

GENERAL NOTES:

1. SITE INFORMATION TAKEN FROM SITE SURVEY CONDUCTED BY GEORGE J. MOTTARELLA, PE, LS, PC, DATED 7-21-2021.
2. HORIZONTAL CONTROL IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83). VERTICAL CONTROL IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. CONTRACTOR SHALL VERIFY FIELD CONDITIONS BEFORE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AND DIMENSIONS WHERE NEW WORK WILL MATCH EXISTING. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO THE COMMENCEMENT OF WORK.
4. CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FROM THE APPROPRIATE AUTHORITIES, DEPARTMENTS, AND/OR AGENCIES HAVING JURISDICTION PRIOR TO COMMENCING WORK.
5. CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGE TO EXISTING PAVEMENT, TREES, VEGETATION, STRUCTURES, AND UTILITIES NOT INDICATED TO BE DEMOLISHED OR REMOVED. ANY DAMAGE TO EXISTING PAVEMENT, TREES, VEGETATION, STRUCTURES, AND UTILITIES NOT INDICATED TO BE DEMOLISHED OR REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE GIS INFORMATION, RECORD DRAWINGS, AND SITE SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION AND TO AVOID DAMAGE TO THEM. THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK AT PHONE NUMBER 811 OR 1-800-962-7962 TO REQUEST UNDERGROUND UTILITY LOCATION MARK-OUT AT LEAST TWO (2) WORKING DAYS BUT NO MORE THAN TEN (10) WORKING DAYS PRIOR TO BEGINNING EXCAVATION, INCLUDING SOIL DRILLING. THE CONTRACTOR SHALL ALSO CONTACT AND REQUEST UTILITY LOCATION MARK-OUT FROM BURIED UTILITY OWNERS WITH UTILITIES ON THE PROJECT SITE THAT ARE NOT PARTICIPANTS OF DIG SAFELY NEW YORK.
7. WHERE PROPOSED WORK IS IN THE VICINITY OF UTILITY POLES, SUCH THAT SUPPORT OF THE POLE(S) WILL BE REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY OF THE WORK. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE UTILITY FOR SUPPORT OF THE POLE.
8. WHERE OVERHEAD POWER LINES ARE PRESENT, CONTRACTOR MUST CONTACT THE UTILITY PRIOR TO CONSTRUCTION ACTIVITIES TO DETERMINE THE MINIMUM REQUIRED EQUIPMENT CLEARANCE (MEC) DISTANCE BASED UPON LINE STRENGTH.
9. DURING STRUCTURAL EXCAVATION AND PLACEMENT OF UTILITIES THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS, INCLUDING BUT NOT LIMITED TO 29 CFR 1926 SUBPART P EXCAVATIONS AND NYS CR 753 DIG SAFELY NY REGULATIONS, AND SHALL SUBMIT TO THE ENGINEER FOR APPROVAL SHEET PILING, SHORING AND/OR BRACING DESIGNS, PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK, AS MAY BE NECESSARY TO COMPLY WITH THESE REGULATIONS.
10. GROUNDWATER FROM ALL DEWATERING OPERATIONS SHALL BE DISCHARGED THROUGH AN APPROVED SEDIMENT FILTERING DEVICE TO AN ENVIRONMENTALLY ACCEPTABLE LOCATION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER.
11. ALL TEMPORARY FACILITIES ARE SUBJECT TO THE SAME HEALTH AND SAFETY REQUIREMENTS AS PERMANENT FACILITIES, AS SPECIFIED IN THE CONTRACT DOCUMENTS AND HEALTH SAFETY PLAN (HASP).
12. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS GENERATED DURING THE PROJECT OFF SITE AT A PROPERLY PERMITTED DISPOSAL FACILITY.
13. CONTRACTOR SHALL MAKE EVERY EFFORT TO SAVE AND MAINTAIN ALL PROPERTY IRONS, MONUMENTS, OTHER PERMANENT POINTS AND LINES OF REFERENCE AND CONSTRUCTION STAKES. A STATE OF NEW YORK REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE SHALL REPLACE PROPERTY IRONS, MONUMENTS, AND OTHER PERMANENT POINTS OF REFERENCE DESTROYED BY THE CONTRACTOR.
14. CONTRACTOR IS REQUIRED TO UTILIZE HAND DIGGING OR HYDROEXCAVATION TO A DEPTH OF 4 FEET IN AREAS WHERE UNDERGROUND UTILITIES ARE PRESENT.

ABBREVIATIONS

ACF	ANNUAL CHANCE FLOOD	FP	FIRE PROTECTION	OF	OVERFLOW	SAN	SANITARY DRAIN
BFV	BUTTERFLY VALVE	FUD	FOUNDATION UNDERDRAIN	OHE	OVERHEAD ELECTRIC	SD	STORM DRAIN
CL	CENTER LINE	G	GAS	PL	PROPERTY LINE	SHWT	SEASONALLY HIGH WATER TABLE
CMP	CORRUGATED METAL PIPE	GD	GALLERY DRAIN	PP	POWER POLE	TP	TEST PIT
DIP	DUCTILE IRON PIPE	GV	GATE VALVE	PPE	POLYPROPYLENE	UGE	UNDERGROUND ELECTRIC
EOP	EDGE OF PAVEMENT	LF	LINEAR FEET	PVC	POLYVINYL CHLORIDE	W	WATER
FDC	FIRE DEPARTMENT CONNECTION	LOC	LIMITS OF CONSTRUCTION	PW	POTABLE WATER	WCA	WESTCHESTER COUNTY AIRPORT
FM	FORCE MAIN	LP	LIGHT POLE	RCP	REINFORCED CONCRETE PIPE	WWR	WASHWATER RECYCLE
FOC	FIBER OPTIC CABLE	MH	MANHOLE	RECM	ROLLED EROSION CONTROL MATTING	WWW	WASTE WASHWATER

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

SYMBOLS

- TP-1

TEST BORING LOCATION
- B-3

SOIL BORING LOCATION
- EXISTING FIRE HYDRANT
- YARD VALVE
- P

SUMP PUMP
- PST

PORTABLE SEDIMENT TANK
- INLET PROTECTION

NEW	DEMO	EXISTING	
			BUILDING/STRUCTURE
			BITUMINOUS PAVEMENT
			CONCRETE CURB AND GUTTER
			CONCRETE PAD/PAVING
			CONCRETE SIDEWALK
			CHAIN LINK FENCE LINE
			ORNAMENTAL FENCE LINE
			AIRPORT FENCE LINE

LEGEND

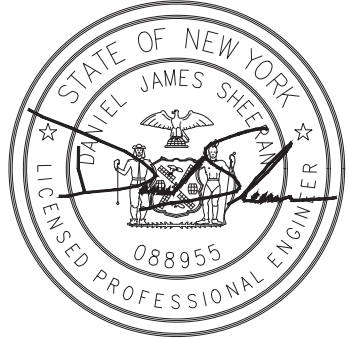
NEW	EXISTING	
		CONTOUR
		SPOT ELEVATION
		PROPERTY LINE
		OVERHEAD ELECTRIC
		WATER PIPING
		ELECTRIC DUCTBANK
		UNDERGROUND COMMUNICATION
		UNDERGROUND ELECTRIC
		GAS LINE
		STORM LINE

NEW	DEMO	EXISTING	
			APPROXIMATE WOODLINE
			YARD PIPING
			MANHOLE
			YARD INLET
			FLARED END SECTION
			CURB INLET
			STORM DRAIN LINE

-
- EXISTING DITCH LINE
-
- EXISTING WETLAND AREA
-
- WETLAND OR DITCH BUFFER
-
- STABILIZED OUTLET FOR SILT FENCE
-
- YARD INLET PROTECTION
-
- GRAVEL CONSTRUCTION ENTRANCE
-
- SILT FENCE
-
- TREE PROTECTION FENCE
-
- LIMITS OF DISTURBANCE

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



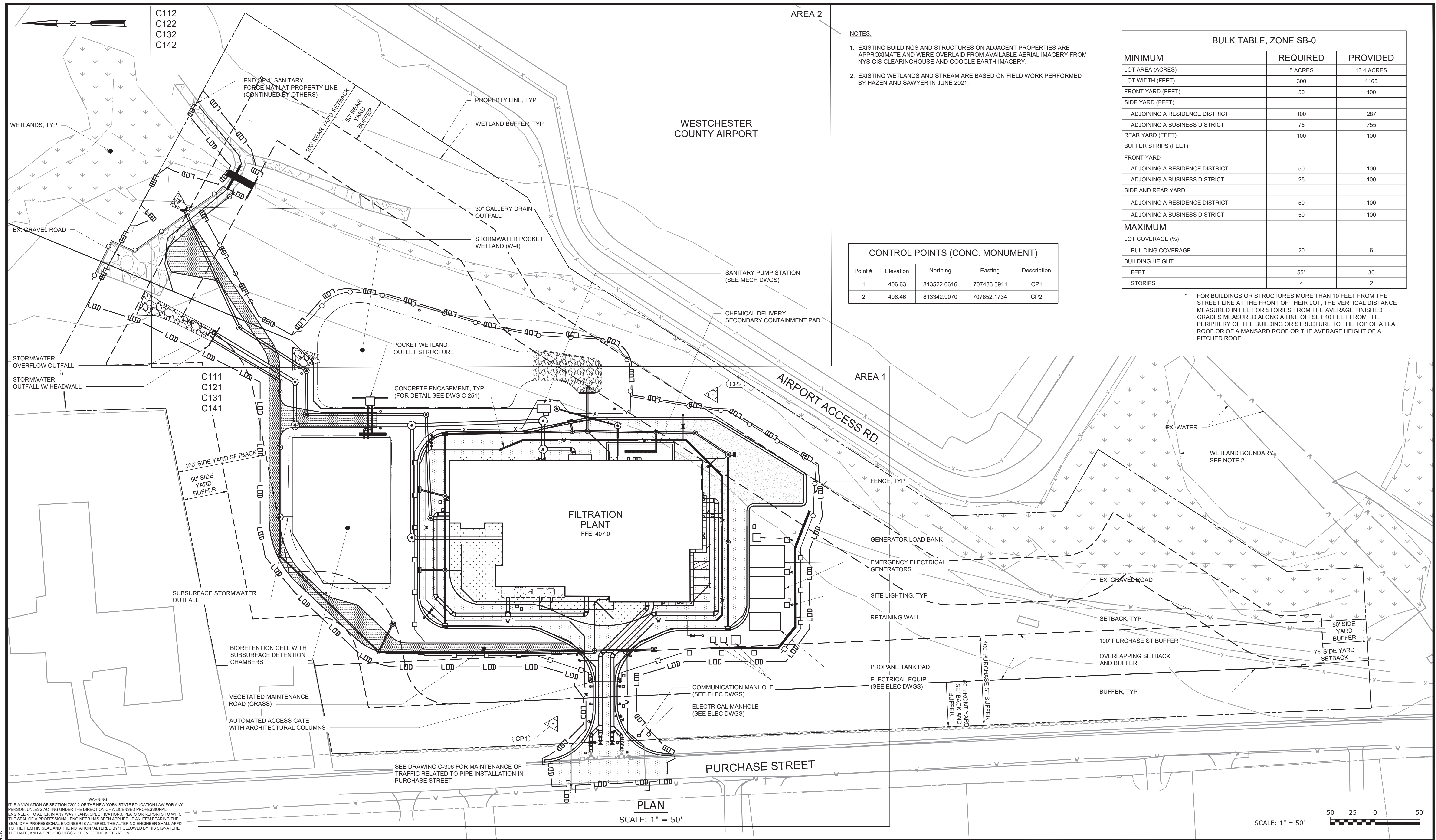
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY


CIVIL
GENERAL NOTES, LEGEND AND ABBREVIATIONS

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-001

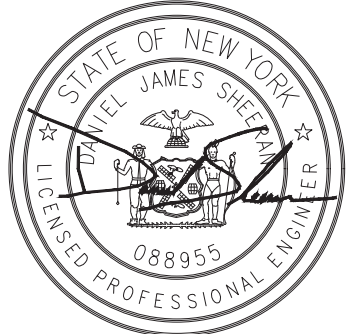


BULK TABLE, ZONE SB-0		
MINIMUM	REQUIRED	PROVIDED
LOT AREA (ACRES)	5 ACRES	13.4 ACRES
LOT WIDTH (FEET)	300	1165
FRONT YARD (FEET)	50	100
SIDE YARD (FEET)		
ADJOINING A RESIDENCE DISTRICT	100	287
ADJOINING A BUSINESS DISTRICT	75	755
REAR YARD (FEET)	100	100
BUFFER STRIPS (FEET)		
FRONT YARD		
ADJOINING A RESIDENCE DISTRICT	50	100
ADJOINING A BUSINESS DISTRICT	25	100
SIDE AND REAR YARD		
ADJOINING A RESIDENCE DISTRICT	50	100
ADJOINING A BUSINESS DISTRICT	50	100
MAXIMUM		
LOT COVERAGE (%)		
BUILDING COVERAGE	20	6
BUILDING HEIGHT		
FEET	55'	30
STORIES	4	2

CONTROL POINTS (CONC. MONUMENT)				
Point #	Elevation	Northing	Easting	Description
1	406.63	813522.0616	707483.3911	CP1
2	406.46	813342.9070	707852.1734	CP2

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	<div> 0 1/2" 1"  </div>
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT HARRISON, NY

CIVIL OVERALL SITE PLAN

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-101

SEE MATCHLINE DWG #####

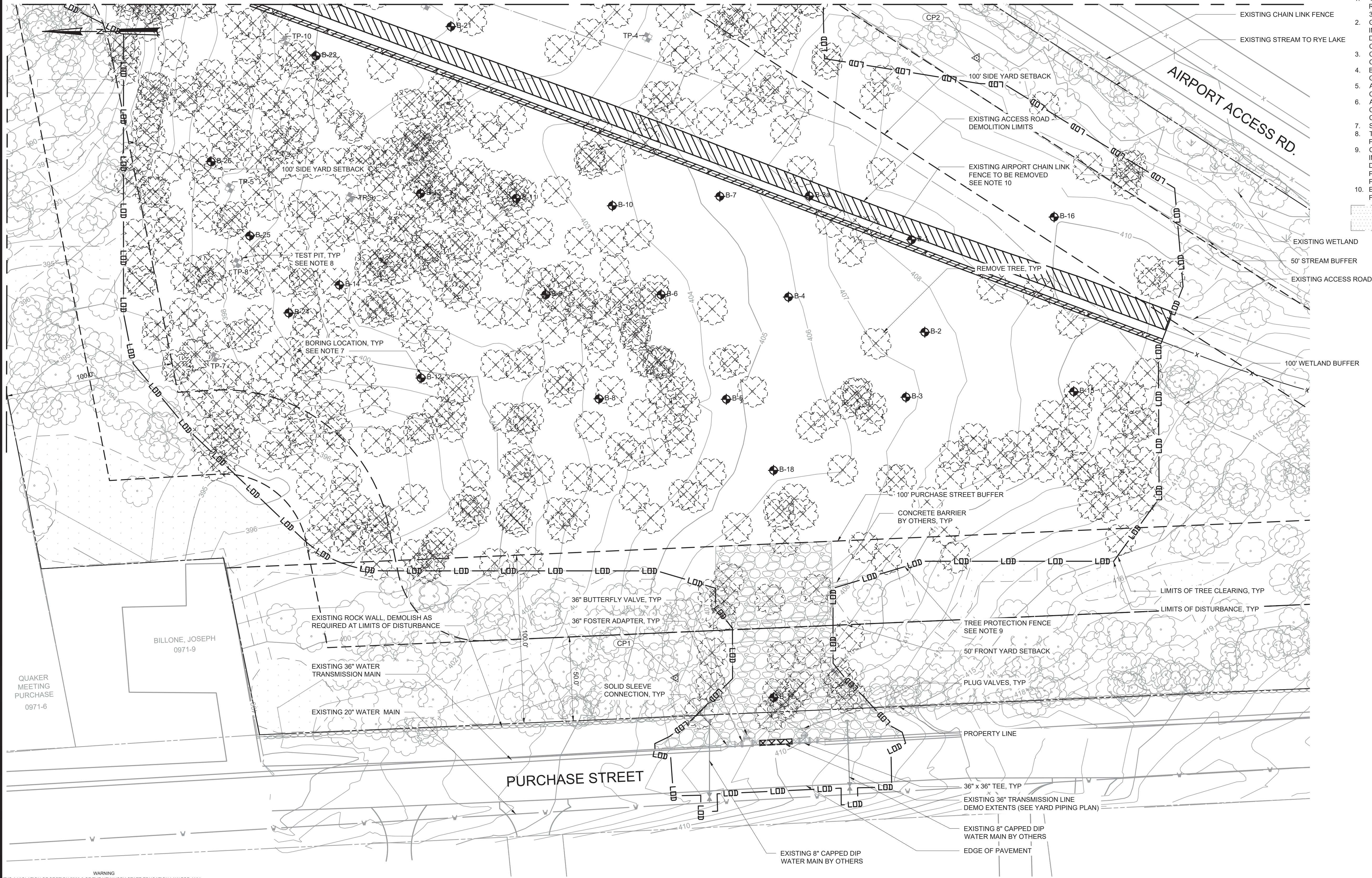
EXISTING CONDITION AND DEMOLITION NOTES:

1. TREES REMOVED UNDER SEPARATE CONTRACT. CONTRACTOR SHALL REMOVE REMAINING STUMPS AND ROOTS. SEE SPECIFICATION SECTION 31 10 00 - CLEARING, GRUBBING, AND SITE PREPARATION.
2. GROUND COVER WITHIN LIMIT OF DISTURBANCE IS APPROXIMATELY SIX INCHES OF WOODCHIPS. CONTRACTOR SHALL REMOVE WOOD AND DISPOSE OF THEM OFFSITE AS REQUIRED TO COMPLETE THEIR CONSTRUCTION ACTIVITIES.
3. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO START OF WORK.
4. BASE MAPPING INFORMATION BASED ON SITE SURVEY PERFORMED BY GEORGE J. MOTARELLA, PE, PS, PC DATED 7-21-2021
5. ALL TREES ROOTED WITHIN THE LIMITS OF DISTURBANCE ARE TO BE CLEARED AND GRUBBED.
6. ALL DEMOLITION WORK MUST BE PERFORMED IN ACCORDANCE WITH 29 CFR 1926 SUBPART T DEMOLITION AND 1926.1153 RESPIRABLE CRYSTALLINE SILICA.
7. SOIL BORINGS PERFORMED BY GZA MAY AND JUNE 2021.
8. TEST PITS 1-6 PERFORMED IN AUGUST 2021 AND TEST PITS 7-13 PERFORMED IN NOVEMBER 2021 BY GZA.
9. CONTRACTOR SHALL USE AREA OF TREE PLANTING AND VEGETATIVE INFILL FOR THE WORK SHOWN ON THE LANDSCAPE DWGS ONLY. HAND DIGGING SHALL BE PREFORMED WITHIN THE LIMITS OF THE TREE PROTECTION ZONE. USE FOR ANY OTHER CONSTRUCTION ACTIVITIES IS PROHIBITED.
10. EXISTING AIRPORT FENCE SHALL NOT BE REMOVED UNTIL RELOCATED FENCE HAS BEEN INSTALLED. SEE DWGS C-111, C-141, AND C-142.

AREA OF TREE PLANTING AND VEGETATIVE INFILL ONLY
SEE LANDSCAPE DWGS

SEE MATCHLINE - THIS DWG

SEE MATCHLINE - THIS DWG

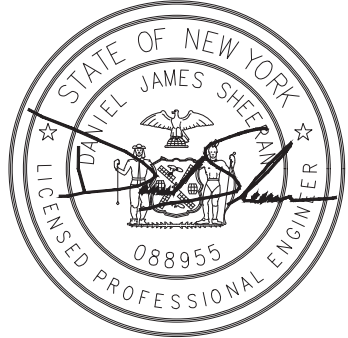


WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

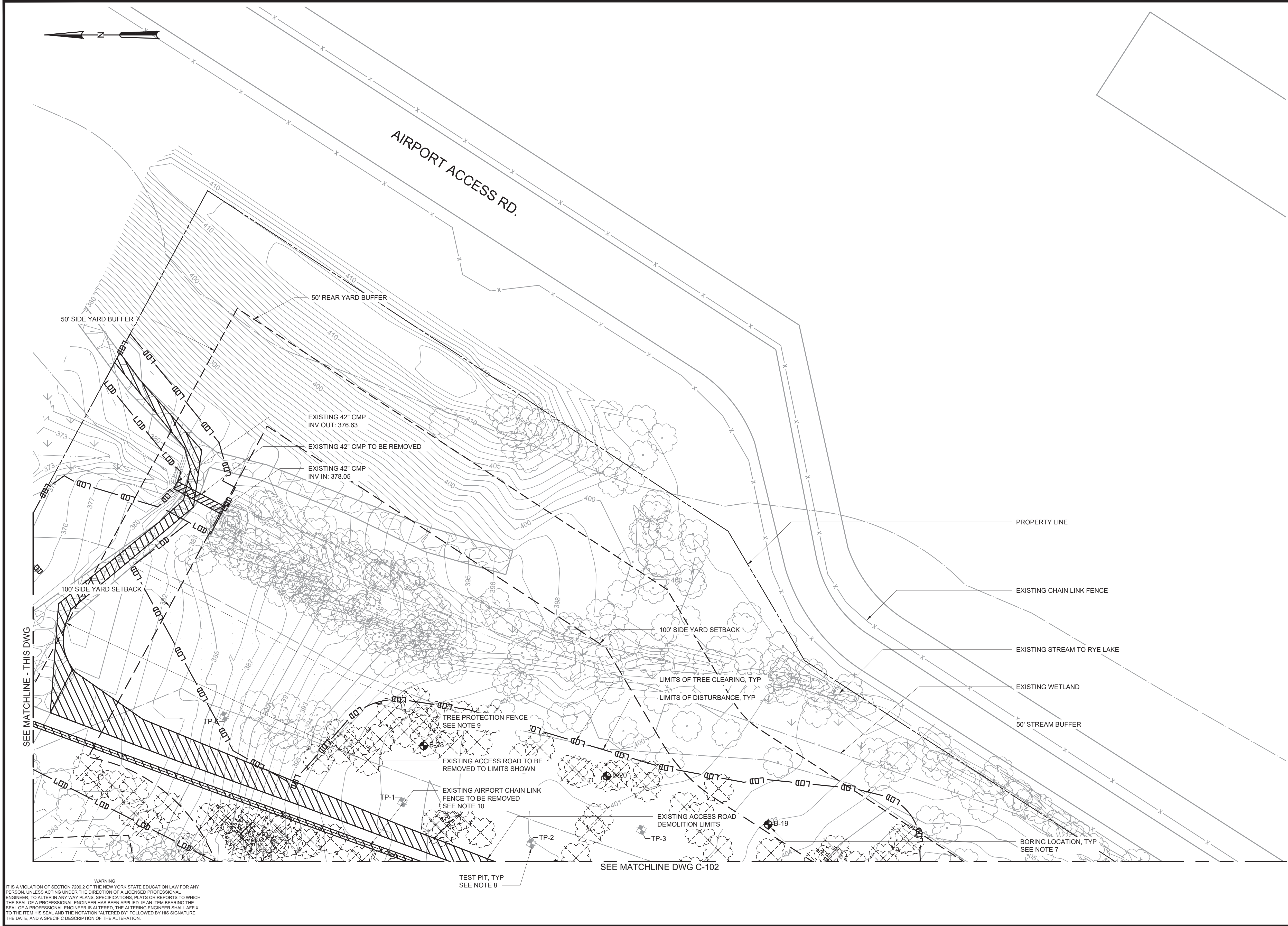
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

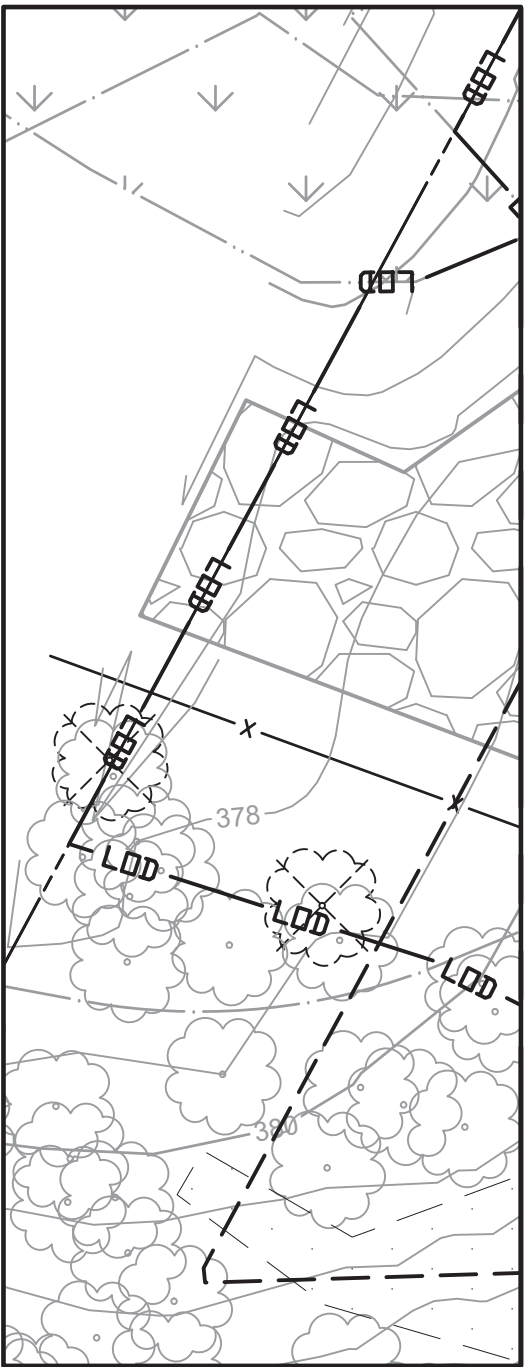
CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN -
AREA 1

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-102

File: C:\USERS\JTANNER\PROJECT FILES\PROJECT\WSE\WILC-103 Saved by: JTANNER Save date: 2/6/2025 3:51 PM
PLOT DATE: 3/26/2025 6:34 PM BY: JTANNER



- EXISTING CONDITION AND DEMOLITION NOTES:
1. TREES REMOVED UNDER SEPARATE CONTRACT. CONTRACTOR SHALL REMOVE REMAINING STUMPS AND ROOTS. SEE SPECIFICATION SECTION 31 10 00 - CLEARING, GRUBBING, AND SITE PREPARATION.
 2. GROUND COVER WITHIN LIMIT OF DISTURBANCE IS APPROXIMATELY SIX INCHES OF WOODCHIPS. CONTRACTOR SHALL REMOVE WOOD AND DISPOSE OF THEM OFFSITE AS REQUIRED TO COMPLETE THEIR CONSTRUCTION ACTIVITIES.
 3. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO START OF WORK.
 4. BASE MAPPING INFORMATION BASED ON SITE SURVEY PERFORMED BY GEORGE J. MOTARELLA, PE, PS, PC DATED 7-21-2021
 5. ALL TREES ROOTED WITHIN THE LIMITS OF DISTURBANCE ARE TO BE CLEARED AND GRUBBED.
 6. ALL DEMOLITION WORK MUST BE PERFORMED IN ACCORDANCE WITH 29 CFR 1926 SUBPART T DEMOLITION AND 1926.1153 RESPIRABLE CRYSTALLINE SILICA.
 7. SOIL BORINGS - PERFORMED BY GZA MAY AND JUNE 2021.
 8. TEST PITS 1-6 PERFORMED IN AUGUST 2021 AND TEST PITS 7-13 PERFORMED IN NOVEMBER 2021 BY GZA.
 9. CONTRACTOR SHALL USE AREA OF TREE PLANTING AND VEGETATIVE INFILL FOR THE WORK SHOWN ON THE LANDSCAPE DWGS ONLY. HAND DIGGING SHALL BE PREFORMED WITHIN THE LIMITS OF THE TREE PROTECTION ZONE. USE FOR ANY OTHER CONSTRUCTION ACTIVITIES IS PROHIBITED.
 10. EXISTING AIRPORT FENCE SHALL NOT BE REMOVED UNTIL RELOCATED FENCE HAS BEEN INSTALLED. SEE DWGS C-111, C-141, AND C-142.
- AREA OF TREE PLANTING AND VEGETATIVE INFILL ONLY
SEE LANDSCAPE DWGS

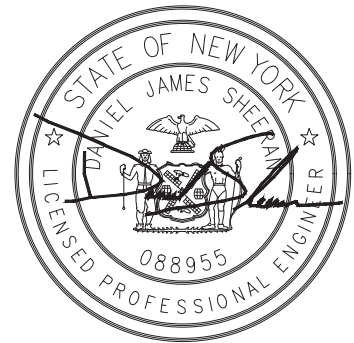


WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

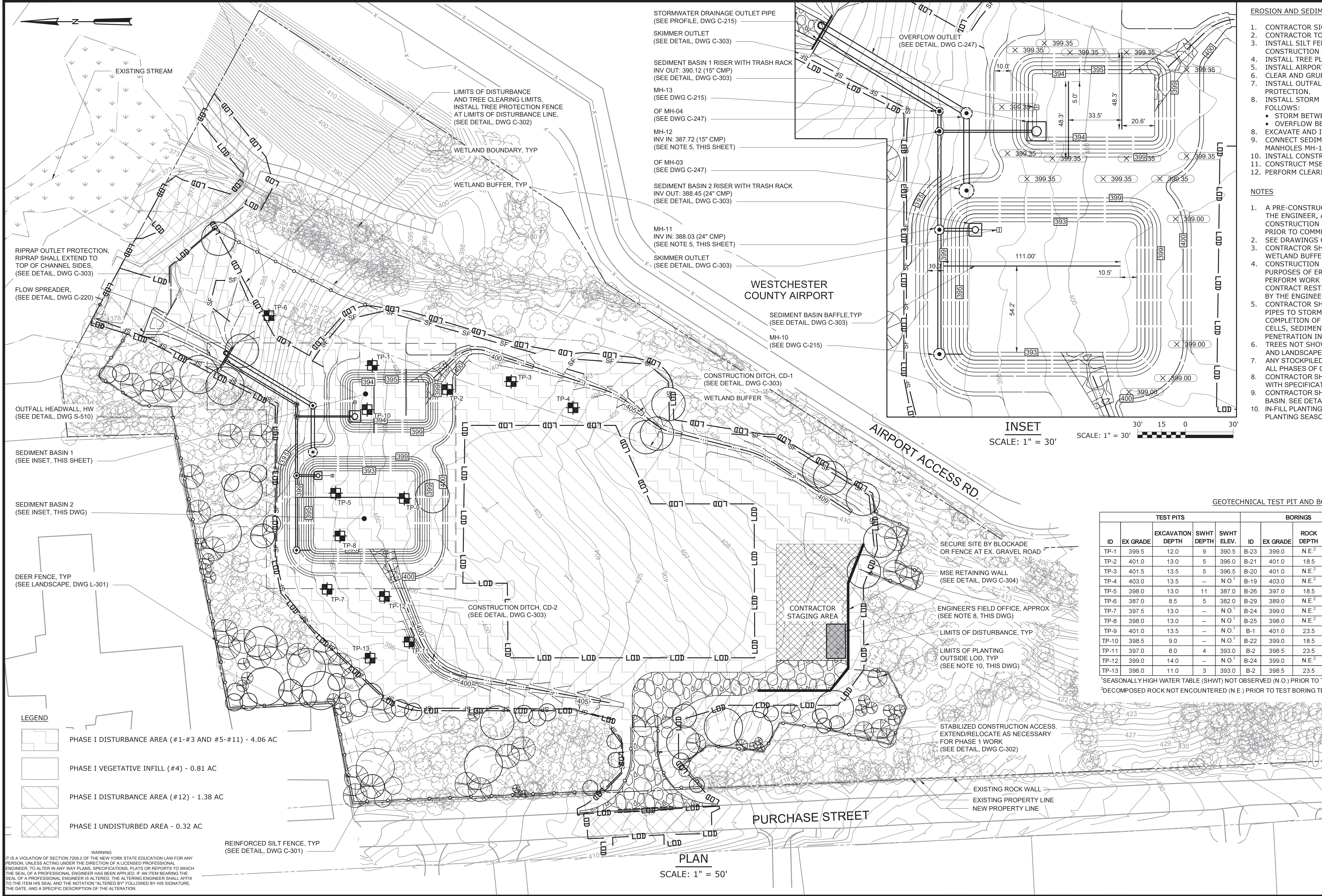
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN -
AREA 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-103

File: C:\USERS\JTANNER\PROJECT FILES\PROJECT\WSE\CIVIL-C-111 Saved by: JTANNER Save date: 3/19/2025 3:18 PM
PLOT DATE: 3/26/2025 6:34 PM BY: JTANNER




- EROSION AND SEDIMENT CONTROL - PHASE I - SITE PREPARATION**
1. CONTRACTOR SIGNS ONTO SWPPP.
 2. CONTRACTOR TO NOTIFY NYC DEP OF CONSTRUCTION ACTIVITIES.
 3. INSTALL SILT FENCE, TREE PROTECTION FENCE, AND STABILIZED CONSTRUCTION ACCESS.
 4. INSTALL TREE PLANTING, VEGETATIVE INFILL, AND DEER FENCE.
 5. INSTALL AIRPORT FENCE. DEMOLISH EXISTING AIRPORT FENCE.
 6. CLEAR AND GRUB STAGING AREA AND AREAS FOR SEDIMENT BASINS.
 7. INSTALL OUTFALL HEADWALL, FLOW SPREADER, AND RIPRAP OUTLET PROTECTION.
 8. INSTALL STORM DRAIN AND OVERFLOW PIPING AND STRUCTURES AS FOLLOWS:
 - STORM BETWEEN HW AND MH-10
 - OVERFLOW BETWEEN HW AND OH MH-03
 9. EXCAVATE AND INSTALL TEMPORARY SEDIMENT BASINS.
 10. CONNECT SEDIMENT BASIN RISER STRUCTURES TO STORM DRAIN MANHOLES MH-11 AND MH-12.
 11. INSTALL CONSTRUCTION DITCHES.
 12. CONSTRUCT MSE RETAINING WALL.
 13. PERFORM CLEARING AND GRUBBING FOR REMAINDER OF SITE.
- NOTES**
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED WITH NYC DEP, THE ENGINEER, AND WJWW TWO WEEKS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. NYC DEP SHALL BE NOTIFIED 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
 2. SEE DRAWINGS C-301 - C-303 FOR EROSION CONTROL DETAILS.
 3. CONTRACTOR SHALL NOT STORE EXCAVATED MATERIAL INSIDE THE WETLAND BUFFER.
 4. CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
 5. CONTRACTOR SHALL TEMPORARILY CONNECT SEDIMENT BASIN OUTLET PIPES TO STORM DRAIN MANHOLES, MH-11 AND MH-12. UPON COMPLETION OF STORMWATER POCKET WETLAND AND BIOTRETENTION CELLS, SEDIMENT BASIN OUTLET PIPE SHALL BE REMOVED AND PENETRATION IN MANHOLES SEALED.
 6. TREES NOT SHOWN FOR CLARITY, REFERENCE CIVIL DWG C-102 - C-103 AND LANDSCAPE DWG L-101 - L-102.
 7. ANY STOCKPILED MATERIALS SHALL BE WITHIN THE STAGING AREA DURING ALL PHASES OF CONSTRUCTION.
 8. CONTRACTOR SHALL PROVIDE ENGINEER'S FIELD OFFICE IN ACCORDANCE WITH SPECIFICATION SECTION 01 52 00 - CONSTRUCTION FACILITIES.
 9. CONTRACTOR SHALL PROVIDE BIRD DETERRENT SYSTEM FOR SEDIMENT BASIN. SEE DETAIL ON DWG C-221 AND SPECIFICATION SECTION 33 46 01.
 10. IN-FILL PLANTING OUTSIDE THE LOD SHOULD BE CONDUCTED IN THE FIRST PLANTING SEASON DURING THE CONSTRUCTION PERIOD. SEE LAND DWGS.

GEOTECHNICAL TEST PIT AND BORING SUMMARY TABLE

TEST PITS					BORINGS				SEDIMENT BASINS			
ID	EX GRADE	EXCAVATION DEPTH	SWHT DEPTH	SWHT ELEV.	ID	EX GRADE	ROCK DEPTH	ROCK ELEV.	BASIN NO.	BASIN BOTTOM ELEV.	SWHT SEPARATION	ROCK SEPARATION
TP-1	399.5	12.0	9	390.5	B-23	399.0	N E ²	N E ²	1	394.0	3.5	N E ²
TP-2	401.0	13.0	5	396.0	B-21	401.0	18.5	382.5	--	--	--	--
TP-3	401.5	13.5	5	396.5	B-20	401.0	N E ²	N E ²	--	--	--	--
TP-4	403.0	13.5	--	N O ¹	B-19	403.0	N E ²	N E ²	--	--	--	--
TP-5	398.0	13.0	11	387.0	B-26	397.0	18.5	378.5	2	393.00	6.0	14.5
TP-6	387.0	8.5	5	382.0	B-29	389.0	N E ²	N E ²	--	--	--	--
TP-7	397.5	13.0	--	N O ¹	B-24	399.0	N E ²	N E ²	--	--	--	--
TP-8	398.0	13.0	--	N O ¹	B-25	398.0	N E ²	N E ²	2	393.00	N O ¹	N E ²
TP-9	401.0	13.5	--	N O ¹	B-1	401.0	23.5	377.5	2	393.00	N O ¹	15.5
TP-10	398.5	9.0	--	N O ¹	B-22	399.0	18.5	380.5	1	394.00	N O ¹	13.5
TP-11	397.0	8.0	4	393.0	B-2	398.5	23.5	375.0	--	--	--	--
TP-12	399.0	14.0	--	N O ¹	B-24	399.0	N E ²	N E ²	--	--	--	--
TP-13	396.0	11.0	3	393.0	B-2	398.5	23.5	374.5	--	--	--	--

¹SEASONALLY HIGH WATER TABLE (SHWT) NOT OBSERVED (N.O.) PRIOR TO TEST PIT TERMINATION
²DECOMPOSED ROCK NOT ENCOUNTERED (N.E.) PRIOR TO TEST BORING TERMINATION AT 22' BELOW GRADE

LIMIT OF DISTURBANCE LEGEND		
LINETYPE	DESCRIPTION	AREA (AC)
— LOD —	WFP LOD	5.76
—	VEGETATIVE INFILL WITH DEER FENCE LOD	0.81
—	OVERALL LOD	6.57

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1" 
REV	ISSUED FOR	DATE	BY		

BID SET

Hazen

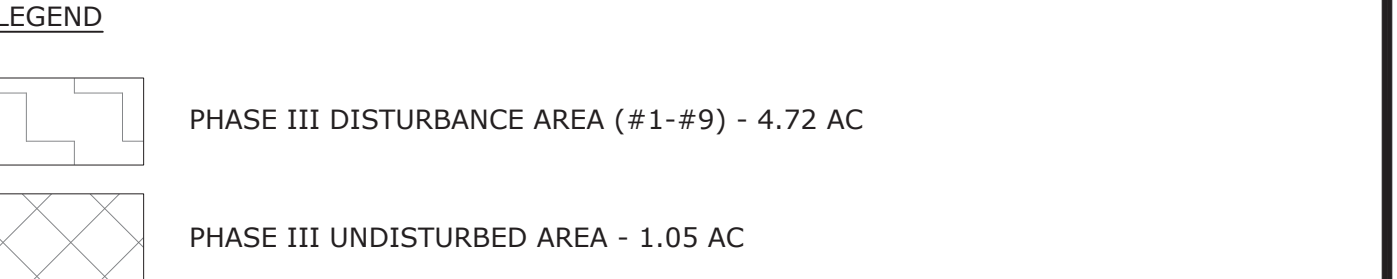
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

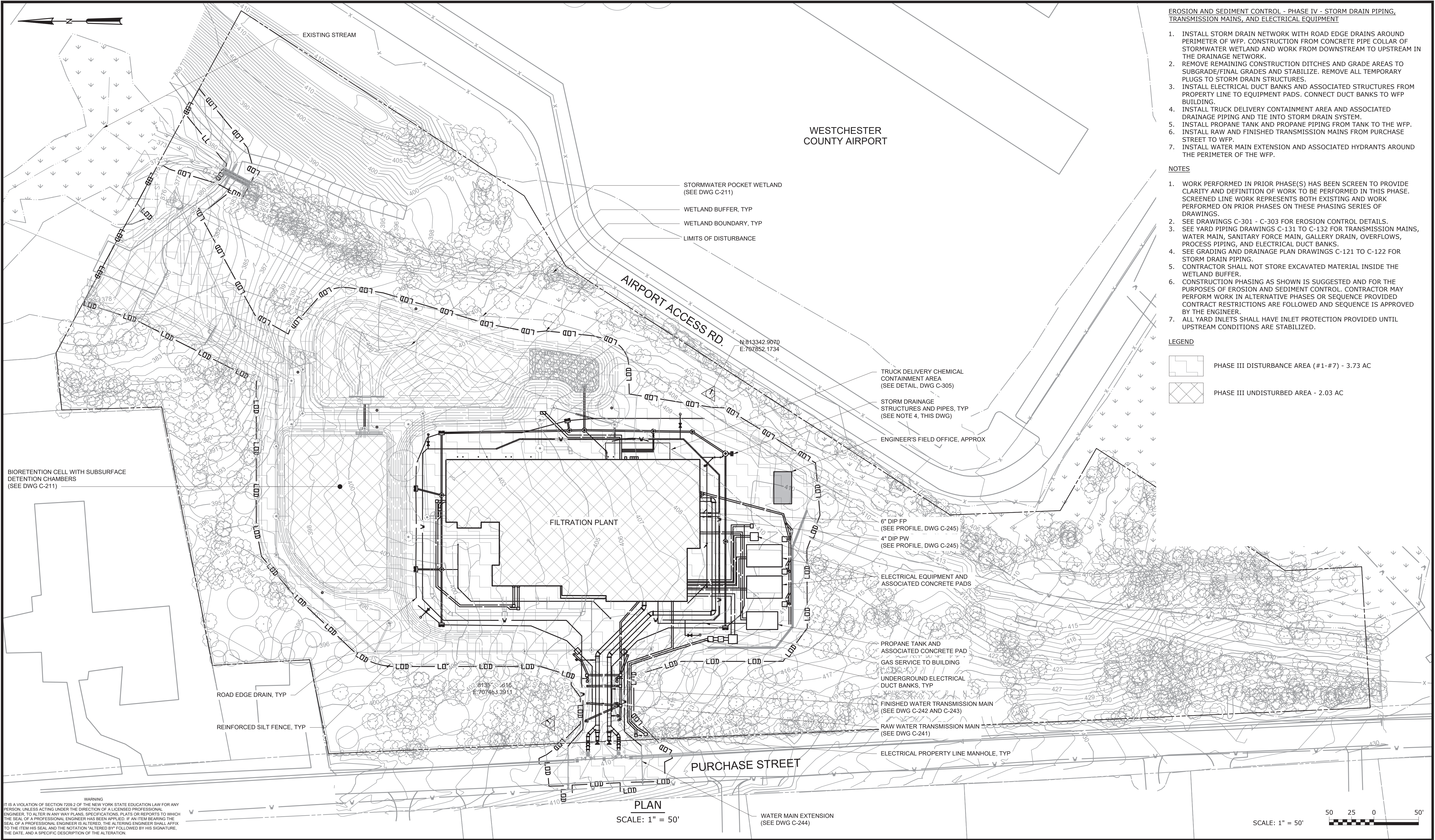
CIVIL
EROSION AND SEDIMENT CONTROL PHASING
PLAN - PHASE I

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-111



DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-113

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WSE\CIVIL-C-114 Saved by: JTANNER Save date: 2/11/2025 1:12 PM
PLOT DATE: 3/27/2025 11:25 AM BY: JTANNER



EROSION AND SEDIMENT CONTROL - PHASE IV - STORM DRAIN PIPING, TRANSMISSION MAINS, AND ELECTRICAL EQUIPMENT

1. INSTALL STORM DRAIN NETWORK WITH ROAD EDGE DRAINS AROUND PERIMETER OF WFP. CONSTRUCTION FROM CONCRETE PIPE COLLAR OF STORMWATER WETLAND AND WORK FROM DOWNSTREAM TO UPSTREAM IN THE DRAINAGE NETWORK.
2. REMOVE REMAINING CONSTRUCTION DITCHES AND GRADE AREAS TO SUBGRADE/FINAL GRADES AND STABILIZE. REMOVE ALL TEMPORARY PLUGS TO STORM DRAIN STRUCTURES.
3. INSTALL ELECTRICAL DUCT BANKS AND ASSOCIATED STRUCTURES FROM PROPERTY LINE TO EQUIPMENT PADS. CONNECT DUCT BANKS TO WFP BUILDING.
4. INSTALL TRUCK DELIVERY CONTAINMENT AREA AND ASSOCIATED DRAINAGE PIPING AND TIE INTO STORM DRAIN SYSTEM.
5. INSTALL PROPANE TANK AND PROPANE PIPING FROM TANK TO THE WFP.
6. INSTALL RAW AND FINISHED TRANSMISSION MAINS FROM PURCHASE STREET TO WFP.
7. INSTALL WATER MAIN EXTENSION AND ASSOCIATED HYDRANTS AROUND THE PERIMETER OF THE WFP.

NOTES

1. WORK PERFORMED IN PRIOR PHASE(S) HAS BEEN SCREEN TO PROVIDE CLARITY AND DEFINITION OF WORK TO BE PERFORMED IN THIS PHASE. SCREENED LINE WORK REPRESENTS BOTH EXISTING AND WORK PERFORMED ON PRIOR PHASES ON THESE PHASING SERIES OF DRAWINGS.
2. SEE DRAWINGS C-301 - C-303 FOR EROSION CONTROL DETAILS.
3. SEE YARD PIPING DRAWINGS C-131 TO C-132 FOR TRANSMISSION MAINS, WATER MAIN, SANITARY FORCE MAIN, GALLERY DRAIN, OVERFLOWS, PROCESS PIPING, AND ELECTRICAL DUCT BANKS.
4. SEE GRADING AND DRAINAGE PLAN DRAWINGS C-121 TO C-122 FOR STORM DRAIN PIPING.
5. CONTRACTOR SHALL NOT STORE EXCAVATED MATERIAL INSIDE THE WETLAND BUFFER.
6. CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
7. ALL YARD INLETS SHALL HAVE INLET PROTECTION PROVIDED UNTIL UPSTREAM CONDITIONS ARE STABILIZED.

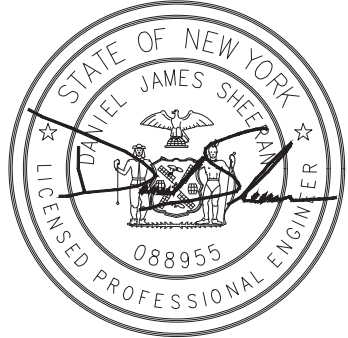
LEGEND

- PHASE III DISTURBANCE AREA (#1-#7) - 3.73 AC
- PHASE III UNDISTURBED AREA - 2.03 AC

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



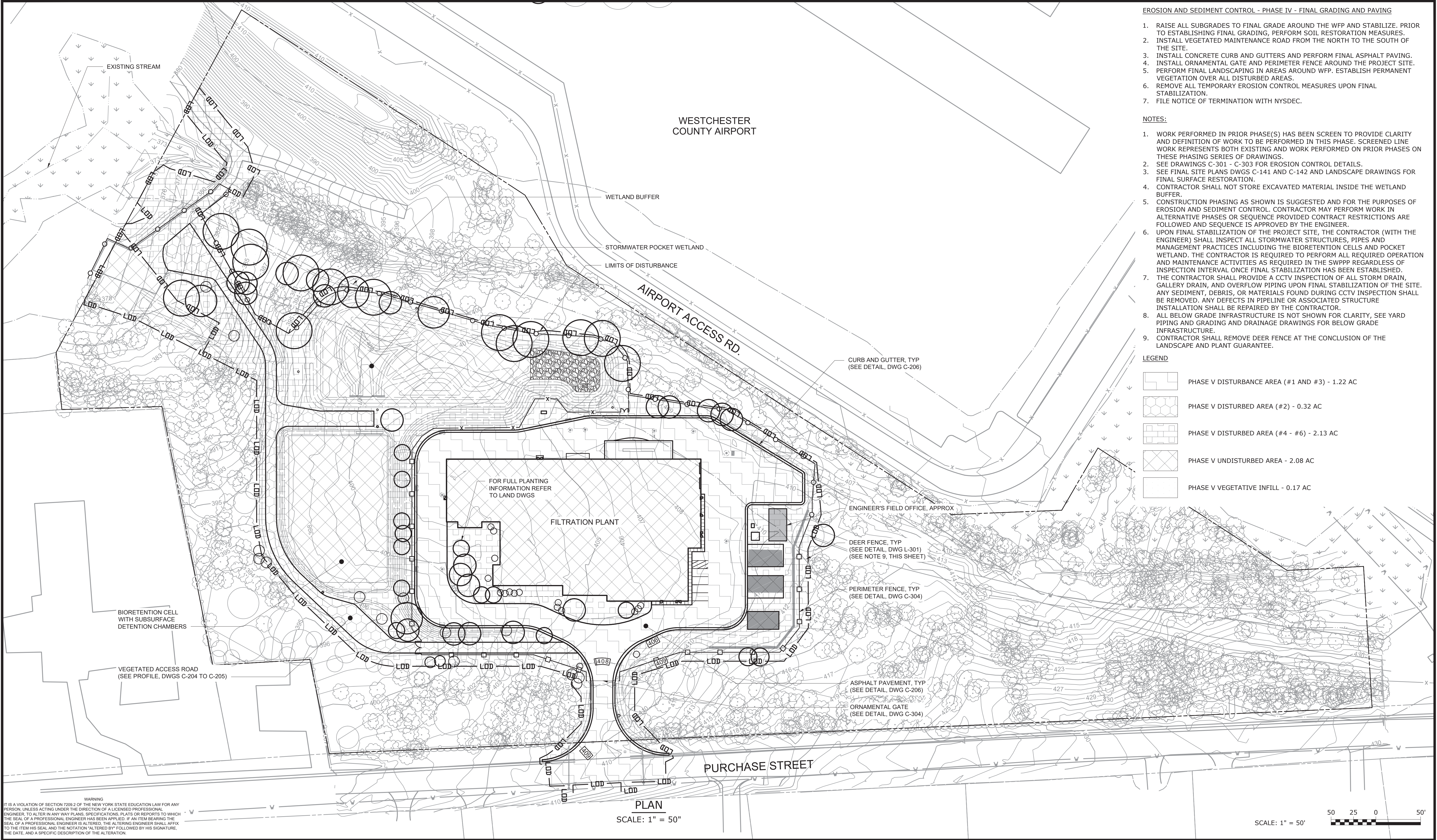
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
EROSION AND SEDIMENT CONTROL PHASING
PLAN - PHASE IV

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-114



EROSION AND SEDIMENT CONTROL - PHASE IV - FINAL GRADING AND PAVING

1. RAISE ALL SUBGRADES TO FINAL GRADE AROUND THE WFP AND STABILIZE. PRIOR TO ESTABLISHING FINAL GRADING, PERFORM SOIL RESTORATION MEASURES.
2. INSTALL VEGETATED MAINTENANCE ROAD FROM THE NORTH TO THE SOUTH OF THE SITE.
3. INSTALL CONCRETE CURB AND GUTTERS AND PERFORM FINAL ASPHALT PAVING.
4. INSTALL ORNAMENTAL GATE AND PERIMETER FENCE AROUND THE PROJECT SITE.
5. PERFORM FINAL LANDSCAPING IN AREAS AROUND WFP. ESTABLISH PERMANENT VEGETATION OVER ALL DISTURBED AREAS.
6. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON FINAL STABILIZATION.
7. FILE NOTICE OF TERMINATION WITH NYSDEC.

NOTES:

1. WORK PERFORMED IN PRIOR PHASE(S) HAS BEEN SCREEN TO PROVIDE CLARITY AND DEFINITION OF WORK TO BE PERFORMED IN THIS PHASE. SCREENED LINE WORK REPRESENTS BOTH EXISTING AND WORK PERFORMED ON PRIOR PHASES ON THESE PHASING SERIES OF DRAWINGS.
2. SEE DRAWINGS C-301 - C-303 FOR EROSION CONTROL DETAILS.
3. SEE FINAL SITE PLANS DWGS C-141 AND C-142 AND LANDSCAPE DRAWINGS FOR FINAL SURFACE RESTORATION.
4. CONTRACTOR SHALL NOT STORE EXCAVATED MATERIAL INSIDE THE WETLAND BUFFER.
5. CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
6. UPON FINAL STABILIZATION OF THE PROJECT SITE, THE CONTRACTOR (WITH THE ENGINEER) SHALL INSPECT ALL STORMWATER STRUCTURES, PIPES AND MANAGEMENT PRACTICES INCLUDING THE BIORETENTION CELLS AND POCKET WETLAND. THE CONTRACTOR IS REQUIRED TO PERFORM ALL REQUIRED OPERATION AND MAINTENANCE ACTIVITIES AS REQUIRED IN THE SWPPP REGARDLESS OF INSPECTION INTERVAL ONCE FINAL STABILIZATION HAS BEEN ESTABLISHED.
7. THE CONTRACTOR SHALL PROVIDE A CCTV INSPECTION OF ALL STORM DRAIN, GALLERY DRAIN, AND OVERFLOW PIPING UPON FINAL STABILIZATION OF THE SITE. ANY SEDIMENT, DEBRIS, OR MATERIALS FOUND DURING CCTV INSPECTION SHALL BE REMOVED. ANY DEFECTS IN PIPELINE OR ASSOCIATED STRUCTURE INSTALLATION SHALL BE REPAIRED BY THE CONTRACTOR.
8. ALL BELOW GRADE INFRASTRUCTURE IS NOT SHOWN FOR CLARITY, SEE YARD PIPING AND GRADING AND DRAINAGE DRAWINGS FOR BELOW GRADE INFRASTRUCTURE.
9. CONTRACTOR SHALL REMOVE DEER FENCE AT THE CONCLUSION OF THE LANDSCAPE AND PLANT GUARANTEE.

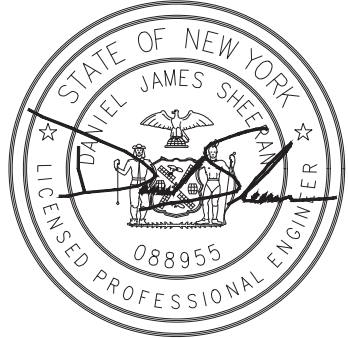
LEGEND

- PHASE V DISTURBANCE AREA (#1 AND #3) - 1.22 AC
- PHASE V DISTURBED AREA (#2) - 0.32 AC
- PHASE V DISTURBED AREA (#4 - #6) - 2.13 AC
- PHASE V UNDISTURBED AREA - 2.08 AC
- PHASE V VEGETATIVE INFILL - 0.17 AC

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



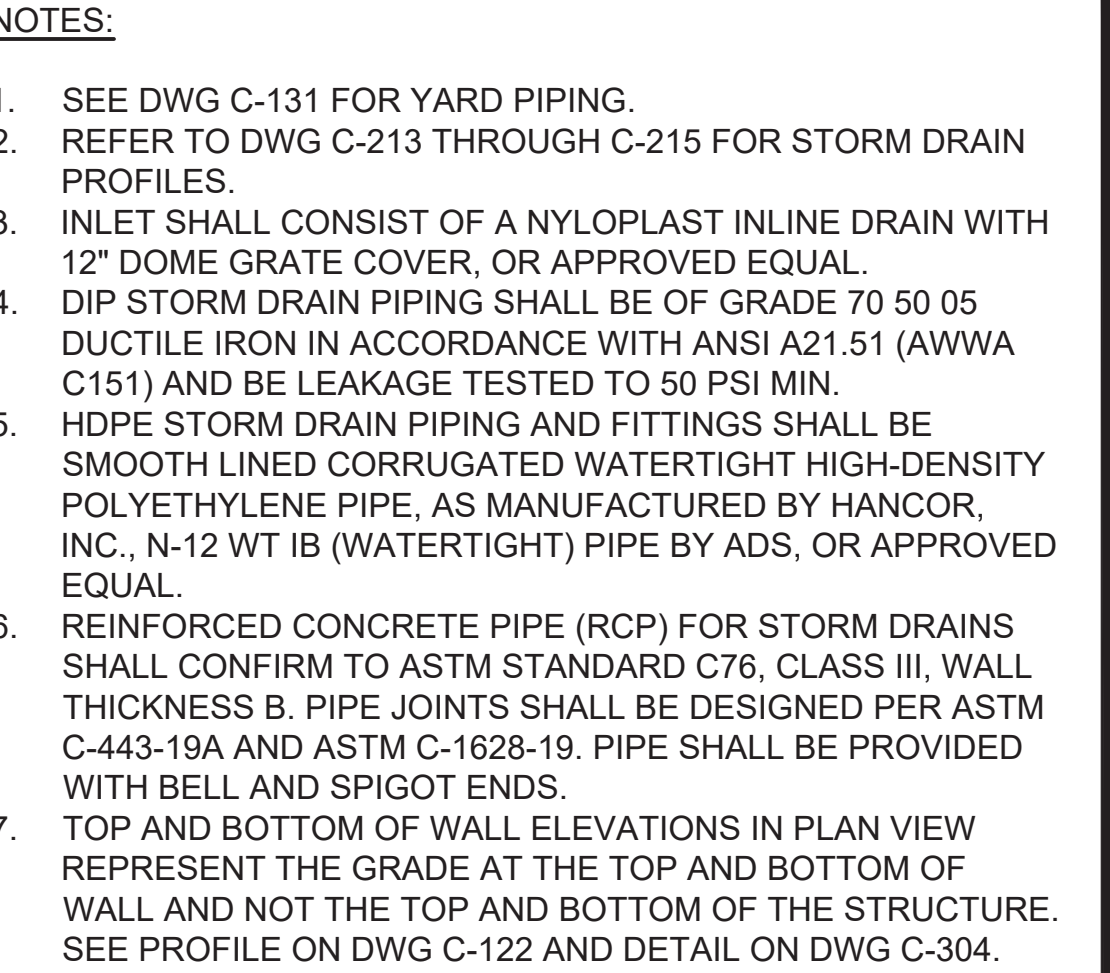
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

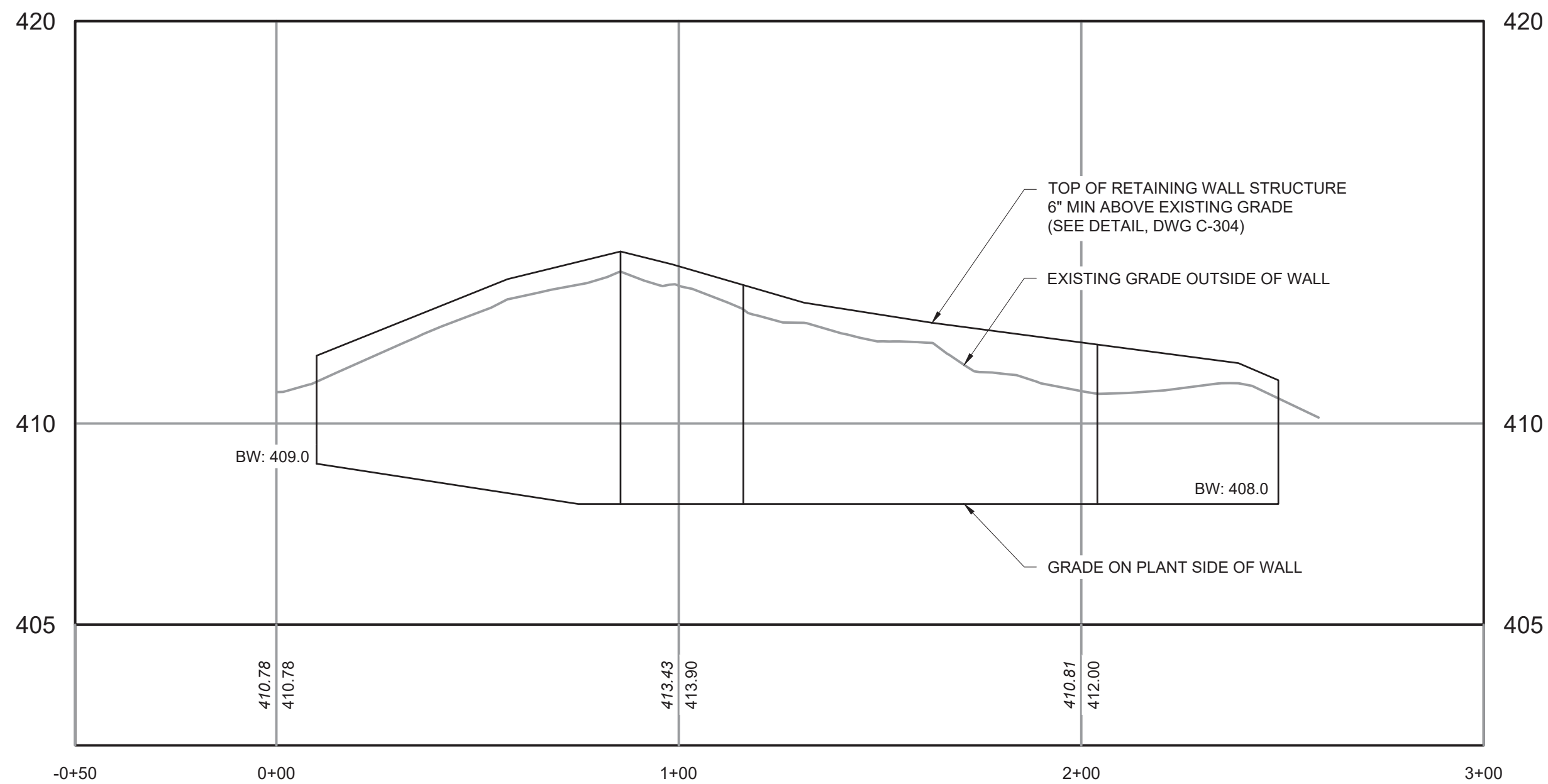
CIVIL
EROSION AND SEDIMENT CONTROL PHASING
PLAN - PHASE V

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-115



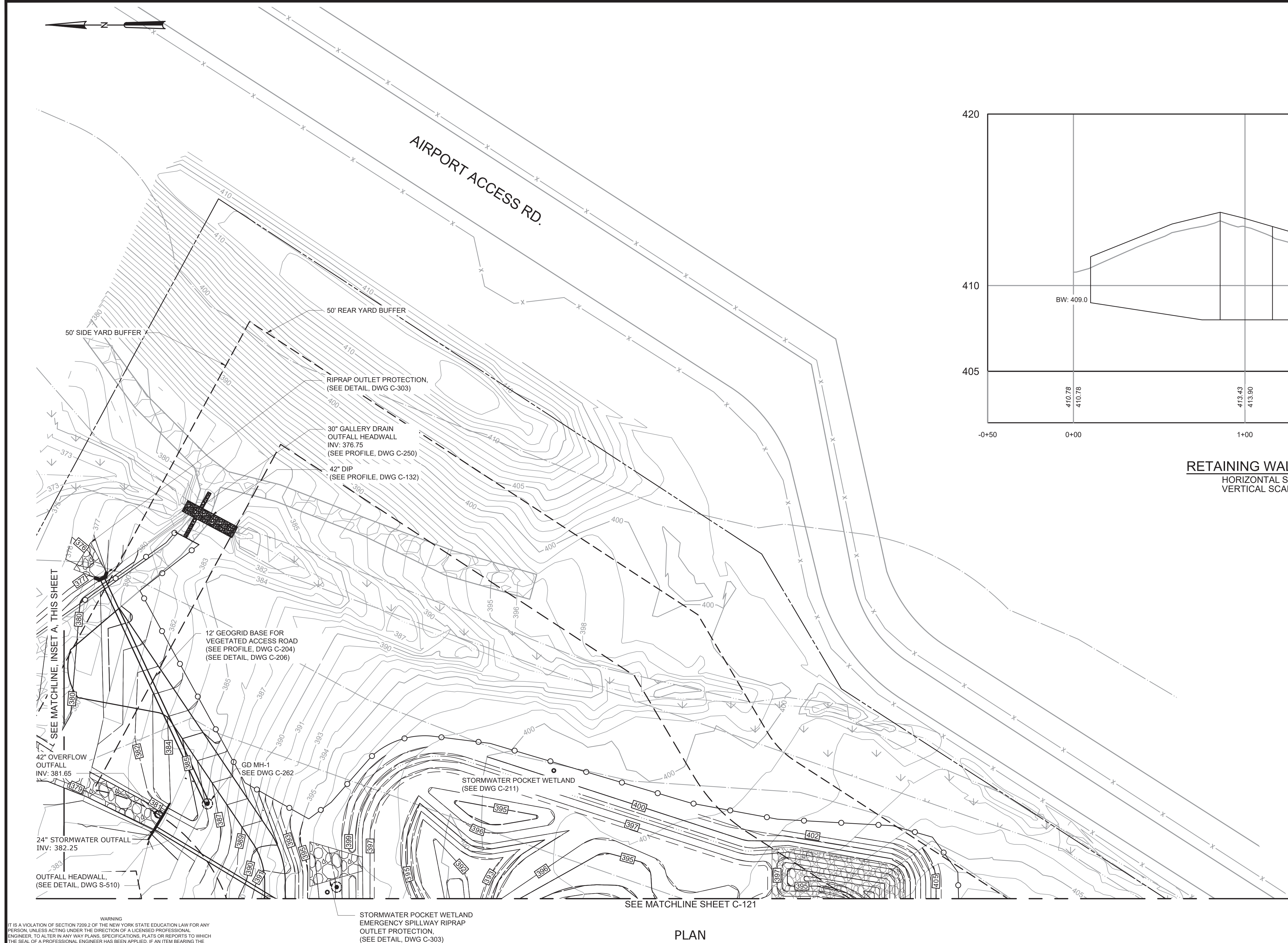
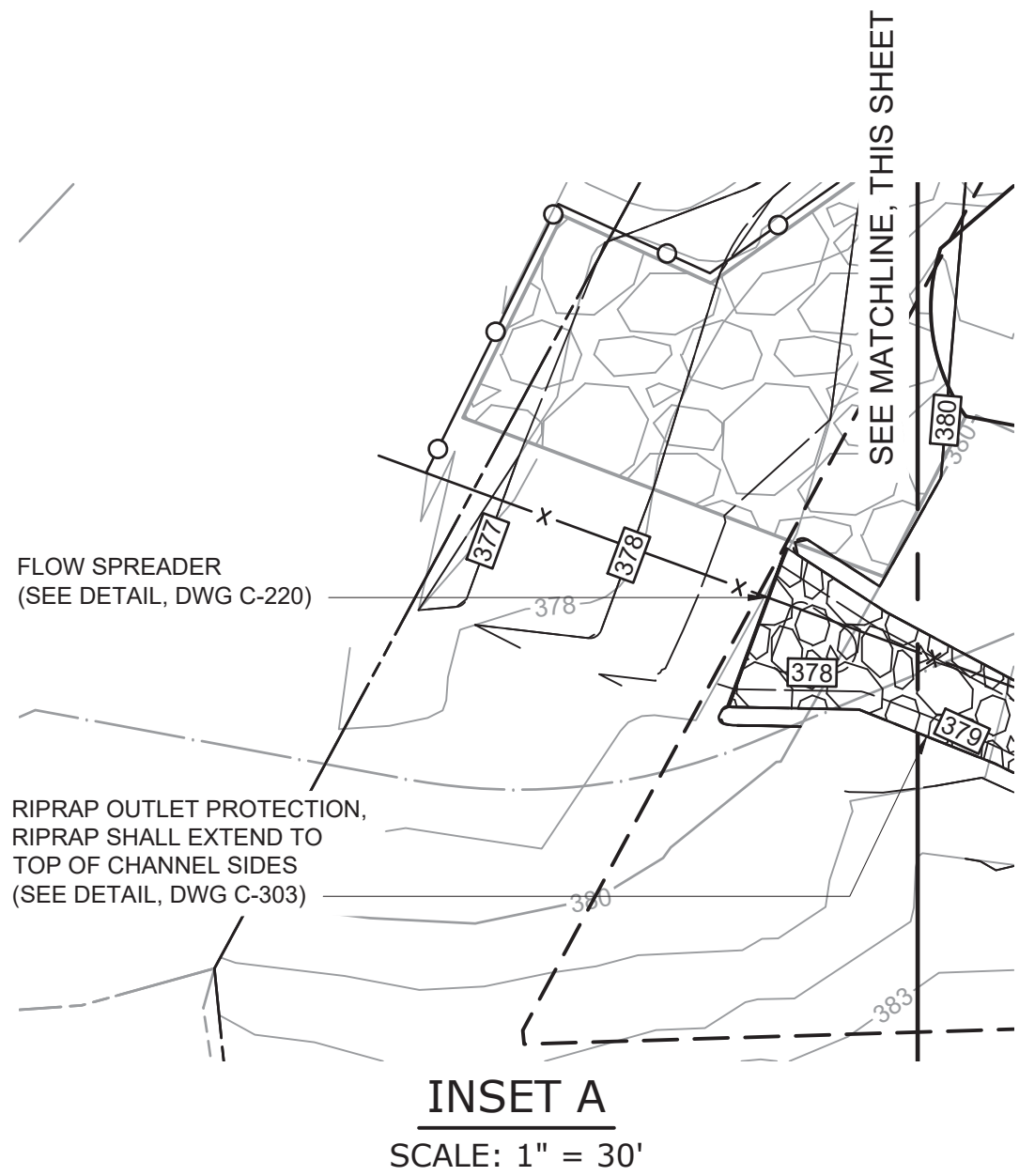
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-121


1. SEE DWG C-132 FOR YARD PIPING
2. REFER TO DWG C-213 THROUGH C-215 FOR STORM DRAIN PROFILES.



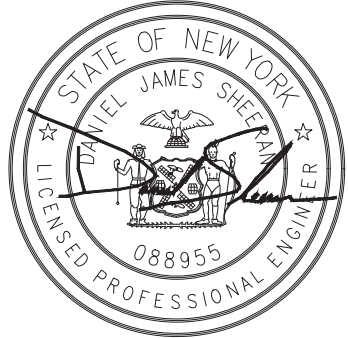
RETAINING WALL PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	<div> <div>0</div> <div>1/2"</div> <div>1"</div> </div> 
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

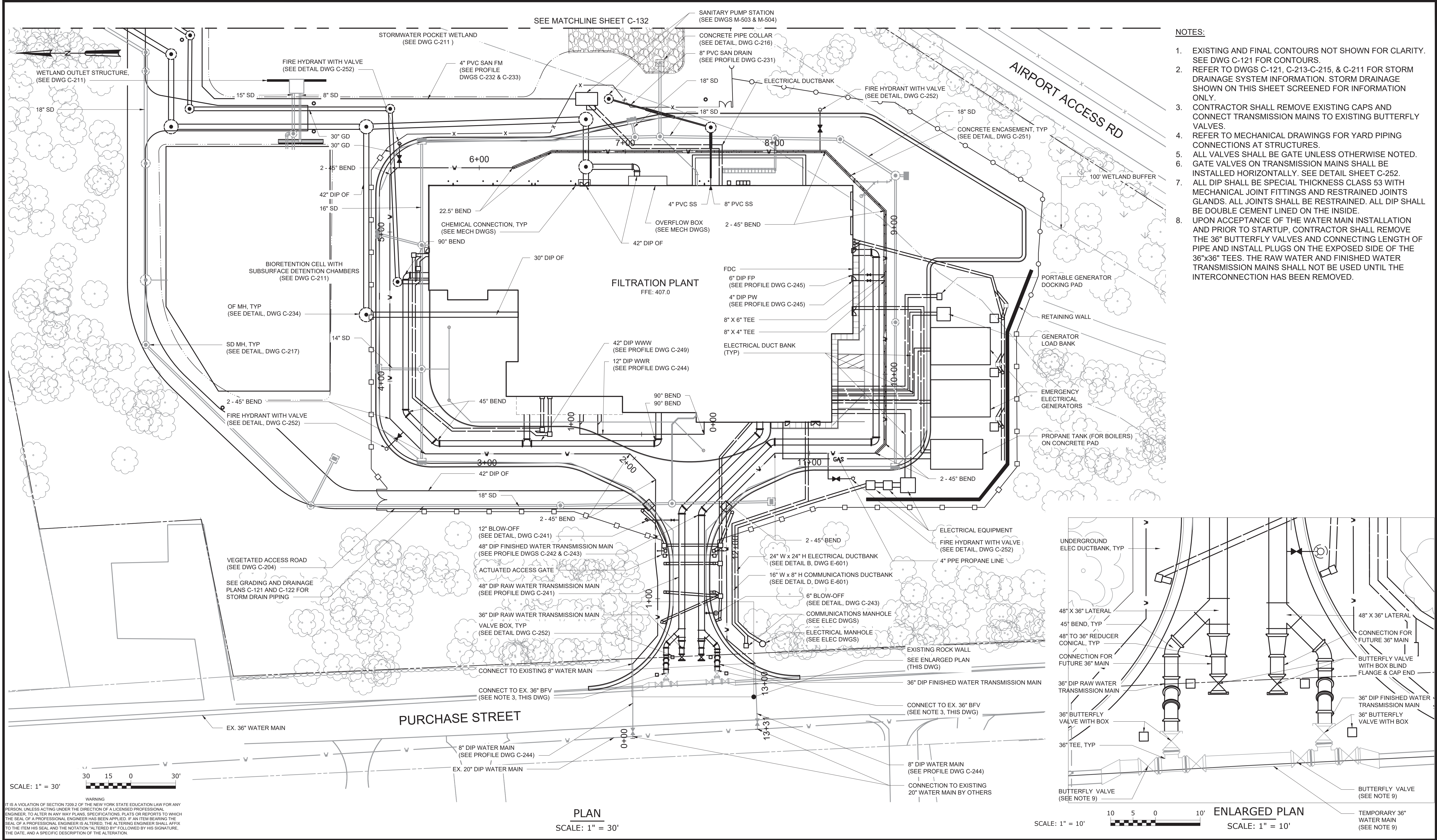
RYE LAKE WATER FILTRATION PLANT HARRISON, NY

CIVIL
GRADING AND DRAINAGE PLAN - AREA 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-122

File: C:\USERS\JTANNER\ID\ACCD\CSHAZEN AND SAWYER\90388-000_RYE_LAKE_FILTERATION\PROJECT FILES\PROJECT\WISE\CIVIL\IC-122 Saved by JTANNER Save date: 3/24/2025 2:25 PM
PLOT DATE: 3/26/2025 6:38 PM BY: JTANNER

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE LAKE FILTRATION\PROJECT\DWG\CIVIL-C-131.dwg, Saved by: JTANNER, Save date: 3/24/2025 2:50 PM
PLOT DATE: 3/27/2025 10:26 AM BY: JTANNER



PLAN

SCALE: 1" = 30'

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

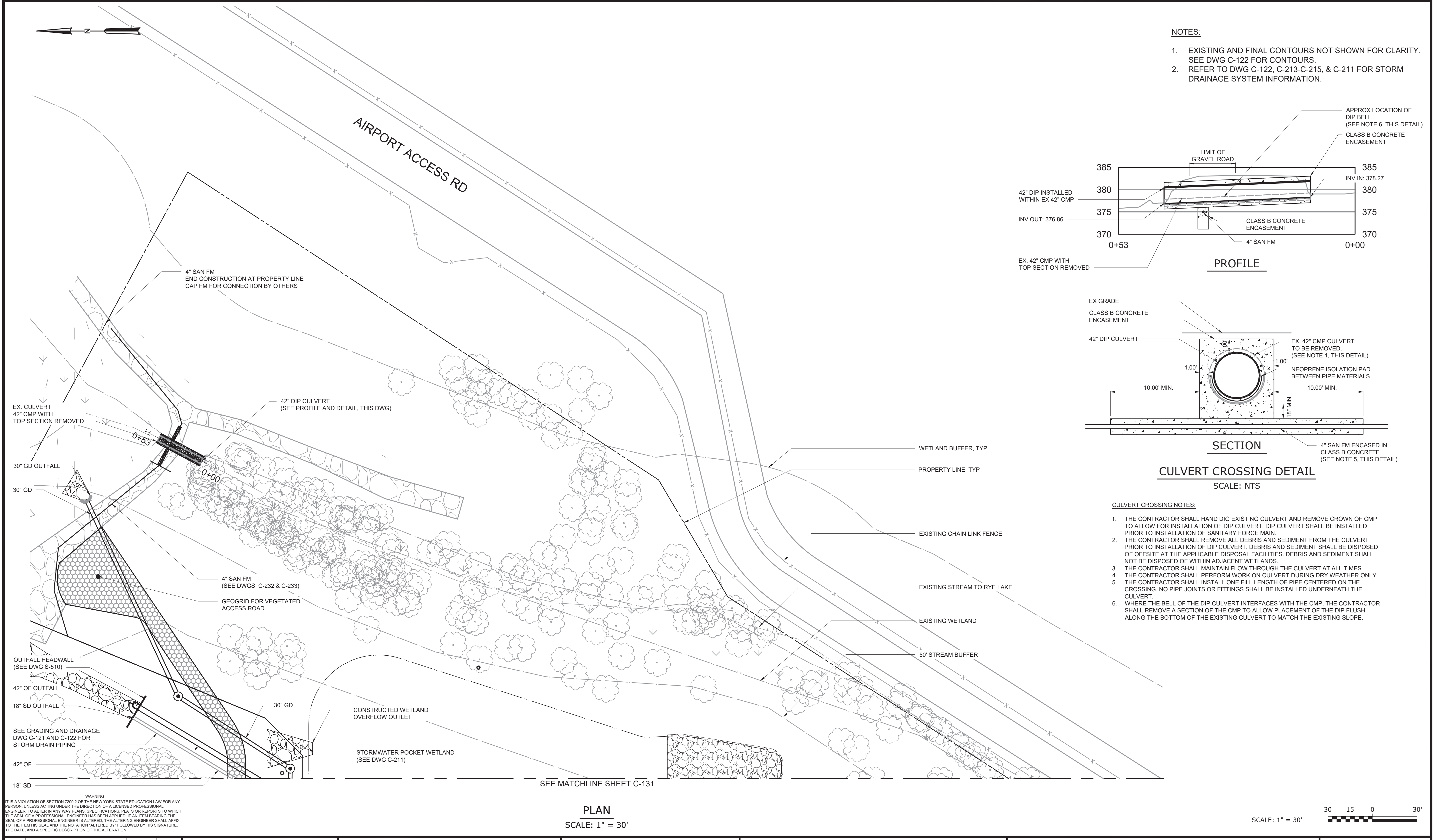
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
YARD PIPING PLAN - AREA 1

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-131

File: C:\USERS\TANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE LAKE FILTRATION\PROJECT\DWG\C-132.dwg, 2/11/2025 1:22 PM
PLOT DATE: 3/26/2025 11:21 PM BY: JTANNER



				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

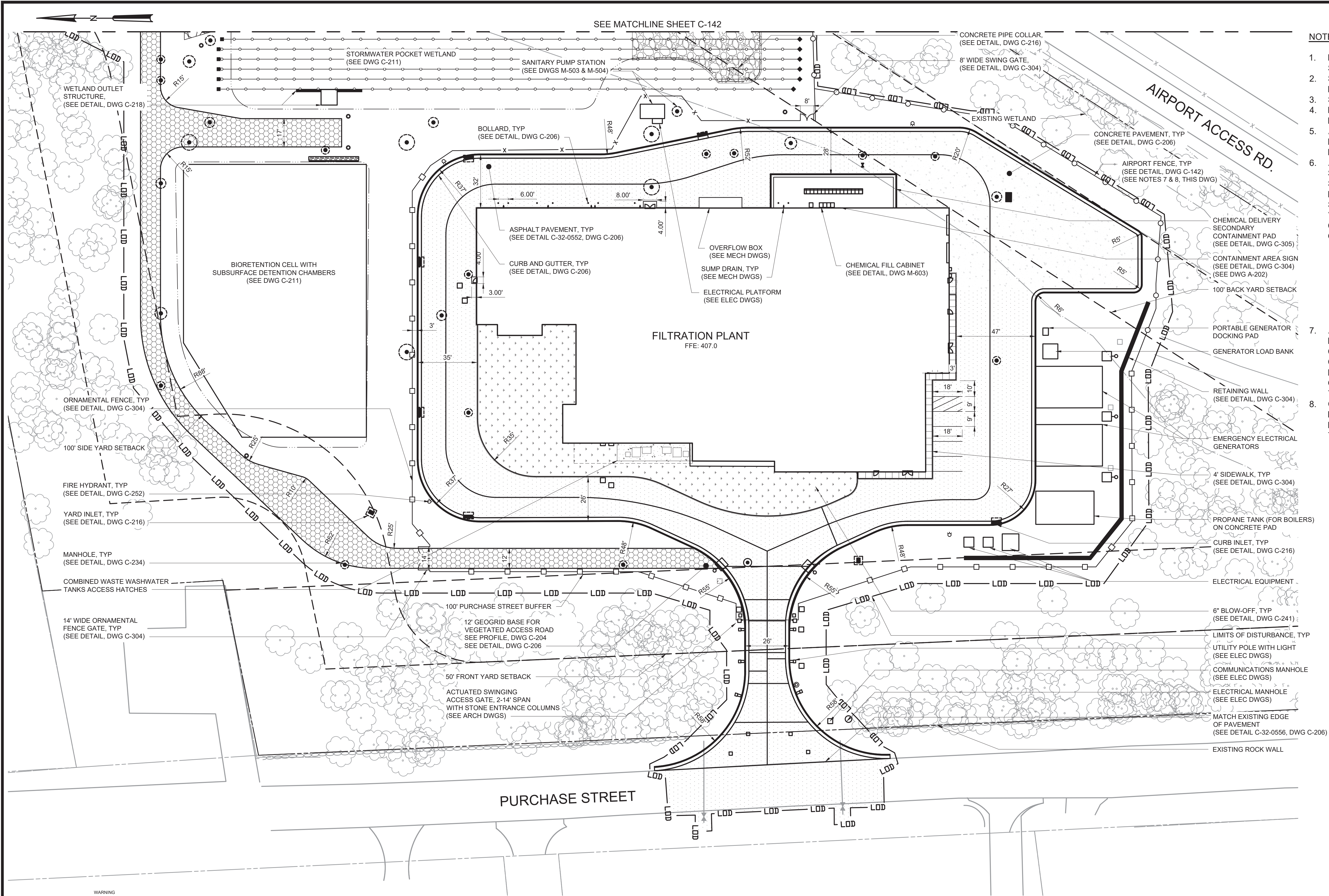
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
YARD PIPING PLAN - AREA 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-132

File: C:\USERS\JTANNER\PROJECT FILES\PROJECT\WSEC\WILC-141A Saved by JTANNER Save date: 3/25/2025 12:46 PM
PLOT DATE: 3/27/2025 10:29 AM BY: JTANNER



- NOTES:
- EXISTING AND FINAL CONTOURS NOT SHOWN FOR CLARITY. SEE SHEET C-121 FOR TOPOGRAPHIC INFORMATION.
 - SEE SHEET C-121 FOR UNDERGROUND STORMWATER PIPING.
 - SEE SHEET C-131 FOR YARD PIPING.
 - REFER TO SHEETS C-213 THROUGH C-215 FOR STORM DRAIN PROFILES.
 - ALL DISTURBED AREAS THAT ARE NOT PAVED SHALL BE RESTORED BY TOPSOIL AND SEEDING. SEE LANDSCAPE DWGS.
 - ALL AREAS DESIGNATED FOR LANDSCAPE RESTORATION SHALL HAVE SOILS RESTORED IN ACCORDANCE WITH THE SOIL RESTORATION TABLE ON DRAWING C-301. SOIL RESTORATION IS NOT REQUIRED FOR AREAS OF STRUCTURES, BUILDING, EQUIPMENT PADS, RIP RAP, VEGETATED AND PAVED ROADWAYS. ALL AREAS SHALL BE CONSIDERED AREAS OF CUT OR FILL WITH THE EXCEPTION OF THE FOLLOWING:
 - THE BIORETENTION CELL SHALL BE CONSIDERED AN AREA OF RUNOFF REDUCTION PRACTICES ARE APPLIED.
 - THE INFILL AREAS (SEE DWG C-102 AND LANDSCAPE DWGS) SHALL BE CONSIDERED MINIMAL SOIL DISTURBANCE.
 - AIRPORT FENCE SHALL BE REVIEWED BY WCA OFFICIALS DURING INITIAL INSTALLATION AND PRIOR TO SUBSTANTIAL COMPLETION. ANY DAMAGE TO THE FENCE DURING THE COURSE OF CONSTRUCTION ACTIVITIES SHALL BE REPLACED AND RESTORED TO THE SATISFACTION OF THE OWNER, ENGINEER AND WCA AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL ASSUME AN ADDITIONAL 50-FEET OF FENCE REPLACEMENT BEYOND WHAT IS SHOWN ON THE DRAWINGS TO ACCOMMODATE FIELD CONDITIONS AND TRANSITION OF EXISTING FENCE TO NEW FENCE.

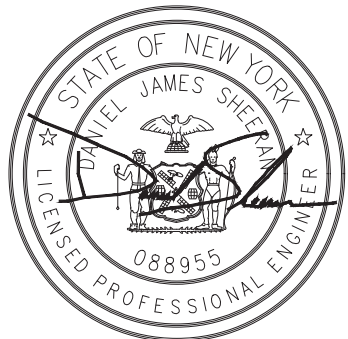
WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

PLAN
SCALE: 1" = 30'

SCALE: 1" = 30'

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

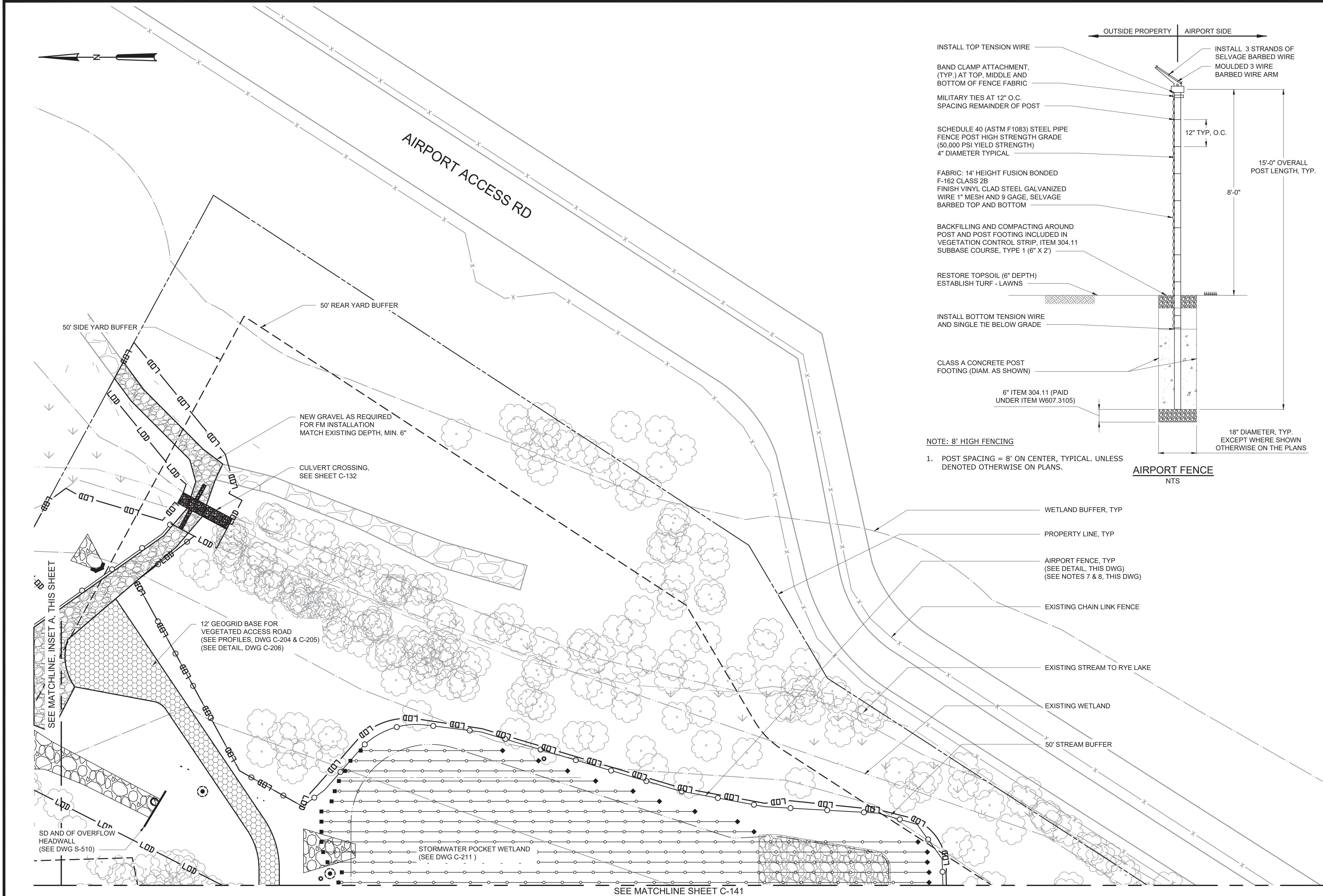
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
FINAL SITE PLAN - AREA 1

DATE: FEB 2025
HAZEN NO.: 90388-000
CONTRACT NO.: A1364-A
DRAWING NUMBER: C-141

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE LAKE FILTRATION\PROJECT\WSE\CIVIL\C-142 Saved by: JTANNER Save date: 2/11/2025 1:35 PM
PLOT DATE: 3/26/2025 11:22 PM BY: JTANNER

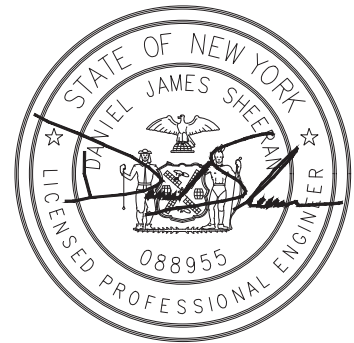


WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	C. MCNICOL
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET

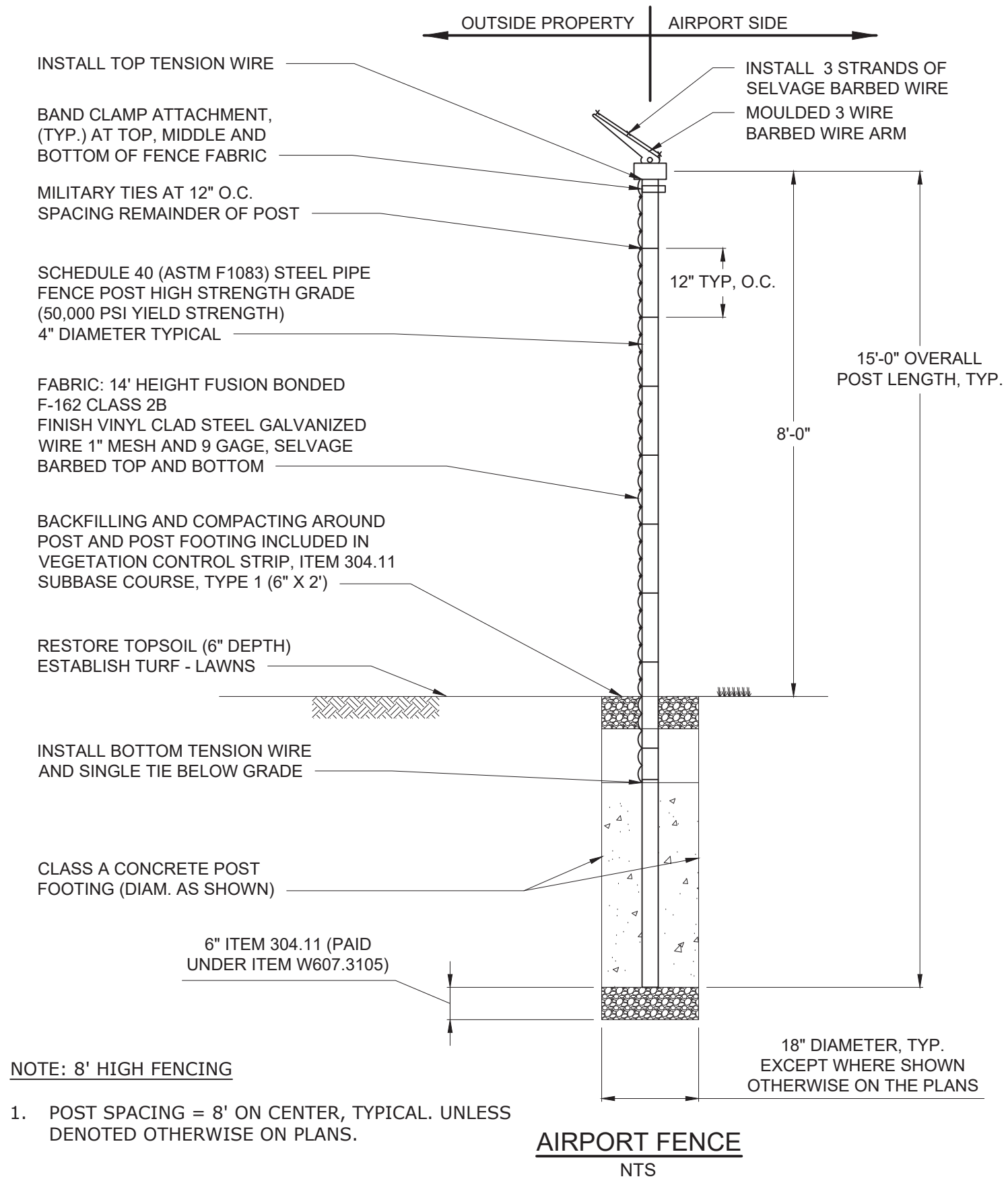


Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

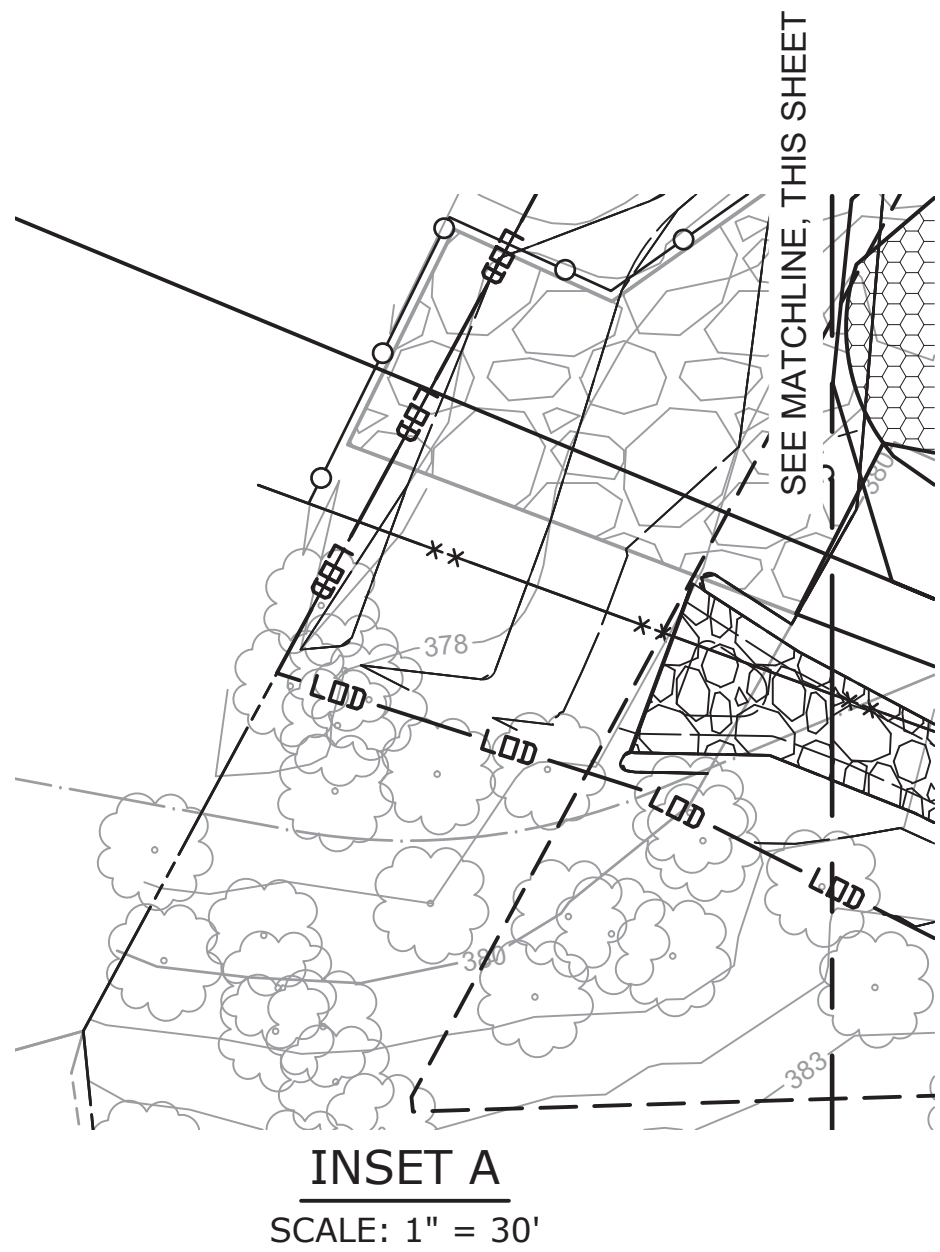
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
FINAL SITE PLAN - AREA 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-142



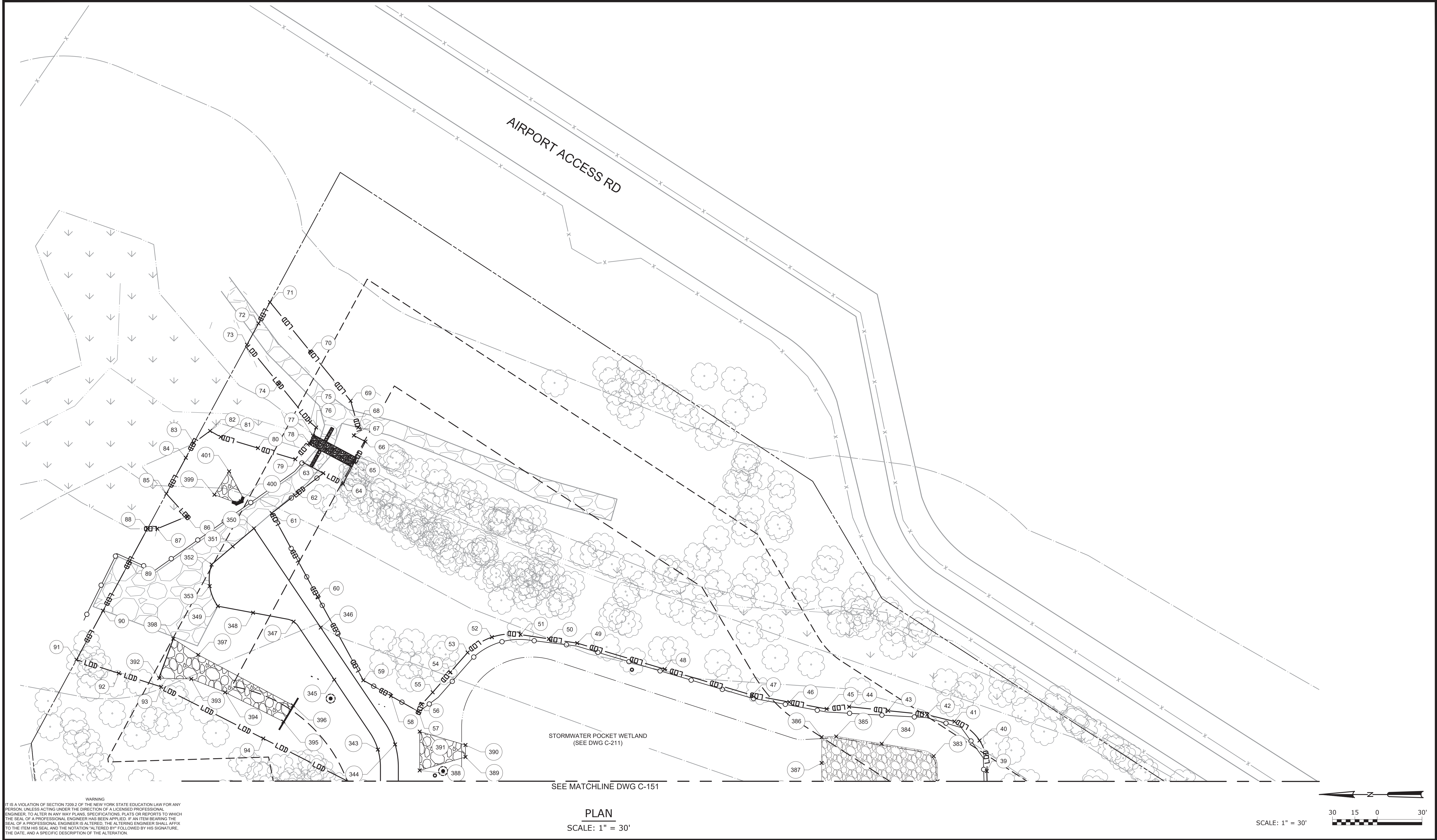
- NOTES:**
- EXISTING AND FINAL CONTOURS NOT SHOWN FOR CLARITY. SEE SHEET C-121 FOR TOPOGRAPHIC INFORMATION.
 - SEE SHEET C-121 FOR UNDERGROUND STORMWATER PIPING.
 - SEE SHEET C-131 FOR YARD PIPING.
 - REFER TO SHEETS C-213 THROUGH C-215 FOR STORM DRAIN PROFILES.
 - ALL DISTURBED AREAS THAT ARE NOT PAVED SHALL BE RESTORED BY TOPSOIL AND SEEDING. SEE LANDSCAPE DWGS.
 - ALL AREAS DESIGNATED FOR LANDSCAPE RESTORATION SHALL HAVE SOILS RESTORED IN ACCORDANCE WITH THE SOIL RESTORATION TABLE ON DRAWING C-301. SOIL RESTORATION IS NOT REQUIRED FOR AREAS OF STRUCTURES, BUILDING, EQUIPMENT PADS, RIP RAP, VEGETATED AND PAVED ROADWAYS. ALL AREAS SHALL BE CONSIDERED AREAS OF CUT OR FILL WITH THE EXCEPTION OF THE FOLLOWING:
 - THE BIORETENTION CELL SHALL BE CONSIDERED AN AREA OF RUNOFF REDUCTION PRACTICES ARE APPLIED.
 - THE INFILL AREAS (SEE DWG C-102 AND LANDSCAPE DWGS) SHALL BE CONSIDERED MINIMAL SOIL DISTURBANCE.
 - AIRPORT FENCE SHALL BE REVIEWED BY WCA OFFICIALS DURING INITIAL INSTALLATION AND PRIOR TO SUBSTANTIAL COMPLETION. ANY DAMAGE TO THE FENCE DURING THE COURSE OF CONSTRUCTION ACTIVITIES SHALL BE REPLACED AND RESTORED TO THE SATISFACTION OF THE OWNER, ENGINEER AND WCA AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL ASSUME AN ADDITIONAL 50-FOET OF FENCE REPLACEMENT BEYOND WHAT IS SHOWN ON THE DRAWINGS TO ACCOMMODATE FIELD CONDITIONS AND TRANSITION OF EXISTING FENCE TO NEW FENCE.



INSET A
SCALE: 1" = 30'

SCALE: 1" = 30'

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WSE\CIVIL-C-152_STAKING.dwg Date: 2/11/2025 1:41 PM
PLOT DATE: 3/26/2025 11:23 PM BY: JTANNER



				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	K. ROBBINS
				DRAWN BY:	K. ROBBINS
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	
				0 1/2" 1"	
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
STAKING PLAN - AREA 2

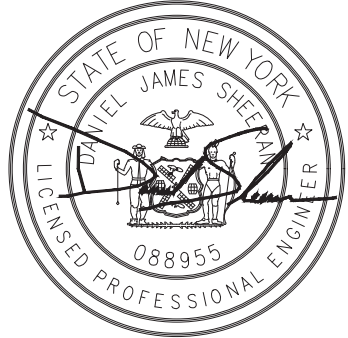
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-152

File: C:\USERS\JANNERD\ACD\GCS\HAZEN AND SAWYER\030388-000_RYE_LAKE_FILTERATION\PROJECT FILES\PROJECTWISE\CIVIL-C-153_STAKING Saved by: JANNER, Save date: 2/7/2025 1:15 PM
PLOT DATE: 3/26/2025 11:23 PM BY: JANNER

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	K. ROBBINS
				DRAWN BY:	K. ROBBINS
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	
				0	1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

STAKING TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
1	813521.69	707411.73	LIMIT OF DISTURBANCE
2	813505.45	707412.11	LIMIT OF DISTURBANCE
3	813505.40	707402.11	LIMIT OF DISTURBANCE
4	813495.43	707402.66	LIMIT OF DISTURBANCE
5	813495.71	707412.94	LIMIT OF DISTURBANCE
6	813468.85	707414.26	LIMIT OF DISTURBANCE
7	813441.99	707415.58	LIMIT OF DISTURBANCE
8	813441.92	707406.04	LIMIT OF DISTURBANCE
9	813431.63	707406.87	LIMIT OF DISTURBANCE
10	813431.79	707416.08	LIMIT OF DISTURBANCE
11	813423.20	707416.32	LIMIT OF DISTURBANCE
12	813391.82	707416.95	LIMIT OF DISTURBANCE
13	813392.26	707438.80	LIMIT OF DISTURBANCE
14	813383.54	707443.03	LIMIT OF DISTURBANCE
15	813385.60	707449.57	LIMIT OF DISTURBANCE
16	813393.02	707453.70	LIMIT OF DISTURBANCE
17	813408.38	707470.60	LIMIT OF DISTURBANCE
18	813418.92	707481.05	LIMIT OF DISTURBANCE
19	813426.70	707490.64	LIMIT OF DISTURBANCE
20	813426.73	707512.94	LIMIT OF DISTURBANCE
21	813426.78	707535.23	LIMIT OF DISTURBANCE
22	813400.09	707543.27	LIMIT OF DISTURBANCE
23	813373.41	707551.30	LIMIT OF DISTURBANCE
24	813316.57	707551.30	LIMIT OF DISTURBANCE
25	813259.74	707551.30	LIMIT OF DISTURBANCE
26	813246.22	707569.99	LIMIT OF DISTURBANCE
27	813232.71	707588.67	LIMIT OF DISTURBANCE
28	813232.92	707632.76	LIMIT OF DISTURBANCE
29	813233.13	707676.86	LIMIT OF DISTURBANCE
30	813225.79	707695.79	LIMIT OF DISTURBANCE
31	813218.45	707714.73	LIMIT OF DISTURBANCE
32	813220.95	707744.00	LIMIT OF DISTURBANCE
33	813223.45	707773.28	LIMIT OF DISTURBANCE
34	813273.92	707804.07	LIMIT OF DISTURBANCE
35	813324.39	707834.85	LIMIT OF DISTURBANCE
36	813339.71	707835.53	LIMIT OF DISTURBANCE
37	813385.75	707842.94	LIMIT OF DISTURBANCE
38	813431.80	707850.35	LIMIT OF DISTURBANCE
39	813432.56	707877.72	LIMIT OF DISTURBANCE
40	813437.43	707898.24	LIMIT OF DISTURBANCE
41	813454.24	707910.98	LIMIT OF DISTURBANCE
42	813472.50	707915.53	LIMIT OF DISTURBANCE
43	813498.66	707918.20	LIMIT OF DISTURBANCE
44	813524.83	707920.88	LIMIT OF DISTURBANCE
45	813539.90	707919.38	LIMIT OF DISTURBANCE
46	813564.85	707924.01	LIMIT OF DISTURBANCE
47	813589.81	707928.64	LIMIT OF DISTURBANCE
48	813648.42	707946.08	LIMIT OF DISTURBANCE
49	813707.04	707963.52	LIMIT OF DISTURBANCE
50	813726.02	707966.37	LIMIT OF DISTURBANCE

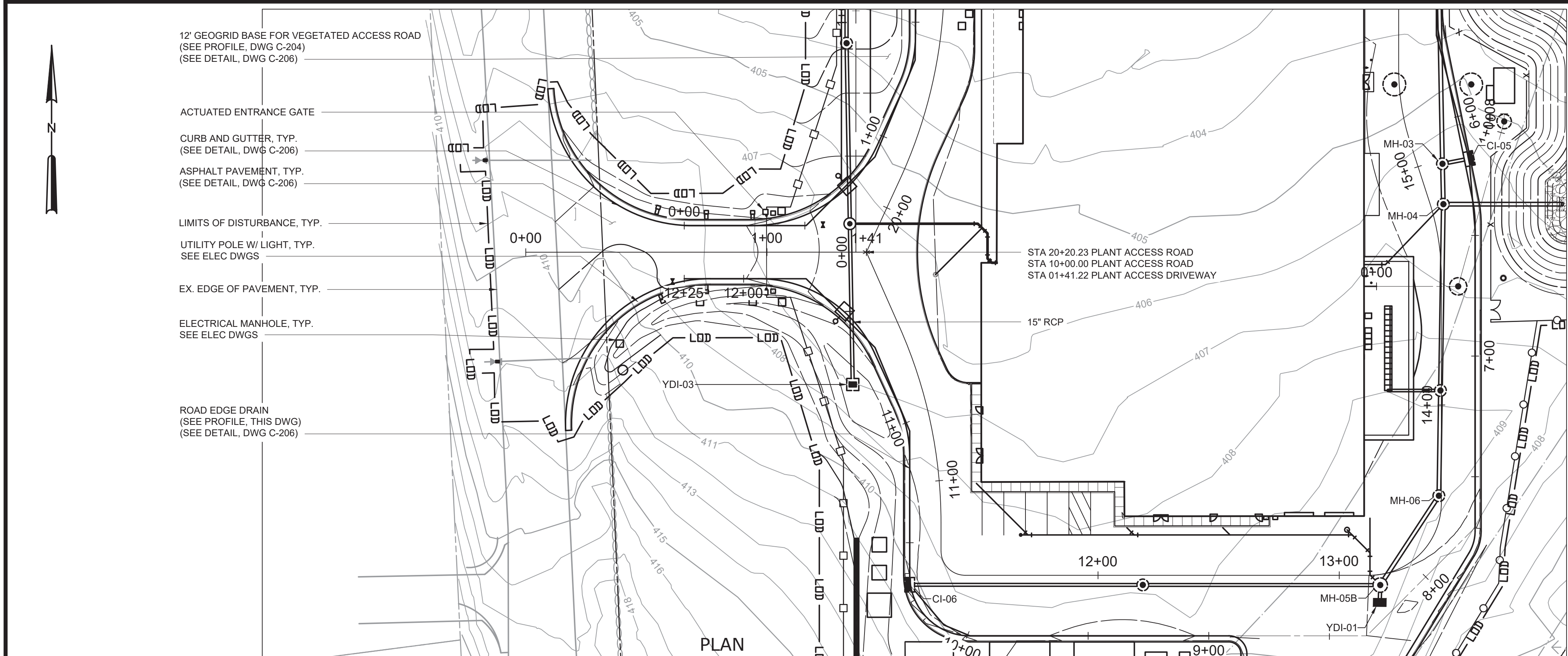
STAKING TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
51	813745.01	707969.21	LIMIT OF DISTURBANCE
52	813764.21	707967.50	LIMIT OF DISTURBANCE
53	813780.49	707957.19	LIMIT OF DISTURBANCE
54	813792.18	707943.87	LIMIT OF DISTURBANCE
55	813803.87	707930.55	LIMIT OF DISTURBANCE
56	813811.28	707922.44	LIMIT OF DISTURBANCE
57	813813.19	707917.51	LIMIT OF DISTURBANCE
58	813831.78	707928.05	LIMIT OF DISTURBANCE
59	813850.38	707938.59	LIMIT OF DISTURBANCE
60	813881.03	707994.62	LIMIT OF DISTURBANCE
61	813911.69	708050.66	LIMIT OF DISTURBANCE
62	813894.45	708064.04	LIMIT OF DISTURBANCE
63	813877.22	708077.42	LIMIT OF DISTURBANCE
64	813863.98	708070.36	LIMIT OF DISTURBANCE
65	813856.37	708084.63	LIMIT OF DISTURBANCE
66	813848.93	708098.58	LIMIT OF DISTURBANCE
67	813856.68	708102.69	LIMIT OF DISTURBANCE
68	813853.78	708108.10	LIMIT OF DISTURBANCE
69	813858.88	708125.95	LIMIT OF DISTURBANCE
70	813885.88	708159.03	LIMIT OF DISTURBANCE
71	813912.89	708192.10	LIMIT OF DISTURBANCE
72	813920.61	708177.84	LIMIT OF DISTURBANCE
73	813928.33	708163.57	LIMIT OF DISTURBANCE
74	813907.16	708137.61	LIMIT OF DISTURBANCE
75	813886.00	708111.66	LIMIT OF DISTURBANCE
76	813881.98	708108.08	LIMIT OF DISTURBANCE
77	813884.04	708102.47	LIMIT OF DISTURBANCE
78	813886.59	708097.68	LIMIT OF DISTURBANCE
79	813895.95	708086.78	LIMIT OF DISTURBANCE
80	813920.97	708094.26	LIMIT OF DISTURBANCE
81	813945.99	708101.74	LIMIT OF DISTURBANCE
82	813953.06	708105.77	LIMIT OF DISTURBANCE
83	813963.92	708097.76	LIMIT OF DISTURBANCE
84	813969.33	708087.77	LIMIT OF DISTURBANCE
85	813982.35	708063.69	LIMIT OF DISTURBANCE
86	813968.58	708048.46	LIMIT OF DISTURBANCE
87	813988.41	708040.23	LIMIT OF DISTURBANCE
88	813995.07	708040.19	LIMIT OF DISTURBANCE
89	814006.99	708018.14	LIMIT OF DISTURBANCE
90	814024.78	707985.26	LIMIT OF DISTURBANCE
91	814042.57	707952.37	LIMIT OF DISTURBANCE
92	814014.21	707943.29	LIMIT OF DISTURBANCE
93	813985.84	707934.21	LIMIT OF DISTURBANCE
94	813917.40	707899.58	LIMIT OF DISTURBANCE
95	813848.96	707864.96	LIMIT OF DISTURBANCE
96	813848.96	707781.89	LIMIT OF DISTURBANCE
97	813848.96	707698.82	LIMIT OF DISTURBANCE
98	813843.14	707668.86	LIMIT OF DISTURBANCE
99	813826.62	707649.03	LIMIT OF DISTURBANCE
100	813810.11	707629.20	LIMIT OF DISTURBANCE

STAKING TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
101	813776.66	707597.33	LIMIT OF DISTURBANCE
102	813743.21	707565.45	LIMIT OF DISTURBANCE
103	813720.29	707550.73	LIMIT OF DISTURBANCE
104	813693.54	707545.58	LIMIT OF DISTURBANCE
105	813612.57	707545.58	LIMIT OF DISTURBANCE
106	813531.61	707545.59	LIMIT OF DISTURBANCE
107	813496.61	707535.23	LIMIT OF DISTURBANCE
108	813496.65	707524.87	LIMIT OF DISTURBANCE
109	813486.58	707511.29	LIMIT OF DISTURBANCE
110	813486.52	707481.47	LIMIT OF DISTURBANCE
111	813511.29	707456.58	LIMIT OF DISTURBANCE
112	813524.22	707446.96	LIMIT OF DISTURBANCE
113	813532.81	707442.81	LIMIT OF DISTURBANCE
114	813532.56	707436.47	LIMIT OF DISTURBANCE
115	813523.34	707434.62	LIMIT OF DISTURBANCE
201	813585.10	707635.71	FILTRATION PLANT
202	813507.17	707635.71	FILTRATION PLANT
203	813507.17	707624.97	FILTRATION PLANT
204	813457.76	707624.82	FILTRATION PLANT
205	813457.76	707618.42	FILTRATION PLANT
206	813366.91	707618.44	FILTRATION PLANT
207	813367.06	707677.69	FILTRATION PLANT
208	813352.73	707677.75	FILTRATION PLANT
209	813352.81	707777.11	FILTRATION PLANT
210	813636.87	707777.03	FILTRATION PLANT
211	813636.85	707706.97	FILTRATION PLANT
212	813624.35	707706.97	FILTRATION PLANT
213	813624.35	707700.47	FILTRATION PLANT
214	813597.45	707700.48	FILTRATION PLANT
215	813597.46	707706.98	FILTRATION PLANT
216	813577.12	707706.98	FILTRATION PLANT
217	813577.11	707658.98	FILTRATION PLANT
218	813585.11	707658.98	FILTRATION PLANT
219	813462.18	707529.44	GATE
220	813664.98	707566.46	GATE
221	813438.26	707829.58	GATE
222	813443.47	707529.44	FENCE
223	813443.47	707539.33	FENCE
224	813375.99	707561.30	FENCE
225	813264.54	707561.30	FENCE
226	813242.71	707588.62	FENCE
227	813243.14	707678.70	FENCE
228	813228.45	707716.60	FENCE
229	813225.36	707772.10	FENCE
230	813325.00	707832.88	FENCE
231	813501.83	707829.58	FENCE
232	813513.61	707844.38	FENCE
233	813538.09	707844.38	FENCE
234	813555.63	707812.47	FENCE
235	813651.38	707812.00	FENCE

STAKING TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
236	813664.59	707802.57	FENCE
237	813675.55	707787.38	FENCE
238	813675.55	707587.14	FENCE
239	813684.98	707574.45	FENCE
240	813664.99	707558.46	FENCE
241	813539.64	707558.47	FENCE
242	813480.89	707539.35	FENCE
243	813480.89	707529.44	FENCE
244	813529.87	707438.78	EDGE OF ROAD
245	813489.59	707457.45	EDGE OF ROAD
246	813473.18	707498.69	EDGE OF ROAD
247	813473.18	707523.48	EDGE OF ROAD
248	813482.18	707554.23	EDGE OF ROAD
249	813506.34	707575.26	EDGE OF ROAD
250	813530.93	707586.58	EDGE OF ROAD
251	813541.22	707590.02	EDGE OF ROAD
252	813552.02	707591.16	EDGE OF ROAD
253	813593.47	707591.01	EDGE OF ROAD
254	813634.92	707590.87	EDGE OF ROAD
255	813659.75	707601.07	EDGE OF ROAD
256	813670.05	707625.87	EDGE OF ROAD
257	813367.05	707698.93	EDGE OF ROAD
258	813670.05	707772.00	EDGE OF ROAD
259	813659.81	707796.74	EDGE OF ROAD
260	813635.07	707807.00	EDGE OF ROAD
261	813598.73	707807.02	EDGE OF ROAD
262	813562.39	707807.04	EDGE OF ROAD
263	813552.42	707808.05	EDGE OF ROAD
264	813557.38	707807.29	EDGE OF ROAD
265	813483.66	707822.07	EDGE OF ROAD
266	813518.04	707815.06	EDGE OF ROAD
267	813473.67	707823.08	EDGE OF ROAD
268	813478.69	707822.83	EDGE OF ROAD
269	813410.13	707823.08	EDGE OF ROAD
270	813346.60	707823.08	EDGE OF ROAD
271	813341.88	707822.43	EDGE OF ROAD
272	813337.51	707820.54	EDGE OF ROAD
273	813289.00	707791.05	EDGE OF ROAD
274	813239.61	707760.65	EDGE OF ROAD
275	813240.00	707729.25	EDGE OF ROAD
276	813268.72	707728.52	EDGE OF ROAD
277	813300.98	707726.33	EDGE OF ROAD
278	813303.18	707667.39	EDGE OF ROAD
279	813303.18	707613.75	EDGE OF ROAD
280	813310.50	707596.08	EDGE OF ROAD
281	813328.17	707588.76	EDGE OF ROAD
282	813352.99	707588.75	EDGE OF ROAD
283	813388.49	707587.58	EDGE OF ROAD
284	813409.52	707579.17	EDGE OF ROAD
285	813420.34	707574.19	EDGE OF ROAD

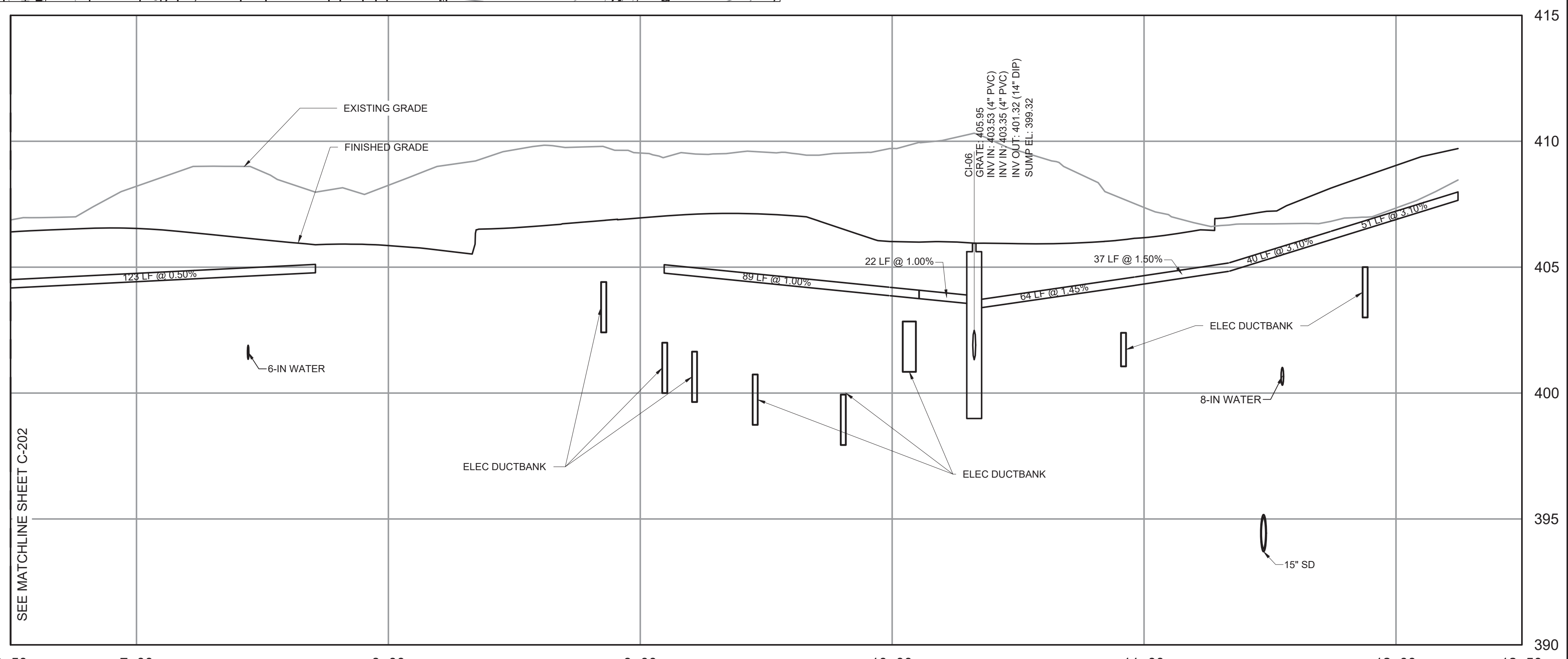
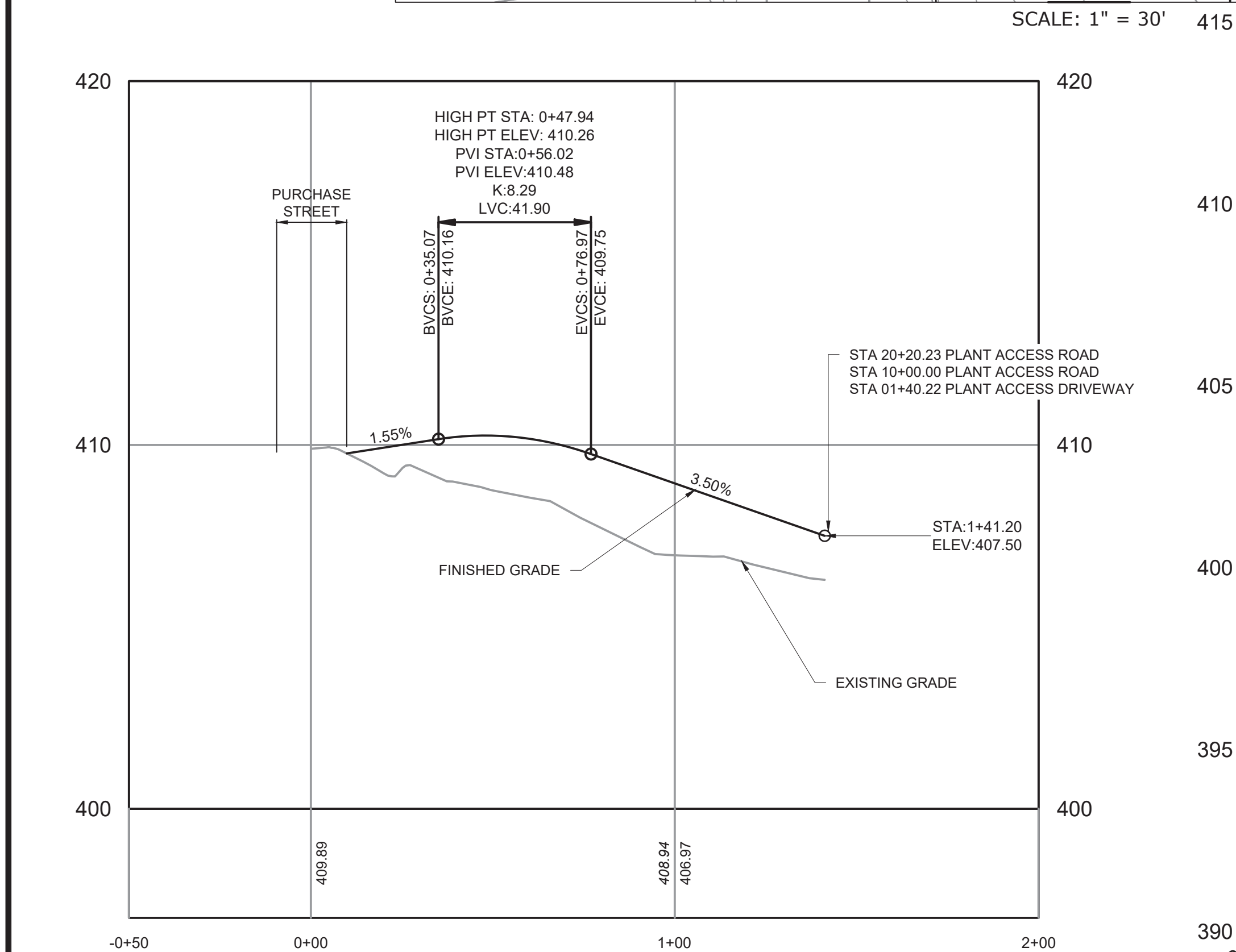
STAKING TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
286	813442.81	707554.63	EDGE OF ROAD
287	813451.18	707526.05	EDGE OF ROAD
288	813451.18	707506.08	EDGE OF ROAD
289	813432.56	707462.64	EDGE OF ROAD
290	813388.27	707446.15	EDGE OF ROAD
291	813636.74	707678.57	EDGE OF ROAD
292	813636.74	707650.16	EDGE OF ROAD
293	813626.49	707625.41	EDGE OF ROAD
294	813601.74	707615.16	EDGE OF ROAD
295	813574.16	707615.16	EDGE OF ROAD
296	813546.58	707615.16	EDGE OF ROAD
297	813535.88	707614.00	EDGE OF ROAD
298	813514.83	707605.59	EDGE OF ROAD
299	813503.99	707600.60	EDGE OF ROAD
300	813462.18	707591.44	EDGE OF ROAD
301	813420.36	707600.60	EDGE OF ROAD
302	813413.41	707603.80	EDGE OF ROAD
303	813409.17	707607.49	EDGE OF ROAD
304	813407.59	707613.93	EDGE OF ROAD
305	813385.00	707613.94	EDGE OF ROAD
306	813362.41	707613.94	EDGE OF ROAD
307	813362.42	707643.60	EDGE OF ROAD
308	813362.43	707673.25	EDGE OF ROAD
309	813348.22	707673.25	EDGE OF ROAD
310	813348.26	707705.75	EDGE OF ROAD
311	813348.29	707738.25	EDGE OF ROAD
312	813352.77	707738.25	EDGE OF ROAD
313	813407.59	707618.43	LIMITS OF SIDEWALK
314	813407.59	707614.43	LIMITS OF SIDEWALK
315	813362.91	707614.44	LIMITS OF SIDEWALK
316	813362.93	707673.75	LIMITS OF SIDEWALK
317	813348.73	707673.75	LIMITS OF SIDEWALK
318	813348.79	707737.75	LIMITS OF SIDEWALK
319	813352.77	707737.75	LIMITS OF SIDEWALK
320	813595.54	707572.46	EDGE OF ROAD
321	813594.62	707560.46	EDGE OF ROAD
322	813721.75	707584.85	EDGE OF ROAD
323	813694.06	707754.25	EDGE OF ROAD
324	813719.75	707596.26	EDGE OF ROAD
325	813774.64	707608.76	EDGE OF ROAD
326	813754.81	707619.22	EDGE OF ROAD
327	813739.43	707614.61	EDGE OF ROAD
328	813773.51	707625.20	EDGE OF ROAD
329	813798.71	707631.49	EDGE OF ROAD
330	813799.62	707648.85	EDGE OF ROAD
331	813819.79	707677.69	EDGE OF ROAD
332	813830.81	707672.94	EDGE OF ROAD
333	813838.90	707712.15	EDGE OF ROAD
334	813826.90	707712.15	EDGE OF ROAD
335	813826.90	707756.91	EDGE OF ROAD

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WSE\DWG\201A Saved by JTANNER Save date: 3/27/2025 1:27 PM
PLOT DATE: 3/27/2025 1:27 PM BY: JTANNER



NOTES:

1. YARD PIPING NOT SHOWN FOR CLARITY. SEE DWGS C-131 & C-132 FOR BELOW GRADE PIPING AND STRUCTURES.
2. ROAD EDGE DRAINS SHALL CONSIST OF 4" PERFORATED PVC PIPE.



IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

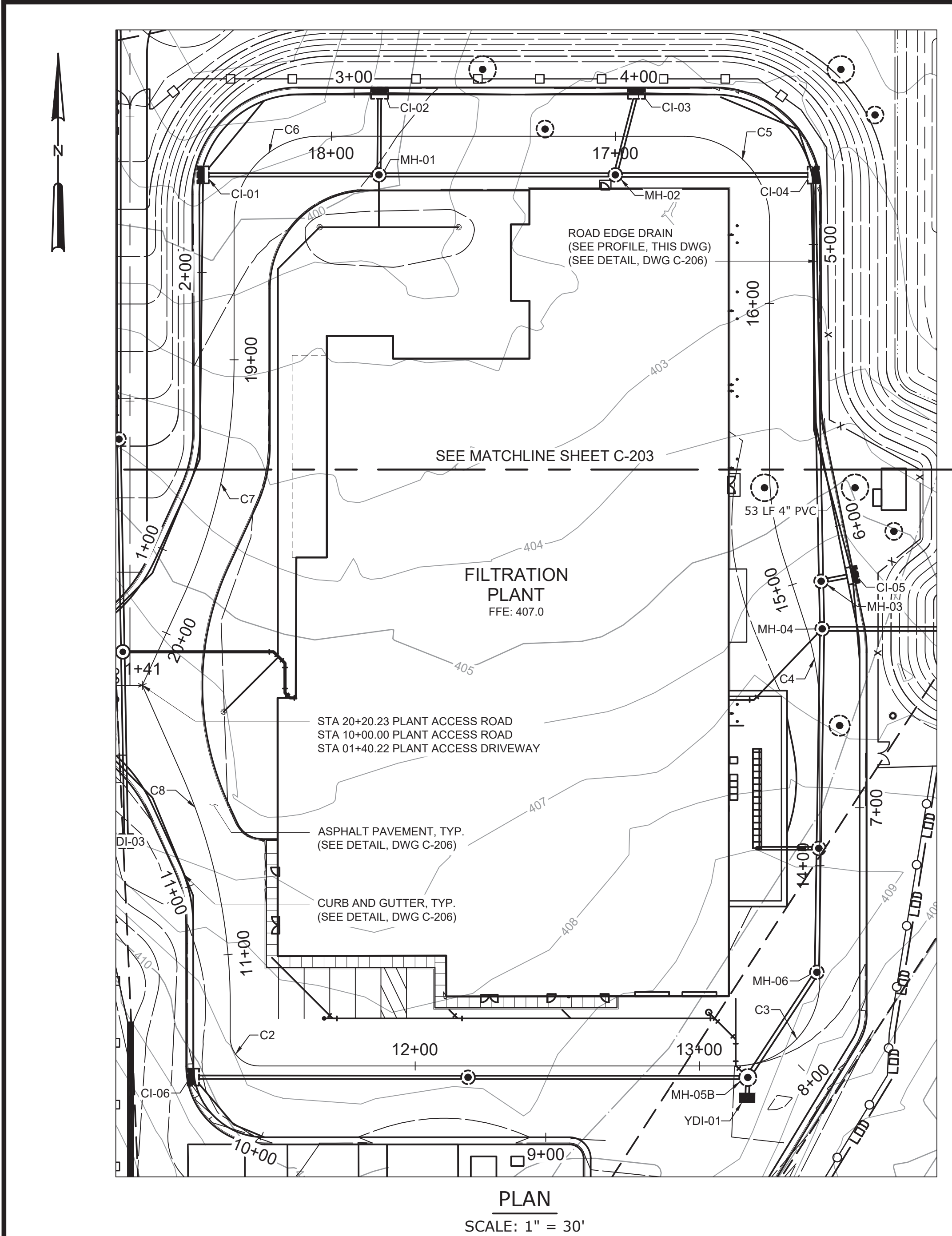
PLANT ACCESS DRIVEWAY PROFILE
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

ROAD EDGE DRAIN PROFILE
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 30'

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

File: C:\USERS\JTANNER\DRAWING\PROJECT\WISCIVILC-202 Saved by: JTANNER Save date: 2/10/2025 9:08 AM
PLOT DATE: 3/27/2025 1:23 PM BY: JTANNER



PLAN
SCALE: 1" = 30'

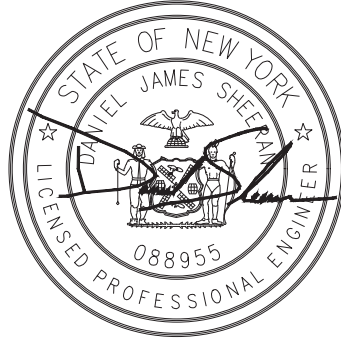
Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C2	10.00	15.71	S45° 00' 00.00"E	(707603.15,813339.89)	(707613.15,813329.89)
C3	30.00	47.12	N45° 00' 00.00"E	(707780.50,813329.89)	(707810.50,813359.89)
C4	100.00	31.27	N8° 57' 28.31"W	(707810.50,813453.64)	(707805.65,813484.40)
C5	30.00	47.12	N44° 59' 38.56"W	(707792.83,813626.97)	(707762.84,813656.97)
C6	30.00	47.13	S45° 00' 21.44"W	(707634.52,813657.00)	(707604.51,813627.00)
C7	200.00	86.23	S12° 21' 05.65"W	(707604.51,813577.78)	(707586.21,813494.19)
C8	200.00	83.26	S11° 55' 35.85"E	(707586.06,813432.52)	(707603.15,813351.65)

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



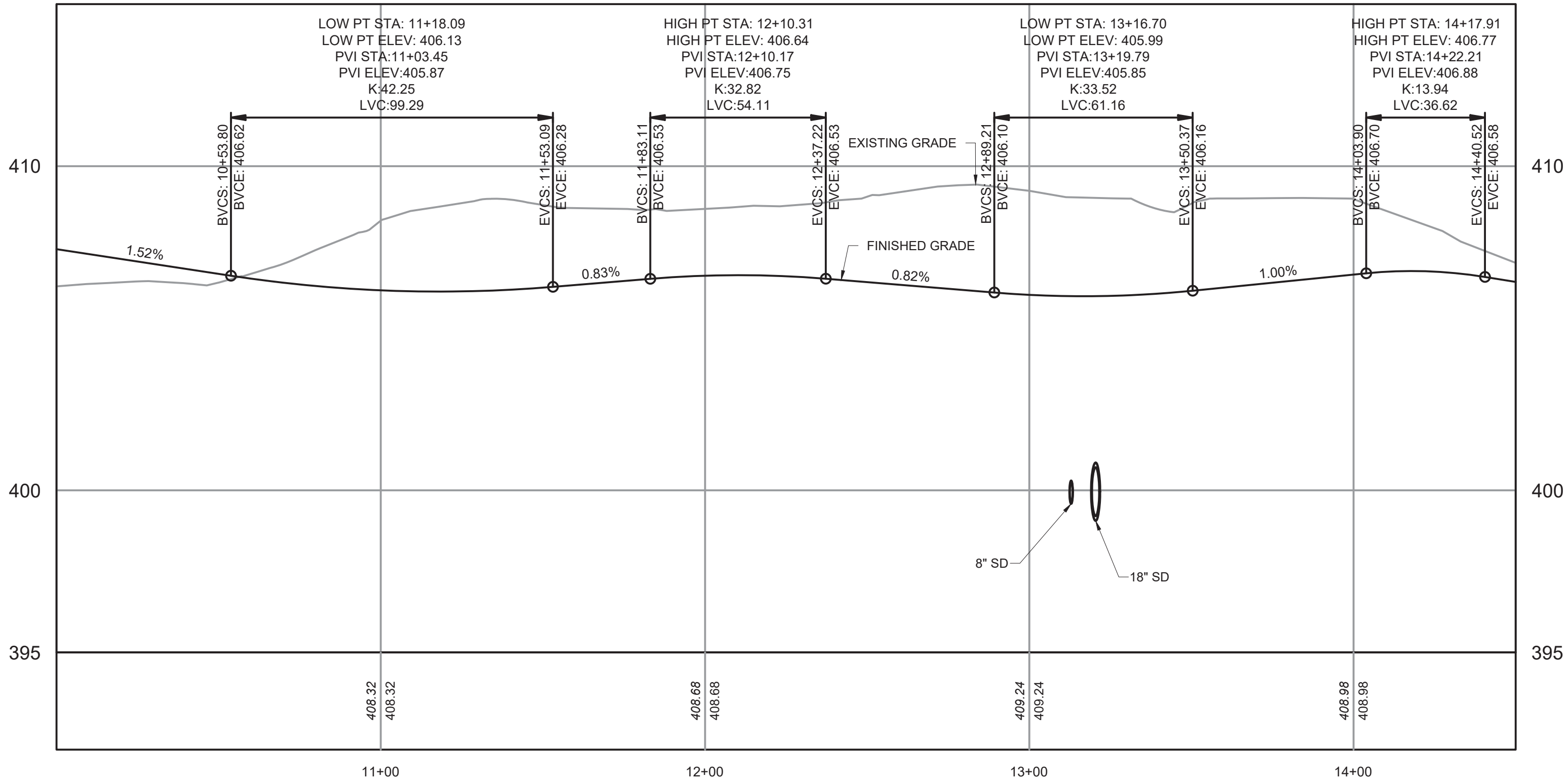
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

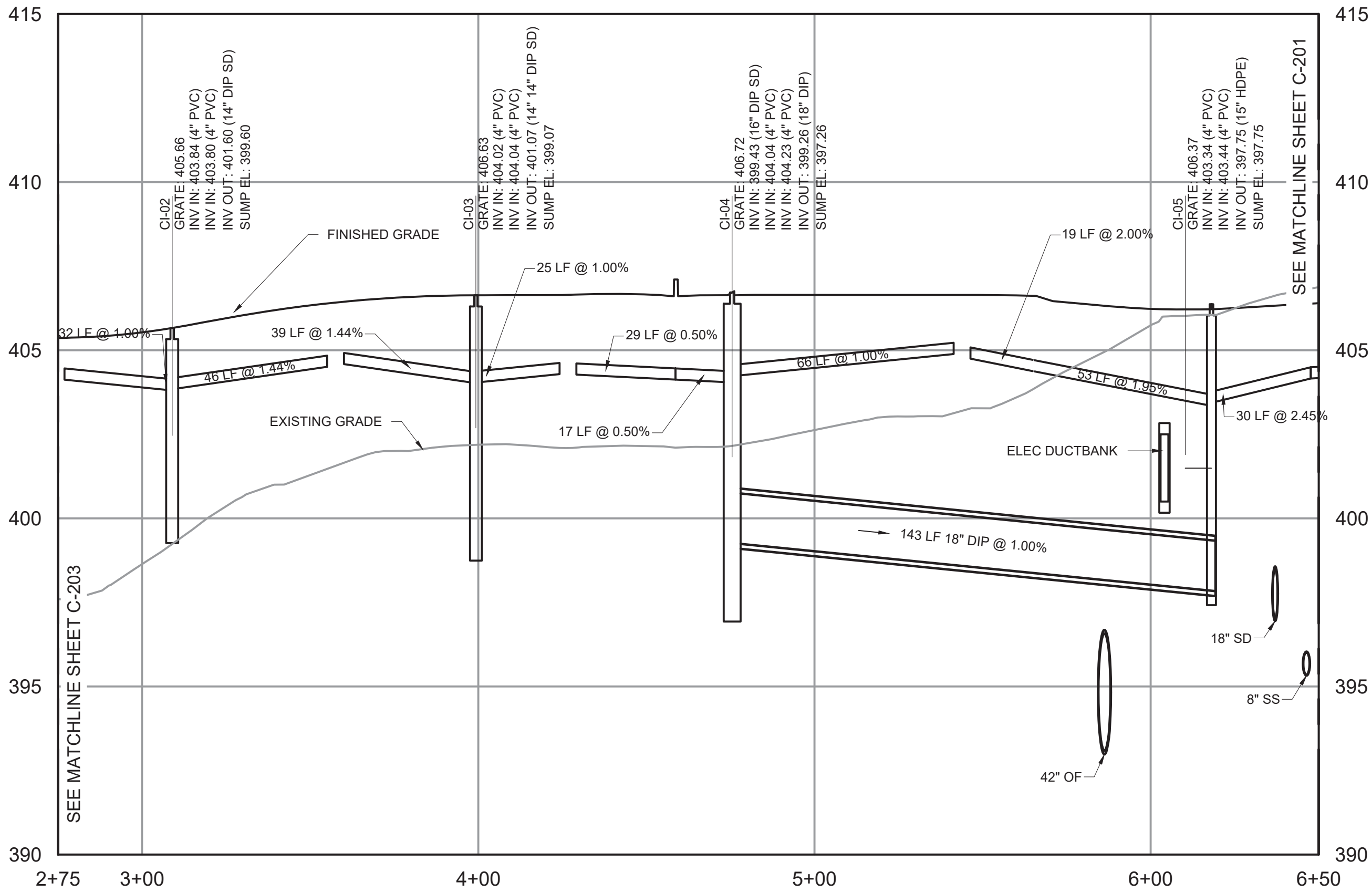
CIVIL
PLANT ACCESS ROAD PLAN AND PROFILE - STA
10+00 TO STA 14+50

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-202



PLANT ACCESS ROAD PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



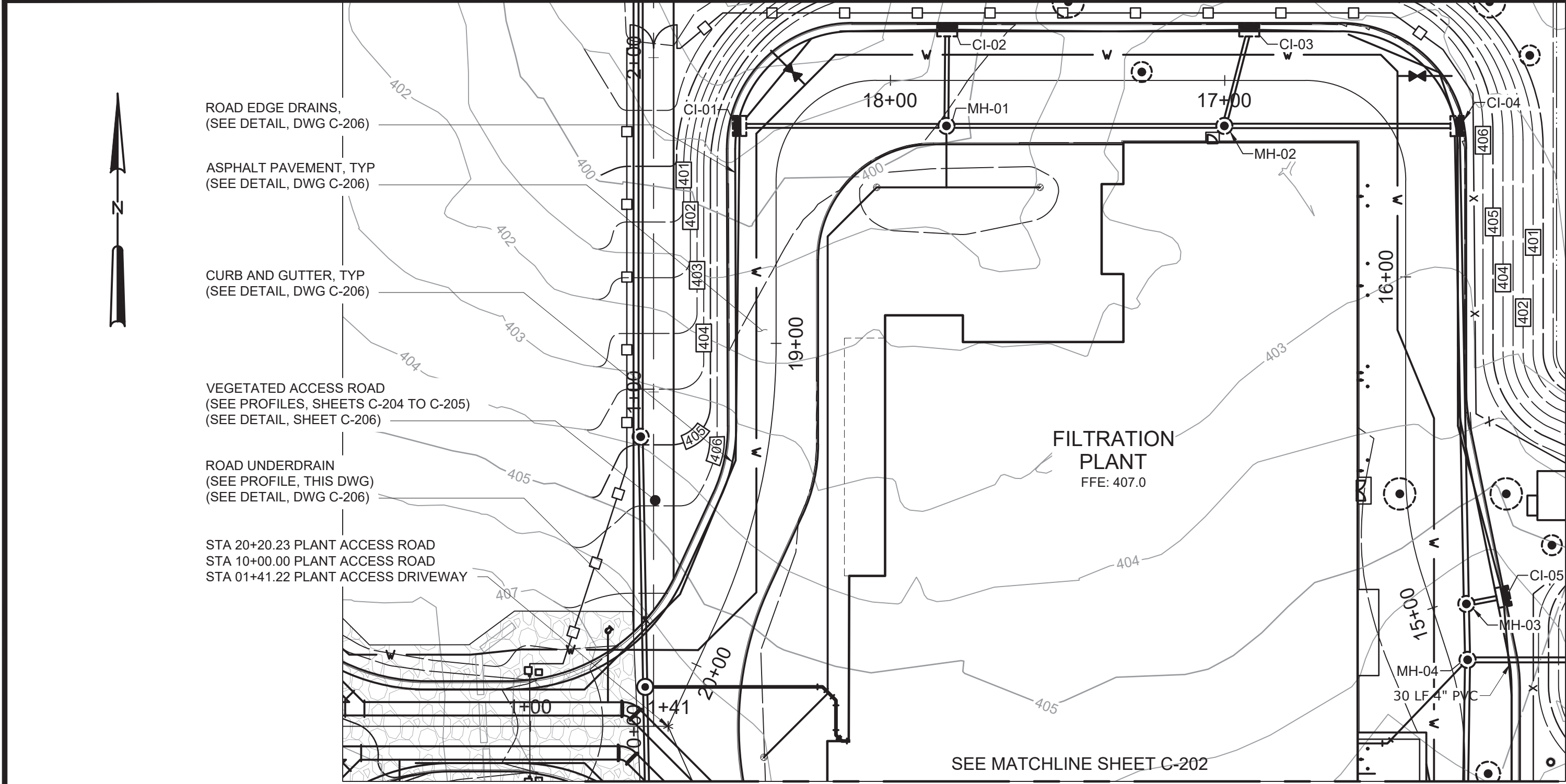
ROAD EDGE DRAIN PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

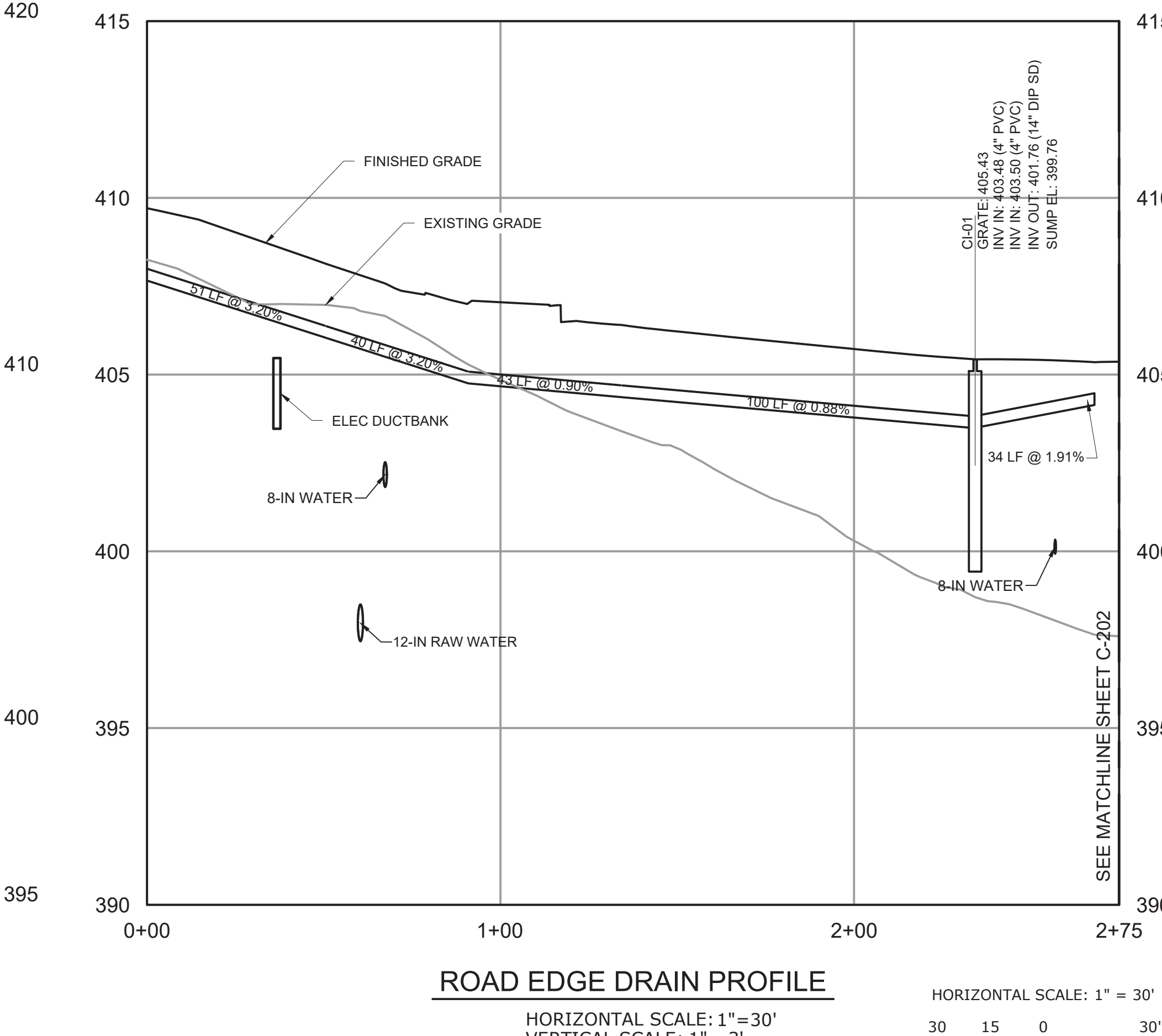
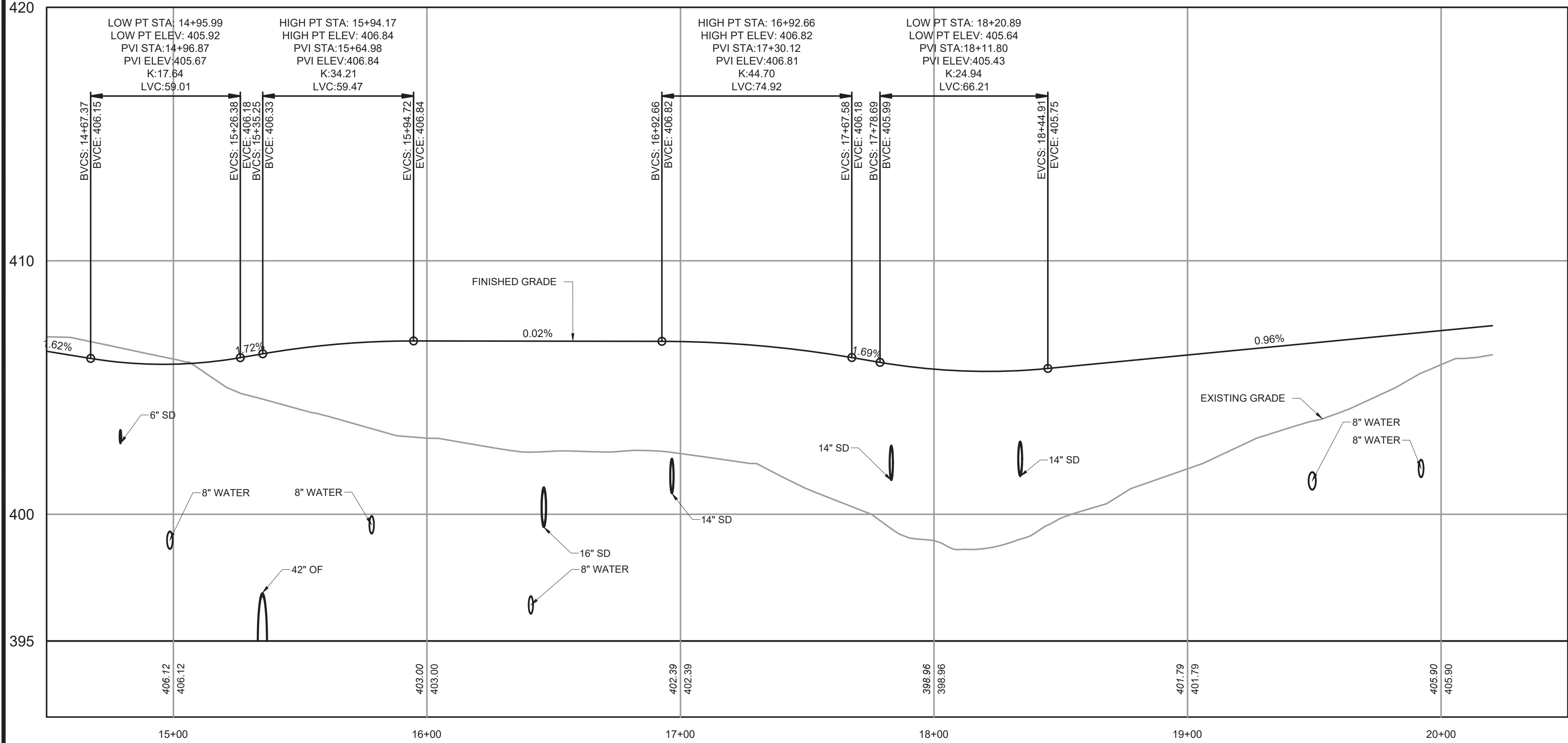
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

NOTES:

- YARD PIPING NOT SHOWN FOR CLARITY. SEE DWGS C-131 & C-132 FOR BELOW GRADE PIPING AND STRUCTURES.
- ROAD EDGE DRAINS SHALL CONSIST OF 4" PERFORATED PVC PIPE.



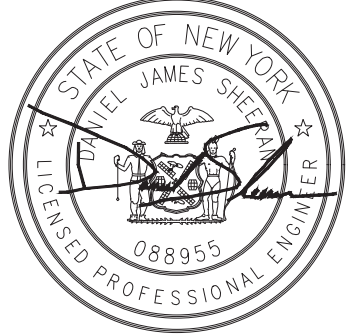
- NOTE:
- YARD PIPING NOT SHOWN FOR CLARITY. SEE DWGS C-131 & C-132 FOR BELOW GRADE PIPING AND STRUCTURES.
 - ROAD EDGE DRAINS SHALL CONSIST OF 4" PERFORATED PVC PIPE.



IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
PLANT ACCESS ROAD PLAN AND PROFILE - STA
14+50 TO STA 20+20

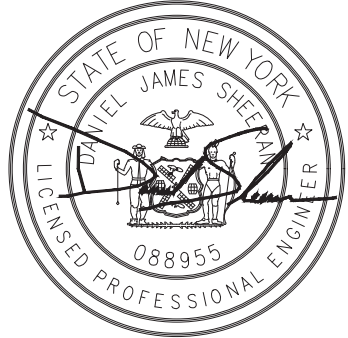
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-203

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTERATION\PROJECT\WSE\CIVIL\C-205 Saved by: JTANNER Save date: 3/27/2025 1:50 PM
PLOT DATE: 3/27/2025 1:50 PM BY: JTANNER

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



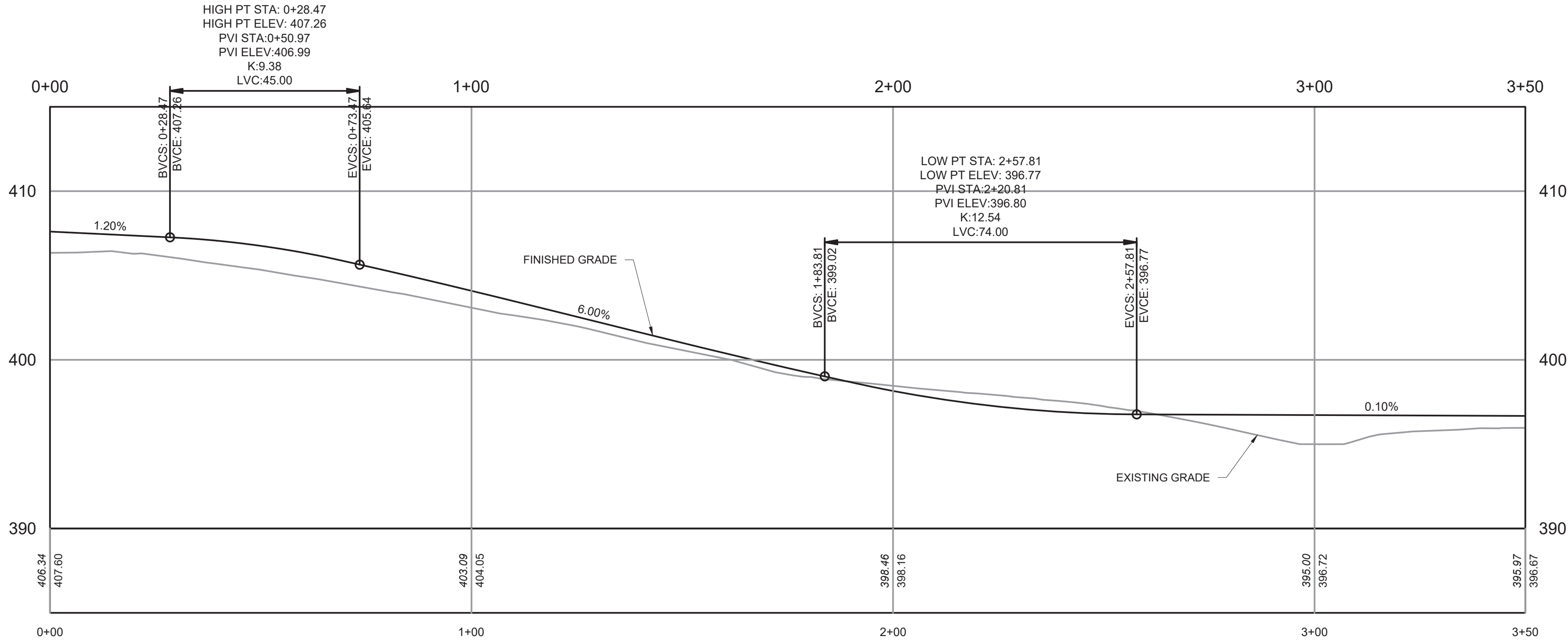
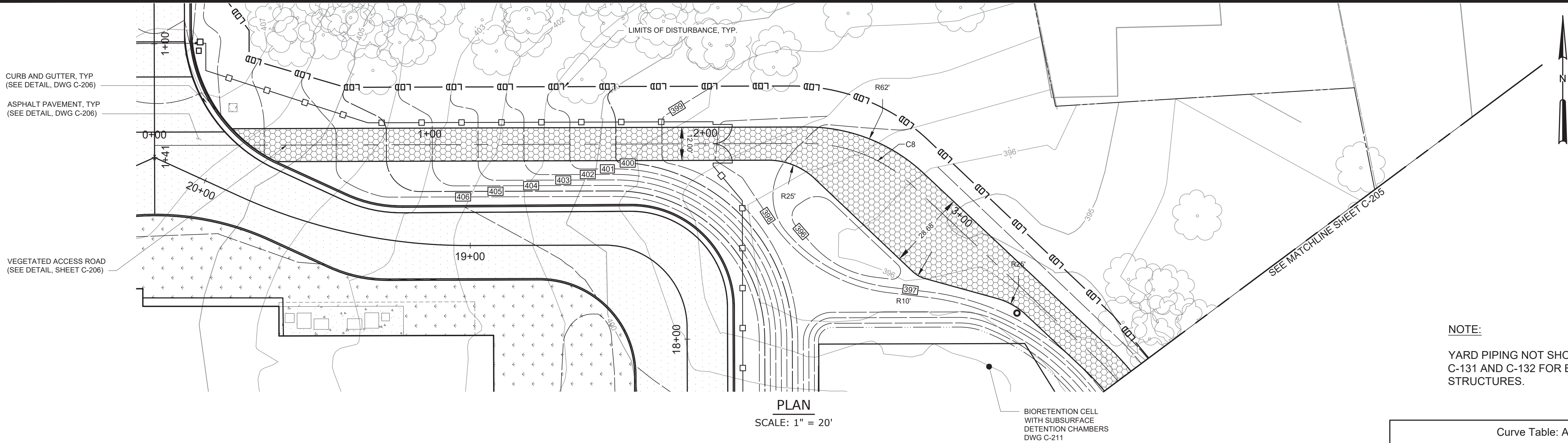
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

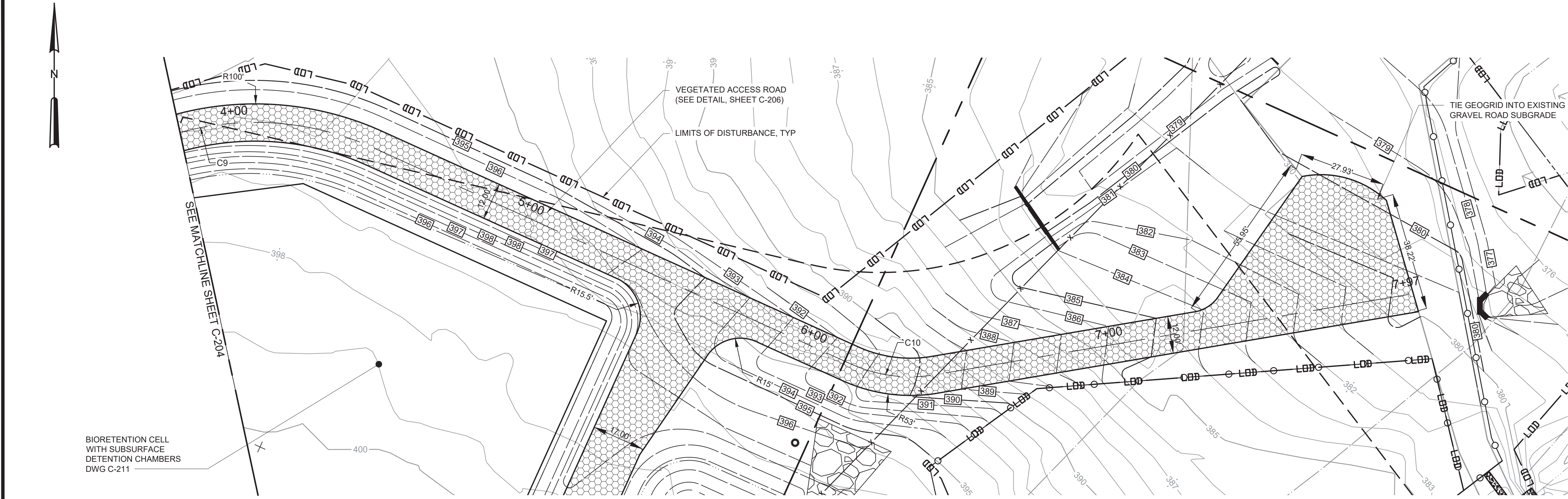
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
VEGETATED ACCESS ROAD PLAN AND PROFILE -
SHEET 1 OF 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-204



File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WSE\CIVIL\C-205 Saved by: JTANNER Save date: 2/10/2025 9:46 AM
PLOT DATE: 3/27/2025 1:16 PM BY: JTANNER



NOTE:

YARD PIPING NOT SHOWN FOR CLARITY. SEE DWGS C-131 AND C-132 FOR BELOW GRADE PIPING AND STRUCTURES.

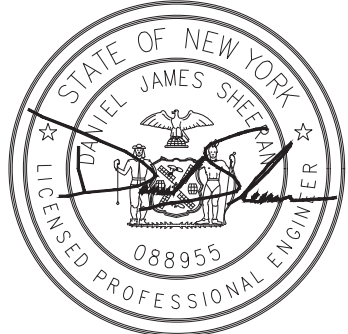
Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C9	92.65	75.42	N66° 40' 50.44"E	(707646.03,813805.49)	(707713.39,813834.53)
C10	46.90	27.81	N73° 00' 55.75"E	(707882.02,813834.53)	(707908.22,813842.54)

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
VEGETATED ACCESS ROAD PLAN AND PROFILE -
SHEET 2 OF 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-205

C-32-0552

TYPICAL PLANT ACCESS ROAD SECTION WITH SIDEWALK

CONCRETE CURB DETAIL
NTS

SCALE: NTS

- NOTES:
1. CONTRACTION JOINTS SHALL BE PLACED AT 10 FOOT INTERVALS, OR 15 FOOT INTERVALS WHEN A MACHINE IS USED TO PLACE THE CURB.
 2. EXPANSION JOINTS SHALL BE PLACED AT 90 FOOT INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.

CURB AND GUTTER
C-32-0530

ROADWAY NOTE:

1. WHERE ROADWAYS ARE REQUIRED TO BE INSTALLED ABOVE EXISTING GRADE, THE CONTRACTOR SHALL PROVIDE SELECT FILL TO ESTABLISH SUBGRADE.

TYPICAL PLANT ACCESS ROAD SECTION WITHOUT SIDEWALK

CONCRETE PAVEMENT
C-32-0560

BASELINE

NOTES:

1. UNLESS OTHERWISE SPECIFIED, MONUMENTS ARE TO BE SET BY A SURVEYOR LICENSED BY THE STATE OF NEW YORK IN ACCORDANCE WITH THE SPECIFICATIONS.
2. ALL CONCRETE WILL BE CLASS "B" POURED AGAINST UNDISTURBED MATERIAL.

SURVEY MONUMENTS
N.T.S.

BOLLARD TYPE 1

NOTES:

1. UNLESS OTHERWISE NOTED, ALL BOLLARDS SHALL BE TYPE 1.
2. BOLLARD COVER SHALL BE POST GUARD MODEL CL1386F 7"x52" HIGH, YELLOW WITH REFLECTIVE RED STRIPES, OR APPROVED EQUAL AND SECURED TO STEEL PIPE WITH COMPRESSIVE FOAM STRIPS.

STANDARD 30" ROLLED CURB SECTION

C-32-0531

TYPICAL PAVEMENT JUNCTION WITH RESURFACING OF EXISTING PAVEMENT


C-32-0555

TYPICAL PAVEMENT JUNCTION

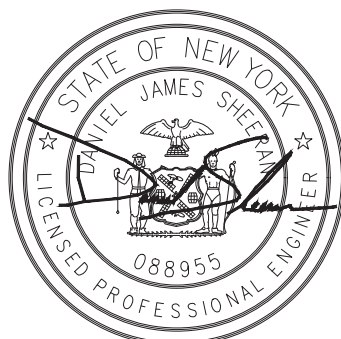
C-32-0556

WARNING

IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	<div> <div>0</div> <div>1/2"</div> <div>1"</div>  </div>
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

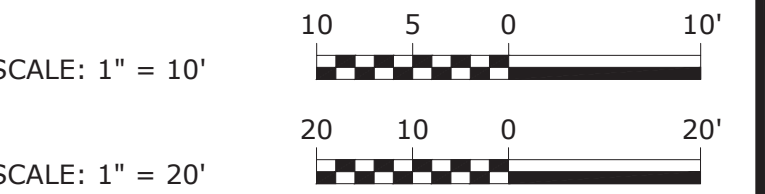
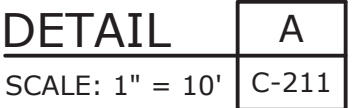
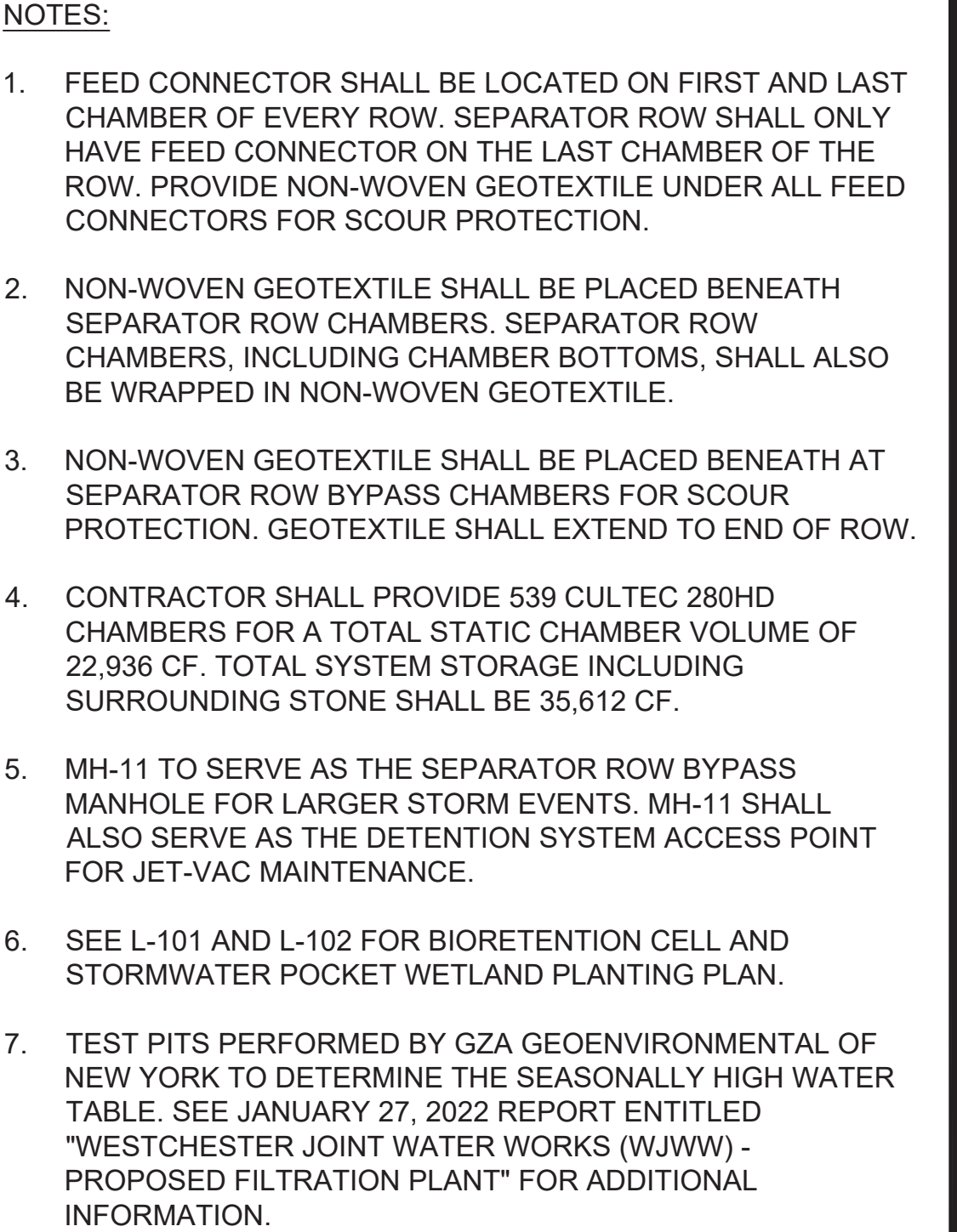
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT HARRISON, NY


CIVIL ROADWAY DETAILS

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-206

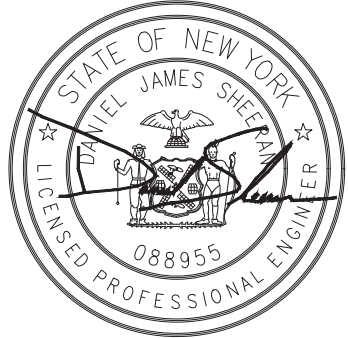


GEOTECHNICAL TEST PIT AND BORING SUMMARY TABLE												
TEST PITS					BORINGS				SMPs			
ID	EX GRADE	EXCAVATION DEPTH	SWHT DEPTH	SWHT ELEV.	ID	EX GRADE	ROCK DEPTH	ROCK ELEV.	SMP TYPE	SMP BOTTOM ELEV.	SMP SHWT SEPARATION	SMP ROCK SEPARATION
TP-1	399.5	12.0	9	390.5	B-23	399.0	N E ²	N E ²	WETLAND	391.5	1.0	N E ²
TP-2	401.0	13.0	5	396.0	B-21	401.0	18.5	382.5	WETLAND	395.00	-1.0	12.5
TP-3	401.5	13.5	5	396.5	B-20	401.0	N E ²	N E ²	WETLAND	395.00	-1.5	N E ²
TP-4	403.0	13.5	--	N O ¹	B-19	403.0	N E ²	N E ²	--	--	--	--
TP-5	398.0	13.0	11	387.0	B-26	397.0	18.5	378.5	CHAMBERS	389.54	2.5	11.0
TP-6	387.0	8.5	5	382.0	B-29	398.0	N E ²	N E ²	--	--	--	--
TP-7	397.5	13.0	--	N O ¹	B-24	399.0	N E ²	N E ²	CHAMBERS	389.54	N O ¹	N E ²
TP-8	398.0	13.0	--	N O ¹	B-25	398.0	N E ²	N E ²	CHAMBERS	389.54	N O ¹	N E ²
TP-9	401.0	13.5	--	N O ¹	B-1	401.0	23.5	377.5	CHAMBERS	389.54	N O ¹	12.0
TP-10	398.5	9.0	--	N O ¹	B-22	399.0	18.5	380.5	WETLAND	396.00	N O ¹	15.5
TP-11	397.0	8.0	4	393.0	B-2	398.5	23.5	375.0	--	--	--	--
TP-12	399.0	14.0	--	N O ¹	B-24	399.0	N E ²	N E ²	CHAMBERS	389.54	N O ¹	N E ²
TP-13	396.0	11.0	3	393.0	B-2	398.5	23.5	374.5	--	--	--	--

²DECOMPOSED ROCK NOT ENCOUNTERED (N.E.) PRIOR TO TEST BORING TERMINATION AT 22' BELOW GRADE

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	C. MCNICOL
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	<div> <div>0</div> <div>1/2"</div> <div>1"</div> </div> 
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

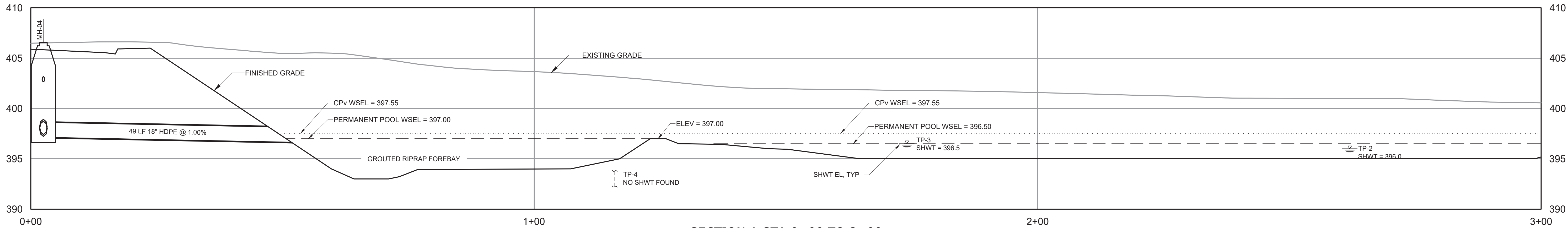
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT HARRISON, NY

CIVIL STORMWATER MANAGEMENT PLAN

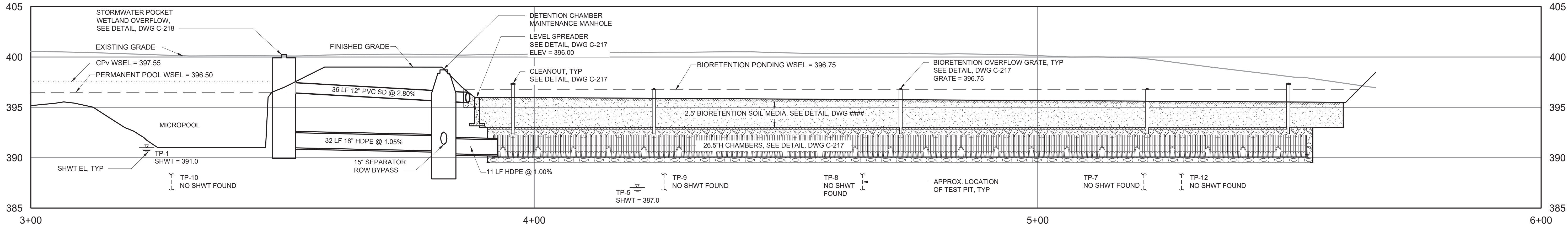
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-211

File: C:\USERS\JANNERD\ACD\GSHAZEN\AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT FILES\PROJECT\WSE\CIVIL-C-212 Saved by: CMCNICOL Save date: 2/3/2025 4:31 PM
PLOT DATE: 3/26/2025 11:34 PM BY: JANNER



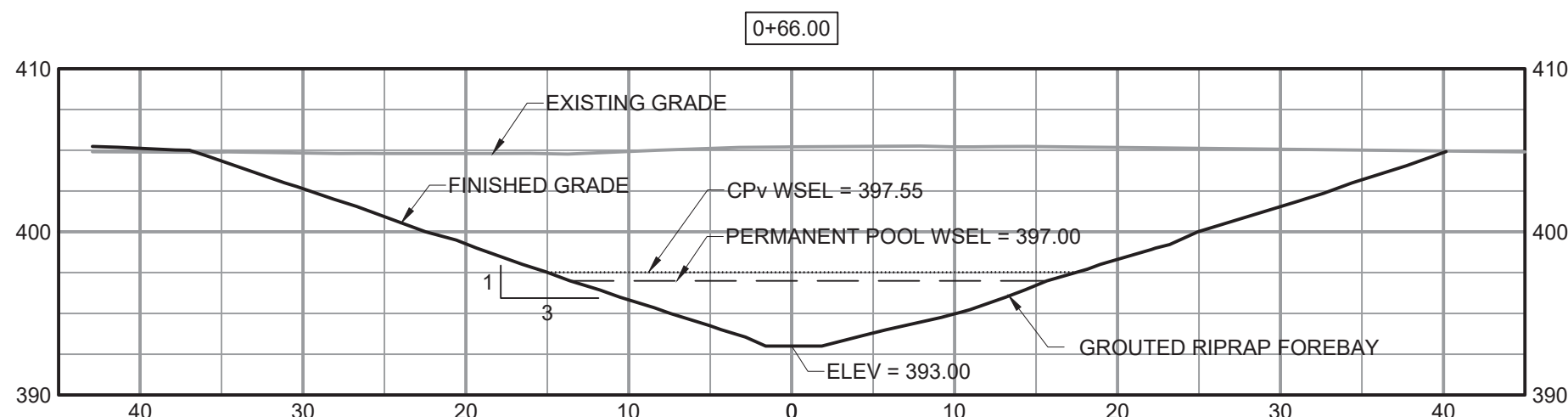
SECTION A STA 0+00 TO 3+00

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1"=5'



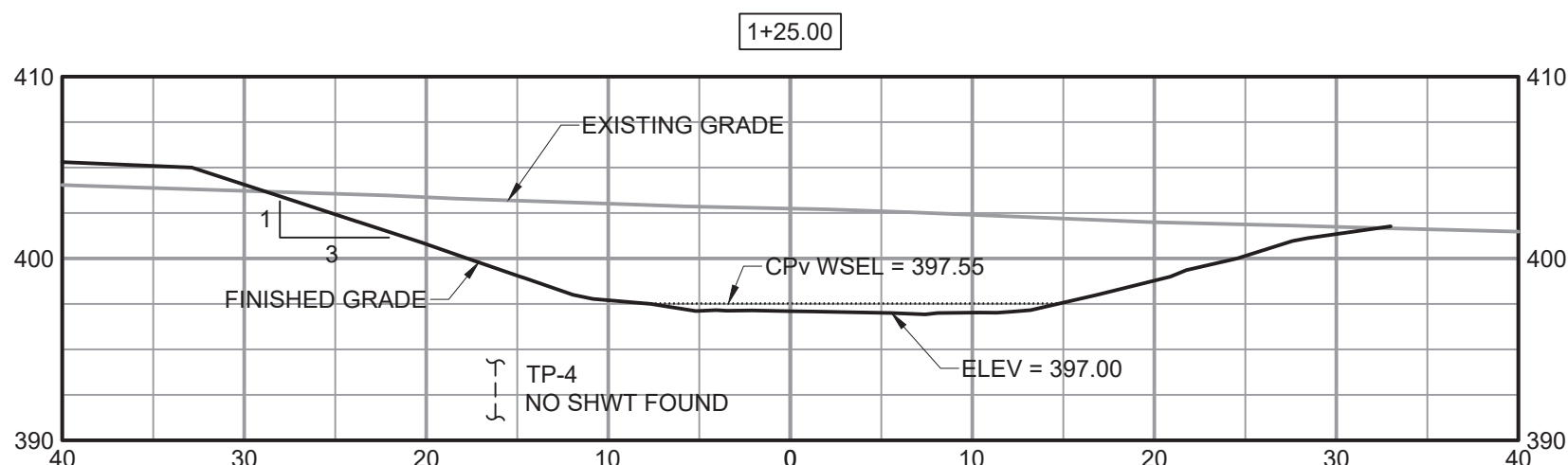
SECTION A 3+00 TO 6+00

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1"=5'



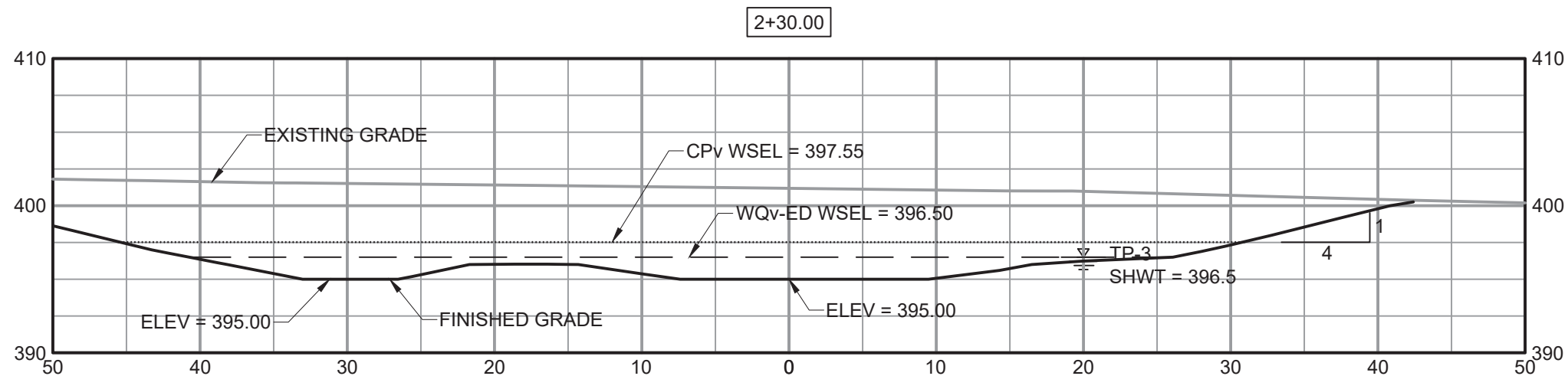
SECTION 0+63

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



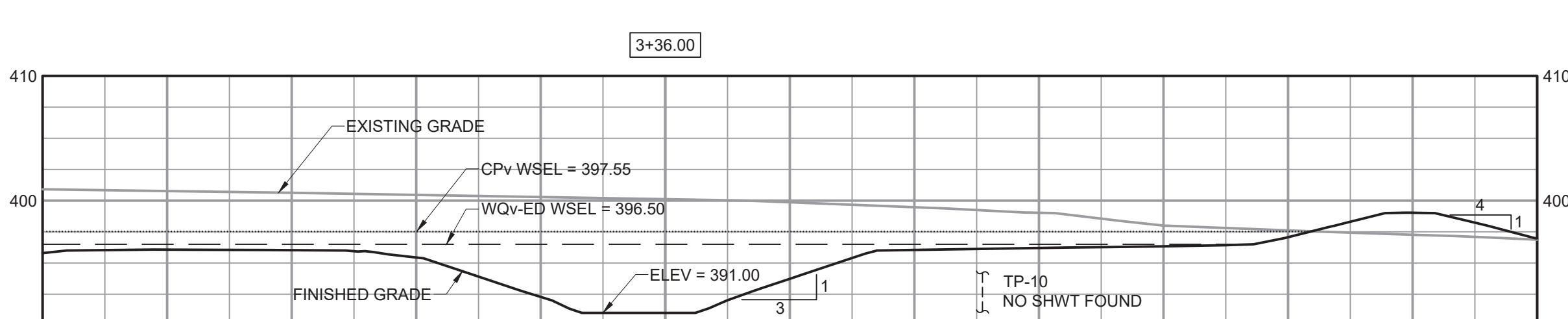
SECTION 1+17

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



SECTION 2+15

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



SECTION 3+31

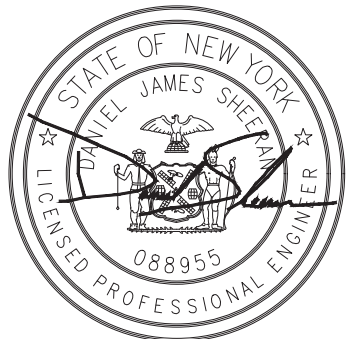
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1"=10'

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1"=5'

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	C. MCNICOL
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
STORMWATER MANAGEMENT
CROSS SECTIONS

DATE: FEB 2025
HAZEN NO.: 90388-000
CONTRACT NO.: A1364-A
DRAWING NUMBER: C-212

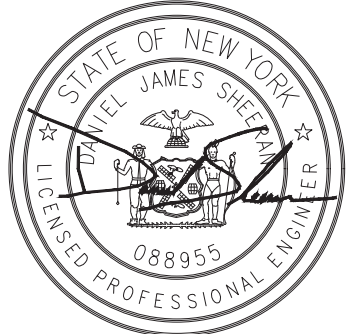
File: C:\USERS\JANNERD\ACD\GCS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WSE\DWG\C-213 Saved by: JTANNER Save date: 2/10/2025 9:28 AM
PLOT DATE: 3/26/2025 11:34 PM BY: JTANNER

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	C. MCNICOL
DRAWN BY:	C. MCNICOL
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



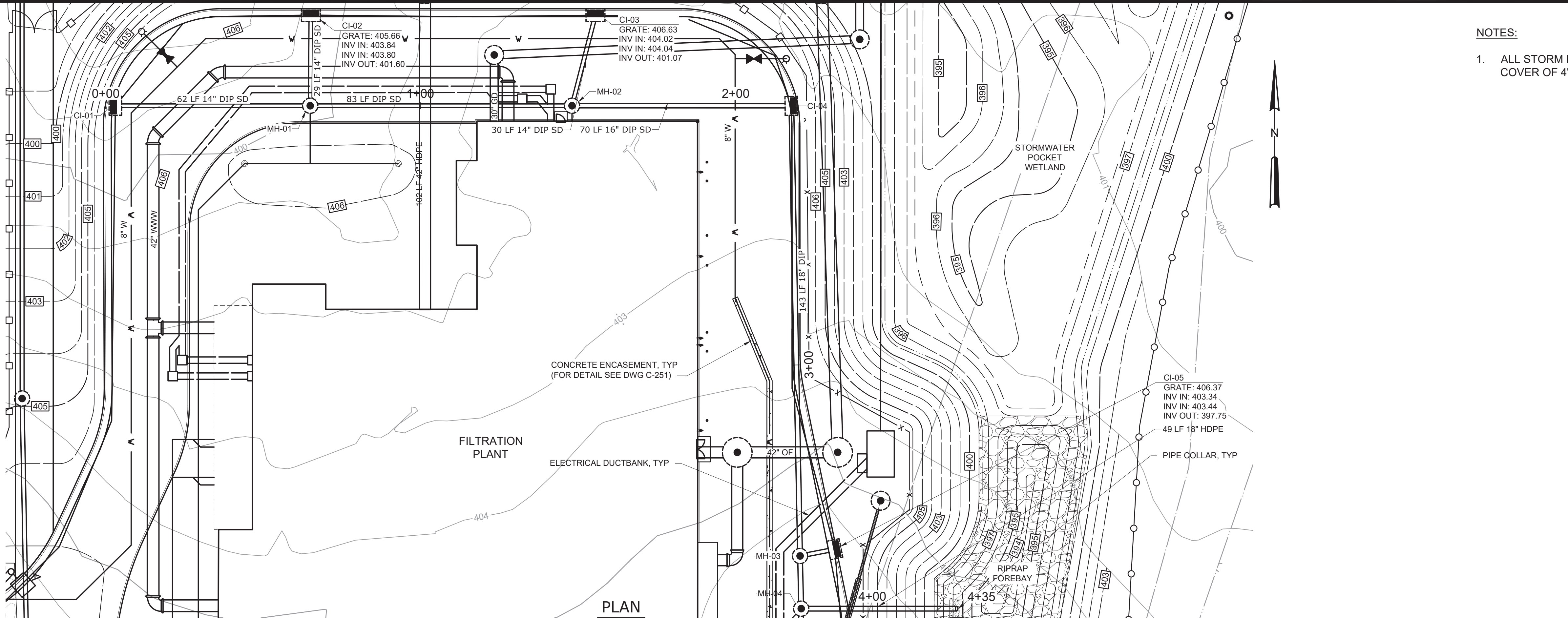
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

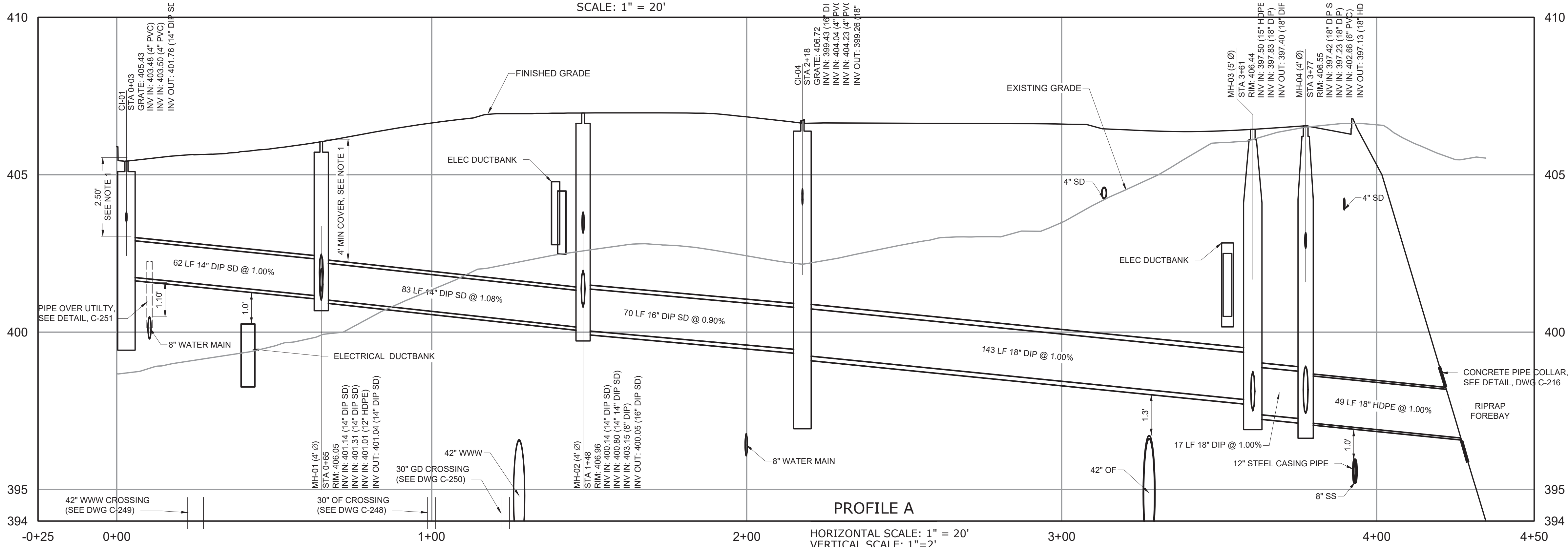
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
STORMWATER DRAINAGE PROFILES -
SHEET 1 OF 3

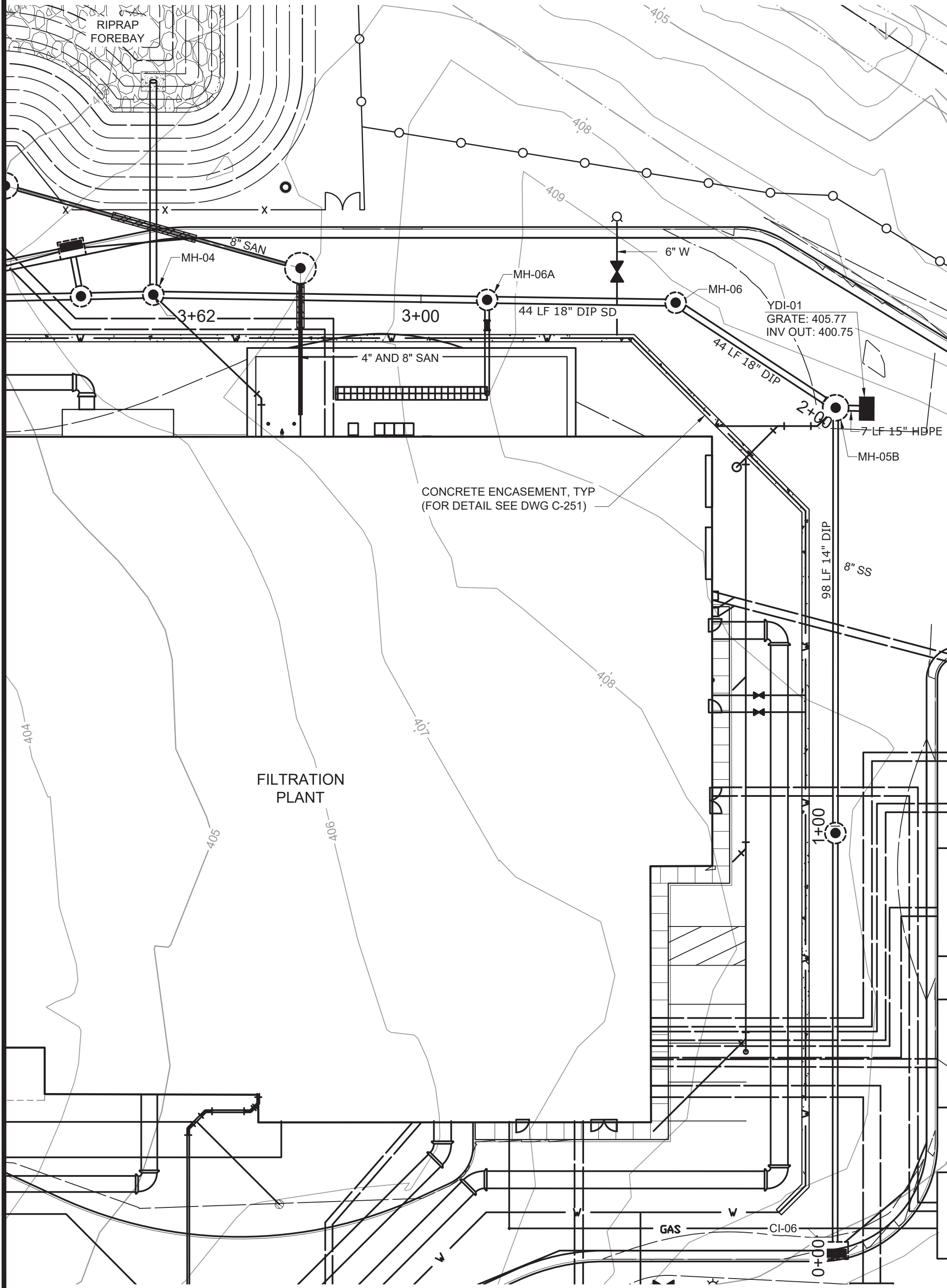
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-213



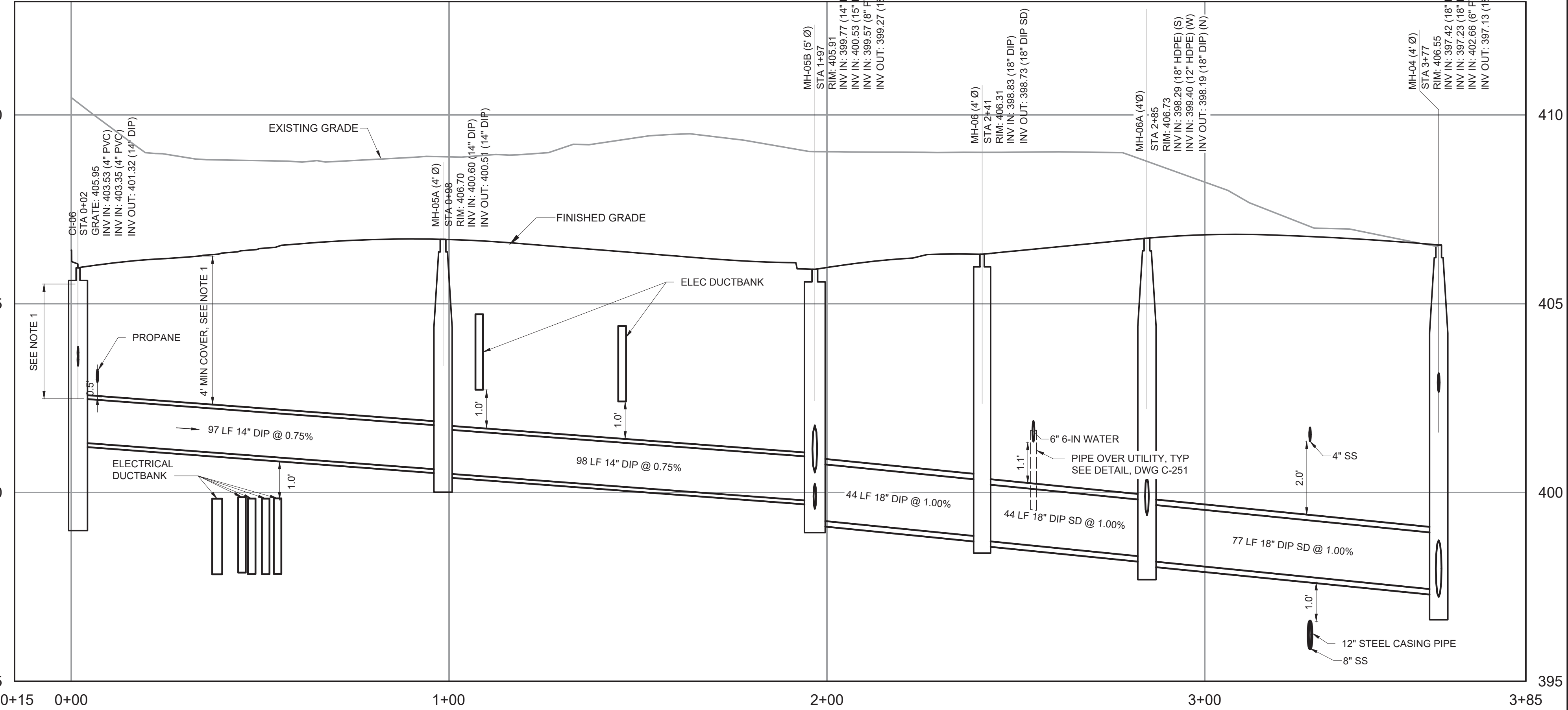
- NOTES:
- ALL STORM DRAINS SHALL HAVE A MINIMUM COVER OF 4' UNLESS SHOWN OTHERWISE.



HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'



PLAN
SCALE: 1" = 20'



PROFILE B
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=2'

- NOTES:
- ALL STORM DRAINS SHALL HAVE A MINIMUM COVER OF 4' UNLESS SHOWN OTHERWISE.
 - CONTRACTOR SHALL LEAKAGE TEST ALL DIP STORM PIPING TO A TEST PRESSURE OF 50 PSI MINIMUM.

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	C. MCNICOL
DRAWN BY:	C. MCNICOL
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET

Hazen

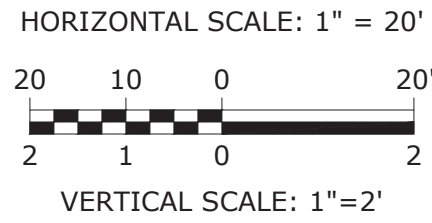
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

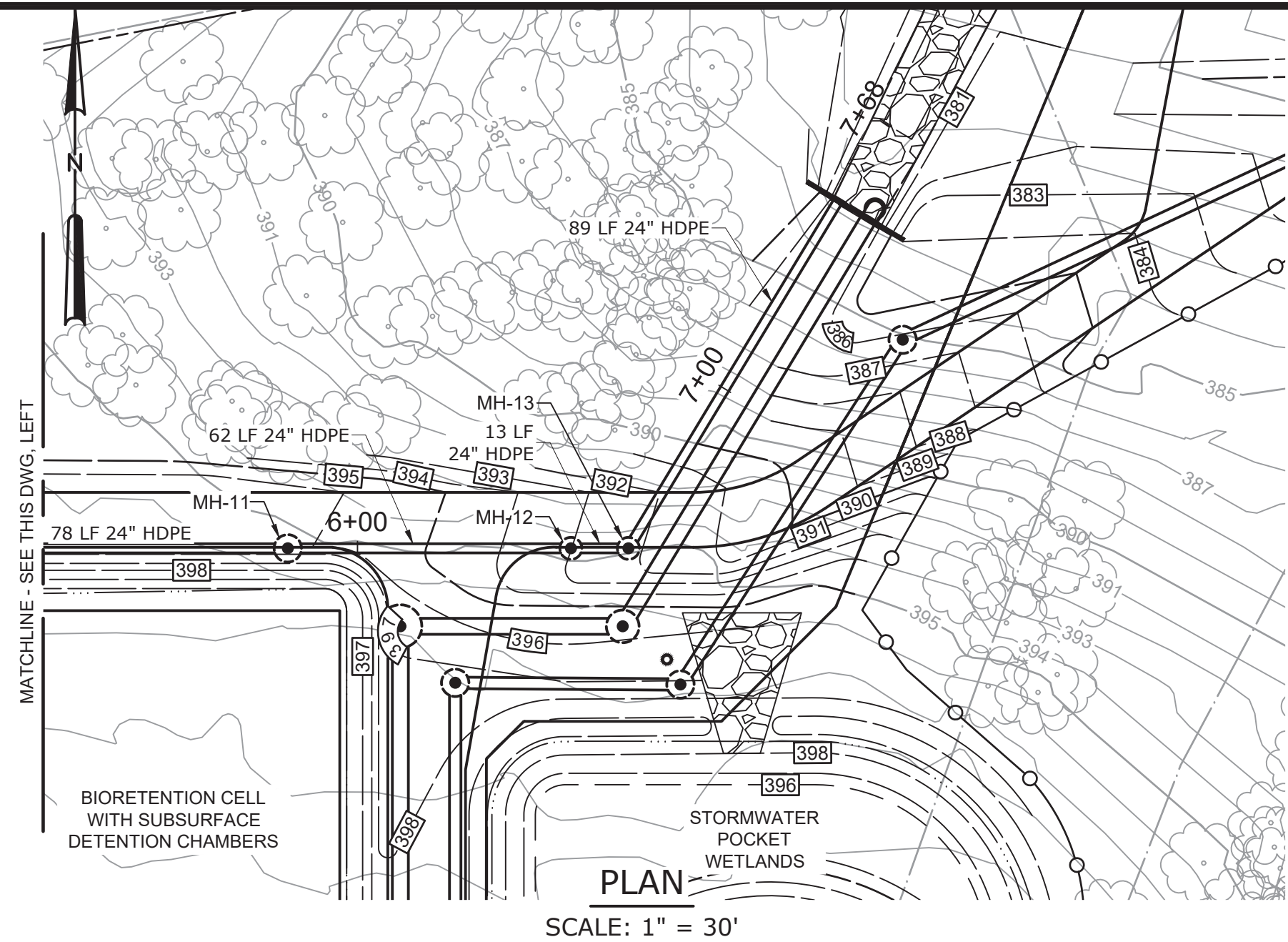
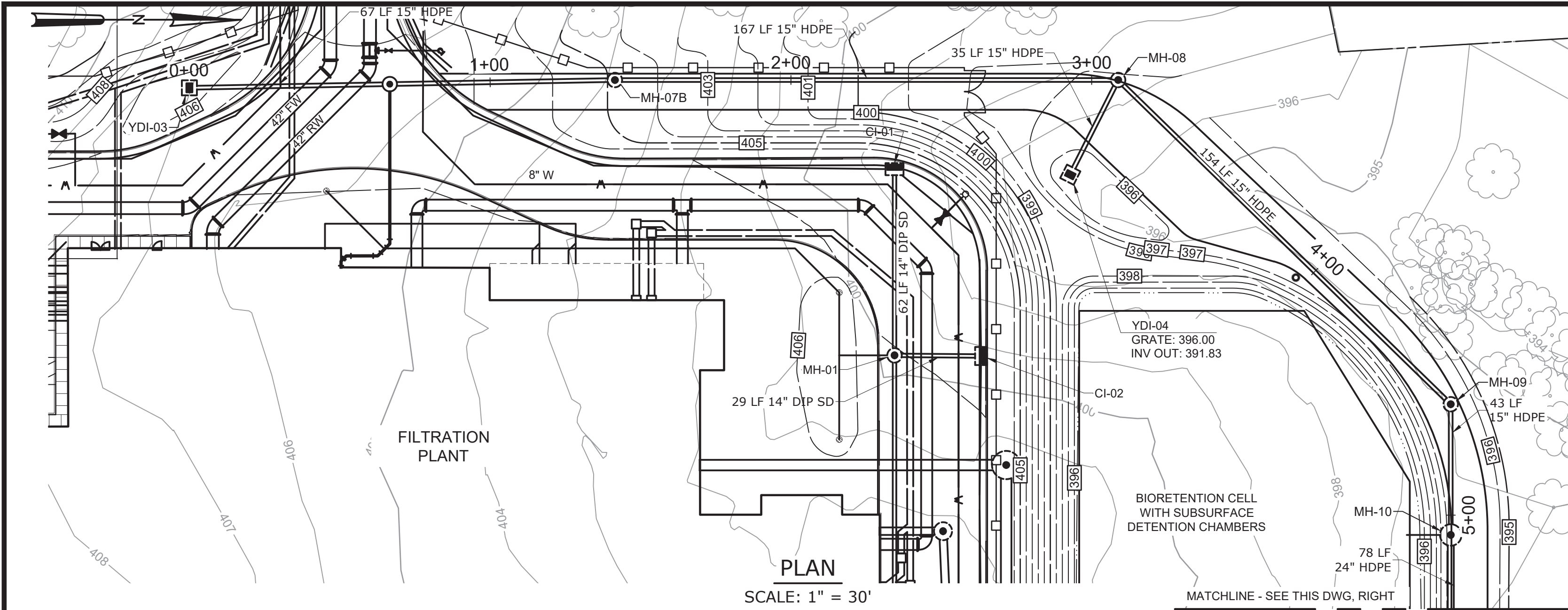
CIVIL
STORMWATER DRAINAGE PROFILES -
SHEET 2 OF 3

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-214

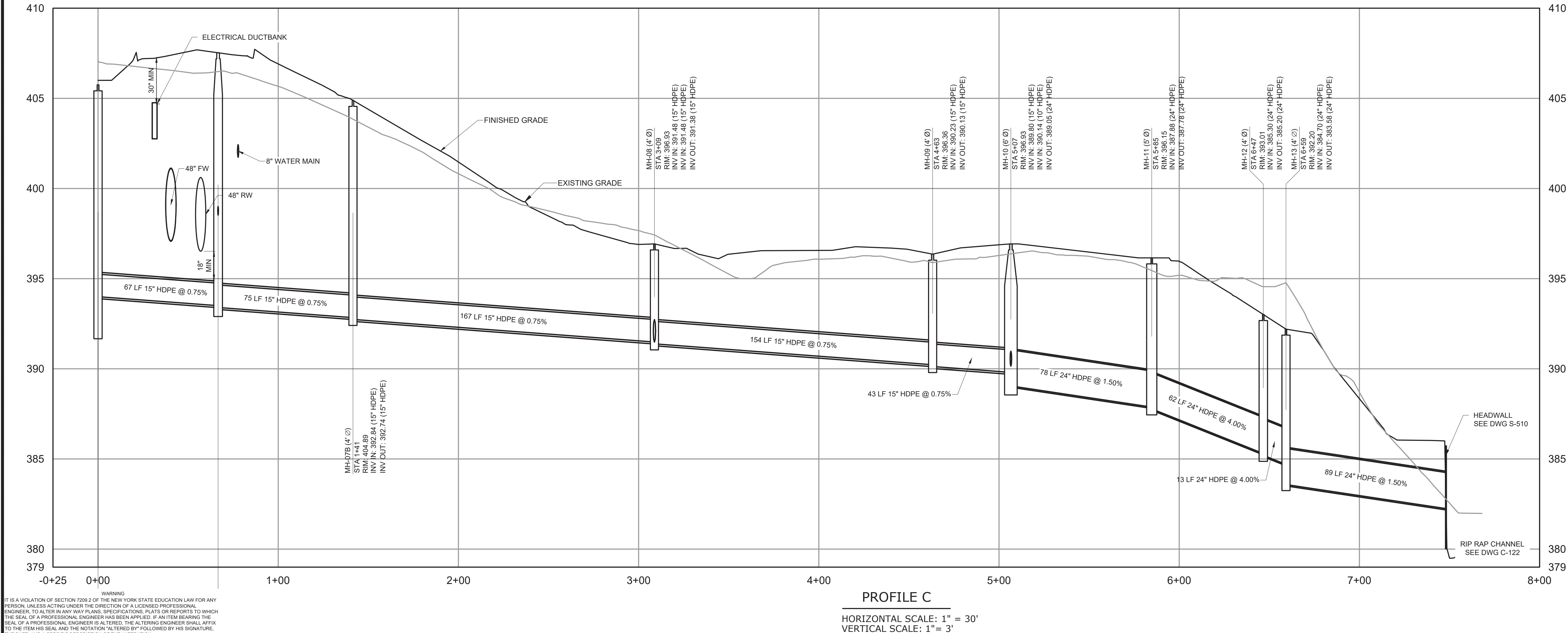


File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\90388-000_RYE LAKE FILTRATION\PROJECT\WSE\DWG\C-214.dwg, 2/10/2025 9:30 AM
PLOT DATE: 3/27/2025 12:58 PM BY: JTANNER

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WSE\CIVIL\215 Saved by: JTANNER Save date: 2/10/2025 9:34 AM
PLOT DATE: 3/27/2025 12:57 PM BY: JTANNER



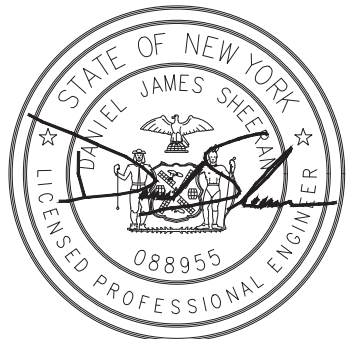
- NOTES:
- ALL STORM DRAINS SHALL HAVE A MINIMUM COVER OF 4' UNLESS SHOWN OTHERWISE.



WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	C. MCNICOL
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

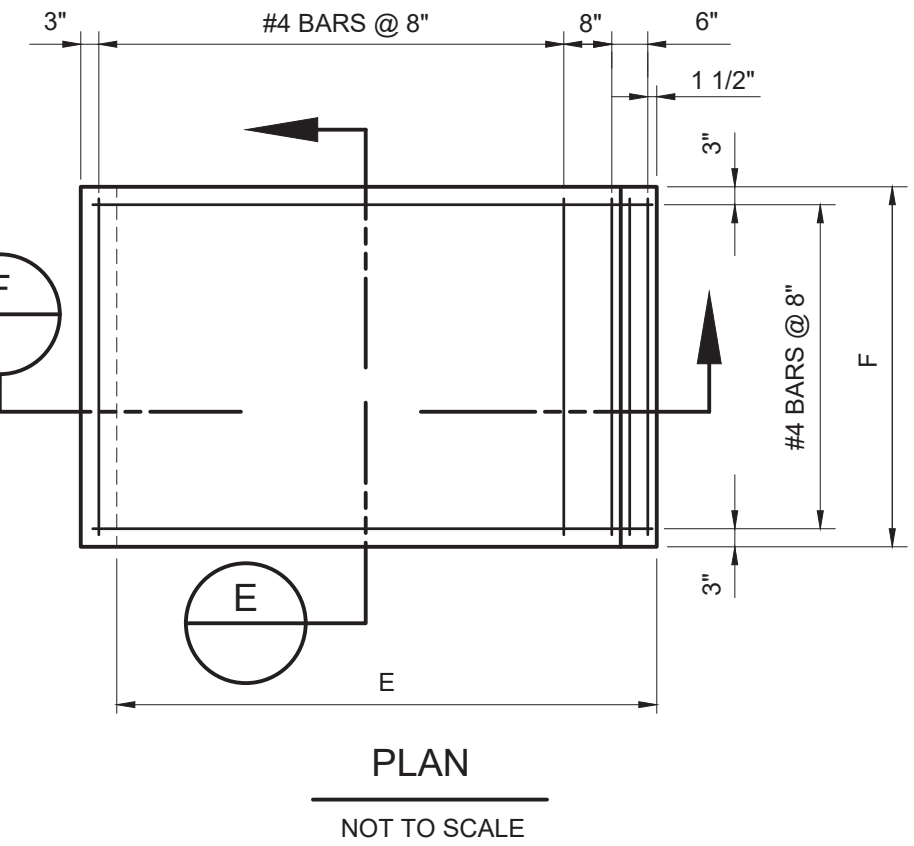
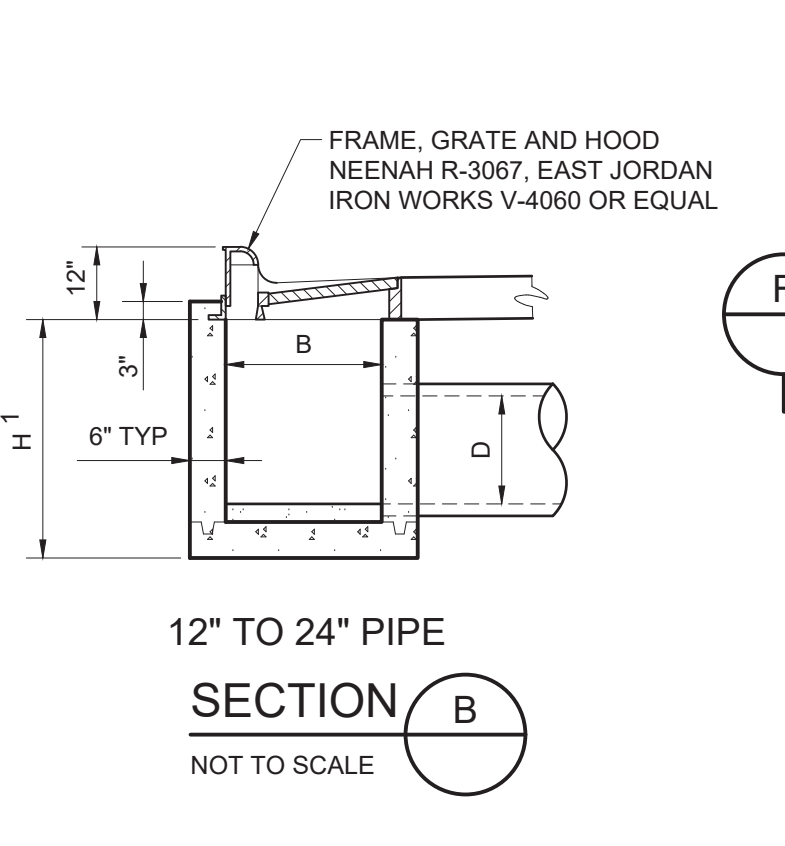
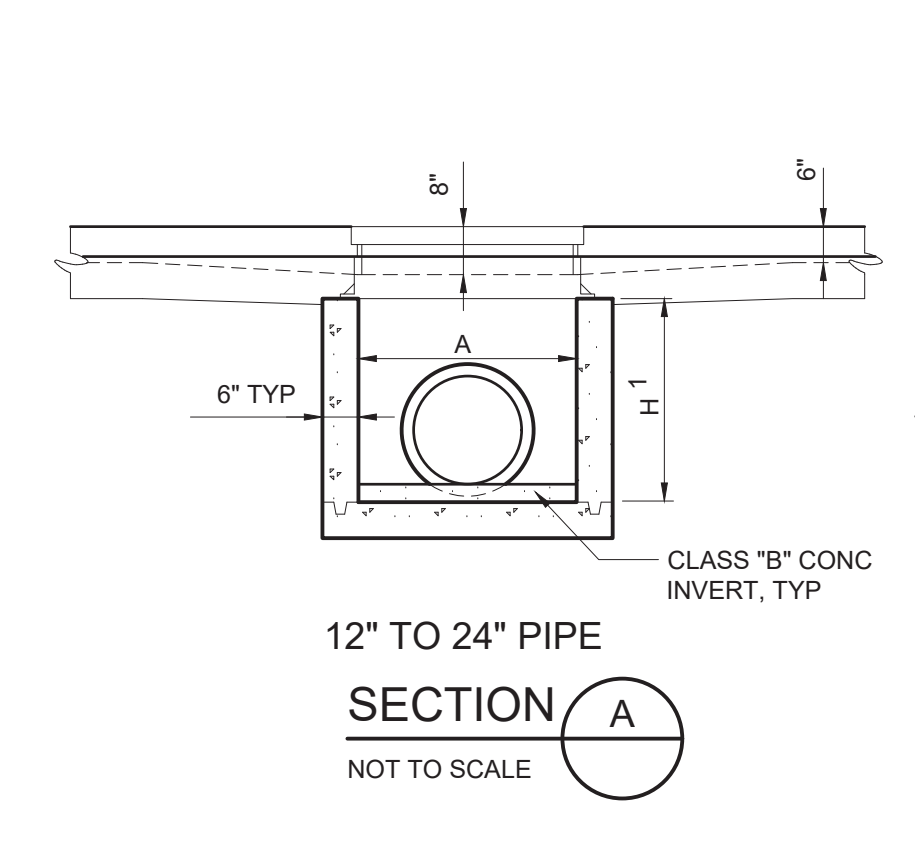
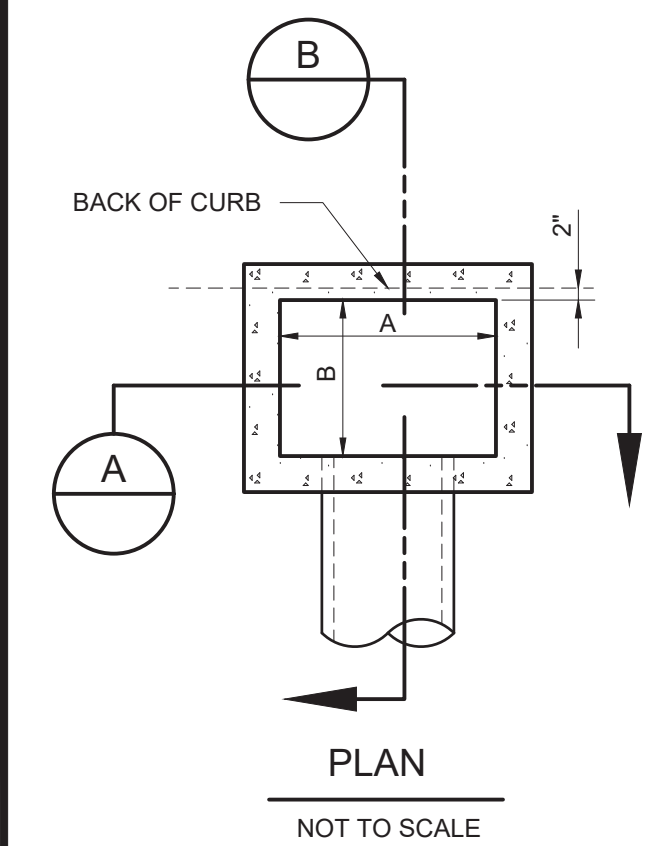
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
STORMWATER DRAINAGE PROFILES -
SHEET 3 OF 3

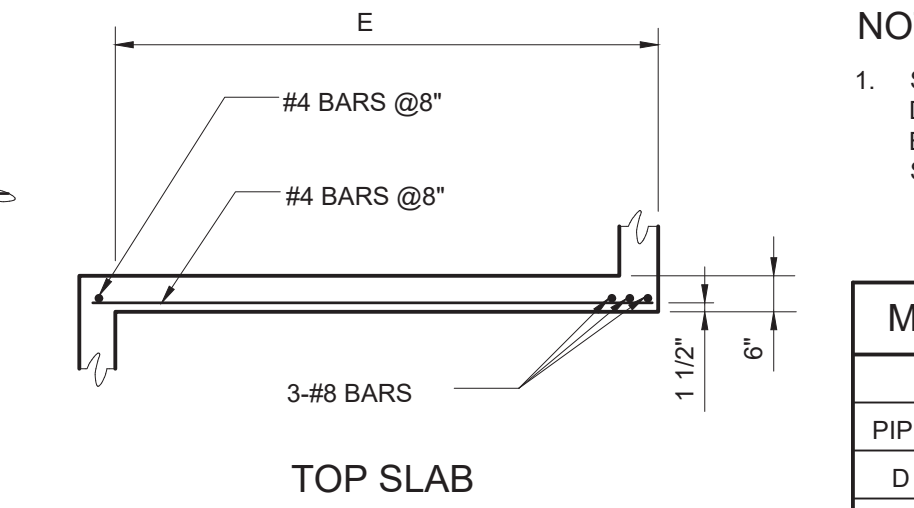
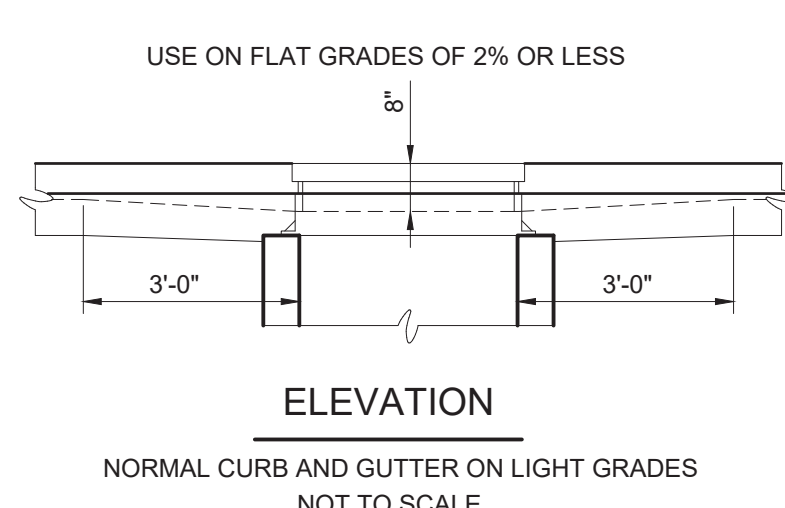
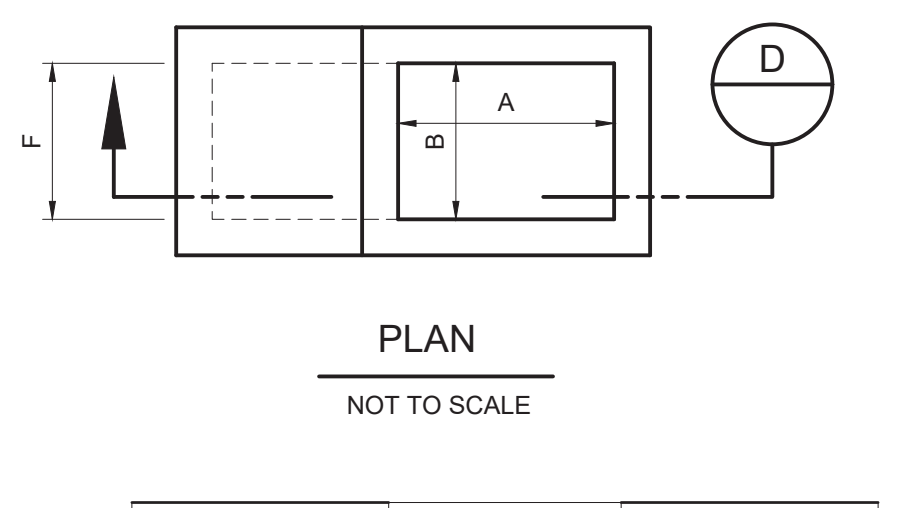
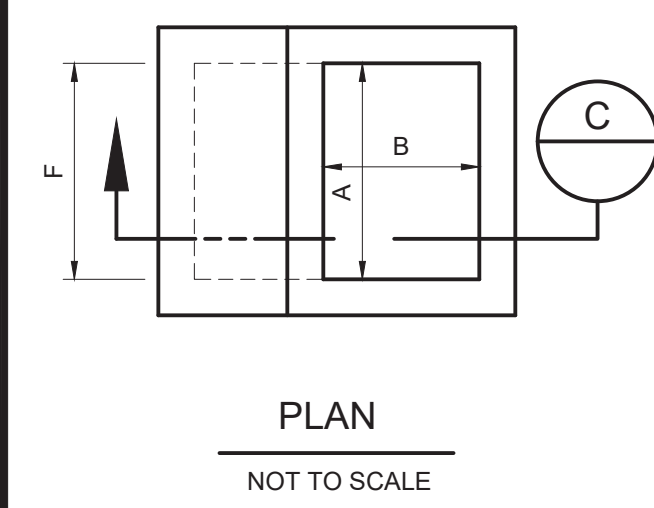
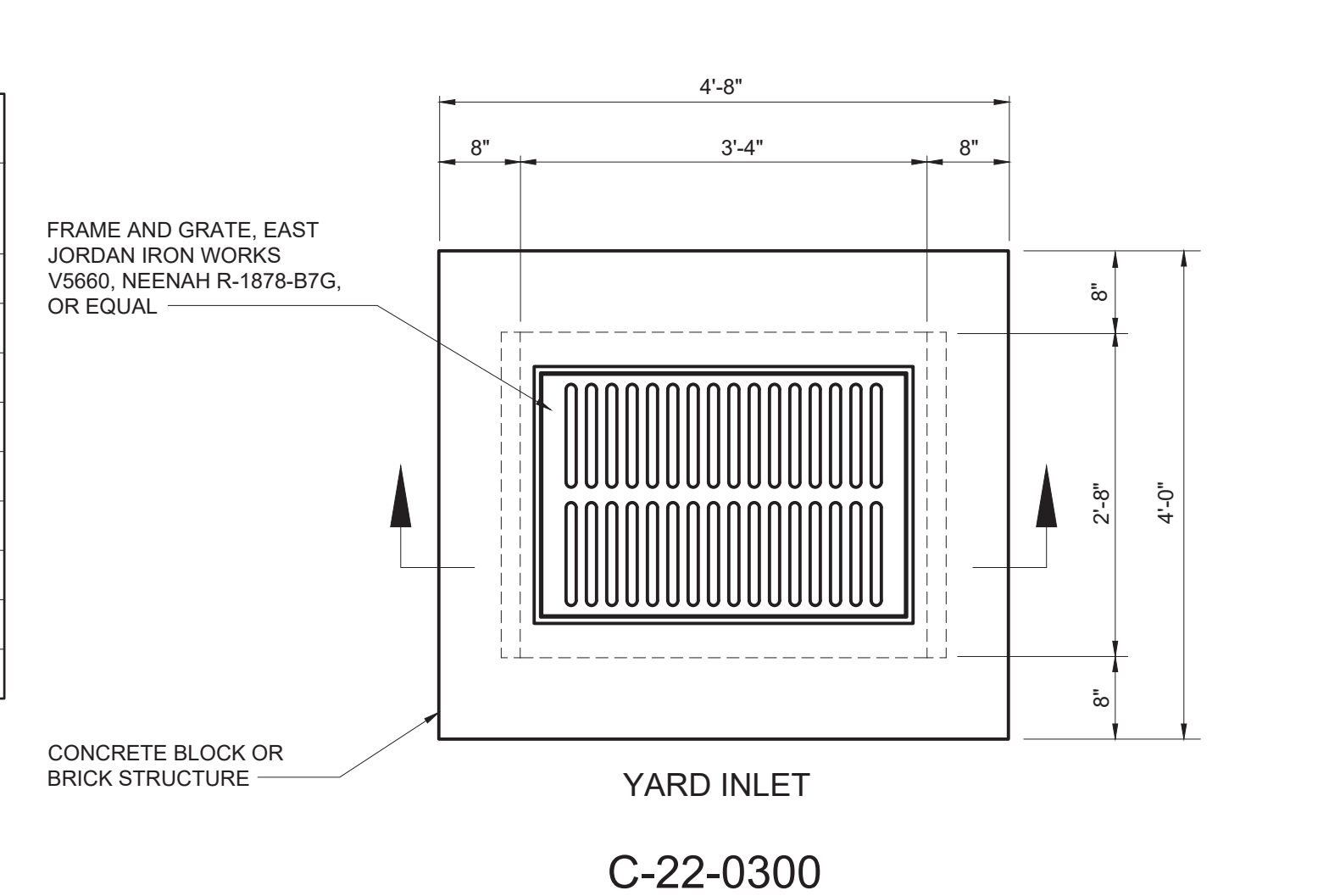
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-215

HORIZONTAL SCALE: 1" = 30'
30 15 0 30'
3 1.5 0 3
VERTICAL SCALE: 1" = 3'

File: C:\USERS\JTANNER\DRAWINGS\Hazen\RYE_LAKE_FILTRATION\PROJECT FILES\PROJECT\WSE\CVIL\C-216 Saved by: JTANNER Save date: 2/7/2025 9:40 AM
PLOT DATE: 3/26/2025 11:35 PM BY: JTANNER



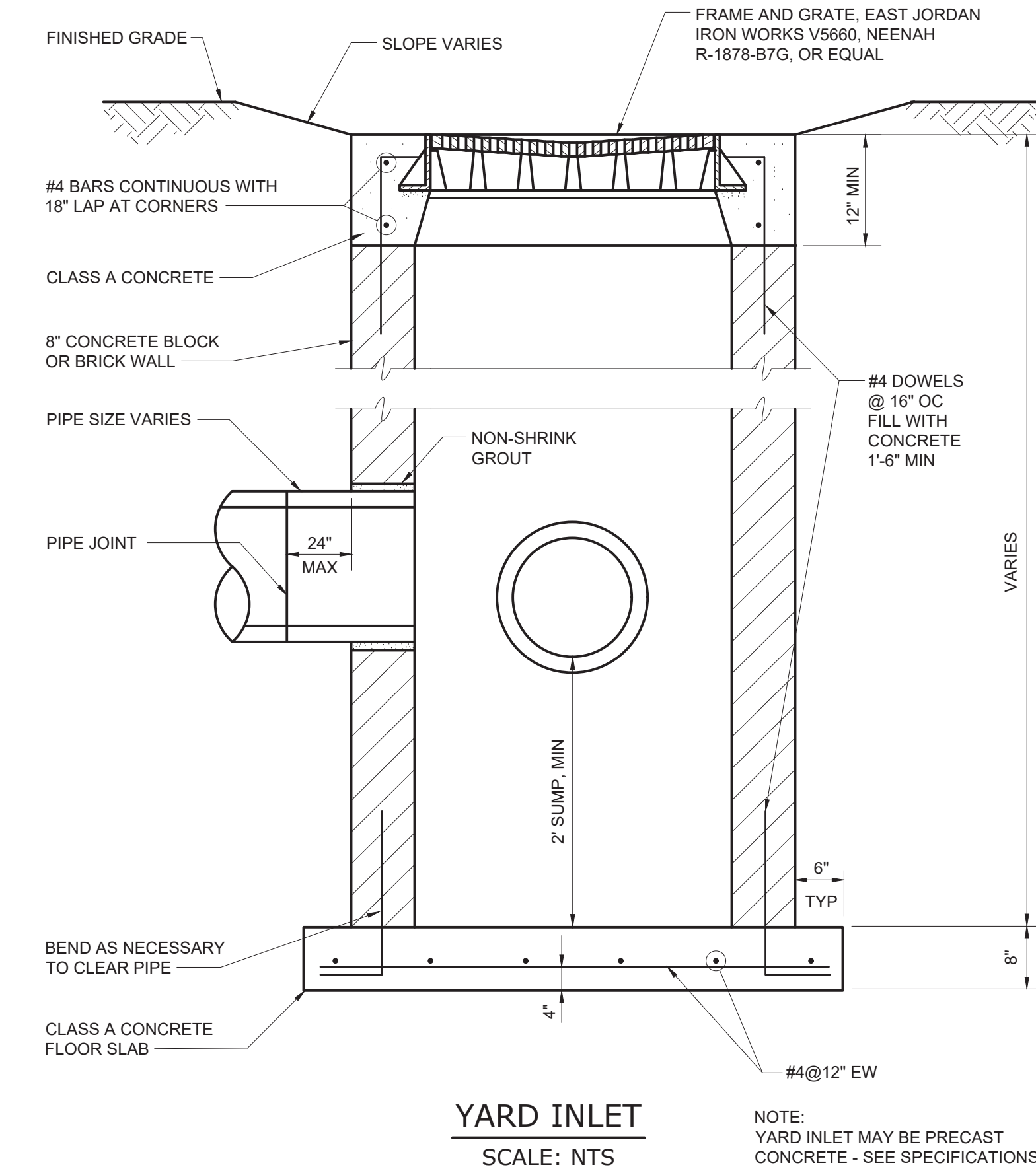
CURB INLET AND YARD INLET STRUCTURE TABLE				
STRUCTURE TABLE				
STRUCTURE ID:	NORTHING	EASTING	DETAIL DWG	INNER DIMENSION (INCHES)
YDI-04	813701.82	707595.44	C-216	SEE DETAIL
YDI-03	813408.96	707566.57	C-216	SEE DETAIL
CI-05	813502.55	707822.01	C-216	SEE DETAIL
CI-04	813643.36	707808.23	C-216	SEE DETAIL
CI-03	813672.14	707746.02	C-216	SEE DETAIL
CI-02	813672.17	707655.68	C-216	SEE DETAIL
CI-06	813325.96	707590.17	C-216	SEE DETAIL
YDI-01	813318.65	707784.98	C-216	SEE DETAIL
CI-01	813643.39	707593.61	C-216	SEE DETAIL



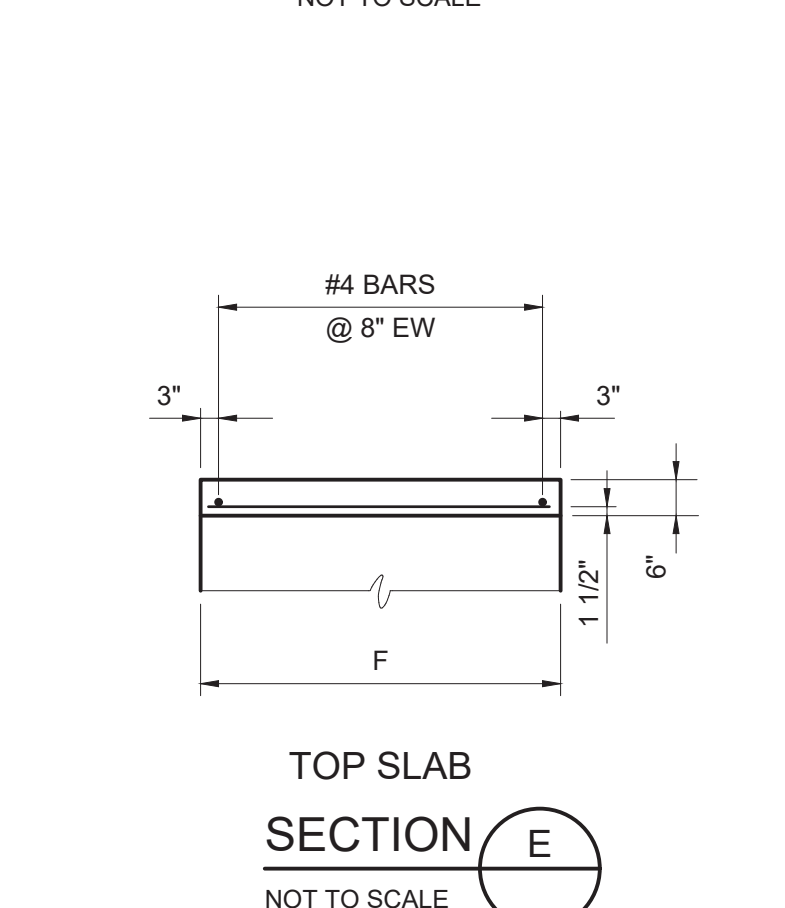
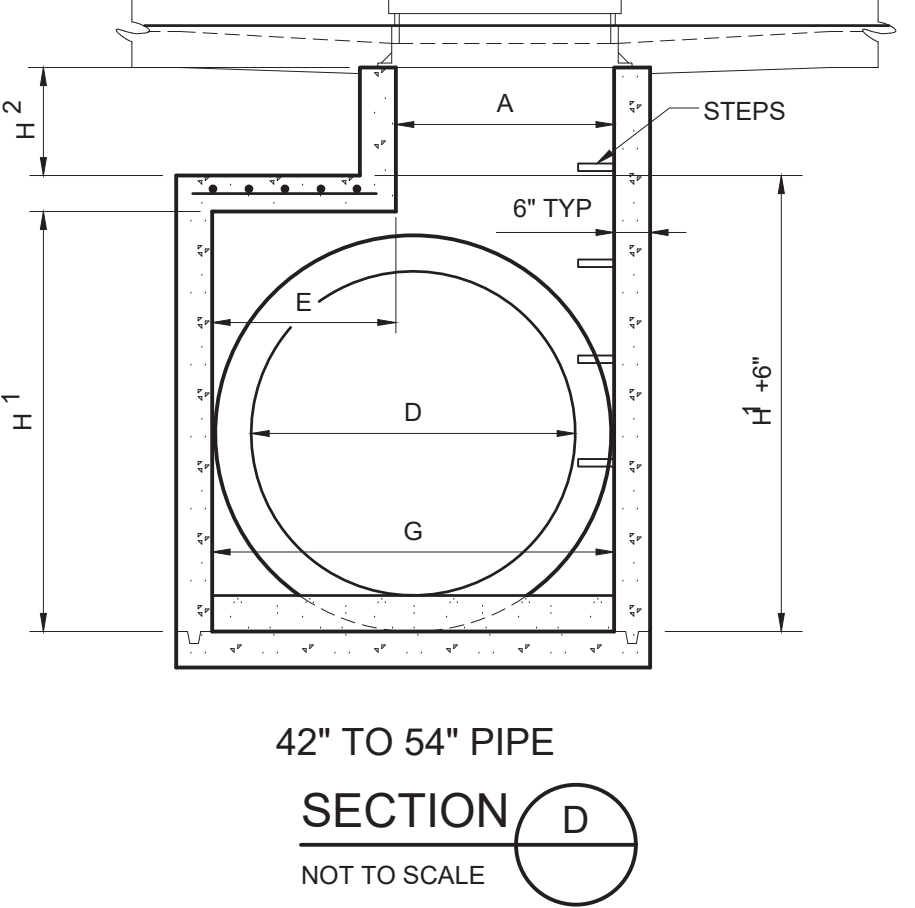
NOTE:
1. STRUCTURAL GEOMETRY AND REINFORCEMENT SHOWN ON THIS DRAWING ARE FOR REFERENCE PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL DESIGN OF ALL UTILITY STRUCTURE ELEMENTS PER SPECIFICATION SECTION 33 05 61.

MINIMUM DIMENSIONS FOR CONCRETE CURB INLETS									
DIMENSIONS OF BOX AND PIPE							COVER DIMENSIONS		
PIPE D	SPAN A	WIDTH B	WIDTH C	SPAN G	HEIGHT MIN H 1	HEIGHT H 2	E	F	
12"	3'-0"	2'-2"	—	—	2'-6"	—	—	—	—
15"	3'-0"	2'-2"	—	—	2'-9"	—	—	—	—
18"	3'-0"	2'-2"	—	—	3'-1"	—	—	—	—
24"	3'-0"	2'-2"	—	—	3'-7"	—	—	—	—
30"	3'-0"	2'-2"	3'-4"	3'-4"	3'-6"	VARIABLE	1'-8"	4'-0"	
36"	3'-0"	2'-2"	3'-10"	3'-10"	4'-1"		2'-2"	4'-0"	
42"	3'-0"	2'-2"	—	4'-5"	4'-10"		1'-11"	3'-2"	
48"	3'-0"	2'-2"	—	5'-0"	5'-4"		2'-6"	3'-2"	
54"	3'-0"	2'-2"	—	5'-7"	5'-11"		3'-1"	3'-2"	

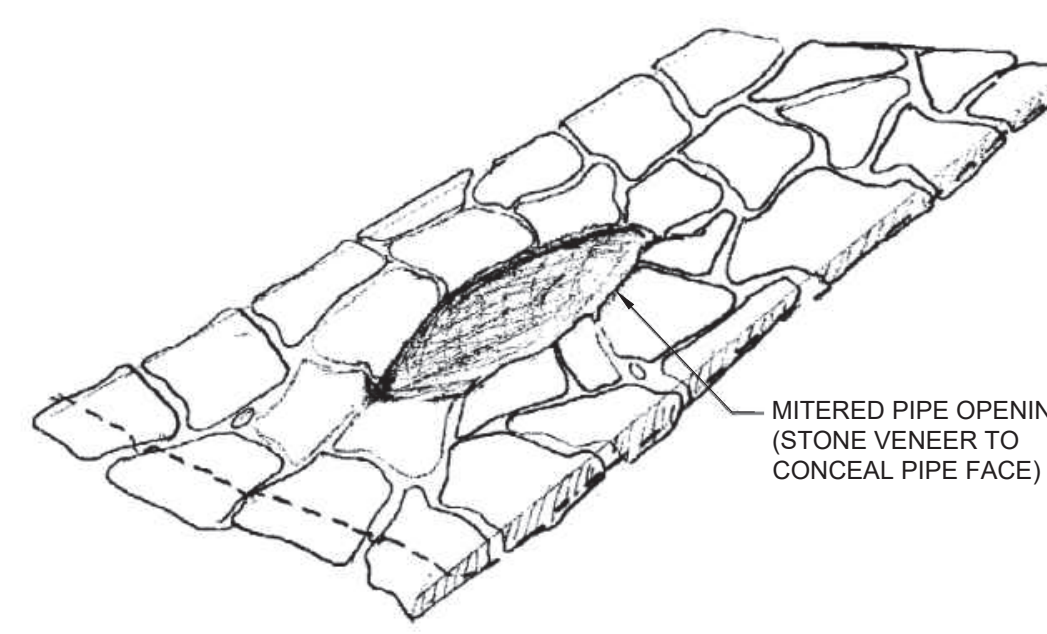
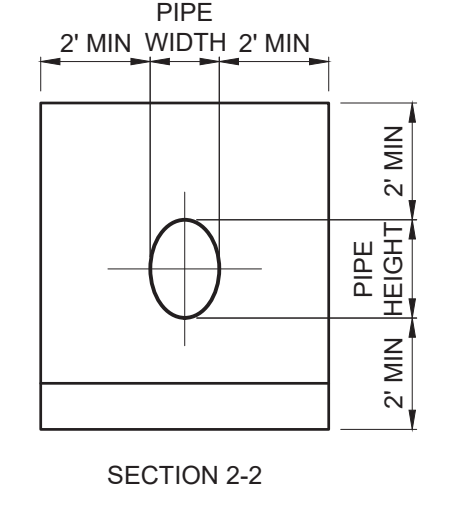
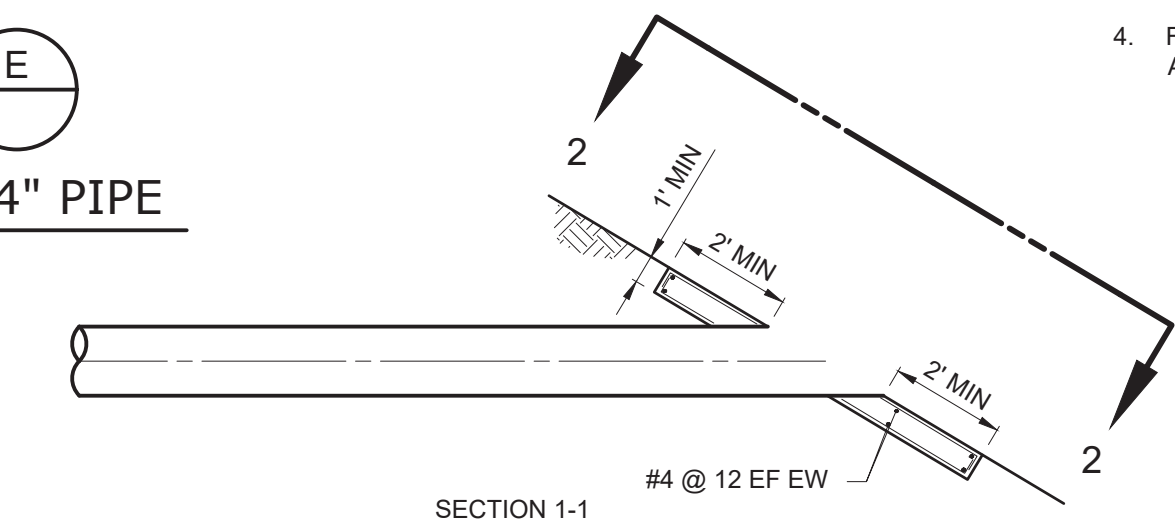
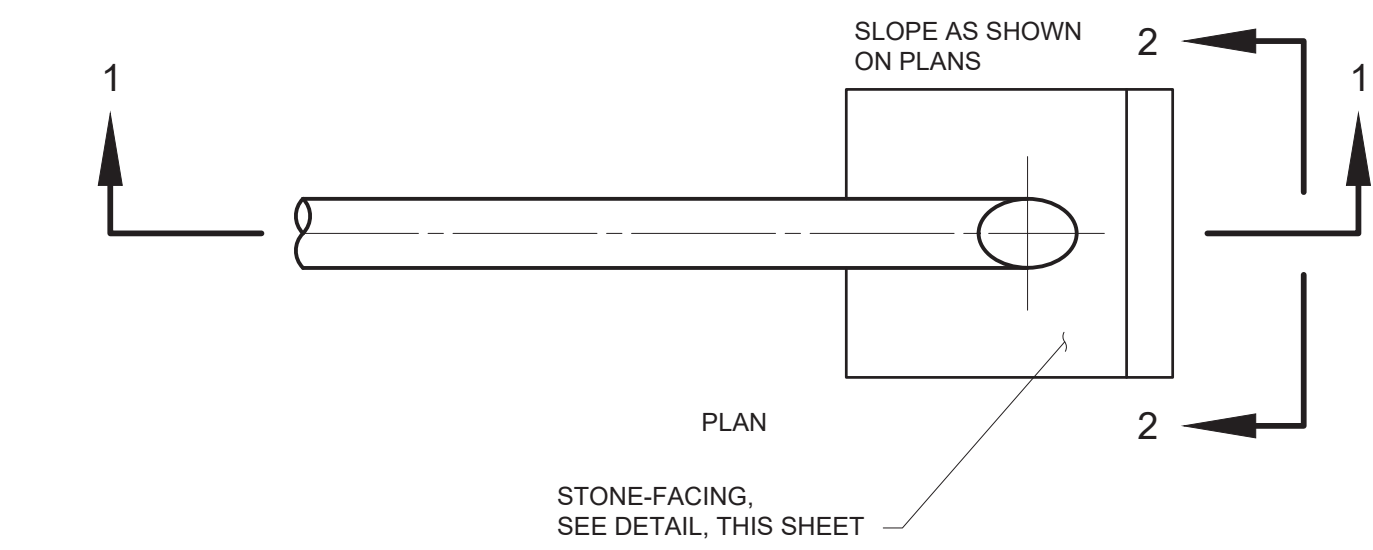
- CONCRETE CURB INLET NOTES:
- CLASS "A1" CONCRETE TO BE USED THROUGHOUT.
 - ALL WALLS SHALL BE REINFORCED WITH #4 BARS @ AT 12" EACH WAY PLACED AT MID-DEPTH. BARS SHALL BE BENT AT CORNERS WITH STD. 90° HOOKS. BOTTOM SLAB SHALL BE REINFORCED WITH #5@12" EACH WAY AT MID-DEPTH.
 - ALL CURB INLETS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH STEPS 14" OC. STEPS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.
 - FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" AND UP TO 15'-0" USE 8" WALLS AND BOTTOM SLAB.



- NOTES:
- STONE VENEER SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL. STONE VENEER SHALL BE CONSTRUCTED OF QUARTZITE SANDSTONE, COMMONLY KNOWN AS PENNSYLVANIA COLONIAL FIELD STONE OR NATURAL LOCAL STONE AS APPROVED BY THE ENGINEER.
 - ALL STONES SHALL HAVE A GENERAL MINIMUM LENGTH OF 1'-8" AND A MINIMUM HEIGHT OF 6". ALL STONES SHALL HAVE A GENERAL MAXIMUM LENGTH OF 3'-0" AND A MAXIMUM HEIGHT OF 12". STONE WIDTHS SHALL GENERALLY BE NO MORE THAN 12". ALL STONES SHALL BE FREE OF SOIL AND DEBRIS IN ORDER TO ACHIEVE SECURE BOND WITH MORTAR.
 - LAY STONE WITH NO LESS THAN 1" AND NO MORE THAN 2" OF MORTAR BETWEEN THE STONE AND CONCRETE. MORTAR AND GROUT SHALL BE PER SPECIFICATION SECTION 04 05 13 AND 04 05 16.




STANDARD CONCRETE CURB INLET 12" THROUGH 54" PIPE
SCALE: NTS



CONCRETE PIPE COLLAR
SCALE: NTS

PIPE COLLAR STONE-FACING DETAILS
SCALE: NTS

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	C. MCNICOL
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1" 
REV	ISSUED FOR	DATE	BY		

BID SET

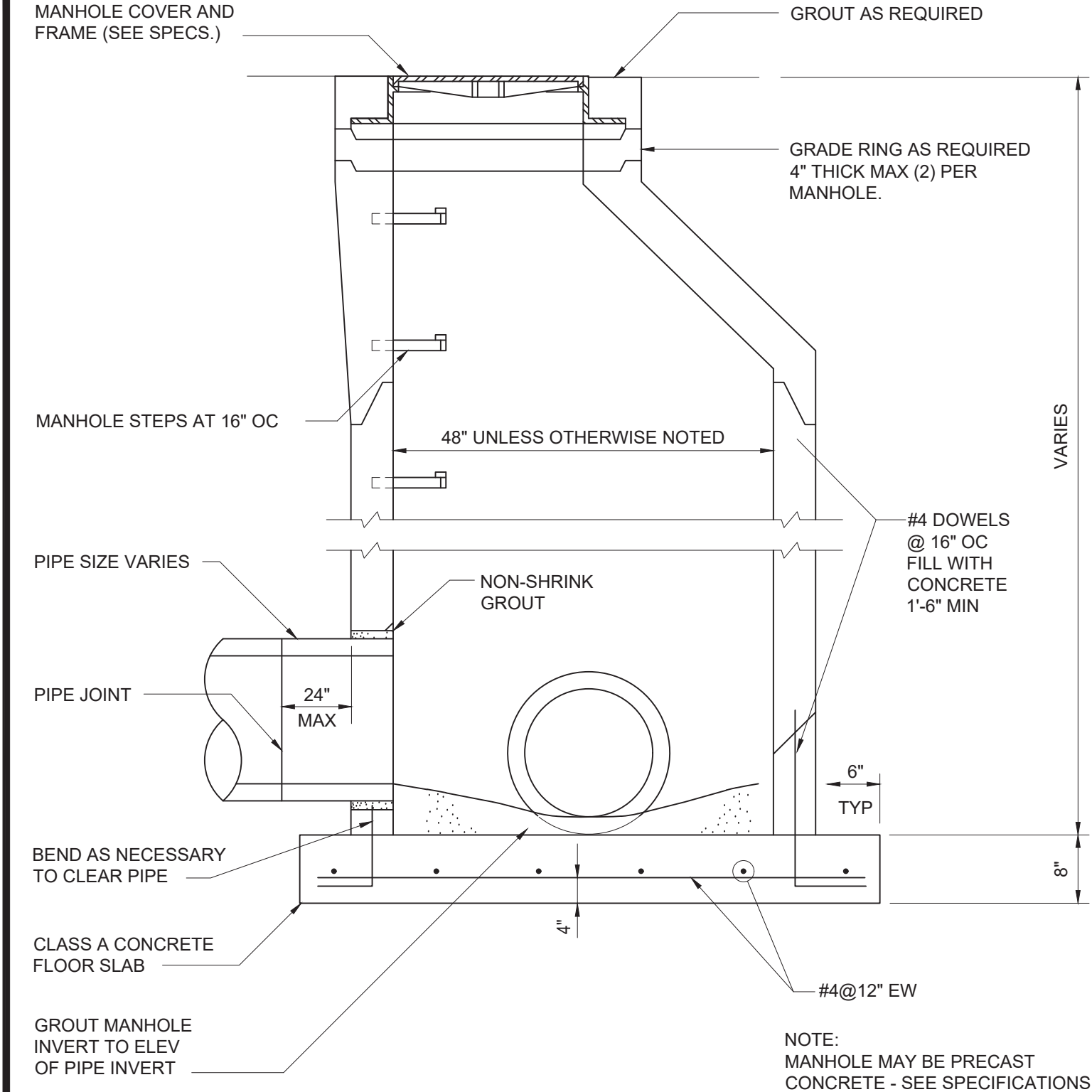
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

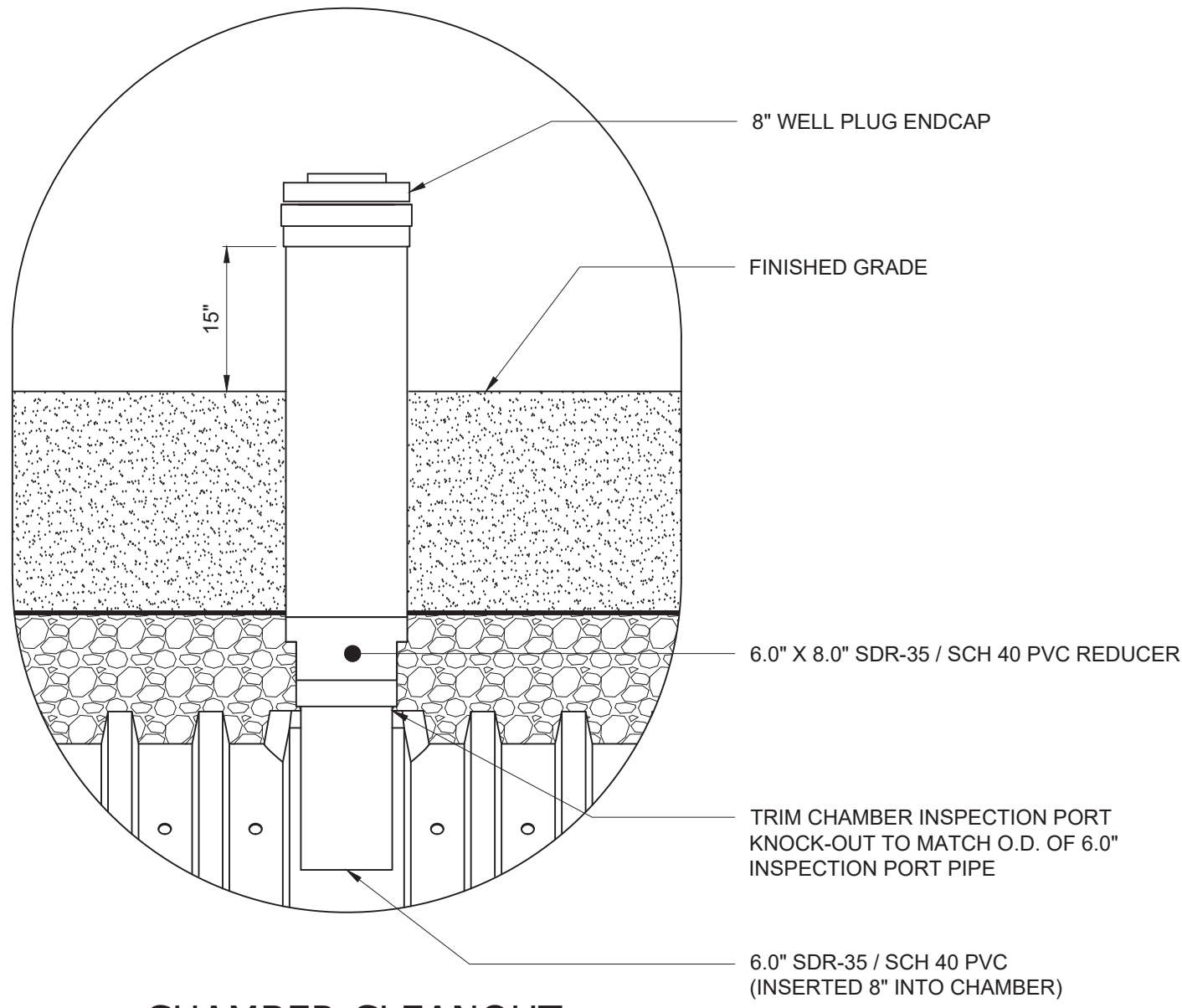
CIVIL
STORMWATER DETAILS - SHEET 1 OF 6

DATE: FEB 2025
HAZEN NO.: 90388-000
CONTRACT NO.: A1364-A
DRAWING NUMBER: C-216

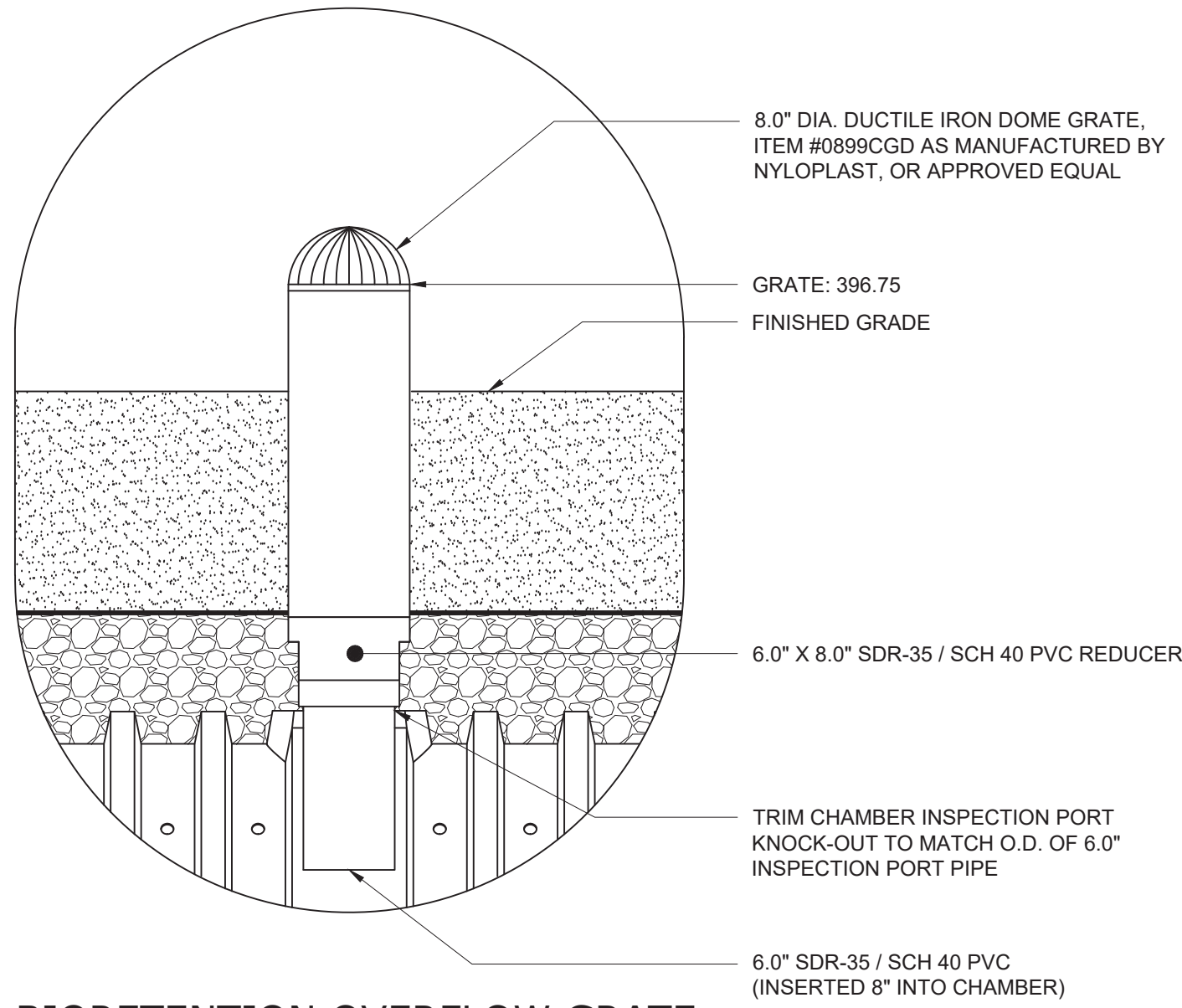


STORMWATER MANHOLE
SCALE: NTS

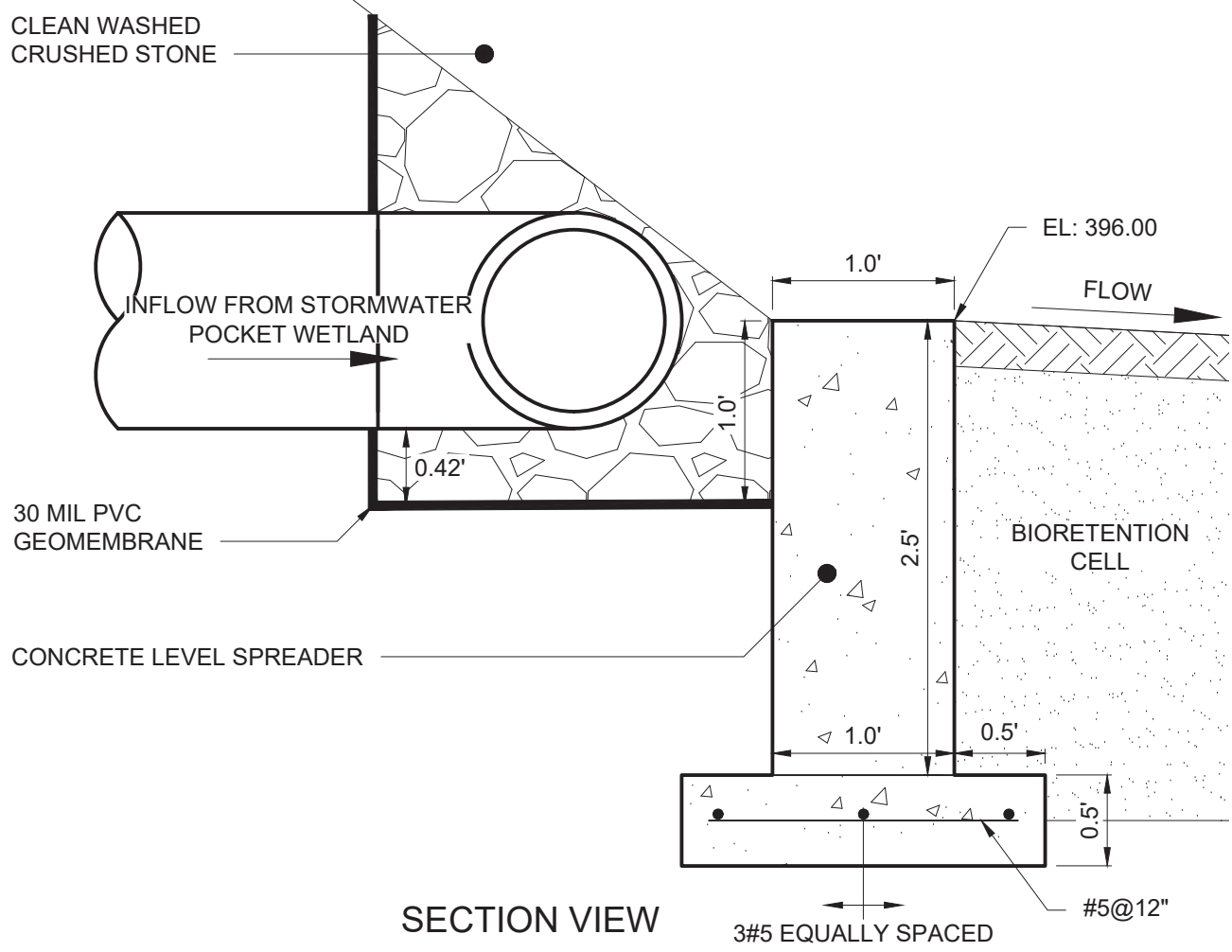
STRUCTURE TABLE				
STRUCTURE ID:	NORTHING	EASTING	DETAIL DWG	INNER DIMENSION (INCHES)
MH-06	813362.85	707809.49	C-217	48
POCKET WETLAND OUTLET STRUCTURE	813729.40	707845.02	C-218	???
MH-02	813643.39	707738.58	C-217	48
MH-05A	813325.90	707686.78	C-217	48
MH-06A	813406.47	707810.14	C-217	48
MH-12	813828.30	707855.21	C-217	SEE DETAIL
MH-11	813828.30	707793.30	C-217	60
MH-04	813483.68	707811.35	C-217	48
MH-05B	813325.84	707785.18	C-217	60
MH-01	813643.39	707655.46	C-217	48
MH-14	813729.40	707813.30	C-217	48
MH-03	813500.41	707810.97	C-217	60
MH-07B	813550.42	707564.00	C-217	48
MH-08	813717.72	707563.99	C-217	48
MH-09	813828.28	707671.70	C-217	48
MH-10	813828.30	707715.13	C-219	72
MH-13	813828.30	707867.79	C-217	48
MH-07A	813475.59	707565.36	C-217	48



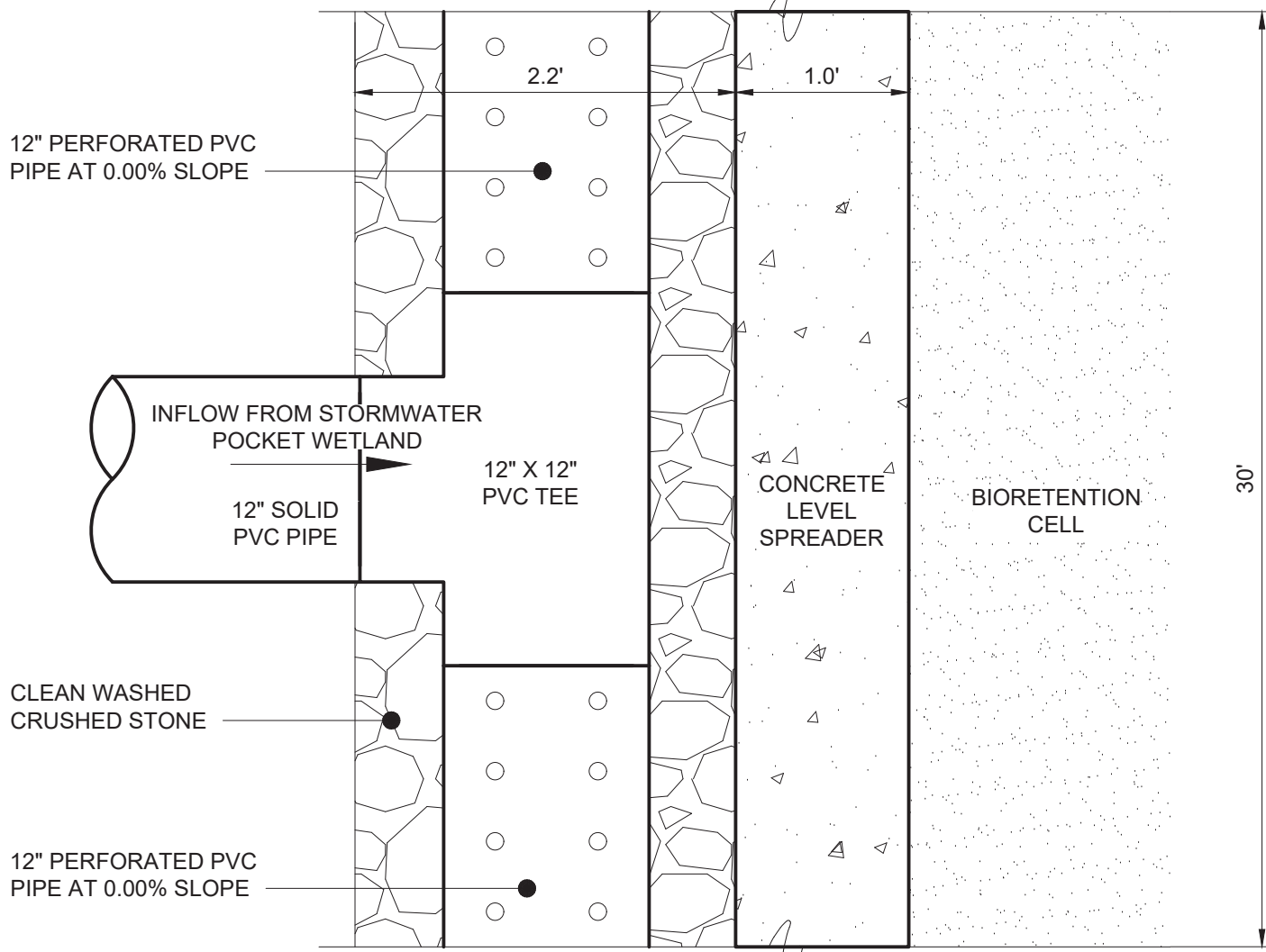
CHAMBER CLEANOUT
SCALE: NTS



BIORETENTION OVERFLOW GRATE
SCALE: NTS



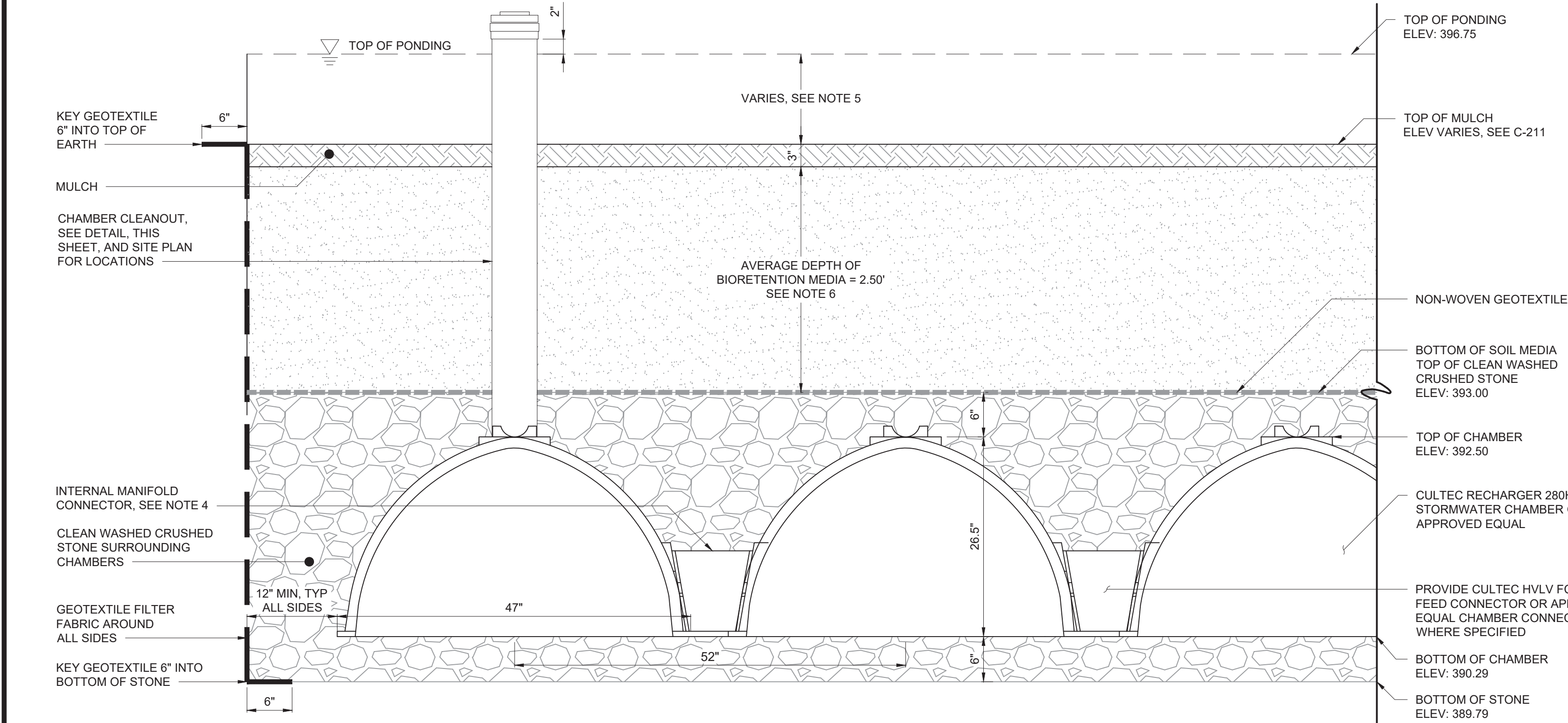
SECTION VIEW



PLAN VIEW
LEVEL SPREADER

SCALE: 1:1

- NOTES:
- CONTRACTOR TO INSTALL CULTEC 280HD CHAMBERS, AS MANUFACTURED BY CULTEC, OR APPROVED EQUAL. REFER TO MANUFACTURER'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 - ALL UNDERGROUND STORAGE CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
 - CROSS SECTION SHOWN IS A TYPICAL CROSS SECTION FOR THE CHAMBERS. REFER TO C-211 FOR THE STORAGE VOLUME AND NUMBER OF CHAMBERS REQUIRED.
 - INTERNAL MANIFOLD CONNECTION SHALL ONLY BE INSTALLED ON THE FIRST AND LAST CHAMBER OF EACH ROW, OR PER MANUFACTURER REQUIREMENTS.
 - BIORETENTION PONDING DEPTH VARIES DUE TO SLOPE OF BIORETENTION (SEE DWG C-211). BIORETENTION HAS BEEN SIZED WITH AN AVERAGE PONDING DEPTH OF SIX INCHES. SEE DWG C-217 FOR BIORETENTION OVERFLOW GRATE ELEVATIONS. GRATE ELEVATIONS ABOVE SURFACE OF BIORETENTION IS GREATER THAN SIX INCHES TO ACCOMMODATE THE AVERAGE DEPTH ABOVE FINISHED GRADE. SEE SPECIFICATION SECTION 33 46 00 - BIORETENTION CELL FOR BIORETENTION MEDIA REQUIREMENTS.
 -

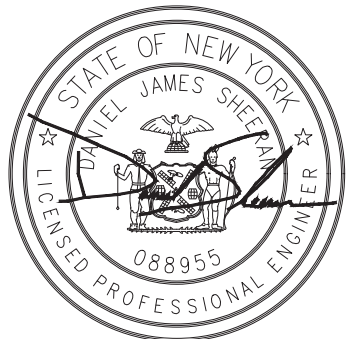


SUBSURFACE STORAGE CHAMBERS
SCALE: 1" = 1'

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	C. MCNICOL
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

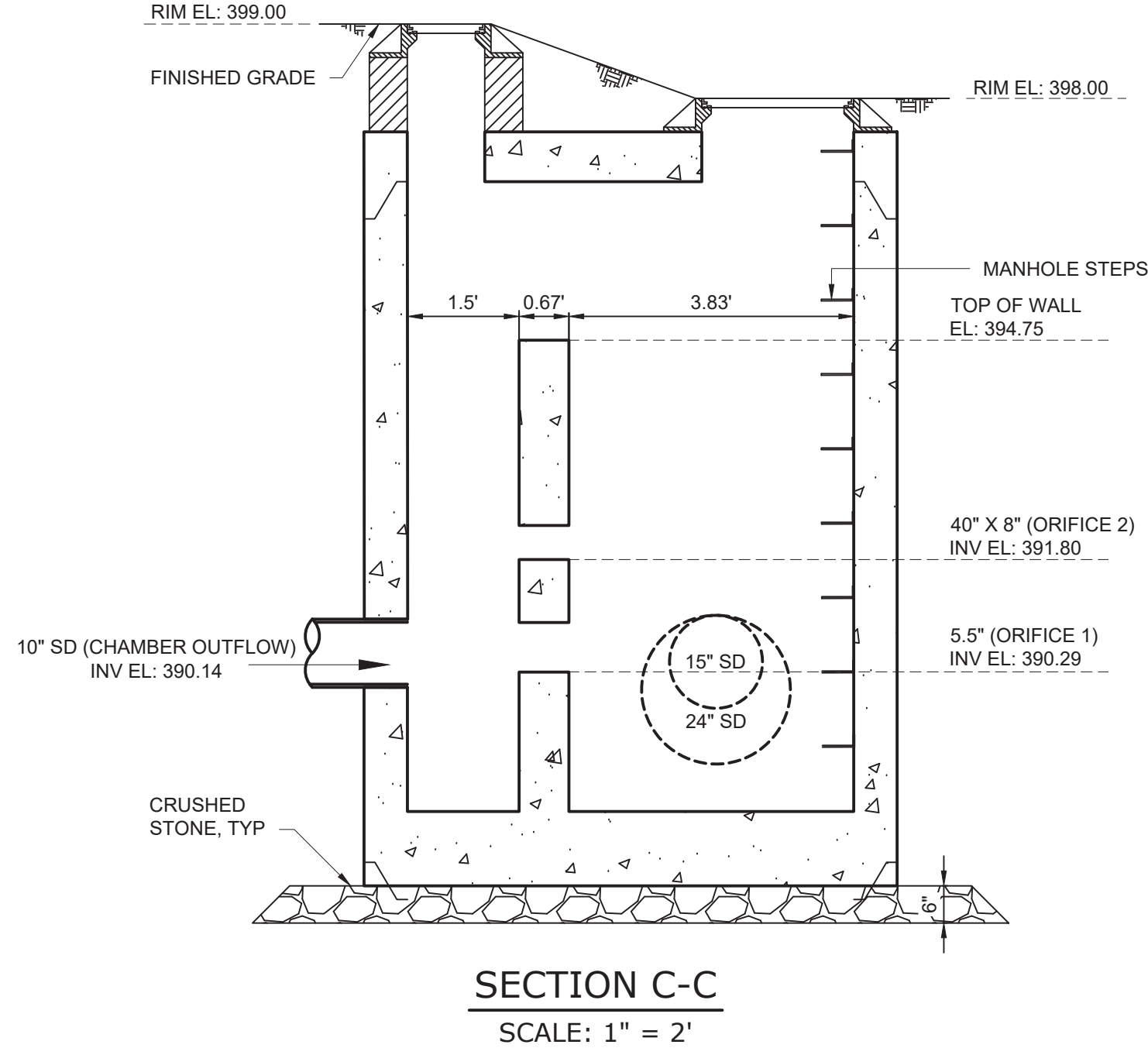
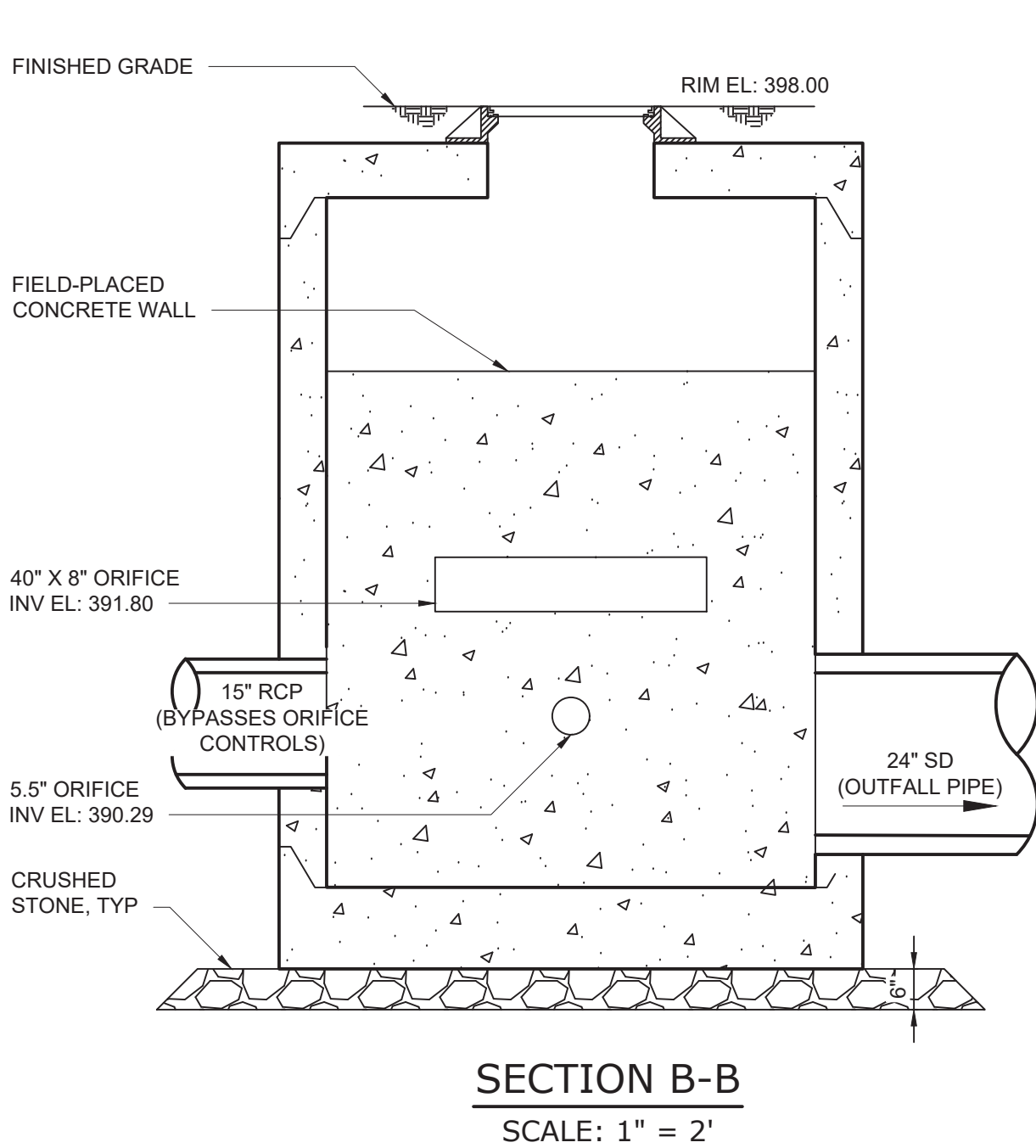
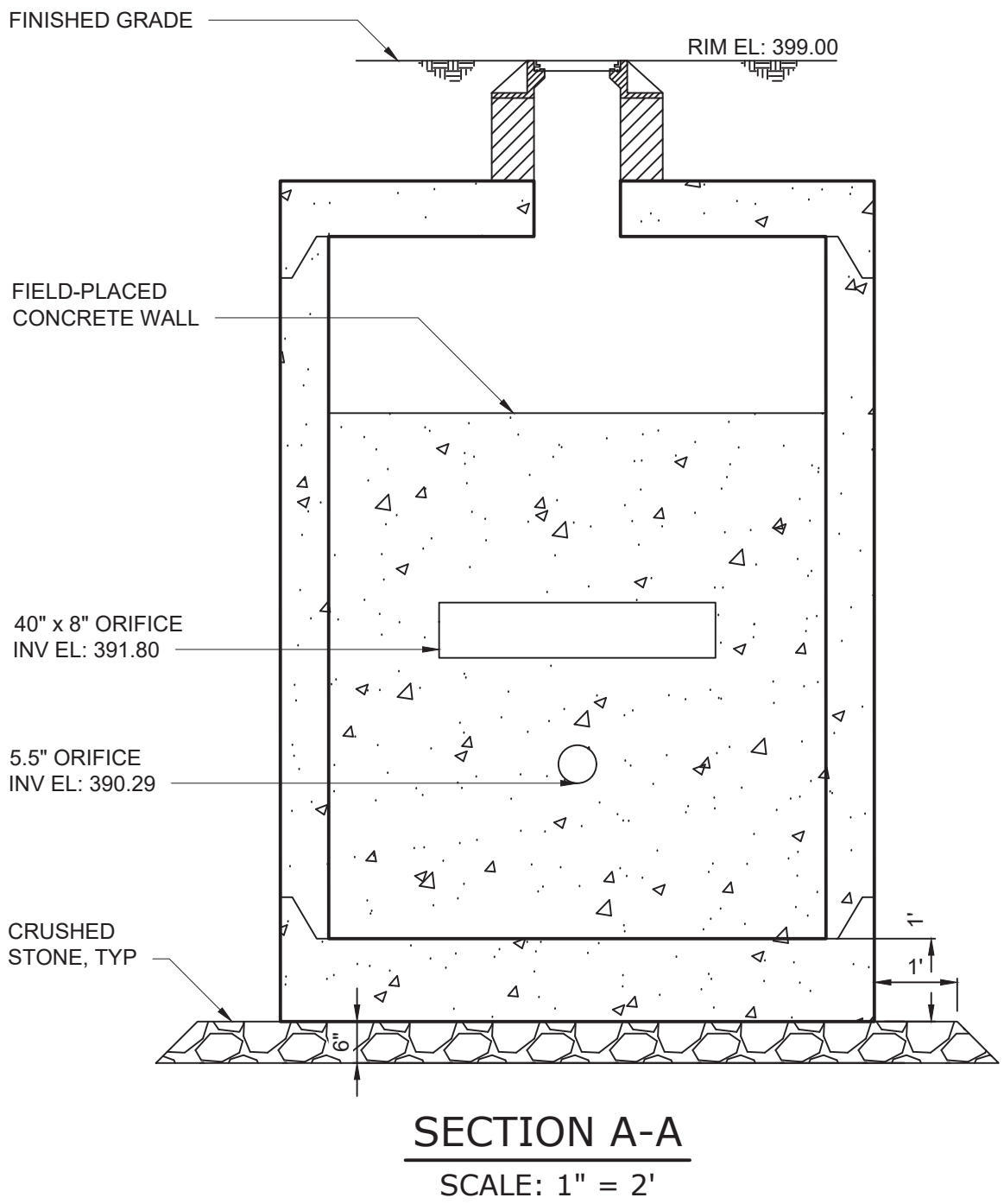
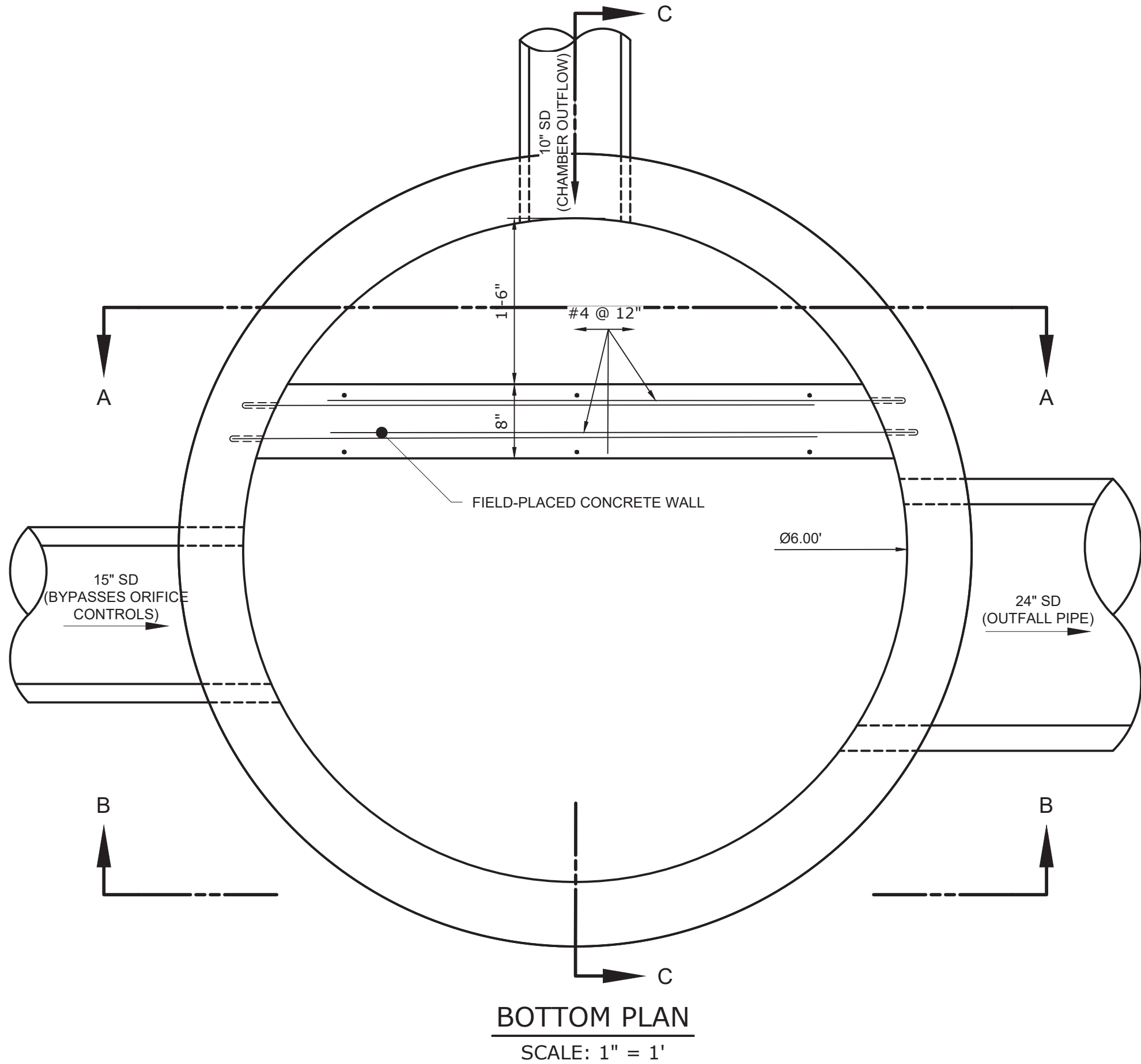
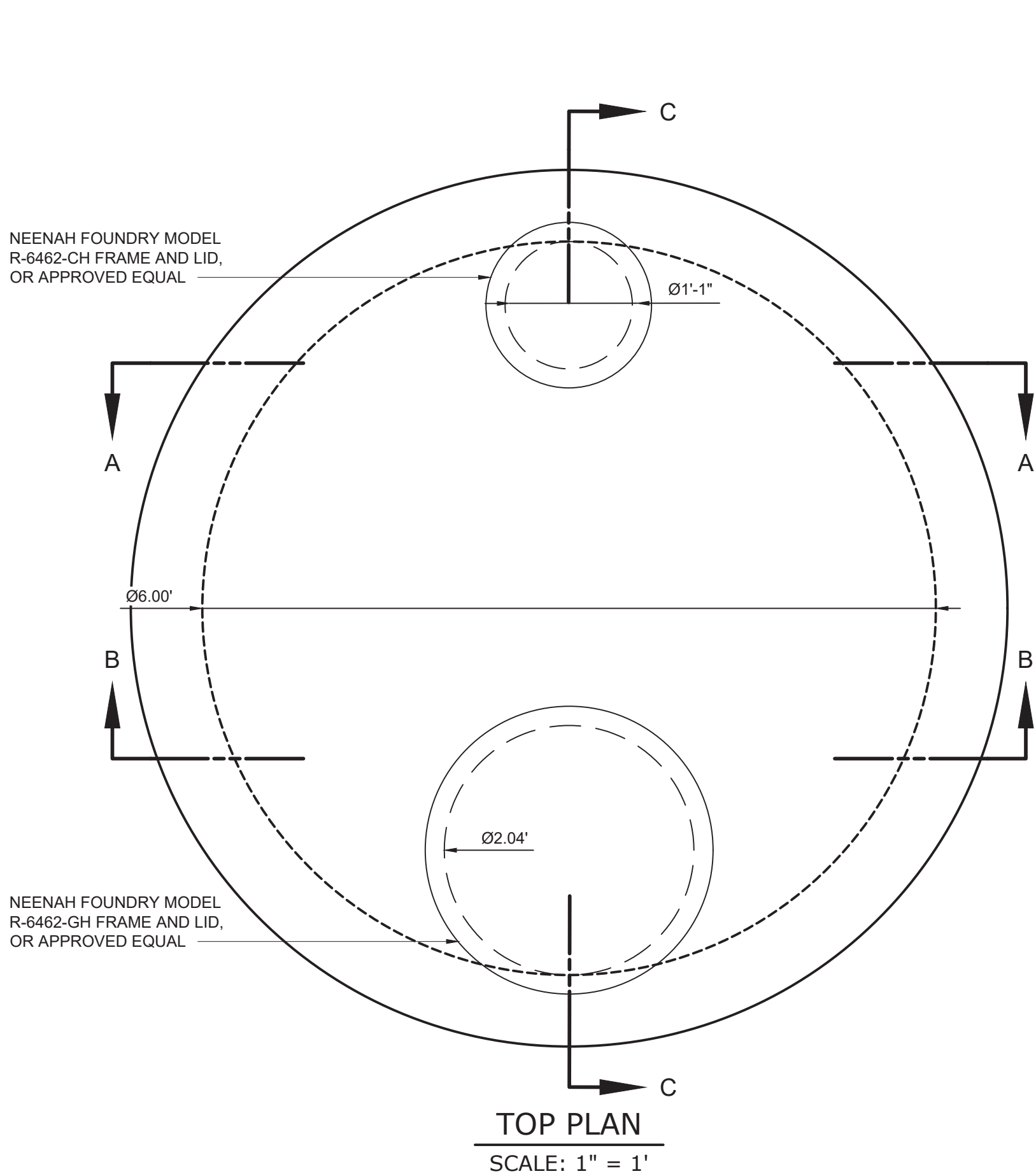
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
STORMWATER DETAILS - SHEET 2 OF 6

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-217

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WSEC\WILC-218 Saved by: JTANNER Save date: 2/7/2025 9:40 AM
PLOT DATE: 3/26/2025 11:36 PM BY: JTANNER



OUTLET SUMMARY TABLE

OPENING DESC.	SIZE	INV IN EL.	INV OUT EL.	STRUCTURE	DRAWING	FUNCTION
POND DRAIN	12" DIA. PIPE	391.00	N/A	WETLAND OUTLET STRUCTURE	C-218	NORMALLY CLOSED, PROVIDED FOR MAINTENANCE
EXTENDED DETENTION	12" DIA. PIPE ¹	392.25	396.50 ²	WETLAND OUTLET STRUCTURE	C-218	SENDS WQv TO BIORETENTION SURFACE
OVERFLOW WEIR	7' W X 1' H	397.55	N/A	WETLAND OUTLET STRUCTURE	C-218	DIRECTS FLOWS GREATER THAN THE 1-YR TO DETENTION CHAMBERS
PIPE TO DETENTION CHAMBERS	18" DIA PIPE	N/A	391.00	WETLAND OUTLET STRUCTURE	C-218	DIRECTS FLOWS GREATER THAN THE 1-YR TO DETENTION CHAMBERS
EMERGENCY SPILLWAY	8' WIDE WEIR	398.75	398.75	WETLAND EMBANKMENT	C-211	EMERGENCY SPILLWAY FOR STORMS GREATER THAN 500-YR
CHAMBER OUTFLOW PIPE	10" DIA PIPE	390.14	N/A	DETENTION CHAMBER OUTLET STRUCTURE	C-219	PIPED CONNECTION BETWEEN CHAMBERS AND OUTLET STRUCTURE
NON-SMP INFLOW PIPE	15" DIA PIPE	389.80	N/A	DETENTION CHAMBER OUTLET STRUCTURE	C-219	CONVEYS FLOWS FROM NON-SMP DRAINAGE AREAS AND BYPASSES THE ORIFICE CONTROLS WITHIN OUTLET STRUCTURE
ORIFICE 1	5.5" DIA	390.29	N/A	DETENTION CHAMBER OUTLET STRUCTURE	C-219	STORMS LESS THAN 10-YR EVENT
ORIFICE 2	40" W X 8" H	391.80	N/A	DETENTION CHAMBER OUTLET STRUCTURE	C-219	ACTIVATED DURING 10-YR STORM AND GREATER
OUTFALL PIPE	24" DIA. PIPE	N/A	389.05	DETENTION CHAMBER OUTLET STRUCTURE	C-219	CONVEYS FLOWS FROM CHAMBERS TO SITE OUTFALL
BIORETENTION OVERFLOW GRATE	(3) 6" DIA OPENINGS	396.75	N/A	BIORETENTION	C-211 AND C-217	CONNECTS BIORETENTION PONDING TO CHAMBERS

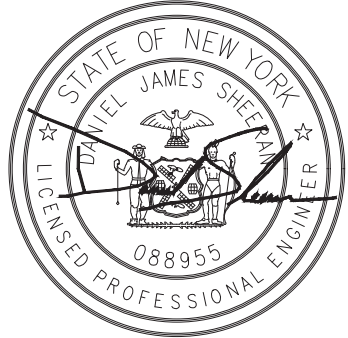
1. 12" GV PROVIDED ON PIPE INTERNAL TO OUTLET STRUCTURE. SEE NOTE 1, THIS DRAWING FOR EQUIVALENT AREA OPENING REQUIREMENT
2. INV OUT SERVES AS THE EFFECTIVE INV IN FOR THE EXTENDED DETENTION ORIFICE

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DETENTION CHAMBER OUTLET STRUCTURE

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

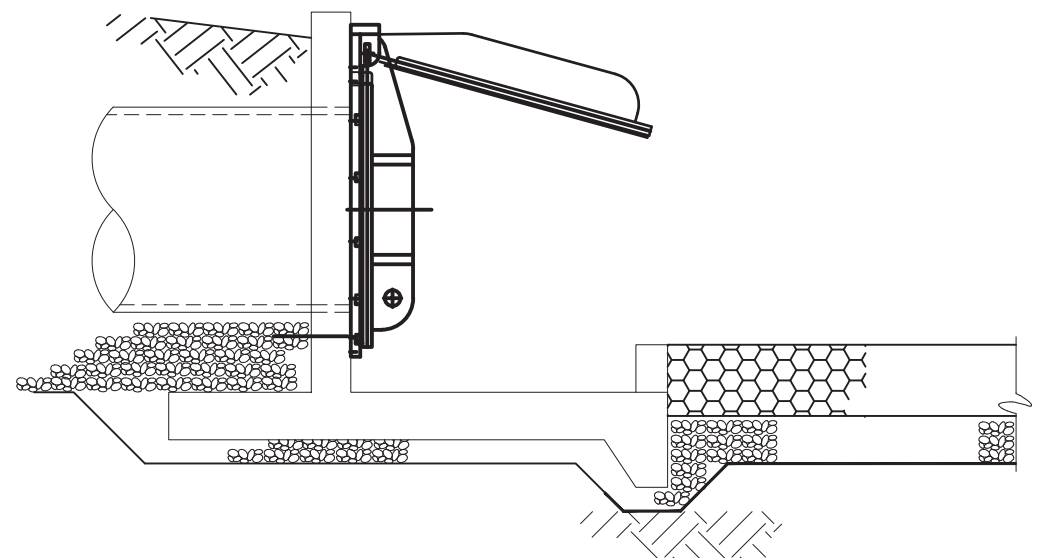
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

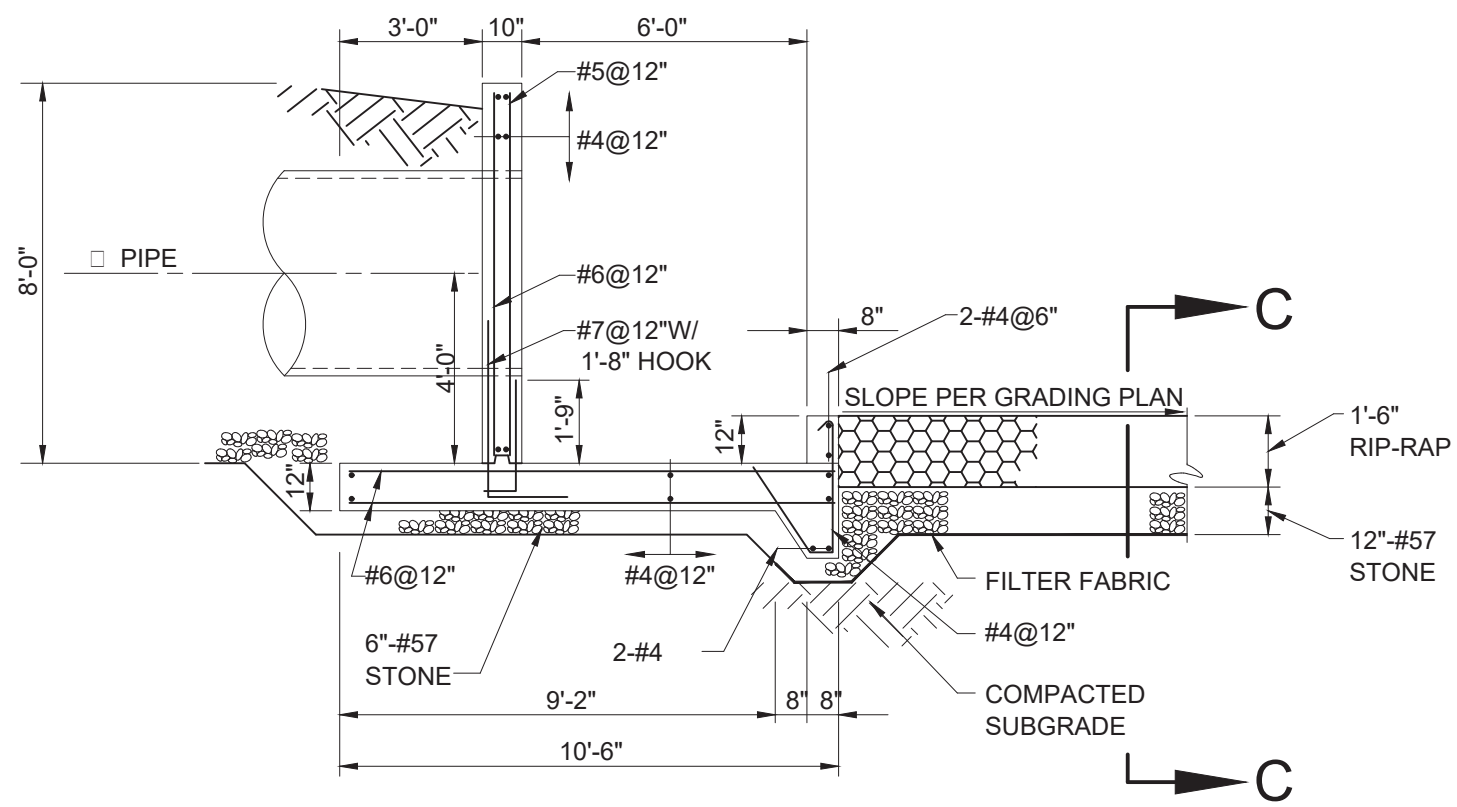
CIVIL
STORMWATER DETAILS - SHEET 4 OF 6

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-219

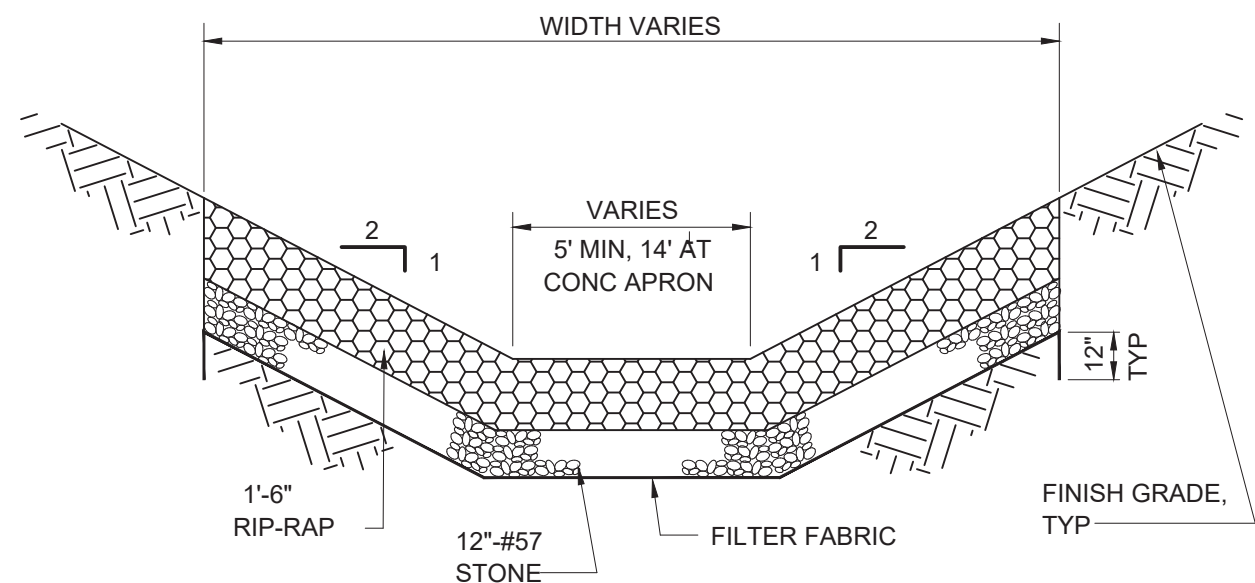
File: C:\USERS\TANNER\PROJECT FILES\PROJECT\WISCIVILC-220 Saved by JTanner Save date: 2/7/2025 9:39 AM
PLOT DATE: 3/26/2025 11:36 PM BY: JTANNER



SECTION WITH FLAP GATE

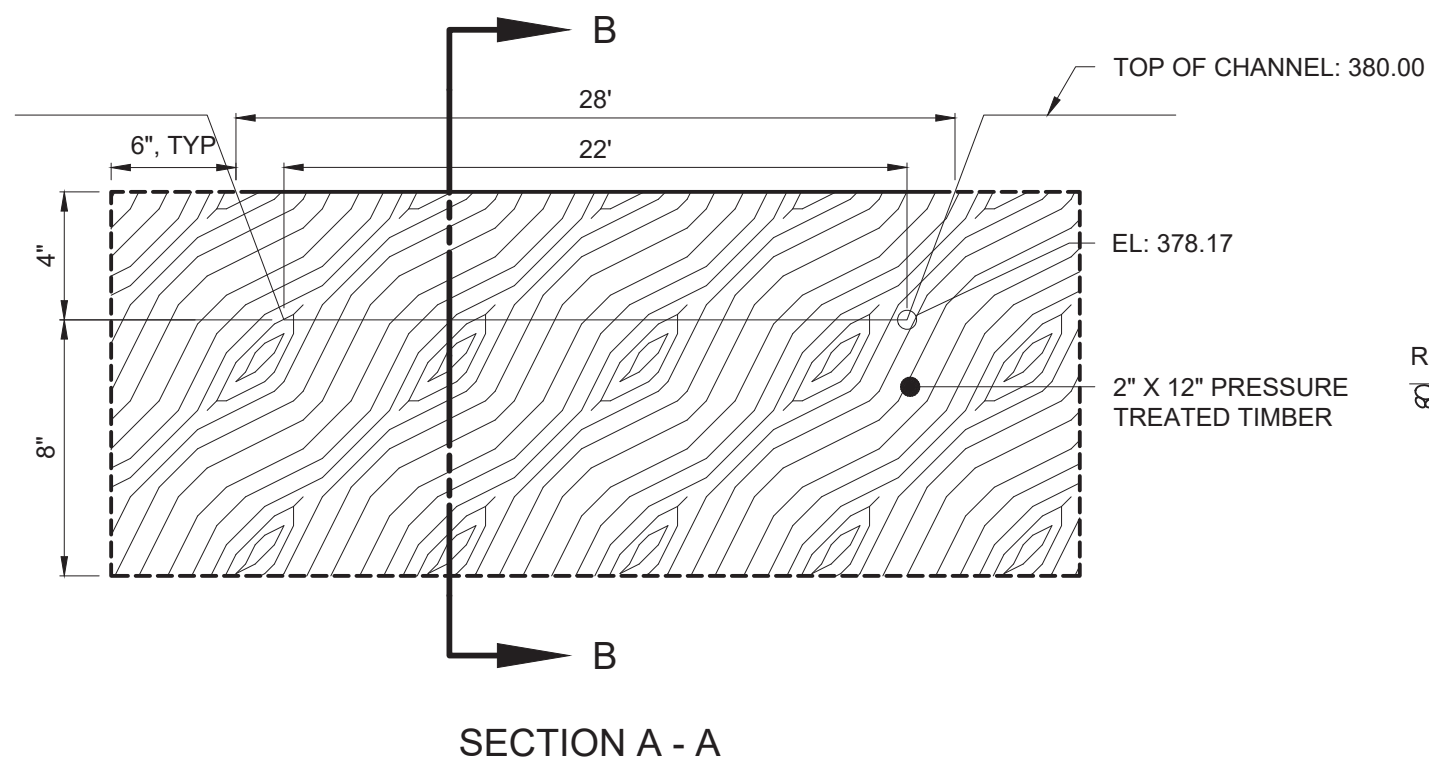


SECTION A-A



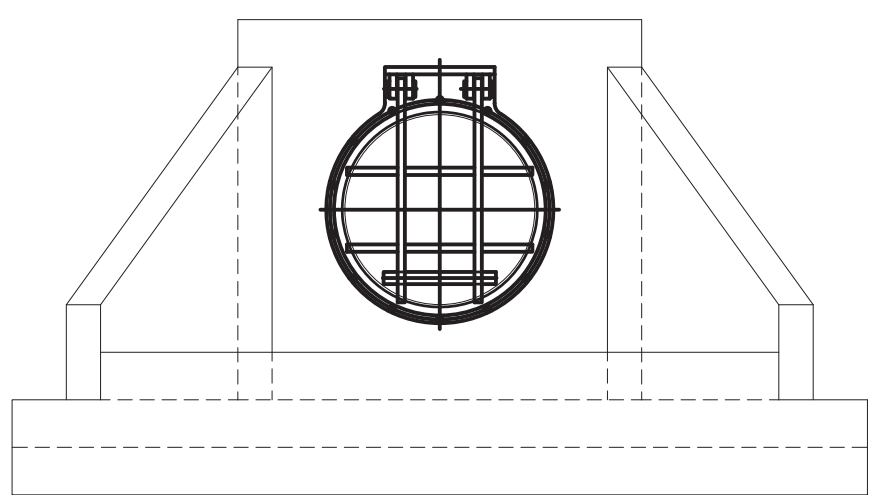
SECTION C-C

HEADWALL WITH FLAP GATE
SCALE: N.T.S.

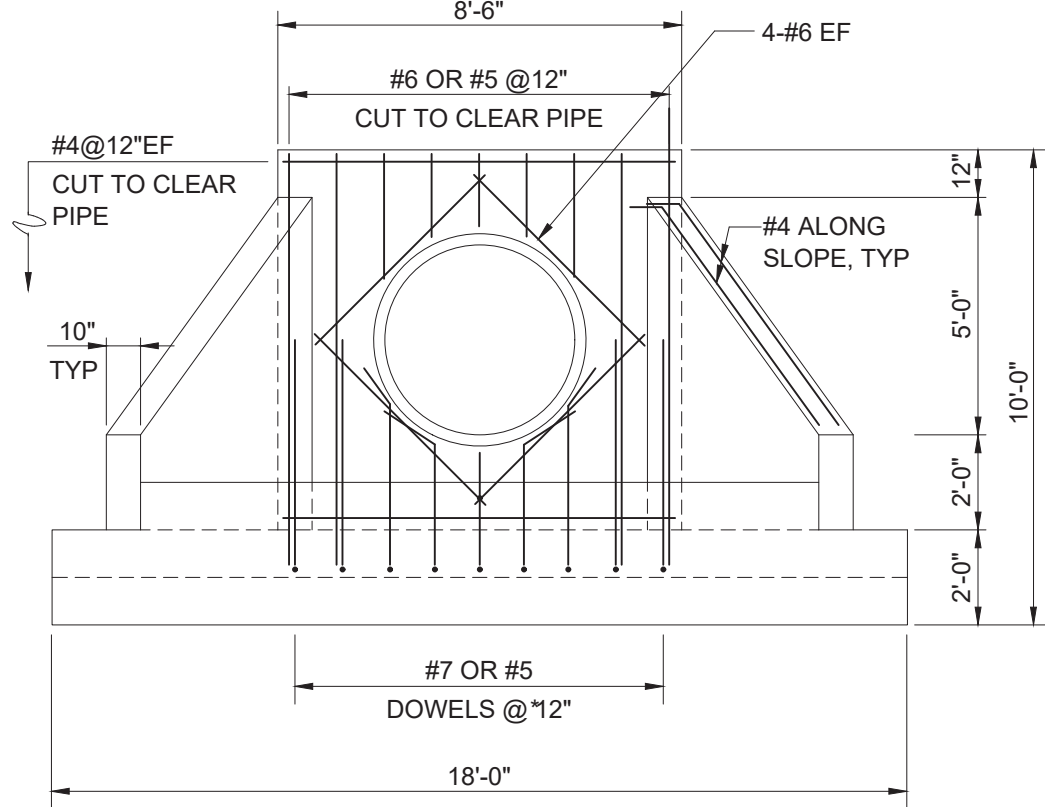


SECTION A - A

FLOW SPREADER
SCALE: N.T.S.

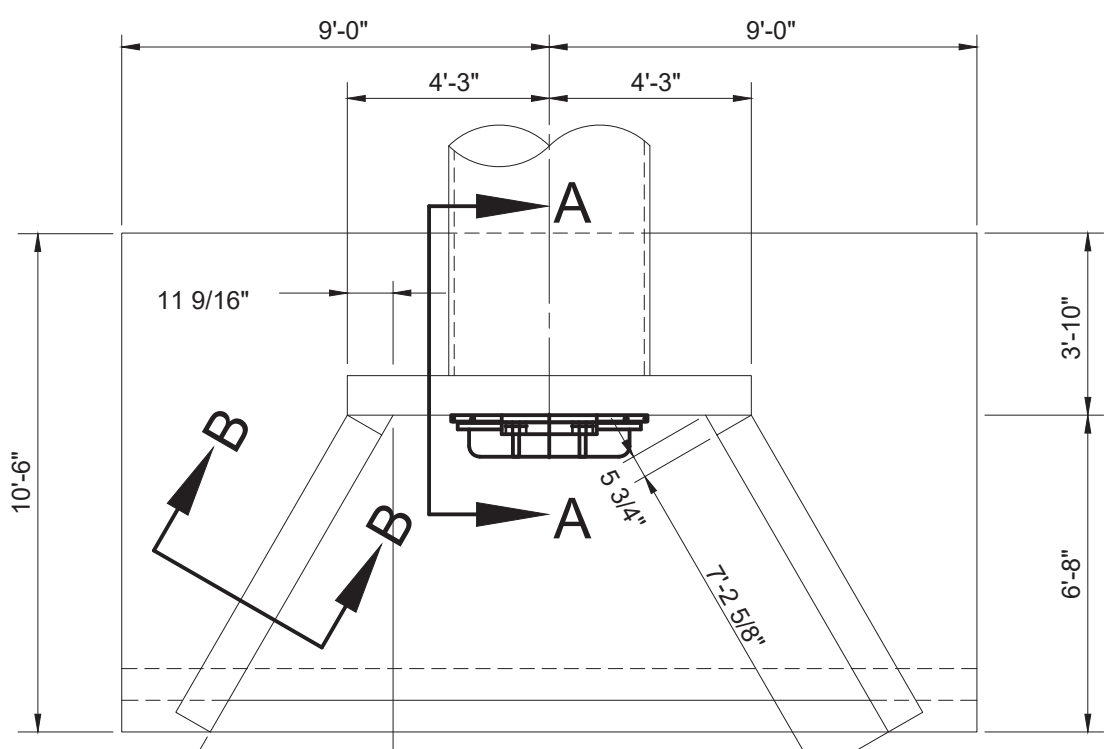


ELEVATION WITH FLAP GATE



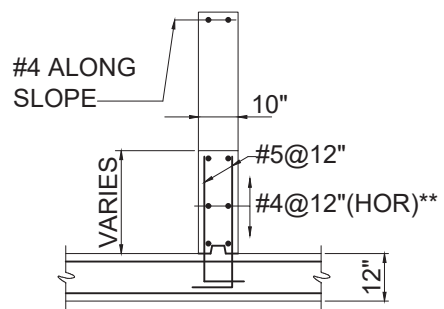
ELEVATION

NOTE: OTHER REINFORCING NOT SHOWN FOR CLARITY
* BEND AS SHOWN TO CLEAR PIPE

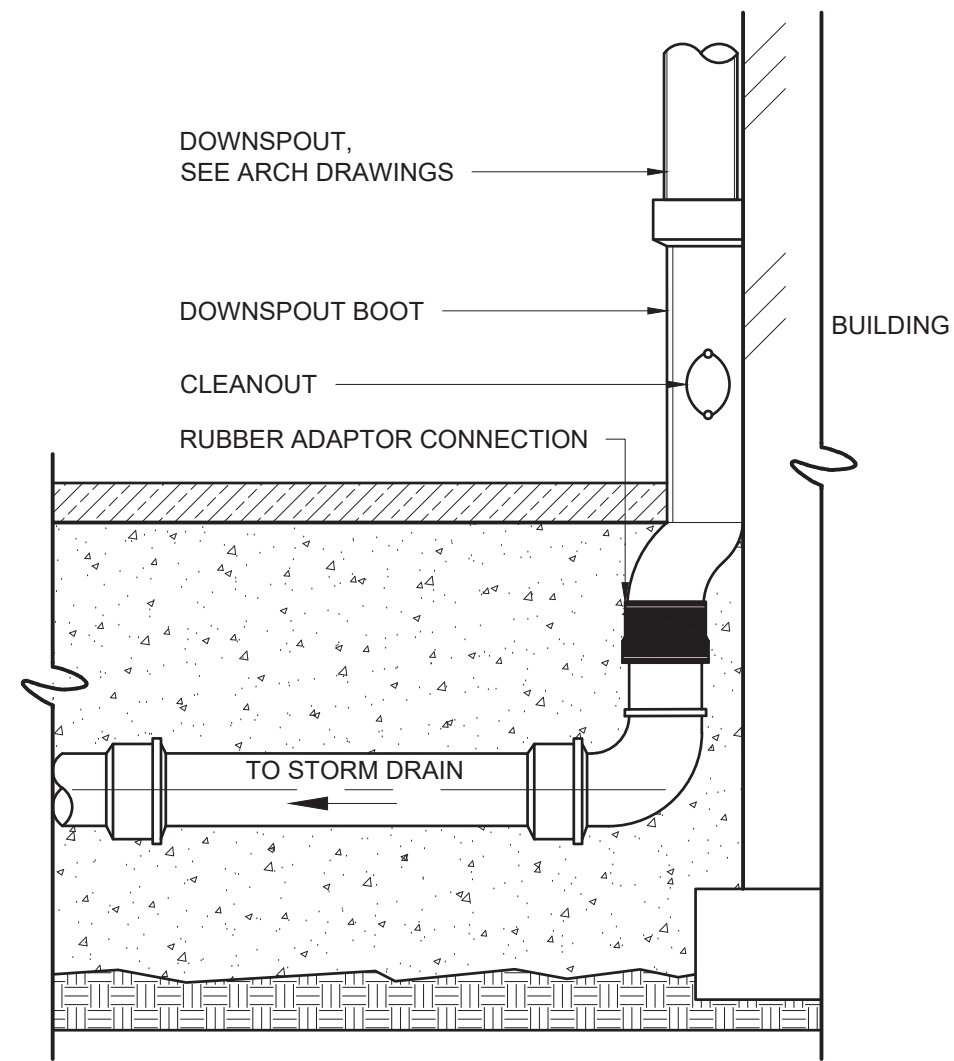


PLAN WITH FLAP GATE

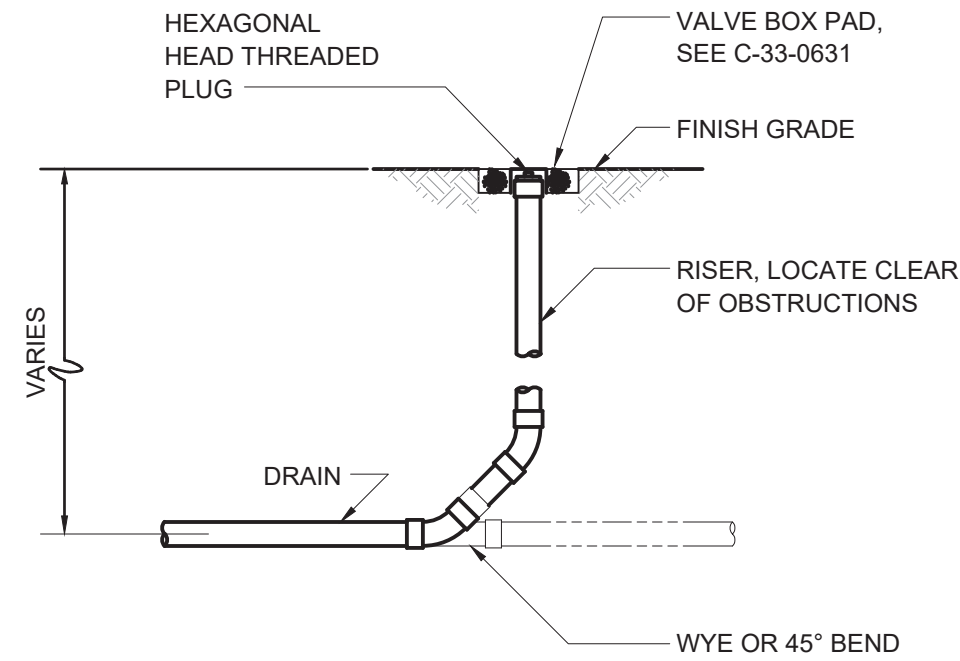
** THESE BARS SHALL EXTEND INTO HEADWALL 8' W/ STD 90° HOOKS



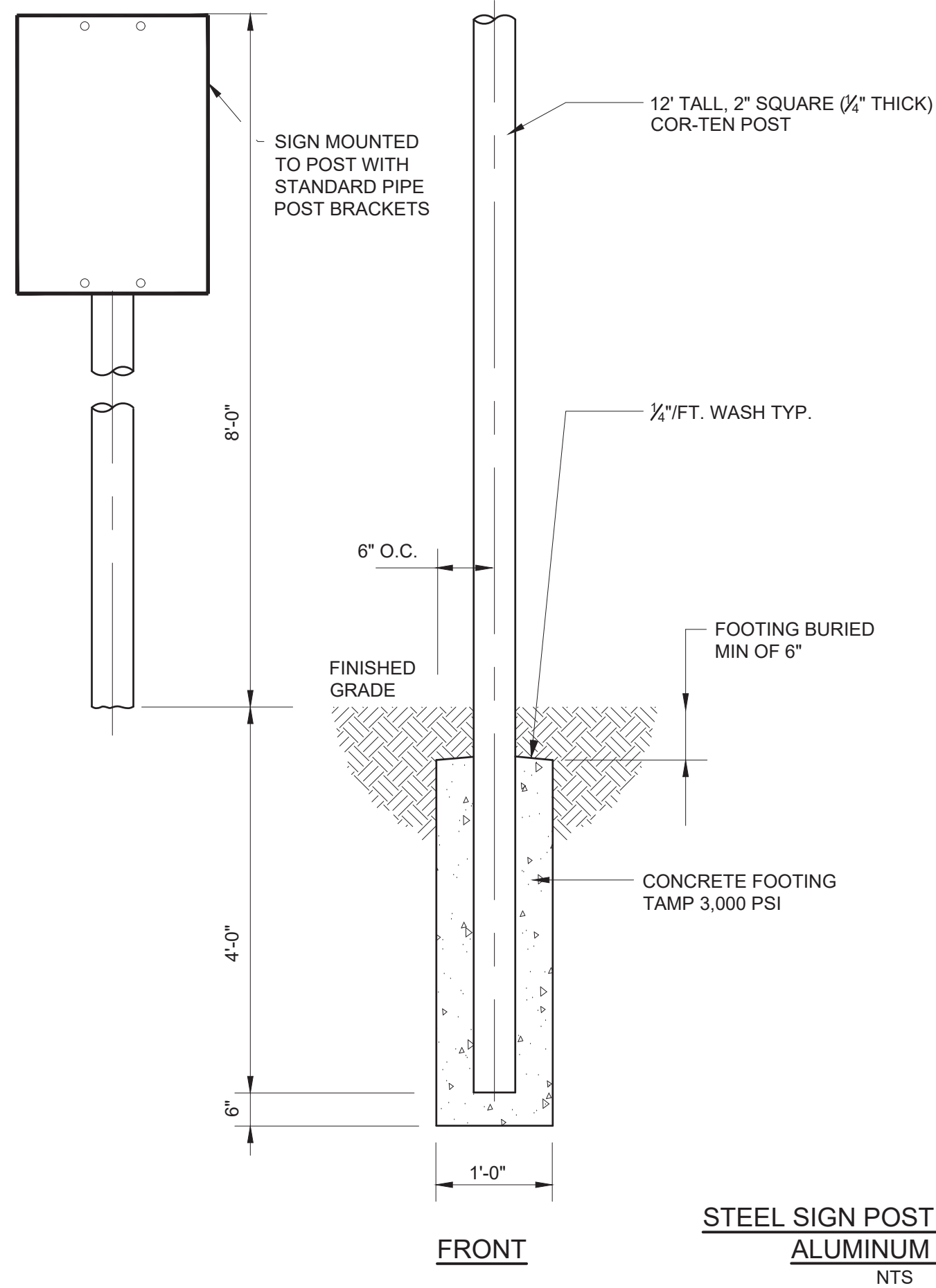
SECTION B-B



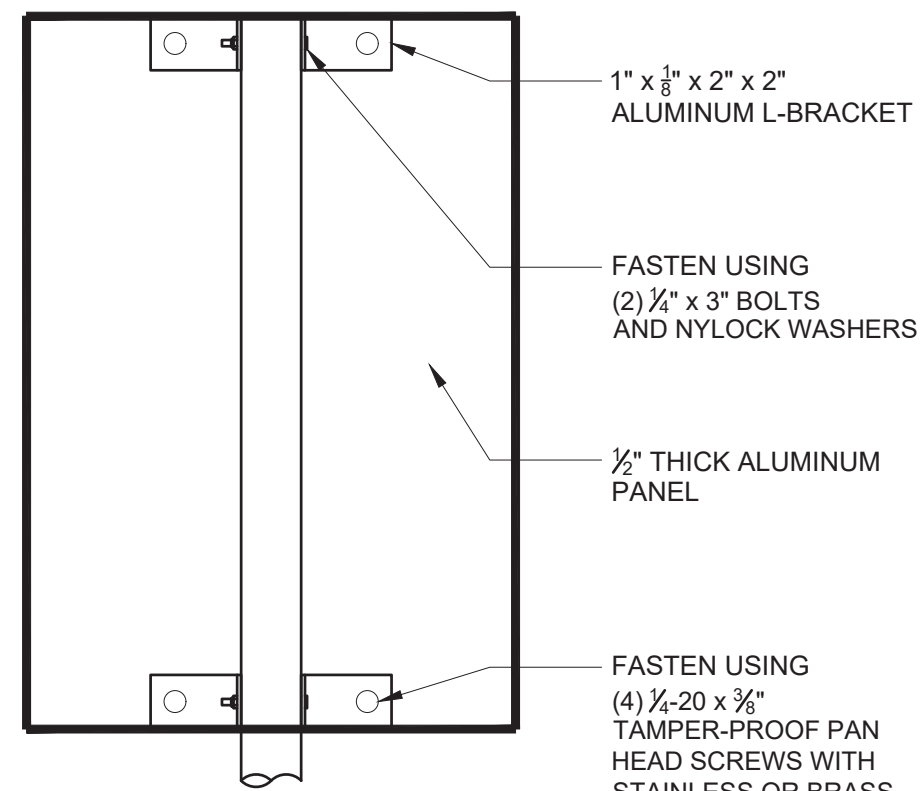
DOWN SPOUT TIE-IN
SCALE: N.T.S.



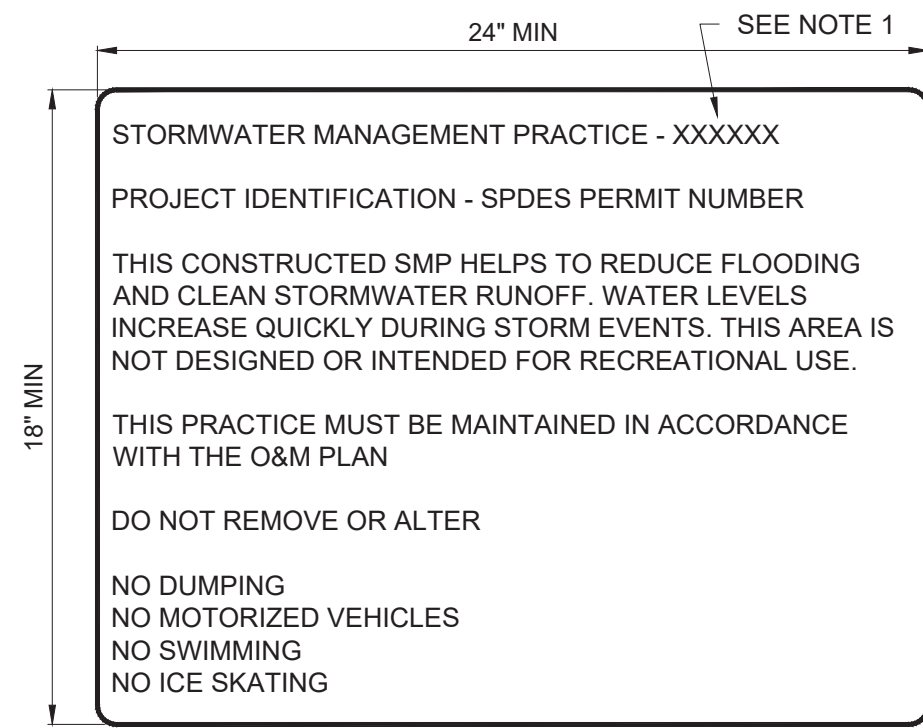
CLEANOUT FOR GRAVITY LINES
SCALE: N.T.S.



STEEL SIGN POST WITH RIGID ALUMINUM SIGN
NTS



REAR DETAIL




NOTES:

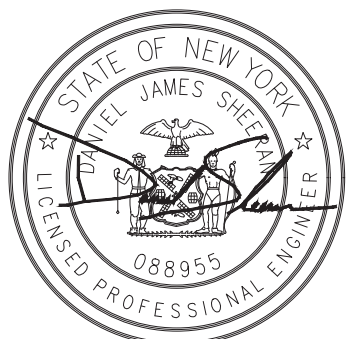
- REFER TO DRAWING C-211 FOR THE SIGN TYPE.
 - SIGN TYPE A SHALL SAY "STORMWATER POCKET WETLAND"
 - SIGN TYPE B SHALL SAY "BIORETENTION CELL WITH SUBSURFACE DETENTION CHAMBERS"
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE CORRECT SPDES PERMIT NUMBER FOR THE SIGN.
- SEE STEEL SIGN POST DETAIL ON THIS DWG FOR MOUNTING OF SIGN.

STORMWATER PRACTICE WARNING SIGN
NTS

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1" 
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

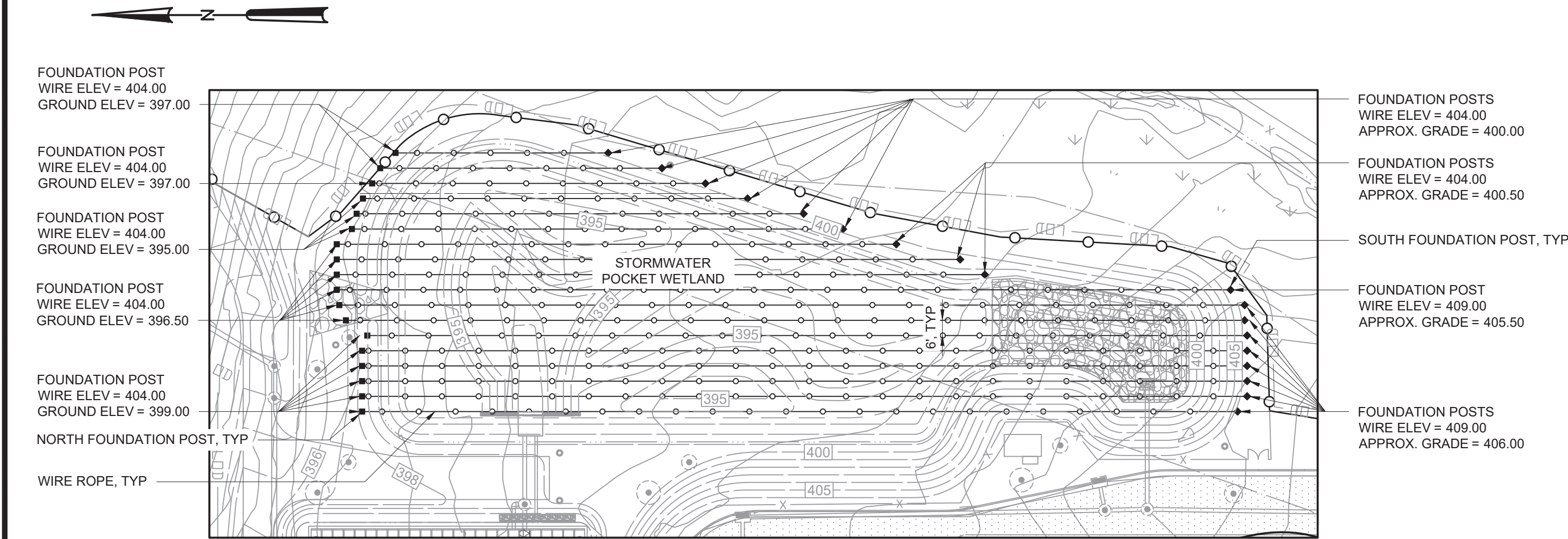
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
STORMWATER DETAILS - SHEET 5 OF 6

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-220

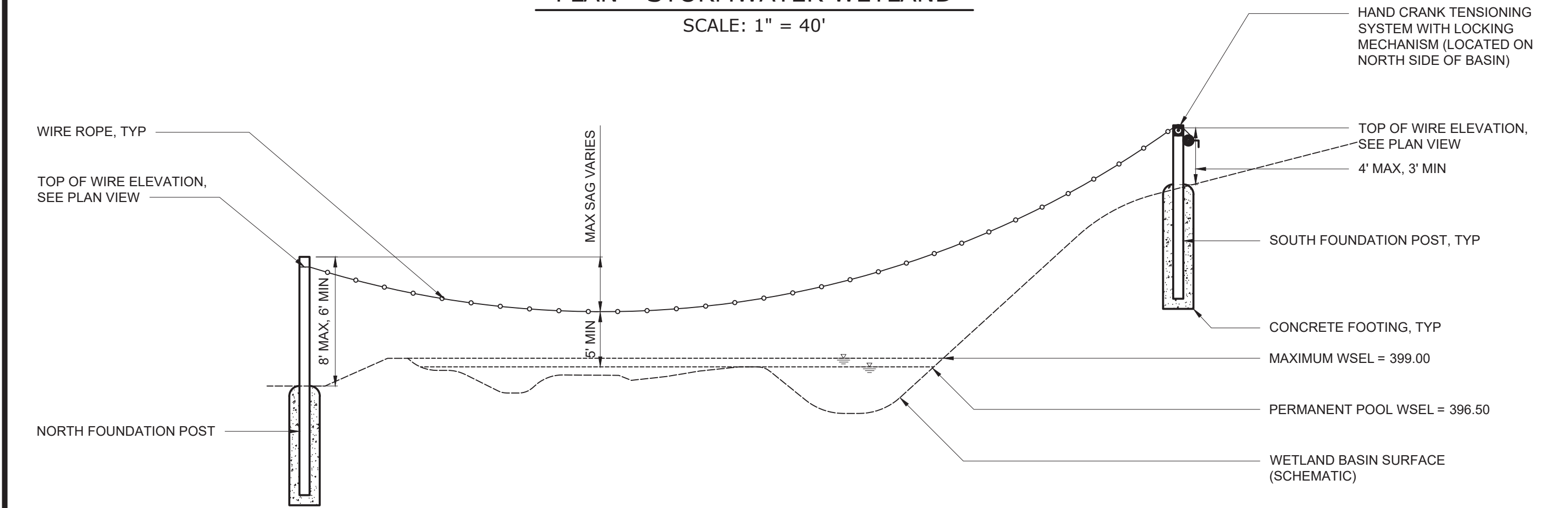
File: C:\USERS\JANNER\CADD\SHAZEN AND SAWYER\00388-000_RYE_LAKE_FILTRATION\PROJECT FILES\PROJECT\WSE\CVILC-221 Saved by: CMCNICOL Save date: 2/11/2025 1:44 PM
PLOT DATE: 3/27/2025 12:53 PM BY: JANNER



PLAN - STORMWATER WETLAND
SCALE: 1" = 40'

FOUNDATION POST LEGEND

- NORTH FOUNDATION POST
- ◆ SOUTH FOUNDATION POST
- SEDIMENT BASIN (TEMPORARY) FOUNDATION POST



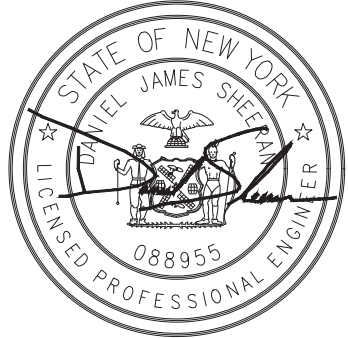
SCHEMATIC PROFILE - STORMWATER WETLAND
SCALE: N.T.S.

- NOTES:
- PLAN VIEWS HAVE ALL NEW CONSTRUCTION WITH THE EXCEPTION OF THE BIRD DETERRENT SYSTEM SCREENED FOR CLARITY.
 - CONTRACTOR SHALL NOT DISCHARGE STORMWATER TO THE STORMWATER POCKET WETLAND UNTIL THE BIRD DETERRENT SYSTEM IS INSTALLED. ANY WATER THAT MAY ACCUMULATE DURING CONSTRUCTION SHALL BE SUMP PUMPED TO THE OUTFALL TO MITIGATE BIRD AND WATERFOWL FROM ENTERING THE WETLAND. CONTRACTOR SHALL PROVIDE MEANS OF PROVIDING NON-TURBID DISCHARGES.
 - BIRD DETERRENT SYSTEM SHALL BE IMPLEMENTED IMMEDIATELY AFTER SEDIMENT BASINS ARE CONSTRUCTED. SEDIMENT BASIN BIRD DETERRENT SYSTEM IS INTENDED TO BE TEMPORARY, AND SHOULD BE REMOVED WHEN THE SEDIMENT BASINS ARE REMOVED.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE SEDIMENT BASIN AND WETLAND BIRD DETERRENT SYSTEMS FOR THE DURATION OF CONSTRUCTION
 - THE CONTRACTOR IS PROHIBITED FROM RE-USING ANY OF THE SEDIMENT BASIN BIRD DETERRENT SYSTEMS IN THE FINAL CONDITIONS OF THE STORMWATER WETLAND.

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	C. MCNICOL
				DRAWN BY:	C. MCNICOL
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

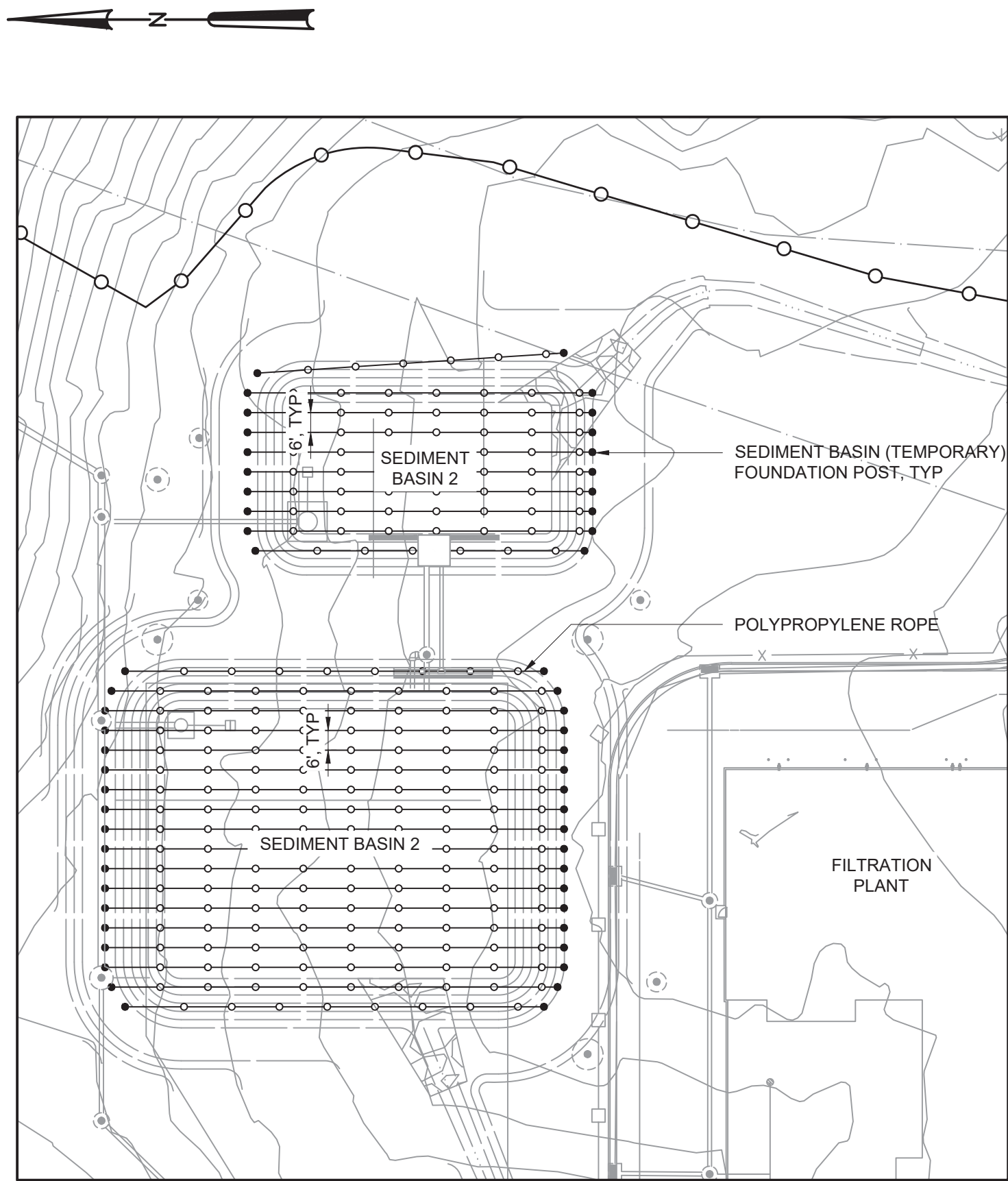
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

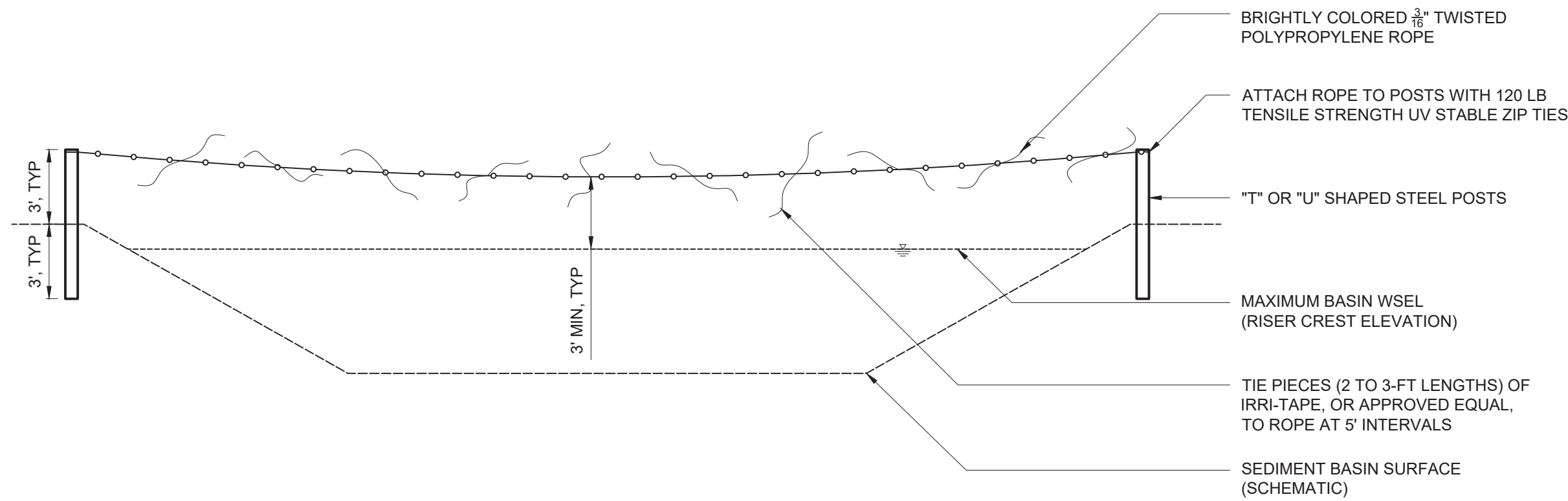
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
STORMWATER DETAILS - SHEET 6 OF 6

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-221



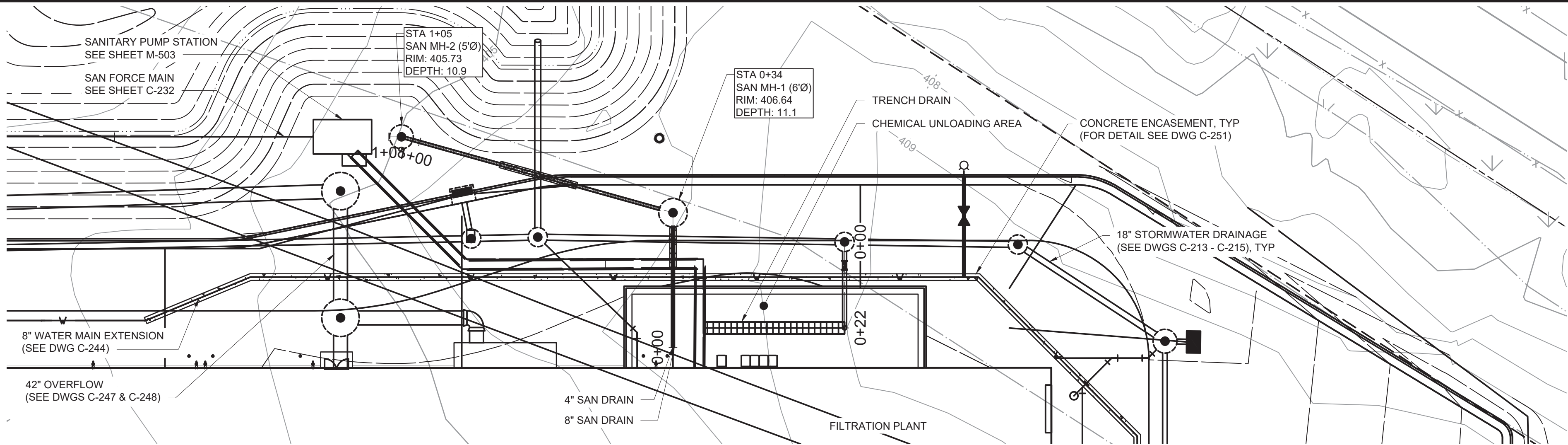
PLAN - SEDIMENT BASINS
SCALE: 1" = 40'



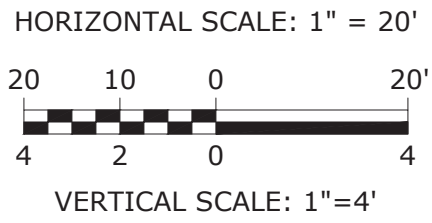
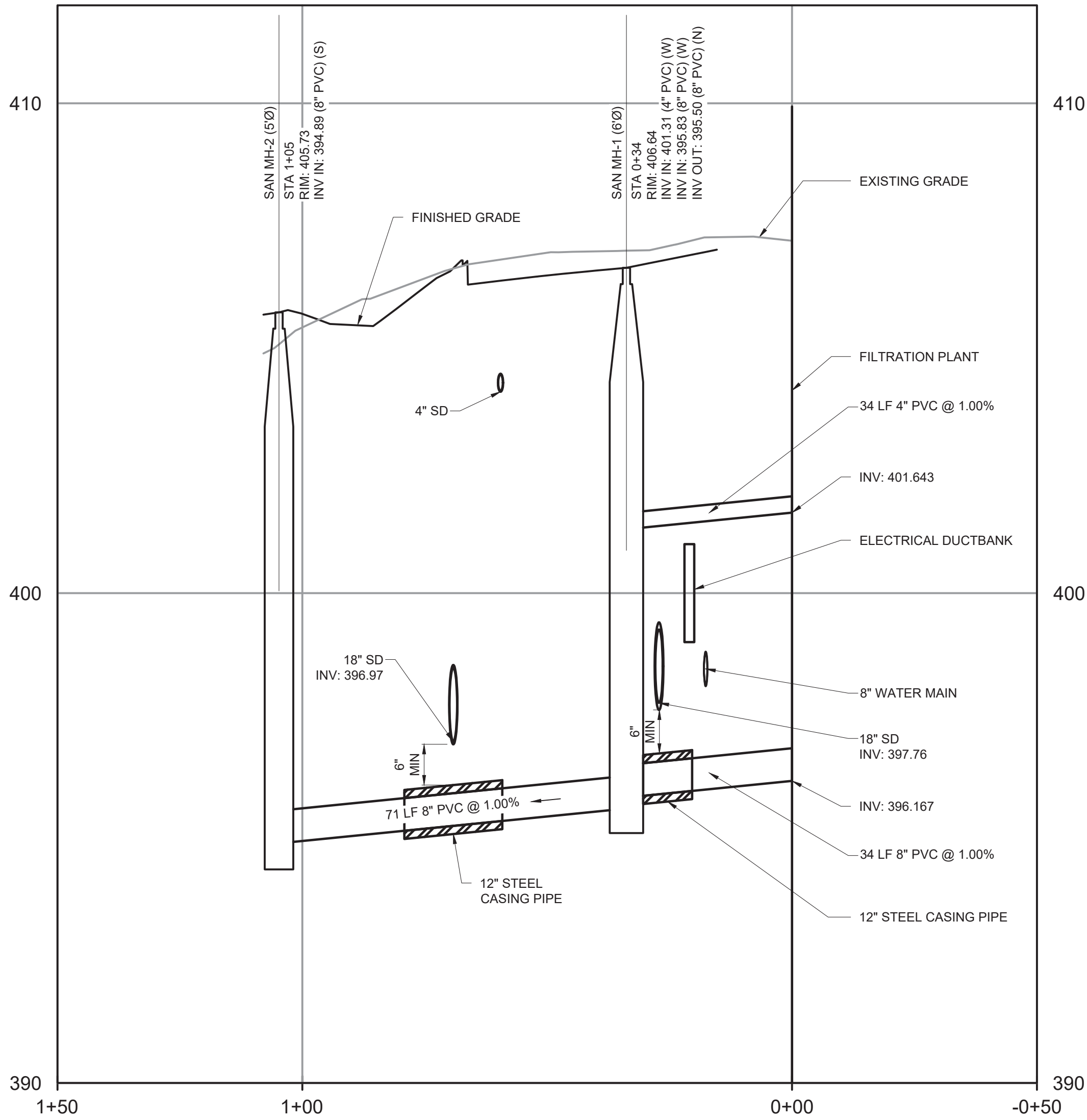
SCHEMATIC PROFILE - SEDIMENT BASINS
SCALE: N.T.S.

BIRD DETERRENT FOR STORMWATER SYSTEMS

SCALE: AS SHOWN



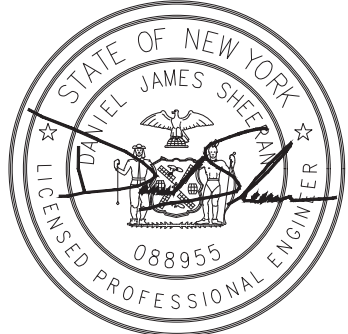
WCDOH NOTE:
THE SANITARY FORCE MAIN DESIGN WILL BE SUBMITTED UNDER SEPARATE COVER AS PART OF THE WESTCHESTER COUNTY AIRPORT SEWER PROJECT.



WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



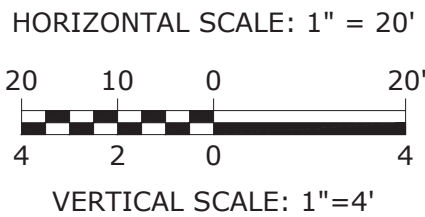
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
SANITARY DRAIN PLAN AND PROFILE

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-231

[illegible]

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	<div> 0 1/2" 1" </div>
REV	ISSUED FOR	DATE	BY		

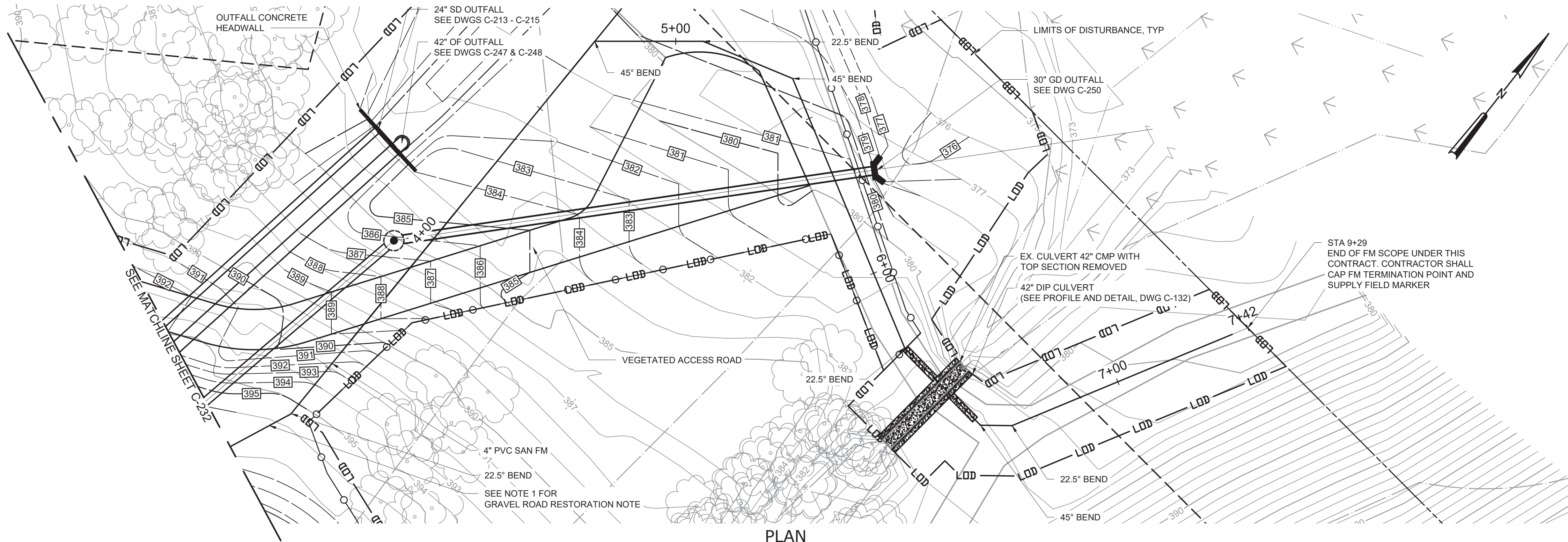
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

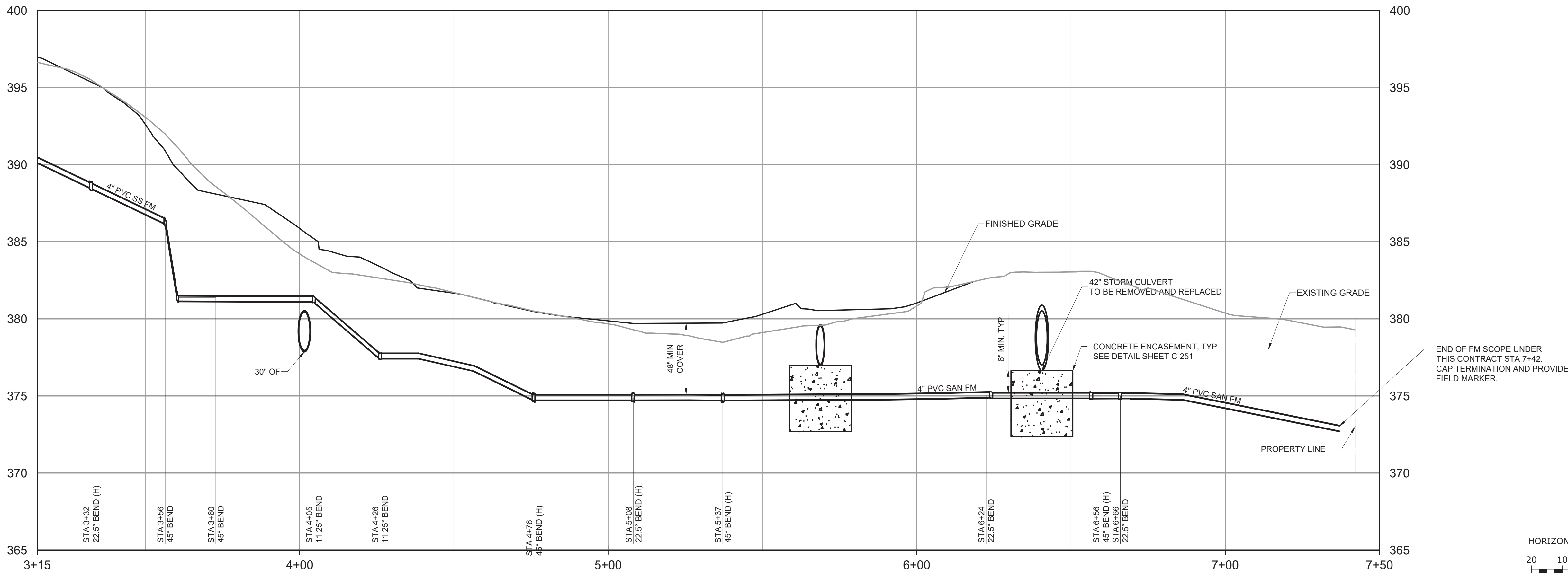
RYE LAKE WATER FILTRATION PLANT HARRISON, NY

CIVIL
SANITARY FM
(SHEET 1 OF 2)

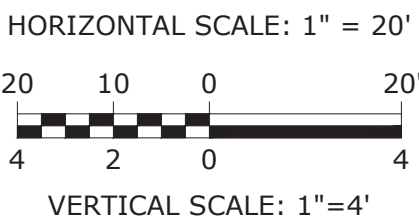
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-232



PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=4'



NOTES:

- RESTORE GRAVEL ROAD TO EXISTING TYPE AND DEPTH OF MATERIAL AS REQUIRED FOR FORCEMAIN INSTALLATION.

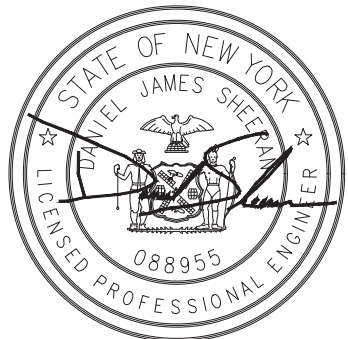
WCDOH NOTE:

THE SANITARY FORCE MAIN DESIGN WILL BE SUBMITTED UNDER SEPARATE COVER AS PART OF THE WESTCHESTER COUNTY AIRPORT SEWER PROJECT.

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

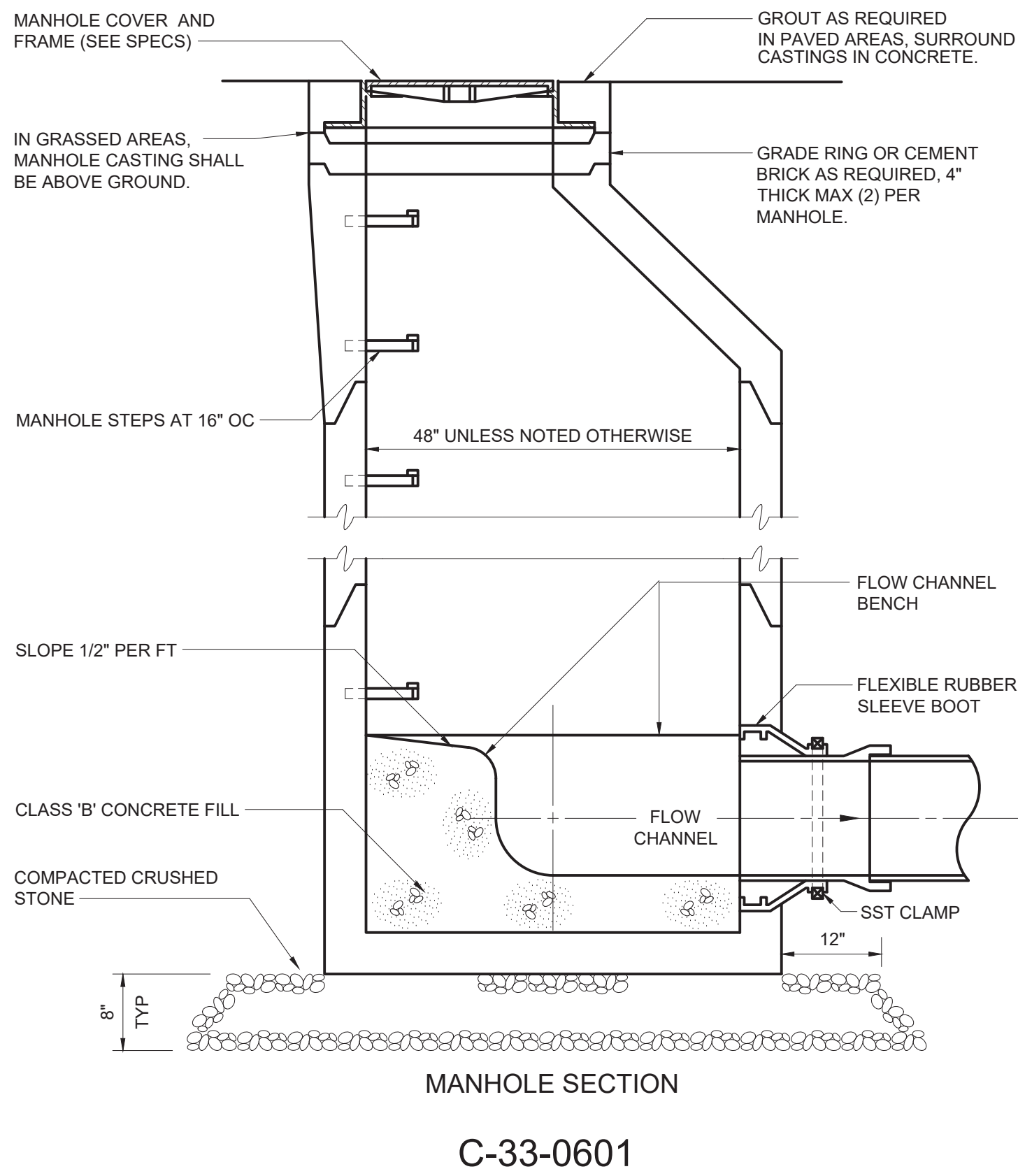
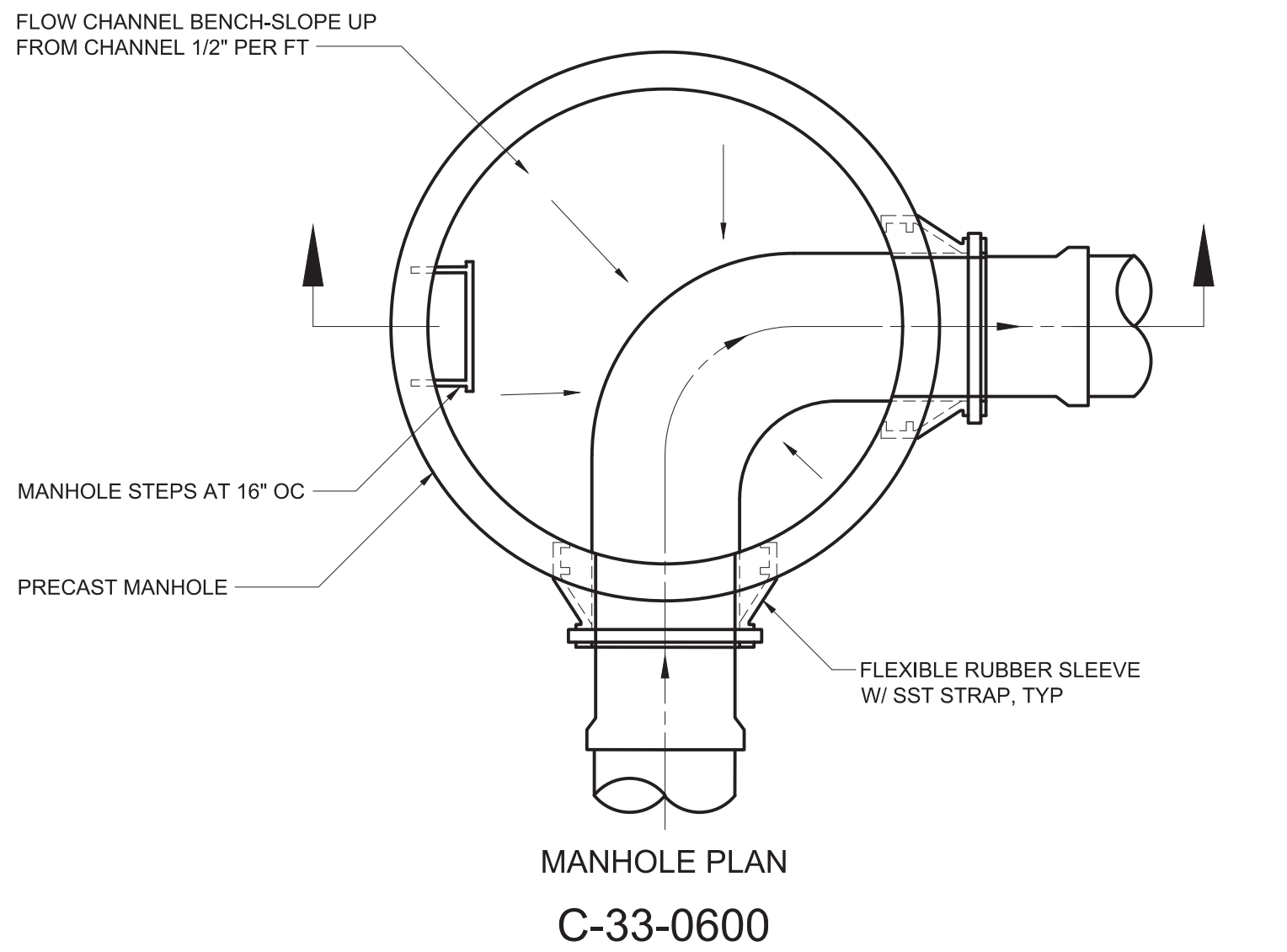
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
SANITARY FM
(SHEET 2 OF 2)

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-233

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\0388-000_RYE LAKE_FILTRATION\PROJECT\WSE\CVILC-234 Saved by: JTANNER Save date: 2/12/2025 11:54 AM
PLOT DATE: 3/26/2025 11:53 PM BY: JTANNER



OVERFLOW AND GALLERY DRAIN STRUCTURE TABLE

STRUCTURE TABLE				
STRUCTURE ID:	NORTHING	EASTING	DETAIL DWG	INNER DIMENSION (INCHES)
OF MH-01	813680.50	707691.90	C-234	96
OF MH-02	813680.50	707817.92	C-234	96
OF MH-03	813811.27	707817.92	C-234	96
GD MH-5	813659.51	707713.88	C-234	48
GD MH-3	813798.91	707829.92	C-234	48
OF MH-04	813811.25	707866.55	C-234	SEE DETAIL
GD MH-2	813798.55	707879.18	C-234	60
GD MH-1	813873.90	707927.78	C-234	60
OF MH-05	813533.32	707791.04	C-234	96
GD MH-4	813664.47	707829.92	C-234	60
OF MH-06	813533.32	707822.91	C-234	96

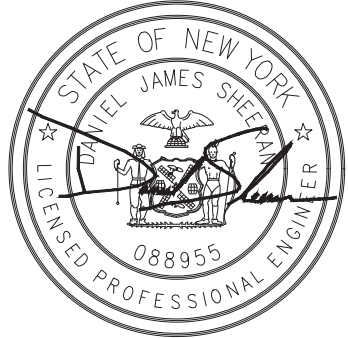
SANITARY SEWER STRUCTURE TABLE

STRUCTURE TABLE				
STRUCTURE ID:	NORTHING	EASTING	DETAIL DWG	INNER DIMENSION (INCHES)
SAN MH-2	813517.97	707836.56	M-503 & M-504	60
SAN MH-1	813449.64	707817.48	C-234	72

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

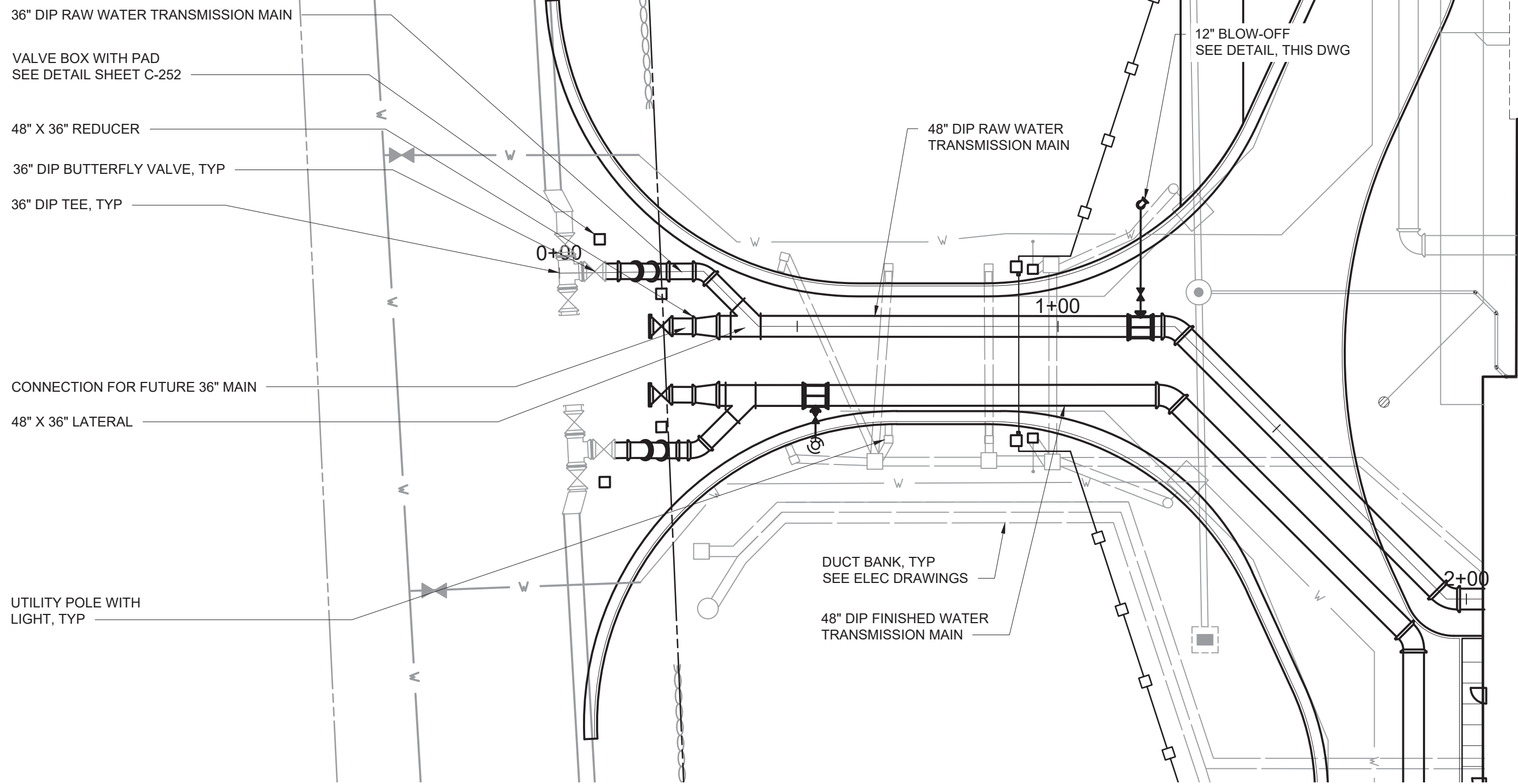
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

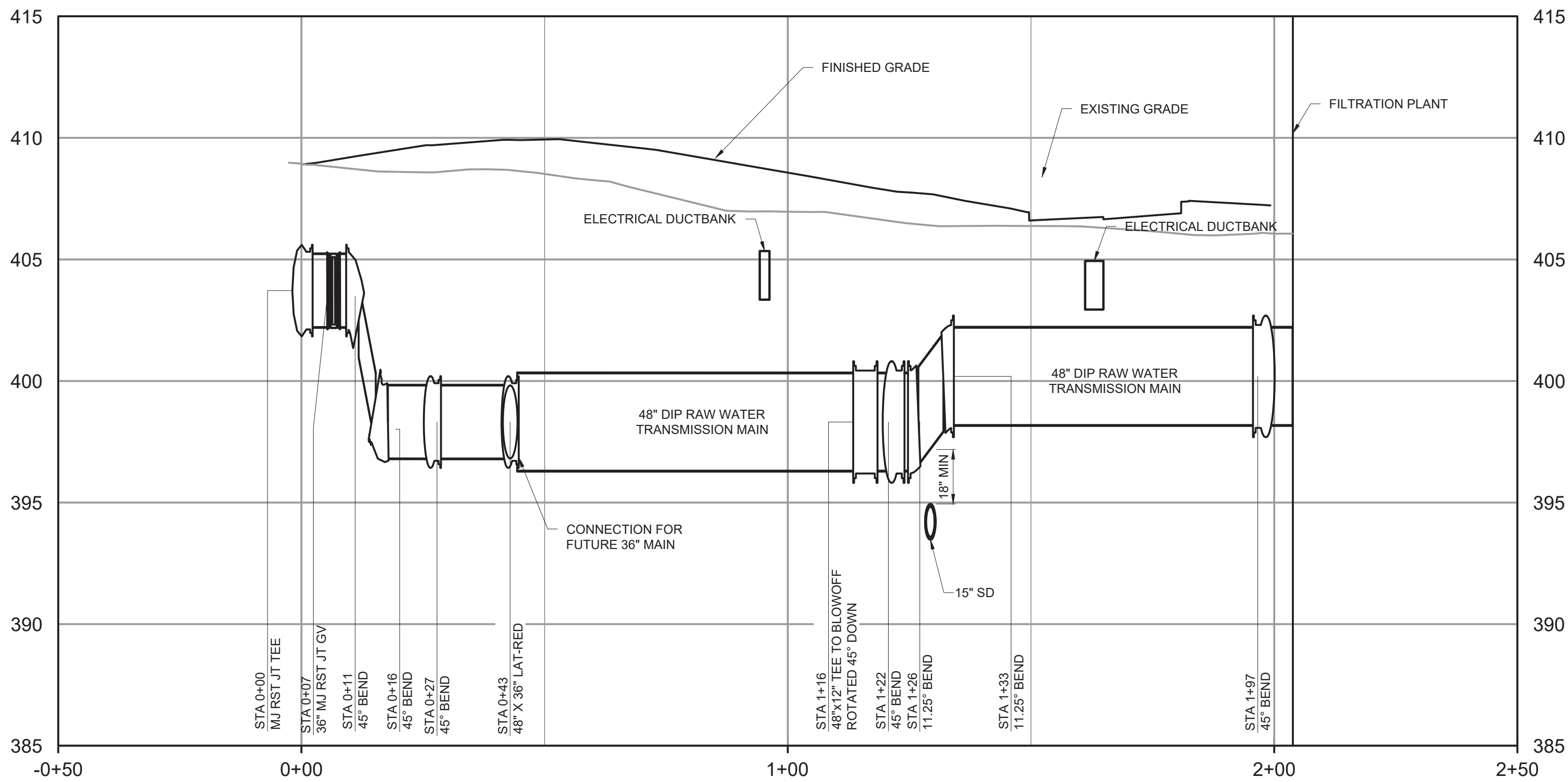
CIVIL
SANITARY AND STORM DRAIN DETAILS

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-234

File: C:\USERS\LWALLACE\DC\DCS\HAZEN AND SAWYER\00388-000_RYE_LAKE_FILTERATION\PROJECT\WISECIVIL\C-241 Saved by LWALLACE Save date: 3/27/2025 4:33 PM
PLOT DATE: 3/27/2025 4:38 PM BY: LWALLACE



PLAN
SCALE: 1" = 20'



PROFILE

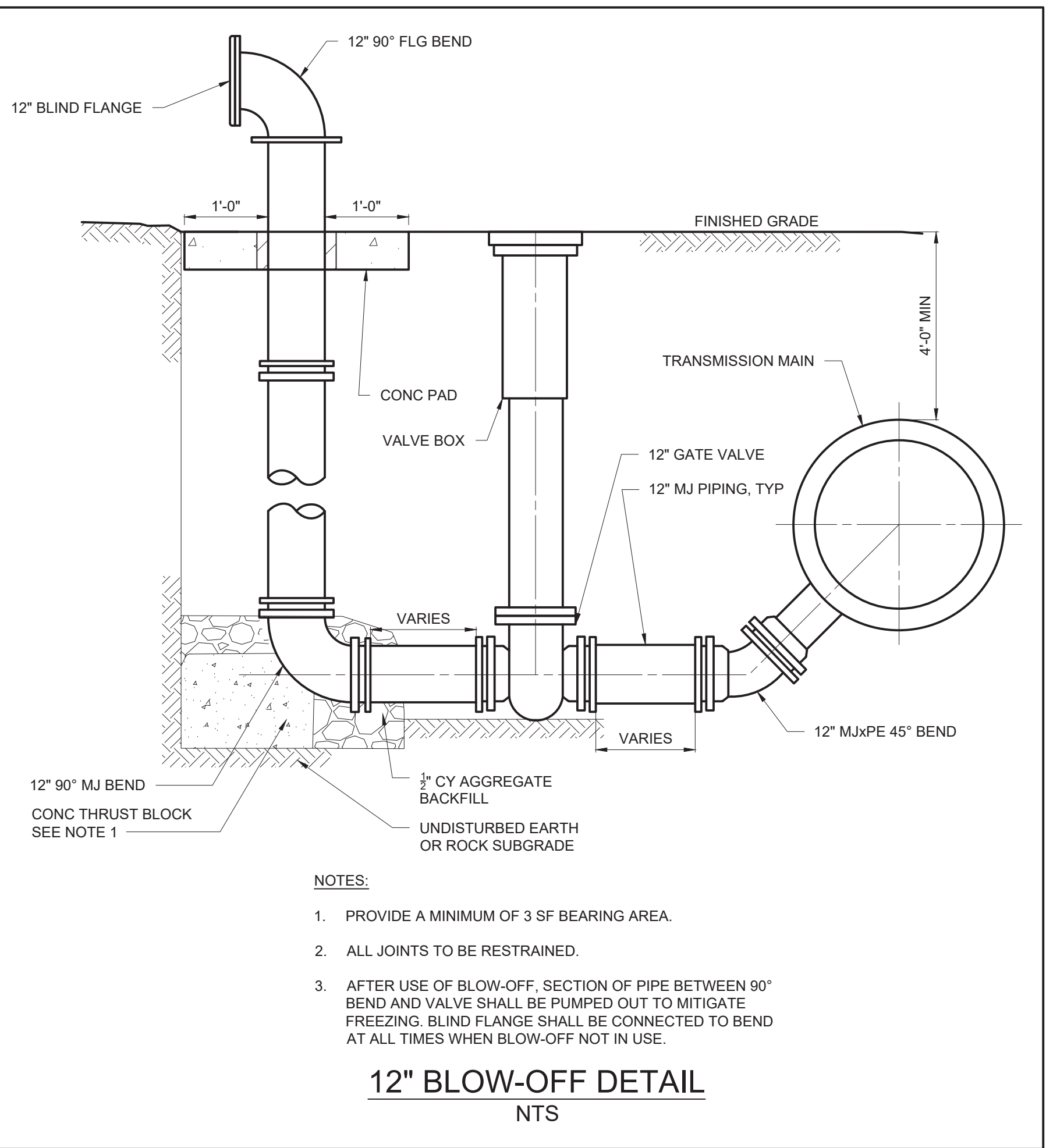
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

FILTRATION PLANT
FFE: 407.0



NOTES:

1. ALL VALVES SHALL BE GATE UNLESS OTHERWISE NOTED.
2. GATE VALVES ON TRANSMISSION MAINS SHALL BE INSTALLED HORIZONTALLY. SEE DETAIL SHEET C-252.
3. CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING OR JOINT RESTRAINT TO PROTECT EXISTING TRANSMISSION MAIN. BYPASS LINE SHALL BE 36".
4. ALL DIP SHALL BE SPECIAL THICKNESS CLASS 53 WITH MECHANICAL JOINT FITTINGS AND RESTRAINED JOINTS GLANDS. ALL JOINTS SHALL BE RESTRAINED. ALL DIP PIPES SHALL BE DOUBLE CEMENT LINED ON THE INSIDE.
5. THE TEMPORARY 36" BUTTERFLY VALVES AND CONNECTING DIP BETWEEN THE RAW WATER AND FINISHED WATER TRANSMISSION HAVE BEEN REMOVED FOR CLARITY. SEE DRAWING C-131 FOR ADDITIONAL INFORMATION.



NOTES:

1. PROVIDE A MINIMUM OF 3 SF BEARING AREA.
2. ALL JOINTS TO BE RESTRAINED.
3. AFTER USE OF BLOW-OFF, SECTION OF PIPE BETWEEN 90° BEND AND VALVE SHALL BE PUMPED OUT TO MITIGATE FREEZING. BLIND FLANGE SHALL BE CONNECTED TO BEND AT ALL TIMES WHEN BLOW-OFF NOT IN USE.

12" BLOW-OFF DETAIL
NTS

HORIZONTAL SCALE: 1" = 20'

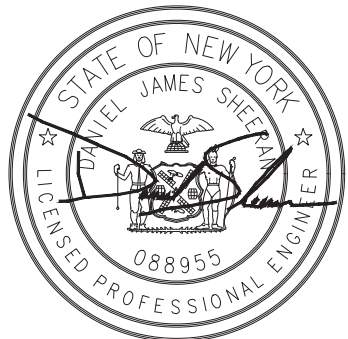


VERTICAL SCALE: 1" = 4'

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
RAW WATER TRANSMISSION MAIN
PLAN AND PROFILE

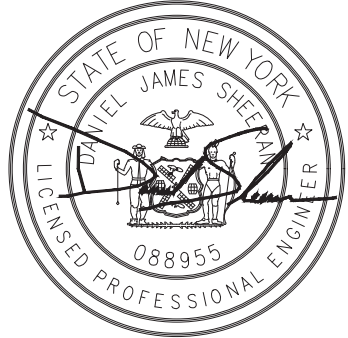
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-241

File: C:\USERS\LWALLACE\Documents\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTERATION\PROJECT FILES\PROJECTWISE\CIVIL\C-242 Saved by JTANNER Save date: 2/10/2025 3:01 PM
PLOT DATE: 3/27/2025 2:25 PM BY: LWALLACE

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	M. SEEBOLD
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



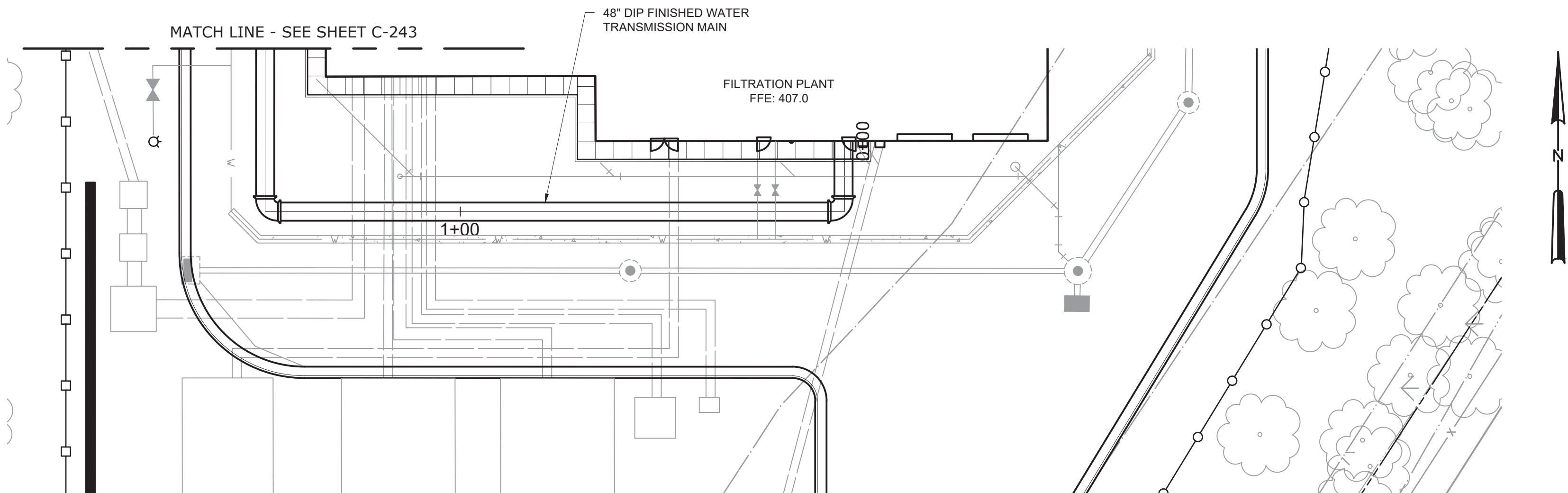
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

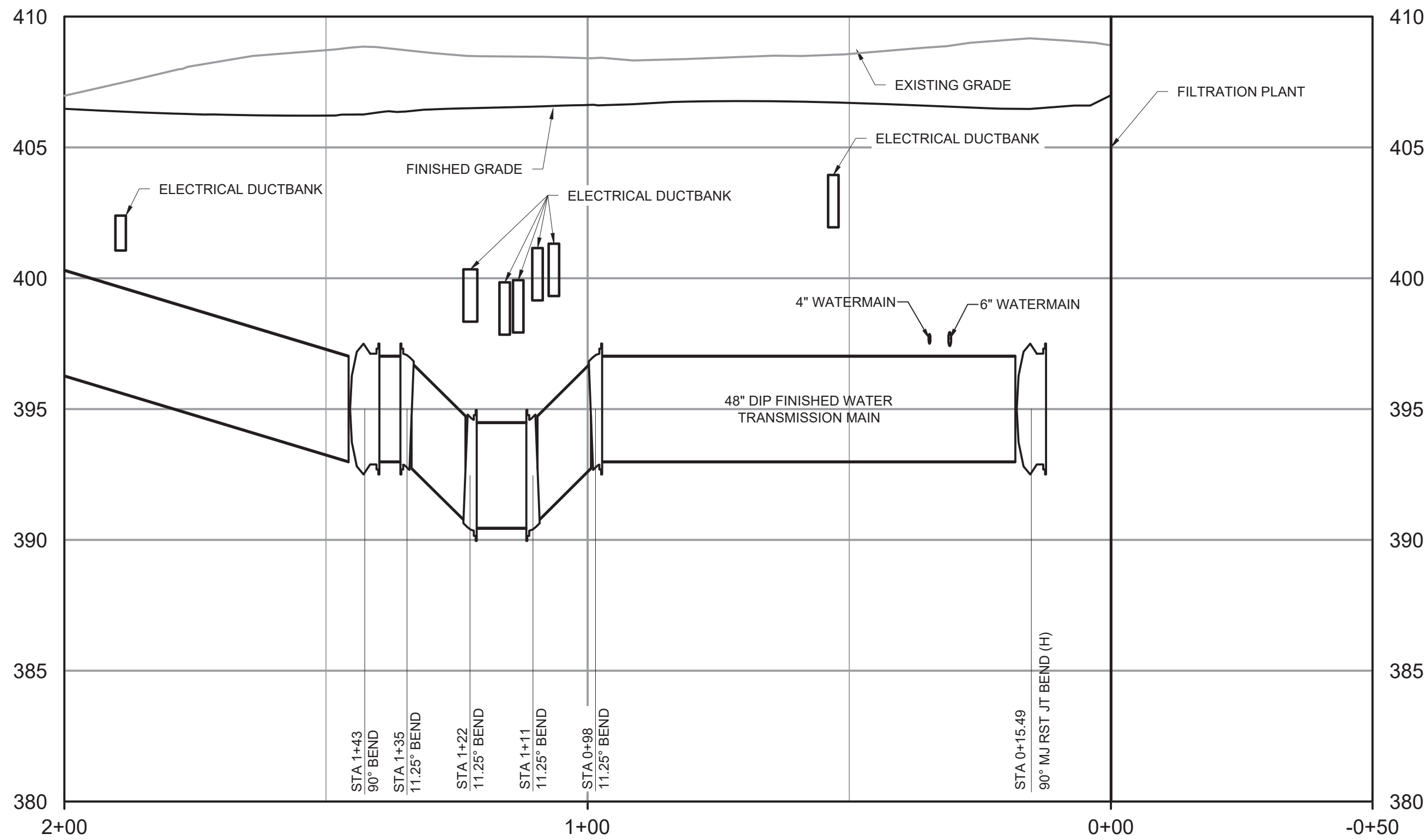
CIVIL
FINISHED WATER TRANSMISSION MAIN PLAN
AND PROFILE - SHEET 1 OF 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-242



PLAN

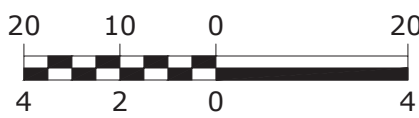
SCALE: 1" = 20'



PROFILE

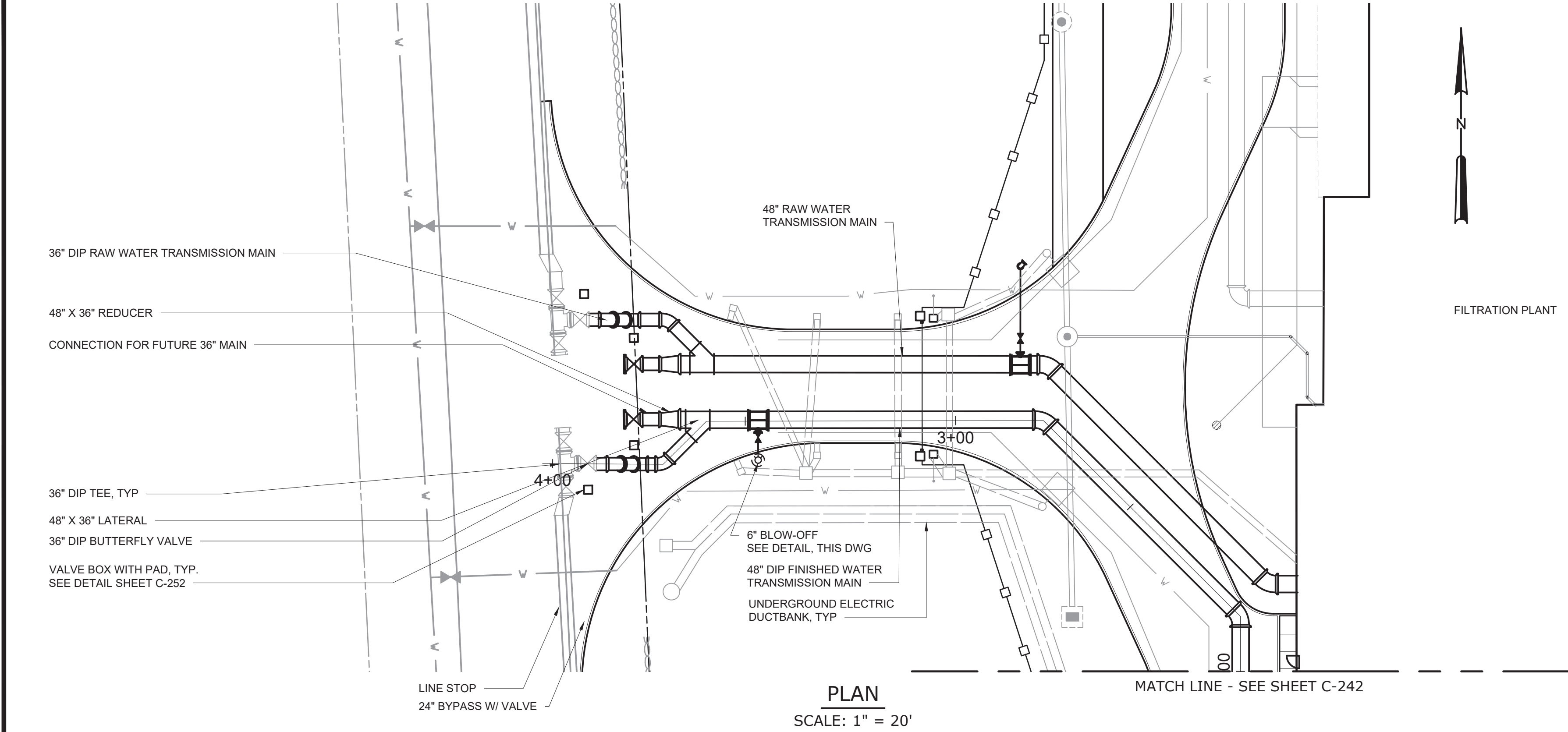
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'



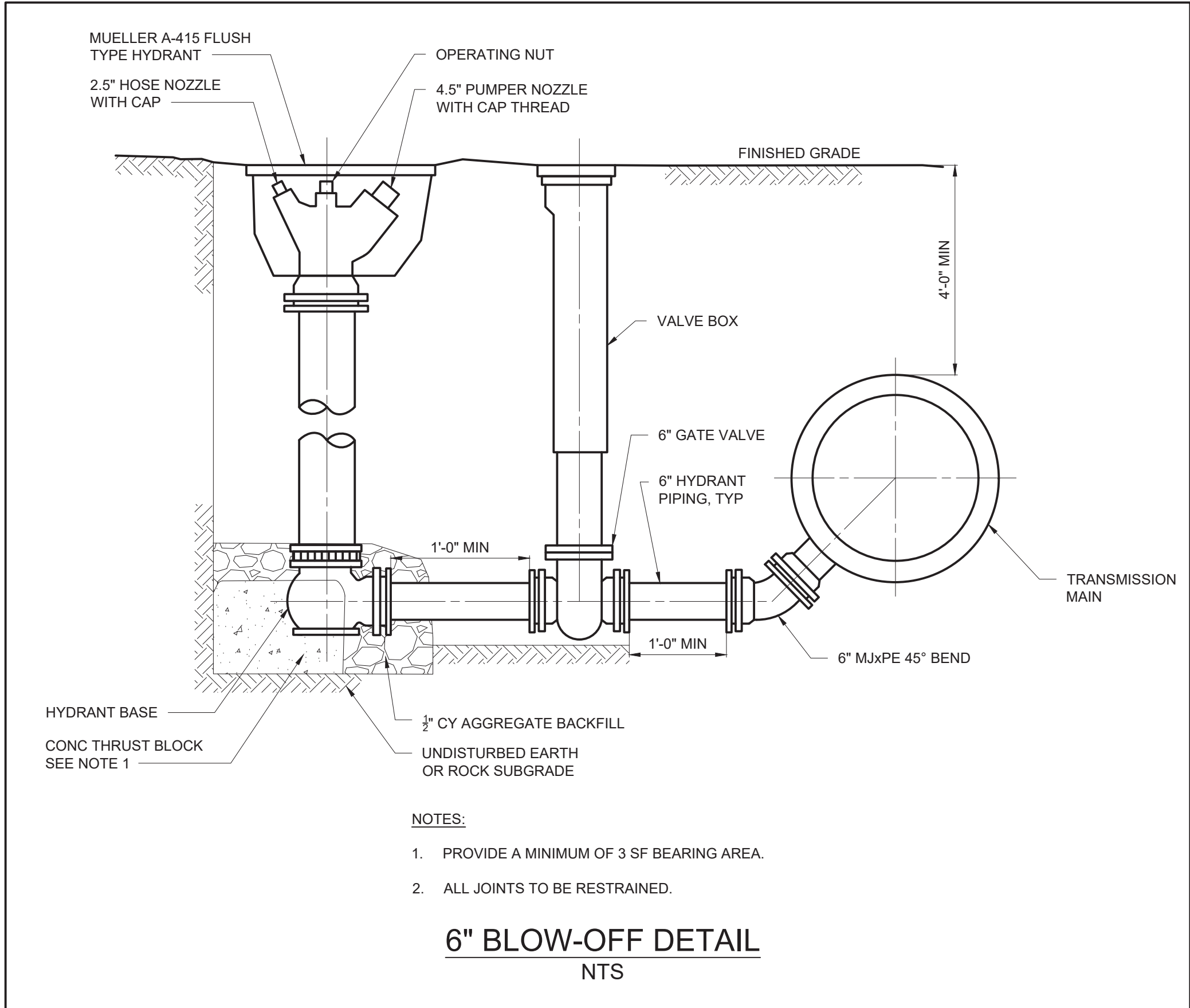
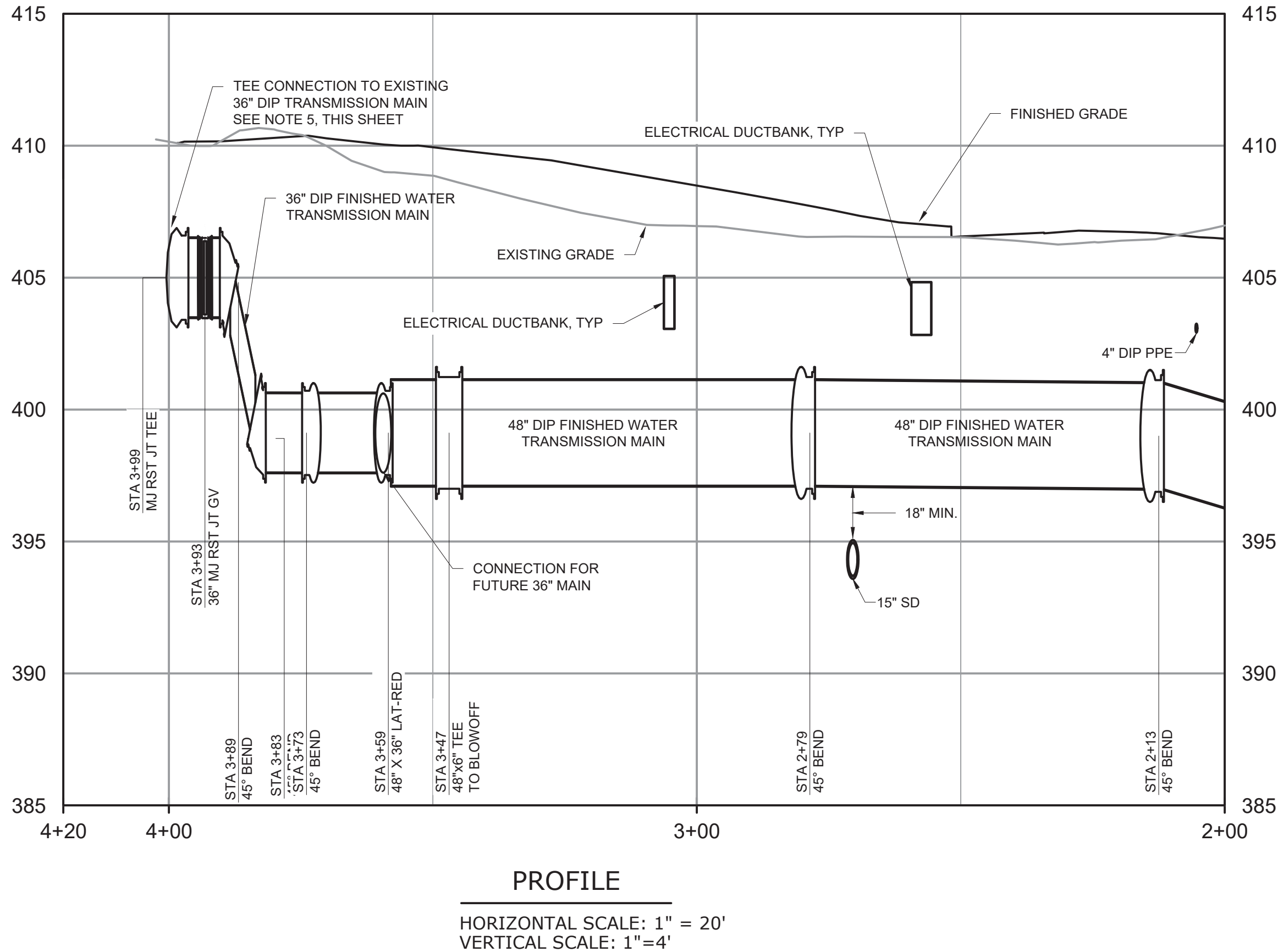
VERTICAL SCALE: 1"=4'

File: C:\USERS\LJALLACE\DCDC\DCS\HAZEN AND SAWYER\00388-000_RYE_LAKE_FILTERATION\PROJECT FILES\PROJECTWISE\CIVIL-C-243 Saved by JTANNER Save date: 3/27/2025 4:00 PM
PLOT DATE: 3/27/2025 4:38 PM BY: LJALLACE



NOTES:

1. ALL VALVES SHALL BE GATE UNLESS OTHERWISE NOTED.
2. GATE VALVES ON TRANSMISSION MAINS SHALL BE INSTALLED HORIZONTALLY. SEE DETAIL SHEET C-252.
3. CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING OR JOINT RESTRAINT TO PROTECT EXISTING TRANSMISSION MAIN. BYPASS LINE SHALL BE 36".
4. ALL DIP SHALL BE SPECIAL THICKNESS CLASS 53 WITH MECHANICAL JOINT FITTINGS AND RESTRAINED JOINTS GLANDS. ALL JOINTS SHALL BE RESTRAINED. ALL DIP PIPES SHALL BE DOUBLE CEMENT LINED ON THE INSIDE.
5. SEE YARD PIPING PLAN C-131 FOR LINESTOP AND BYPASS REQUIREMENTS FOR CONNECTION TO EXISTING 36" TRANSMISSION MAIN.
6. THE TEMPORARY 36" BUTTERFLY VALVES AND CONNECTING DIP BETWEEN THE RAW WATER AND FINISHED WATER TRANSMISSION HAVE BEEN REMOVED FOR CLARITY. SEE DRAWING C-131 FOR ADDITIONAL INFORMATION.



HORIZONTAL SCALE: 1" = 20'

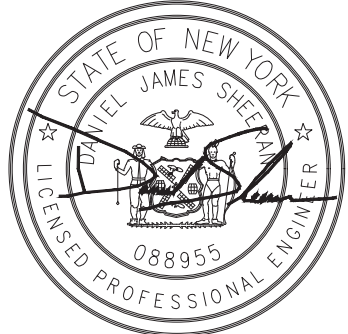


VERTICAL SCALE: 1"=4'

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	M. SEEBOLD
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

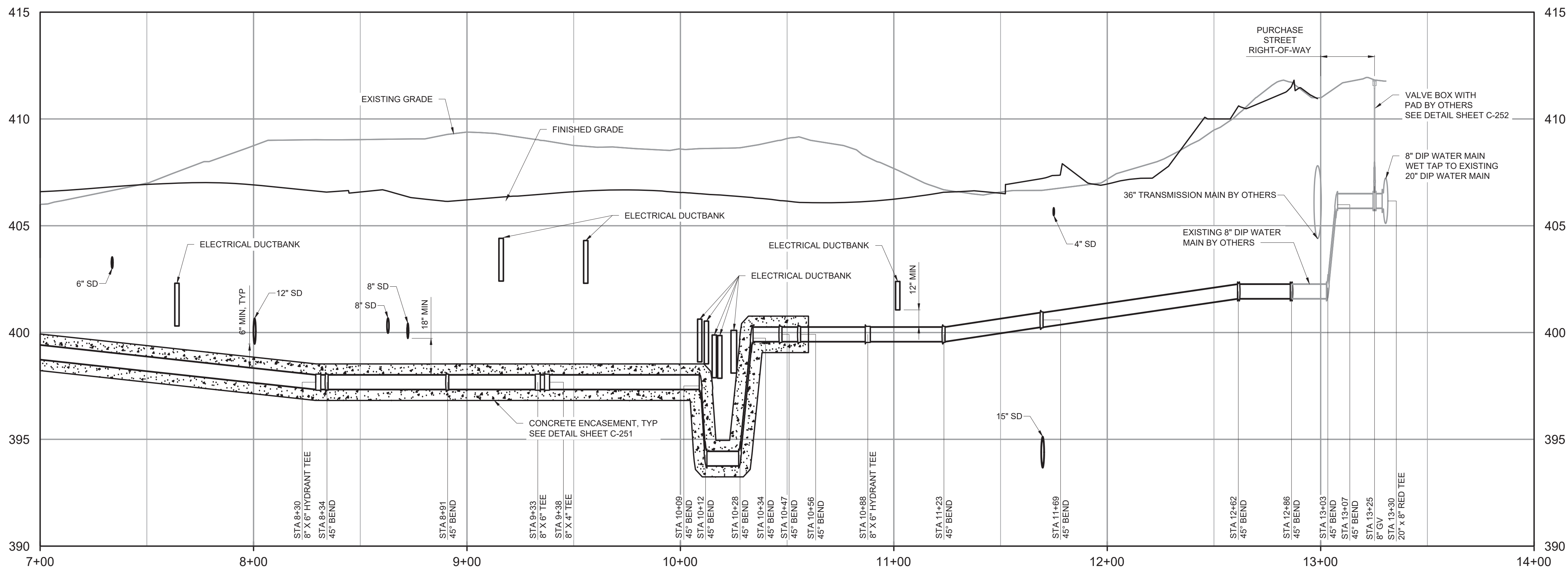
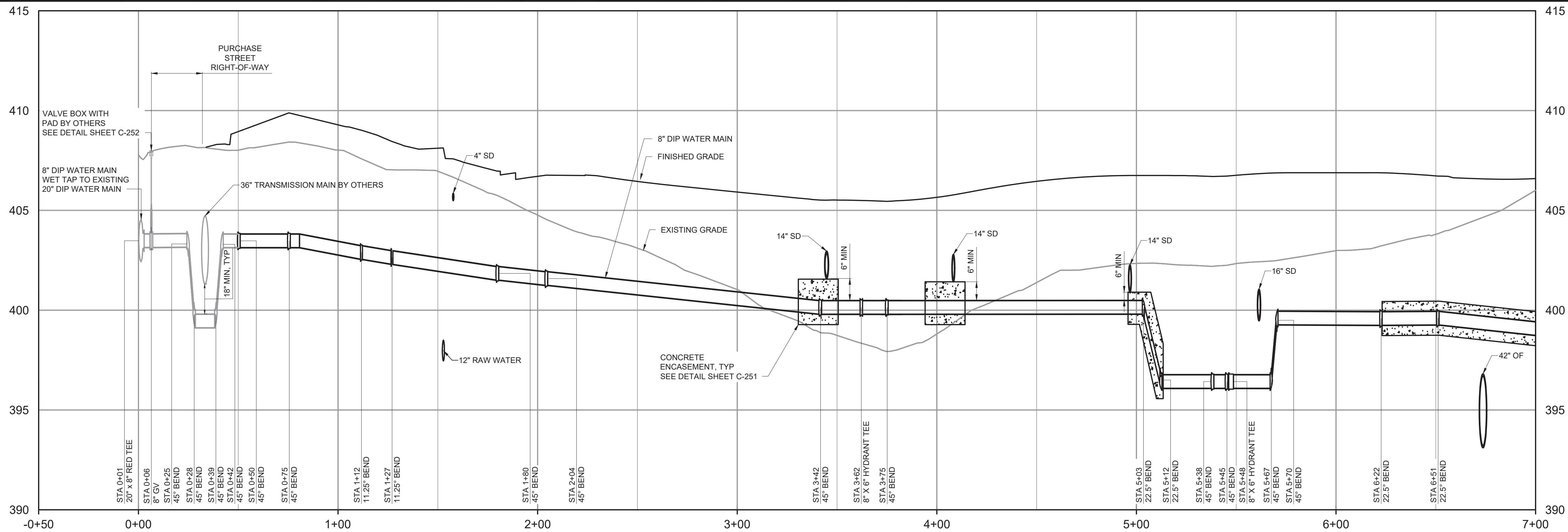
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
FINISHED WATER TRANSMISSION MAIN PLAN
AND PROFILE - SHEET 2 OF 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-243

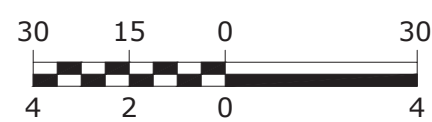
File: C:\USERS\JTANNER\DRAWINGS\HAZEN\RYE_LAKE_FILTRATION\PROJECT\WSE\CIVIL\C-244 Saved by: JTANNER Save date: 3/27/2025 10:55 AM
PLOT DATE: 3/27/2025 10:56 AM BY: JTANNER



WATER MAIN EXTENSION PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 4'

HORIZONTAL SCALE: 1" = 30'



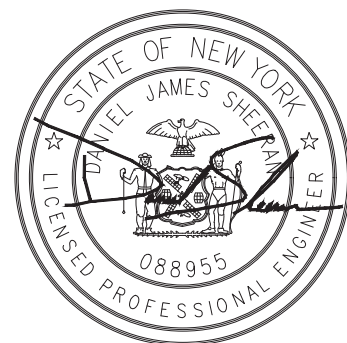
VERTICAL SCALE: 1" = 4'

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

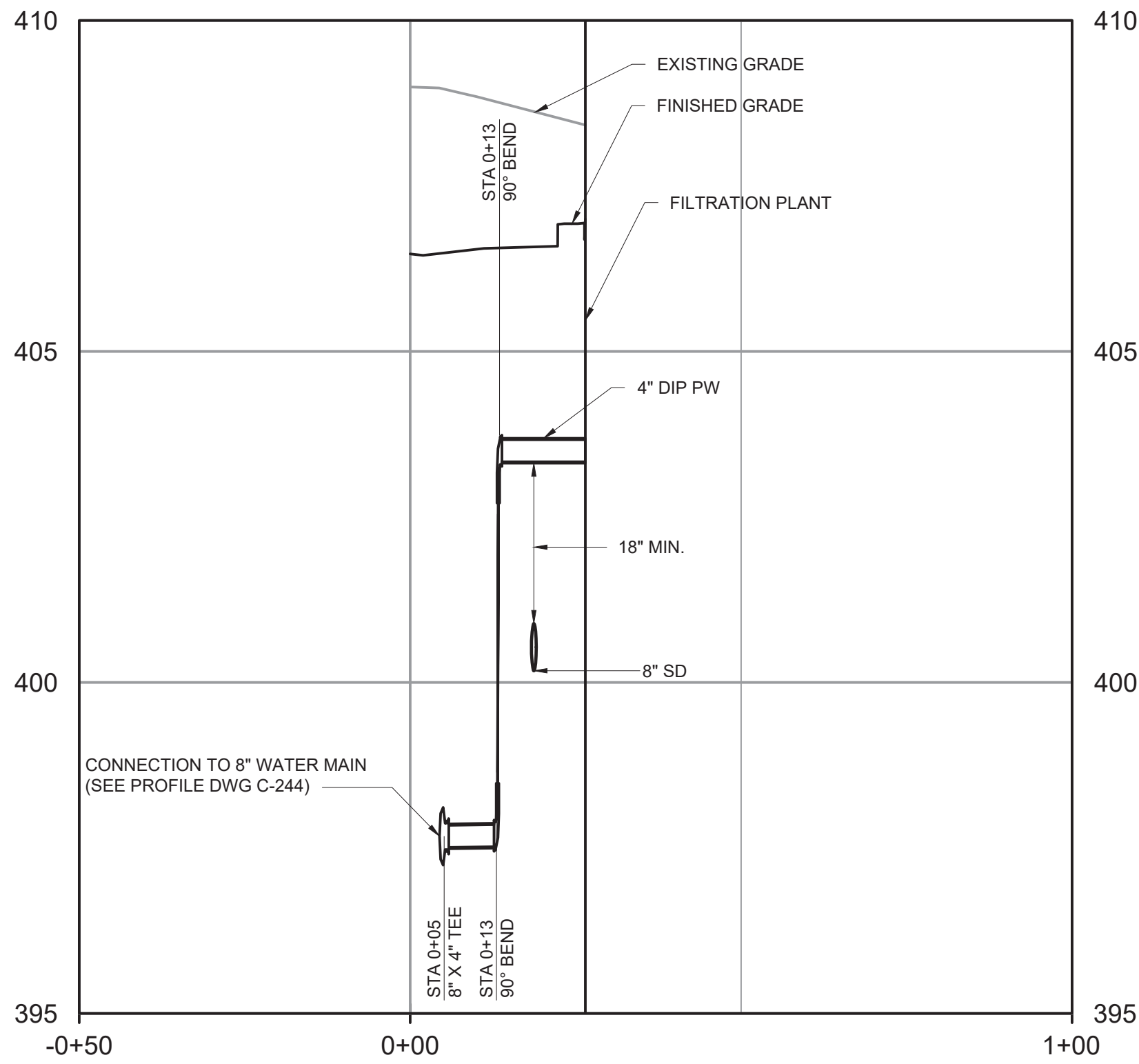
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
WATER MAIN EXTENSION PROFILE

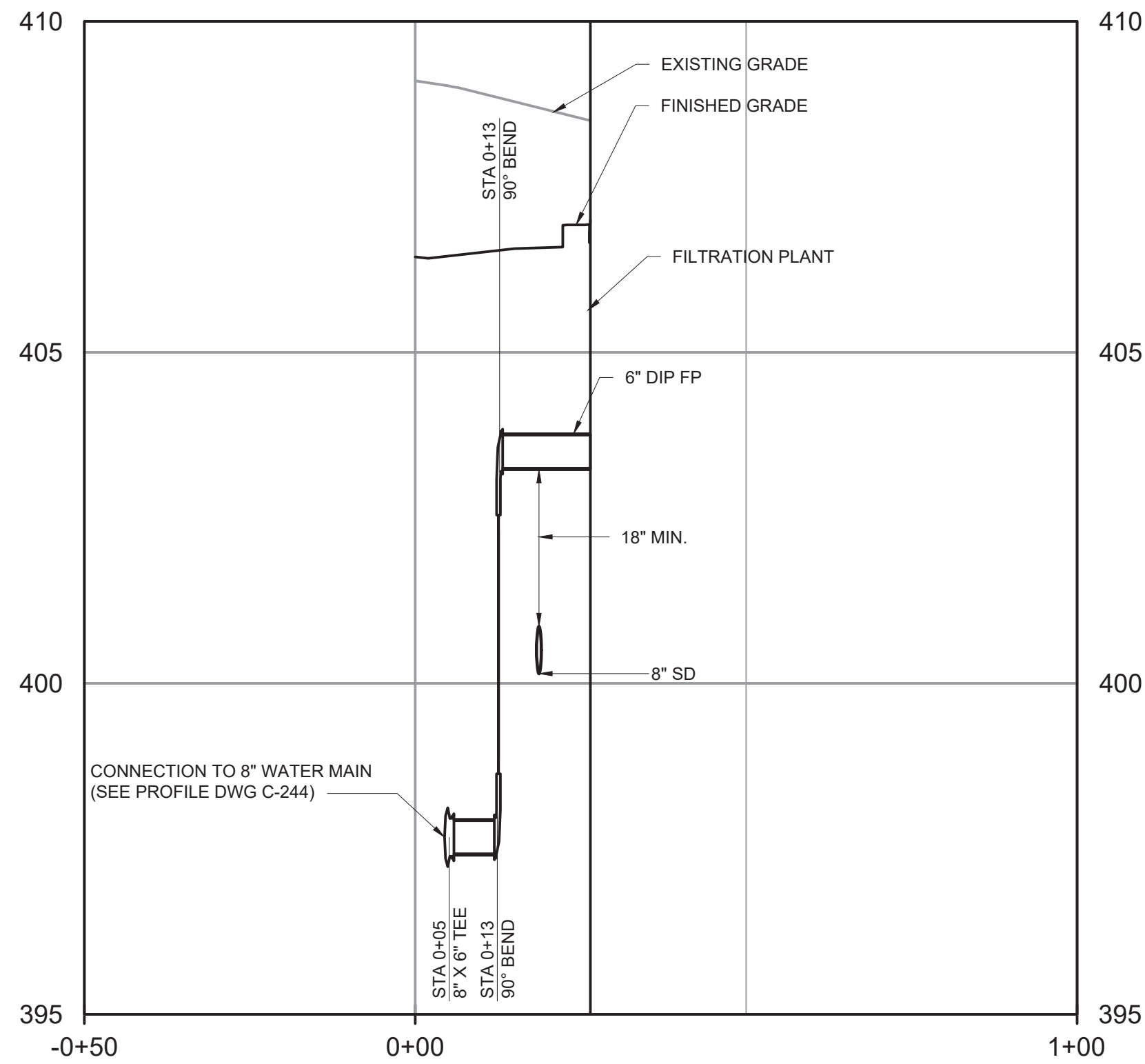
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-244

File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\90388-000_RYE_LAKE_FILTRATION\PROJECT\WSE\CIVIL\C-245 Saved by: JTANNER Save date: 2/10/2025 10:51 AM
PLOT DATE: 3/27/2025 12:02 AM BY: JTANNER



POTABLE WATER (PW) PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'



FIRE PROTECTION SERVICE (FP) PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET

Hazen

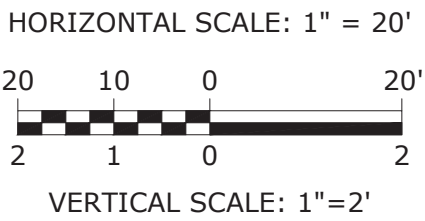
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

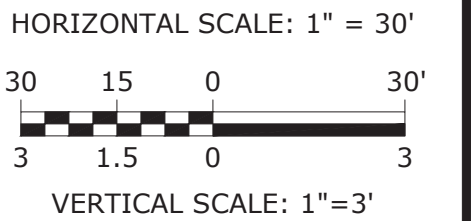
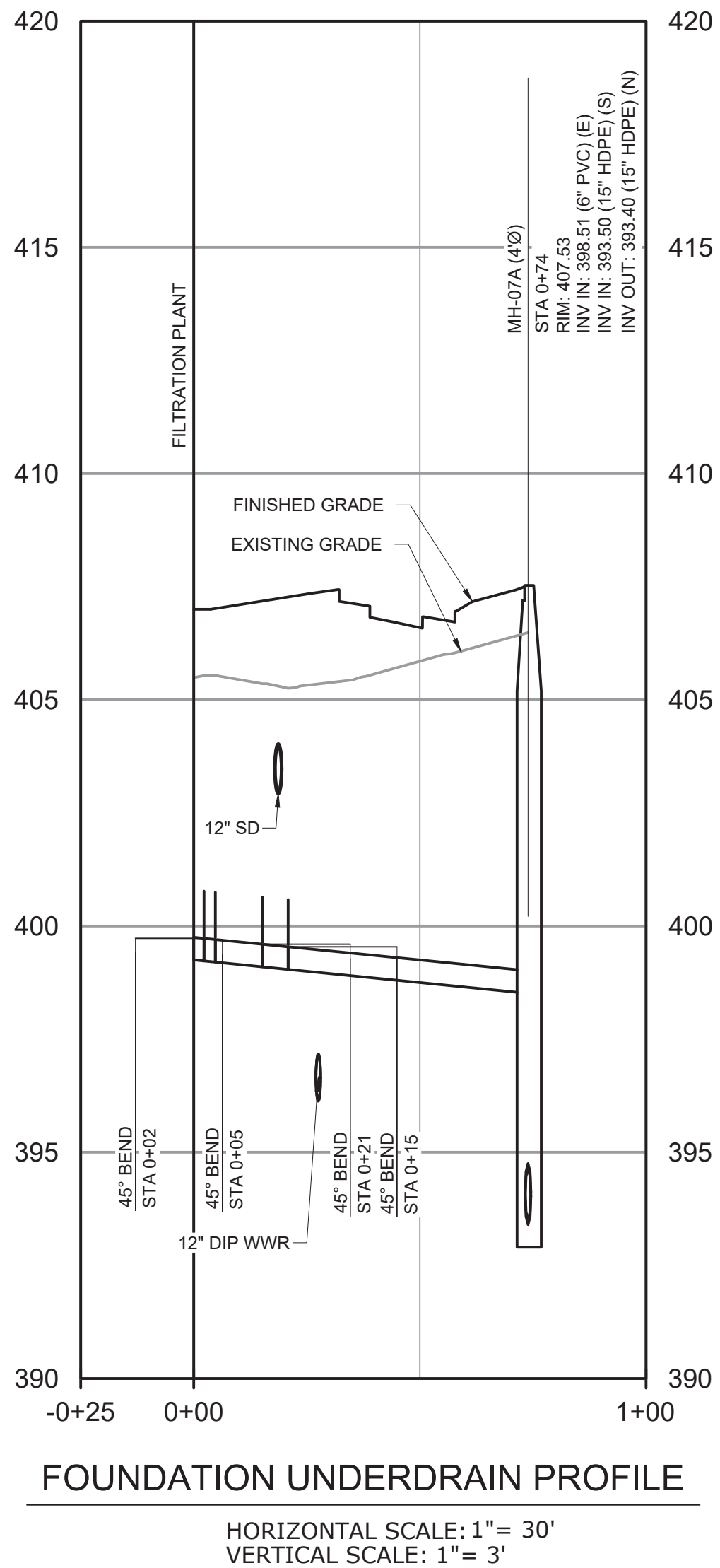
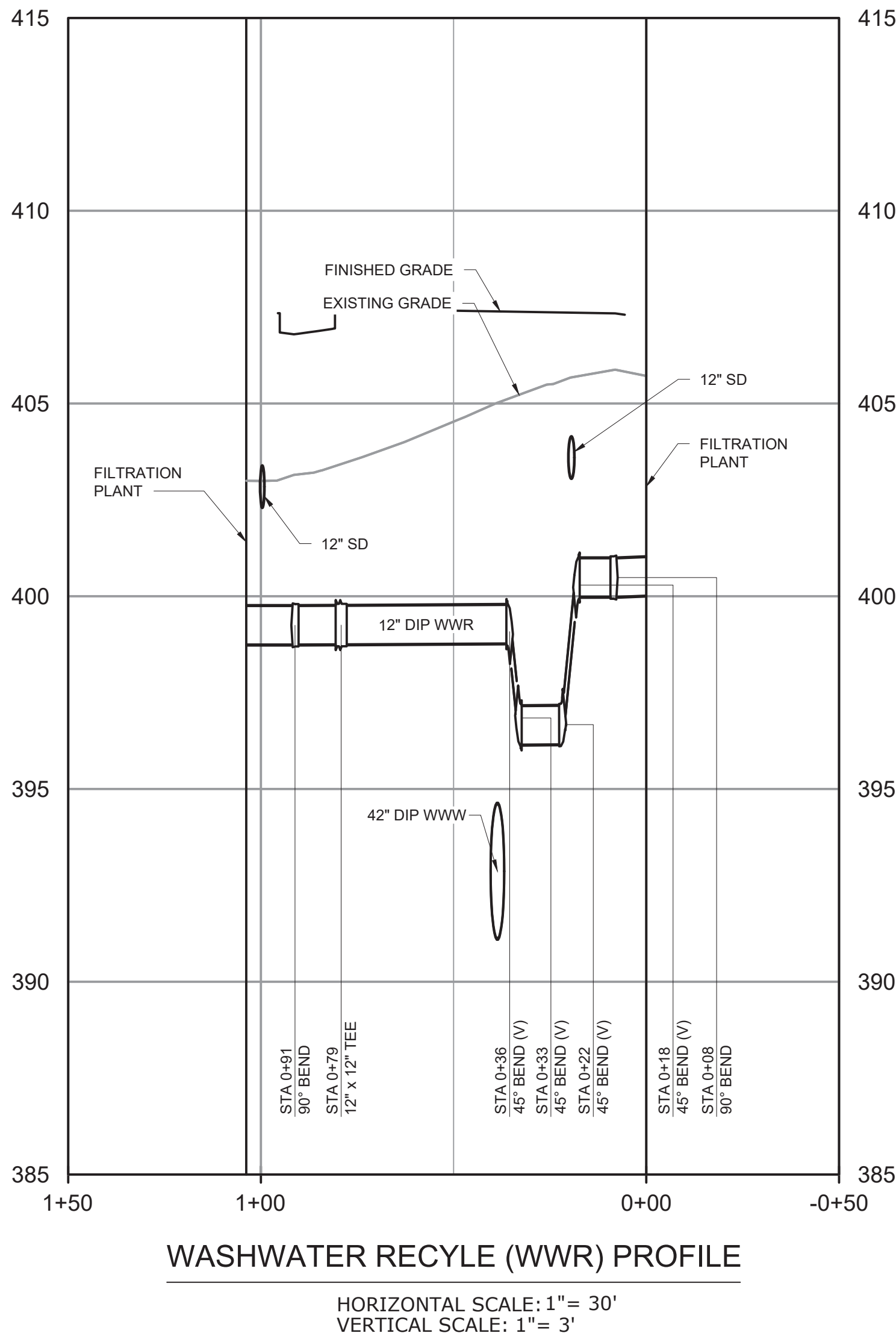
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
PW AND FP PROFILES

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-245



- NOTES:
1. FOR PLAN INFORMATION SEE DWG C-131

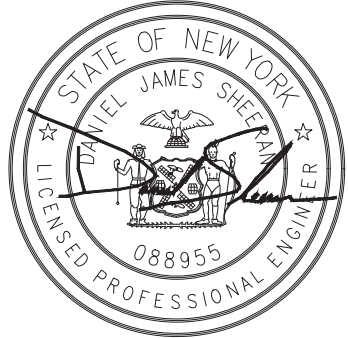


WARNING

IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

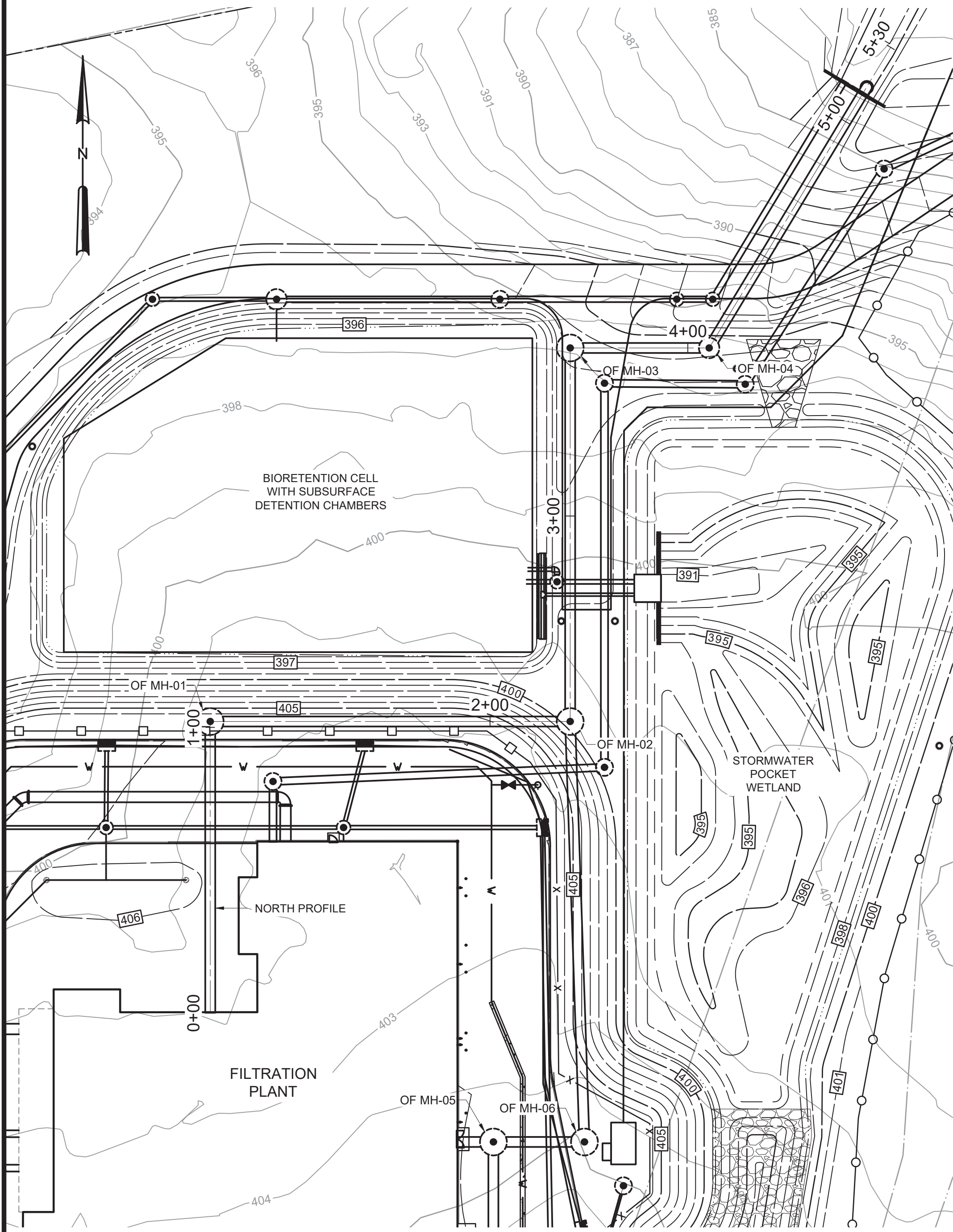
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
WWR AND FUD PROFILE

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-246

File: C:\USERS\LWALLACE\PROJECTS\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTRATION\PROJECT\WISCIVILC-247 Saved by JTANNER Save date: 2/10/2025 3:07 PM
PLOT DATE: 3/27/2025 2:40 PM BY: LWALLACE



PLAN
SCALE: 1" = 30'

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

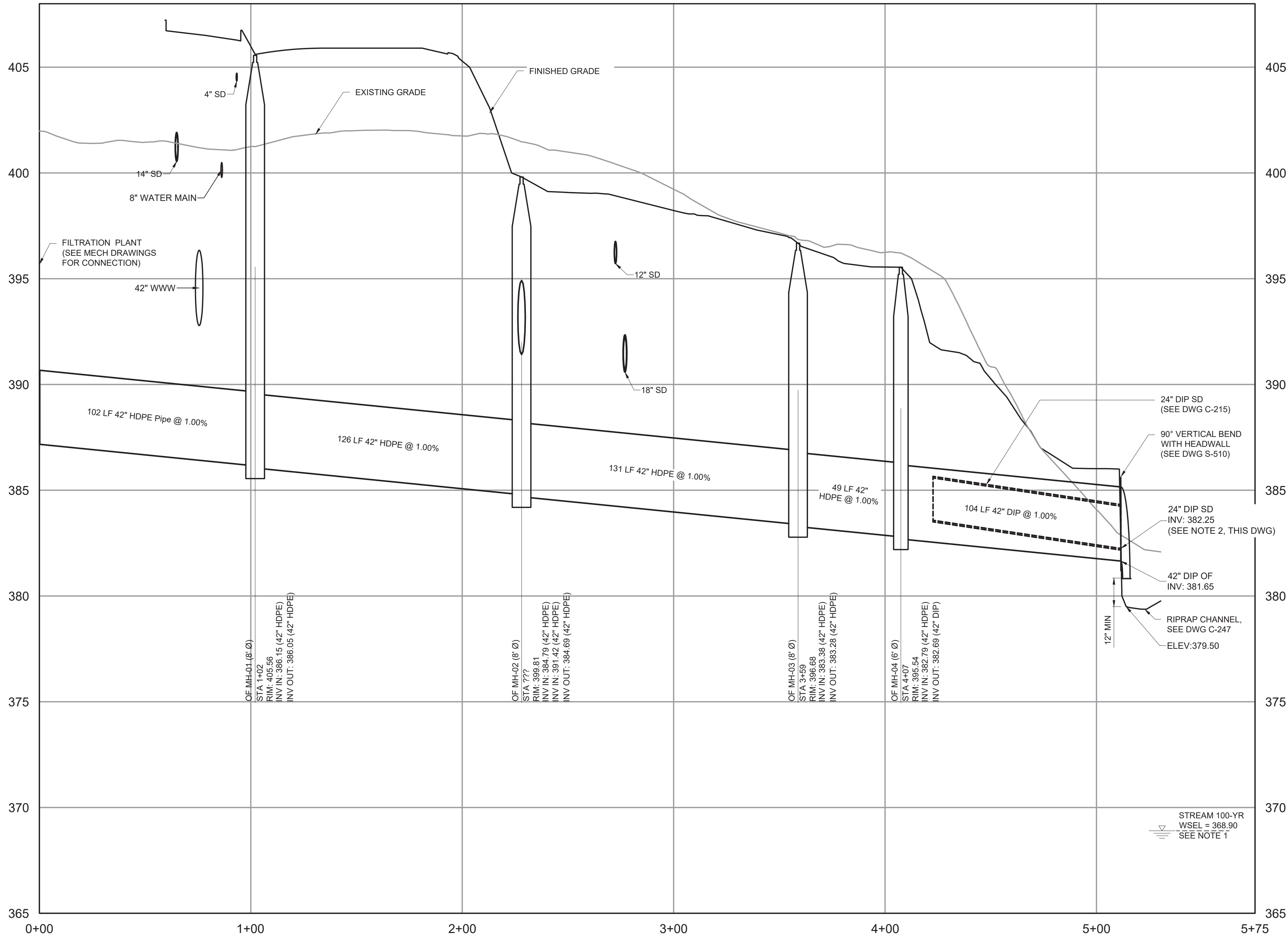
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
OVERFLOW PROFILE - SHEET 1 OF 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-247

NOTES:

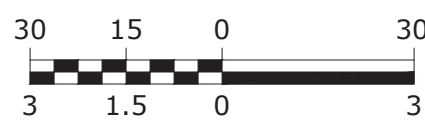
1. STREAM CENTERLINE IS LOCATED 260 FT FROM OVERFLOW OUTFALL.
2. PROVIDE REMOVABLE 24 MESH SSTL SCREEN TO OUTFALL PIPE.



PROFILE - NORTH

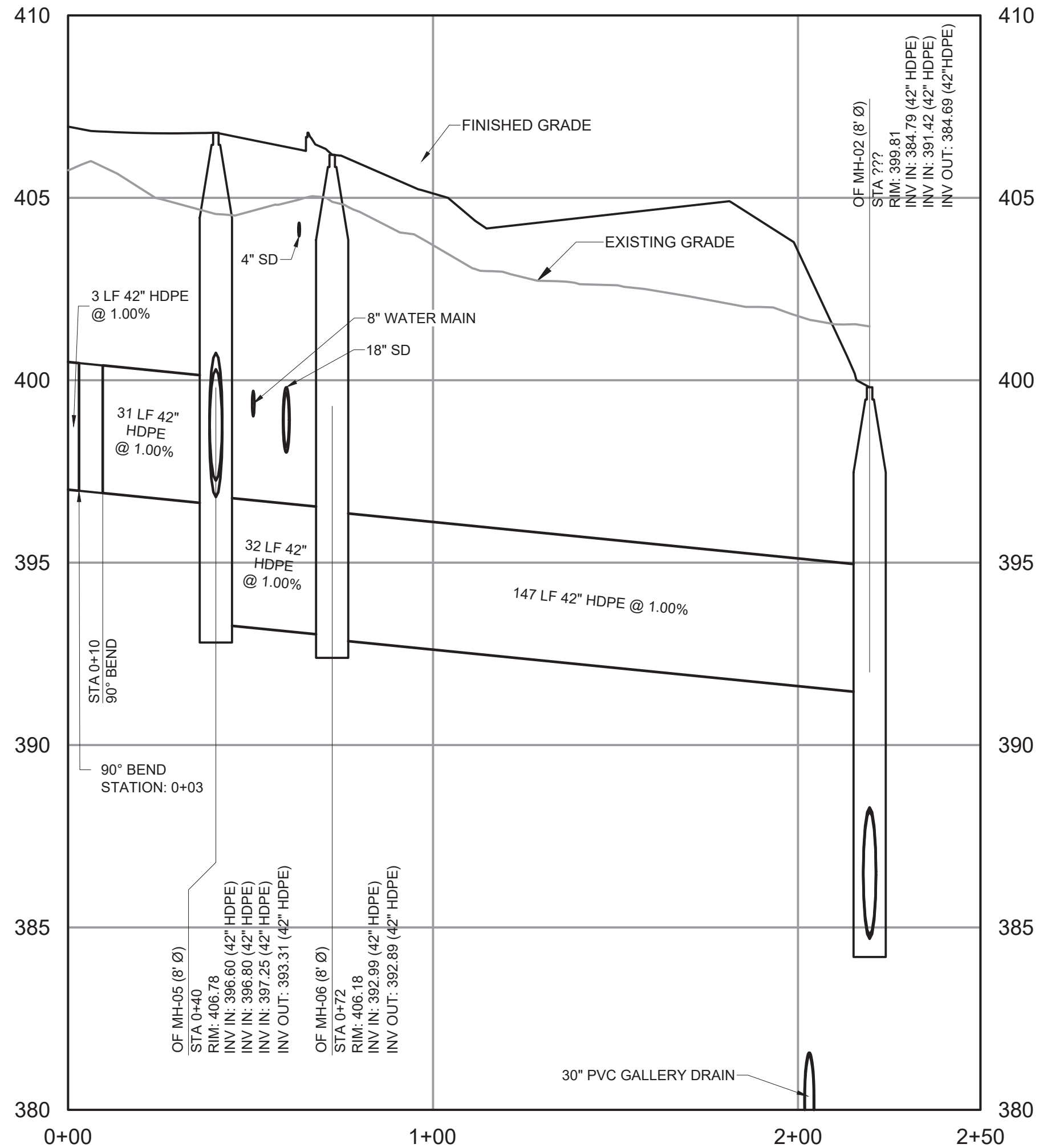
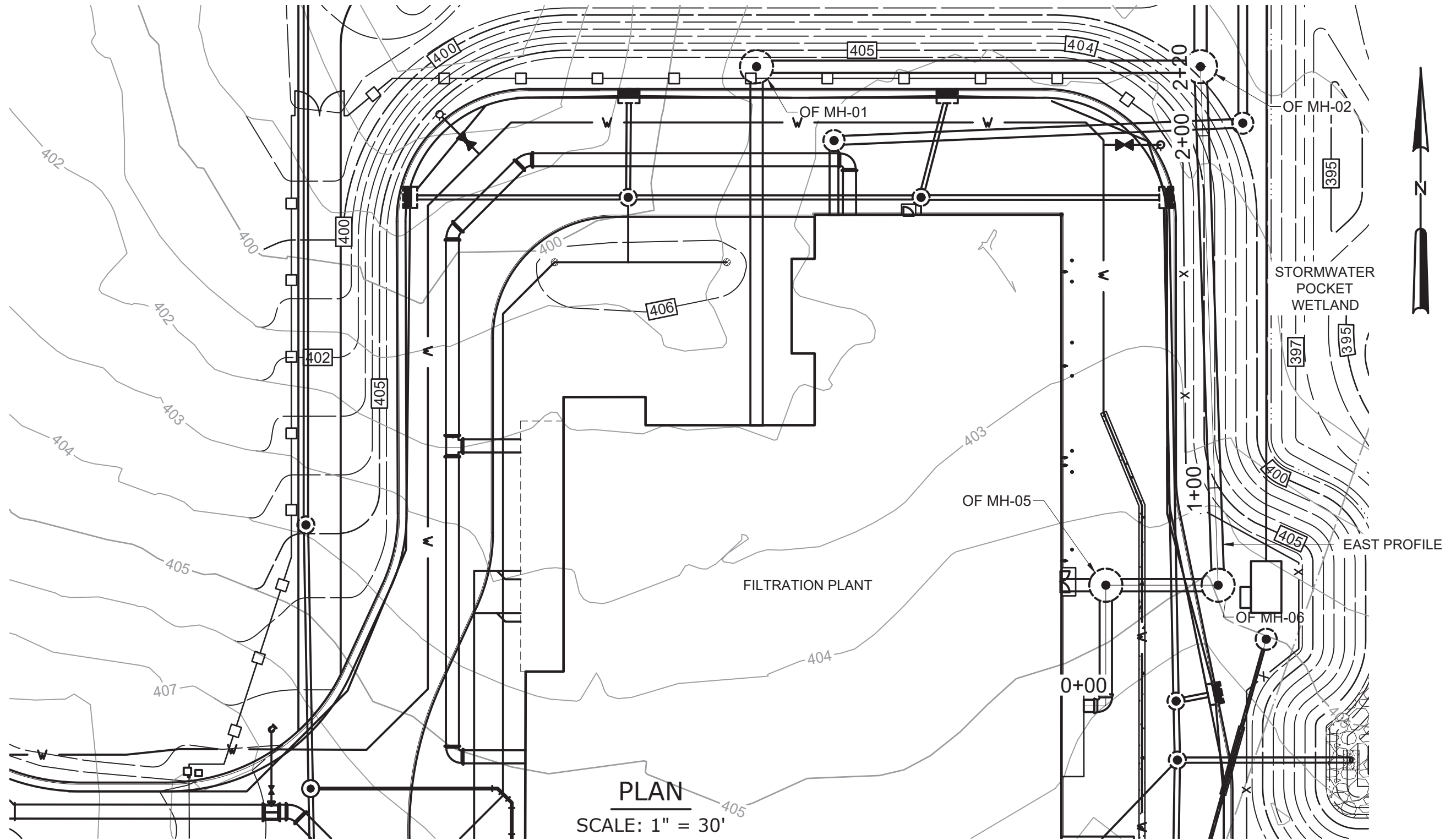
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

HORIZONTAL SCALE: 1" = 30'



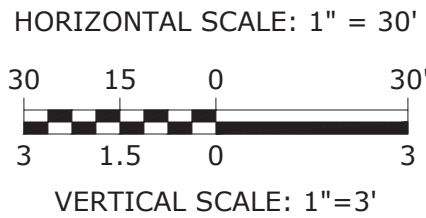
VERTICAL SCALE: 1"=3'

File: C:\USERS\LWALLACE\CAD\DWG\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTERATION\PROJECT FILES\PROJECTWIS\CVILC-248 Saved by JTANNER Save date: 2/10/2025 3:08 PM
PLOT DATE: 3/27/2025 3:03 PM BY: LWALLACE



PROFILE - EAST

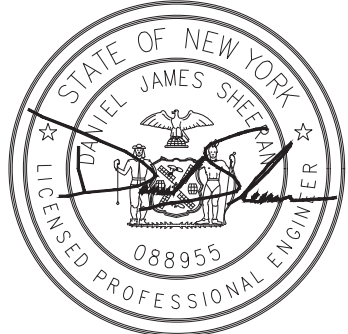
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

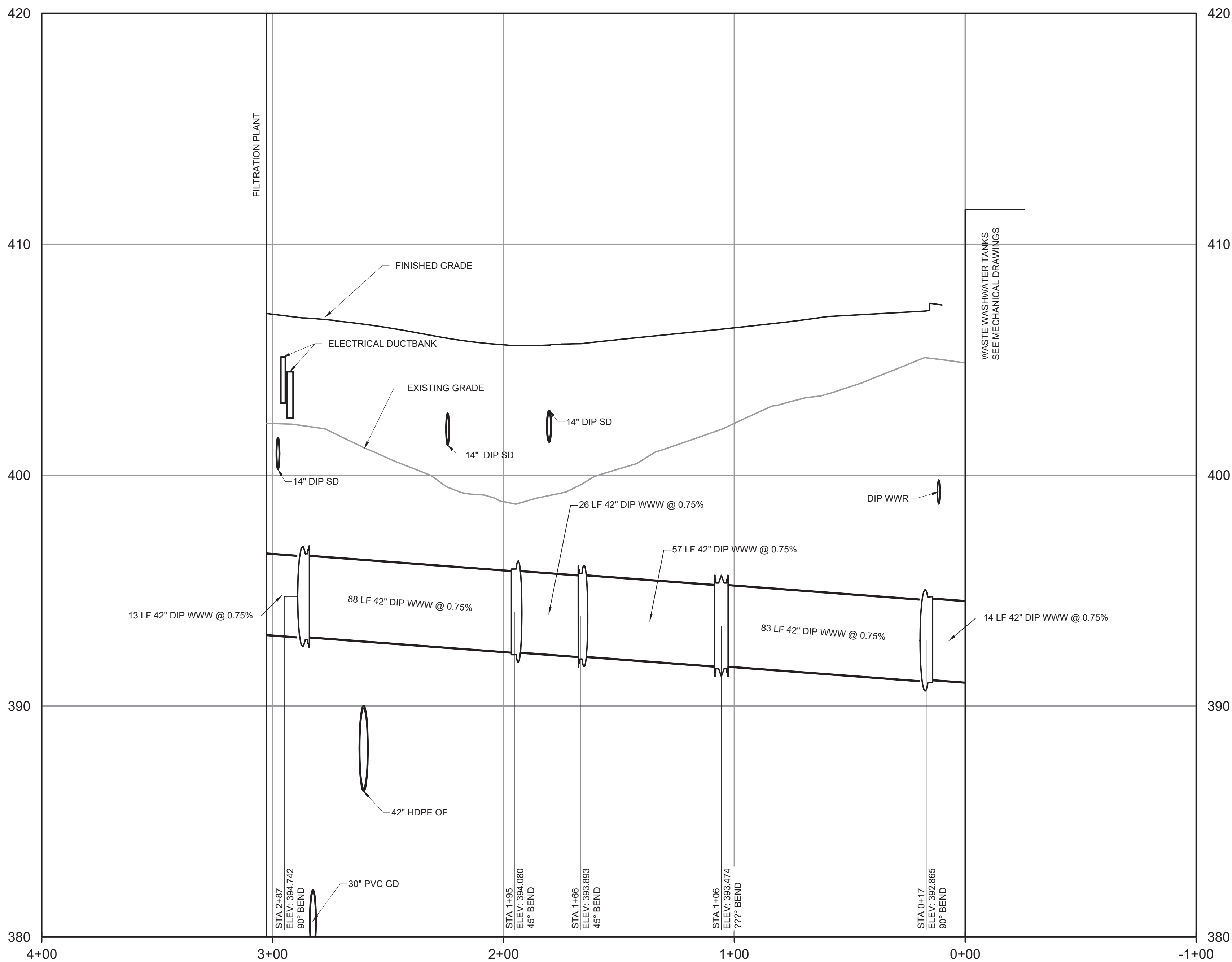
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
OVERFLOW PROFILE - SHEET 2 OF 2

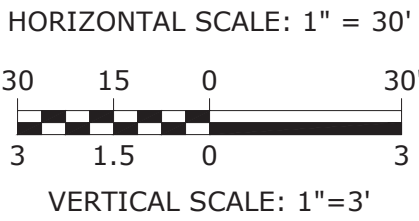
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-248

NOTES:
1. FOR PLAN INFORMATION SEE DWG C-131



WASTE WASHWATER (WWW) PROFILE

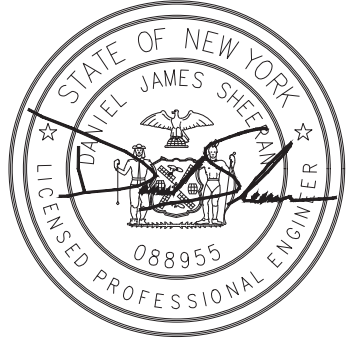
HORIZONTAL SCALE: 1"= 30'
VERTICAL SCALE: 1"= 3'



WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



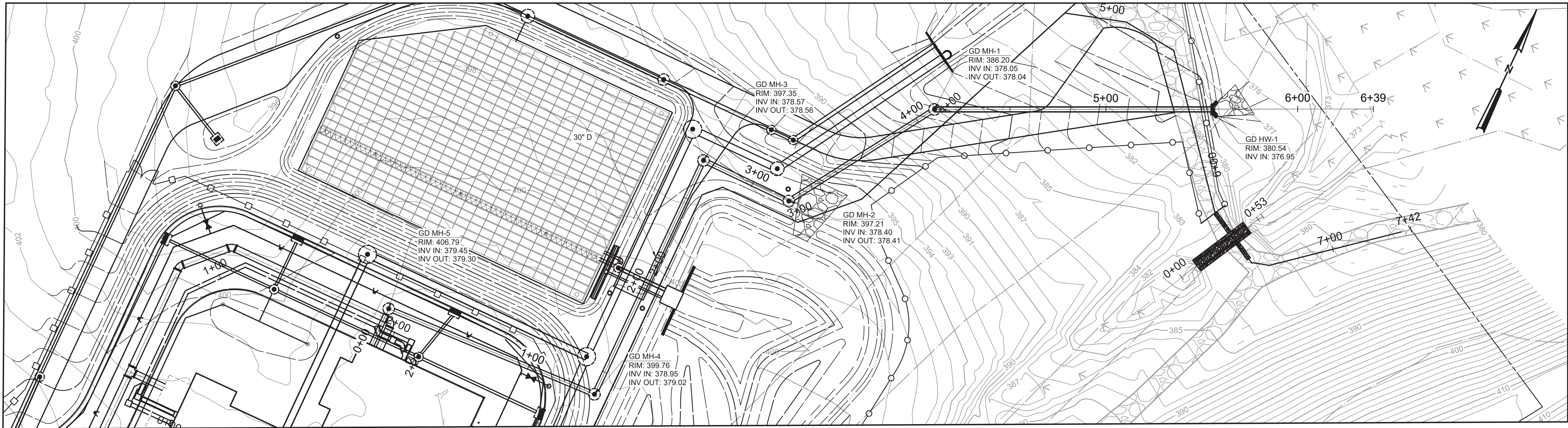
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

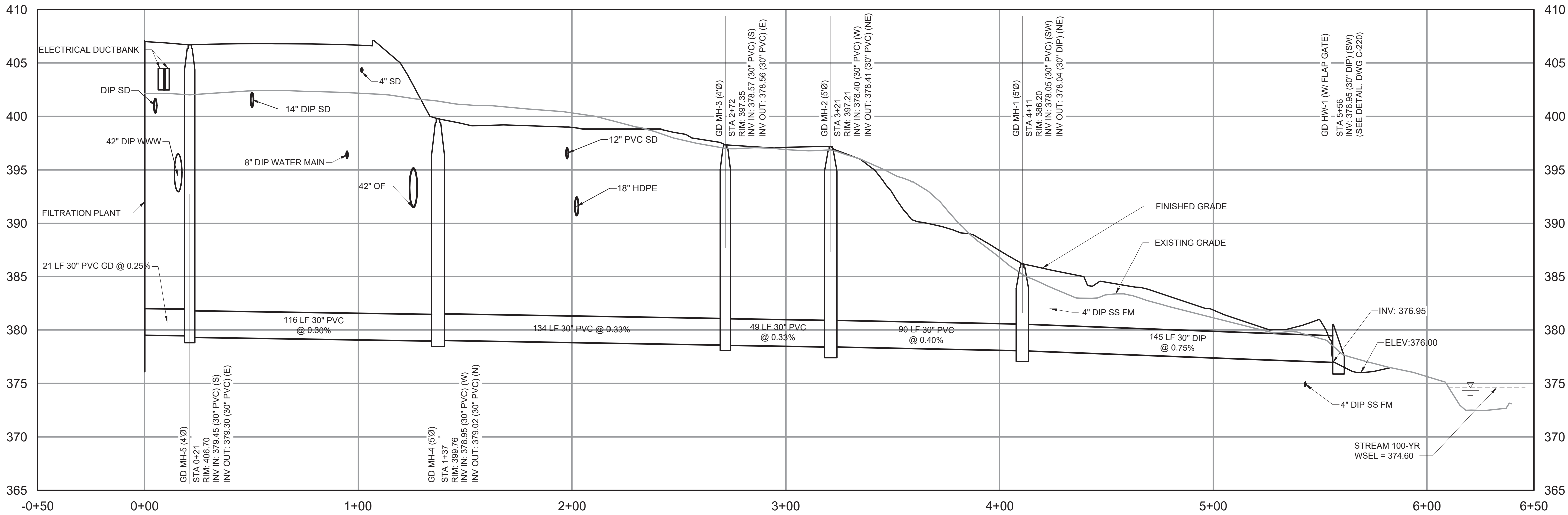
CIVIL
WWW PROFILE

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-249



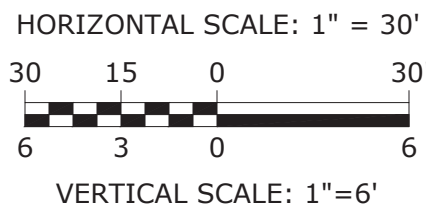
PLAN

SCALE 1" = 30'



PROFILE

HORIZONTAL SCALE 1" = 30'
VERTICAL SCALE: 1" = 6'

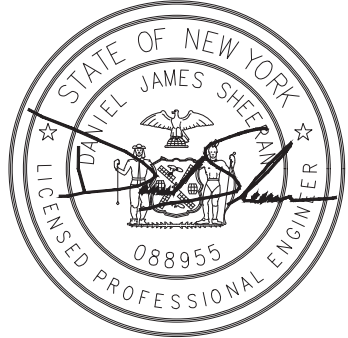


WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

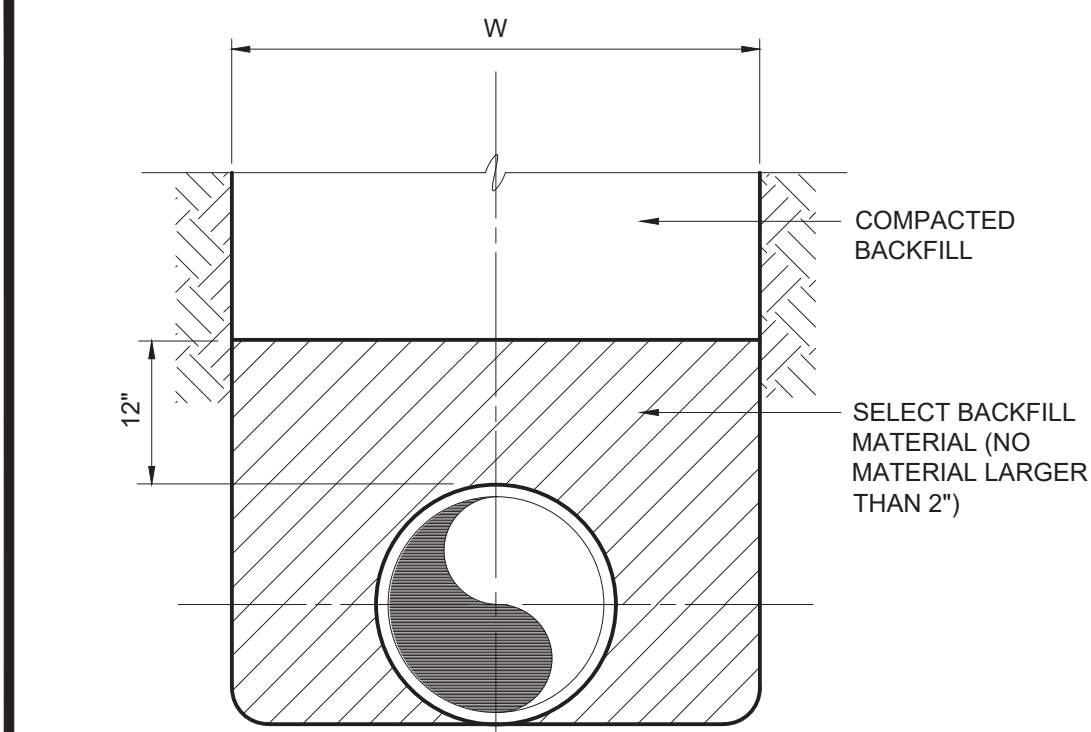
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

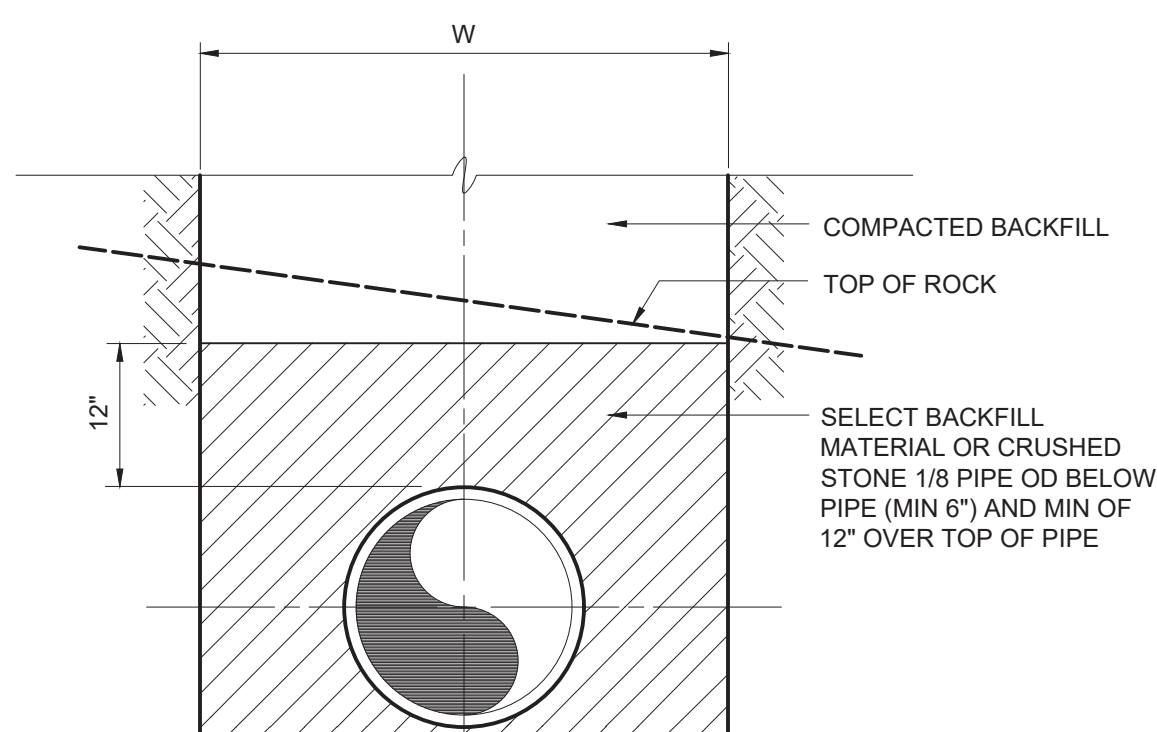
CIVIL
GALLERY DRAIN PROFILE

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-250

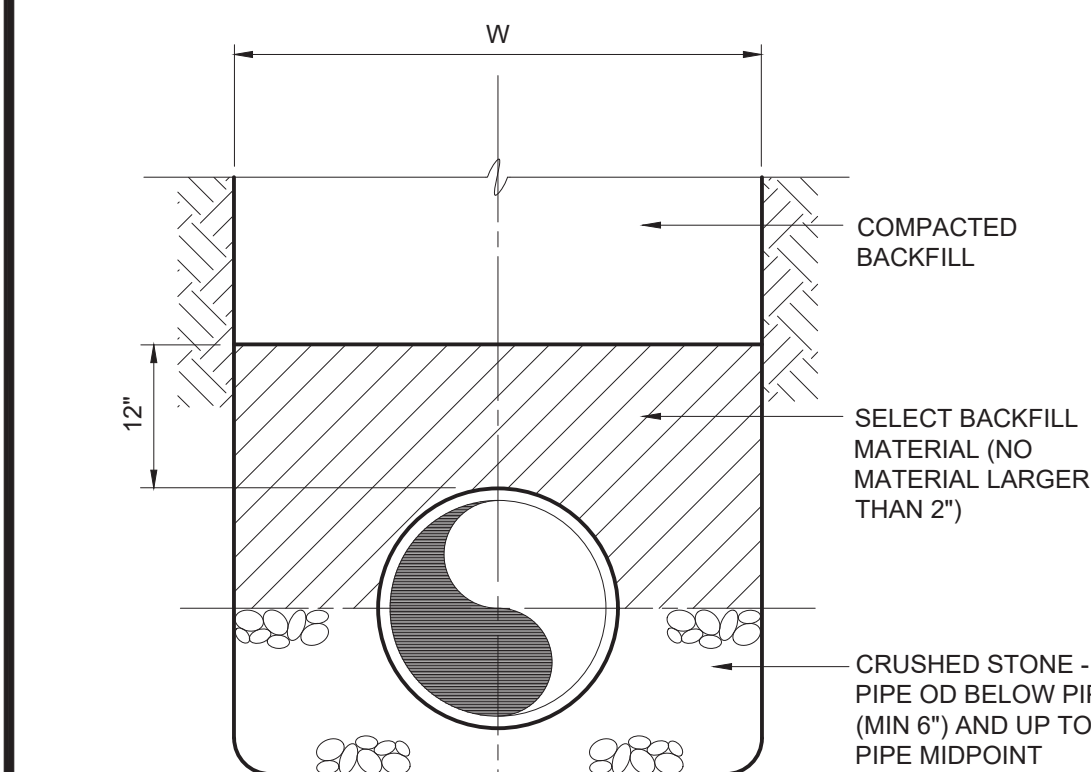
File: C:\USERS\JTANNER\DRAWINGS\HAZEN AND SAWYER\030388-000_RYE_LAKE_FILTRATION\PROJECT FILES\PROJECT\WSE\CV\LC-251A Saved by JTANNER Save date: 2/10/2025 10:29 AM
PLOT DATE: 3/27/2025 12:04 AM BY: JTANNER



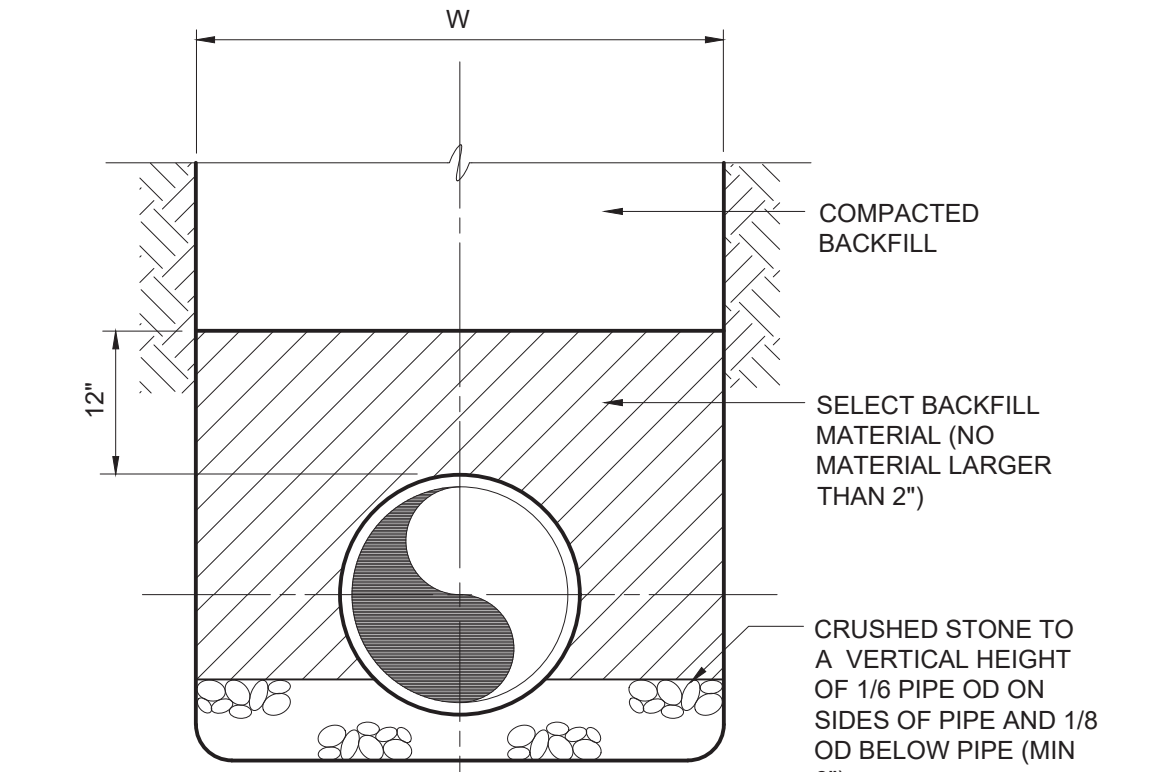
TYPE A
IN EARTH
C-01-0100



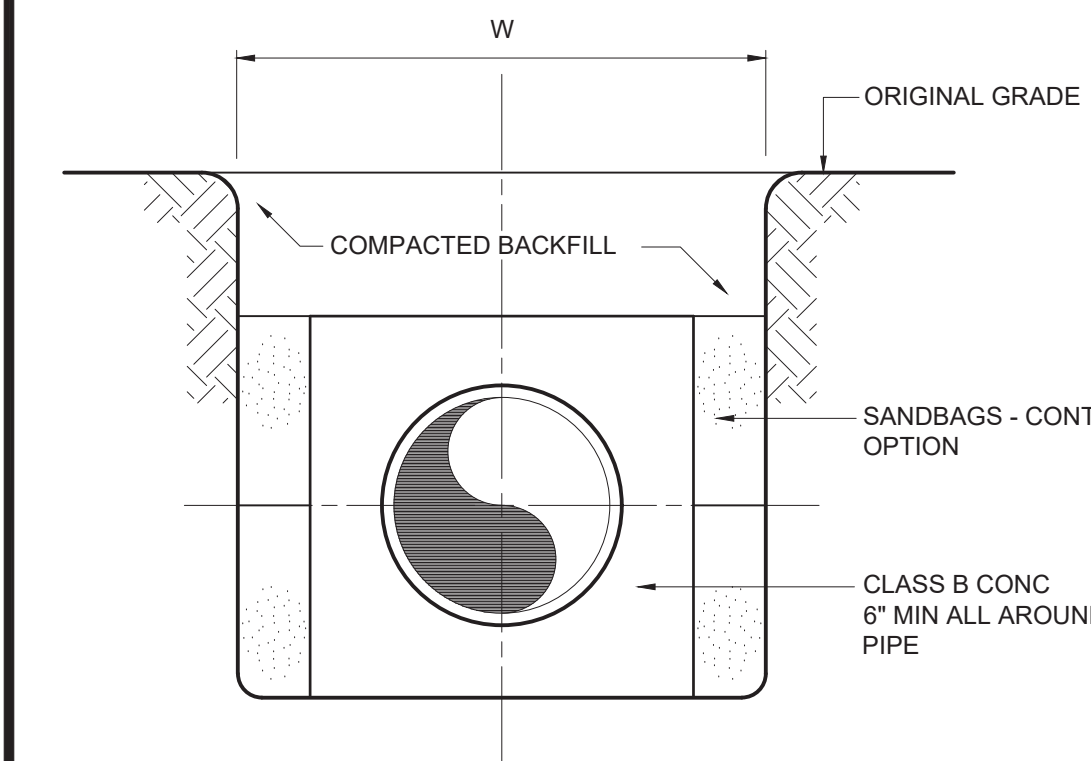
TYPE A
IN ROCK
C-01-0101



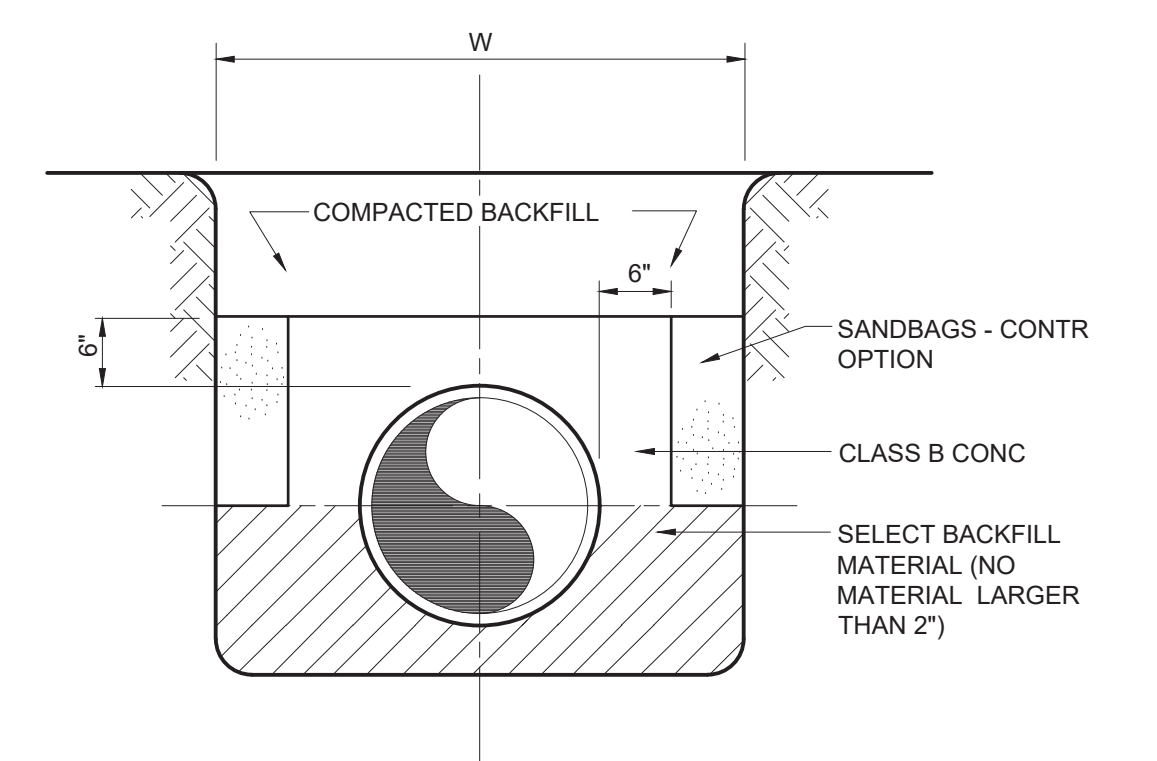
TYPE B
C-01-0102



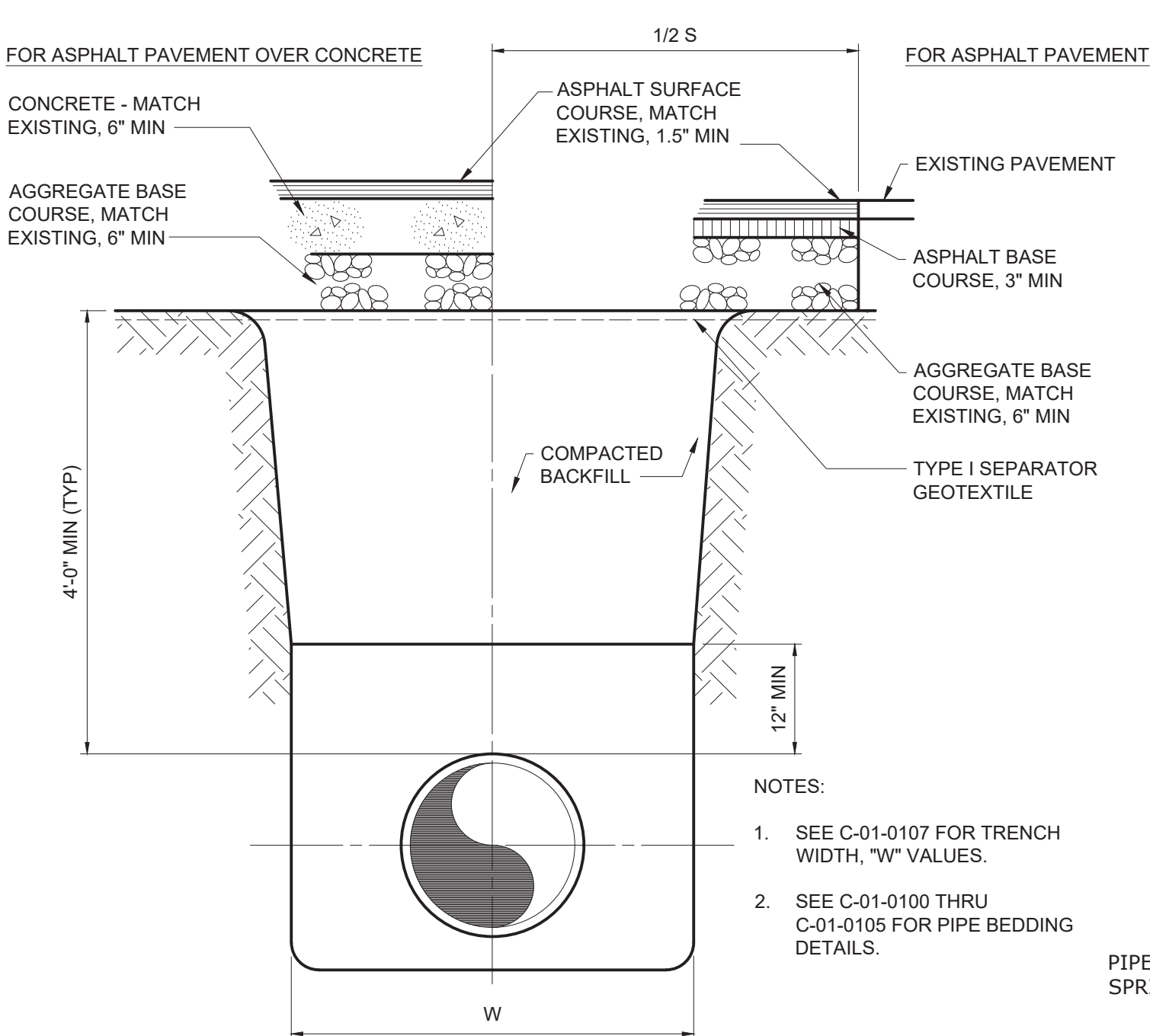
TYPE C
C-01-0103



CONCRETE ENCASEMENT
(SEE NOTE 1)
C-01-0104



CONCRETE ARCH
(SEE NOTE 1)
C-01-0105



TYPICAL TRENCH
C-01-0106

TRENCH EXCAVATION LIMITS		
INTERNAL DIAMETER OF PIPE	W	
	MAX	W-MIN
4"-6"	3'-9"	2'-0"
8"-10"	3'-9"	2'-2"
12"	3'-9"	O.D.+2'
14"-16"	4'-2"	O.D.+2'
18"	4'-4"	O.D.+2'
20"-21"	4'-8"	O.D.+2'
24"	4'-11"	O.D.+2'
27"	5'-9"	O.D.+2'
30"	6'-7"	O.D.+2'
36"	7'-4"	O.D.+2'
42"	8'-2"	O.D.+2'
48"	8'-9"	O.D.+2'
54"	9'-4"	O.D.+2'
60"	9'-10"	O.D.+2'
72"	11'-0"	O.D.+2'
78"	11'-8"	O.D.+2'
84"	12'-0"	O.D.+2'
90"	12'-6"	O.D.+2'
96"	13'-0"	O.D.+2'
108"	14'-0"	O.D.+2'
DEPTH OF CUT	S	
	MAXIMUM PAVEMENT REPLACEMENT WIDTH	
0'-6"	S=W+4'	
>6'-8"	S=W+8'	
>8'-10"	S=W+12'	
>10'-12"	S=W+16'	
>12'-14"	S=W+20'	
>14'-16"	S=W+24'	
>16'-18"	S=W+28'	
>18"	S=W+32'	

W = TRENCH WIDTH AT BOTTOM OF PIPE. TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.

C-01-0107

TRANSMISSION MAIN NOTES:

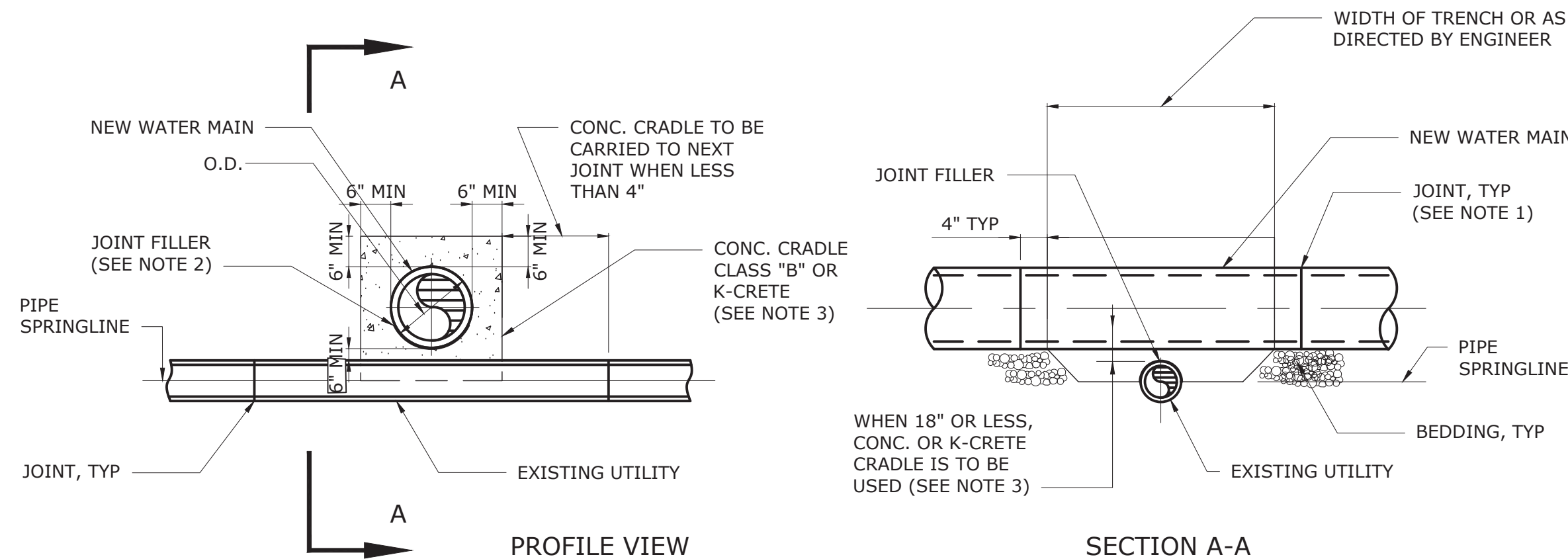
- EXISTING UTILITIES TO BE RAISED/LOWERED TO FINISH GRADE. (INCLUDES CB'S, D'S, MH'S, VALVES, HYDRANTS, ETC.)
- PROVIDE 18" VERTICAL SEPARATION BETWEEN WATER MAIN AND SANITARY SEWER; AND 18" SEPARATION BETWEEN WATER MAIN AND STORMSEWER.
- PROVIDE 10' HORIZONTAL SEPARATION BETWEEN WATER MAIN AND ALL OTHER UTILITIES.
- EXISTING ON SITE WATER SYSTEM IS TO BE PRESSURE TESTED AND DISINFECTED.
- EXISTING SANITARY SEWER MANHOLES THAT WILL BE CONNECTED TO ARE TO BE RECONSTRUCTED AS REQUIRED WITH 4' DIA. PRECAST RISERS WITH ROOF SLAB AND 3' DIA. OPENING. (SEE DETAILS FOR MANHOLE).
- SEE THRUST BLOCK DETAILS FOR WATER MAIN SYSTEM.
- ALL WATER MAINS TO BE TESTED AND CHLORINATED IN ACCORDANCE WITH AWWA STANDARDS C 600-93 SECTION 4 & C651-99 EXCEPT FOR SECTION 4.4.2 (TABLET METHOD). ALL TESTING MUST BE PERFORMED, RESULTS CERTIFIED BY A NYS PR AND SENT TO AND APPROVED BY WESTCHESTER COUNTY DEPARTMENT OF HEALTH BEFORE WATER MAIN IS PUT INTO SERVICE.
- EXISTING WATER MAINS THAT ARE BEING REPLACED WITH NEW WATER MAINS SHALL BE REMOVED OR ABANDONED AFTER THE NEW MAIN HAS BEEN PLACE IN SERVICE.
- ALL VALVES ASSOCIATED WITH TRANSMISSION MAINS SHALL ONLY BE OPERATED BY DPW STAFF.

PRESSURE LEAKAGE TESTING:

- ALL PIPE INSTALLED SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA STANDARD C600-93 SECTION 4.
- 48 HOUR NOTICE TO DPW AND WCDH IS REQUIRED FOR SCHEDULING PRESSURE/LEAKAGE TESTING.

DISINFECTION

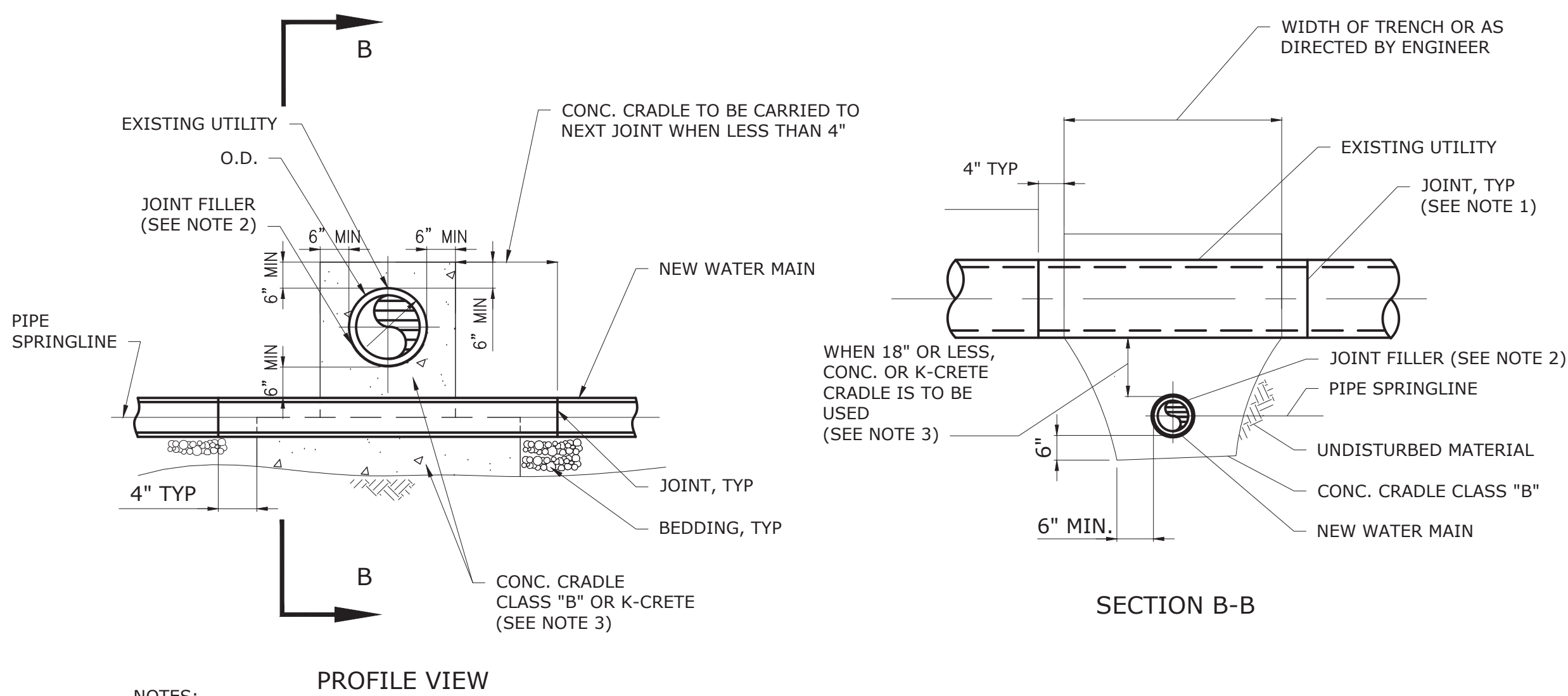
- ALL NEW, CLEANED, OR REPAIRED WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH TEH LATEST EDITION OF AWWA STANDARDS C 600-93 SECTION 4 & C651-99 EXCEPT FOR SECTION 4.4.2 (TABLET METHOD).



NOTES:

- ARRANGE SO NEITHER NEW OR EXISTING PIPE HAS JOINT IN CONTACT WITH CONCRETE.
- JUTE OR SIMILAR BITUMINOUS IMPREGNATED JOINT FILLER SHALL BE INSTALLED BETWEEN BOTH PIPES AND CONCRETE.
- IF 10' OF HORIZONTAL SEPARATION OR 18" VERTICAL SEPARATION CANNOT BE MADE, THE CONTRACTOR WILL ENCASE THE NEW WATER MAIN IN K-CRETE (SEE WATER MAIN INSTALLATION NEAR SANITARY SEWER). HEALTH DEPARTMENT APPROVAL SHALL BE REQUIRED.

NEW PIPE OVER EXIST. UTILITY
C-01-0120R



PROFILE VIEW

NOTES:

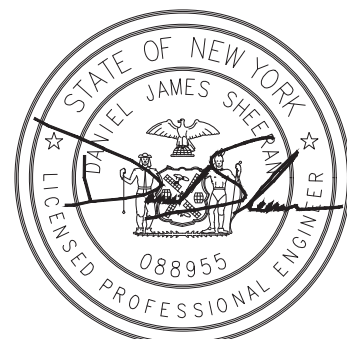
- ARRANGE SO NEITHER NEW OR EXISTING PIPE HAS JOINT IN CONTACT WITH CONCRETE.
- JUTE OR SIMILAR BITUMINOUS IMPREGNATED JOINT FILLER SHALL BE INSTALLED BETWEEN BOTH PIPES AND CONCRETE.
- IF 10' OF HORIZONTAL SEPARATION OR 18" VERTICAL SEPARATION CANNOT BE MADE, THE CONTRACTOR WILL ENCASE THE NEW WATER MAIN IN K-CRETE (SEE WATER MAIN INSTALLATION NEAR SANITARY SEWER). HEALTH DEPARTMENT APPROVAL SHALL BE REQUIRED.

NEW PIPE UNDER EXIST. UTILITIES
C-01-0120R

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

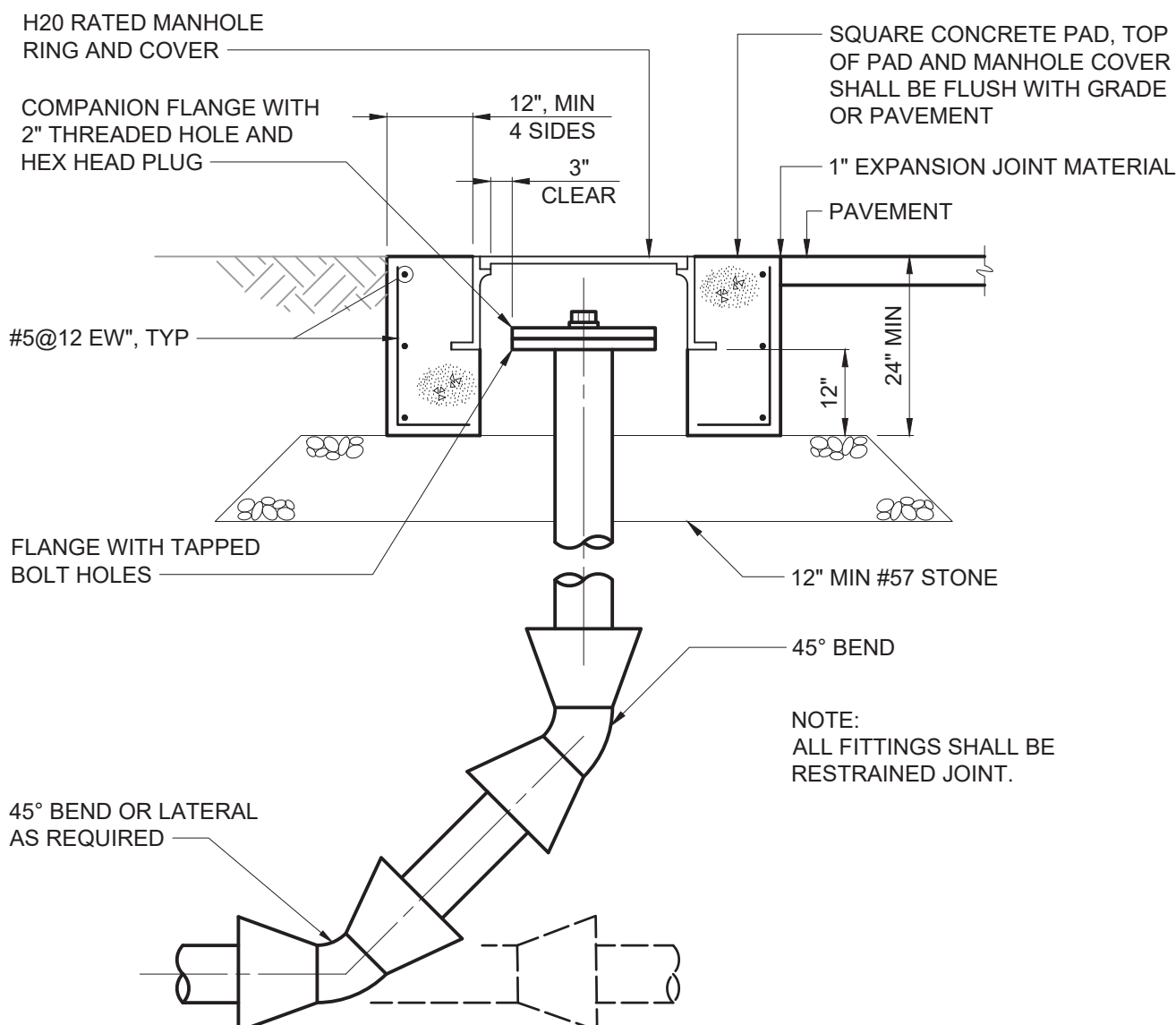
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

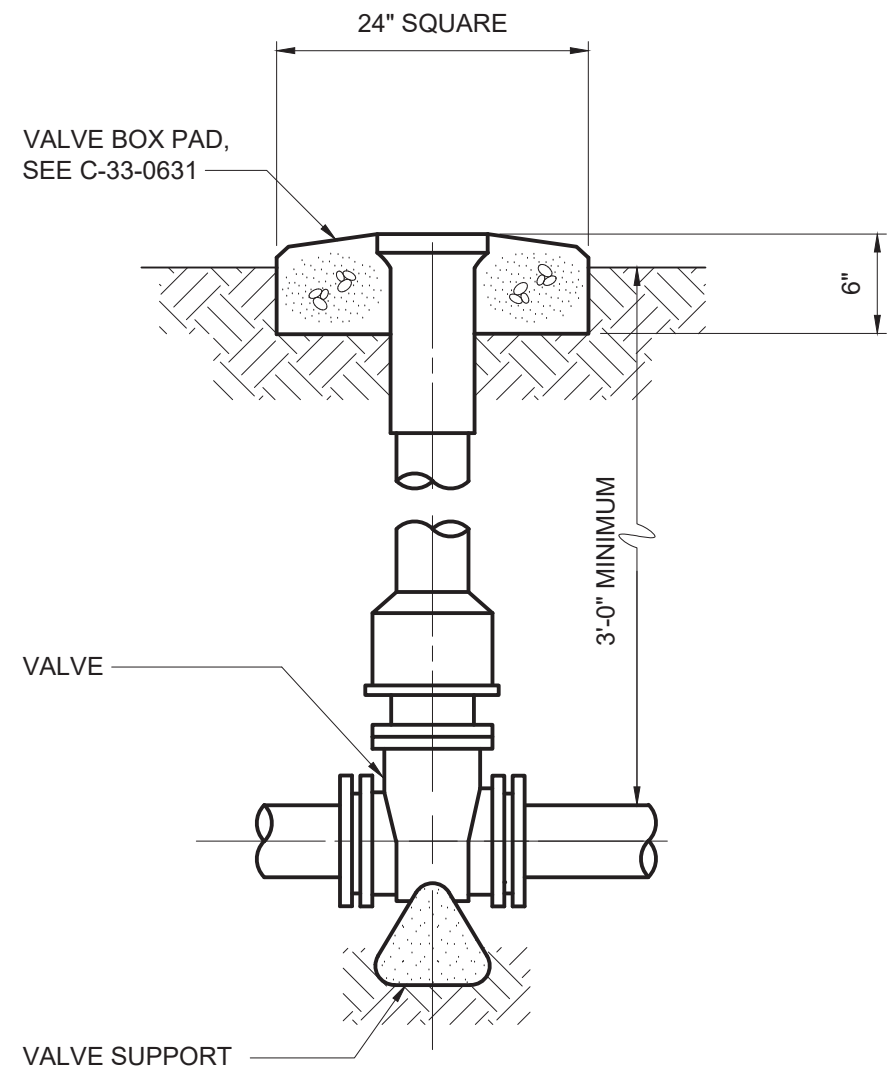
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
YARD PIPING DETAILS - SHEET 1 OF 2

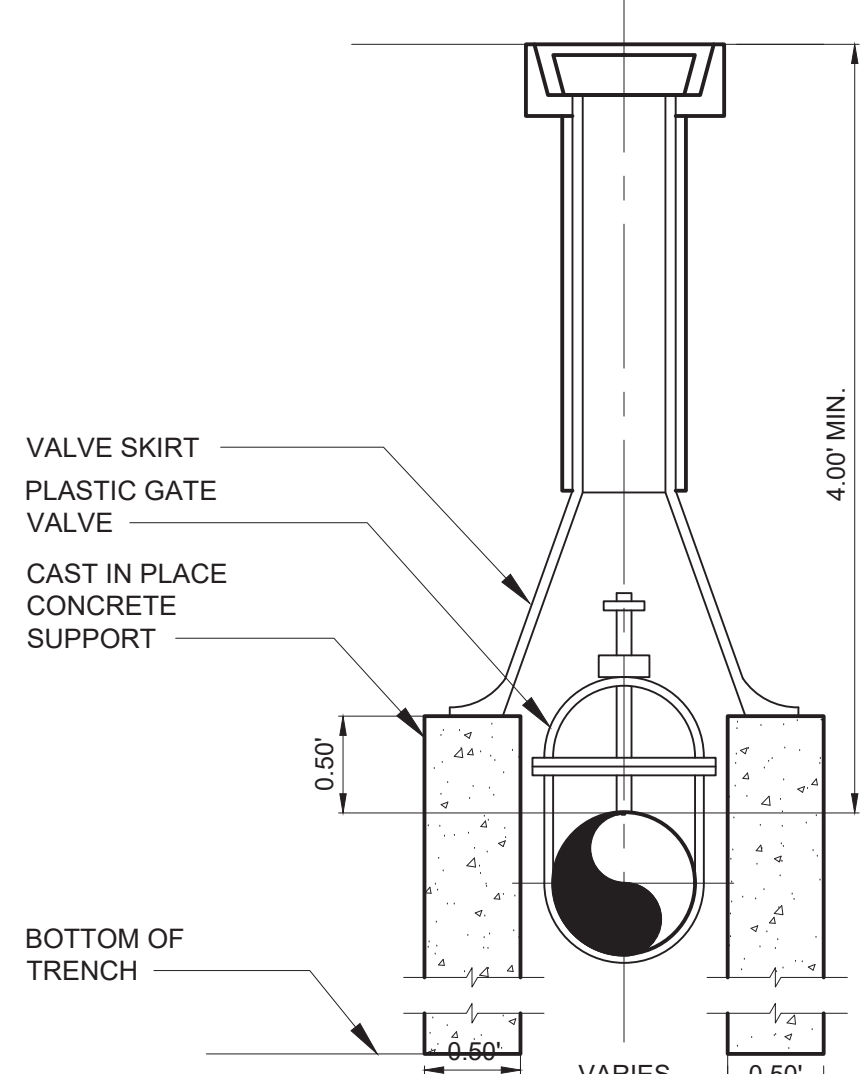
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-251



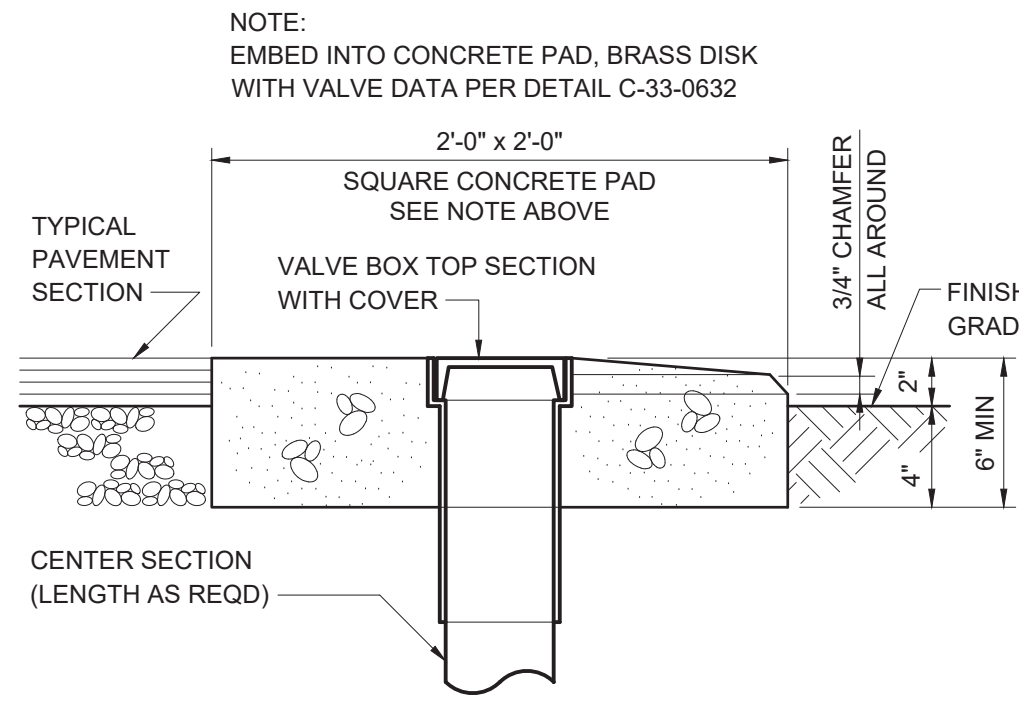
CLEANOUT RISER FOR PRESSURIZED LINES 4"-12"
C-33-0643



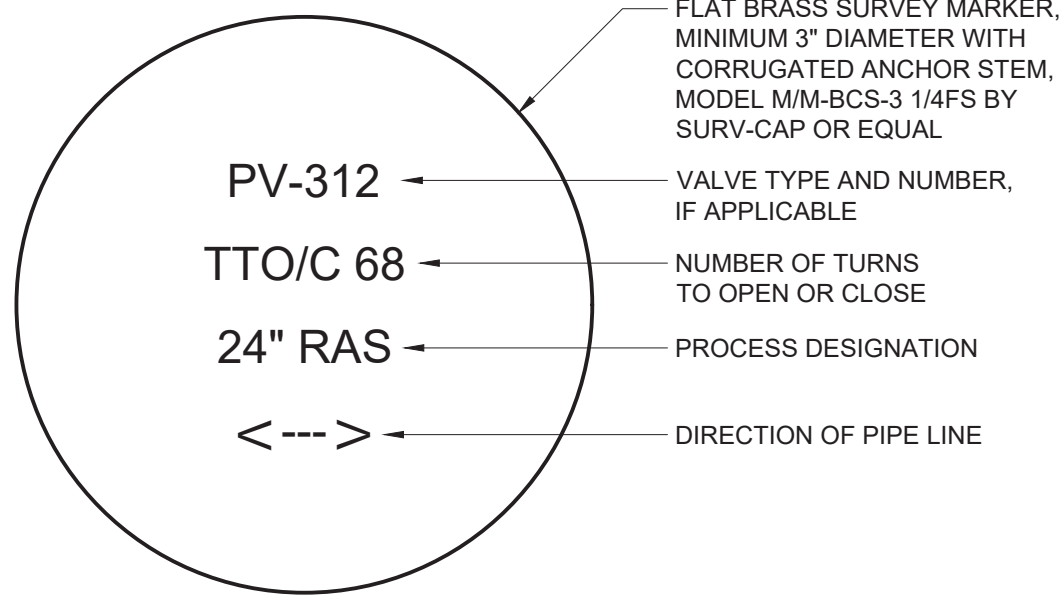
VALVE BOX
C-33-0630



PLASTIC VALVE BOX DETAIL
NTS

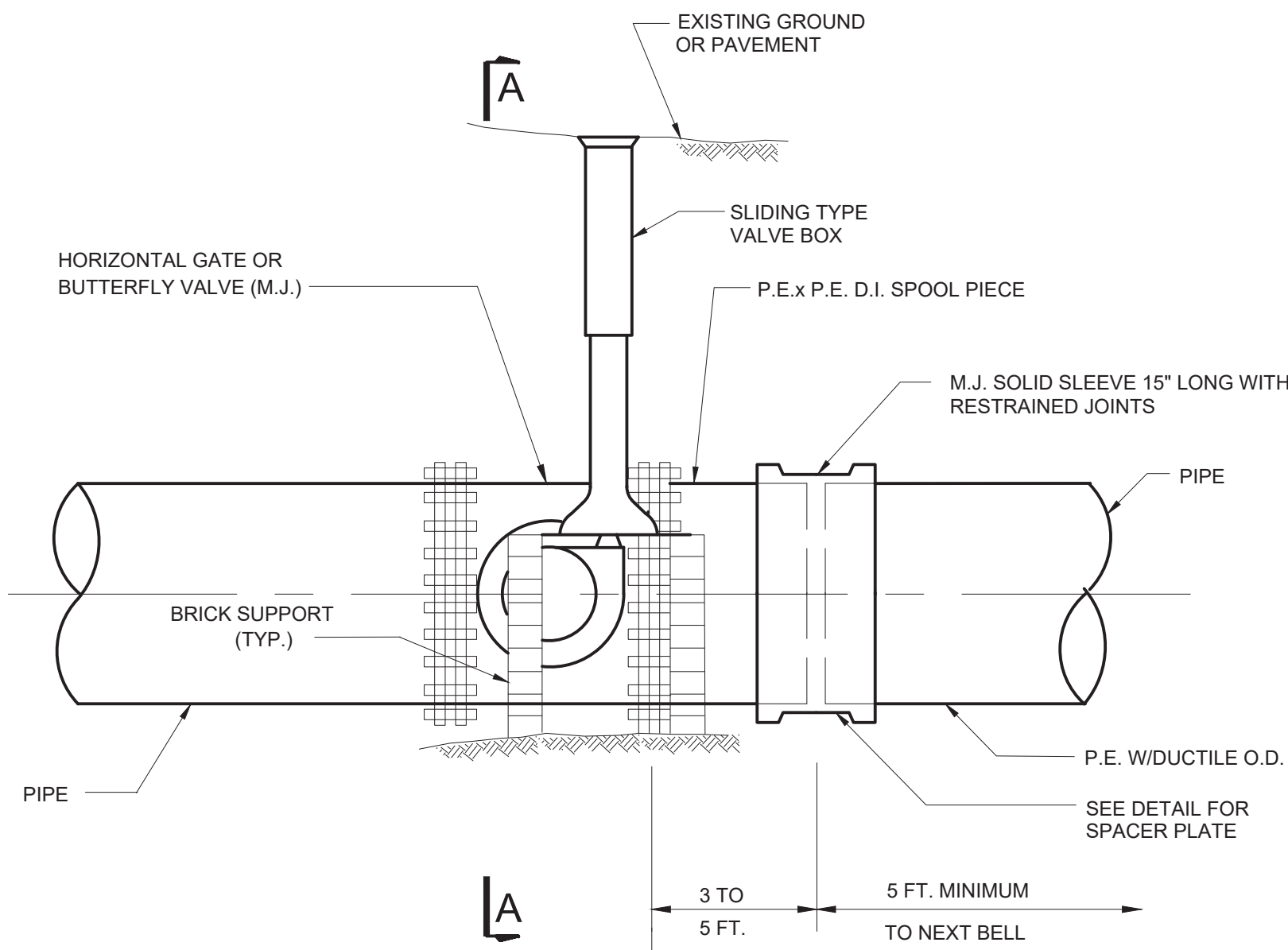


VALVE BOX PAD
C-33-0631

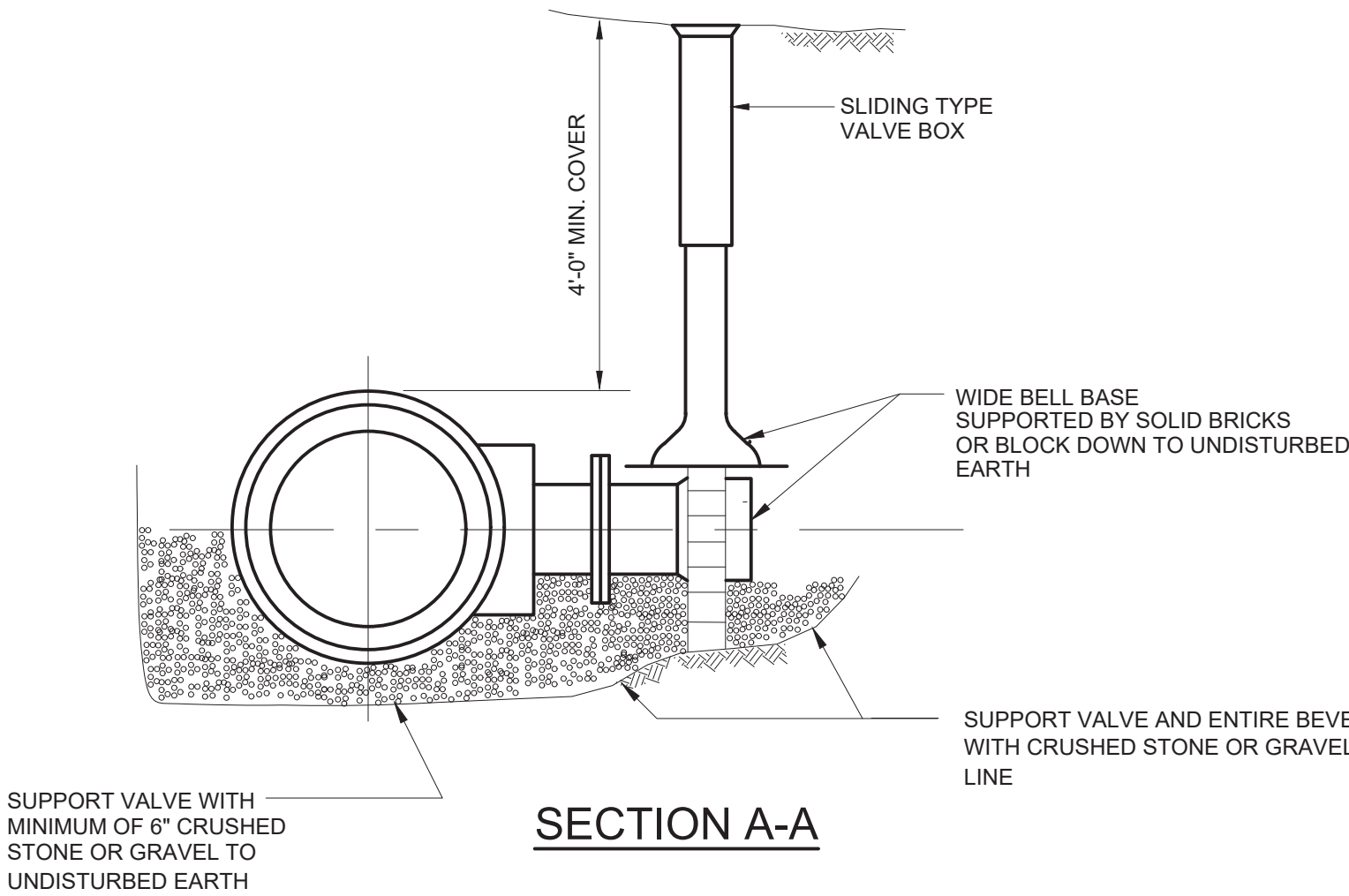


- NOTES:
1. ENGRAVING SHALL BE MINIMUM 3/16" TALL CAPITAL LETTERS IN A BLOCK FONT SIMILAR TO ARIAL, CENTERED AND SPACED AS SHOWN.
 2. ALL MARKINGS SHALL BE NEATLY MACHINE ENGRAVED.
 3. ALTERNATELY, MARKINGS MAY BE HAND STAMPED, PROVIDED STAMPING IS DEEP ENOUGH TO WITHSTAND NORMAL TRAFFIC AND WEATHERING. STAMPING OF DISK SHALL BE ACCOMPLISHED PRIOR TO SETTING IN CONCRETE VALVE BOX PAD.
 4. SUBMIT ONE SAMPLE FOR APPROVAL PRIOR TO ENGRAVING ALL MARKERS.
 5. REGARDLESS OF ENGRAVING METHOD SELECTED, CONTRACTOR SHALL PROVIDE COMPATIBLE STAMP SET AND ANVIL TO OWNER UPON COMPLETION OF PROJECT FOR FUTURE REPAIR OF ENGRAVINGS.

C-33-0632

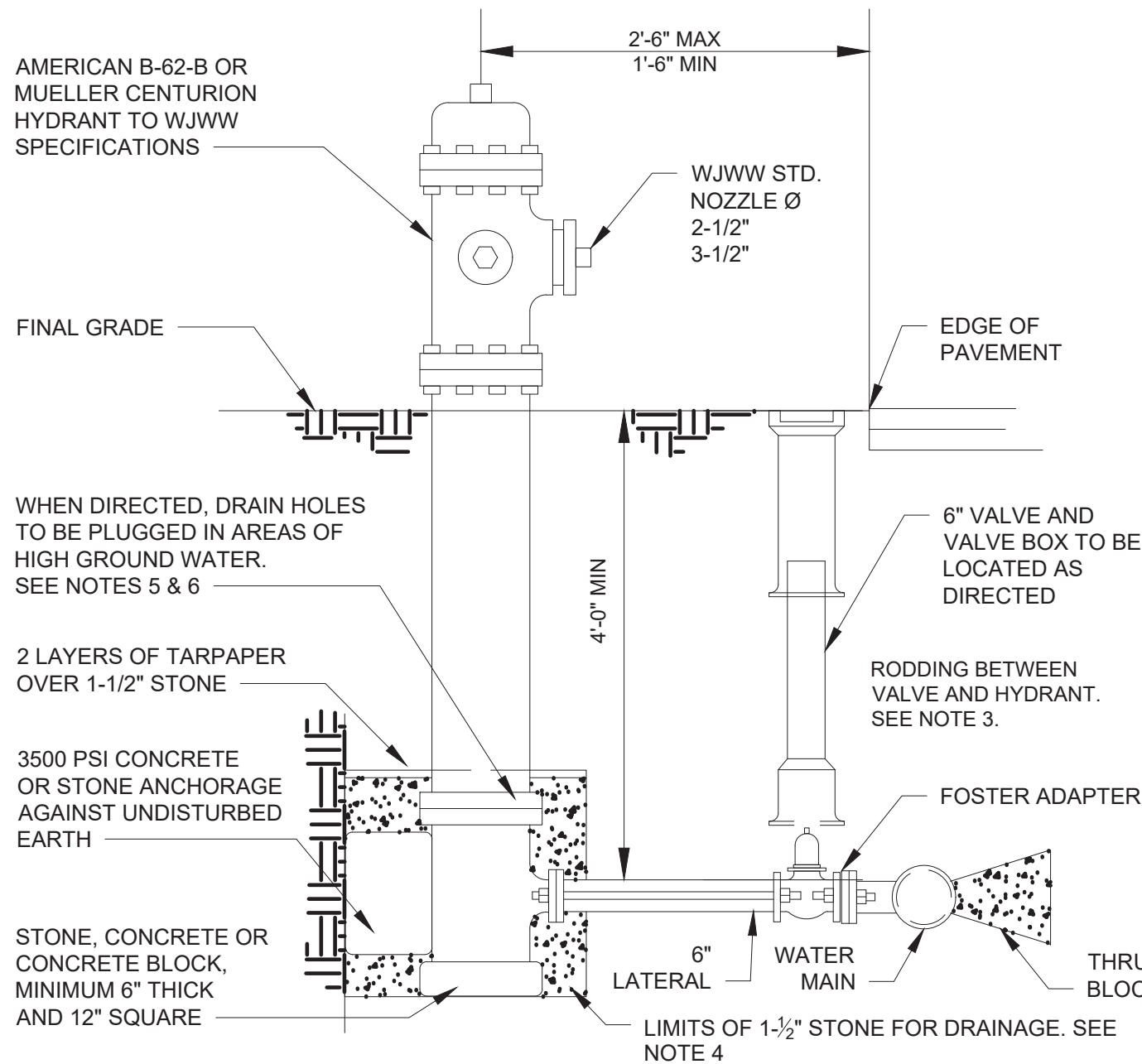


ELEVATION



SECTION A-A

- NOTES:
1. NO PART OF VALVE BOX OR BASE TO TOUCH VALVE
 2. PAINT NUTS AND BOLTS ON JOINTS WITH 2 COATS BITUMASTIC AFTER INSTALLATION



- NOTES:
1. PUMPER OUTLET SHALL FACE STREET, HOSE OUTLETS SHALL BE PARALLEL TO STREET.
 2. PLUMBNESS OF HYDRANT TO BE CHECKED IN TWO DIRECTIONS, 90° APART.
 3. RODDING SHALL CONSIST OF TWO 3/4" THREADED RODS CAREFULLY COATED WITH BITUMASTIC PAINT. RODDING MAY BE OMITTED BETWEEN THE MAIN AND LATERAL VALVE ONLY WHERE A TAPPING VALVE OR HYDRANT VALVE ANCHORING TEE IS USED.
 4. 1-1/2" STONE SHALL BE PLACED AROUND THE HYDRANT FROM THE BOTTOM OF THE TRENCH, BUT AT LEAST 6" BELOW THE BASE OF THE HYDRANT TO 6" ABOVE THE WASTE OPENING AND TO A DISTANCE OF 12" AROUND THE ELBOW.
 5. HYDRANTS WITH PLUGGED DRAINS SHALL HAVE A 3" BLACK CIRCLE PAINTED DIRECTLY UNDER THE PUMPER OUTLET.
 6. HYDRANT DRAINAGE:
 - 6.A. HYDRANT DRAINS SHOULD BE PLUGGED. WHEN THE DRAINS ARE PLUGGED THE BARRELS MUST BE PUMPED DRY AFTER USE DURING FREEZING WEATHER.
 - 6.B. WHERE HYDRANT DRAINS ARE NOT PLUGGED, A GRAVEL POCKET OR DRY WELL SHALL BE PROVIDED UNLESS THE NATURAL SOILS WILL PROVIDE ADEQUATE DRAINAGE.
 - 6.C. HYDRANT DRAINS SHALL NOT BE CONNECTED TO OR LOCATED WITHIN 10 FEET OF SANITARY SEWERS, STORM SEWERS, OR STORM DRAINS.
 - 6.D. HYDRANT DRAINS, WHERE ALLOWED, MUST BE ABOVE THE SEASONAL GROUNDWATER TABLE.

FIRE HYDRANT

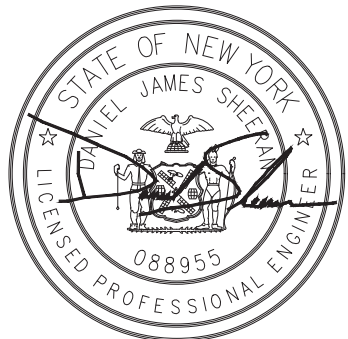
NTS

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

TYPICAL HORIZONTAL MAIN - LINE GATE OR BUTTERFLY VALVE INSTALLATION DETAIL

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR
DATE	BY

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
YARD PIPING DETAILS - SHEET 2 OF 2

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-252

EROSION AND SEDIMENT CONTROL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE, AND/OR WITH THE SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS SPECIFIED BY THE NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (NOVEMBER 2016), AND THE TOWN/VILLAGE OF HARRISON STANDARDS FOR EROSION AND SEDIMENT CONTROL.
3. IN THE EVENT OF CONFLICT BETWEEN THESE SPECIFICATION REQUIREMENTS AND POLLUTION CONTROL LAWS, RULES, REGULATIONS OR PERMIT CONDITIONS BY OTHER FEDERAL OR STATE OR LOCAL GOVERNMENT AGENCIES, THE MORE RESTRICTIVE LAWS, RULES OR REGULATIONS SHALL APPLY.
4. DUE TO THE NATURE OF THE WORK REQUIRED BY THIS CONTRACT, IT IS ANTICIPATED THE LOCATION AND NATURE OF EROSION AND SEDIMENT CONTROL MEASURES WILL BE ADJUSTED AS CONSTRUCTION PROGRESSES TO REFLECT THE CURRENT PHASE OF WORK. THE CONSTRUCTION SCHEDULE ADOPTED BY THE CONTRACTOR WILL IMPACT THE PLACEMENT AND NEED FOR SPECIFIC DEVICES REQUIRED FOR THE CONTROL OF EROSION. THE LOCATION AND EXTENT OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REVISED AT EACH PHASE OF CONSTRUCTION RESULTING IN A CHANGE OF EITHER THE QUANTITY OR DIRECTION OF SURFACE RUNOFF FROM THE CONSTRUCTION AREAS. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE AT THE CONCLUSION OF THE PROJECT.
5. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE ENGINEER, OWNER, AND REGULATORY AGENCIES FOR DEVIATIONS FROM THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
6. NO LAND DISTURBANCE, DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING, BUT NOT LIMITED TO, SILT FENCING, INLET PROTECTION, TEMPORARY DIVERSIONS, SEDIMENT BASIN PROTECTION HAVE BEEN INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS. IF CLEARING IS REQUIRED FOR INSTALLATION OF A PARTICULAR MEASURE, ALL MEASURES NOT REQUIRING CLEARING SHALL BE INSTALLED FIRST. CLEARING OF THE NECESSARY LAND FOR INSTALLATION OF THE PARTICULAR MEASURE MAY THEN PROCEED.
7. CLEARING SHALL BE LIMITED AS MUCH AS POSSIBLE TO AREAS REQUIRED FOR CURRENT CONSTRUCTION ACTIVITIES. MASS CLEARING AND GRADING SHALL BE AVOIDED.
8. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED BY A QUALIFIED INSPECTOR WITHIN 24 HOURS FOLLOWING EVERY RAINFALL BUT IN NO CASE LESS THAN TWICE EVERY SEVEN CALENDAR DAYS. THE TWO INSPECTIONS SHALL BE SEPARATED BY A MINIMUM OF TWO (2) FULL CALENDAR DAYS.
9. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED, REPAIRED, OR REPLACED IMMEDIATELY BY THE CONTRACTOR AS REQUIRED TO MAINTAIN PERFORMANCE OF MEASURE DURING THE LIFE OF THE PROJECT, INCLUDING WINTER SHUTDOWN, ETC. SUCH INSPECTION AND MAINTENANCE SHALL CONTINUE UNTIL AFTER PERMANENT STABILIZATION MEASURES ARE IN PLACE AND THE TEMPORARY CONTROL MEASURES ARE ORDERED TO BE REMOVED BY THE ENGINEER.
10. TIMELY MAINTENANCE OF SEDIMENT CONTROL PRACTICES IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL PRACTICES SHALL BE MAINTAINED IN GOOD WORKING ORDER AT ALL TIMES. THE SEDIMENT LEVEL IN ALL PRACTICES SHALL BE CLOSELY MONITORED AND SEDIMENT REMOVED PROMPTLY WHEN MAXIMUM LEVELS ARE REACHED OR AS ORDERED BY THE ENGINEER. ALL SEDIMENT CONTROL PRACTICES SHALL BE INSPECTED BY THE END OF EACH WORK DAY, PRIOR TO EVERY WEEKEND, BEFORE AND AFTER EACH RAINFALL OF 0.5" OR GREATER WITHIN A 12 HOUR PERIOD, OR AS DIRECTED BY THE ENGINEER IN ORDER TO INSURE PROPER OPERATION.
11. WHERE EROSION CONTROL MATERIALS HAVE BEEN USED ON FINAL GRADE THAT HAVE BEEN PERMANENTLY SEEDED, THE CONTRACTOR SHALL CARE FOR THE AREAS UNTIL ACCEPTANCE OF THE CONTRACT OR ACCEPTANCE OF THE TURF, WHICHEVER IS LATER. WHERE NECESSARY, SUCH CARE MAY INCLUDE, BUT IS NOT LIMITED TO PROVIDING WARNING SIGNS OR BARRICADES FOR PROTECTION AGAINST TRAFFIC, ANY SURFACES THAT HAVE SETTLED, BECOME GULLIED, OR OTHERWISE DAMAGED SHALL BE REPAIRED AT NO ADDITIONAL EXPENSE TO THE CITY TO REESTABLISH THE GRADE AND SOIL CONDITIONS THAT EXISTED PRIOR TO PLACING EROSION CONTROL MATERIALS.
12. DUST CONTROL MUST BE PROVIDED AS DIRECTED.
13. CONTRACTOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICABLE ON STOCKPILES AND IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. THIS REQUIREMENT DOES NOT APPLY IN THE FOLLOWING INSTANCES:

A) WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE;

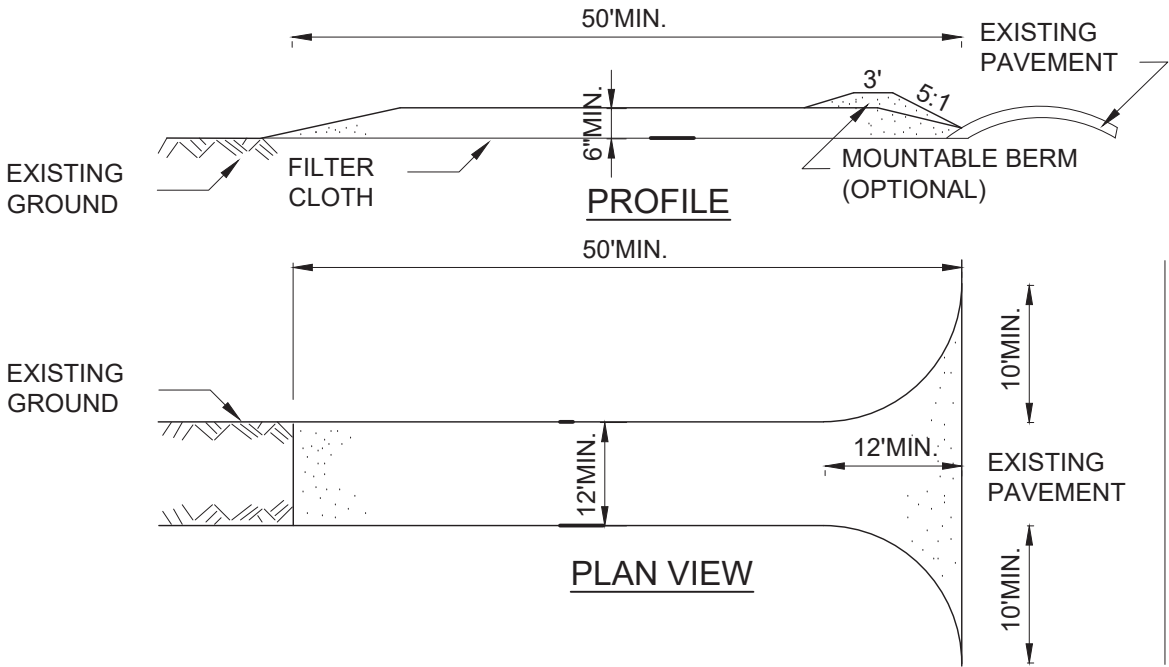
B) WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN FOURTEEN (14) DAYS, TEMPORARY STABILIZATION MEASURES NEED NOT BE INITIATED ON THAT PORTION OF THE SITE.
14. ALL DISTURBED AREAS SHALL DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBANCE ACTIVITIES AND UNTIL FINAL STABILIZATION IS ACHIEVED. SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING, OR OTHER ACTIVITIES SHALL BE PUMPED INTO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE, OR CATCH BASIN.
15. SOIL STOCKPILE AND LAYDOWN AREAS SHALL HAVE PERIMETER SEDIMENT CONTROL MEASURES AND TEMPORARY OR PERMANENT STABILIZATION MEASURES INSTALLED AS SOON AS POSSIBLE AND AT COMPLETION OF STOCKPILING AND LAYDOWN ACTIVITIES. STOCKPILE SIDE SLOPES SHALL NOT EXCEED 3H : 1V UNLESS APPROVED BY ENGINEER. TOP OF STOCKPILE SHALL BE GRADED WITH A MINIMUM 5% SLOPE TO INSURE PROPER DRAINAGE.
16. EARTHEN-MATERIAL STOCKPILES MUST BE LOCATED A MINIMUM OF 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE.
17. DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION, AND OTHER WASTES MUST BE LOCATED A MINIMUM OF 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE.

18. STAGING AREA, STOCKPILES, AND OTHER STORAGE LOCATIONS SHALL BE PROTECTED FROM EROSION.
19. ALL DISTURBED SOIL AREAS SHALL BE FERTILIZED, SEEDED AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE SEEDING SCHEDULE, AND RE-SEEDED AS NECESSARY, TO ESTABLISH AND MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
20. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED OFFSITE ROADWAYS. IF MATERIAL IS TRACKED ONTO OFFSITE ROADWAYS, IT SHALL BE REMOVED IMMEDIATELY. DO NOT UTILIZE A WATER HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT CONTROL DEVICE. PROPER PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT MATERIALS DEPOSITED ONTO OFFSITE ROADWAYS ARE REMOVED SO THAT THEY DO NOT ENTER YARD INLETS, CATCH BASINS, SEWERS, WETLANDS, SURFACE WATER BODIES, OR ROADSIDE SWALES. DO NOT UTILIZE A FIRE OR GARDEN HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT CONTROL DEVICE. WATER PUMPED OUT OF THE EXCAVATED AREAS CONTAINS SEDIMENTS THAT MUST BE REMOVED PRIOR TO DISCHARGING TO RECEIVING BODIES OF WATER USING REMOVABLE PUMPING STATIONS, SUMP PITS, PORTABLE SEDIMENTATION TANKS AND/OR SILT CONTROL BAGS.
21. WHERE CONCRETE EQUIPMENT WASHING IS REQUIRED, THIS MUST BE DONE IN AN APPROVED "CONCRETE CONTAINMENT AREA". CONTRACTOR SHALL NOT DISCHARGE ANY CONCRETE WASHOUT WATER INTO SEWERS, SURFACE WATER BODIES OR ONTO THE GROUND. ALL WASHOUT WATER MUST BE REMOVED FROM THE SITE(S) DAILY.
22. SEEDING DATES: THE FOLLOWING SEEDING DATES ARE BEST RECOMMENDED TO ESTABLISH PERMANENT VEGETATIVE COVER WITHIN MOST LOCATIONS IN THE WESTCHESTER COUNTY SOIL AND WATER CONSERVATION DISTRICT: **SPRING - 3/1-6/1 AND FALL - 9/1 - 10/15**
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION, PERMITTING, AND OPERATION OF A DEWATERING SYSTEM AS REQUIRED FOR THE COMPLETION OF THE WORK. PROCEDURES FOR DEWATERING INCLUDING ASSOCIATED EROSION AND SEDIMENT CONTROL PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO ANY EARTHWORK OPERATIONS. ALL WATER REMOVED BY DEWATERING OPERATIONS SHALL BE DISPOSED OF IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS SPECIFIED BY THE NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (NOVEMBER 2016). CONTRACTOR MAY USE PORTABLE SETTLING TANK, SEDIMENT FILTER BAG, OR OTHER APPROVED METHOD TO SETTLE DEWATERING FLOW OF SEDIMENT BEFORE DISCHARGE.
24. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE, PERMANENT VEGETATION IS ESTABLISHED ON ALL DISTURBED AREAS, AND LOCAL AUTHORITIES HAVE GIVEN PERMISSION FOR REMOVAL. ONCE FINAL STABILIZATION IS COMPLETE, REMOVE EROSION AND SEDIMENT CONTROL MEASURES AND PERFORM FINAL SITE RESTORATION.
25. IF INSPECTIONS BY THE ENGINEER OR THE TOWN/VILLAGE OF HARRISON'S DPW INSPECTOR OR ENGINEER FIND FAILURE(S) BY THE CONTRACTOR TO COMPLY, THE ENTIRE PROJECT WILL BE STOPPED WITH NO COMPENSATION TO THE CONTRACTOR UNTIL ALL FINDINGS HAVE BEEN IDENTIFIED, ADDRESSED AND COMPLETED BY THE CONTRACTOR.
26. IF DIRECTED, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER WEEKLY COPIES OF A REPORT FOR HIS INSPECTION, FINDINGS AND ACTIONS TAKEN.
27. THE CONTRACTOR SHALL MAINTAIN ALL TEMPORARY AND PERMANENT STORMWATER MANAGEMENT PRACTICES DURING CONSTRUCTION UNTIL FINAL STABILIZATION AND ACCEPTANCE BY THE OWNER. WJWW SHALL MAINTAIN PERMANENT STORMWATER MANAGEMENT PRACTICES UPON COMPLETION OF CONSTRUCTION. SEE SWPPP FOR APPLICABLE CONTACT INFORMATION.

SITE RESTORATION REQUIREMENTS			
TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT		COMMENTS / EXAMPLES
NO SOIL DISTURBANCE	RESTORATION NOT PERMITTED		PRESERVATION OF NATURAL FEATURES
MINIMAL SOIL DISTURBANCE	RESTORATION NOT PERMITTED		CLEARING AND GRUBBING
AREAS WHERE TOPSOIL IS STRIPPED ONLY - NO CHANGE IN GRADE	HSG A & B	HSG C & D	PROTECT AREA FROM ANY ONGOING CONSTRUCTION ACTIVITIES
	APPLY 6 INCHES OF TOPSOIL	AERATE* AND APPLY 6 INCHES OF TOPSOIL	
AREAS OF CUT OR FILL	HSG A & B	HSG C & D	
	AERATE* AND APPLY 6 INCHES OF TOPSOIL	APPLY FULL SOIL RESTORATION**	
HEAVY TRAFFIC AREAS ON SITE (ESPECIALLY IN ZONE 5-25 FEET AROUND BUILDINGS BUT NOT WITHIN 5 FOOT PERIMETER AROUND FOUNDATION WALLS	APPLY FULL SOIL RESTORATION (DECOMPACTION AND COMPOST ENHANCEMENT)		
AREAS WHERE RUNOFF REDUCTION AND/OR INFILTRATION PRACTICES ARE APPLIED	RESTORATION NOT REQUIRED, BY MAY BE APPLIED TO ENHANCE THE REDUCTION SPECIFIED FOR APPROPRIATE PRACTICES		KEEP CONSTRUCTION EQUIPMENT FROM CROSSING THESE AREAS. TO PROTECT NEWLY INSTALLED PRACTICE FROM ANY ONGOING CONSTRUCTION ACTIVITIES CONSTRUCT A SINGLE PHASE OPERATION FENCE AREA
REDEVELOPMENT PROJECTS	SOIL RESTORATION IS REQUIRED ON REDEVELOPMENT PROJECTS IN AREAS WHERE EXISTING IMPERVIOUS AREA WILL BE CONVERTED TO PERVIOUS AREA		

* AERATION INCLUDES THE USE OF MACHINES SUCH AS TRACTOR-DRAWN IMPLEMENTS WITH COULTERS MAKING A NARROW SLIT IN THE SOIL, A ROLLER WITH MANY SPIKES MAKING INDENTATIONS IN THE SOIL, OR PRONGS WHICH FUNCTION LIKE A MINI-SUBSOILER.

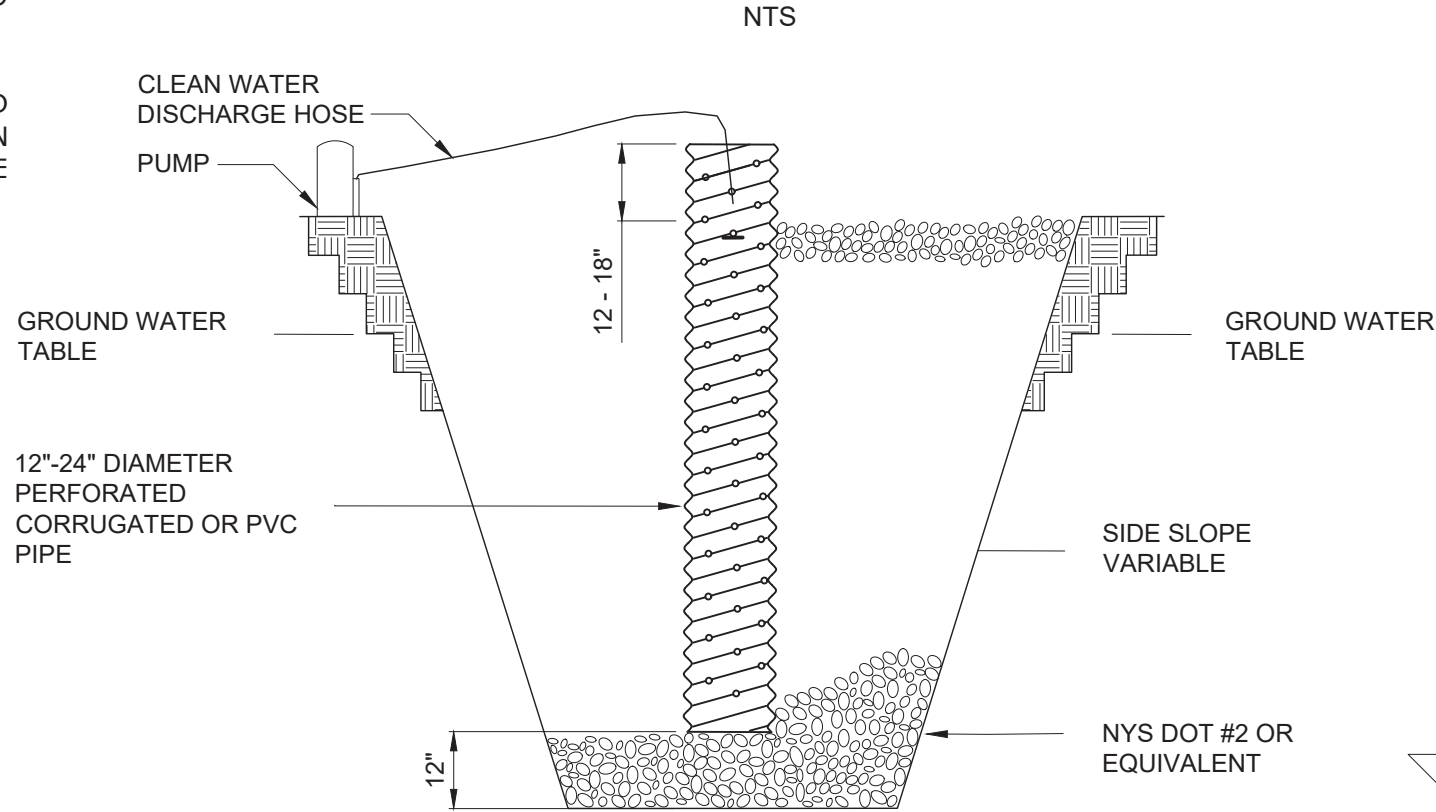
** PER "DEEP RIPPING AND DE-COMPACTION, DEC 2008".



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

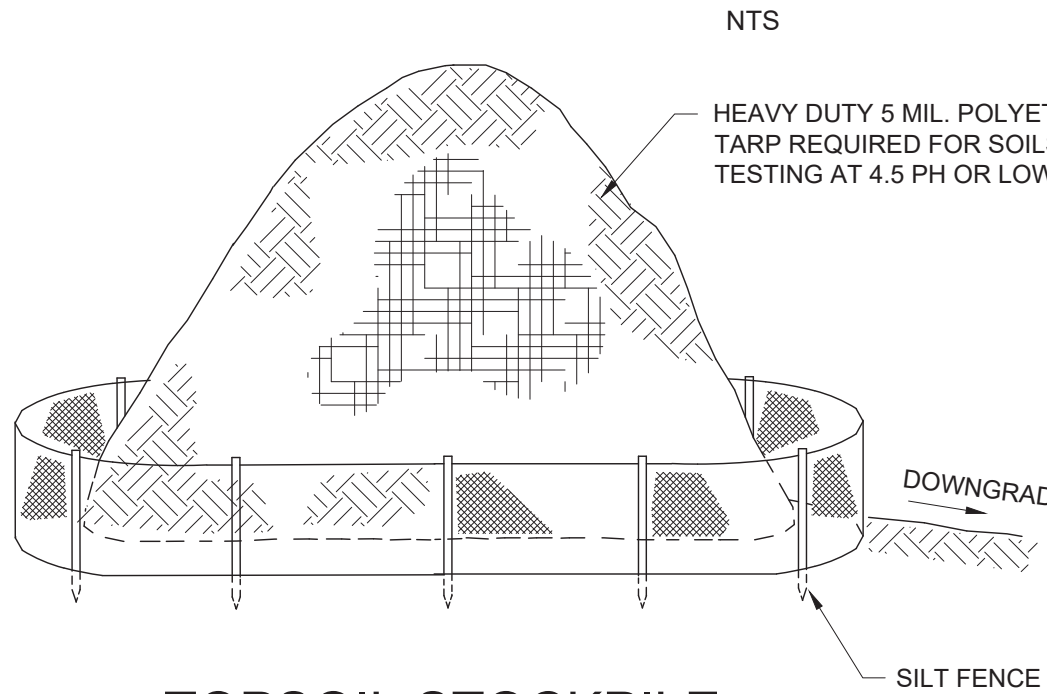
STABILIZED CONSTRUCTION ACCESS



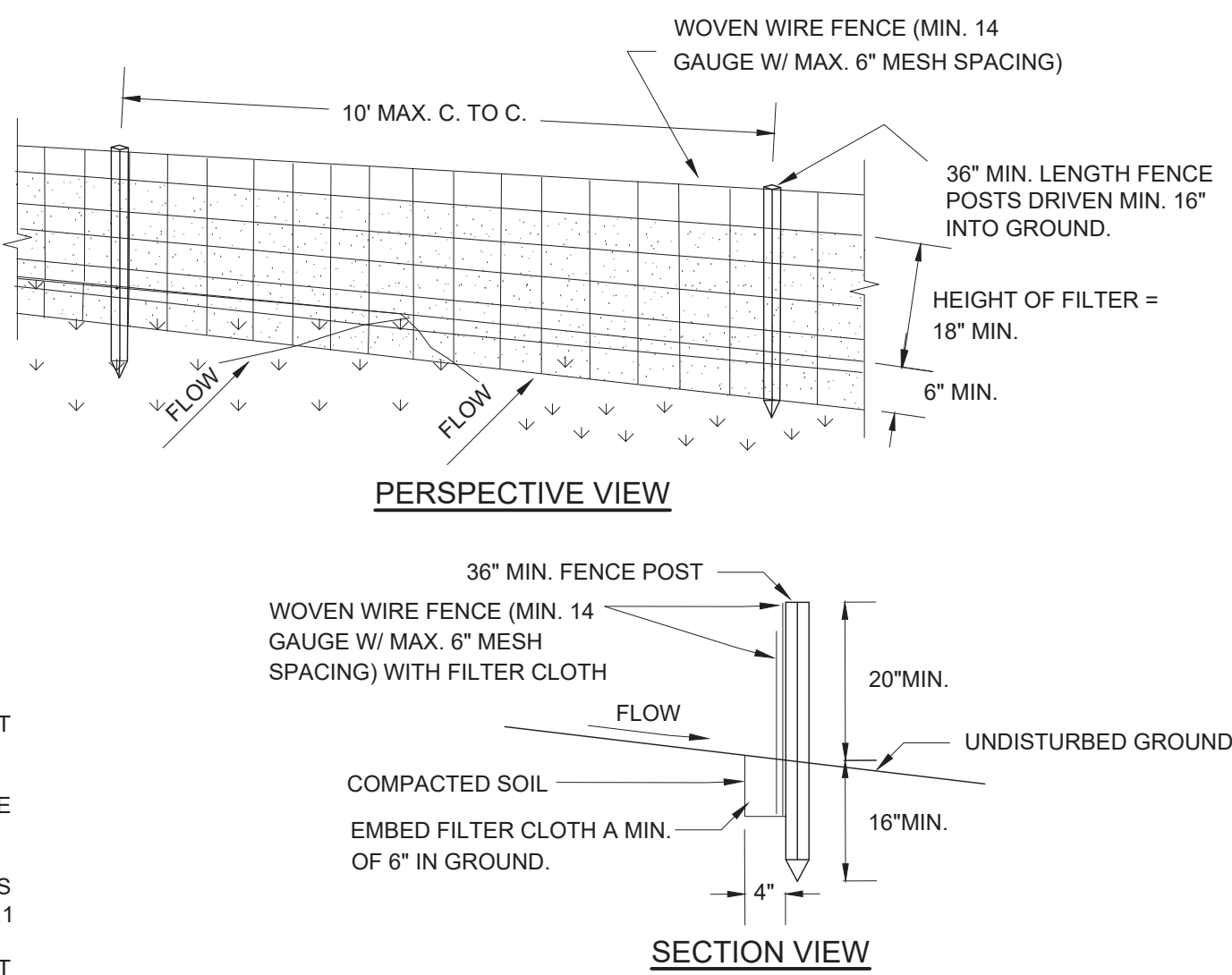
CONSTRUCTION SPECIFICATIONS

1. PIT DIMENSIONS ARE VARIABLE.
2. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 12-24" DIAMETER CORRUGATED OR PVC PIPE.
3. A BASE OF NYS DOT #2 OR EQUIVALENT AGGREGATE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD BE BACKFILLED WITH NYS DOT #2 OR EQUIVALENT AGGREGATE.
4. THE STANDPIPE SHOULD EXTEND 12-18" ABOVE THE LIP OF THE PIT.
5. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE SHOULD BE WRAPPED WITH FILTERCLOTH BEFORE INSTALLATION. IT IS RECOMMENDED THAT 1/4"-1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE, PRIOR TO ATTACHING THE FILTERCLOTH.

DEWATERING SUMP PIT



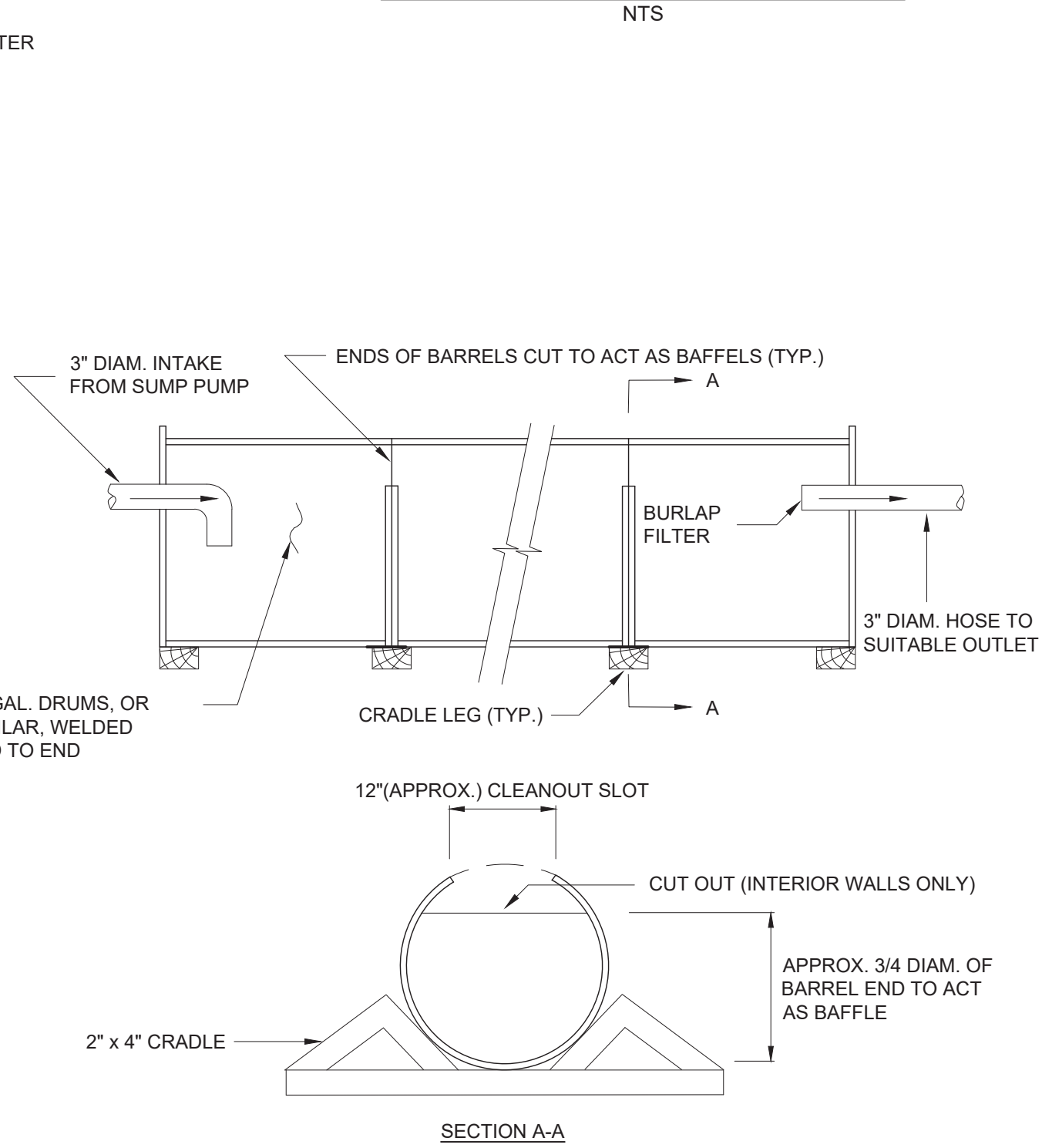
TOPSOIL STOCKPILE



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

REINFORCED SILT FENCE



CONSTRUCTION SPECIFICATIONS

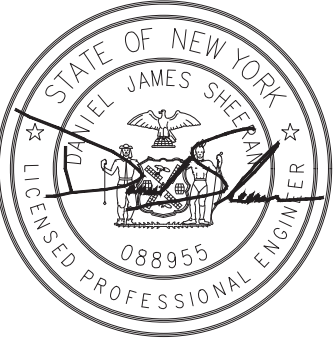
1. CLEAN OUT THE SEDIMENT TANK WHEN ONE THIRD (1/3) FILLED WITH SILT.
2. STEEL DRUMS ARE USED AS AN EXAMPLE DUE TO THEIR READY AVAILABILITY. ANY TANKS MAY BE USED, PROVIDING THAT THE VOLUME REQUIREMENTS ARE MET.
3. ALL SEDIMENT COLLECTED IN THE TANK SHALL BE DISPOSED OF IN A SEDIMENT TRAPPING DEVICE OR AS APPROVED BY THE INSPECTOR.

PORTABLE SEDIMENT TANK

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

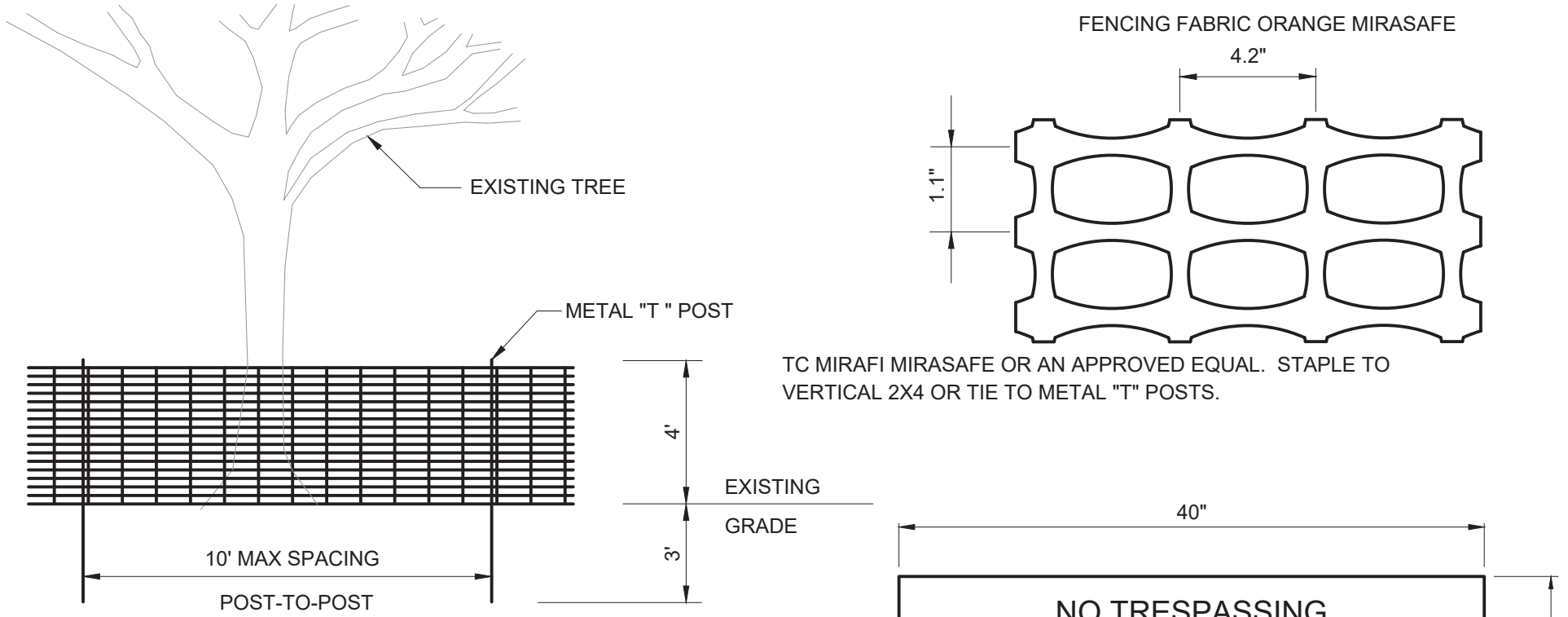
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
EROSION AND SEDIMENT CONTROL NOTES

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-301

File: C:\USERS\JTANNER\DRAWINGS\Hazen\RYE_LAKE_FILTERATION\PROJECT FILES\PROJECT\WISCIVILC-302 Saved by: JTANNER Save date: 2/10/2025 10:24 AM
PLOT DATE: 3/27/2025 12:05 AM BY: JTANNER

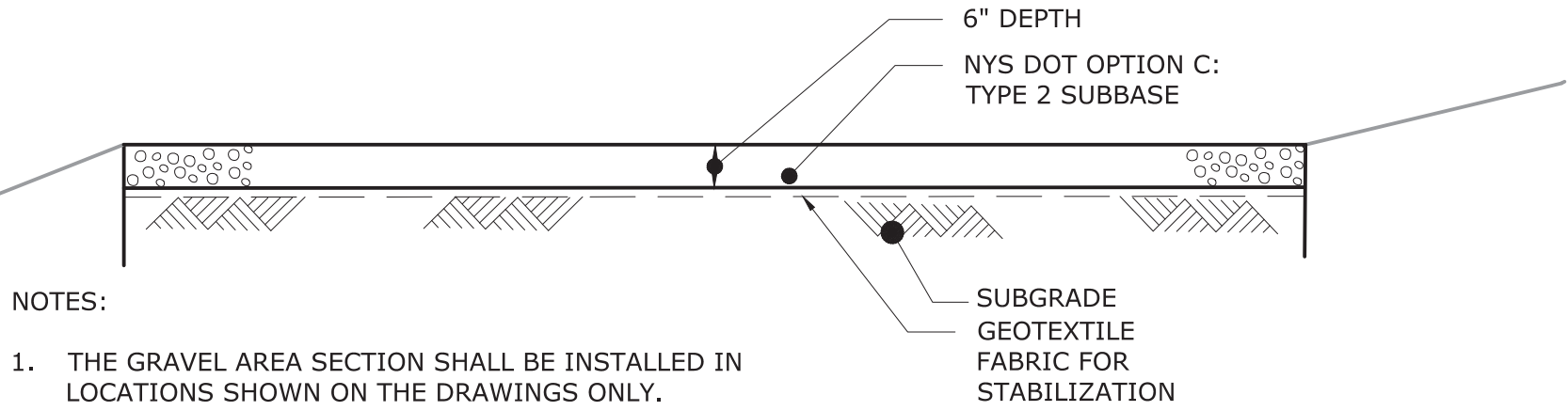
EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE					
MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS		
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	---	INSPECT	INSPECT	CLEAN / REPLACE	REMOVE
STABILIZED CONSTRUCTION ACCESS	INSPECT	---	INSPECT	CLEAN / REPLACE STONE AND FABRIC	REMOVE
DUST CONTROL	INSPECT	---	INSPECT	MULCHING / SPRAYING WATER	N/A
VEGETATIVE ESTABLISHMENT	---	INSPECT	INSPECT	WATER / RESEED / REPLACE	RESEED TO 80% COVERAGE
INLET PROTECTION	---	INSPECT	INSPECT	CLEAN / REPAIR / REPLACE	REMOVE
SOIL STOCKPILES	---	INSPECT	INSPECT	MULCHING / SILT FENCE REPAIR	REMOVE
CONCRETE DRAINAGE STRUCTURES	---	INSPECT	INSPECT	CLEAN SUMPS / REMOVE DEBRIS / REPAIR / REPLACE	CLEAN SUMPS / REMOVE DEBRIS / REPAIR / REPLACE
DRAINAGE PIPES	---	INSPECT	INSPECT	CLEAN / REPAIR	CLEAN / REPAIR
ROAD AND PAVEMENT	---	INSPECT	INSPECT	CLEAN	CLEAN
DEWATERING SUMP PIT	INSPECT	---	INSPECT	CLEAN / REPAIR / REPLACE	REMOVE
PORTABLE SEDIMENT TANK	INSPECT	---	INSPECT	CLEAN / REPAIR / REPLACE	REMOVE
GEOTEXTILE FILTER BAG	INSPECT	---	INSPECT	REPLACE AT 75% REDUCTION OF FLOW	REMOVE
EROSION CONTROL MATTING	---	INSPECT	INSPECT	RESTORE IF DAMAGED	BIODEGRADABLE
CONSTRUCTION ROAD STABILIZATION	---	INSPECT	INSPECT	TOP DRESS WITH GRAVEL	REMOVE
CONCRETE WASHOUT	INSPECT	---	INSPECT	REPAIR / REPLACE	REMOVE
TREE PROTECTION	---	INSPECT	INSPECT	REPAIR / REPLACE	REMOVE
CONSTRUCTION DITCH	---	INSPECT	INSPECT	REMOVE SEDIMENT / REGRADE	REMOVE
SKIMMER	---	INSPECT	INSPECT	REPAIR / REPLACE	REMOVE
SEDIMENT BASIN	INSPECT	---	INSPECT	REMOVE SEDIMENT / REGRADE	CONVERTED TO SMP
SEDIMENT BASIN BAFFLE	INSPECT	---	INSPECT	REPAIR / REPLACE	REMOVE
RIP RAP OUTLET PROTECTION	---	INSPECT	INSPECT	REPAIR / REPLACE	CLEAN / REPAIR / REMOVE DEBRIS



- NOTES:
1. PLACE CONTINUOUS RUN OF FENCE MATERIAL ON BOTH SIDES OF IMMEDIATE WORK ZONE IN WOODED AREAS AS SHOWN ON THE PLANS. DO NOT ATTACH FENCE MATERIAL TO TREES.
 2. TREE PROTECTION FENCING FABRIC TO BE PLACED AT THE DRIP LINE OF THE TREES THAT ARE TO BE PROTECTED.
 3. "MIRASAFE" HIGH STRENGTH POLYMER GEOGRID FABRIC BY MIRAFI CONSTRUCTION PRODUCTS, PENDERGRASS, GEORGIA. FENCE MATERIAL TO BE WARNING AND BARRIER FENCE AS PER SPECIFICATION 31 10 00.
 4. ONE SIGN PER 300' OF TREE PROTECTION FENCING SHALL READ, AS SHOWN TO THE RIGHT.

TREE PROTECTION BARRIER FENCE

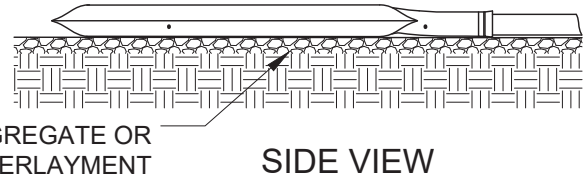
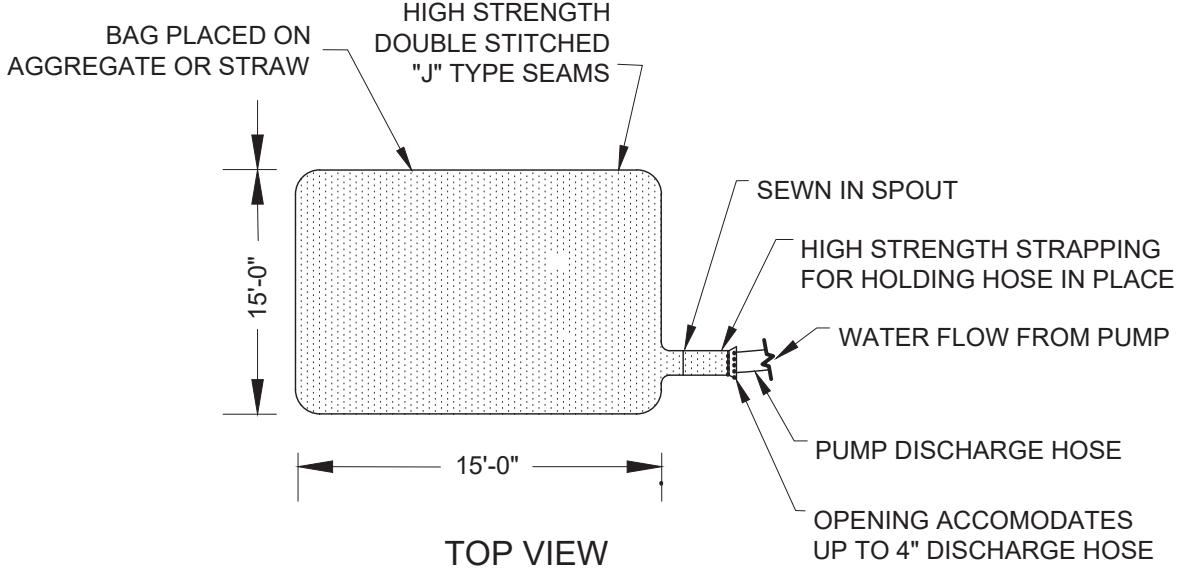
NTS



- NOTES:
1. THE GRAVEL AREA SECTION SHALL BE INSTALLED IN LOCATIONS SHOWN ON THE DRAWINGS ONLY.

CONSTRUCTION ROAD STABILIZATION

NTS



NOTES:

1. SILT CONTROL SYSTEM TO BE USED IN CONJUNCTION WITH PUMP AROUND IF DEEMED NECESSARY BY SEDIMENT CONTROL INSPECTOR TO TREAT ANY SEDIMENT-LADEN WATER WITHIN THE DRY WORK AREA.
2. GEOTEXTILE FILTER BAG SHALL BE PLACED AT LEAST 50 FT FROM ALL WETLANDS, STREAMS, OR OTHER SURFACE WATERS.

DEWATERING/FILTER BAG MATERIALS SPECIFICATIONS:

THE DEWATERING/FILTER BAG SHALL BE MADE OF NON-WOVEN GEOTEXTILE WITH A MINIMUM SURFACE AREA OF 225 SQUARE FEET PER SIDE. ALL STRUCTURAL SEAMS SHALL BE SEWN WITH A DOUBLE STITCH USING A DOUBLE NEEDLE MACHINE WITH HIGH STRENGTH THREAD. THE SEAM STRENGTH SHALL WITHSTAND 100LB/IN USING ASTM D-4884 TEST METHOD. THE DEWATERING/FILTER BAG SHALL HAVE A NOZZLE LARGE ENOUGH TO ACCOMMODATE A FOUR INCH DISCHARGE HOSE. THE NOZZLE SHALL BE SEALED TIGHTLY AROUND THE DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE TO PREVENT UNTREATED WATER FROM ESCAPING. THE GEOTEXTILE FABRIC SHALL BE A NON-WOVEN FABRIC WITH THE FOLLOWING PROPERTIES:

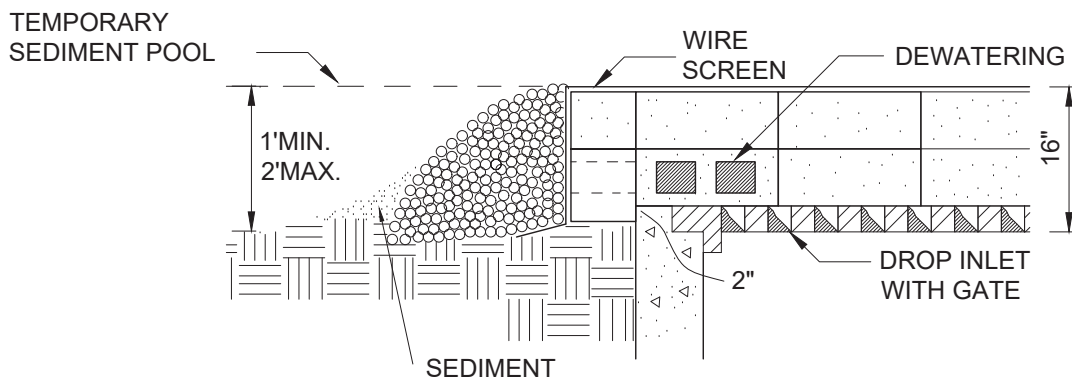
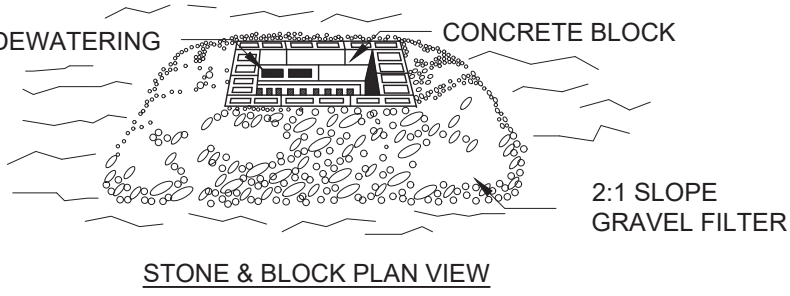
WEIGHT	ASTM D-3776	10 OZ/YD
GRAB TENSILE	ASTM D-4632	270 LBS
PUNCTURE	ASTM D-4833	150 LBS
FLOW RATE	ASTM D-4491	70 GAL/MIN/SQ FT
PERMITIVITY	ASTM D-4991	1/1.3 SEC
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	100

CONSTRUCTION:

THE DEWATERING/FILTER BAG SHALL BE INSTALLED OVER A 3 INCH GRAVEL BASE OR A STRAW BALE BASE TO PROMOTE INFILTRATION AND DEWATERING OF THE FILTER BAG.

GEOTEXTILE FILTER BAG

NTS



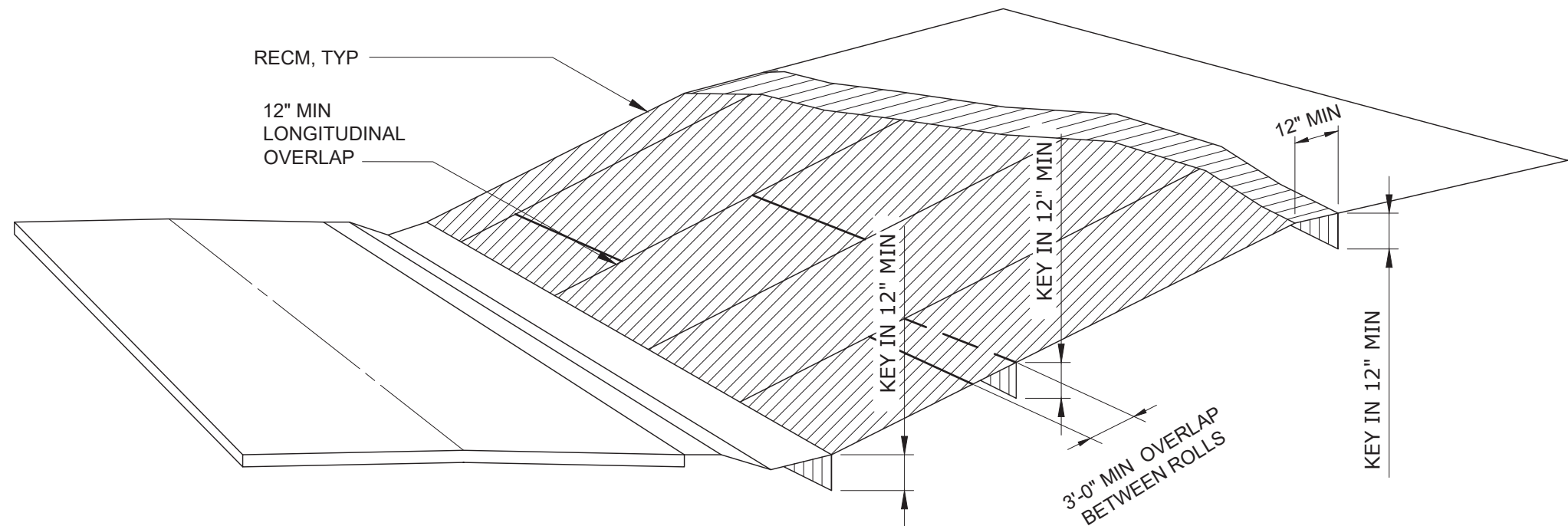
STONE & BLOCK DETAIL

CONSTRUCTION SPECIFICATIONS

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. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.
5. MAXIMUM DRAINAGE AREA 1 ACRE.
6. INSERTS SHALL PROVIDE A MINIMUM OF 50-PERCENT OF THE OPENING, UNOBSTRUCTED DESIGN FLOW AREA OF THE STORM DRAIN INLET OPENING.

STONE & BLOCK DROP INLET PROTECTION

NTS

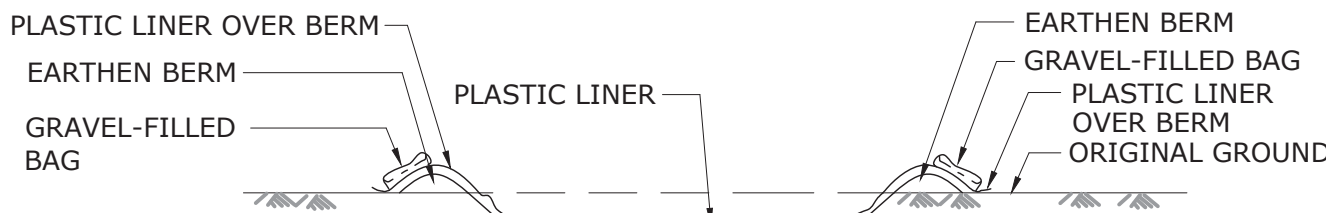


CONSTRUCTION SPECIFICATIONS:

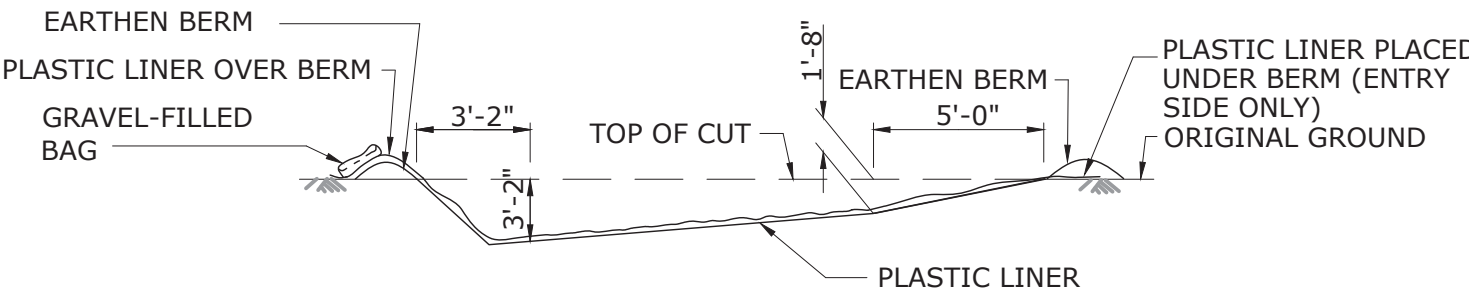
1. BEGIN AT TOP OF SLOPE AND ANCHOR FIBER MATTING IN A 12 INCH DEEP INITIAL ANCHOR TRENCH. BACKFILL TRENCH AND TAMP EARTH FIRMLY.
2. UNROLL FIBER MATTING DOWNSLOPE IN THE DIRECTION OF WATER FLOW.
3. OVERLAP EDGES OF ADJACENT PARALLEL ROLLS A MINIMUM 12 INCHES AND ANCHOR AT 12 INCHES O.C.
4. WHEN FIBER MAT MUST BE SPLICED, PLACE END OVER END (SHINGLE STYLE) WITH 12 INCH OVERLAP AND ANCHOR USING TWO STAGGERED ROWS OF STAKES AT 6 INCHES O.C.
5. LAY FIBER MAT LOOSELY AND ANCHOR SUFFICIENTLY TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
6. FOR SLOPES 2:1 AND STEEPER, USE A MINIMUM 3 STAKES PER SQUARE YARD AND FOR SLOPES FLATTER THAN 2:1, USE A MINIMUM OF 2 STAKES PER SQUARE YARD.
7. ANCHOR, FILL, AND COMPACT END OF FIBER MATTING IN A 12X6 INCH TERMINAL ANCHOR TRENCH (MIRROR IMAGE OF EXISTING TRENCH).
8. MATTING MATERIALS SHALL BE BIODEGRADABLE AND 100% PLASTIC FREE.

EROSION CONTROL MATTING

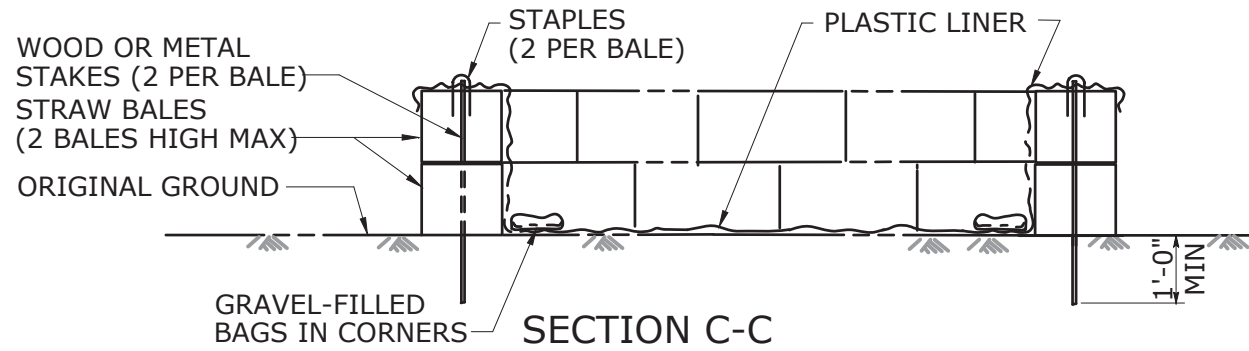
NTS



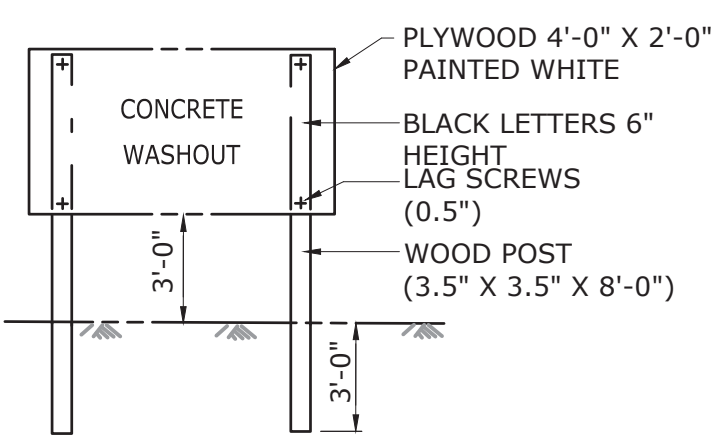
SECTION A-A



SECTION B-B



SECTION C-C

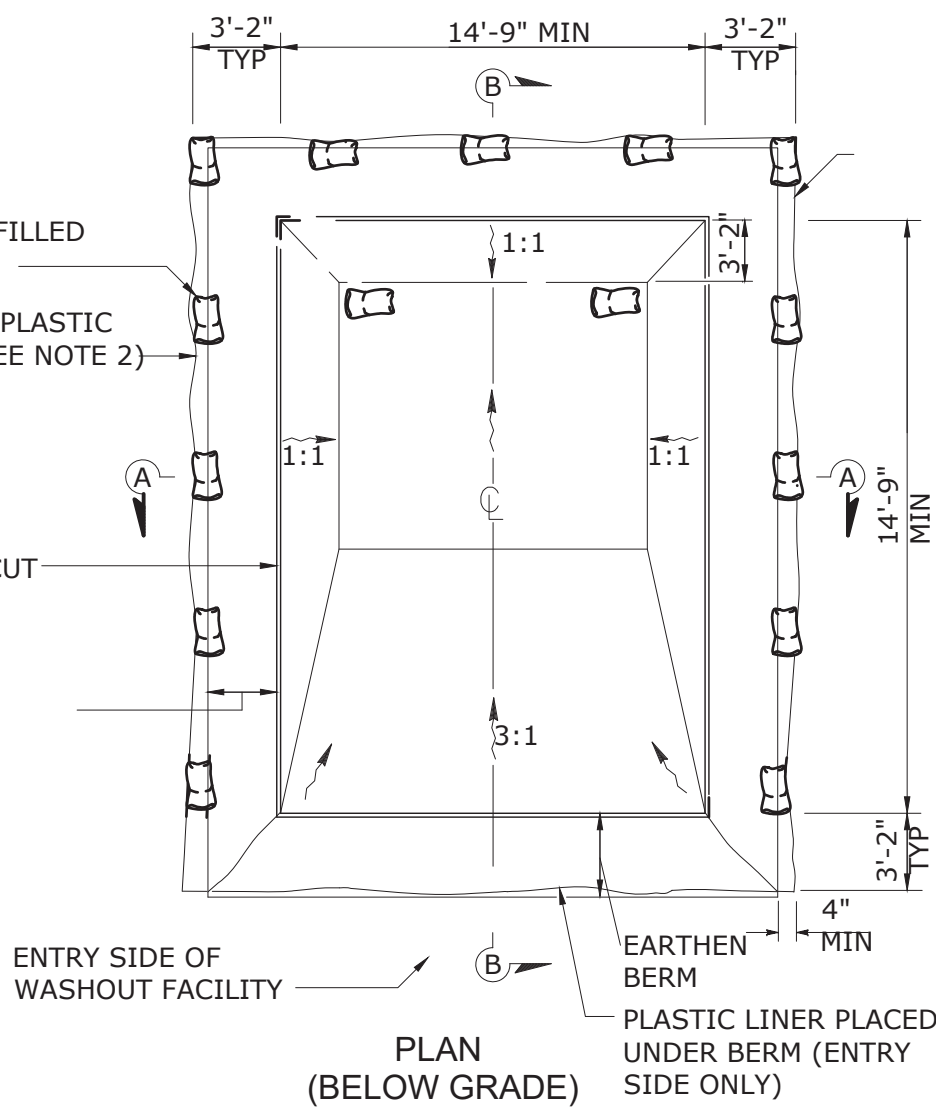


CONCRETE WASHOUT SIGN DETAIL

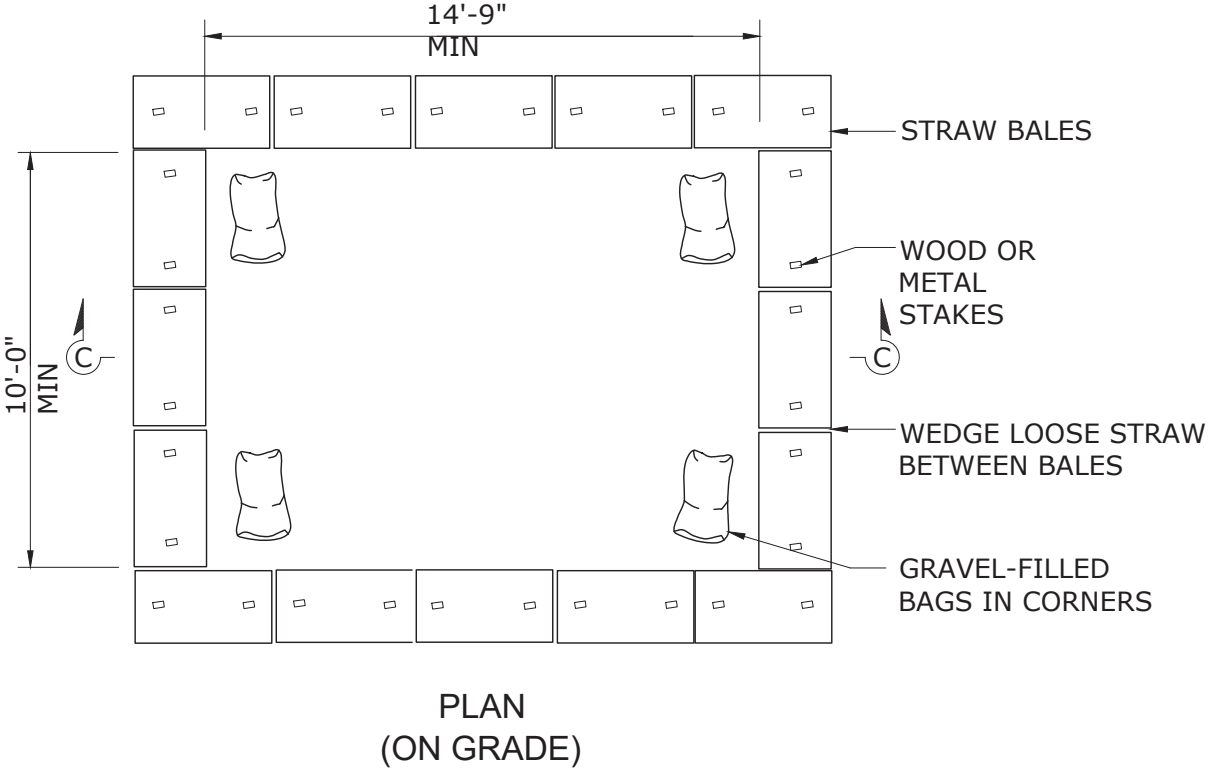
- NOTES:
1. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 32'-10" OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
 2. PLASTIC LINER SHALL HAVE A MINIMUM THICKNESS OF 10MIL AND SHALL BE ANCHORED WITH GRAVEL-FILLED BAGS FOR BELOW GRADE CONCRETE WASHOUT FACILITY.
 3. CONCRETE WASHOUT SHALL BE LOCATED A MINIMUM OF 100-FEET FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS, AND OTHER SURFACE WATERS

CONCRETE WASHOUT

NTS



PLAN (BELOW GRADE)

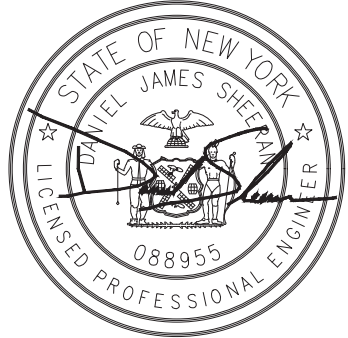


PLAN (ON GRADE)

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

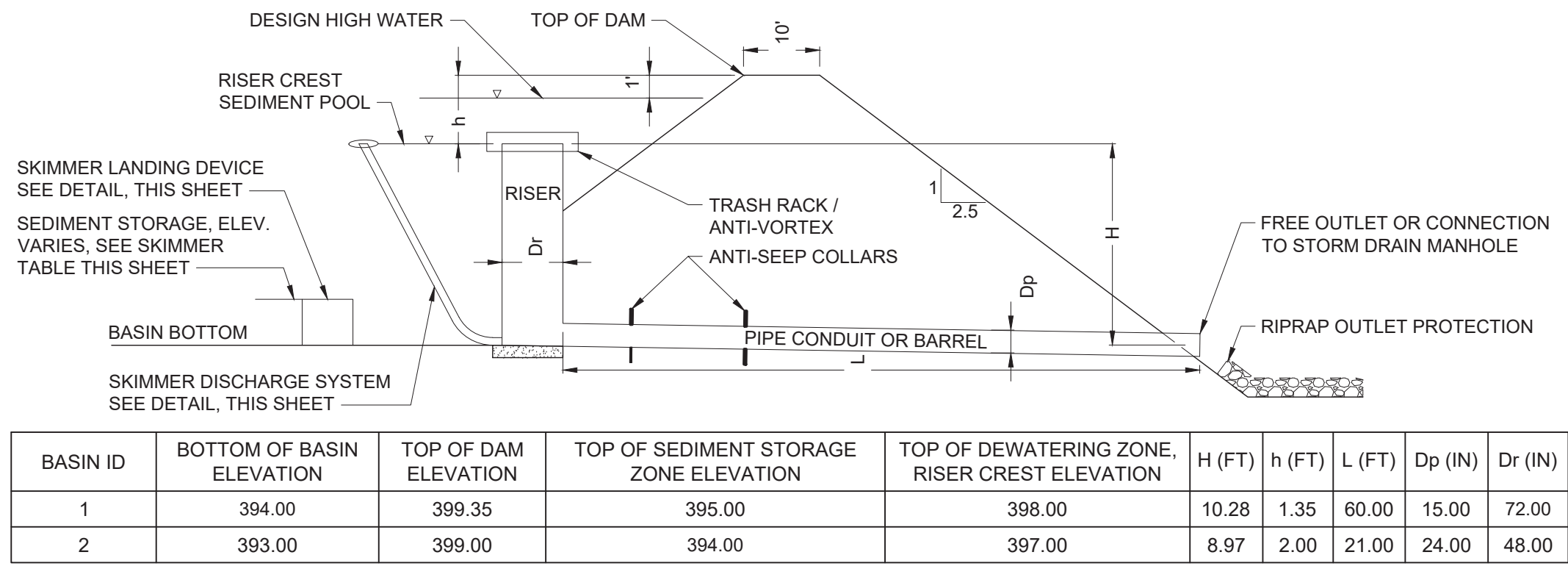
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
EROSION AND SEDIMENT CONTROL DETAILS

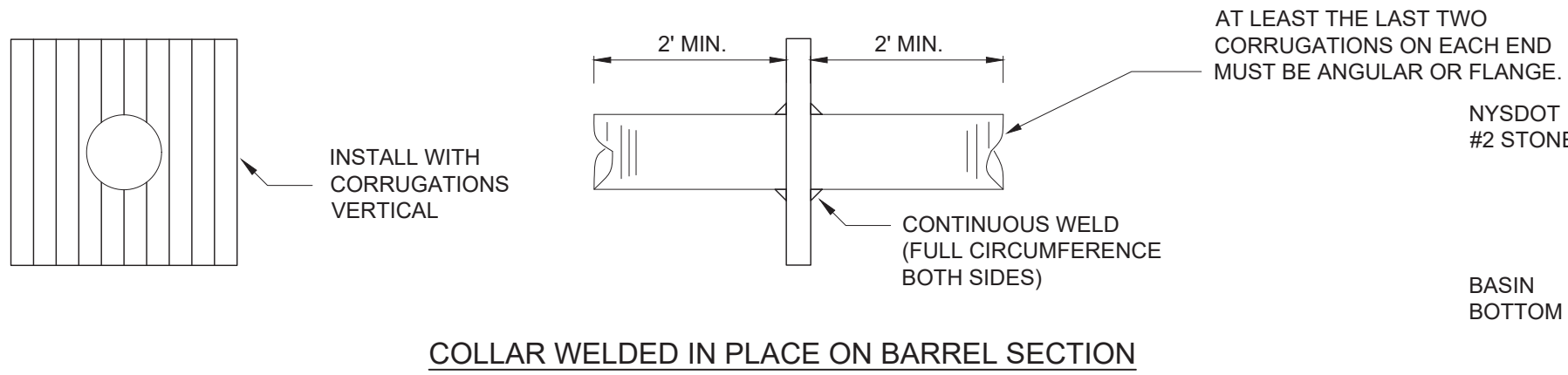
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-302

File: C:\USERSTANNER\PROJECT FILES\PROJECT\WSEC\WILC-303 Saved by: JTANNER Save date: 2/10/2025 10:23 AM
PLOT DATE: 3/27/2025 12:05 AM BY: JTANNER

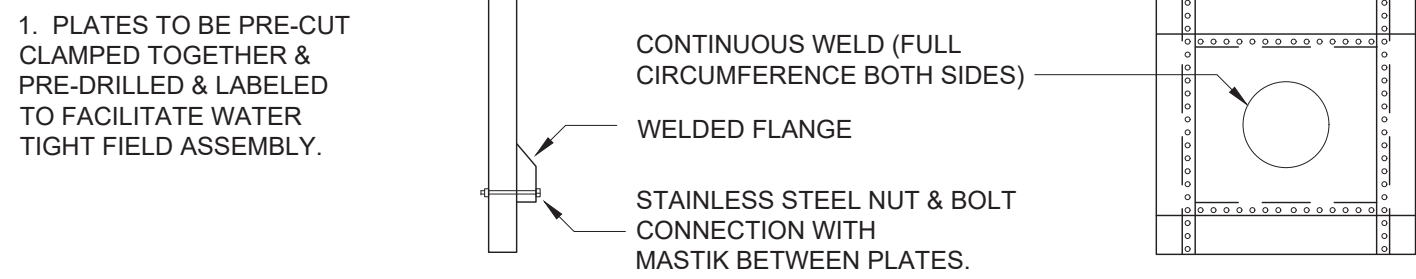


SEDIMENT BASIN PIPE SPILLWAY

NTS



COLLAR WELDED IN PLACE ON BARREL SECTION



MULTI-PIECE COLLAR FOR LARGE PIPES

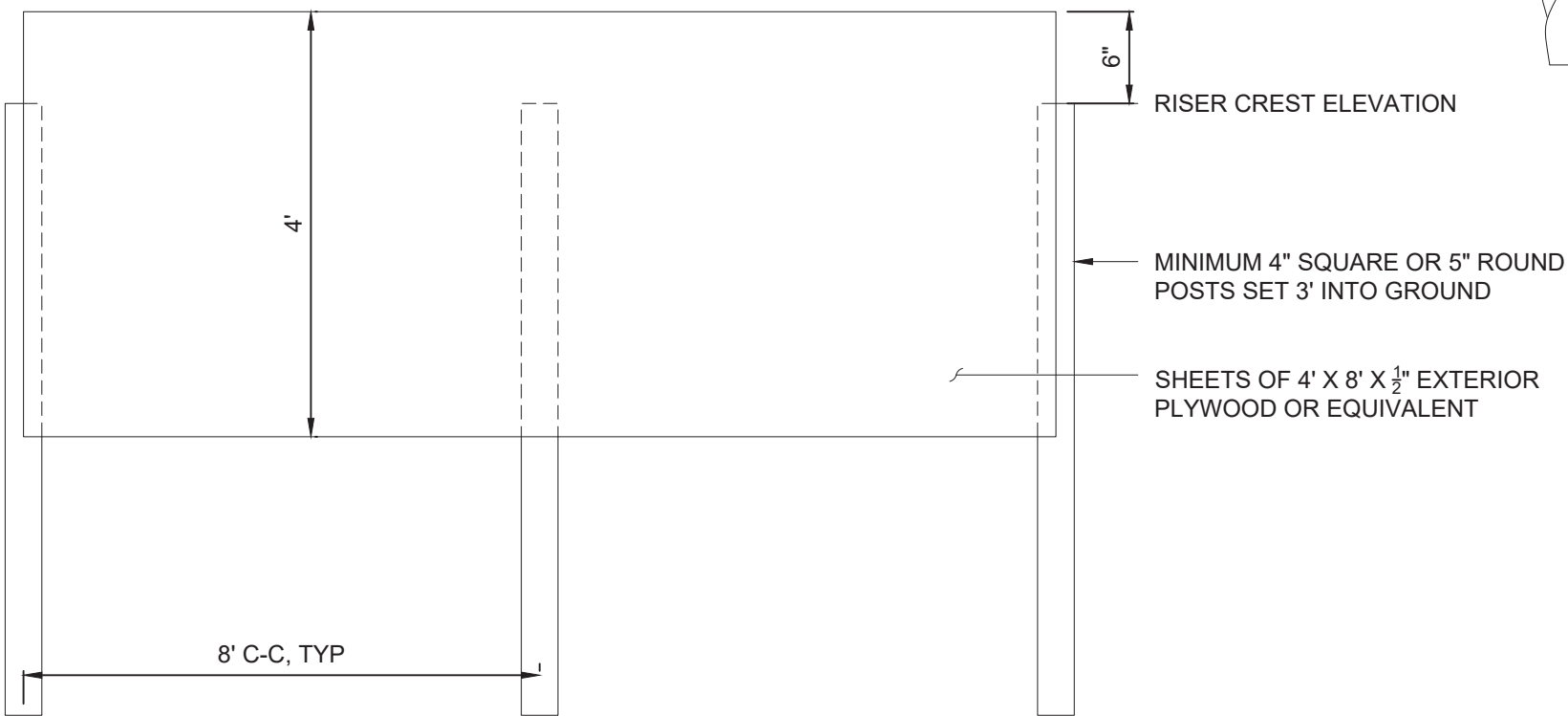


COLLAR FOR FLANGE JOINT PIPE

BASIN ID	# OF COLLARS	COLLAR SIZE (FT x FT)	COLLAR PROJECTION (FT)
1	4.00	3.33 x 3.33	1.10
2	4.00	3.33 x 3.33	1.10

ANTI SEEP COLLAR

NTS



SEDIMENT BASIN BAFFLE

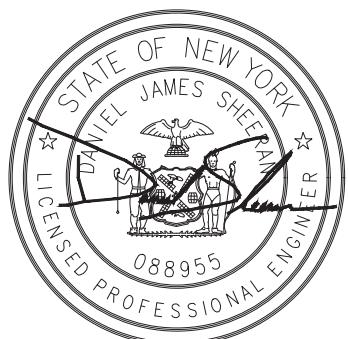
NTS

IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

BID SET



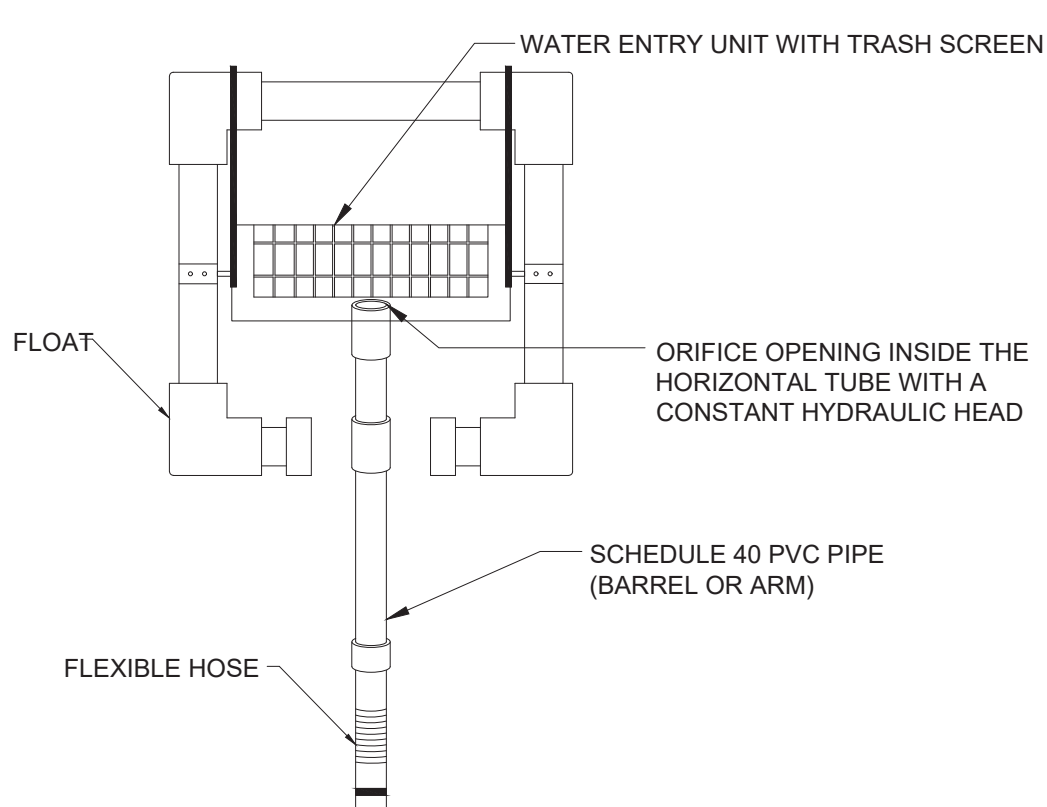
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

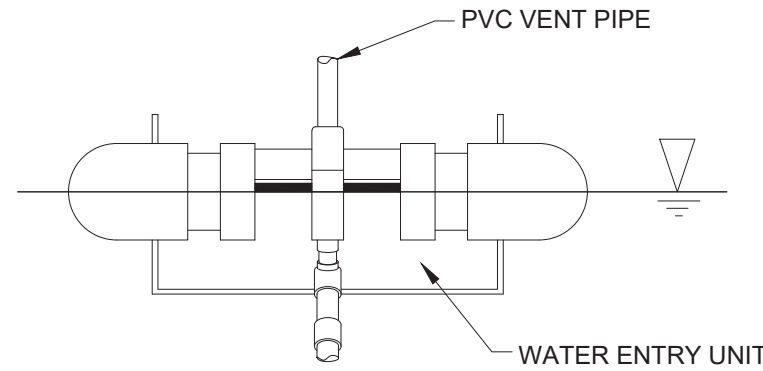
RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
EROSION AND SEDIMENT CONTROL DETAILS

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-303



SKIMMER PLAN VIEW



SKIMMER PROFILE VIEW

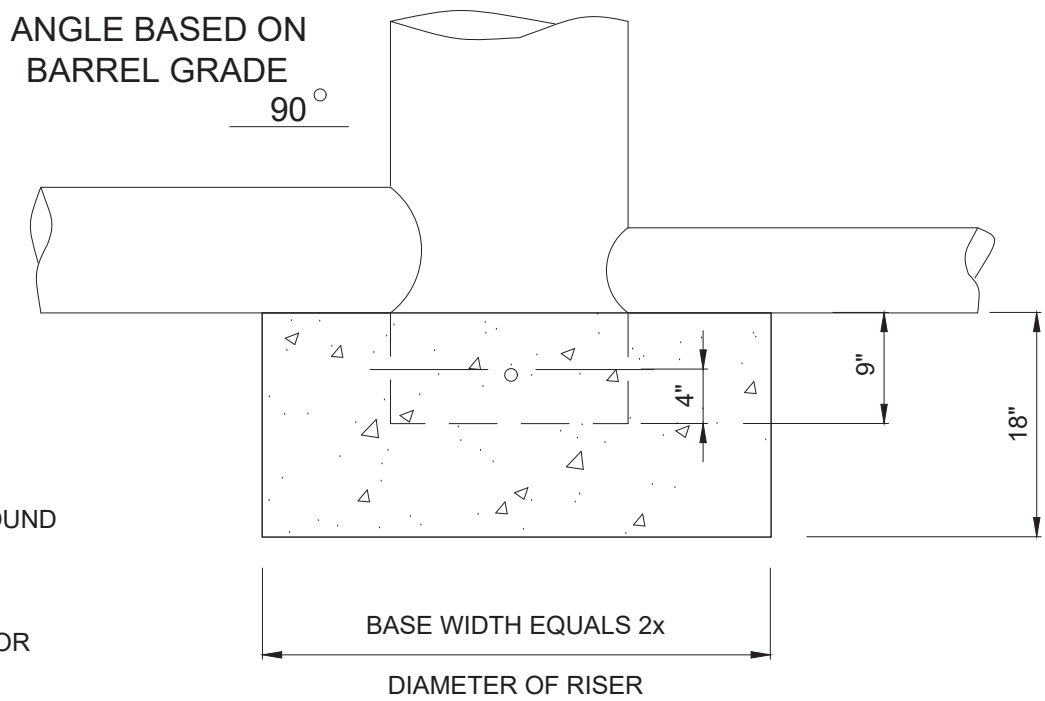
CONSTRUCTION NOTES

- PIPE FLotation SECTION SHALL BE SOLVENT WELDED TO ENSURE AN AIRTIGHT ASSEMBLY. THE CONTRACTOR IS REQUIRED TO CONDUCT A TEST TO CHECK FOR LEAKS PRIOR TO INSTALLATION.
- SKIMMER SECTION SHALL HAVE 12 ROW OF 1/2" DIAMETER HOLES, 1 1/4" ON CENTER. IF ADDITIONAL FILTRATION IS NECESSARY, THE FILTERING MEDIA SHALL CONSIST OF A TYPE GD-II GEOTEXTILE FABRIC WRAPPED AROUND THE PERFORATED PORTION OF THE SKIMMER AND ATTACHED WITH PLASTIC SNAP TIES, BANDS, ETC.
- FLEXIBLE PIPE SHALL BE INSERTED INTO SOLID PIPE AND FASTENED WITH 2 #8 WOOD SCREWS.
- AT A MINIMUM, THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. IF VANDALISM IS A PROBLEM, MORE FREQUENT INSPECTION MAY BE NECESSARY.
- CONSTRUCTION OPERATION SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
- THE STRUCTURE SHALL ONLY BE REMOVED WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BASIN ID	WATER SURFACE ELEVATION	ARM LENGTH (FT)	ARM DIAMETER (IN)	ORIFICE SIZE (IN)	TOP OF LANDING DEVICE ELEVATION	FLEXIBLE HOSE LENGTH (IN)	FLEXIBLE HOSE ATTACHMENT ELEVATION
1	398.35	12.00	3.00	3.00	395.00	72.00	394.00
2	397	13.00	3.00	3.00	394.00	72.00	393.00

SKIMMER DISCHARGE SYSTEM

NTS

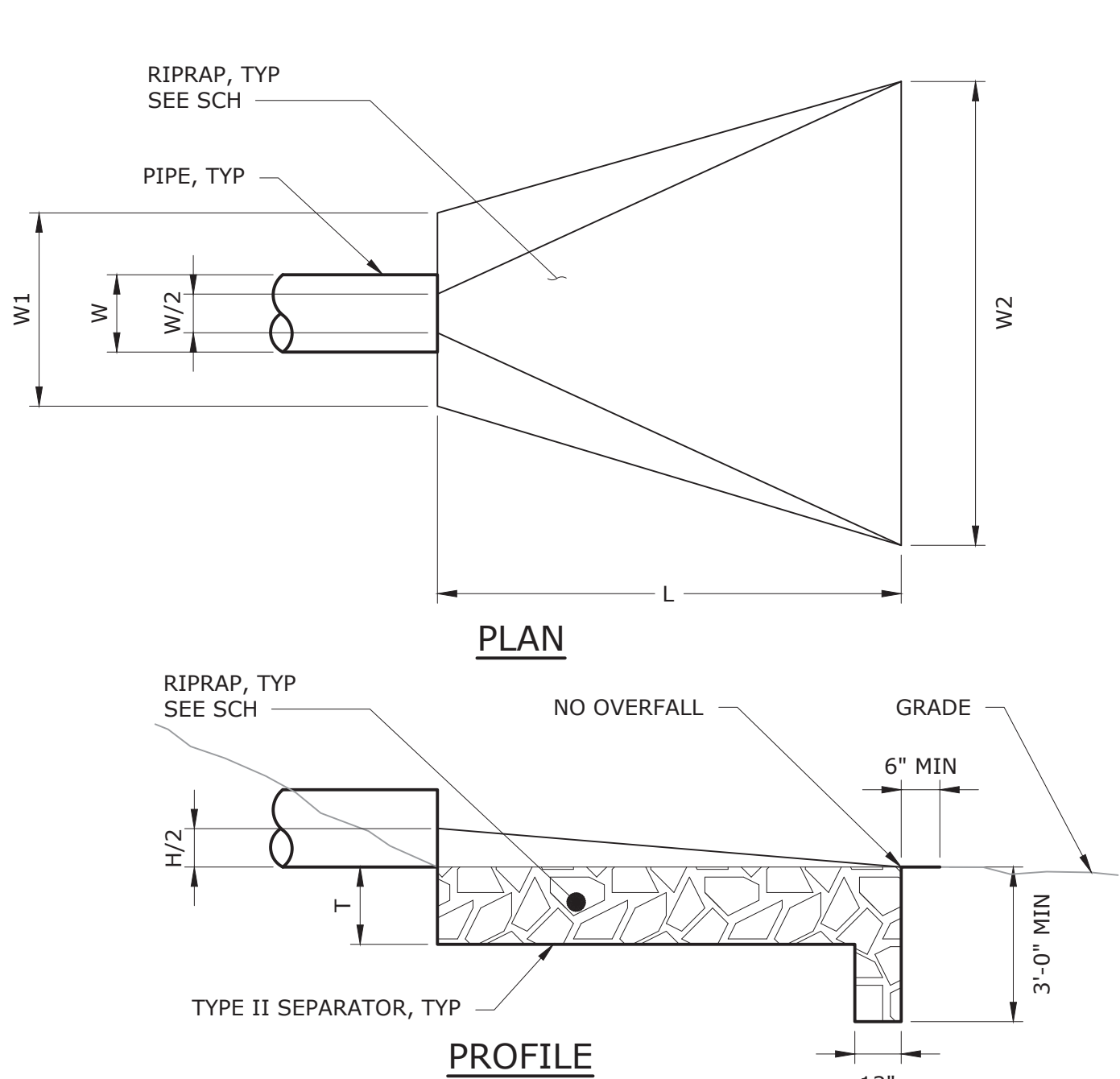


CONSTRUCTION NOTES

- THE CONCRETE BASE SHALL BE POURED IN SUCH A MANNER TO INSURE THAT THE CONCRETE FILLS THE BOTTOM OF THE RISER TO THE INVERT OF THE OUTLET PIPE TO PREVENT THE RISER FROM BREAKING AWAY FROM THE BASE.
- WITH ALUMINUM OR ALUMINIZED PIPE, THE EMBEDDED SECTION MUST BE PAINTED WITH CHROMATE OR EQUIVALENT.
- RISER BASE MAY BE SIZED AS COMPUTED USING FLotation WITH A FACTOR OF SAFETY OF 1.2.

RISER BASE SEDIMENT BASIN DETAIL

NTS

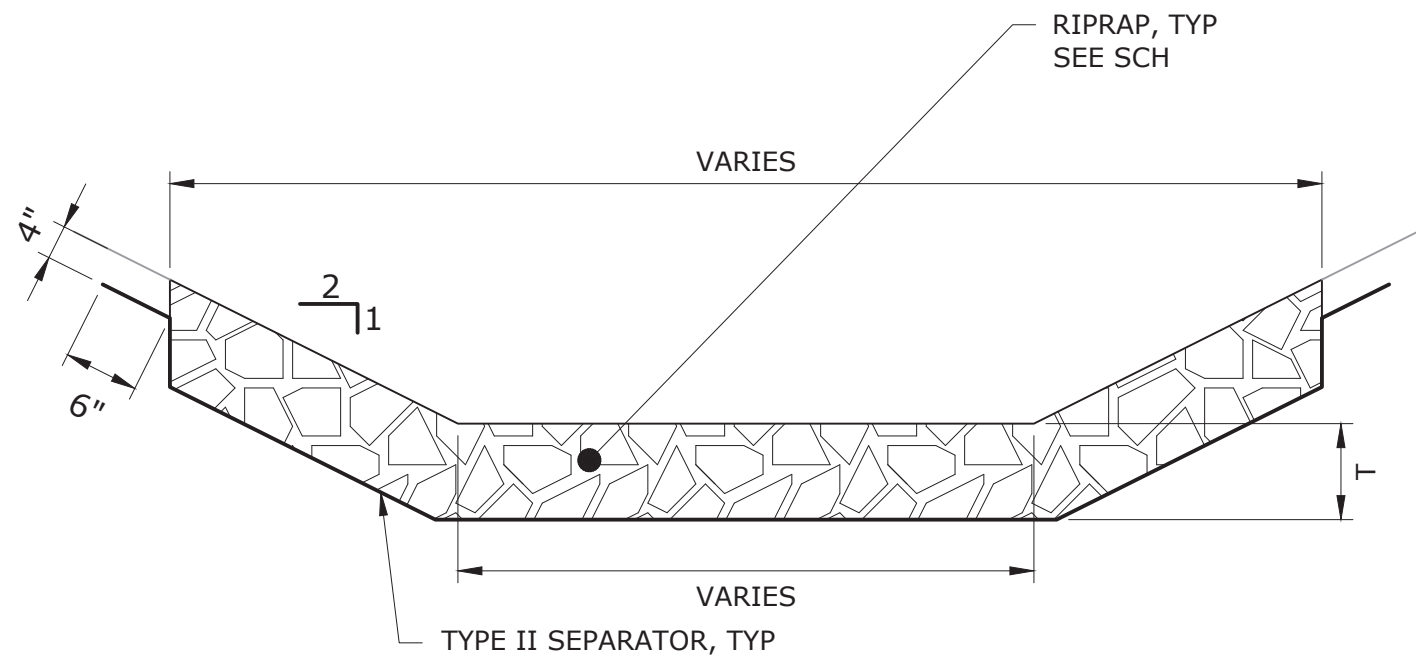


PLAN

PROFILE

RIPRAP OUTLET PROTECTION

NTS



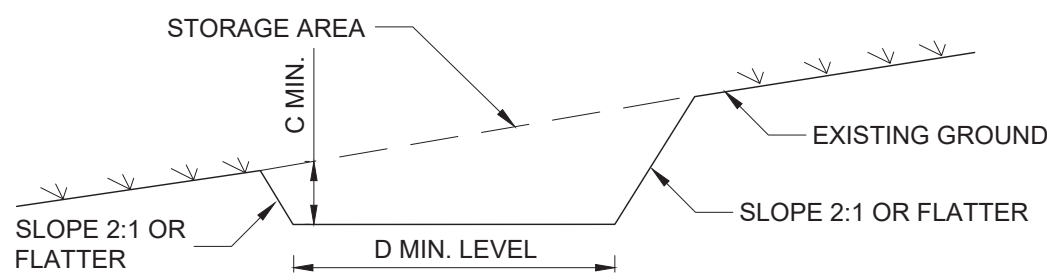
CROSS-SECTION

NOTES:

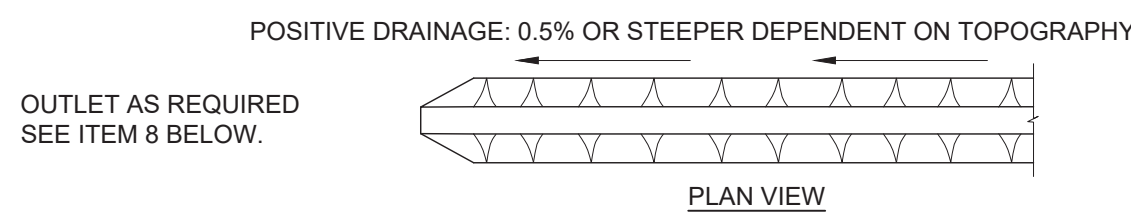
- DETAIL AND SCHEDULE PROVIDE MINIMUM DIMENSIONS. SEE CONTRACT DWGS FOR LOCATIONS, EXTENTS, AND SHAPE OF RIPRAP OUTLET PROTECTION.
- RIPRAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF ROCK SIZE SO THAT 50 PERCENT OF THE PIECES, BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE. WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED OF PRIMARILY LARGER ROCK SIZES, BUT WITH SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE SMALLER VOIDS BETWEEN THE ROCKS.

SCHEDULE OF DIMENSIONS

PIPE	H	W	W1	W2	L	T	D ₅₀	D _{MAX}
SD AND OF OUTFALL	SEE GRADING PLANS	20"	9"					
WETLAND SPILLWAY	2'	--	8'	26'	22'	20"	9"	14"
FOREBAY HEADWALL	SEE GRADING PLANS	20"	9"	14"				
GALLERY DRAIN	1.25'	--	9'	18.5'	17'	20"	9"	14"
CD-1	1'	--	12'	24'	20'	20"	9"	14"
CD-2	1'	--	12'	24'	20'	20"	9"	14"



CROSS SECTION



CONSTRUCTION DITCH SCHEDULE						
DITCH ID	DITCH WIDTH (D)	DITCH DEPTH (C)	SWALE TYPE	TYPE OF TREATMENT	SIDE SLOPES	SLOPE
CD-1	4 FT	1 FT	A	2	2:1	< 5%
CD-2	4 FT	1 FT	A	2	2:1	< 5%

CONSTRUCTION SPECIFICATIONS

- ALL CONSTRUCTION DITCHES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
- THE DITCH SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
- FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
- ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DITCH.
- STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW:

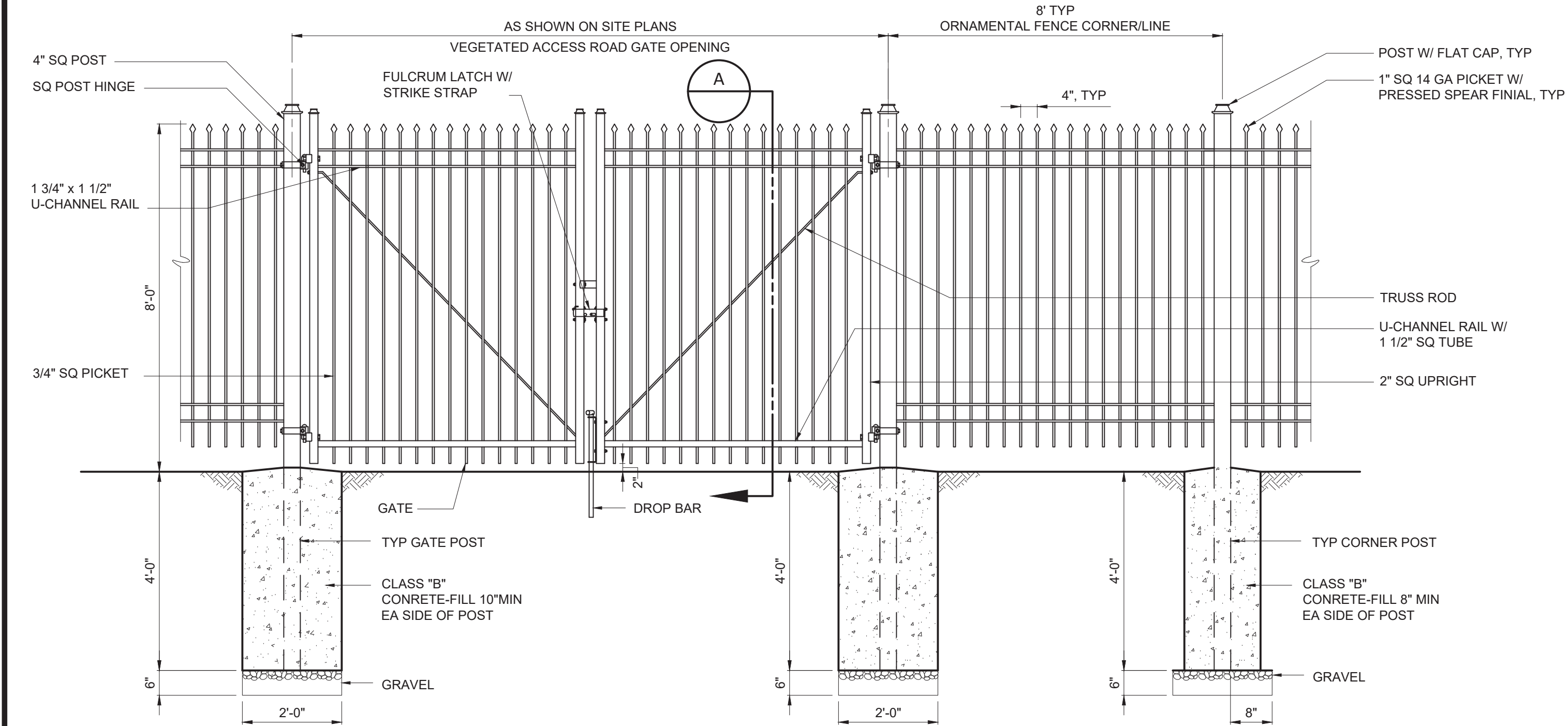
TYPE OF TREATMENT	CHANNEL GRADE	SWALE TYPE A (5 AC. OR LESS)	SWALE TYPE B (5 AC. - 10 AC)
1	0.5 - 3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1 - 5.0%	SEED AND STRAW MULCH	SEED AND COVER USING RECP
3	5.1 - 8.0%	SEED AND COVER WITH RECP	LINED WITH 4-8" RIP-RAP OR GEOTEXTLE
4	8.1 - 10.0%	LINED WITH 4-8" RIP-RAP OR GEOTEXTILE	SITE SPECIFIC DESIGN

- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

CONSTRUCTION DITCH

NTS

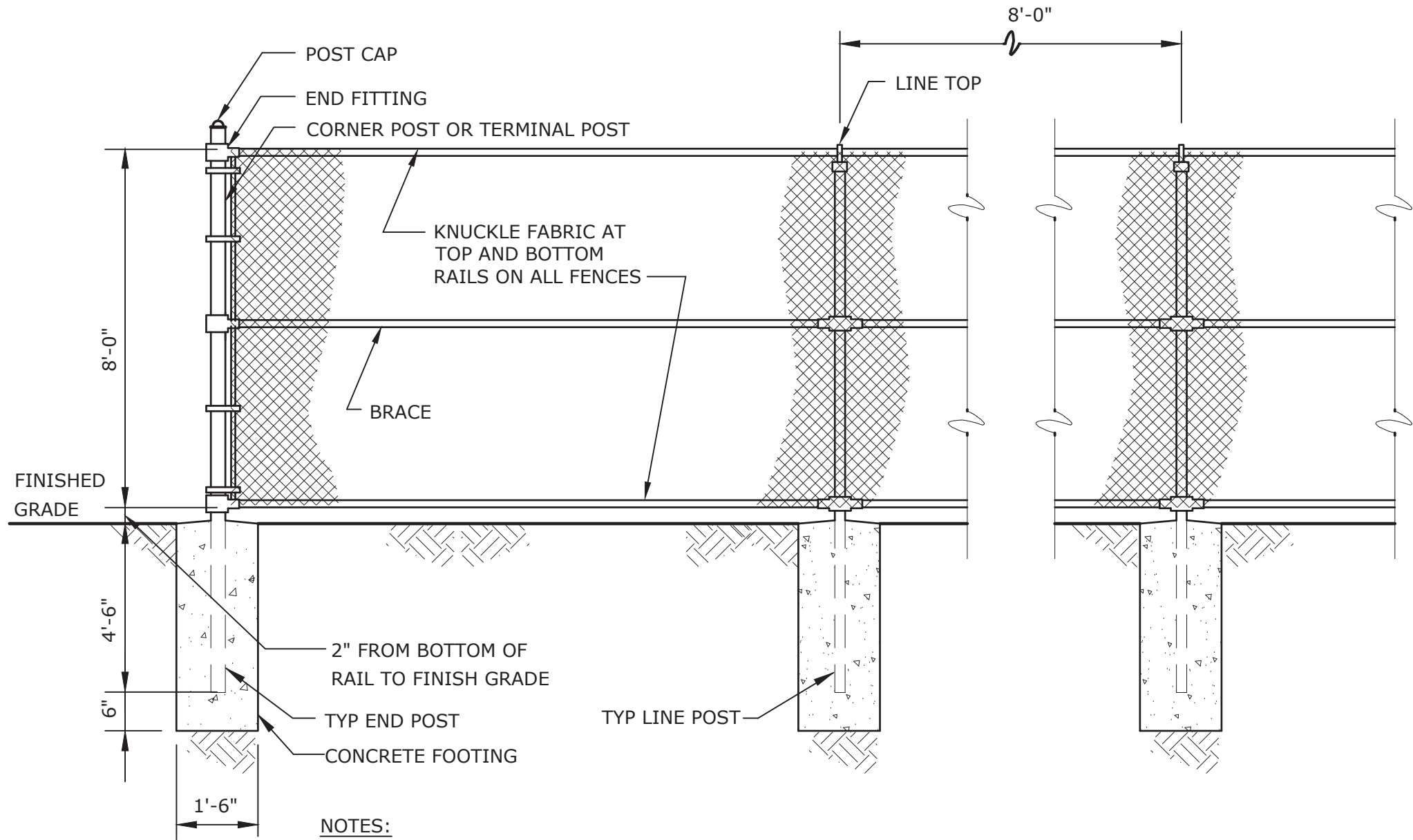
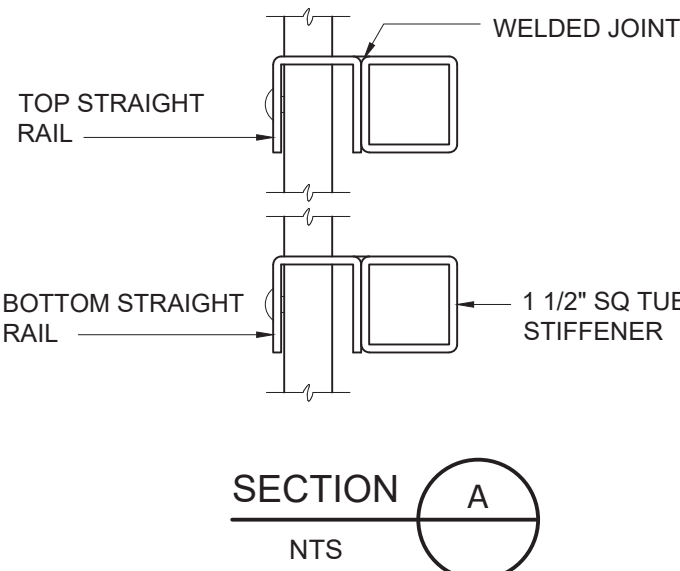
File: C:\USERS\JTANNER\PROJECT FILES\PROJECT\WSE\CVILC-304 Saved by: JTANNER Save date: 2/10/2025 10:22 AM
PLOT DATE: 3/27/2025 12:05 AM BY: JTANNER



ORNAMENTAL FENCE

NOTES:

1. PROVIDE LATCHING DEVICES TO HOLD GATE IN OPEN POSITION.
2. IF ROCK IS ENCOUNTERED WHEN SETTING POSTS, DRILL HOLES 4"ARGER IN DIA. THAN POSTS AND BACKFILL TO GRADE WITH CLASS "B" CONCRETE.
3. SEE SPECIFICATION 32-31-19 FOR ADDITIONAL INFORMATION.

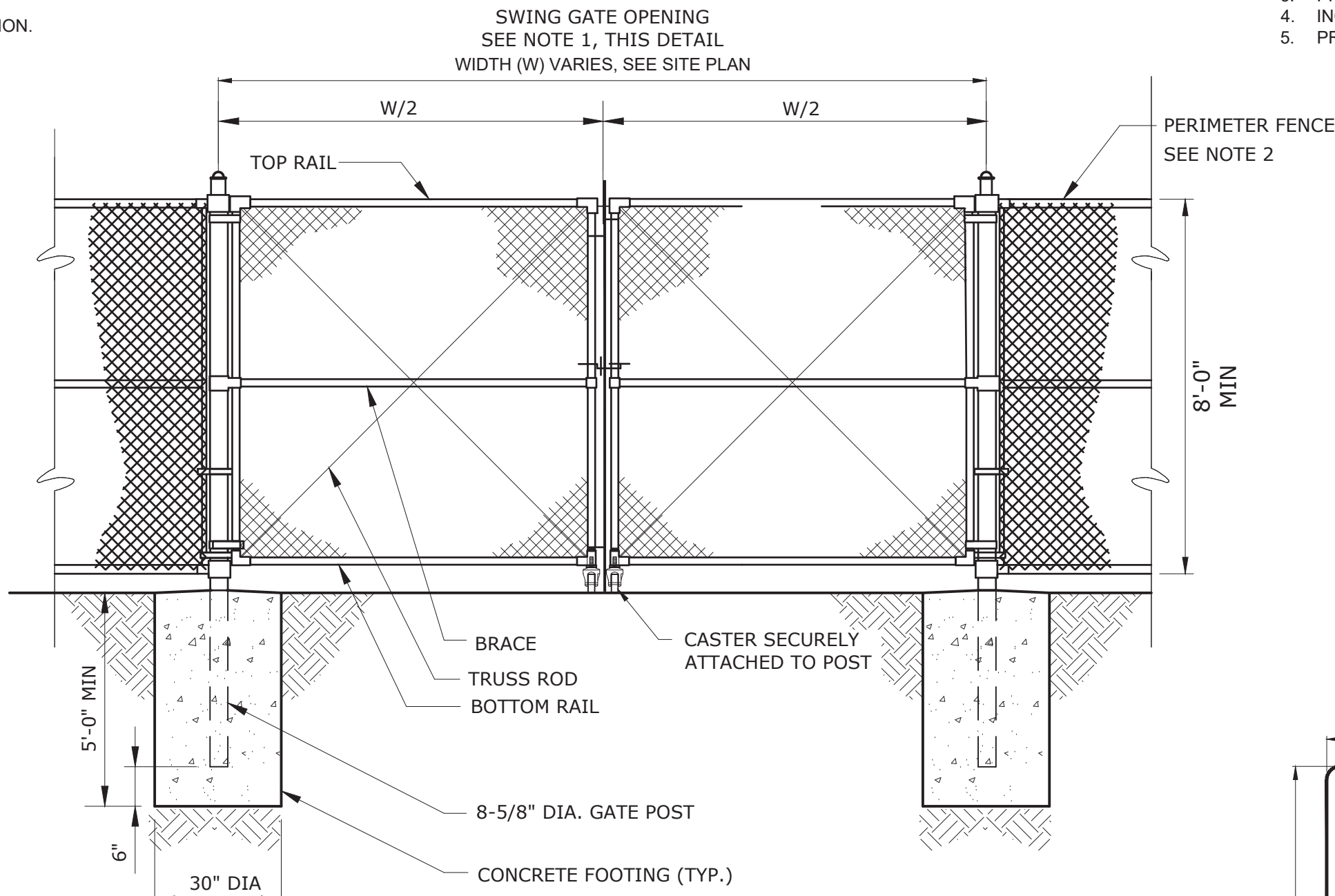


NOTES:

1. GATES SHALL BE IN ACCORDANCE WITH THE DETAILS ON THE ARCH DRAWINGS.
2. FENCE SHALL BE POLYOLEFIN COATED CHAIN LINK FENCE PER SPECIFICATION 32 31 13.
3. ORIENTATION AND LIMIT OF PERIMETER FENCE SHALL BE INSTALLED PER DWGS AND AS DIRECTED BY ENGINEER.
4. IF ROCK IS ENCOUNTERED WHEN SETTING POSTS, DRILL HOLES 4 INCHES LARGER IN DIAMETER THAN POSTS AND BACKFILL TO GRADE WITH CLASS "B" CONCRETE.

TYPICAL PERIMETER FENCE

NTS

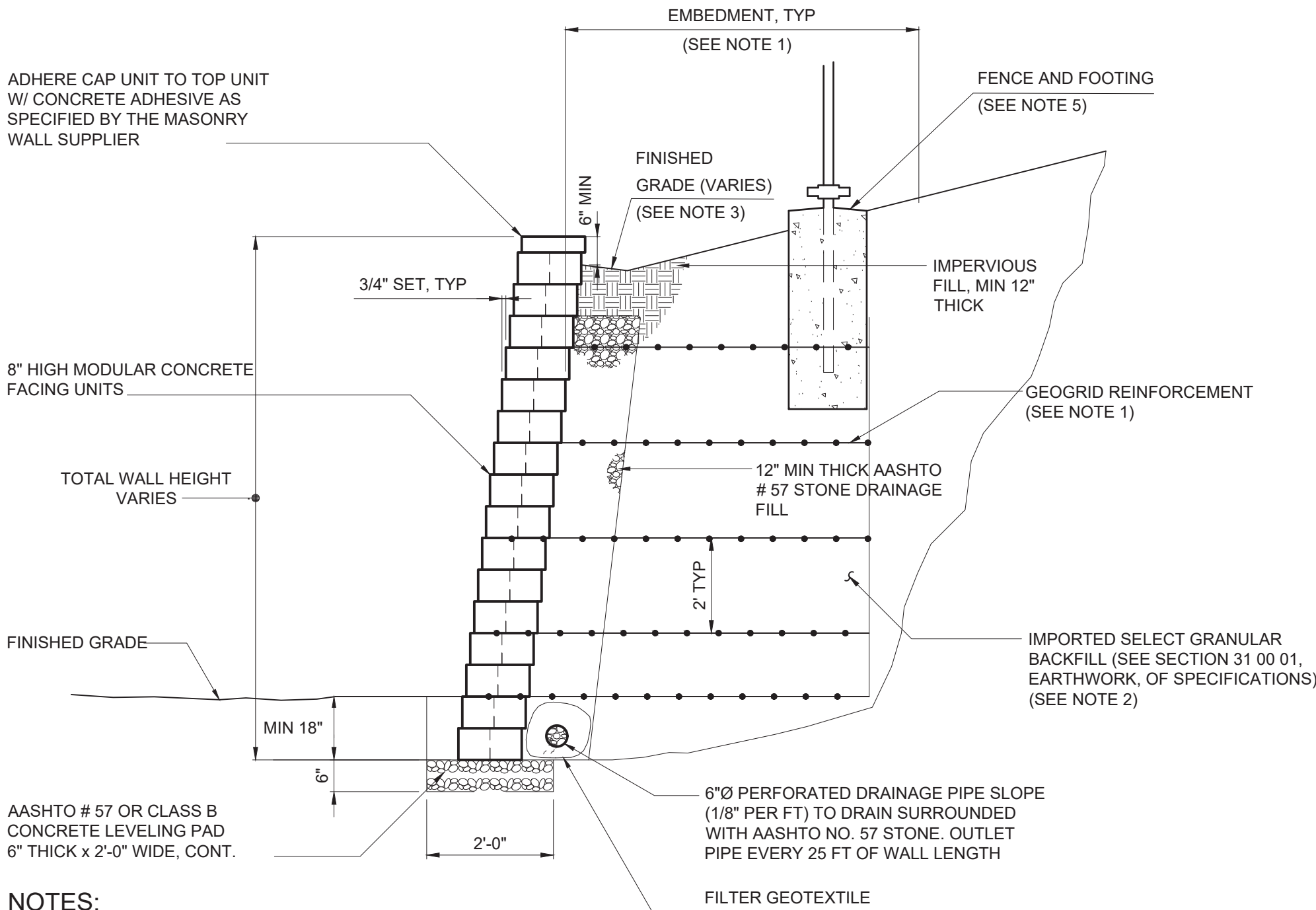


NOTES:

1. PROVIDE LATCHING DEVICES TO HOLD GATES IN OPEN POSITION AND PADLOCK MASTER LOCK NUMBER 12 OR EQUAL TO LOCK GATES CLOSED.
2. ORIENTATION AND LIMIT OF PERIMETER FENCE SHALL BE INSTALLED AS DIRECTED BY ENGINEER.
3. IF ROCK IS ENCOUNTERED WHEN SETTING POSTS, DRILL HOLES 1/2" INCH LARGER IN DIAMETER THAN POSTS AND BACKFILL TO GRADE WITH CLASS "B" CONCRETE.

TYPICAL CHAIN LINK FENCE GATE

NTS

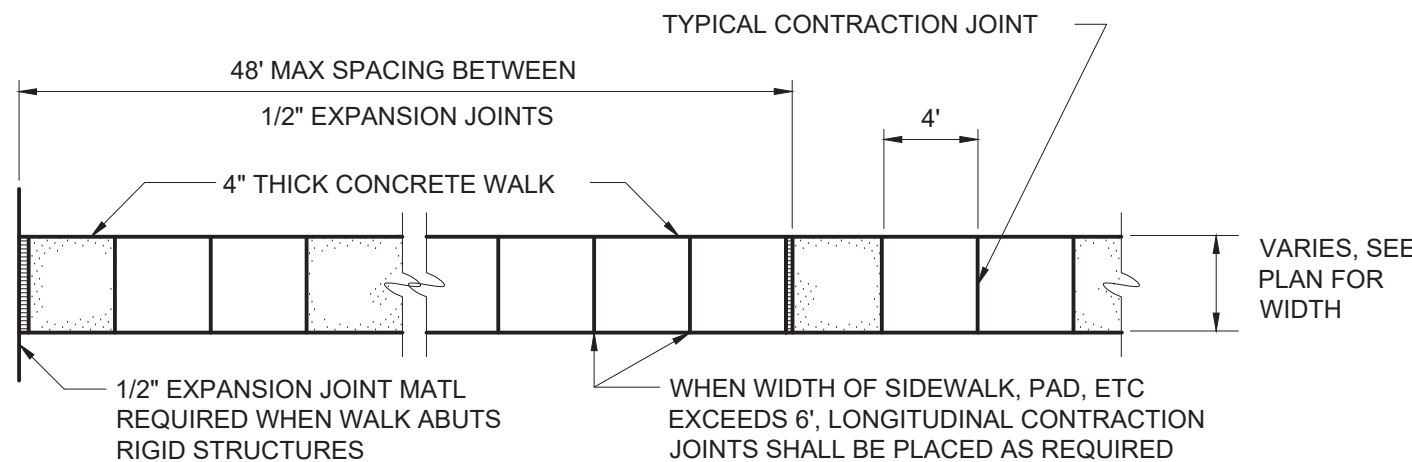


NOTES:

1. GEOGRID REINFORCEMENT MATERIAL AND EMBEDMENT LENGTH TO BE ESTABLISHED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK BASED UPON CURRENT AND PROJECTED LOADINGS AND PROPER DRAINAGE. MINIMUM GEOGRID LENGTH TO BE 0.75 TIMES THE MAXIMUM WALL HEIGHT AND TO BE UNIFORM FOR ALL LAYERS. SEE SPECIFICATION 31 34 19.13.
2. WALL BACKFILL MATERIAL USED IN DESIGN SHALL BE ON-SITE MATERIAL OR MATERIAL MATCHING WALL DESIGN PARAMETERS SHALL BE SUPPLIED BY CONTRACTOR AT NO ADDITIONAL COST. IT SHOULD BE ASSUMED BACKFILL MATERIAL IS NOT AVAILABLE ON SITE. SEE SPECIFICATION SECTION 32 32 35 FOR BACKFILL SPECIFICATIONS.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM BACK OF WALL.
4. INCLUDE SUBGRADE LOADING FOR PARKING AREA WHERE APPLICABLE. DESIGN TO ACCOMMODATE H-20 LOADING AS MINIMUM.
5. PROVIDE ADDITIONAL SPACE BEHIND THE RETAINING WALL TO INSTALL FENCE AND FOOTINGS.

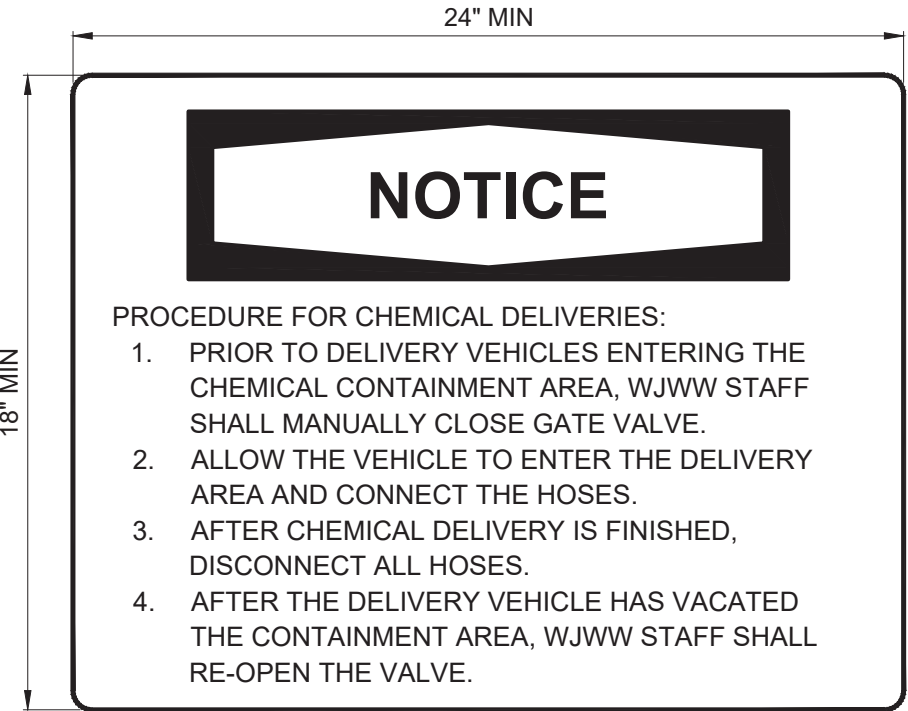
MSE RETAINING WALL

C-32-0580



TYPICAL CONCRETE WALKWAY

C-32-0520



NOTES:

1. SIGN SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 10 14 01 - IDENTIFYING DEVICES.
2. SEE DWG C-141 AND A-012 FOR SIGN LOCATION.

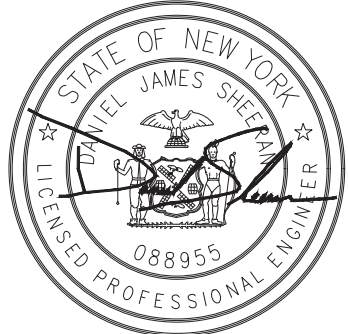
CONTAINMENT AREA SIGN

NTS

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

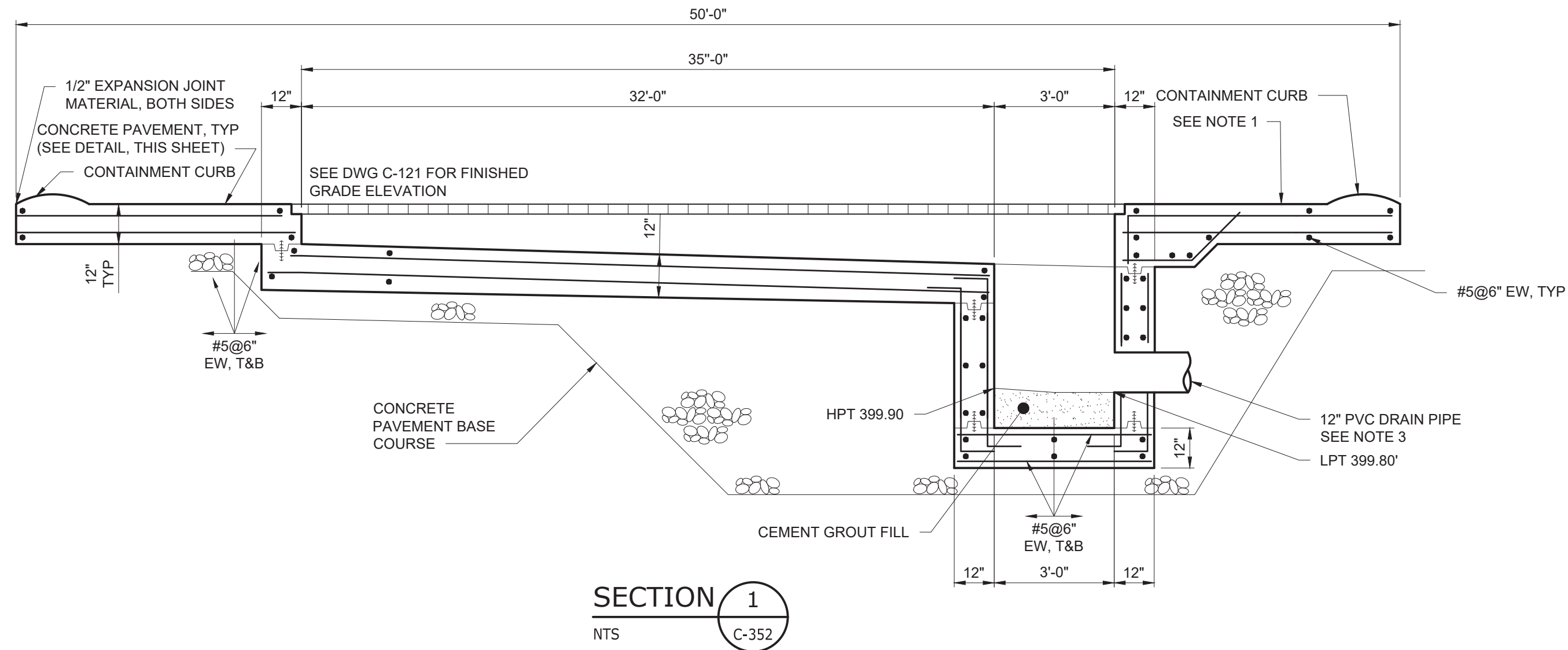
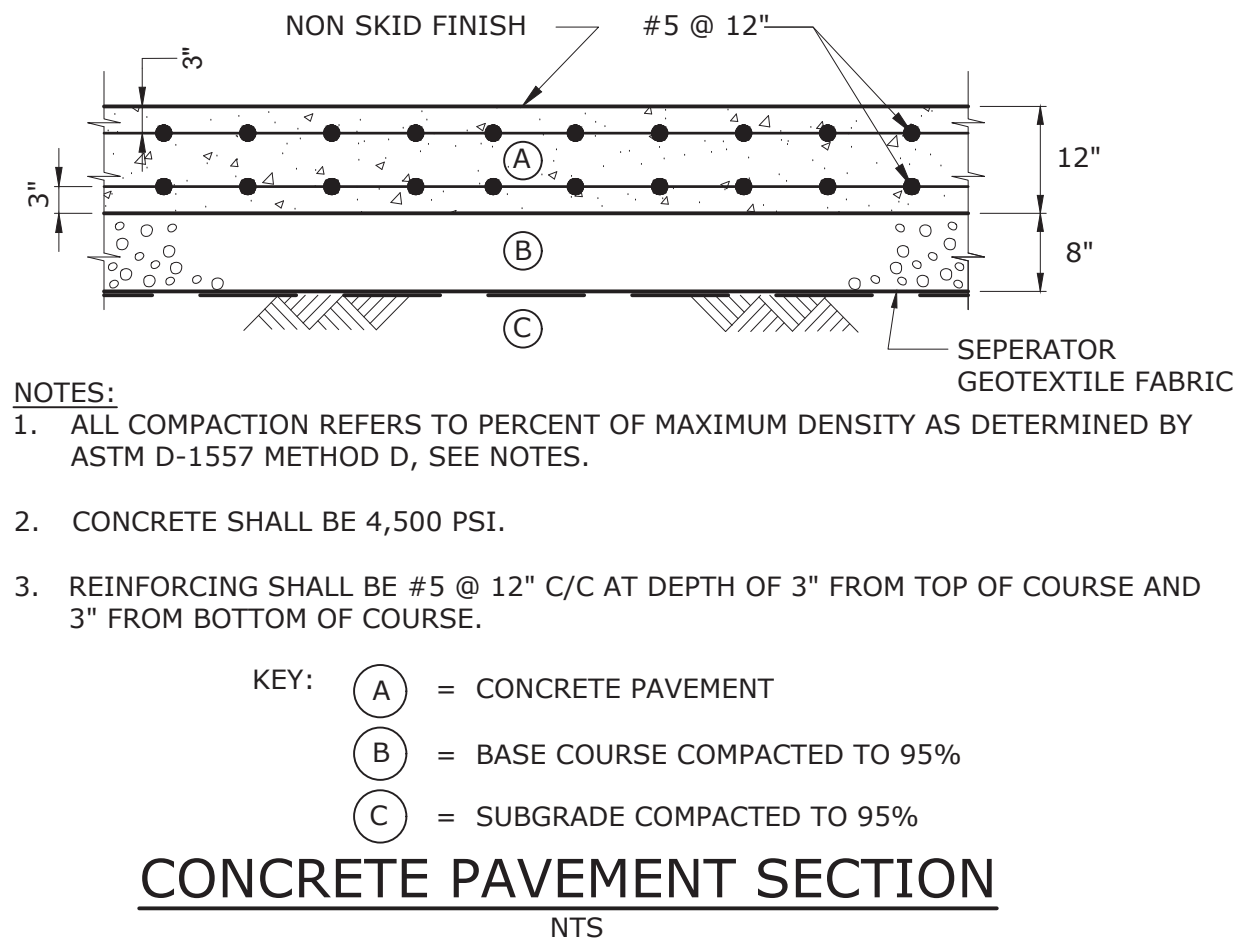
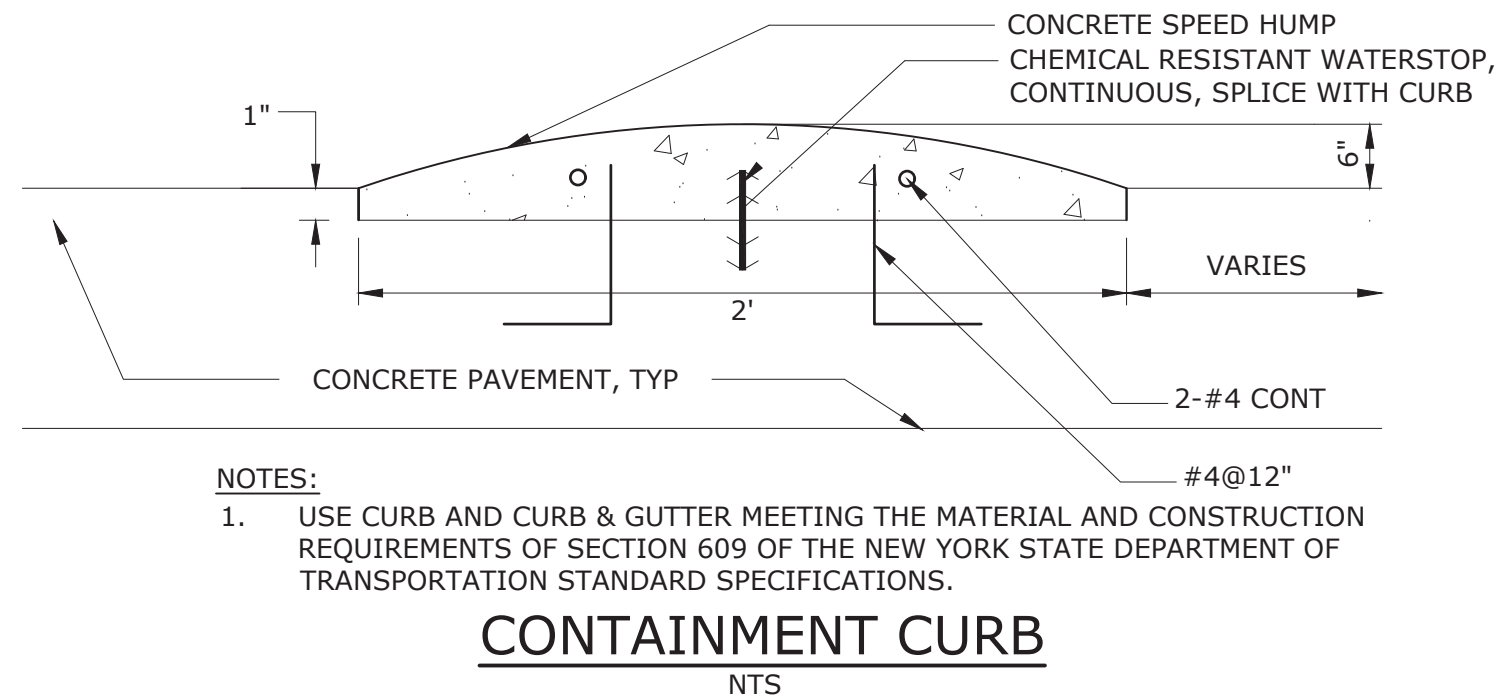
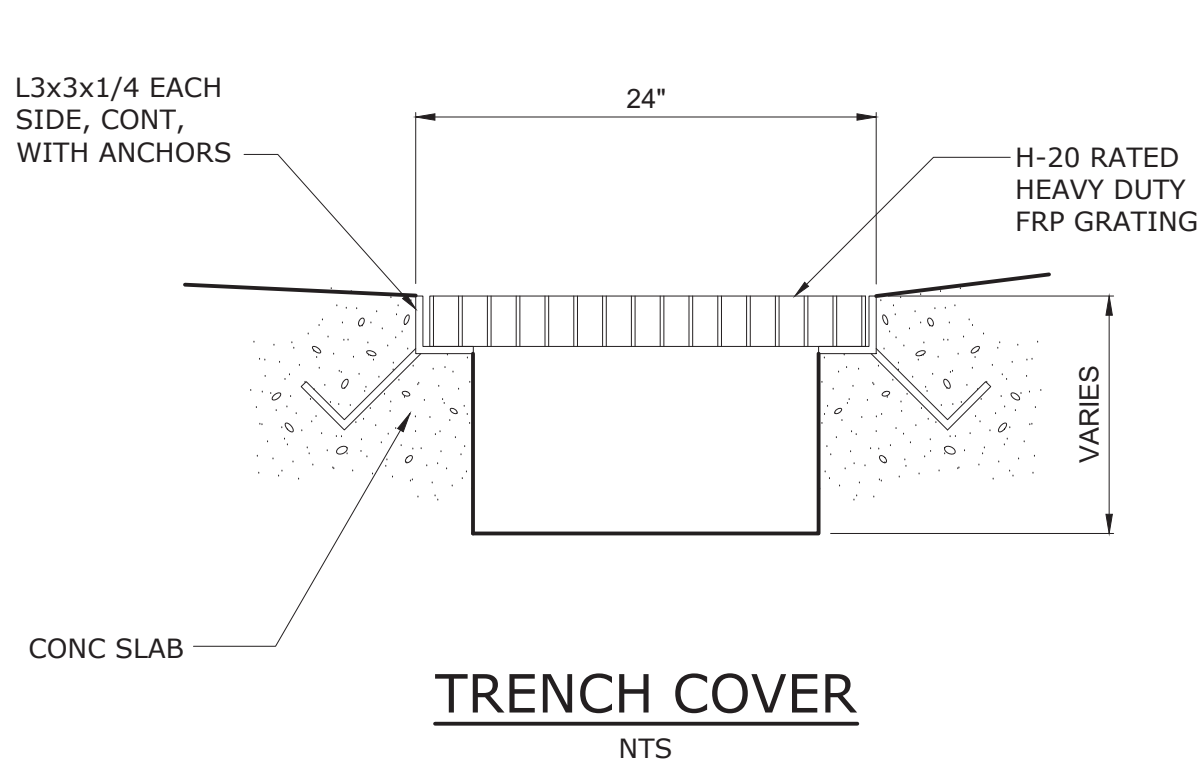
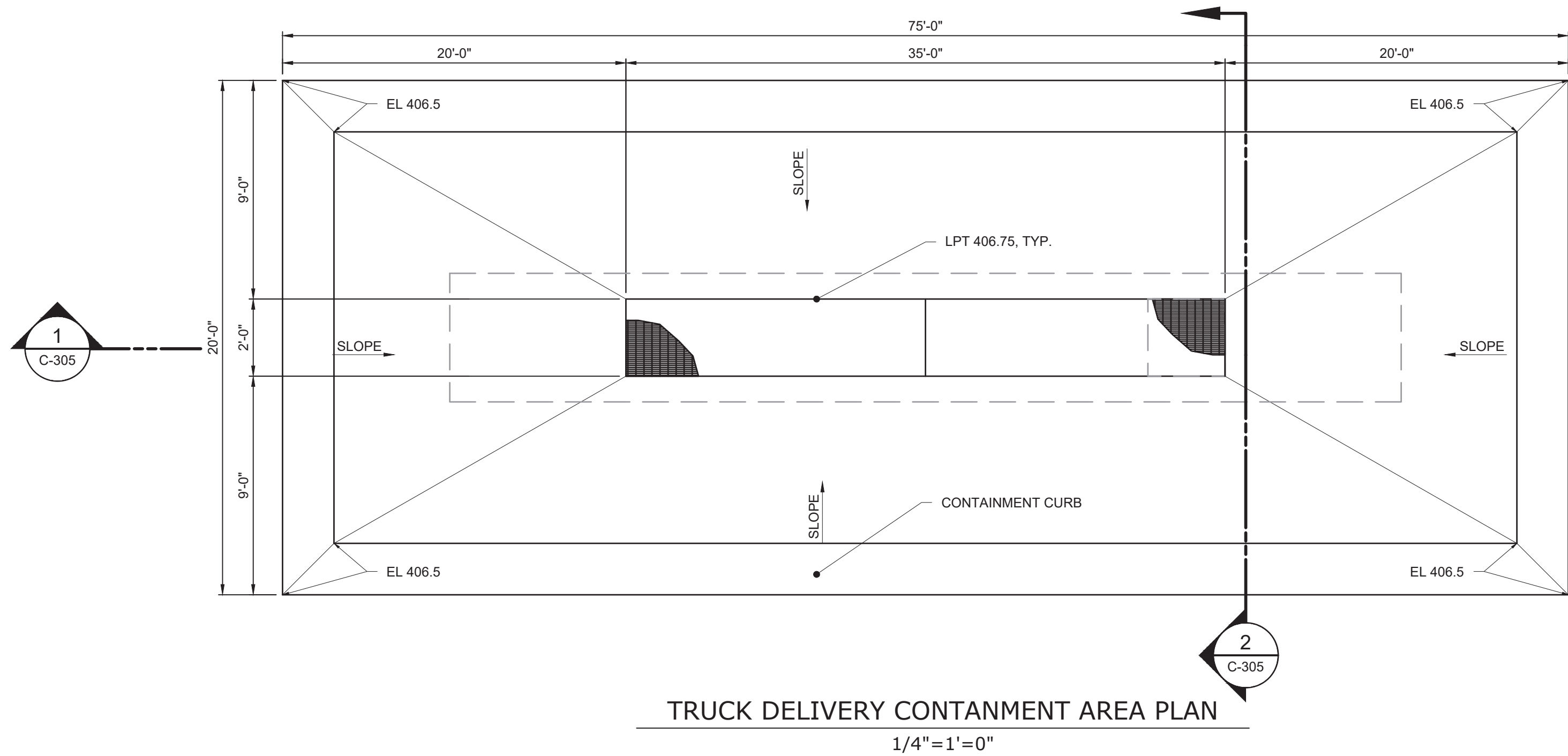
WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
SITE DETAILS

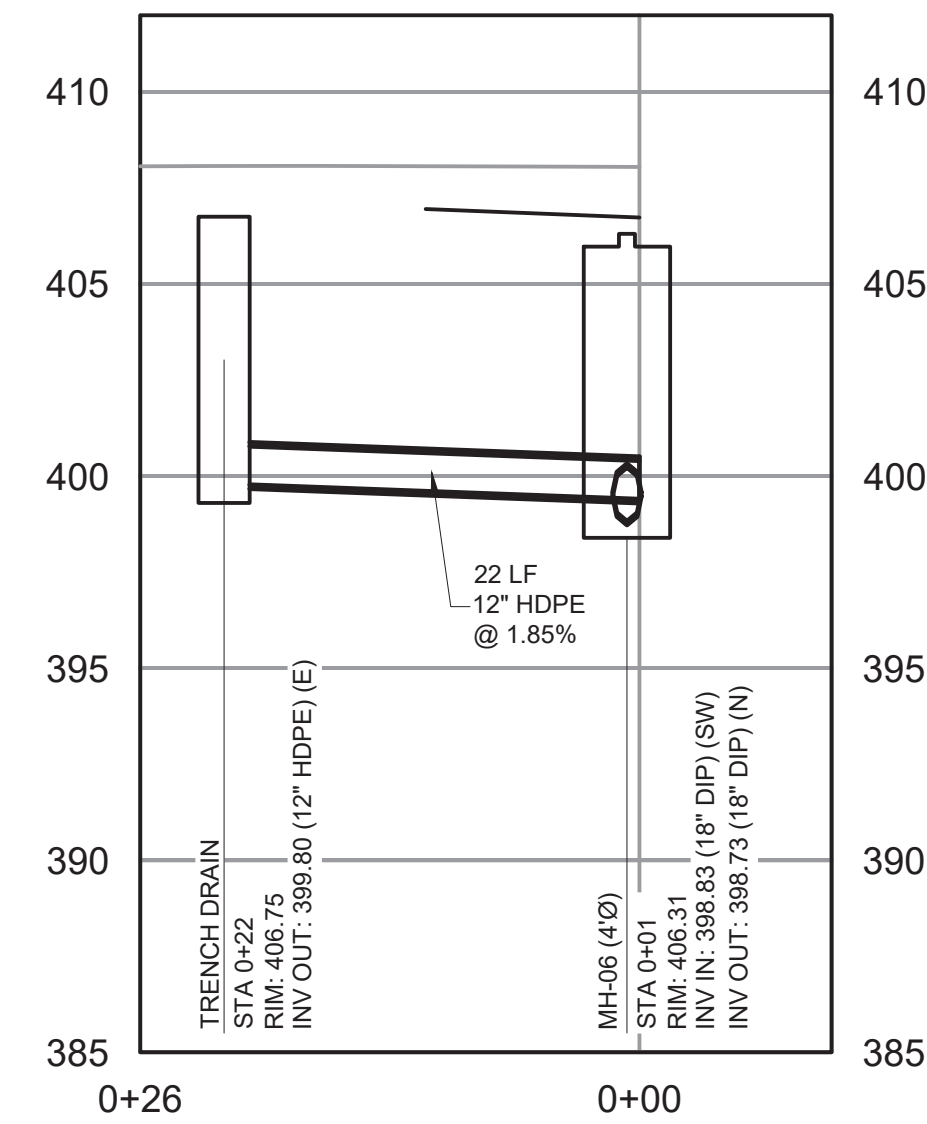
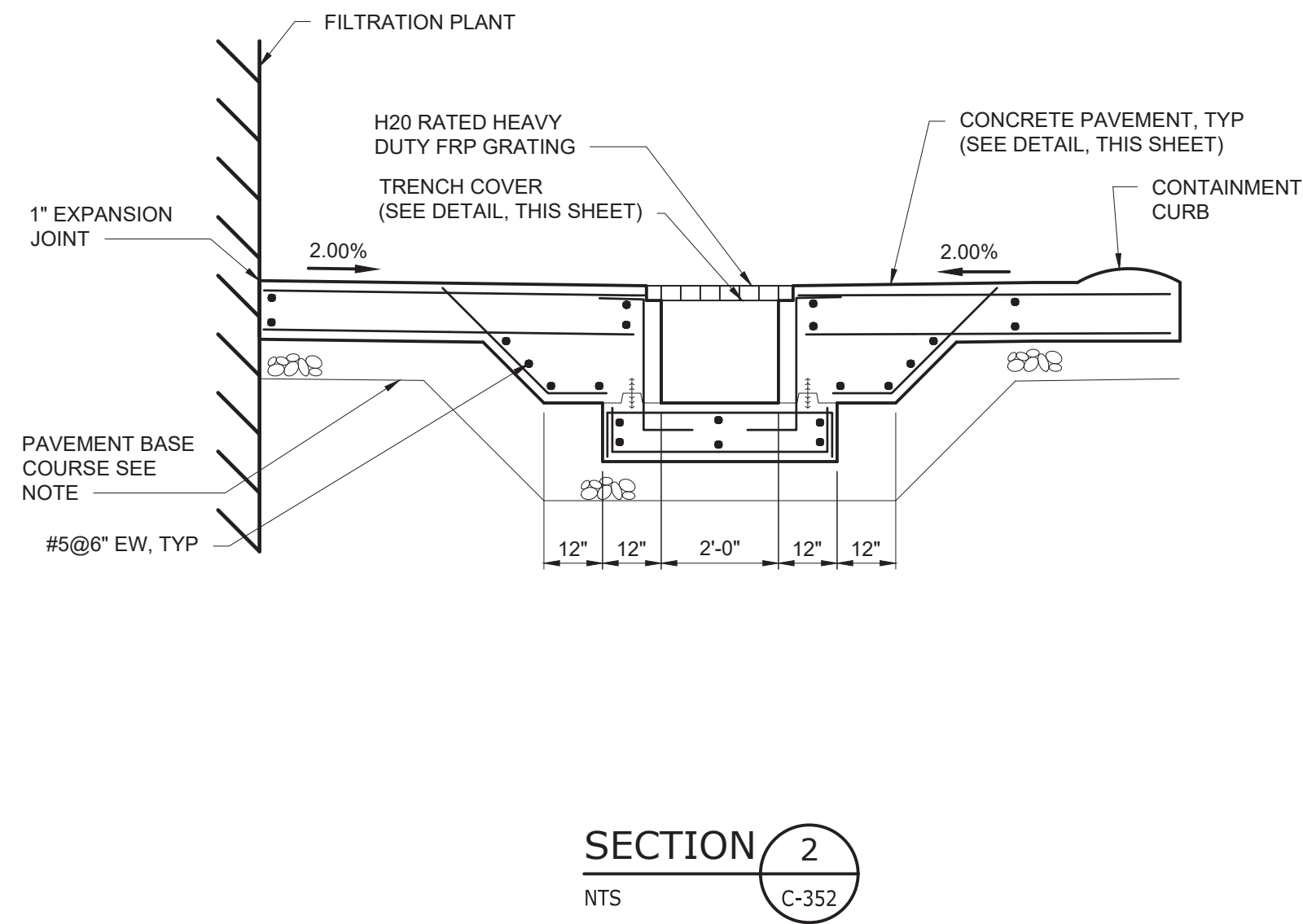
DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-304

File: C:\USERS\JTANNER\DRAWING\HAZEN AND SAWYER\0388-000_RYE_LAKE_FILTERATIONPROJECT\WSE\CIVIL\C-305 Saved by: JTANNER Save date: 3/27/2025 2:27 PM
PLOT DATE: 3/27/2025 2:27 PM BY: JTANNER



NOTE:

1. APPLY CONCRETE TOPPING ON ALL CONCRETE SURFACES WITHIN THE AREA ENCLOSED BY SPEED HUMPS AND EDGE OF BUILDING AS PART OF THE SECONDARY CONTAINMENT AREA IN ACCORDANCE WITH SPECIFICATION 099700 - SPECIAL COATINGS.
2. PAVEMENT BASE COURSE SHALL BE PER SPECIFICATION 321000 - PAVING AND SURFACING.
3. PIPE PENETRATION SHALL BE SEALED USING A LINK-SEAL, AS MANUFACTURED BY GPT, OR APPROVED EQUAL.



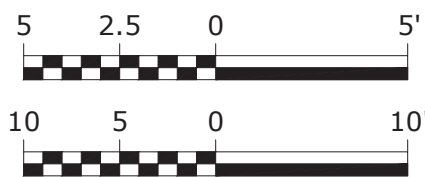
TRENCH DRAIN OUTLET PROFILE

HORIZONTAL SCALE: 1" = 10'

VERTICAL SCALE: 1" = 5'

SCALE: 1" = 5'

SCALE: 1" = 10'

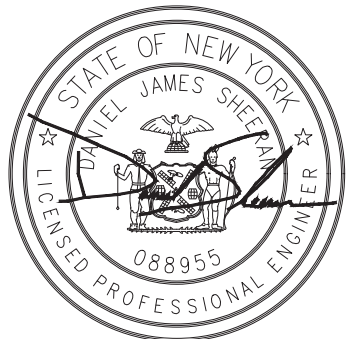


WARNING

IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

				PROJECT ENGINEER:	R. FROST
				DESIGNED BY:	J. TANNER
				DRAWN BY:	J. TANNER
				CHECKED BY:	D. SHEERAN
				IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
REV	ISSUED FOR	DATE	BY		

BID SET



Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

WESTCHESTER JOINT WATER WORKS
MAMARONECK, NY

RYE LAKE WATER FILTRATION PLANT
HARRISON, NY

CIVIL
TRUCK DELIVERY CONTAINMENT DETAIL

DATE:	FEB 2025
HAZEN NO.:	90388-000
CONTRACT NO.:	A1364-A
DRAWING NUMBER:	C-305

