
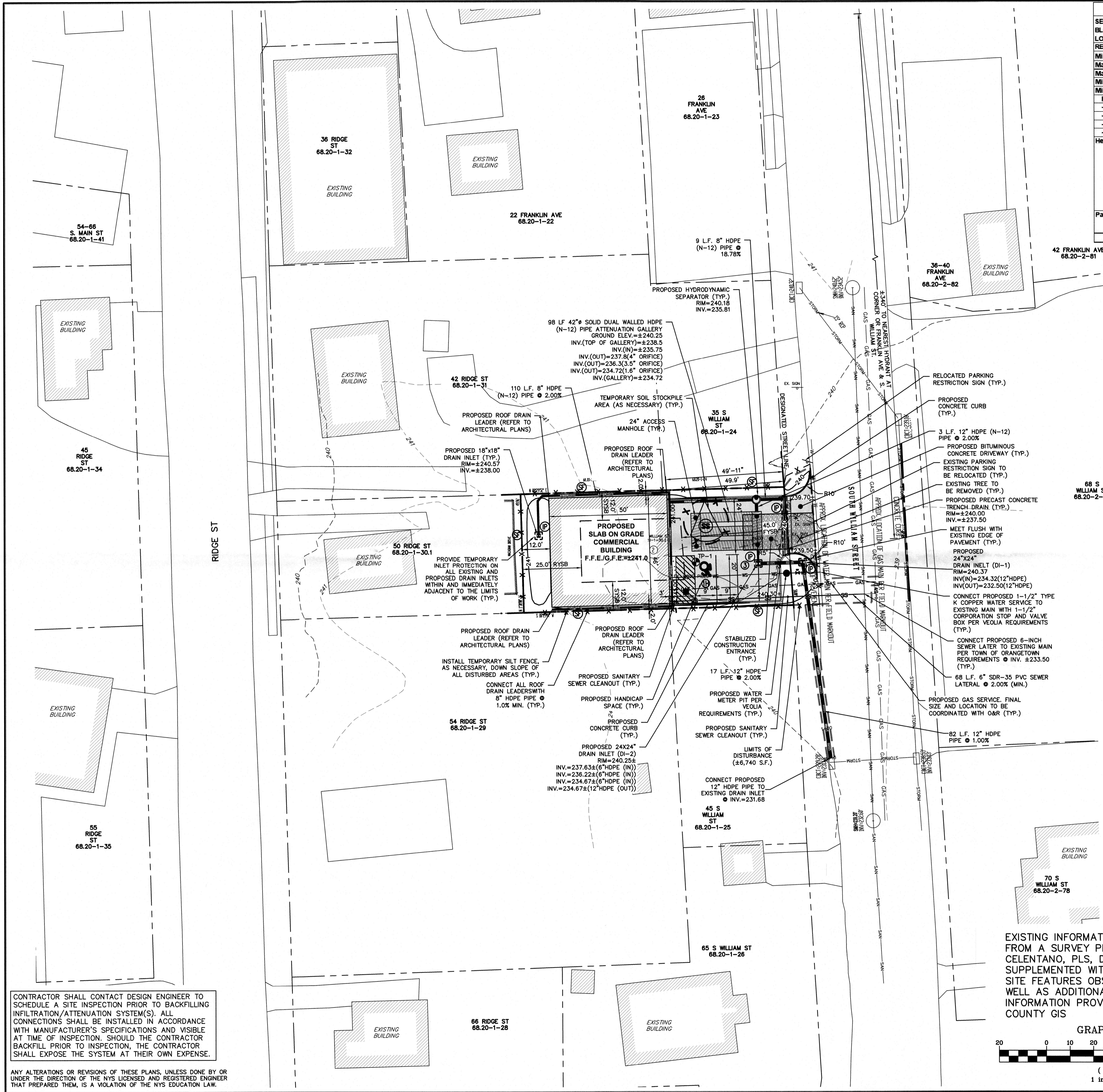
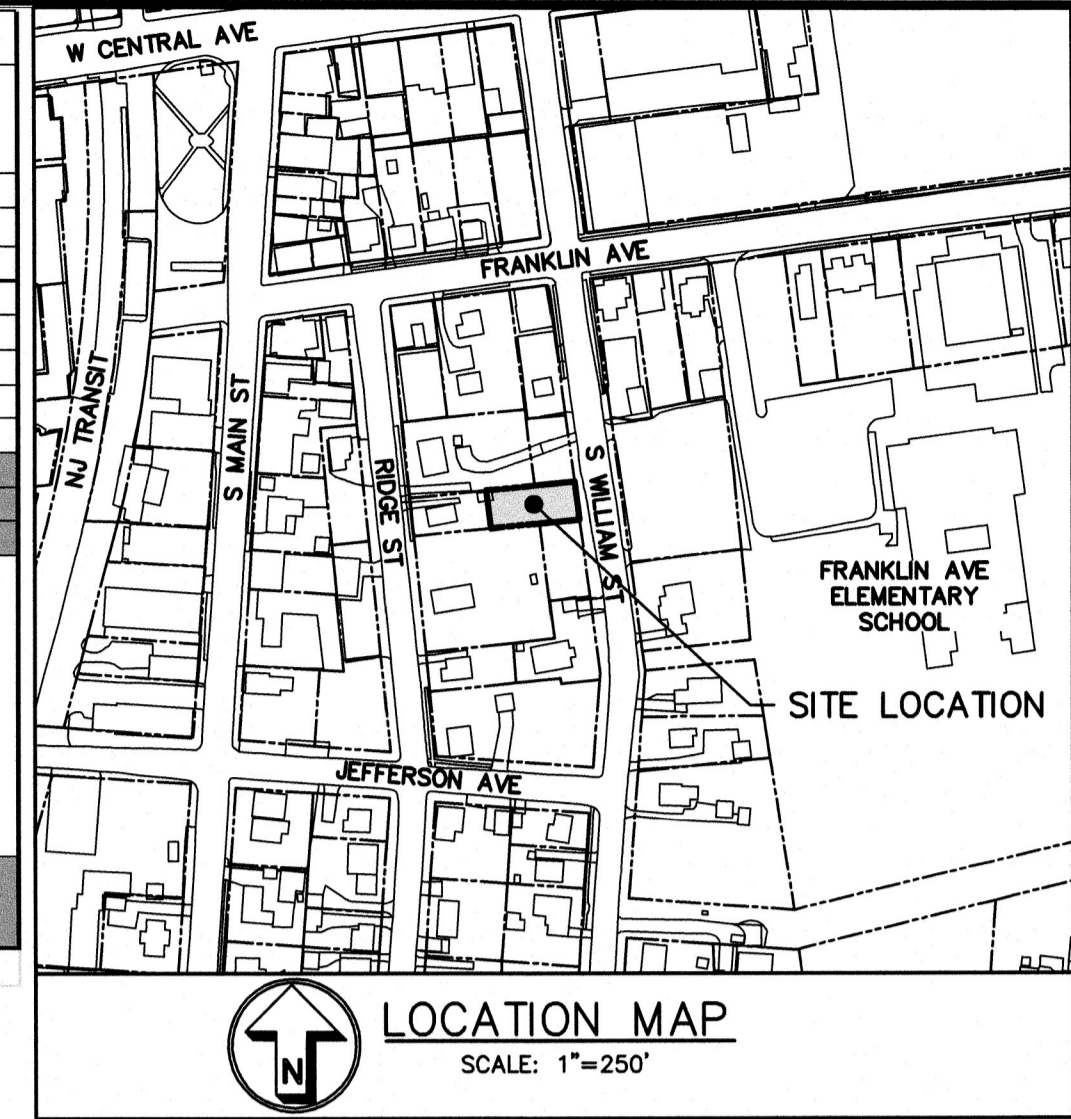


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No.	Description	Revisions	Date	PROJECT:	
				PROPOSED COMMERCIAL BUILDING 39 SOUTH WILLIAM STREET TOWN OF ORANGETOWN ROCKLAND COUNTY - NEW YORK	
				EXISTING CONDITIONS MAP	
				HUDSON ENGINEERING & CONSULTING, P.C. 45 Knollwood Road - Suite 201 Elmsford, New York 10523 T: 914-909-0420 F: 914-909-2086	
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE				Date: 10/9/23 Sheet: 1 Scale: 1" = 20' Designed By: D.C. Checked By: M.S. Sheet No. 5	
				 EX-1	



ZONING ANALYSIS TABLE		
SECTIONS: 7.370	DISTRICT:	
BLOCKS: 188	CS Zone - Group CS-FF	
LOTS: 73.1		
REGULATION	Required	Provided
Min. Lot Area (s.f.)	2,500	5,652.0
Max. Floor Area (s.f.)	-	4,496.0
Max. F.A.R.	1.0	0.8
Min. Lot Width (ft.)	25	50.0
Min. Yard Setbacks		
Principal Bldg.		
- Front (ft.)	0 or 45	49.9
- Side (ft.)	0/12	2.0
- Both Sides (ft.)	0/25	4.0
- Rear (ft.)	25	12.0
Height		29.0
	1 foot 4 inches from prop. line for building greater than 22 feet	
	- Required front yards and maximum building heights are subject to Sec. 5.111, with the designated street line.	
	49'-11" x 1'-4" = 66'-6 3/5"	
Parking Required:	Retail/Sales: 1 Space per 200 s.f.	4 Spaces
	Required: 4996/200 = 25 spaces	
Variance Required:		



TEST HOLE DATA:

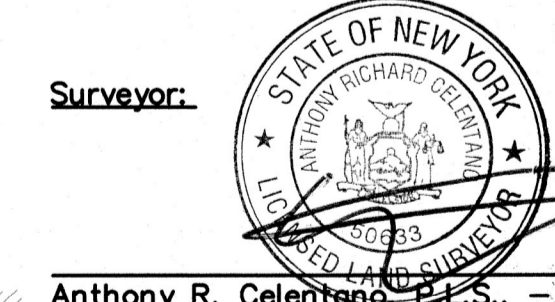
TEST HOLE #1
DEPTH - 90"
0-12" TOPSOIL
12-16" FILL
16-28" ORGANIC SOIL
28-90" MOD COMPACT SANDY LOAM
GROUNDWATER @ 30"
NO PERC. TEST COMPLETED

PROPERTY NOTES:

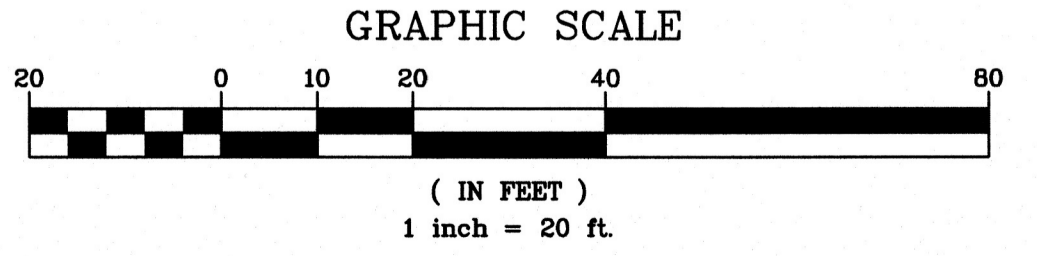
- OWNER: MR. EDWARD O'HARA, 941 MCLEAN AVENUE, YORKES, NY 10734
- PROJECT LOCATION: 39 S. WILLIAM STREET, ORANGETOWN, 10965
SECTION: 68.20 BLOCK: 1 LOT: 30.2

LEGEND

- PROPERTY LINE
- PROPOSED CONCRETE CURB
- PROPOSED ASPHALT DRIVEWAY
- PROPOSED CONCRETE WALKWAY
- PROPOSED CONTOUR
- PROPOSED SPOT GRADE
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SEWER SERVICE
- TEMPORARY SILT FENCE
- TEMPORARY CONSTRUCTION FENCE
- TEMPORARY SOIL STOCKPILE AREA
- STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED LIMIT OF DISTURBANCE



EXISTING INFORMATION SHOWN HEREON TAKEN FROM A SURVEY PREPARED BY ANTHONY R. CELENTANO, PLS. DATED MAY 15, 2023 AND SUPPLEMENTED WITH ADDITIONAL UTILITY AND SITE FEATURES OBSERVED IN THE FIELD, AS WELL AS ADDITIONAL OFFSITE TOPOGRAPHIC INFORMATION PROVIDED BY ROCKLAND COUNTY GIS



GENERAL NOTES:

- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE SUPERVISION OF THE CONSTRUCTION.
- NO CHANGES SHALL BE MADE TO THESE PLANS EXCEPT AS PER NYS LAW CHAPTER 987.
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO ACI, AISC, ZONING, AND THE NEW YORK STATE BUILDING CODE.
- ALL CONDITIONS, LOCATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
- ALL CHANGES MADE TO THE PLANS SHALL BE APPROVED BY THE ENGINEER AND ANY SUCH CHANGES SHALL BE FILED AS AMENDMENTS TO THE ORIGINAL BUILDING PERMIT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR THE ACTS AND OMISSIONS OF HIS EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
- SAFETY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL AGENCIES IN EFFECT DURING THE PERIOD OF CONSTRUCTION.
- THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL MAKE APPLICATION TO RECEIVE ALL NECESSARY PERMITS TO PERFORM THE WORK UNDER CONTRACT. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL BE LICENSED TO DO ALL WORK AS REQUIRED BY THE LOCAL, COUNTY, AND STATE AGENCIES WHICH MAY HAVE JURISDICTION OVER THOSE TRADES, AND SHALL PRESENT THE OWNER WITH COPIES OF ALL LICENSES AND INSURANCE CERTIFICATES.
- FINAL GRADING AROUND THE BUILDING AREA SHALL SLOPE AWAY FROM THE STRUCTURE.
- ALL WRITTEN DIMENSIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY SCALED DIMENSIONS.
- ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION, REMODELING AND DEMOLITION WORK. PROTECTION MUST BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDING SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.
- OWNER SHALL INSURE THAT THE INSURANCE PROVIDED BY THE CONTRACTOR HIRED TO PERFORM THE WORK SHALL BE ENDORSED TO NAME HUDSON ENGINEERING & CONSULTING, P.C., AND ANY DIRECTORS, OFFICERS, EMPLOYEES, SUBSIDIARIES, AND AFFILIATES, AS ADDITIONAL INSURED ON ALL POLICIES AND HOLD HARMLESS DOCUMENTS, AND SHALL STIPULATE THAT THIS INSURANCE IS PRIMARY, AND THAT ANY OTHER INSURANCE OR SELF-INSURANCE MAINTAINED BY HUDSON ENGINEERING & CONSULTING, P.C., SHALL BE EXCESS ONLY AND SHALL NOT BE CALLED UPON TO CONTRIBUTE WITH THIS INSURANCE. 150 ADDITIONAL INSURED ENDORSEMENT FORM NUMBER 020201185 UNDER COPIES OF THE INSURANCE POLICIES SHALL BE SUBMITTED TO HUDSON ENGINEERING & CONSULTING, P.C., FOR APPROVAL PRIOR TO THE SIGNING OF THE CONTRACT.
- INDUSTRIAL CODE RULE 753: THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS PRIOR TO THE START OF HIS OPERATIONS AND SHALL COMPLY WITH ALL THE LATEST INDUSTRIAL CODE RULE 753 REGULATIONS.
- THIS PLAN DOES NOT CONFLICT WITH THE COUNTY OFFICIAL MAP AND HAS BEEN APPROVED IN THE MANNER SPECIFIED BY SECTION 2391.06M OF THE GENERAL MUNICIPAL LAW OF THE STATE OF NEW YORK.
- THE TOWN OF ORANGETOWN SEWER INSPECTOR SHALL BE NOTIFIED AT LEAST 48-HOURS IN ADVANCE OF ANY WORK BEING DONE ON OR NEAR ANY OF THE EXISTING SANITARY SEWER MAINS AND/OR THE PROPOSED SANITARY BUILDING CONNECTION.

INSTALLATION & MAINTENANCE OF EROSION CONTROL:

- CONSTRUCTION SCHEDULE
NOTIFY APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 5 DAYS PRIOR TO START.
- EROSION CONTROL MEASURES
INSTALL ALL EROSION CONTROL MEASURES PRIOR TO START OF CONSTRUCTION. CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.
- INSPECTION BY MUNICIPALITY - MAINTENANCE (TO BE PERFORMED DURING ALL PHASES OF CONSTRUCTION)
AFTER ANY RAIN CAUSING RUNOFF, CONTRACTOR TO INSPECT HAYBALES, ETC. AND REMOVE ANY EXCESSIVE SEDIMENT AND INSPECT STOCKPILES AND CORRECT ANY PROBLEMS WITH SEED ESTABLISHMENT.
INSPECTIONS SHALL BE DOCUMENTED IN WRITING AND SUBMITTED TO THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION.
- INSPECTION BY MUNICIPALITY - FINAL GRADING
REMOVE UNNEEDED SUBGRADE FROM SITE.
CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.
- INSPECTION BY MUNICIPALITY - LANDSCAPING
SPREAD TOPSOIL EVENLY OVER AREAS TO BE SEEDDED. HAND RAKE LEVEL.
BROADCAST 1.25 LB. BAG OF JONATHAN GREEN "FASTGROW" MIX OR EQUAL OVER AREA TO BE SEEDDED. APPLY STRAW MULCH AND WATER WITHIN 2 DAYS OF COMPLETION OF TOPSOILING. CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.
- INSPECTION BY MUNICIPALITY - FINAL LANDSCAPING
GRASS ESTABLISHED.
CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.
- INSPECTION BY MUNICIPALITY - FINAL INSPECTION
ALL EROSION CONTROL MEASURES REMOVED AND GRASS ESTABLISHED.
CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.

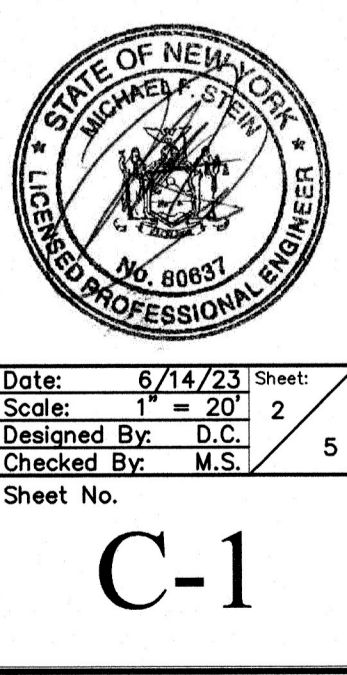
CONTRACTOR SHALL CONTACT DESIGN ENGINEER TO SCHEDULE A SITE INSPECTION PRIOR TO BACKFILLING INFILTRATION/ATTENUATION SYSTEM(S). ALL CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND VISIBLE AT TIME OF INSPECTION. SHOULD THE CONTRACTOR BACKFILL PRIOR TO INSPECTION, THE CONTRACTOR SHALL EXPOSE THE SYSTEM AT THEIR OWN EXPENSE.

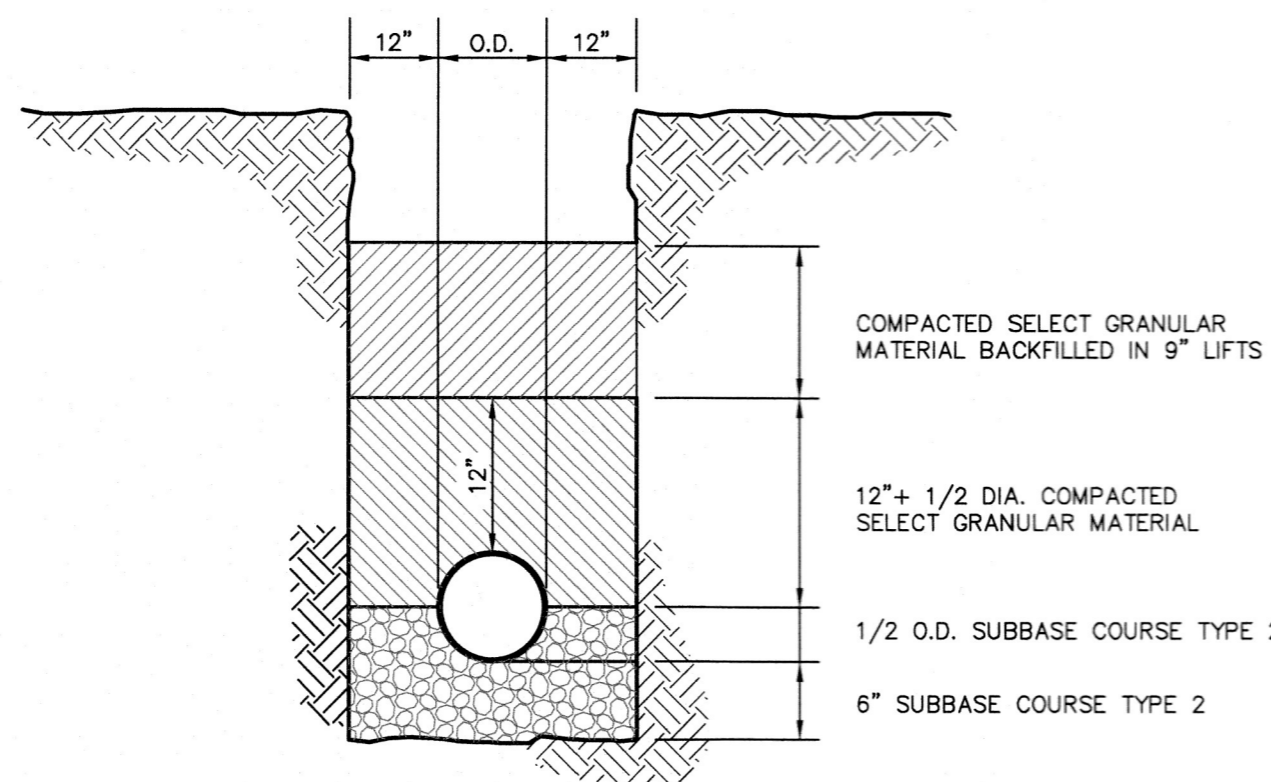
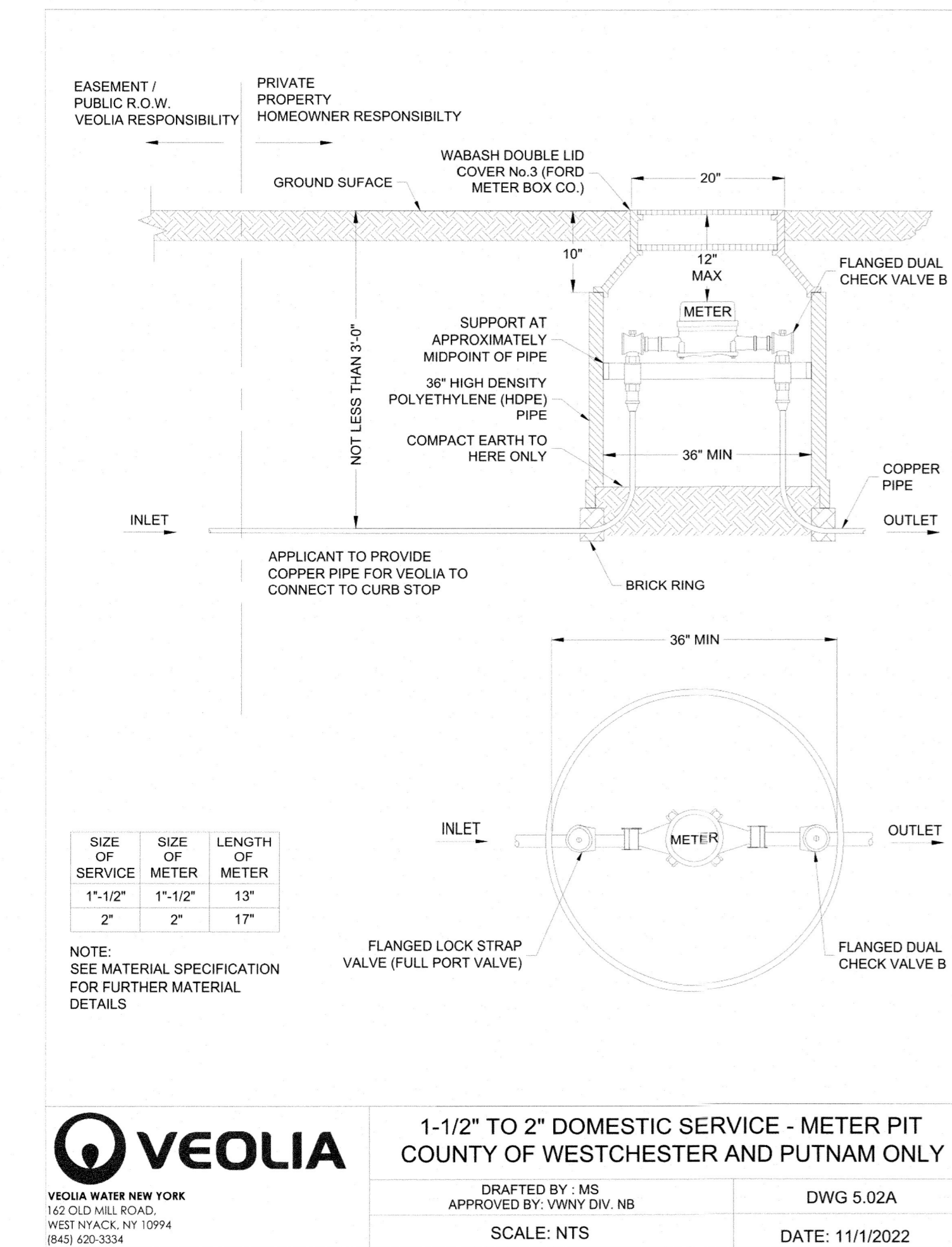
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PROJECT:
PROPOSED COMMERCIAL BUILDING
39 SOUTH WILLIAM STREET
TOWN OF ORANGETOWN
ROCKLAND COUNTY - NEW YORK

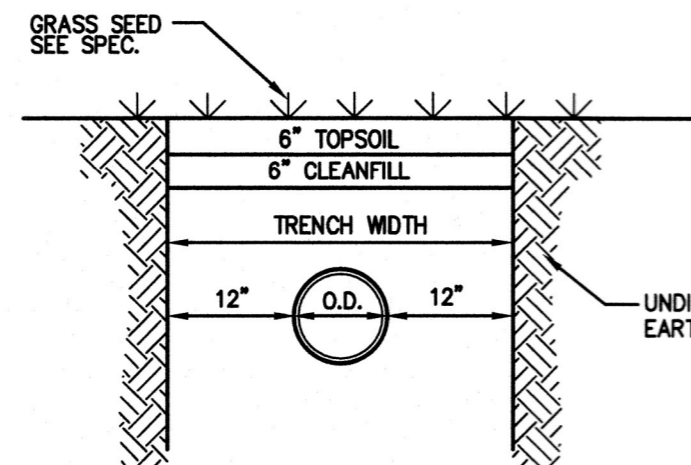
HEC
HUDSON
ENGINEERING
CONSULTING, P.C.
45 Knollwood Road, Suite 201
Elmford, New York 10523
T: 914-909-0420
F: 914-909-0086
© 2023

DATE: 6/14/23
SCALE: 1" = 20'
DESIGNED BY: D.C.
CHECKED BY: M.S.
SHEET NO. C-1

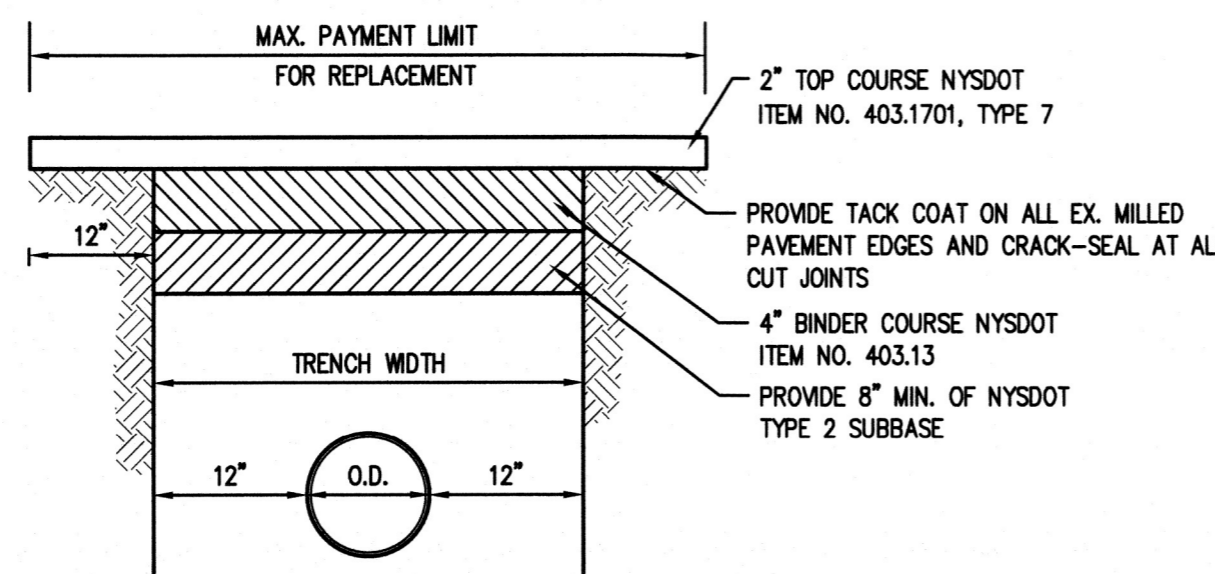




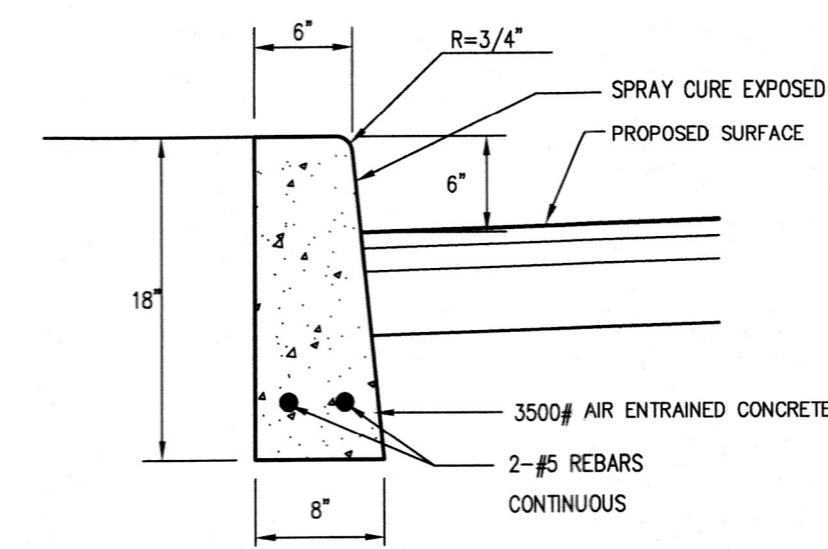
TRENCH BEDDING



SHOULDER RESTORATION (N.T.S.)

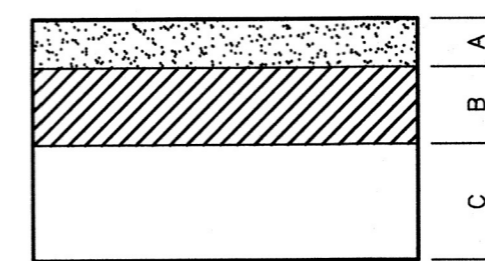


ASPHALTIC MACADAM PAVEMENT REPLACEMENT (N.T.S.)

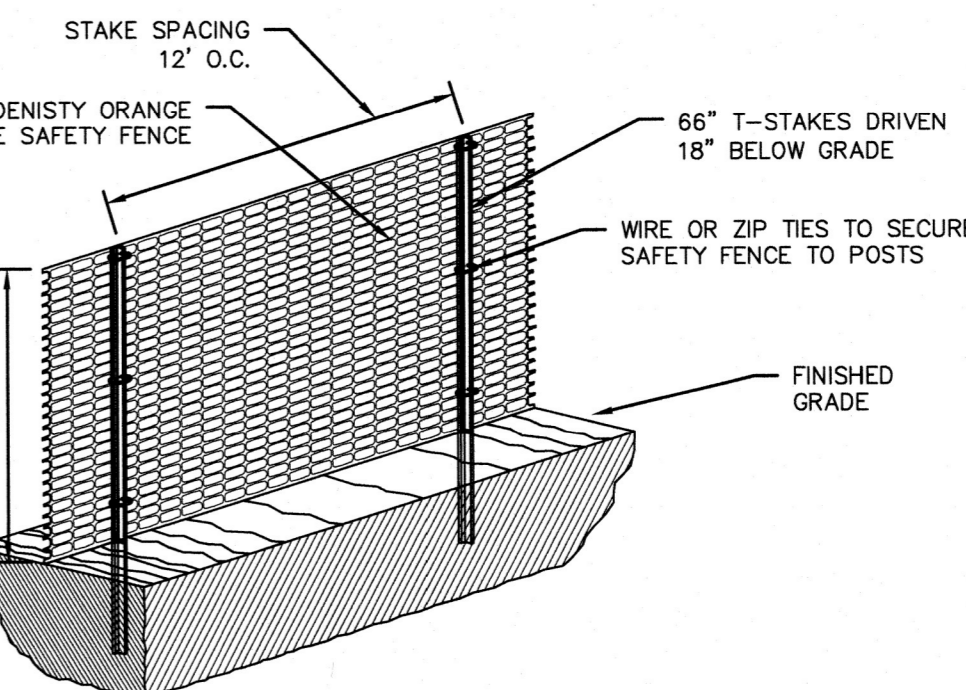
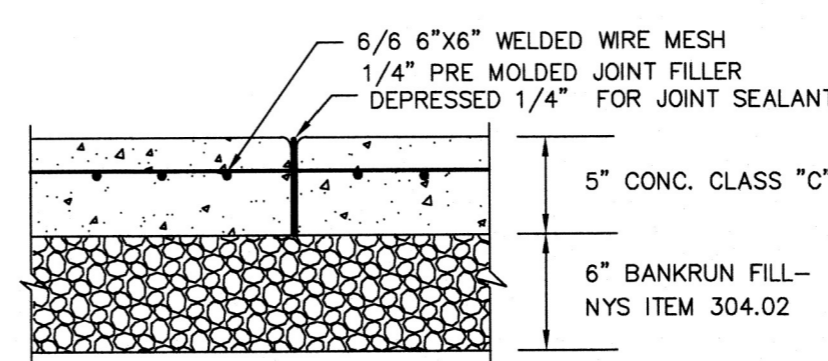


NOTE:
EXPANSION JOINTS TO BE INSTALLED EVERY 10 FEET.

CONCRETE CURB



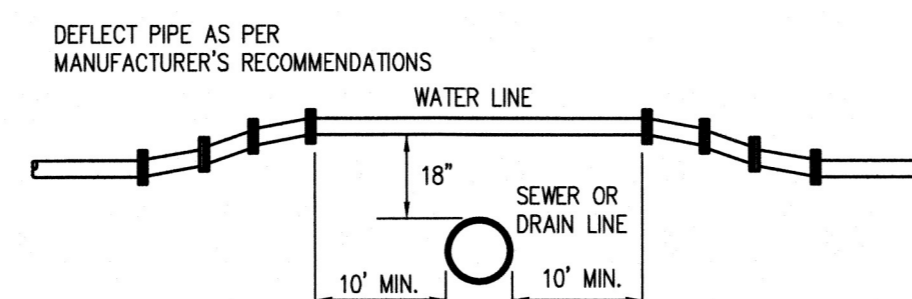
ROADWAY PAVEMENT SECTION



CONSTRUCTION FENCE

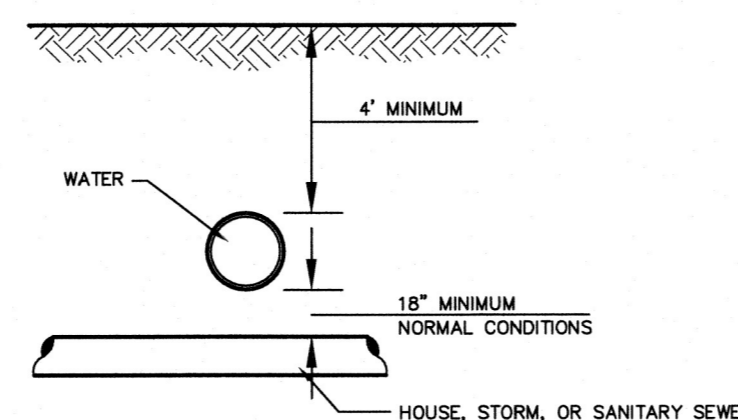
NOTE:
ALL JOINTS TO BE FLUSH
PROVIDE 1/4\"/>

CONCRETE SIDEWALK



NOTE:
FOR ANY CONDITIONS OTHER THAN SHOWN ABOVE THE FOLLOWING REQUIREMENTS SHALL BE MET. THE JOINTS OF THE SANITARY SEWER OR STORM DRAIN SHALL BE A MINIMUM OF 10' FROM THE POINT OF CROSSING AND THE SANITARY SEWER SHALL BE CLASS 100 PRESSURE PIPE & THE STORM DRAIN SHALL BE DUCTILE IRON.

CROSSING OF WATER LINE OVER SANITARY SEWER OR STORM DRAIN

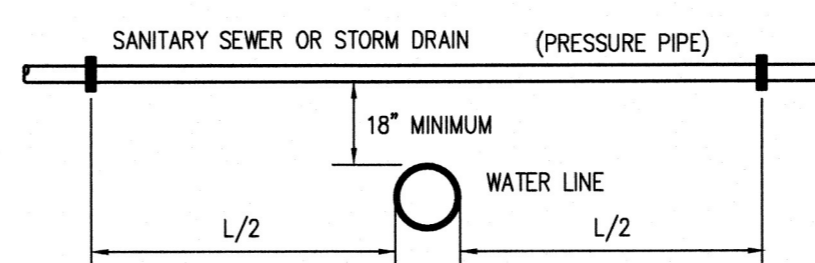


UNUSUAL CONDITIONS
WATER MAINS PASSING UNDER SEWERS SHALL HAVE A VERTICAL CLEARANCE OF 18\"/>

SEPARATION OF WATER MAINS AND SEWER CROSSINGS

NOTE:
WHERE A 10' HORIZONTAL SEPARATION CANNOT BE OBTAINED DUE TO FIELD CONDITIONS, THE VERTICAL CLEAR DISTANCE SHALL BE A MINIMUM OF 18\"/>

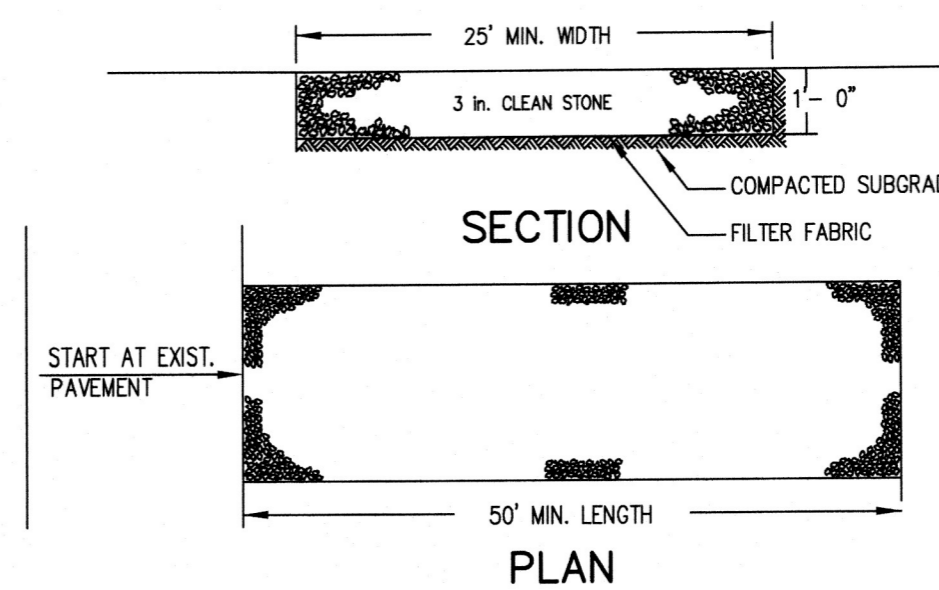
SEPARATION OF WATER MAINS AND SEWERS - PARALLEL INSTALLATION



NOTE:
WHERE WATER LINE PASSES BENEATH SEWER LINE OR STORM DRAIN, THE JOINTS OF THE PIPE SHALL BE A MIN. OF 10' FROM THE POINT OF CROSSING AND THE SANITARY SEWER SHALL BE CLASS 100 PRESSURE PIPE & THE STORM DRAIN SHALL BE DUCTILE IRON PIPE.

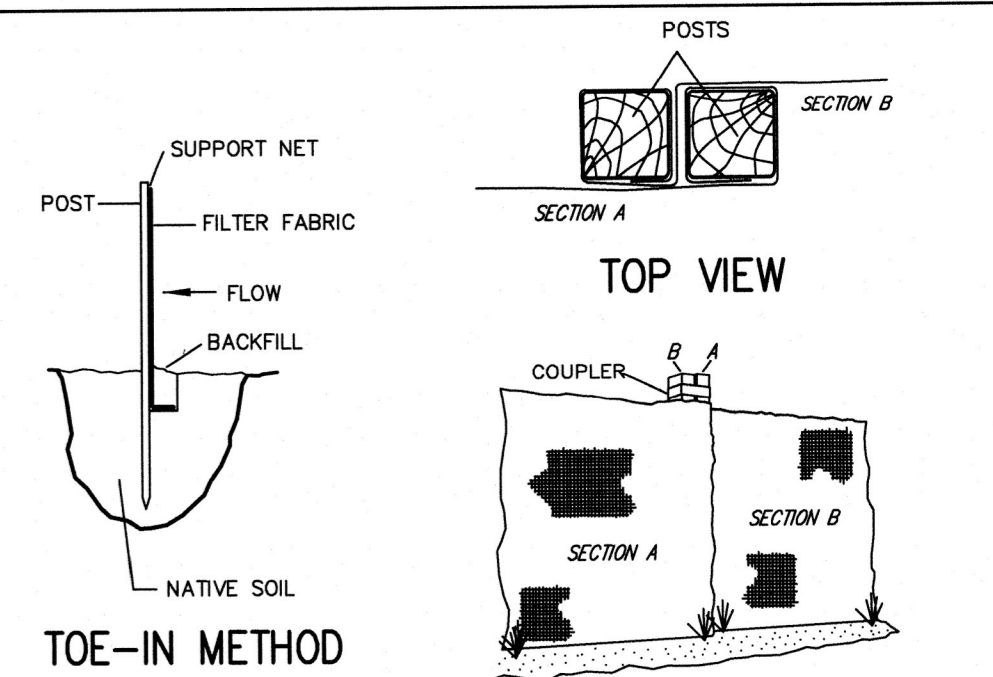
CROSSING OF WATER LINE UNDER SANITARY SEWER OR STORM DRAIN

Stabilized Construction Entrance



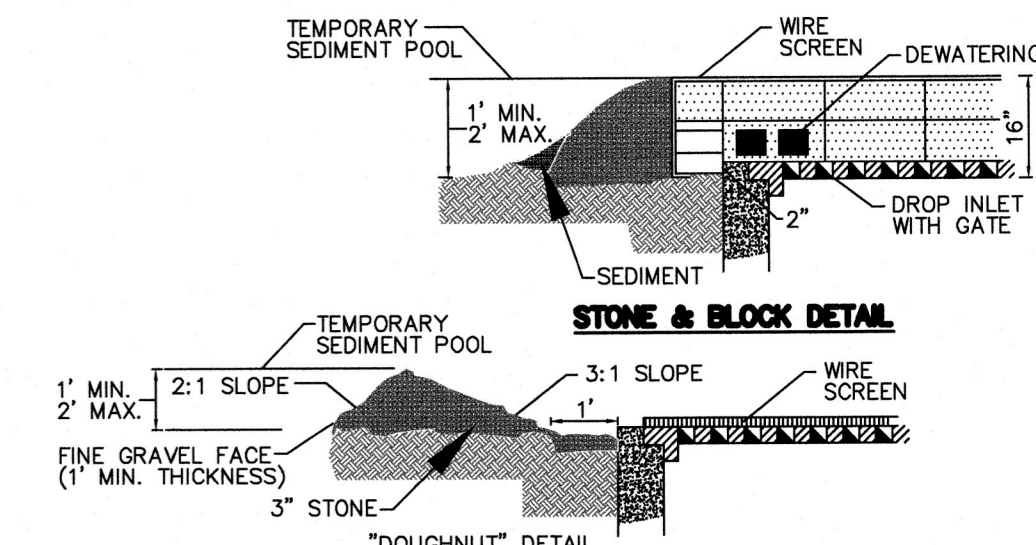
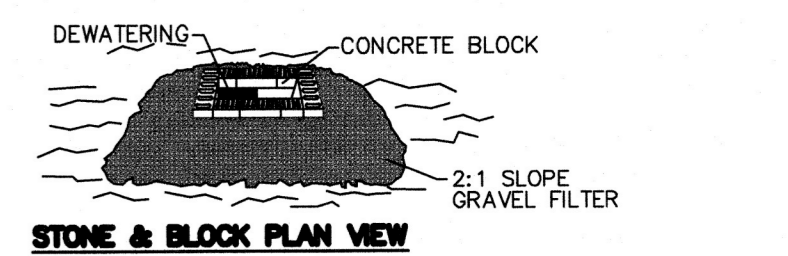
INSTALLATION NOTES:
1. STONE SIZE - USE 3\"/>

Silt Fence



INSTALLATION NOTES:
1. EXCAVATE A 4\"/>

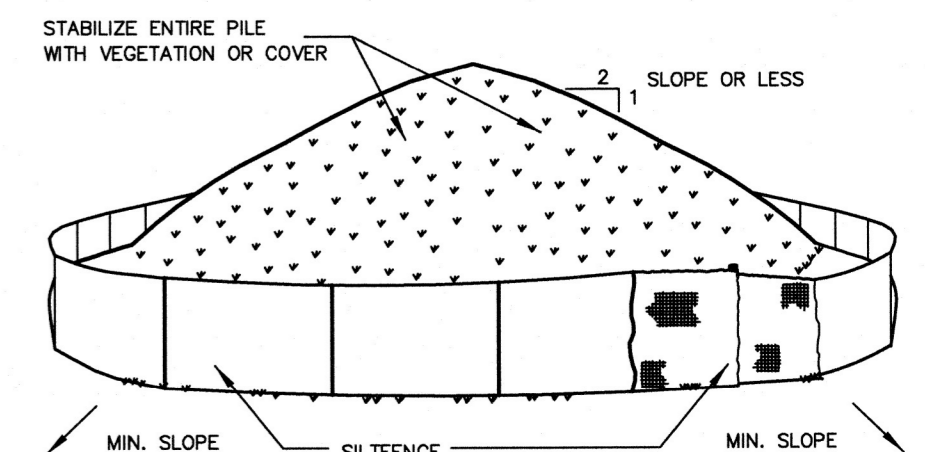
Stone & Block Drop Inlet Protection



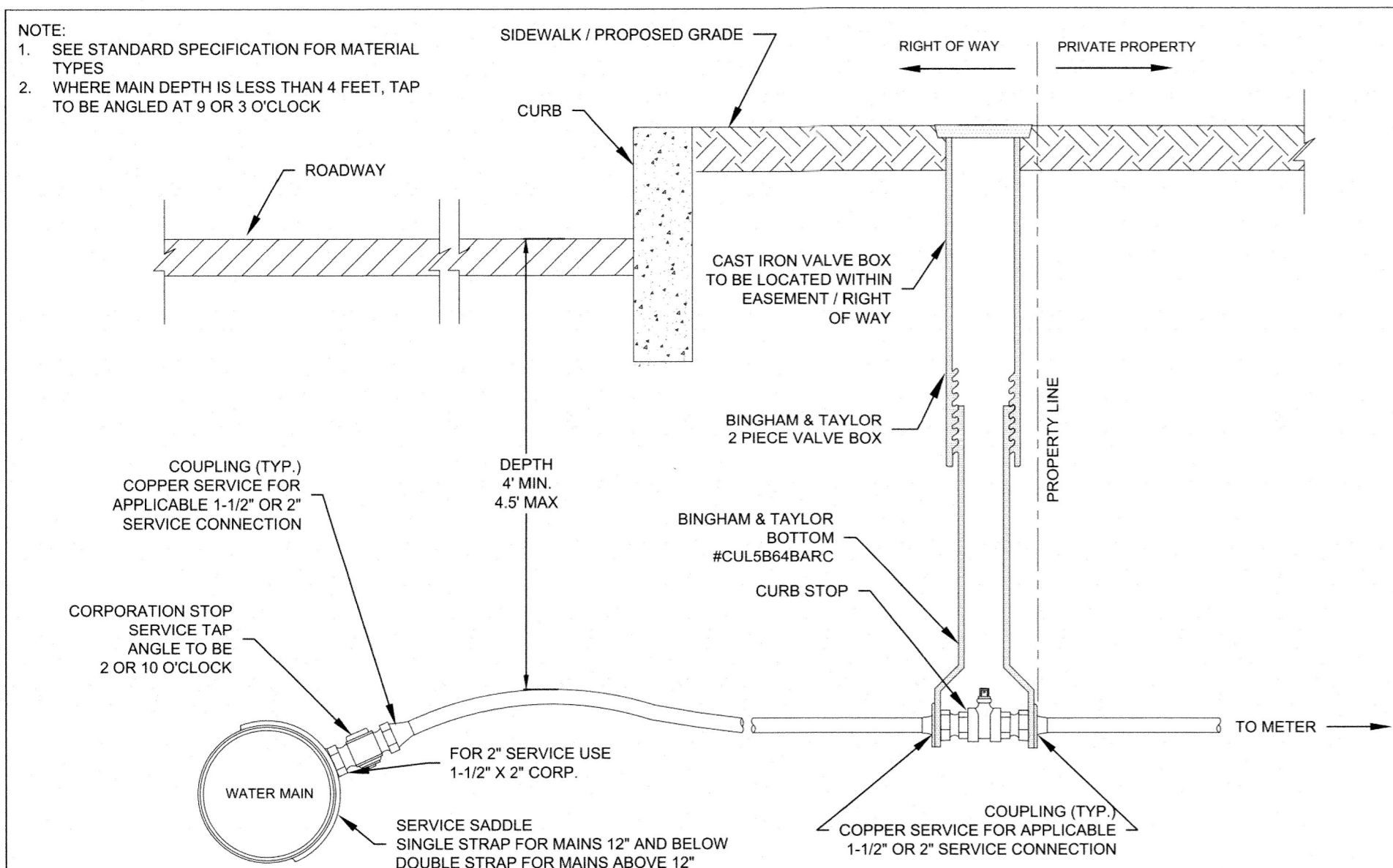
CONSTRUCTION SPECIFICATION

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARECLOTH OR 1/2\"/>

Soil Stockpiling



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



VEOLIA	SPECIFICATION DETAILS	DOMESTIC SERVICE CONNECTION 1-1/2" & 2" SERVICE CONNECTION
VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334	INSTALLATION OF WATER SYSTEMS APPURTENANCES	DRAFTED BY: MS APPROVED BY: VVNY DIV. NB SCALE: NTS DATE: 11/1/2022

DETAIL - CONNECTION 8" PVC TO 4" SDR-35 SANITARY SEWER SERVICE LINES

NOTE: IF WALL EXISTS AT PROPERTY LINE; EXTEND SERVICE LINE UNDER WALL.

PROJECT:
PROPOSED COMMERCIAL BUILDING
39 SOUTH WILLIAM STREET
TOWN OF ORANGETOWN
ROCKLAND COUNTY - NEW YORK

DETAILS

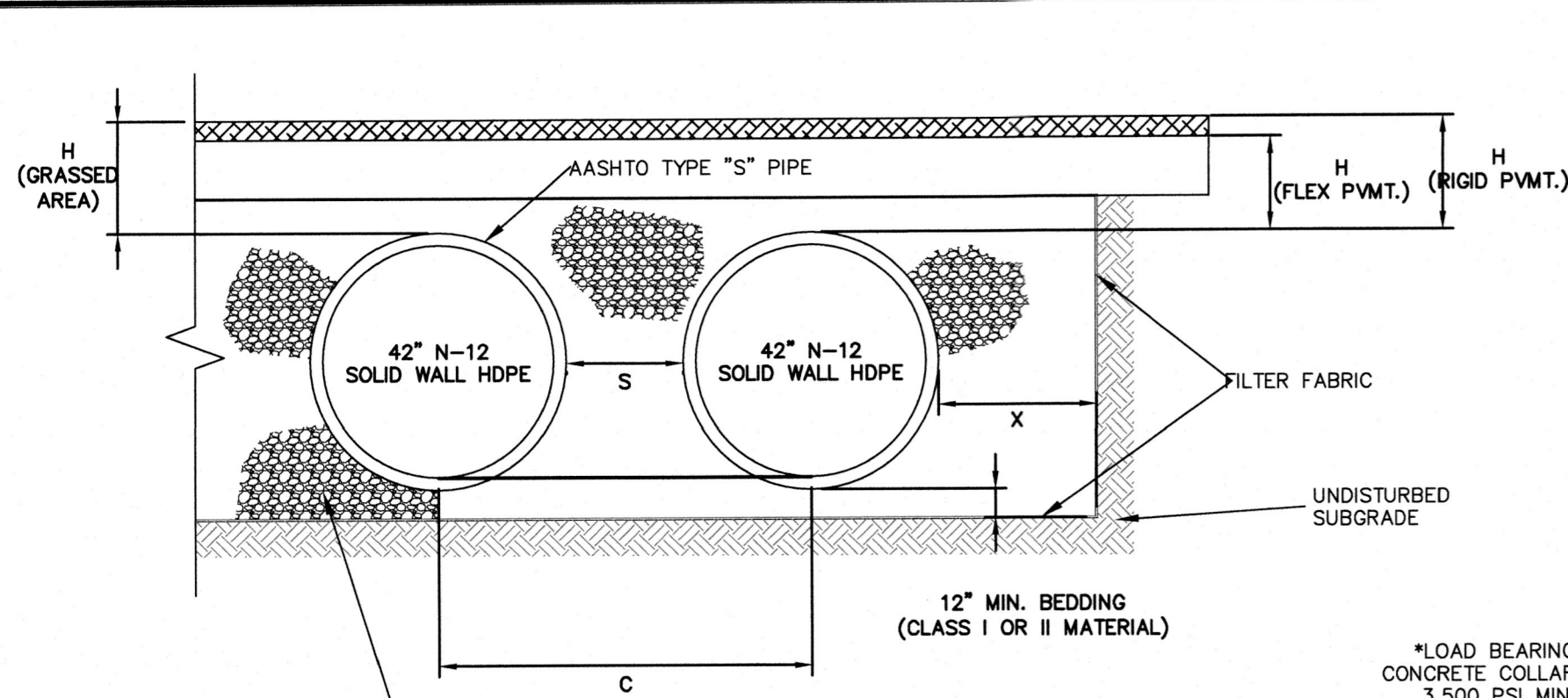
HUDSON ENGINEERING & CONSULTING, P.C.
45 Knollwood Road - Suite 201
Elmsford, New York 10523
T: 914-909-0420
F: 914-360-2086
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Date: 6/14/23
Scale: N.T.S.
Designed By: D.G.
Checked By: M.S.
Sheet No. 3

C-2

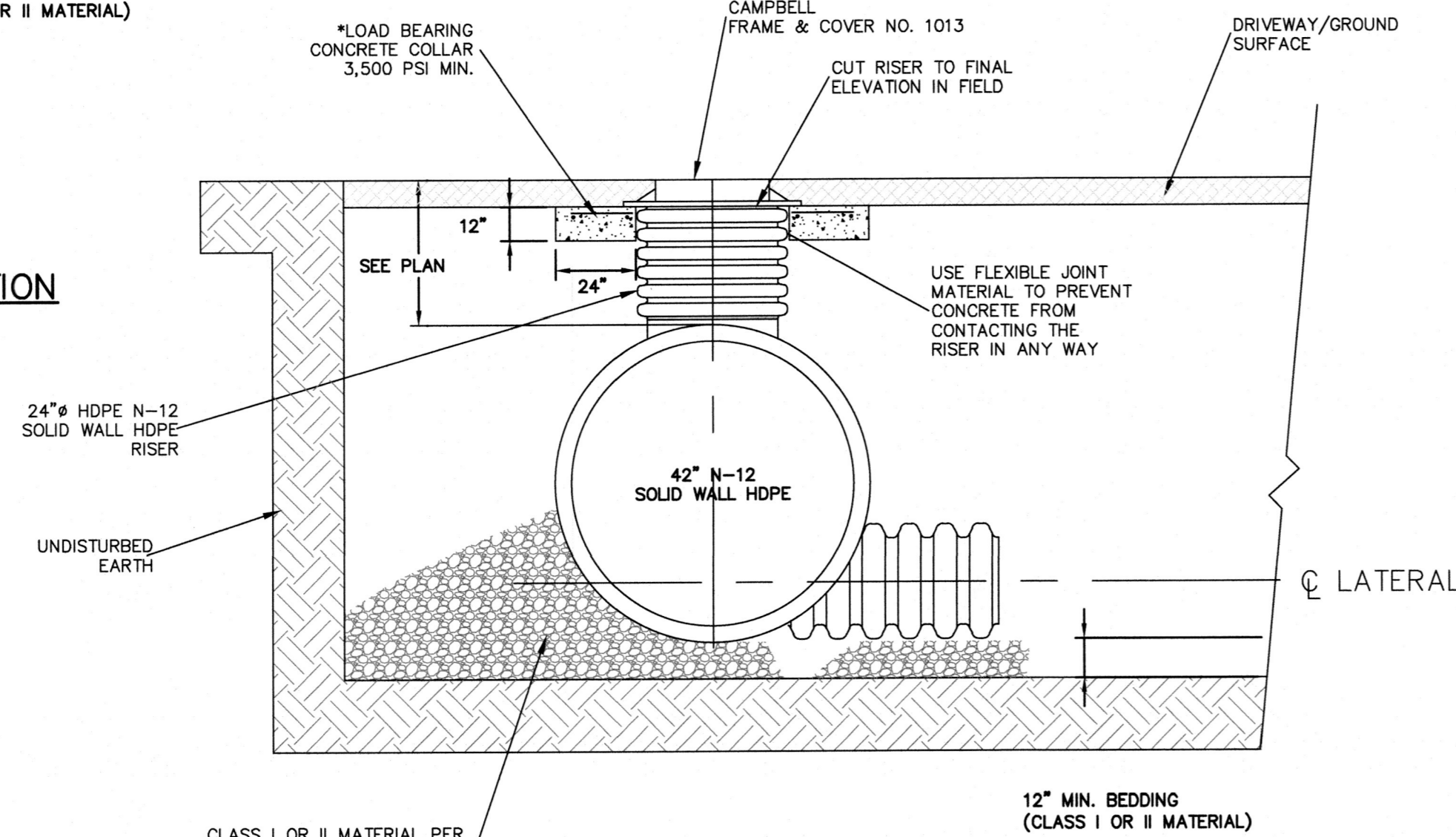
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ATTENUATION GALLERY SECTION

NOTES:

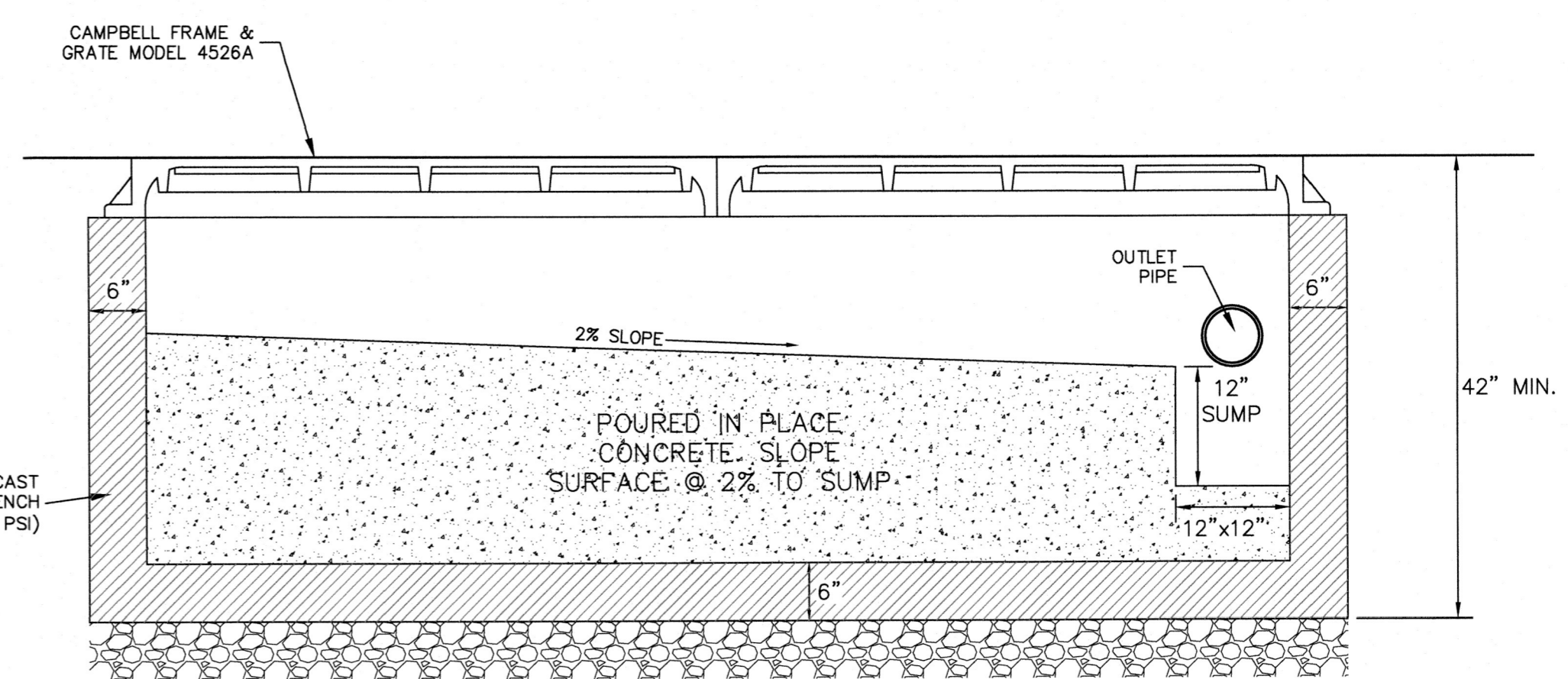
- ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- THE ATTENUATION/EXFILTRATION GALLERY SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION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



ACCESS MANHOLE STRUCTURE

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

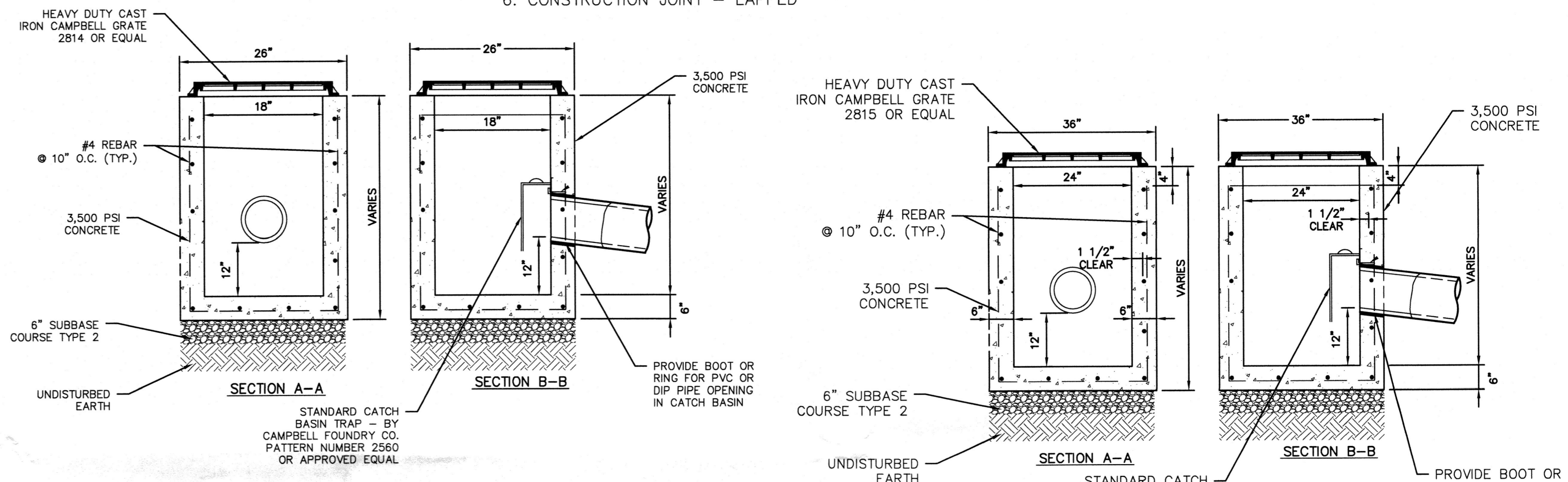
NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "S"	TYPICAL SPACING "C"	TYPICAL SIDE WALL "X"	H (NON-TRAFFIC)	H (TRAFFIC)
12"	14.5"	11"	25.4"	8"	12"	12"
15"	18"	12"	28.9"	8"	12"	12"
18"	21"	17"	33.9"	9"	12"	12"
24"	28"	13"	40.7"	10"	12"	12"
30"	36"	18"	53.1"	18"	12"	12"
36"	42"	22"	63"	18"	12"	12"
42"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



CONCRETE TRENCH DRAIN

NOTES:

- CONCRETE - 3,500 PSI MINIMUM STRENGTH @ 28 DAYS
- STEEL REINFORCEMENT - ASTM A-615, # 4 REBAR, GRADE 60
- COVER TO STEEL - 1 1/2" MINIMUM
- DESIGN LOADING - AASHTO HS20-44
- EARTH COVER - 0 TO 5 FEET
- CONSTRUCTION JOINT - LAPPED



18"x18" PRECAST DRAIN INLET

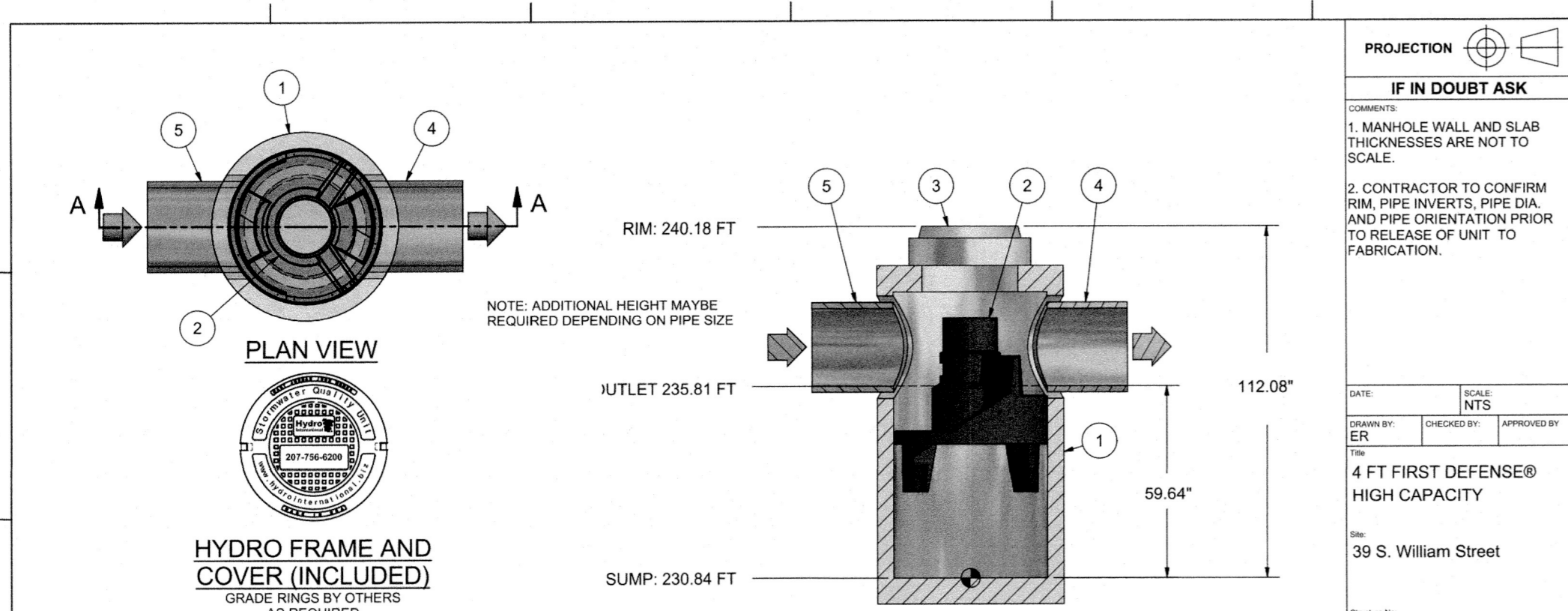
NOTES:

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

24"x24" PRECAST DRAIN INLET

NOTES:

- CONCRETE - 3,500 PSI MINIMUM STRENGTH @ 28 DAYS
- STEEL REINFORCEMENT - ASTM A-615, # 4 REBAR, GRADE 60
- COVER TO STEEL - 1 1/2" MINIMUM
- DESIGN LOADING - AASHTO HS20-44
- EARTH COVER - 0 TO 5 FEET
- CONSTRUCTION JOINT - LAPPED



FIRST DEFENSE® HIGH CAPACITY DESIGN SUMMARY

Hydro International

PROJECT INFORMATION

Reference: HS-1/23_12_3198

Site: 39 S. William Street

Designer: Daniel Collins

Date: 10/10/2023 1:58 PM

DESIGN INPUTS

Regulatory Agency: 80% TSS (110 um)

Water Quality Flow Rate (cfs): 1.13

DESIGN OUTPUTS

Product: 4-4 DIAMETER FIRST DEFENSE HIGH CAPACITY

Unit Reference: FD-4HC

* Approved for use in 80% TSS (110 um)

UNIT WEIGHTS AND DIMENSIONS

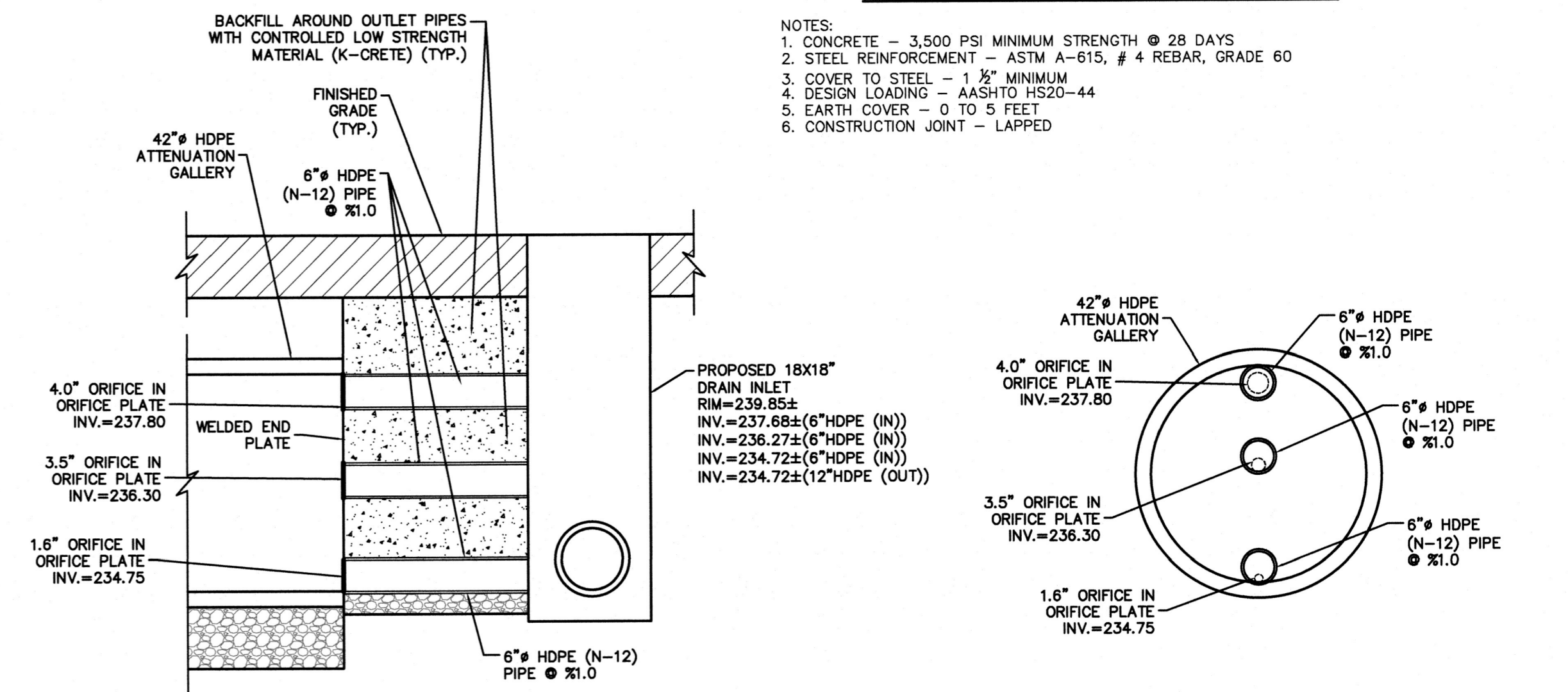
(A) Unit Size (ft)	4.00
(B) Inlet Pipe Size (in)	8
(C) Outlet Pipe Size (in)	12
(D) Unit Depth (ft)	240.18
Inlet Invert Height (ft)	235.81
Outlet Invert Height (ft)	235.81

PERFORMANCE AND HYDRAULICS

Max. Treatment Flow Rate (cfs)	1.88
Hydraulic Capacity Flow Rate (cfs)	1.13
Typical Operating Headloss (in)	0
Maximum Headloss (in)	0

STORAGE

(C) Oil Storage Capacity (gal)	191
(E) Min Sediment Storage Capacity (yd³)	0.7



OUTLET DETAIL

PROJECT:

PROPOSED COMMERCIAL BUILDING
39 SOUTH WILLIAM STREET
TOWN OF ORANGETOWN
ROCKLAND COUNTY - NEW YORK

DATE: 10/20/23

SCALE: N.T.S.

DESIGNED BY: D.C.

CHECKED BY: M.S.

SHEET NO. 4

DATE: 10/20/23

SCALE: N.T.S.

DESIGNED BY: D.C.

CHECKED BY: M.S.

SHEET NO. 4

DETAILS

HUDSON ENGINEERING

CONSULTING, P.C.

48 Knollwood Road, Suite 201
Elmford, New York 10523

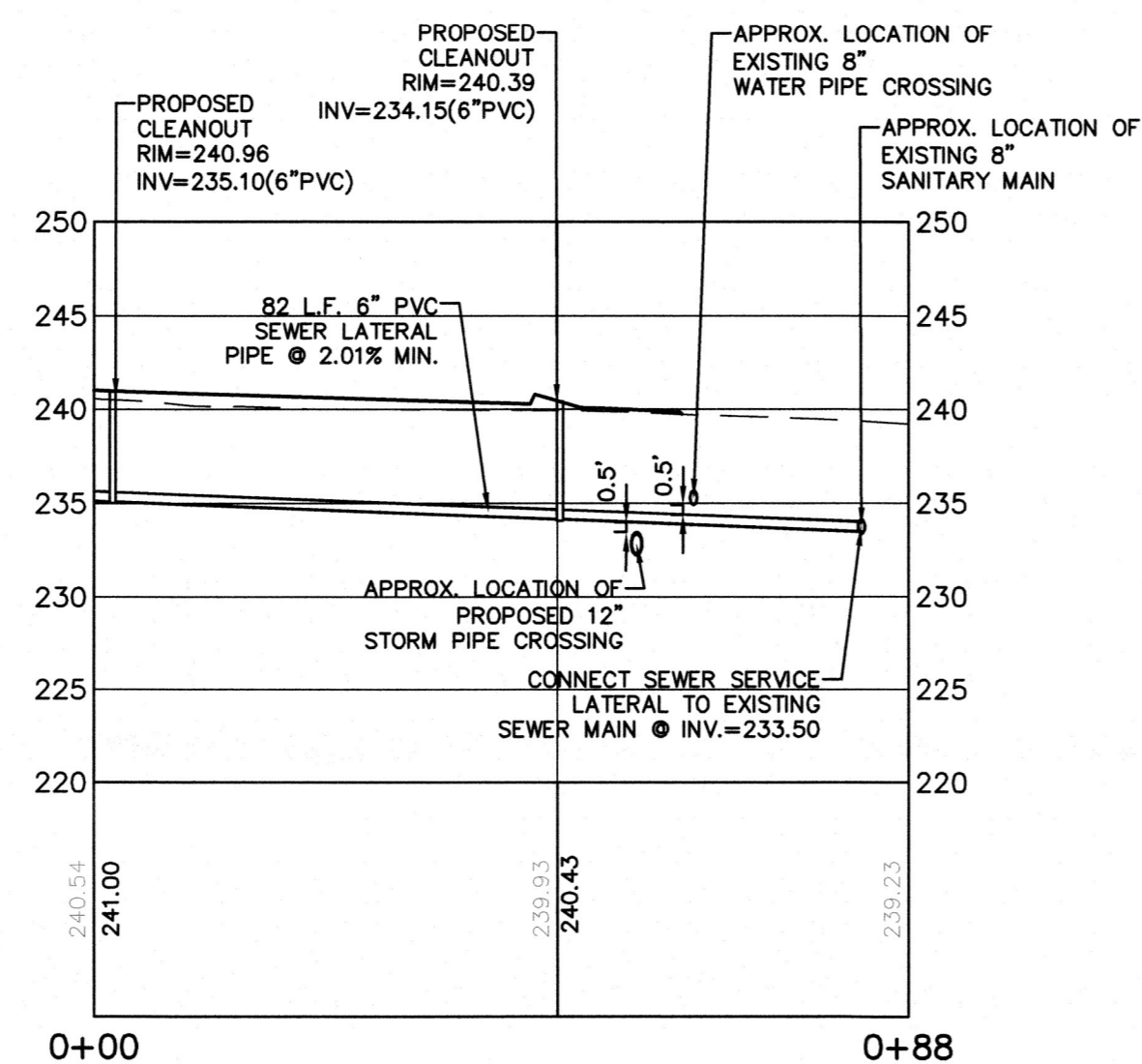
T: 914-899-0420
F: 914-899-2086

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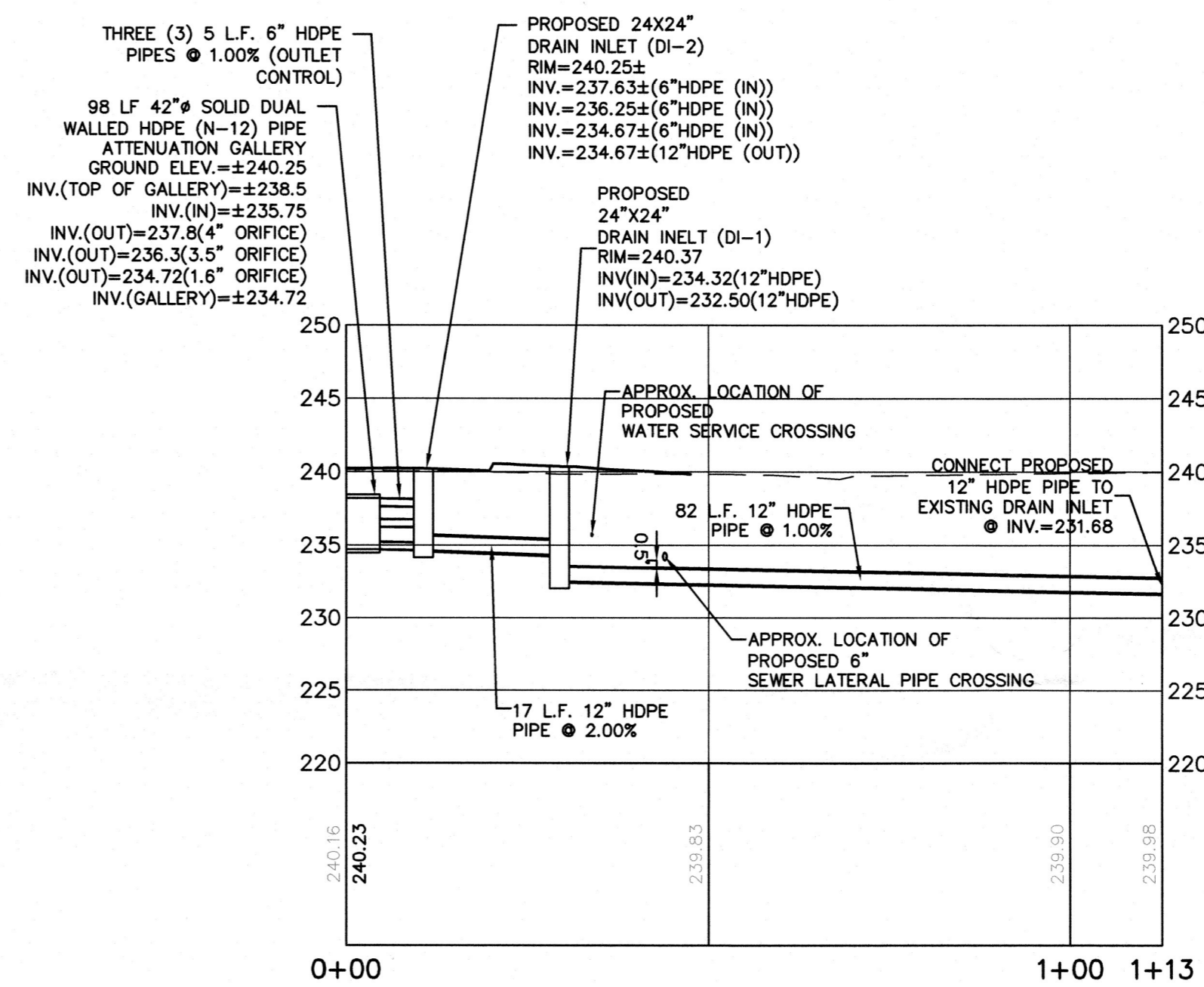
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE

HEC

C-3



SEWER LATERAL PROFILE
(STA. 0+00 TO STA. 0+88)
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'



STORMWATER PROFILE
(STA. 0+00 TO STA. 1+13)
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

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

PROJECT: PROPOSED COMMERCIAL BUILDING 39 SOUTH WILLIAM STREET TOWN OF ORANGETOWN ROCKLAND COUNTY - NEW YORK		
UTILITY PROFILES		
HEC HUDSON ENGINEERING & CONSULTING, P.C. 48 Knollwood Road - Suite 201 Elmford, New York 10523 T: 914-909-0420 F: 914-960-2086		Date: 10/20/23 Scale: N.T.S. Designed By: D.C. Checked By: M.S. Sheet No. 5
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEER'S SEAL & SIGNATURE		C-4