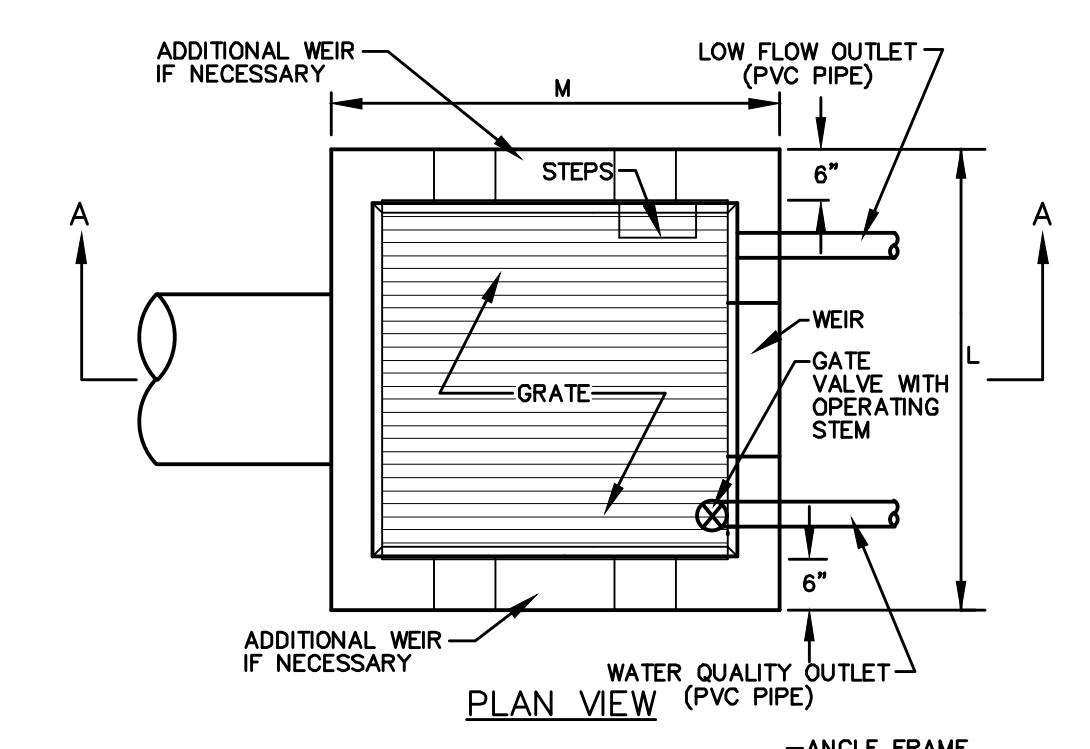
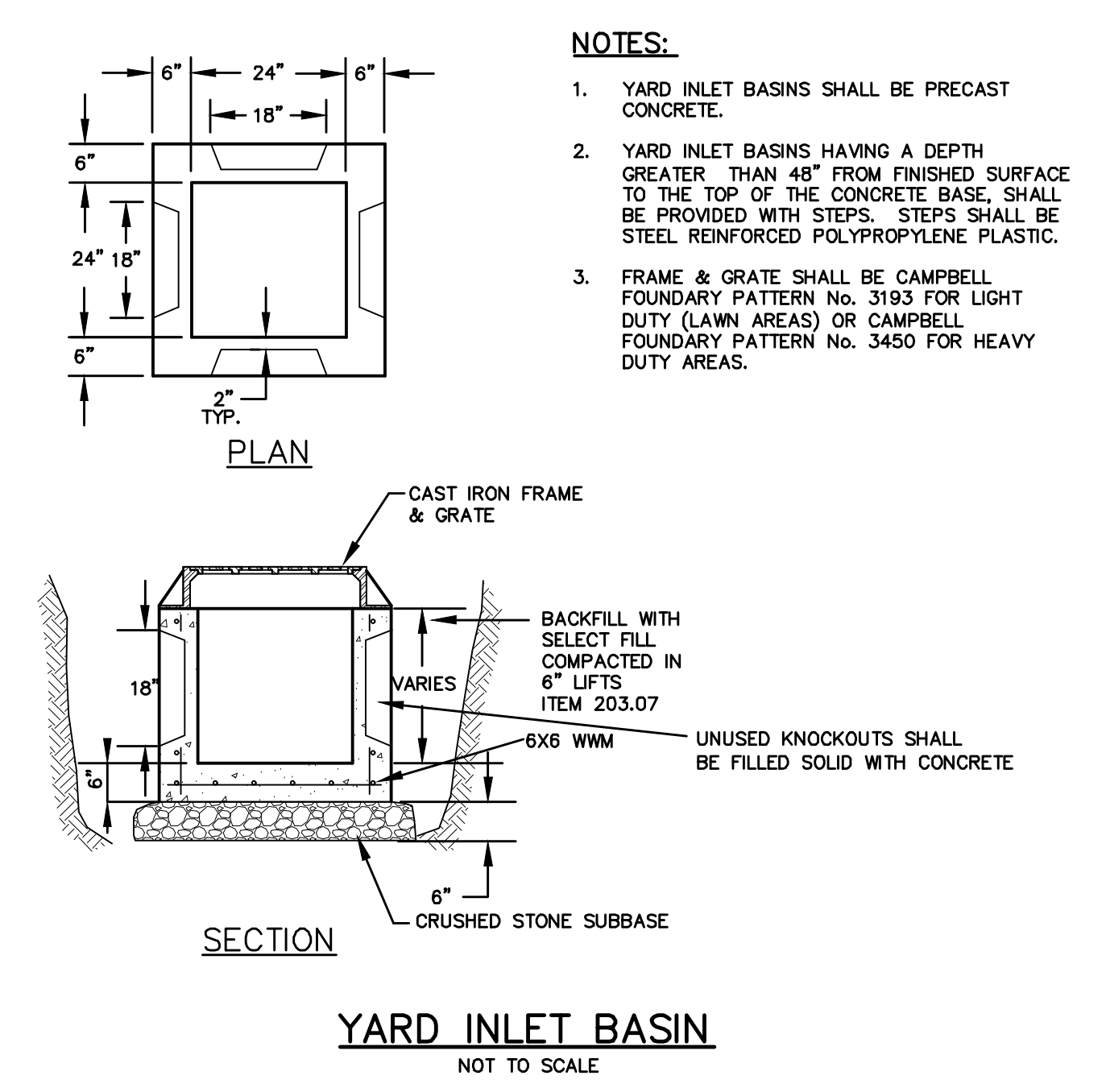
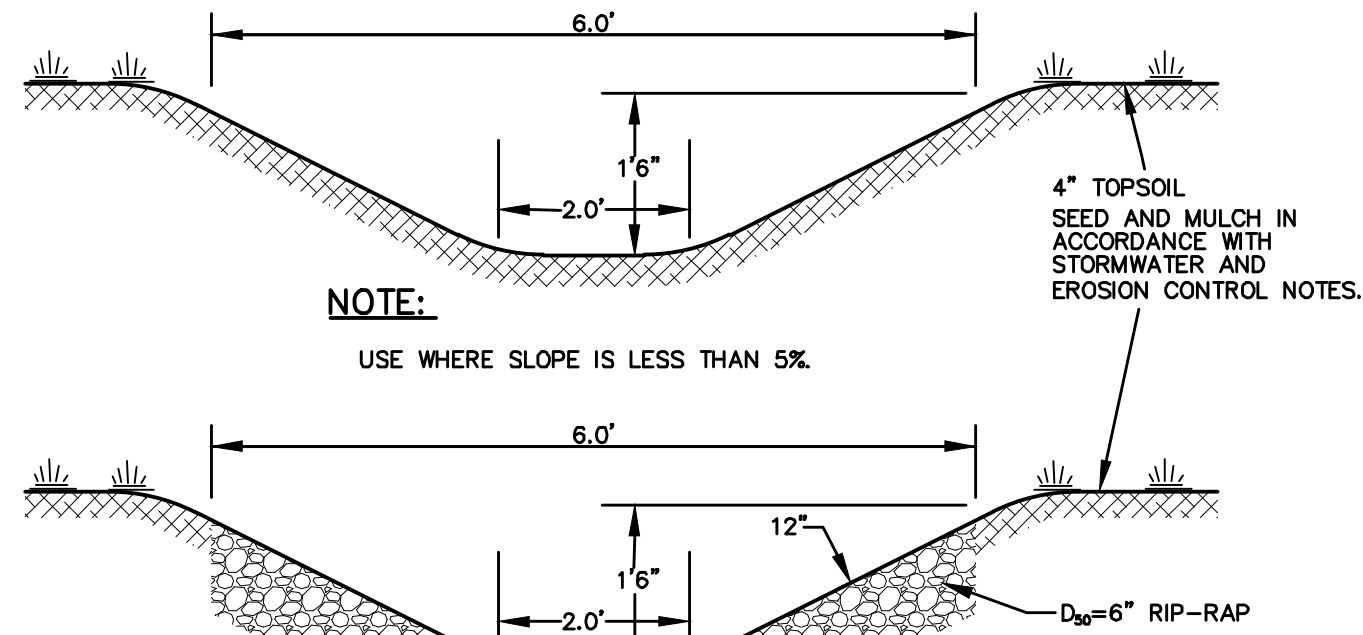
NO.	DATE	DESCRIPTION
1	3/15/18	ENGINEERS COMMENTS
2	5/25/17	ENGINEERS COMMENTS
3	6/21/17	ENGINEERS COMMENTS
4	6/2/12	LAYOUT REVISIONS
5	7/6/12	COMMENTS
6	7/6/12	EMERGENCY ACCESS AND DRAINAGE REVISIONS
7	10/20/13	CONSULTANT COMMENTS

*Thomas B. Olley, P.E.*

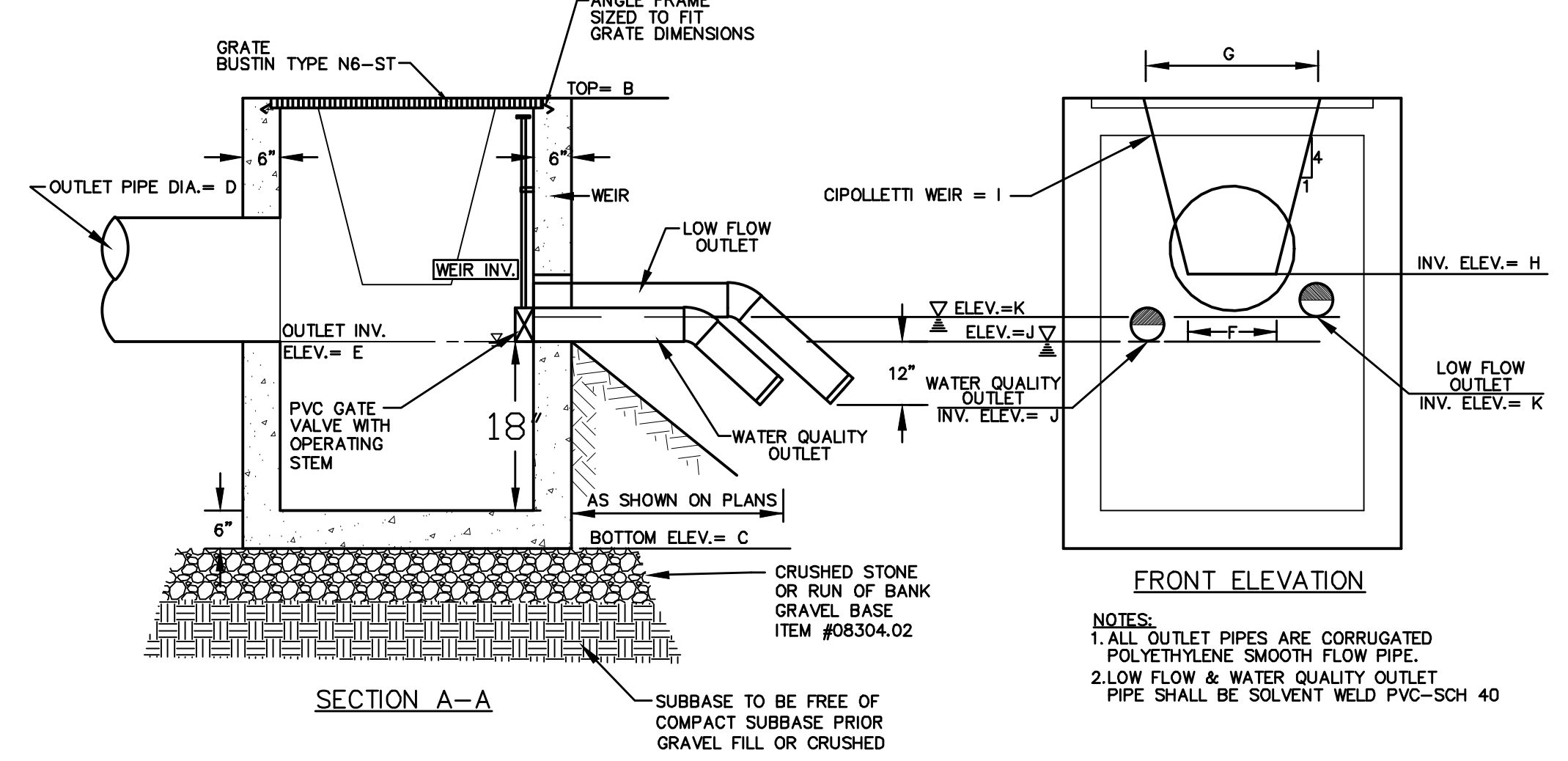
**THOMAS B. OLLEY, P.E., P.L.L.C.**  
ENGINEERS AND PLANNERS  
ORANGE AVENUE  
WALDEN NY 12586  
PHONE (845) 778-8339  
FAX (845) 778-1517

SANITARY SEWER DETAILS  
**GARDNER RIDGE**  
GARDNERTOWN ROAD  
TOWN OF NEWBURGH, ORANGE COUNTY, NY

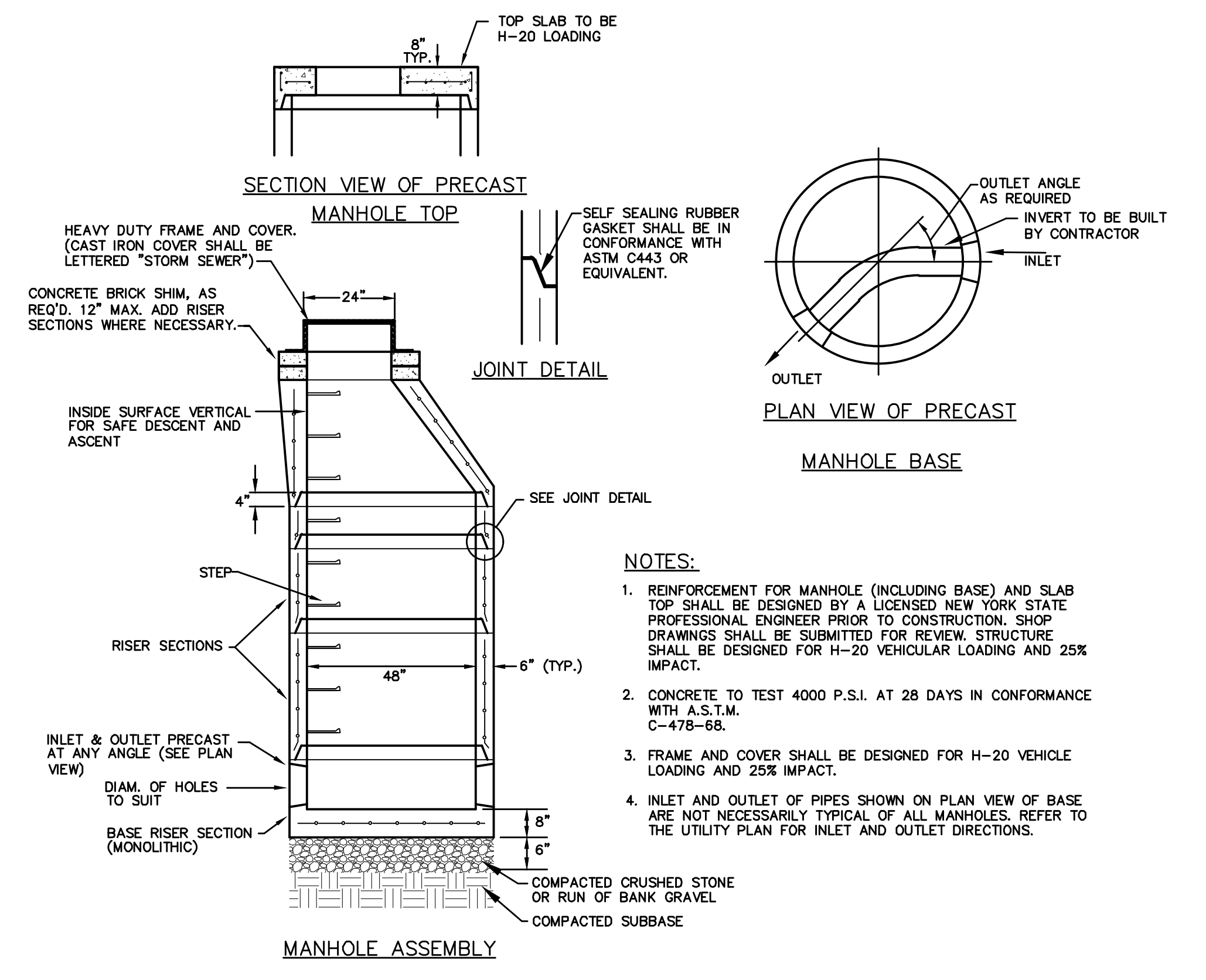




OUTLET STRUCTURE TABLE	
OUTLET STRUCTURE DIMENSIONS	OUTLET
A. STRUCTURE HEIGHT (ITEM B - ITEM C)	5.0'
B. TOP GRATE ELEVATION	258.5
C. STRUCTURE BOTTOM ELEVATION	253.5
D. OUTLET PIPE DIAMETER (IN.)	24"
E. OUTLET PIPE INVERT ELEVATION	254.0
F. WEIR CREST WIDTH (FT.)	2.0'
G. WEIR TOP WIDTH (FT.)	2.8'
H. WEIR CREST INVERT ELEVATION	256.0'
I. NUMBER OF WEIRS	1
J. WATER QUALITY OUTLET INVERT ELEVATION	N/A
K. WATER QUALITY OUTLET DIAMETER (IN.)	N/A
L. LOW FLOW OUTLET INVERT ELEVATION	254.0
M. STRUCTURE LENGTH	5'
N. STRUCTURE WIDTH	5'
O. POND BOTTOM ELEVATION	254.0
P. TOP OF BERM	260.0

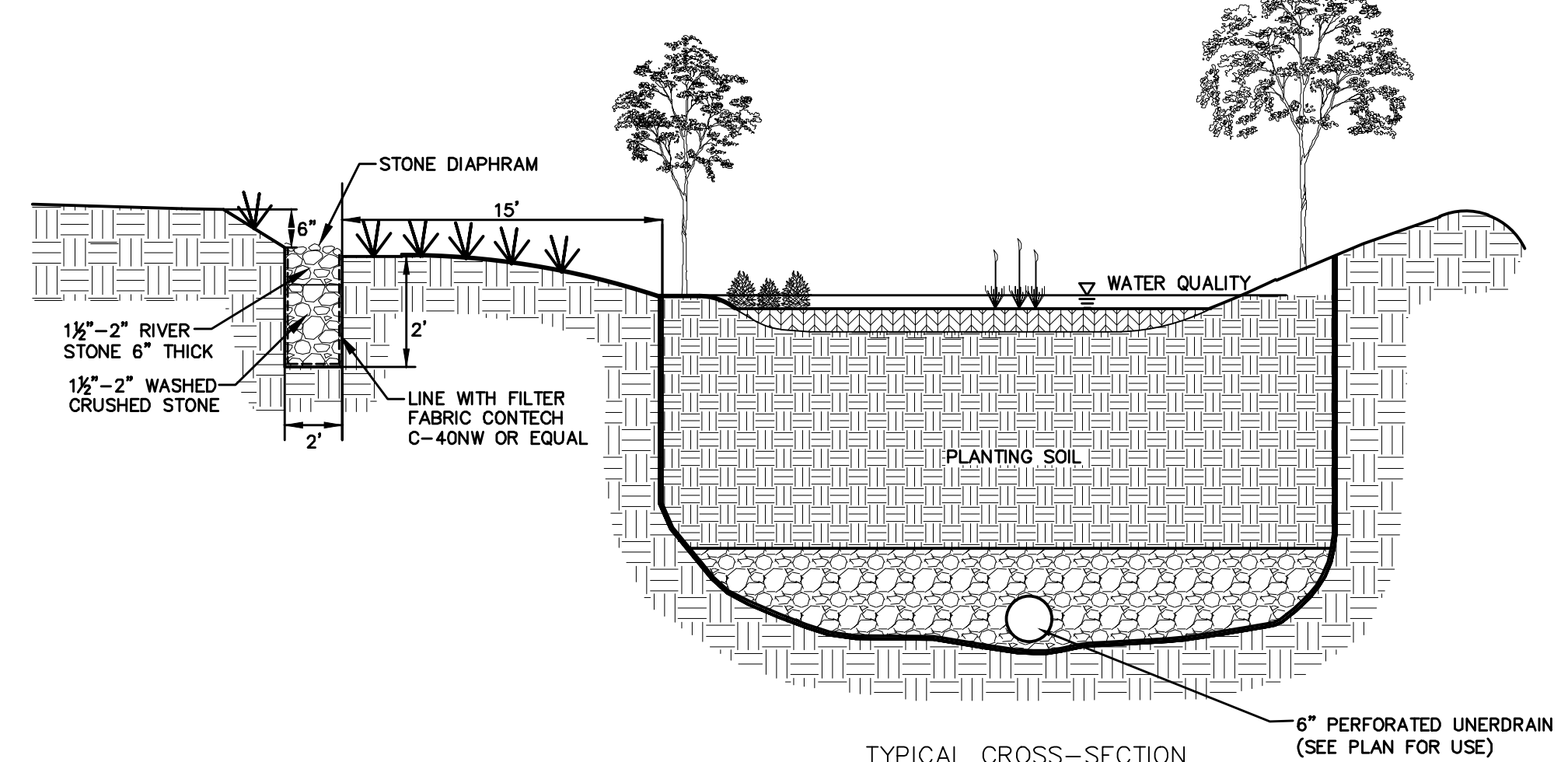
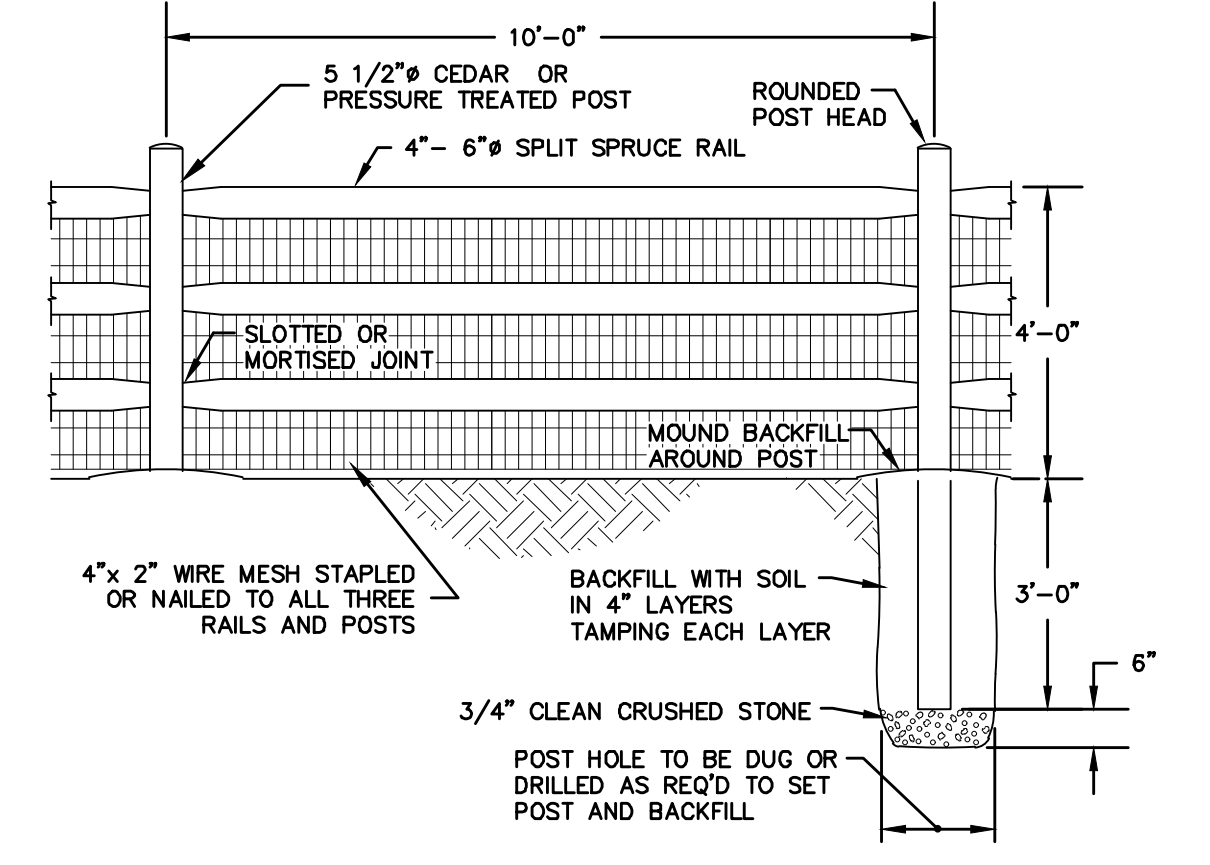
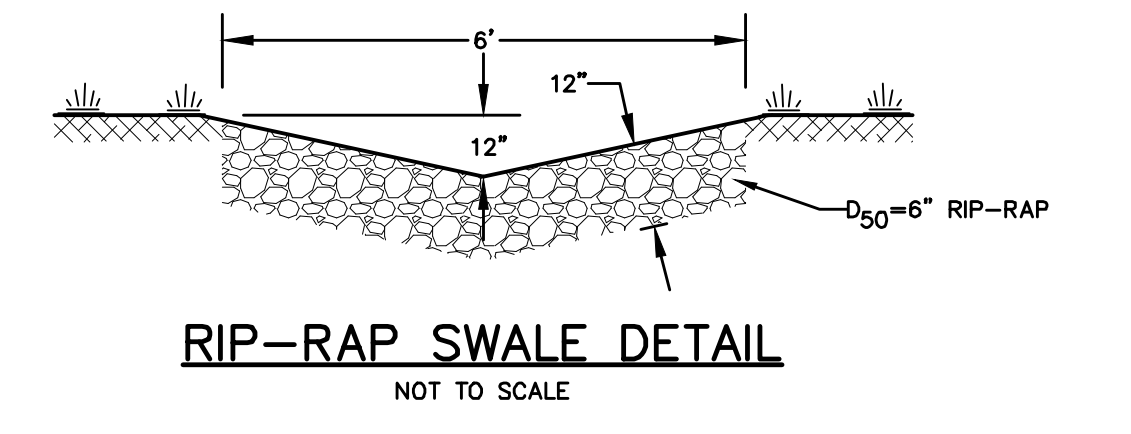


**STORMWATER MANAGEMENT BASIN OUTLET STRUCTURE**  
NOT TO SCALE

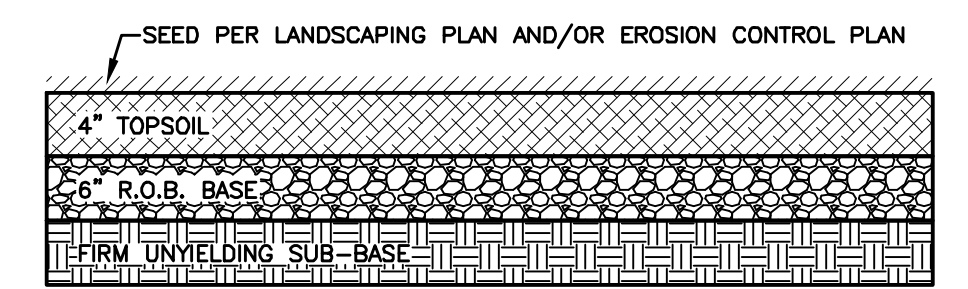


- NOTES:**
- REINFORCEMENT FOR MANHOLE (INCLUDING BASE) AND SLAB TOP SHALL BE DESIGNED BY A LICENSED NEW YORK STATE PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW. STRUCTURE SHALL BE DESIGNED FOR H-20 VEHICULAR LOADING AND 25% IMPACT.
  - CONCRETE TO TEST 4000 P.S.I. AT 28 DAYS IN CONFORMANCE WITH A.S.T.M. C-478-88.
  - FRAME AND COVER SHALL BE DESIGNED FOR H-20 VEHICLE LOADING AND 25% IMPACT.
  - INLET AND OUTLET OF PIPES SHOWN ON PLAN VIEW OF BASE ARE NOT NECESSARILY TYPICAL OF ALL MANHOLES. REFER TO THE UTILITY PLAN FOR INLET AND OUTLET DIRECTIONS.

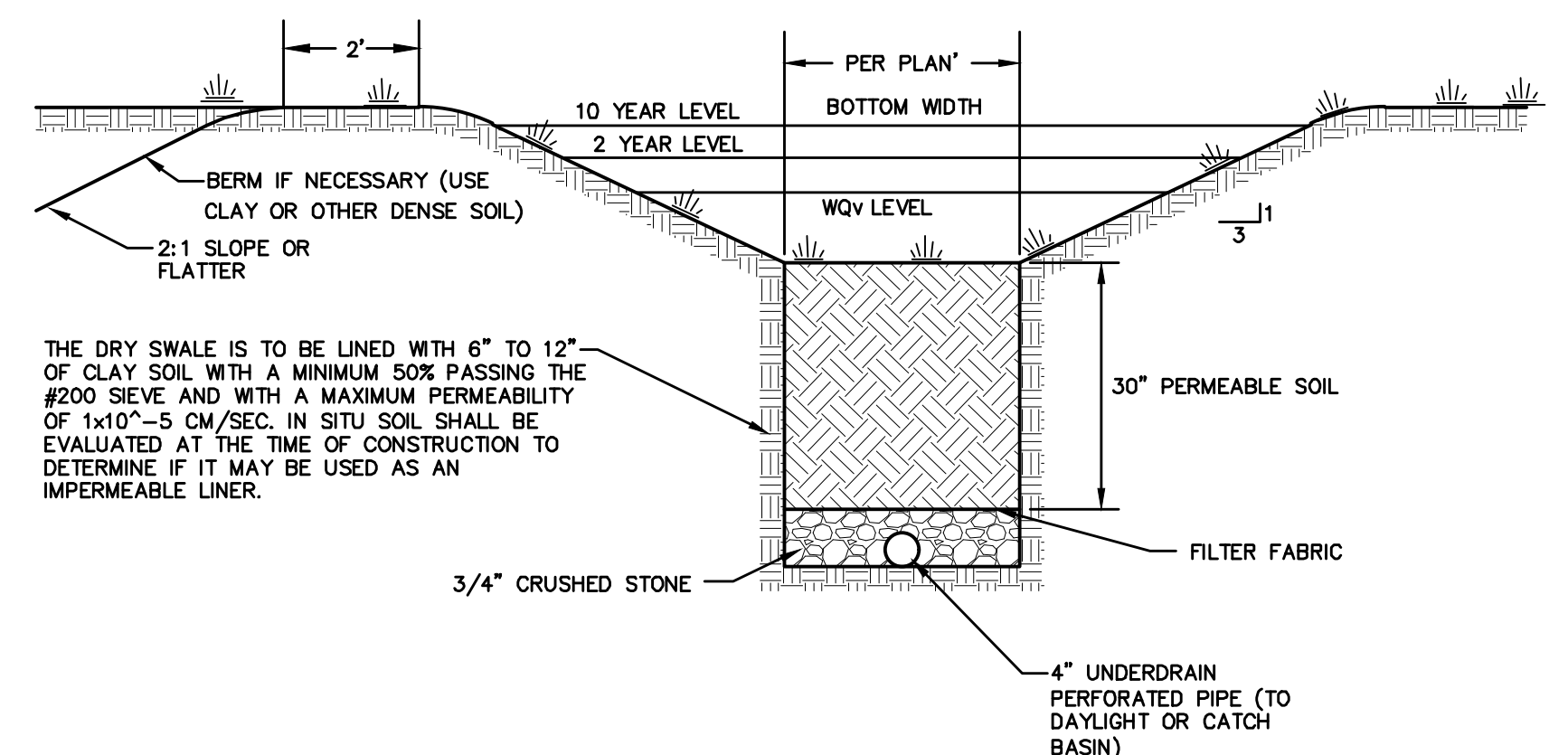
**STORM SEWER MANHOLE**  
NOT TO SCALE



**BIORETENTION SYSTEM DETAIL**  
NOT TO SCALE

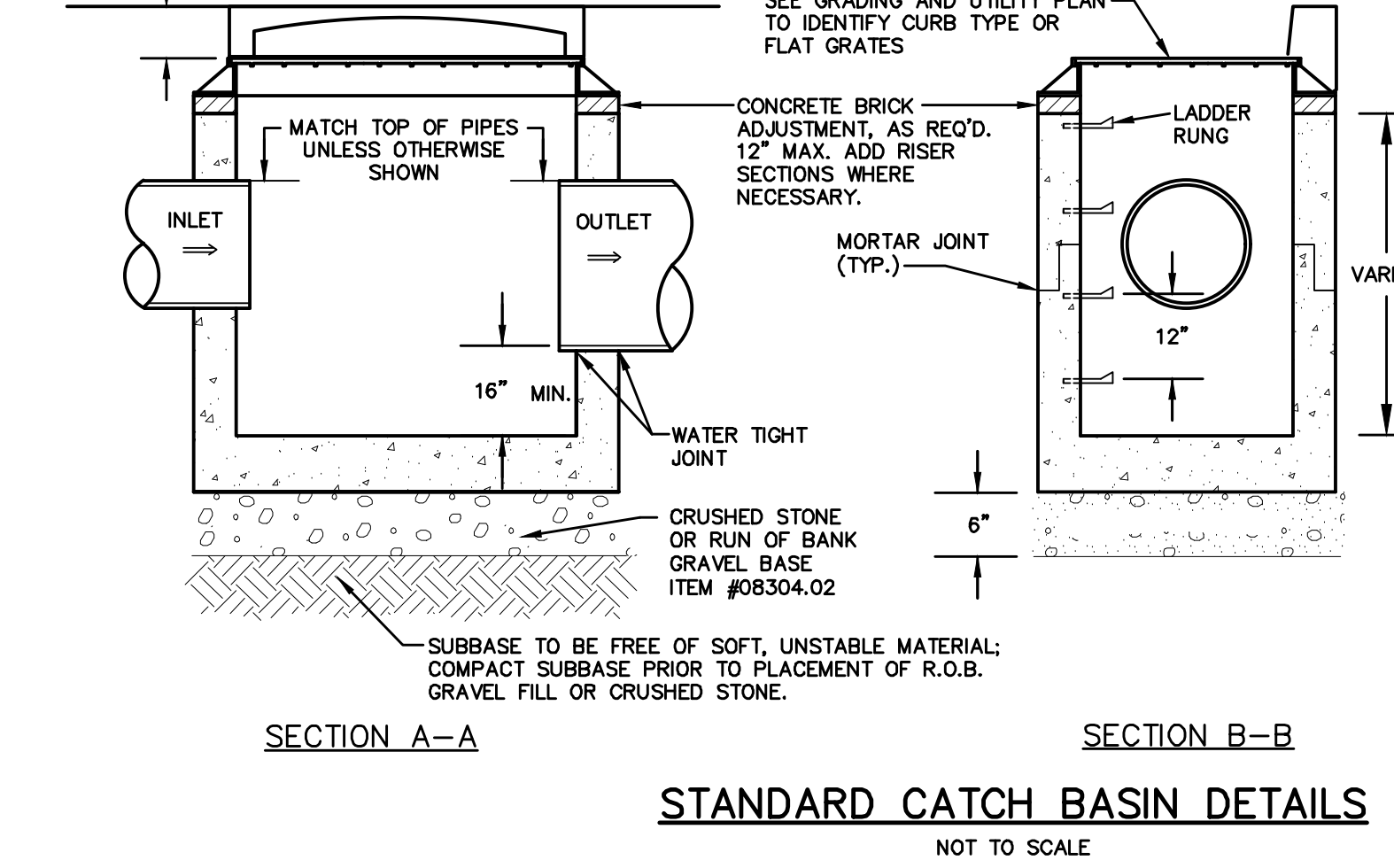
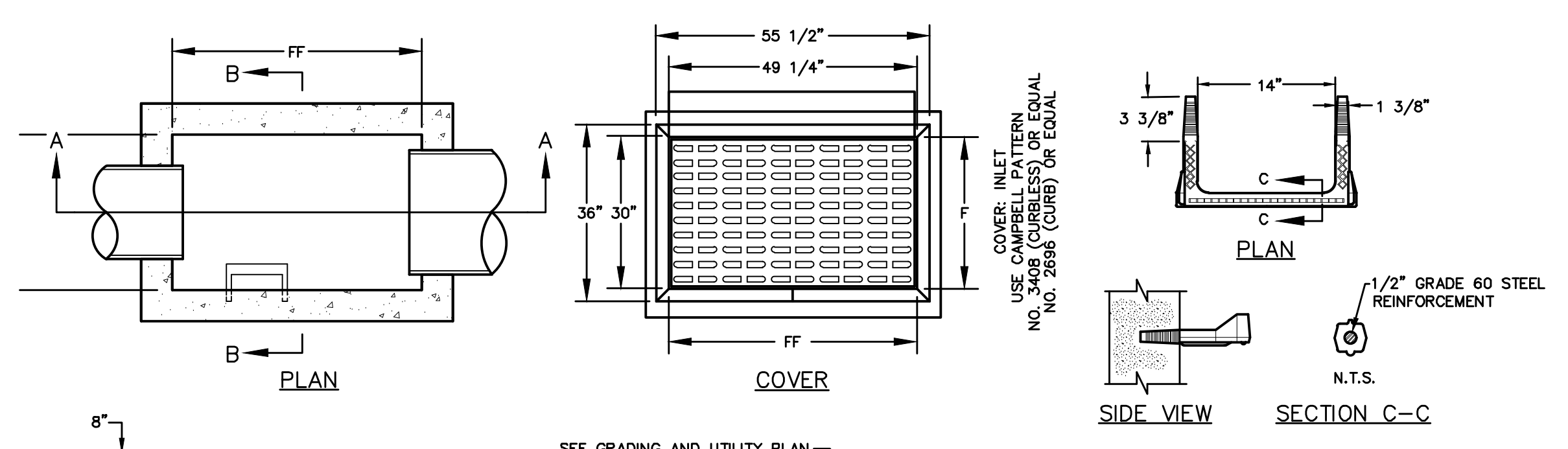


**STORMWATER MANAGEMENT BASIN ACCESS DRIVE DETAIL**  
NOT TO SCALE



**NOTE:**  
USE WHERE SLOPE IS 4% OR LESS.

**DRY SWALE DETAIL**  
NOT TO SCALE



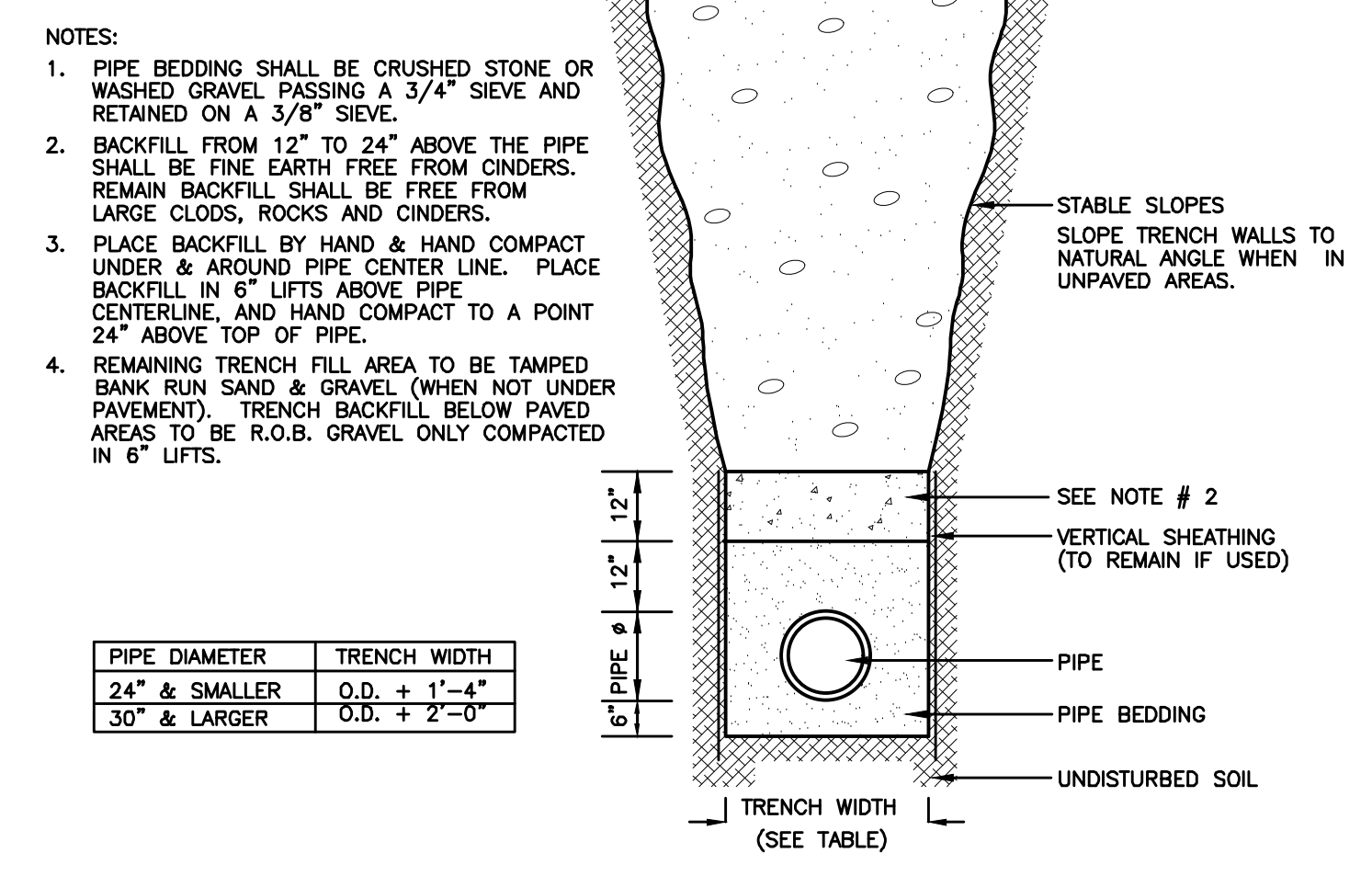
**STANDARD CATCH BASIN DETAILS**  
NOT TO SCALE

- NOTES:**
- CATCH BASIN SHALL BE PRECAST CONCRETE. DESIGNED FOR H-20 VEHICULAR LOADING AND 25% IMPACT.
  - FRAME AND COVER SHALL BE DESIGNED FOR H-20 VEHICULAR LOADING AND 25% IMPACT.
  - CONCRETE CATCH BASIN CASTING CLEAR OPENING DIMENSION MUST MATCH FRAME AND GRATE. CLEAR OPENING DIMENSION (F<sub>FF</sub>) FOR H-20 VEHICULAR LOADING.
  - CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE TOP OF THE CONCRETE BASE SHALL BE PROVIDED WITH STEPS.
  - BACKFILL USING SELECT MATERIAL, COMPACTED IN 6" LIFTS.
  - SUMP SHALL BE 16".

**PLANTING SOIL SPECIFICATIONS**

PARAMETER	VALUE
PH RANGE	5.2 TO 7.00
ORGANIC MATTER	1.5 TO 4.0%
MAGNESIUM	35 LBS. PER ACRES, MINIMUM
PHOSPHORUS (P205)	75 LBS. PER ACRES, MINIMUM
POTASSIUM (K2O)	85 LBS. PER ACRES, MINIMUM
SOLUBLE SALTS	≤500 PPM
CLAY	10 TO 25%
SILT	30 TO 55%
SAND	35 TO 60%

- NOTES:**
- THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 25% BY VOLUME.
  - SOILS SHOULD FALL WITHIN THE SM OR ML CLASSIFICATIONS OF THE UNITED SOIL CLASSIFICATION SYSTEM (USCS).
  - A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"/HR) IS REQUIRED.
  - THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER.
  - THE SOILS SHOULD BE FREE OF BRUSH OR SEEDS FROM NOXIOUS WEEDS.
  - PLACEMENT OF THE PLANTING SOILS SHOULD BE IN LIFTS OF 12" TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET).
  - TYPICAL PLANT LIST FOR 200 S.F. INFILTRATION BIORETENTION BASIN
    - SHRUBS (18 SHRUBS PLANTED 5' ± ON CENTER, 2'-3" HT.)
      - ARROWWOOD
      - WINTER BERRY
      - RED OSIER DOGWOOD
    - HERBACEOUS PLANTS (HE) (51 PLANTS PLANTED 2.5' ± ON CENTER, 1 QUART CONT.)
      - WILD GRASS
      - NEW ENGLAND ASTER
      - SPOTTED JOE PYE WEED
      - PICKEREL WEED
      - CARDINAL FLOWER
      - COMMON RUSH
    - TREES (2 TREES PLANTED 10' ± ON CENTER, 1.5" CAL.)
      - ACER RUBRUM 'OCTOBER GLORY' TM
      - CERCIS CANADENSIS
      - GLEDITSIA TRICANTHOS INERMIS
      - PLATANUS OCCIDENTALIS
      - TILIA CORDATA 'GREENSPIRE'
  - ADJUST NUMBER OF PLANTS AND DIMENSIONS AS REQUIRED FOR VARYING IMPERVIOUS AREAS.



**STORM SEWER TRENCH DETAIL**  
NOT TO SCALE

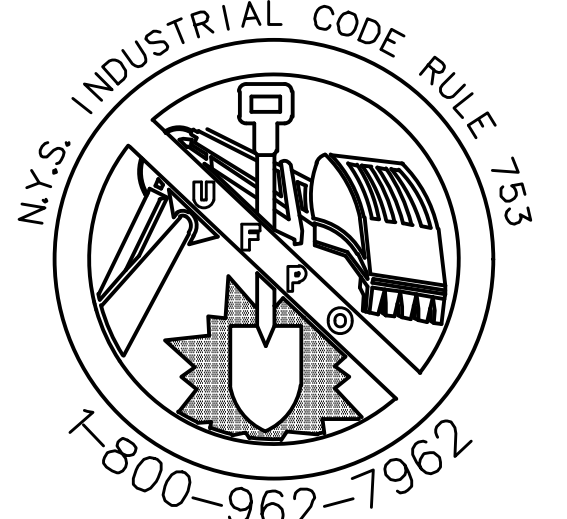
**OUTLET PROTECTION TABLE**

D (IN)	D <sub>90</sub> (IN)	L (FT) *
12	4	8
15	4	10
18	6	10
24	6	12
30	8	18
36	8	18
42	10	27
48	12	33

\* FOR LOW TAIL WATER CONDITIONS (I.E. NO PLUNGE POOL OR OTHER DEEP TAIL WATER)

- NOTES:**
- RIP RAP DEPTH SHALL BE 2 TIMES D<sub>90</sub>
  - RIP RAP APRON LENGTH AND WIDTH PER CHART UNLESS OTHERWISE SHOWN ON PLAN.

**PIPE OUTLET PROTECTION DETAIL**  
NOT TO SCALE



CALL BEFORE YOU DIG, DRILL OR BLAST  
NO LESS THAN TWO WORKING DAYS NOTICE  
**IT'S THE LAW!**

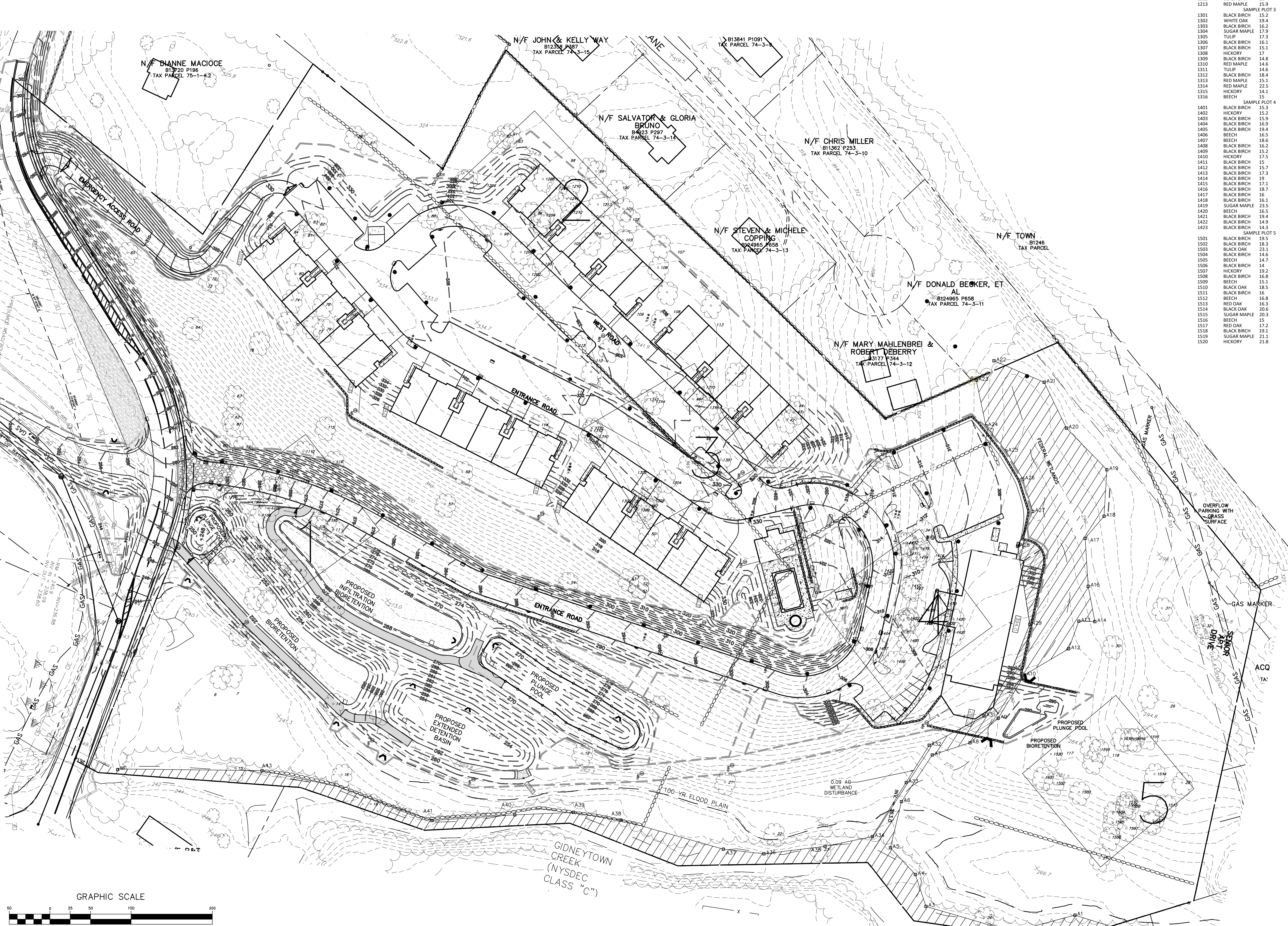
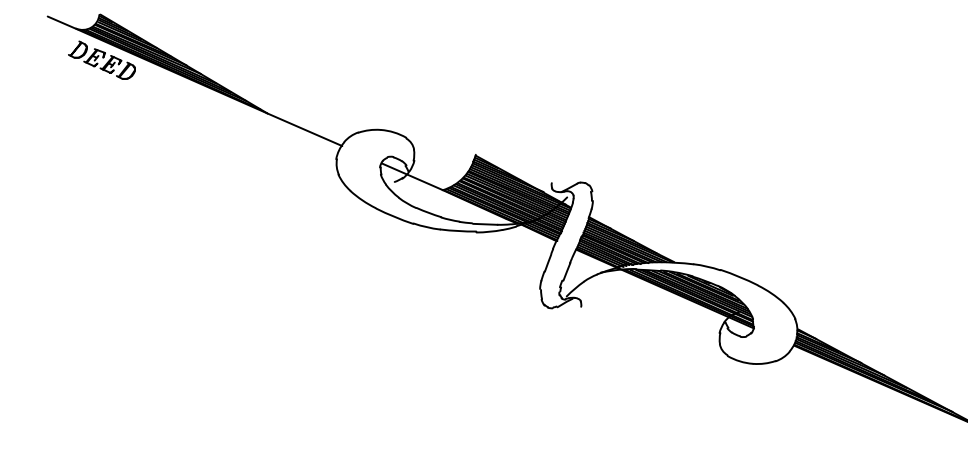
NO.	DATE	REVISION	DESCRIPTION
1	3/15/18	ENGINEERS COMMENTS	
2	5/5/17	ENGINEERS COMMENTS	
3	6/21/17	ENGINEERS COMMENTS	
4	6/9/12	LAYOUT REVISIONS	
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6	7/6/13	EMERGENCY ACCESS AND DRAINAGE REVISIONS	
7	10/20/13	CONSULTANT COMMENTS	

*Thomas B. Olley, P.E.*

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**STORM DRAINAGE DETAILS**  
**GARDNER RIDGE**  
**GARDNERTOWN ROAD**  
TOWN OF NEWBURGH, ORANGE COUNTY, NY





TREE NUMBER	SPECIES	DIAMETER (INCHES)	TAGGED TREES >24" DBH
1101	TULIP	15.7	1
1102	BLACK OAK	14.1	11
1103	ASPEN	15.3	4
1104	BLACK OAK	14.9	9
1105	TULIP	16.7	8
1106	TULIP	15.2	7
1107	TULIP	16.1	8
1108	BLACK BIRCH	14	9
1109	BLACK OAK	19.3	10
1110	RED OAK	20	11
1111	RED MAPLE	16.3	12
1112	BLACK OAK	18.5	13
1113	BLACK OAK	14	14
1114	TULIP	19	15
1115	RED OAK	18.5	16
1201	BLACK OAK	16	17
1202	TULIP	17.6	18
1203	RED MAPLE	16.5	19
1204	RED MAPLE	17.7	20
1205	RED MAPLE	14.6	21
1206	BLACK OAK	21.6	22
1207	HICKORY	15.9	23
1208	RED MAPLE	21.8	24
1209	RED MAPLE	15.7	25
1210	RED MAPLE	20.4	26
1211	SUGAR MAPLE	20.1	27
1212	BLACK OAK	20	28
1213	RED MAPLE	15.9	29
1301	BLACK BIRCH	15.2	30
1302	WHITE OAK	19.4	31
1303	BLACK BIRCH	16.2	32
1304	SUGAR MAPLE	17.9	33
1305	TULIP	16.1	34
1306	BLACK BIRCH	16.1	35
1307	BLACK BIRCH	16.1	36
1308	HICKORY	17	37
1309	BLACK BIRCH	14.8	38
1310	RED MAPLE	14.6	39
1311	TULIP	14.6	40
1312	BLACK BIRCH	18.4	41
1313	RED MAPLE	15.1	42
1314	RED MAPLE	22.5	43
1315	HICKORY	14.1	44
1316	BEECH	14	45
1401	BLACK BIRCH	15.3	46
1402	HICKORY	15.2	47
1403	BLACK BIRCH	15.9	48
1404	BLACK BIRCH	16.9	49
1405	BLACK BIRCH	19.4	50
1406	BEECH	16.5	51
1407	BEECH	18.6	52
1408	BLACK BIRCH	16.2	53
1409	BLACK BIRCH	15.2	54
1410	HICKORY	17.5	55
1411	BLACK BIRCH	15	56
1412	BLACK BIRCH	15.7	57
1413	BLACK BIRCH	17.3	58
1414	BLACK BIRCH	19	59
1415	BLACK BIRCH	17.1	60
1416	BLACK BIRCH	18.7	61
1417	BLACK BIRCH	19	62
1418	BLACK BIRCH	16.1	63
1419	SUGAR MAPLE	23.5	64
1420	BEECH	16.5	65
1421	BLACK BIRCH	19.4	66
1422	BLACK BIRCH	14.9	67
1423	BLACK BIRCH	14.3	68
1501	BLACK BIRCH	19.5	69
1502	BLACK BIRCH	18.3	70
1503	BLACK OAK	23.1	71
1504	BLACK BIRCH	14.6	72
1505	BEECH	14.7	73
1506	BLACK BIRCH	14	74
1507	HICKORY	18.2	75
1508	BLACK BIRCH	16.8	76
1509	BEECH	15.1	77
1510	BLACK OAK	16.5	78
1511	BLACK BIRCH	16	79
1512	BEECH	16.8	80
1513	RED OAK	16.3	81
1514	BLACK OAK	20.6	82
1515	SUGAR MAPLE	20.3	83
1516	BEECH	15	84
1517	RED OAK	17.2	85
1518	BLACK BIRCH	19.1	86
1519	SUGAR MAPLE	21.1	87
1520	HICKORY	21.8	88

COMPLIANCE WITH TREE PRESERVATION AND PROTECTION CODE  
 A TREES SURVEY WAS CONDUCTED BY LOWER HUDSON FORESTRY SERVICES LLC. CONCLUSIONS BASED ON THIS TREE SURVEY ARE OUTLINED BELOW.

1. SPECIMEN TREES:  
 a. ALL SPECIMEN TREES (TRUNK DIAMETER EQUAL TO OR GREATER THAN 24 IN. DBH) WERE TAGGED, NUMBERED, LOCATED AND IDENTIFIED AS TO DIAMETER AND SPECIES (REFER TO THE TREE SURVEY PLAN IN THE PLAN SET). DAMAGED OR DISEASED TREES WERE LOCATED BUT EXCLUDED FROM THE TOTAL TREE INCHES.  
 b. THE TOTAL INCHES IN DIAMETER OF SPECIMEN TREES WAS DETERMINED TO BE 3081.1 INCHES.  
 c. THE TOTAL INCHES IN DIAMETER OF SPECIMEN TREES THAT WILL BE DISTURBED/REMOVED DUE TO THE PARCEL'S DEVELOPMENT WAS DETERMINED TO BE 2064.2 INCHES.  
 d. THE DISTURBANCE IS GREATER THAN THE 50% THRESHOLD ALLOWED AND WILL REQUIRE REFORESTATION OR RESTITUTION.

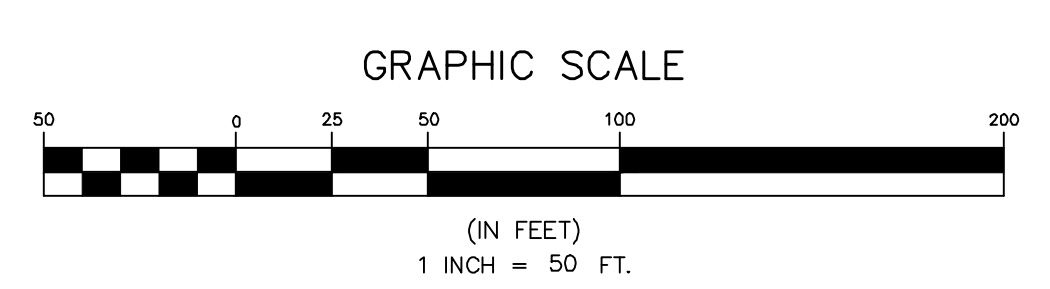
PERCENT OF SPECIMEN TREE INCHES REMOVED =  $\frac{2064.2 \text{ IN}}{3081.1 \text{ IN}} = 67\%$

e. TREE INCHES REMOVED OVER THE 50% THRESHOLD: 523.6 IN.

2. SIGNIFICANT TREES:  
 a. THE SIGNIFICANT TREES (TRUNK DIAMETER EQUAL TO OR GREATER THAN 14 IN. DBH) WERE LOCATED AND IDENTIFIED AS TO DIAMETER AND SPECIES ON FIVE ¼ ACRE SAMPLE PLOTS DISTRIBUTED THROUGHOUT THE PARCEL (REFER TO THE TREE SURVEY PLAN IN THE PLAN SET).  
 b. FOR EVERY 10 ACRES OF PARCEL AREA TWO SAMPLE PLOTS ARE REQUIRED. THE NUMBER OF SAMPLE PLOTS WAS DETERMINED AS FOLLOWS:  
 $\text{SAMPLE PLOTS REQUIRED} = 2 \left(\frac{\text{SITE AREA}}{10}\right)$   
 $\text{SAMPLE PLOTS REQUIRED} = 2 \left(\frac{23.3}{10}\right) \approx 5$   
 c. THE TOTAL INCHES OF SIGNIFICANT TREES INCLUDED ON THE SAMPLE PLOTS WAS DETERMINED TO BE 1497.9 IN.  
 d. THE TOTAL SIGNIFICANT TREE INCHES PROJECTED FOR THE ENTIRE SITE IS CALCULATED AS FOLLOWS:  
 $\text{TOTAL SIGNIFICANT TREE IN.} = \frac{\text{SIGNIFICANT TREE IN. WITHIN SAMPLE PLOTS (SITE ACRES)}}{\text{ACREAGE OF SAMPLE PLOTS}}$   
 $\text{TOTAL SIGNIFICANT TREE IN.} = \frac{1497.9 \text{ IN.} (23.3 \text{ AC.})}{72.5 \text{ AC.}} = 13,960.4 \text{ IN.}$   
 e. DISTURBED SIGNIFICANT TREE IN. = SIGNIFICANT TREE IN. WITHIN SAMPLE PLOTS (DIST. ACRES)  
 $\text{ACREAGE OF SAMPLE PLOTS}$   
 $\text{DISTURBED SIGNIFICANT TREE IN.} = \frac{1497.9 \text{ IN.} (12.59 \text{ AC.})}{7.5434 \text{ AC.}} = 7,543.4 \text{ IN.}$   
 f. THE DISTURBANCE TO SIGNIFICANT TREES IS GREATER THAN THE ALLOWABLE 50% THRESHOLD AND WILL REQUIRE REFORESTATION OR RESTITUTION.  
 % OF SIGNIFICANT TREE INCHES REMOVED =  $\frac{\text{SIGNIFICANT TREE INCHES REMOVED}}{\text{TOTAL SIGNIFICANT TREE INCHES}} = \frac{7543.4 \text{ IN.}}{13,960.4 \text{ IN.}} = 54\%$   
 g. TREE INCHES REMOVED OVER THE 50% THRESHOLD: 563.2 IN.

3. REFORESTATION OF SPECIMEN AND SIGNIFICANT TREES:  
 a. FOR EVERY 1 INCH OF TREE DIAMETER THAT IS REMOVED/DISTURBED ABOVE THE THRESHOLD, 1.25 INCHES OF NEW TREES MUST BE PLANTED.  
 b. REFORESTATION IN THE AMOUNT OF 83 PER INCH OF NEW TREE DIAMETER MUST BE PAID.  
 c. NEW TREE INCHES THAT MUST BE REPLANTED:  
 $(1.25 \text{ IN./1 IN.}) 1086.6 \text{ IN.} = 1,358.5 \text{ IN.}$   
 OR  
 $\text{RESTITUTION REQUIRED: } (1358.5 \text{ IN.}) \$5 = \$6,792.50$

4. PROTECTED TREES (HAVING A CIRCUMFERENCE, HEIGHT AND SPREAD EQUAL TO OR GREATER THAN 50% OF THE SIZE IDENTIFIED ON THE NY BIG CHAMPION TREE LIST):  
 a. THERE WERE NO PROTECTED TREES FOUND WITHIN THE SAMPLE PLOT AREAS.  
 b. ONE PROTECTED TREE WAS FOUND WHEN THE SPECIMEN TREES WERE BEING TAGGED AND LOCATED. THIS TREE WAS HOLLOW AND CONSIDERED A HAZARD TREE. THEREFORE, ITS REMOVAL DOES NOT REQUIRE REFORESTATION OR RESTITUTION.



REVISIONS TABLE

NO.	DATE	DESCRIPTION

**THOMAS B. O'LEY, P.E., P.L.L.C.**  
 ENGINEERS AND PLANNERS

PHYS. #00 72-003  
 TAX. #00 77-027  
 15 GRANVILLE AVENUE  
 WALKEN NY 14880

**TREE SURVEY MAP**  
**GARDNER RIDGE**  
**GARDNERTOWN ROAD**

TOWN OF NEWBURGH, ORANGE COUNTY, NY

SHEET NO.  
**16 OF 16**

DATE: OCTOBER 20, 2023

FILE NO.

REV.	DATE	DRAWN BY	DESCRIPTION
1	6/9/22	M.J.A.	REVISED PER TOWN COMMENTS.
2	7/17/21	M.J.A.	REVISED PER CREGGHTON MANNING COMMENT LETTER DATED 6/17/22.
3	8/23/22	M.J.A.	ADDED TURNING TRAILS & RIP RAP TO END SECTIONS.
4	8/31/22	M.J.A.	MODIFIED PER TOWN CONSULTANTS COMMENTS.
5	6/27/23	M.J.A.	REVISED PER TOWN HIGHWAY DEPARTMENT COMMENTS.
6	7/7/23	M.J.A.	REVISED PER TOWN HIGHWAY DEPARTMENT COMMENTS.
7	8/2/23	M.J.A.	REVISED PER CIE COMMENTS DATED 8/1/23.
8	10/20/23	M.J.A.	FOR 10/20/23 PLANNING BOARD SUBMISSION.

CONCEPTUAL IMPROVEMENT PLAN FOR GARDNER RIDGE ASSOCIATES, LLC

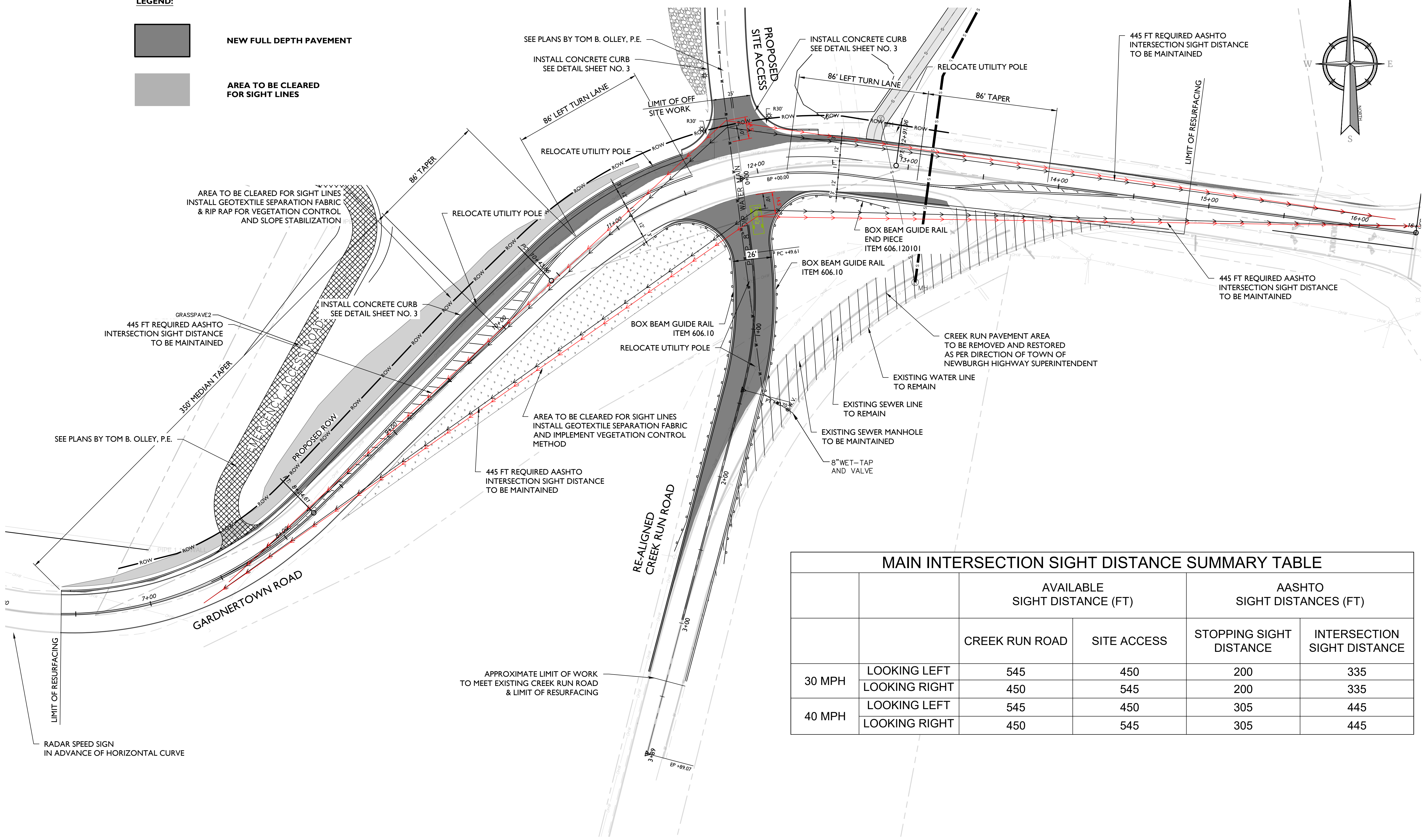
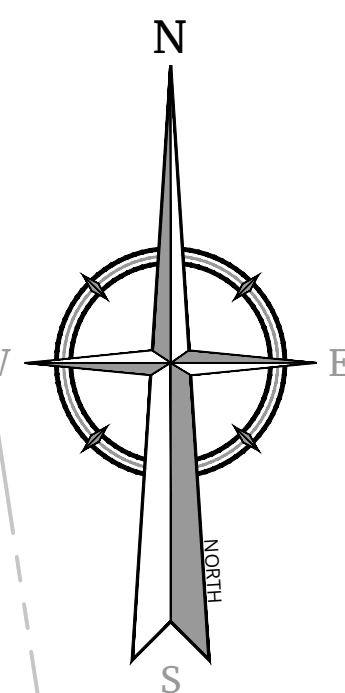
GARDNERTOWN ROAD & CREEK RUN ROAD  
 TOWN OF NEWBURGH  
 ORANGE COUNTY  
 NEW YORK

WESTCHESTER  
 400 Columbus Avenue,  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 COLLIERS ENGINEERING & DESIGN  
 ARCHITECTURE, LANDSCAPE ARCHITECTURE  
 SURVEYING CT, P.C.

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	8/27/21	M.J.A.	P.J.G./A.P.R.
PROJECT NUMBER:	DRAWING NAME:		
140003750	R-PL01-EXBT		

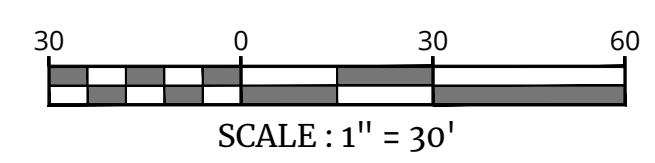
**LEGEND:**

- NEW FULL DEPTH PAVEMENT
- AREA TO BE CLEARED FOR SIGHT LINES



**MAIN INTERSECTION SIGHT DISTANCE SUMMARY TABLE**

		AVAILABLE SIGHT DISTANCE (FT)		AASHTO SIGHT DISTANCES (FT)	
		CREEK RUN ROAD	SITE ACCESS	STOPPING SIGHT DISTANCE	INTERSECTION SIGHT DISTANCE
30 MPH	LOOKING LEFT	545	450	200	335
	LOOKING RIGHT	450	545	200	335
40 MPH	LOOKING LEFT	545	450	305	445
	LOOKING RIGHT	450	545	305	445



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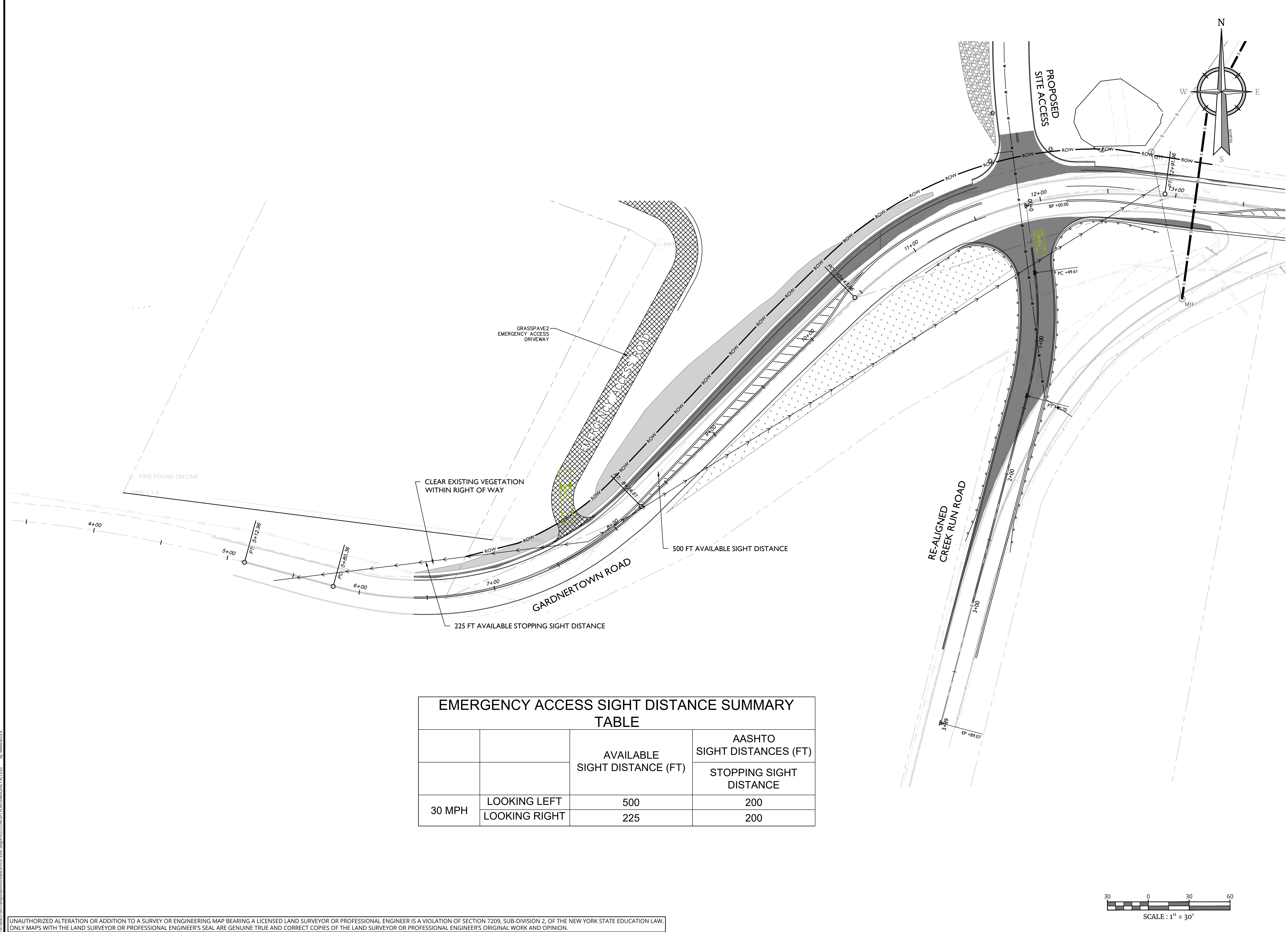
**CONCEPTUAL IMPROVEMENT PLAN**  
FOR  
**GARDNER RIDGE ASSOCIATES, LLC**

**GARDNERTOWN ROAD & CREEK RUN ROAD**  
TOWN OF NEWBURGH  
ORANGE COUNTY  
NEW YORK

**WESTCHESTER**  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN  
ARCHITECTURE, LANDSCAPE ARCHITECTURE,  
SURVEYING CT, P.C.

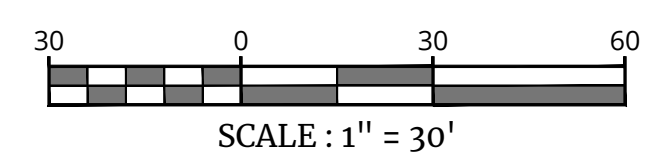
SCALE: AS SHOWN	DATE: 8/27/21	DRAWN BY: M.J.A.	CHECKED BY: P.J.G./A.P.R.
PROJECT NUMBER: 140003750	DRAWING NAME: R-PL01-EXBT		

**EMERGENCY ACCESS SIGHT DISTANCE PLAN**

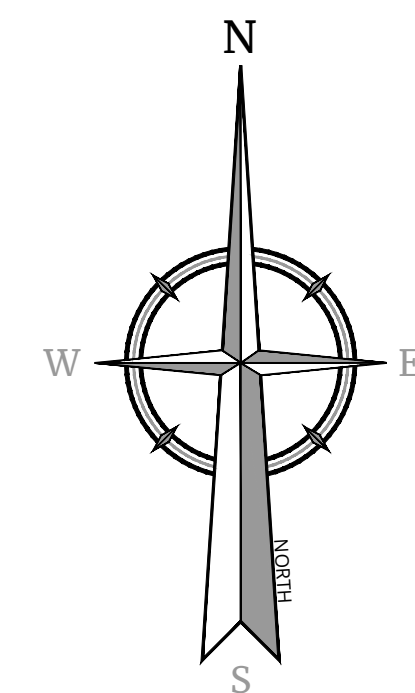
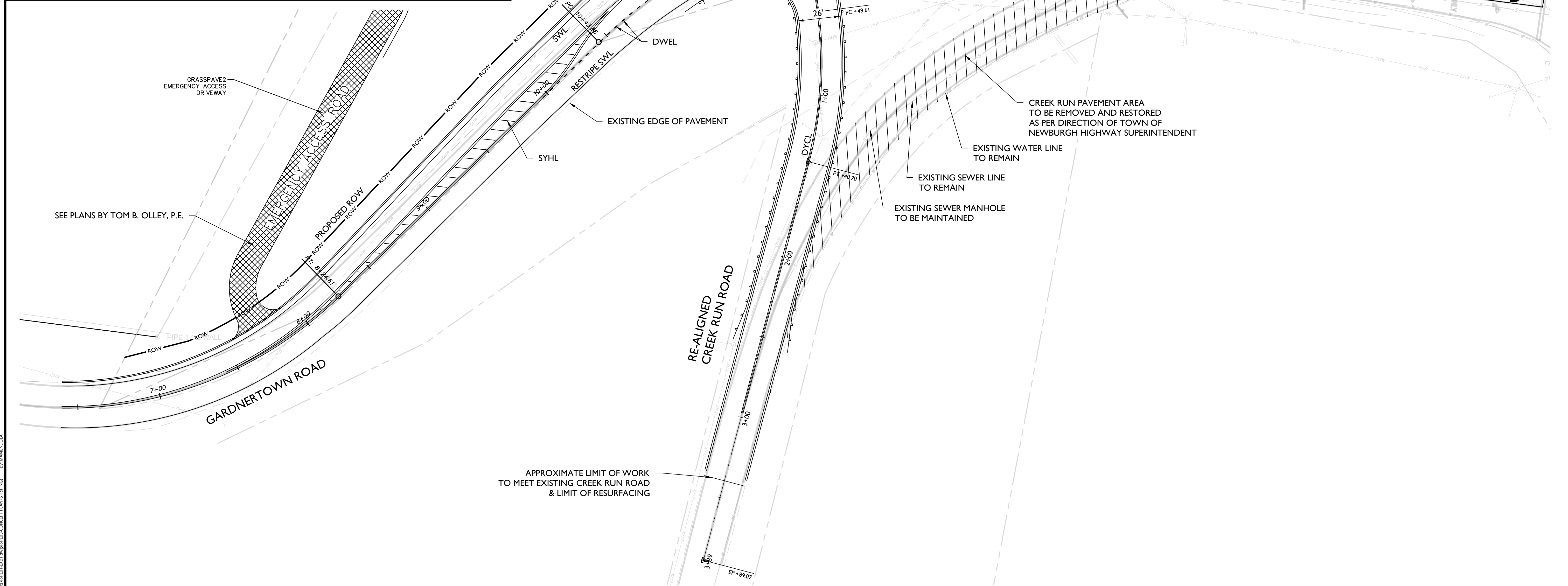
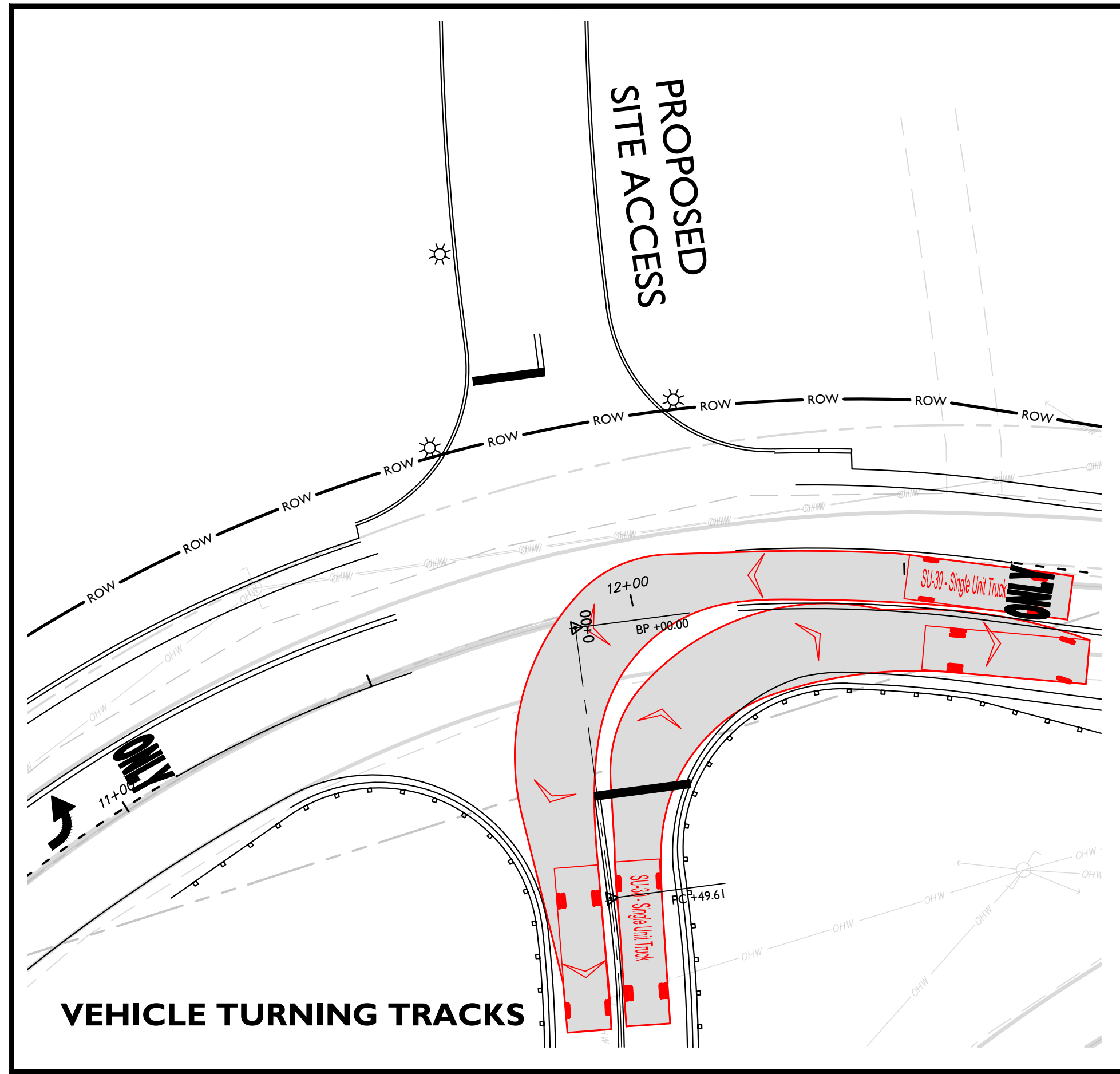


**EMERGENCY ACCESS SIGHT DISTANCE SUMMARY TABLE**

		AVAILABLE SIGHT DISTANCE (FT)	AASHTO SIGHT DISTANCES (FT)
			STOPPING SIGHT DISTANCE
30 MPH	LOOKING LEFT	500	200
	LOOKING RIGHT	225	200



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CONCEPTUAL IMPROVEMENT PLAN  
FOR  
GARDNER RIDGE ASSOCIATES, LLC

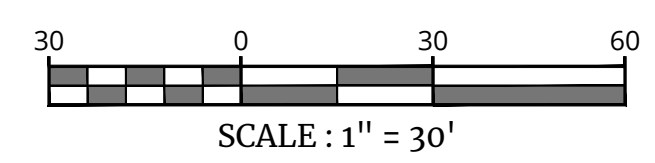
GARDNERTOWN ROAD & CREEK RUN ROAD  
TOWN OF NEWBURGH  
ORANGE COUNTY  
NEW YORK

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400 Columbus Avenue,  
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SURVEYING CT, P.C.

SCALE AS SHOWN	DATE	DRAWN BY	CHECKED BY
PROJECT NUMBER	DRAWING NAME		

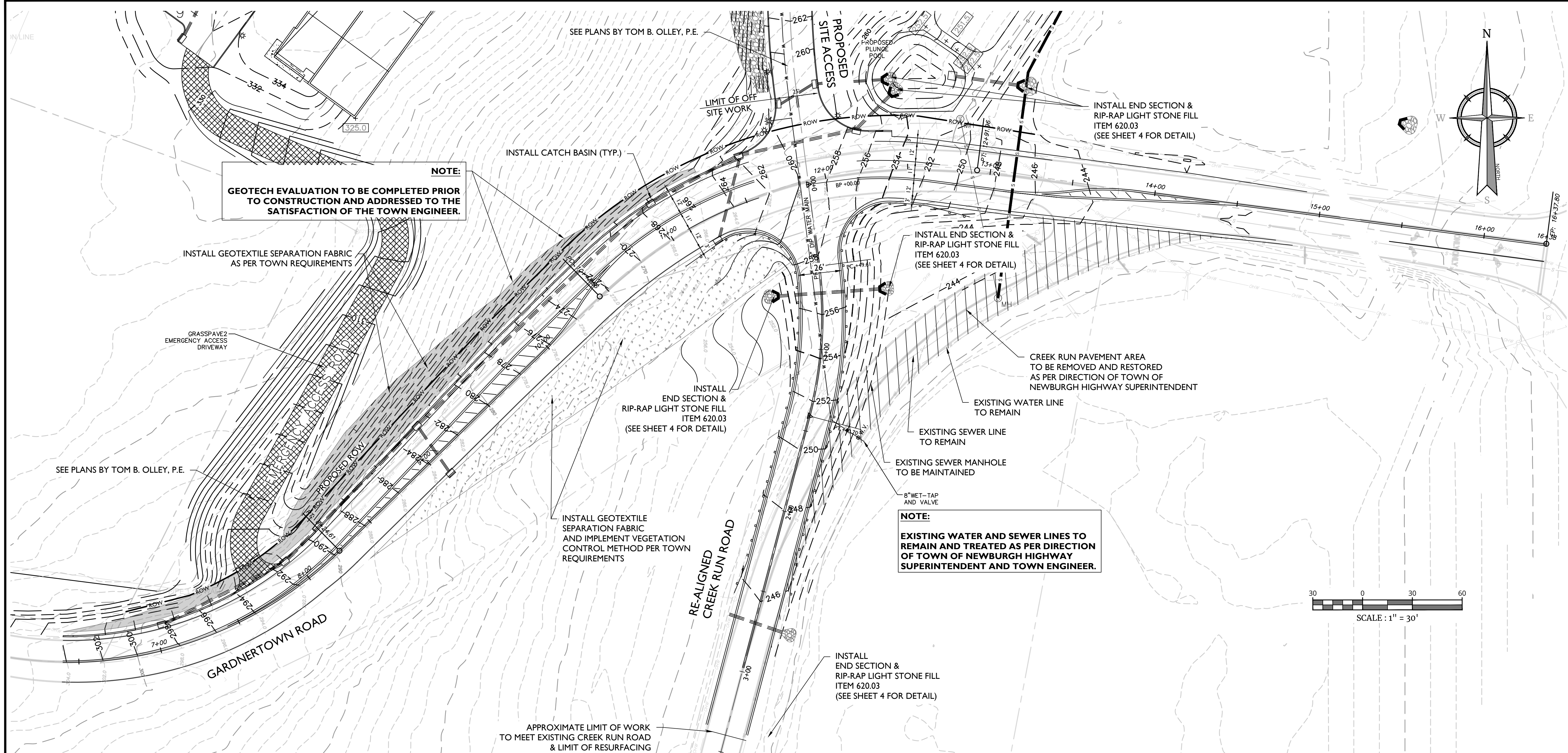
SHEET TITLE:  
**CONCEPT PLAN (STRIPING)**

SHEET NUMBER:  
**3 of 8**



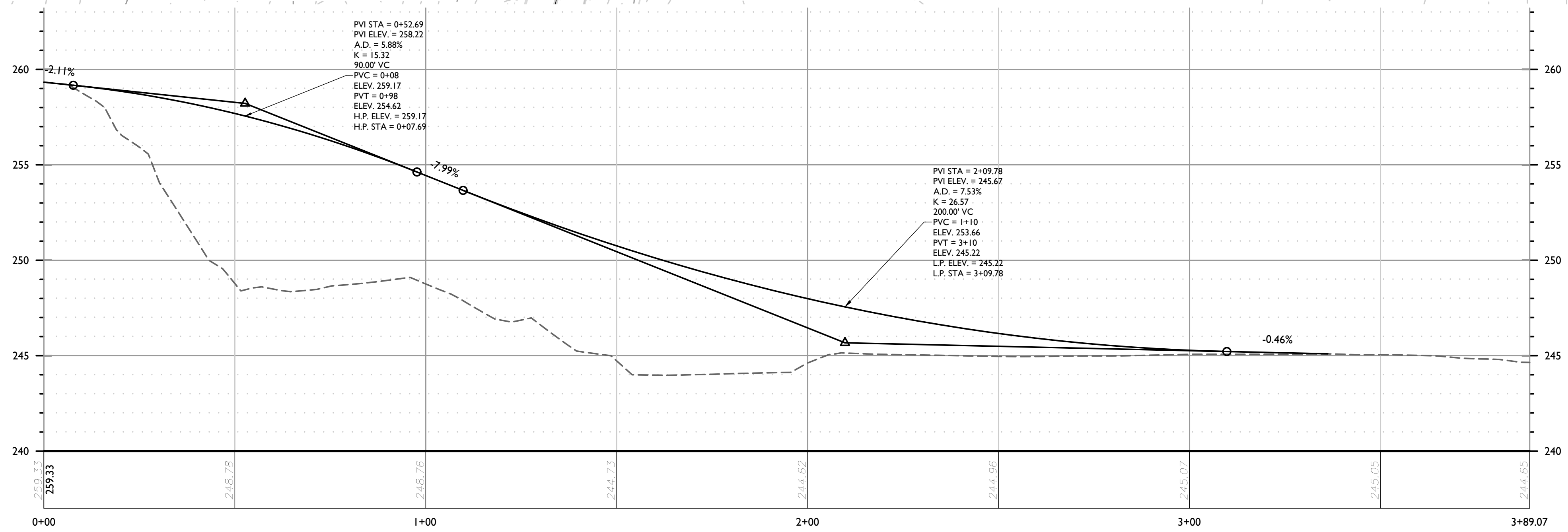
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**NOTE:**  
**GEOTECH EVALUATION TO BE COMPLETED PRIOR TO CONSTRUCTION AND ADDRESSED TO THE SATISFACTION OF THE TOWN ENGINEER.**

**NOTE:**  
**EXISTING WATER AND SEWER LINES TO REMAIN AND TREATED AS PER DIRECTION OF TOWN OF NEWBURGH HIGHWAY SUPERINTENDENT AND TOWN ENGINEER.**



**PROFILE OF REALIGNED CREEK RUN ROAD - NEW**  
 HORIZONTAL : 1" = 20'  
 VERTICAL : 1" = 4'

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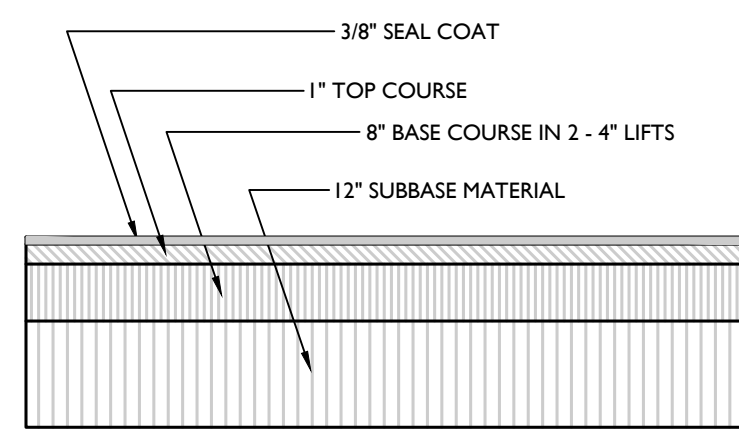
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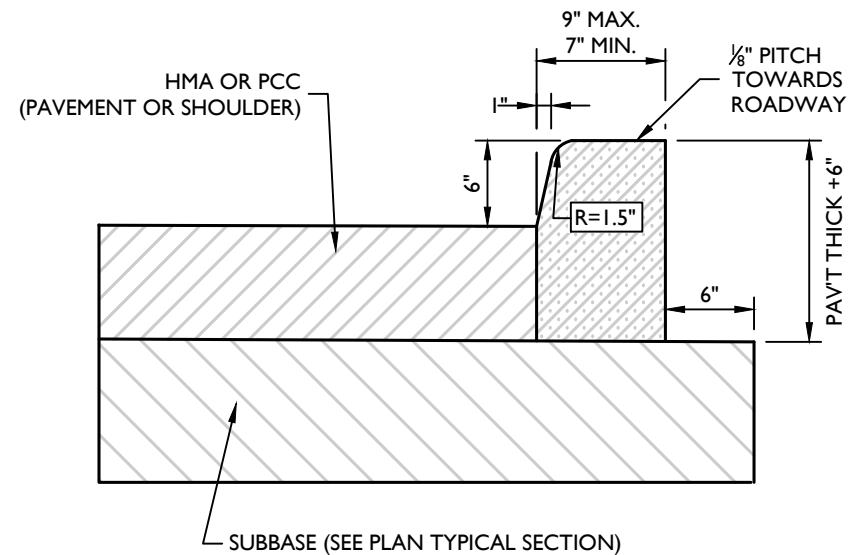
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	8/27/21	M.J.A.	P.J.G./A.P.R.
PROJECT NUMBER:	DRAWING NAME:		
140003750	R-PL01-EXBT		

**CONCEPT PLAN (GRADING)**

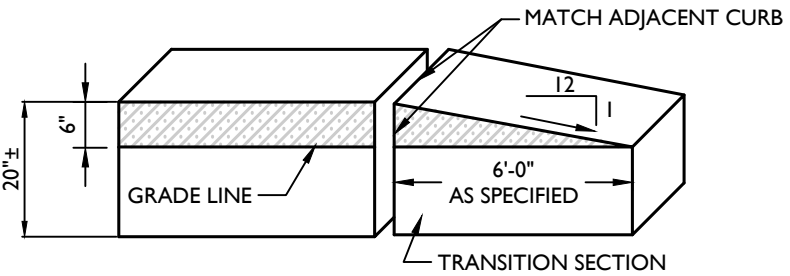
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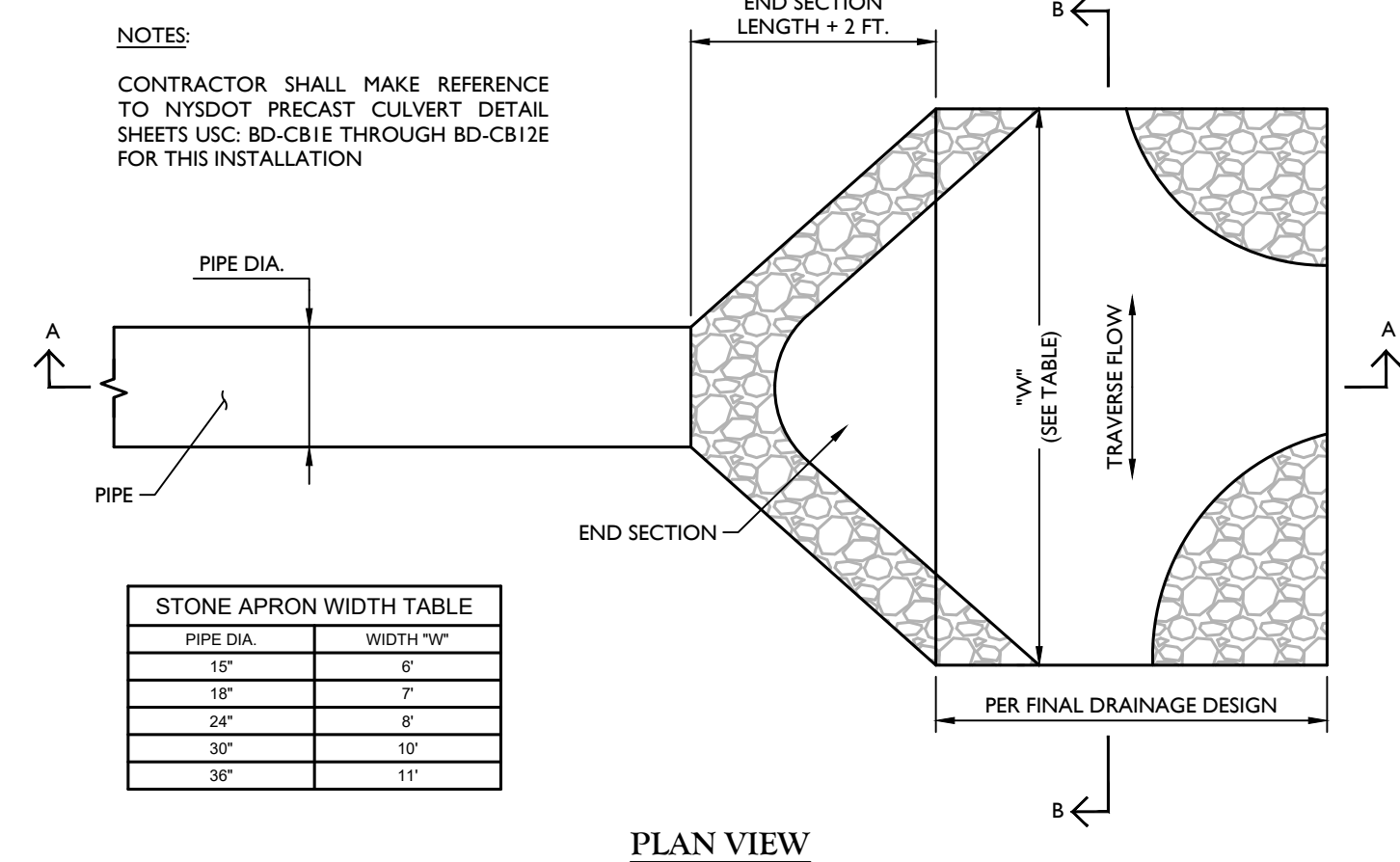
**TOWN OF NEWBURGH  
FULL DEPTH PAVEMENT DETAIL**  
NOT TO SCALE GNRL-DTLS-STND-GRID XX/XX/XX



**TYPE V6 CURB**  
NOT TO SCALE NYDT-CURB-1000 08/04/21



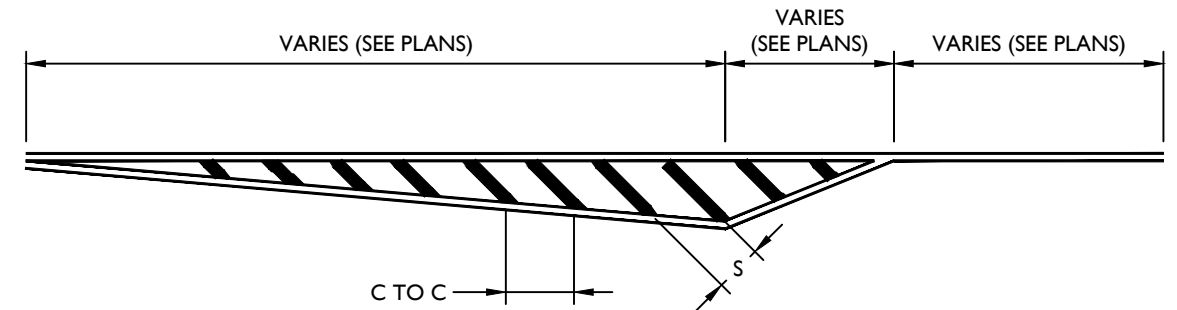
**CURB TRANSITION**  
NOT TO SCALE NYDT-CURB-1200 01/09/14



STONE APRON WIDTH TABLE

PIPE DIA.	WIDTH "W"
18"	6"
24"	7"
30"	8"
36"	10"
42"	11"

**STONE LINED APRON**  
NOT TO SCALE NYDT-STRM-1100 11/01/17



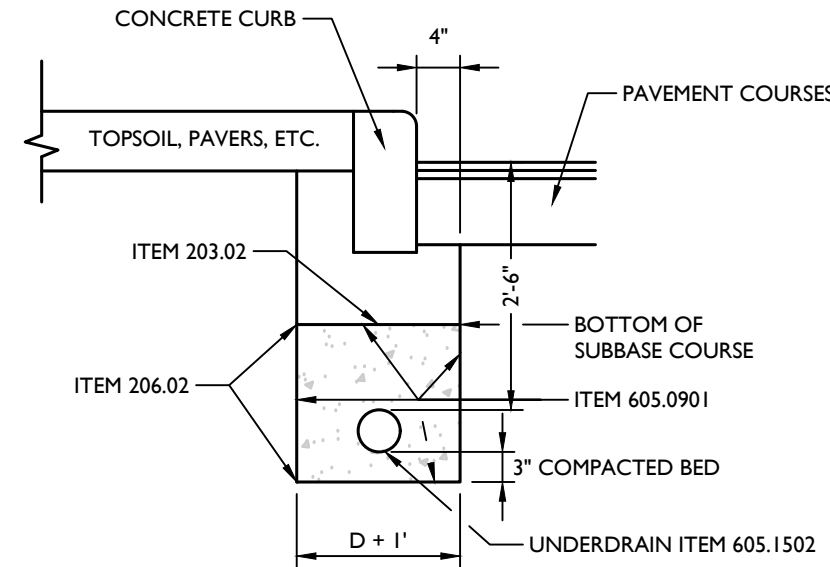
CRITERIA FOR HATCHED LINES

WIDTH OF LINE	ANGLE WITH ADJACENT LANE	SPACE BETWEEN ADJACENT LINES	CENTER TO CENTER DISTANCE PARALLEL TO ADJACENT LANE
24"	45°	6'	11'-4"

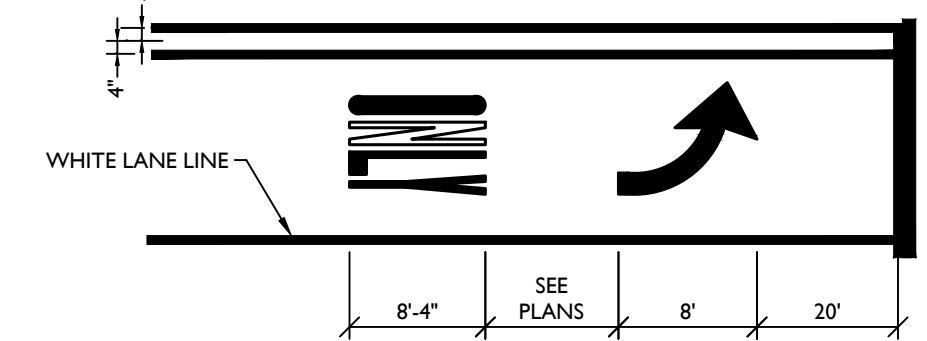
FOR ADDITIONAL STRIPING DETAILS SEE  
NYSDOT STANDARD SHEET 685-01 DATED 09/02/13

PER NYSDOT  
STANDARD SHEET 685-01  
(SHEET 1 OF 9)

**HATCHED ISLAND DETAIL**  
NOT TO SCALE NYDT-MRKG-1101 05/02/13

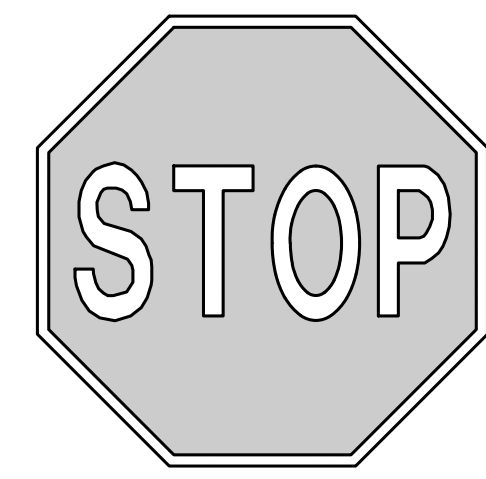


**UNDERDRAIN WITH CURB**  
NOT TO SCALE NYDT-CURB-1400 11/01/17



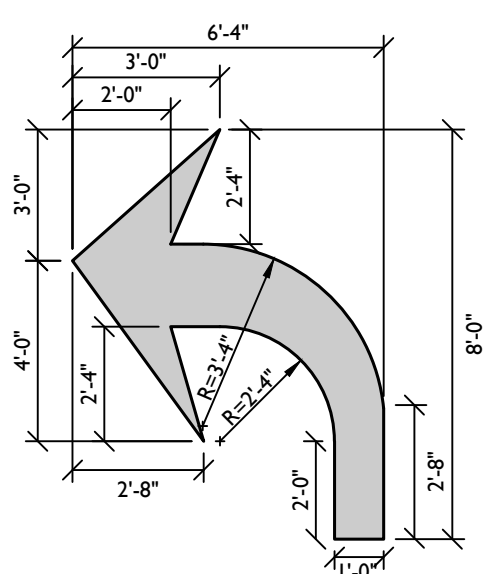
PER NYSDOT  
STANDARD SHEET 685-01  
(SHEET 6 OF 9)

**TYPICAL LEFT TURN LANE STRIPING**  
NOT TO SCALE NYDT-MRKG-1100 05/02/13



**RI-1  
(30"x30")**

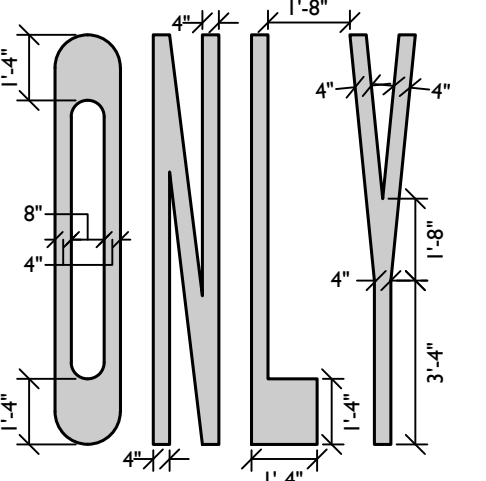
**STOP SIGN**  
NOT TO SCALE NYDT-SIGN-1000 05/02/13



(PAID AS ONE SYMBOL)

PER NYSDOT  
STANDARD SHEET 685-01  
(SHEET 8 OF 9)

**TURNING ARROW**  
NOT TO SCALE NYDT-MRKG-1200 05/02/13



NOTES:  
UNLESS OTHERWISE SHOWN:  
LETTER HEIGHT = 8'-4"  
LETTER WIDTH = 1'-4"  
SPACING = 8"  
(USE EQUAL SPACING BETWEEN LETTERS  
AND CENTER ENTIRE SYMBOL IN LANE)

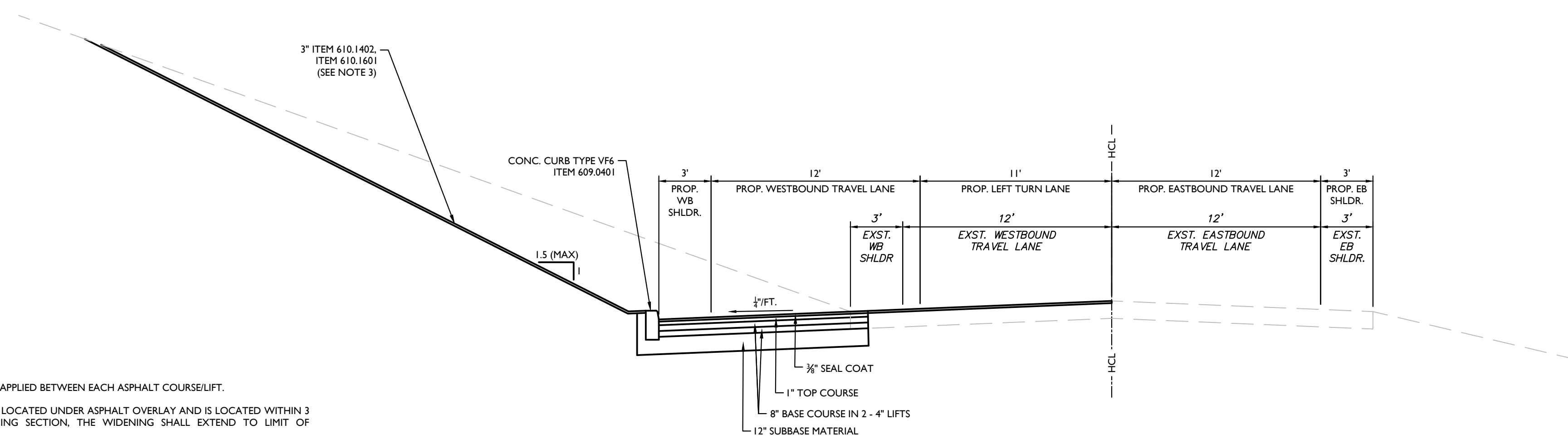
PER NYSDOT  
STANDARD SHEET 685-01  
(SHEET 8 OF 9)

**ONLY LETTERS**  
NOT TO SCALE NYDT-MRKG-1101 05/02/13

**TYPICAL SECTION NOTES**

1. STRAIGHT TACK COAT SHALL BE APPLIED BETWEEN EACH ASPHALT COURSE/LIFT.
2. WHERE CONCRETE PAVEMENT IS LOCATED UNDER ASPHALT OVERLAY AND IS LOCATED WITHIN 3 FT. OF THE PROPOSED WIDENING SECTION, THE WIDENING SHALL EXTEND TO LIMIT OF CONCRETE PAVEMENT.
3. WHERE POSSIBLE SUBBASE MATERIAL SHALL BE DAYLIGHTED TO EMBANKMENT SIDE SLOPES.
4. AS PER SECTION 610.3.10, IN THE ABSENCE OF 1 INCH OF RAINFALL WITHIN 5 CONSECUTIVE CALENDAR DAYS THE CONTRACTOR SHALL WATER ALL TURF, WILDFLOWERS, SOIL AND PLANTING BEDS ONCE A WEEK TO A DEPTH OF 1 INCH UNDER ITEM 610.19, IN ADDITION AS PER SECTION 610.3.12, THE CONTRACTOR SHALL MOW ALL TURF ESTABLISHMENT AREAS TO A HEIGHT OF 5 INCHES WHEREVER GROWTH REACHES 8 INCHES FOR THE DURATION OF THE CONTRACT UNDER ITEM 619.21. CLIPPINGS SHALL BE LEFT IN PLACE.
5. TRUING AND LEVELING COURSE MAY BE REQUIRED TO ACHIEVE UNIFORM CROSS SLOPE. CONTRACTOR SHALL VERIFY IF SUCH NEED IS REQUIRED AND CONFIR WITH E.I.C. PRIOR TO COMMENCEMENT OF PAVING OPERATIONS.

ITEM	DESCRIPTION
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL
203.03	EMBANKMENT IN PLACE
609.0401	CAST-IN-PLACE CONCRETE CURB TYPE V6



**GARDNERTOWN ROAD - TYPICAL SECTION**

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SCALE: AS SHOWN DATE: 8/27/21 DRAWN BY: M.J.A. CHECKED BY: P.J.G./A.P.R.  
PROJECT NUMBER: 140003750 DRAWING NAME: R-PL01-EXBT

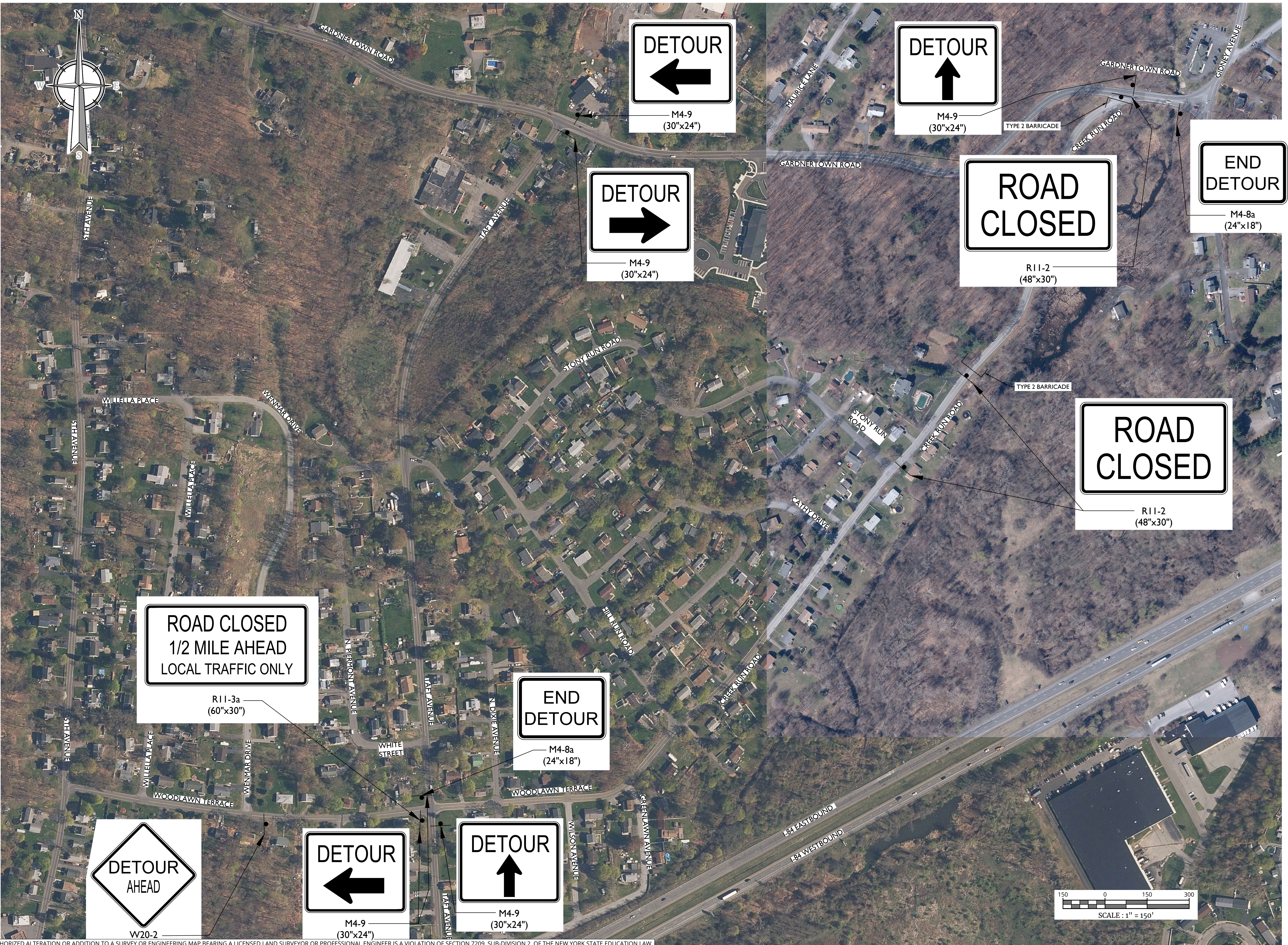
SHEET TITLE: **DETAILS**

SHEET NUMBER: **5 of 8**









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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	8/27/21	M.J.A.	P.J.G./A.P.R.
PROJECT NUMBER:	140003750	DRAWING NAME:	R-PL02-ESBT-WZTC

SHEET TITLE:  
WORK ZONE TRAFFIC CONTROL  
CREEK RUN ROAD SHORT TERM  
CLOSURE DETOUR PLAN

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