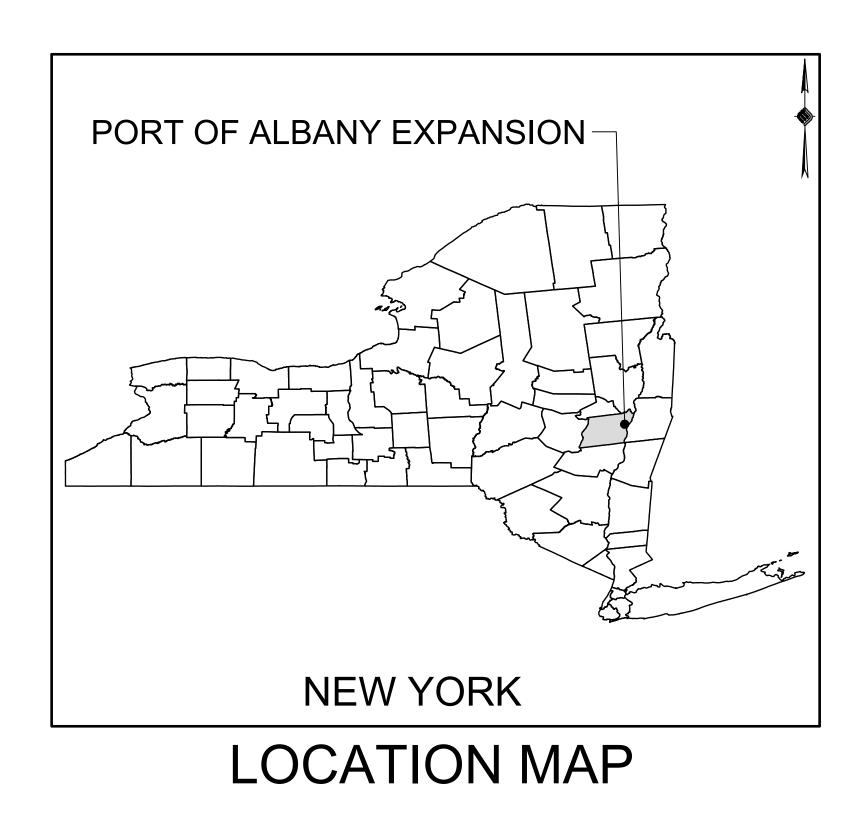
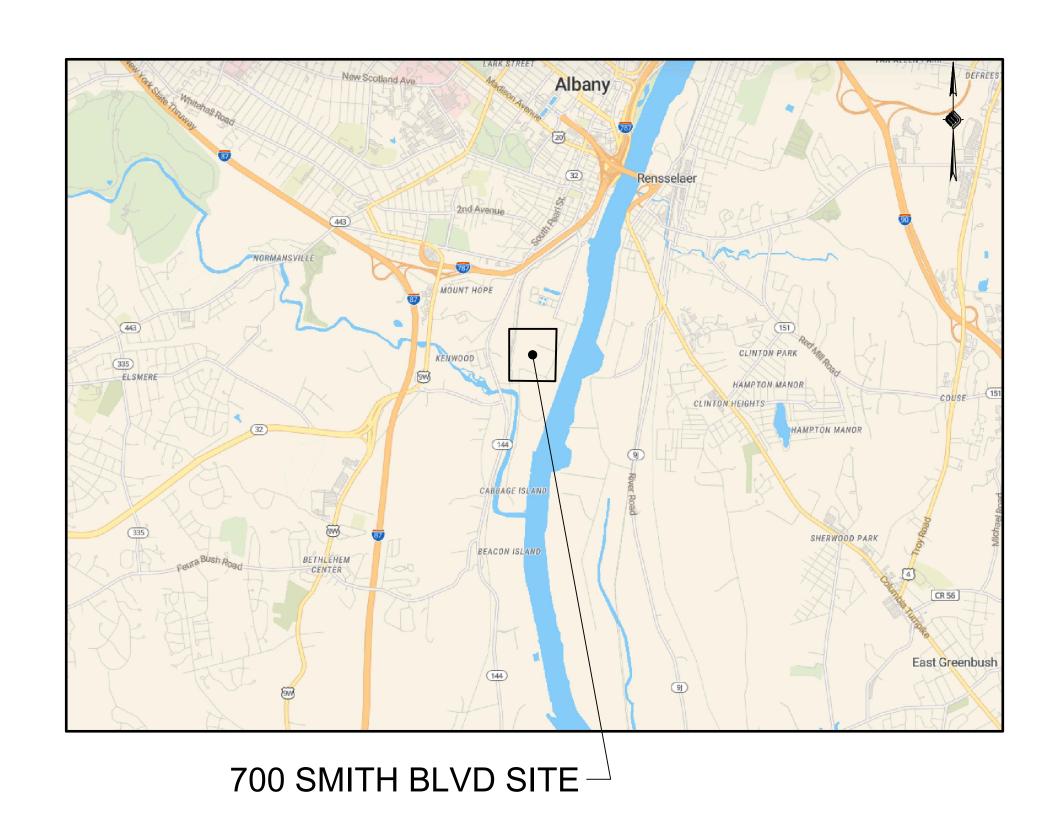
ALBANY PORT DISTRICT COMMISSION MARMEN WELCON SITE: 700 SMITH BLVD



FINAL DESIGN PLANS APRIL 2022

CITY OF ALBANY
ALBANY COUNTY
NEW YORK



VICINITY MAP

PREPARED FOR:



ALBANY PORT DISTRICT COMMISSION 106 SMITH BOULEVARD ALBANY, NEW YORK (518) 463-8763 WWW.ALBANY.GOV

PREPARED BY:



MCFARLAND JOHNSON PROJECT # 18641.00

PE_NO 088870

PE_DATE APRIL 2022

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

GENERAL NOTES:

- 1. THE UNDERGROUND STRUCTURES AND UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM A SURVEY PREPARED BY MASER CONSULTING P.A. 18 COMPUTER DRIVE EAST SUITE 203, ALBANY, NY 12205, DATED JULY 10, 2018 AND AUGUST 10, 2021 AND AVAILABLE SURVEYS AND RECORD MAPS BY OTHERS. MCFARLAND JOHNSON DOES NOT CERTIFY TO THE ACCURACY OF THEIR LOCATION AND/OR COMPLETENESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND EXTENT OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION ACTIVITIES IN THEIR VICINITY. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES FIELD STAKED BEFORE STARTING WORK BY CALLING U DIG NY AT 811 OR 1-800-962-7962.
- 2. THE CONTRACTOR SHALL PERFORM ALL WORK IN COMPLIANCE WITH TITLE 29 OF FEDERAL REGULATIONS, PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION (OSHA).
- 3. HIGHWAY DRAINAGE ALONG ALL ROADS AND PRIVATE DRIVES SHALL BE KEPT CLEAN OF MUD, DEBRIS ETC. AT ALL TIMES. ALL CATCH BASINS AND STORM SEWER MANHOLES SHALL BE CLEANED PRIOR TO ACCEPTANCE BY THE TOWN.
- 4. THE CONTRACTOR SHALL CONSULT THE DESIGN ENGINEER BEFORE DEVIATING FROM THESE
- 5. IN ALL TRENCH EXCAVATIONS, CONTRACTOR MUST LAY THE TRENCH SIDE SLOPES BACK TO A SAFE SLOPE, USE A TRENCH SHIELD OR PROVIDE SHEETING AND BRACING. THE MEANS AND METHODS SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER.
- 6. EXCAVATED WASTE MATERIAL REMOVED FROM THE SITE SHALL BE PLACED AT A LOCATION ACCEPTABLE TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND THE OWNER.
- 7. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO MAINTAIN A MINIMUM OF 2' OF COVER OVER ALL EXISTING AND NEW STORM SEWER PIPES AND 4' OF COVER OVER ALL SANITARY PIPES DURING CONSTRUCTION.
- 8. ALL EXISTING SURFACE APPURTENANCES (I.E. WATER VALVES, CATCH BASIN FRAMES AND GRATES, MANHOLE COVERS) WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO FINISHED GRADE. (NO SEPARATE PAYMENT).
- 9. AREAS DISTURBED OR DAMAGED AS PART OF THIS PROJECT'S CONSTRUCTION THAT ARE OUTSIDE OF THE PRIMARY WORK AREA SHALL BE RESTORED, AT THE CONTRACTORS EXPENSE, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- 10. UNLESS COVERED BY THE CONTRACT SPECIFICATIONS OR AS NOTED ON THE PLANS, ALL WORK SHALL CONFORM TO THE LATEST VERSION OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND ANY SUBSEQUENT REVISIONS OR ENGINEERING BULLETINS.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PERMITS AND PROVIDE ALL BONDS REQUIRED FOR THIS WORK, INCLUDING BUT NOT LIMITED TO UTILITY CONNECTIONS, BUILDING AND SITE CONSTRUCTION.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODE AND/OR UTILITY SERVICE COMPANIES. THIS SHALL BE COMPLETED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
- 13. MAINTENANCE AND PROTECTION OF TRAFFIC ALONG WITH SECURING THE WORK AREA SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 14. THE CONTRACTOR SHALL LOCATE, SAFEGUARD AND PRESERVE ALL SURVEY CONTROL MONUMENTS AND ROW MONUMENTS IN THE AREAS OF CONSTRUCTION.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND SAFETY PROCEDURES. THE OWNER AND/OR ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB CONTRACTOR OR THEIR AGENTS, EMPLOYEES OR ANY OTHER PERSON PERFORMING ANY OF THE WORK.
- 16. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATION ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATION OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE OWNERS REPRESENTATIVE IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE OWNERS REPRESENTATIVE SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.
- 17. THESE PLANS HAVE BEEN REVIEWED SOULY FOR WORK PERFORMED ON LANDS WITHIN THE CITY OF ALBANY.

GRADING NOTES:

- REMOVE AND STOCKPILE TOPSOIL AS DIRECTED BY THE CONSTRUCTION MANAGER. REPLACE TOPSOIL TO A MINIMUM 4" DEPTH. ALL DISTURBED AREAS TO BE HYDROSEEDED AS DIRECTED BY THE CONSTRUCTION MANAGER.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS, INCLUDING INLET PROTECTION AND SILT FENCE. EROSION CONTROL MEASURES SHALL NOT BE REMOVED BEFORE VEGETATION HAS ACHIEVED 80% STABILIZATION.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF TOPSOIL AND ALL DISTURBED AREAS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES.
- 4. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, ALBANY COUNTY HEALTH DEPARTMENT, AND THE CITY OF ALBANY REQUIREMENTS.
- 5. ALL INLETS TO THE STORM SEWER SHALL HAVE INLET PROTECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING BEST MANAGEMENT PRACTICES (BMP'S) UNTIL GROUND COVER ACHIEVES 80% STABILIZATION.
- 6. SILT FENCE OR OTHER APPROVED EROSION CONTROL PRACTICES SHALL BE USED ON STEEP SLOPES AND WHEREVER NECESSARY TO CONTROL EROSION AND SILTATION OF EXISTING DRAINAGE SYSTEMS AS ORDERED BY THE ENGINEER OR SPECIFIED ON PLANS.
- 8. THE CONTRACTOR SHALL DESIGNATE A REPRESENTATIVE WITH NYSDEC CERTIFICATION TO MONITOR EROSION CONTROL PRACTICES AND STRUCTURES AS WELL AS TREE PROTECTION AND PRESERVATION THROUGHOUT CONSTRUCTION.
- 9. ALL GRADING AND EARTHWORK SHALL BE IN CONFORMANCE WITH NEW YORK STATE STANDARD SPECIFICATIONS SECTION 203 EXCAVATION AND EMBANKMENT, WHICH INCLUDES MAXIMUM EMBANKMENT LIFT THICKNESS ALLOWED BASED ON THE COMPACTION EQUIPMENT USED.
- 10. ALL PROPOSED ELEVATIONS SHOWN HEREON ARE FINISHED GRADE ELEVATION.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RIM ELEVATIONS IN RELATION TO PROPOSED GRADE PRIOR TO INSTALLATION.

SEQUENCE OF CONSTRUCTION

- HOLD A PRE-CONSTRUCTION MEETING WITH PROJECT MANAGER, OPERATOR'S ENGINEER, CONTRACTORS & SUB-CONTRACTORS, AND REPRESENTATIVES OF THE TOWN OF BETHLEHEM AND CITY OF ALBANY (MS4) PRIOR TO LAND DISTURBING ACTIVITIES.
- 2. HAVE A QUALIFIED PROFESSIONAL CONDUCT AN ASSESSMENT OF THE SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND CERTIFY IN AN INSPECTION REPORT THAT THE APPROPRIATE EROSION AND SEDIMENT CONTROLS DESCRIBED IN THE SWPPP AS REQUIRED BY THE GP-0-20-001 HAVE BEEN ADEQUATELY INSTALLED OR IMPLEMENTED TO ENSURE OVERALL PREPAREDNESS OF THE SITE FOR THE COMMENCEMENT OF CONSTRUCTION.
- 3. INSTALL PERIMETER CONTROLS AND INLET PROTECTION AT THE LOCATIONS SHOWN ON THE DRAWINGS.
- 4. CONSULT A QUALIFIED PROFESSIONAL TO PERFORM A SITE INSPECTION AND VERIFY THAT THE INITIAL PHASE OF EROSION CONTROL DEVICES HAVE BEEN INSTALLED PER THE DRAWINGS PRIOR TO COMMENCEMENT OF GROUND DISTURBANCE.
- 5. BEGIN CLEARING AND GRUBBING OPERATIONS. CLEARING AND GRUBBING SHALL ONLY BE DONE IN AREAS WHERE EARTHWORK WILL BE PERFORMED.
- 6. STRIP AND STOCKPILE TOPSOIL, INSTALL PERIMETER EROSION CONTROL AROUND STOCKPILES, SEED AND MULCH PER PLANS.
- 7. COMMENCE EARTHWORK CUTS AND FILLS. WORK SHALL BE PROGRESSED TO ALLOW A REASONABLE TRANSFER OF CUT AND FILL FOR ROUGH GRADING AND EARTH MOVING FOR BULK SITE GRADING.
- 8. STABILIZE ALL AREAS IDLE IN EXCESS OF 7 DAYS IN WHICH CONSTRUCTION WILL NOT COMMENCE WITHIN 7 DAYS.
- 9. ADJUST THE EROSION AND SEDIMENT CONTROL PRACTICES AS REQUIRED FOR CONTINUING CONSTRUCTION AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN. THIS SHALL BE A PHASED ADJUSTMENT IN ORDER TO ENSURE THAT RUNOFF FROM ALL DISTURBED AREAS IS TREATED BY APPROPRIATE EROSION AND SEDIMENT CONTROL DEVICES.
- 10. CONSTRUCT CATCH BASINS, AREA INLETS AND STORM SEWER MANHOLES, AS SHOWN ON THE
- 11. INSTALL INLET/OUTLET PROTECTION PROGRESSIVELY AS THE STORM SEWER IS INSTALLED.
- 12. AS LAWN AREAS ARE BROUGHT TO GRADE, STABILIZE WITH TOPSOIL, SEED AND MULCH PER SPECIFICATIONS.
- 13. FINALIZE PAVEMENT SUB-GRADE PREPARATION.
- 14. INSTALL ASPHALT SUB-BASE MATERIAL AS REQUIRED FOR PAVEMENT.
- 15. CARRY OUT ALL FINAL GRADING, STABILIZE SLOPES GREATER THAN 3H:1V WITH HEIGHTS EXCEEDING 5 FEET WITH EROSION CONTROL MATTING/BLANKETS, AND SEED AND MULCH ALL DISTURBED AREAS.
- 16. A QUALIFIED PROFESSIONAL SHALL PERFORM A SITE ASSESSMENT TO CONFIRM THAT ALL PERMANENT STORMWATER DEVICES HAVE BEEN INSTALLED PER PLANS AND 80% UNIFORM GERMINATION/STABILIZATION HAS BEEN ACHIEVED PRIOR TO THE REMOVAL OF ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROLS.

SANITARY SEWER NOTES:

- ONLY DOMESTIC WASTE FROM THE PROJECT SHALL BE DISCHARGED INTO THE SANITARY SEWER.
- 2. ALL SANITARY LATERALS SHALL BE 6" PVC SDR-21 ASTM D2241 UNLESS OTHERWISE SPECIFIED ON THE DLANS
- 3. A MINIMUM OF 4 FEET OF COVER SHALL BE PROVIDED OVER ENTIRE LENGTH OF ALL
- 5. THE CITY OF ALBANY DEPARTMENT OF WATER & WATER SUPPLY SHALL BE NOTIFIED FORTY-EIGHT HOURS IN ADVANCE OF CONNECTION OR TAP. [518-434-5300].
- 6. SANITARY SEWER LATERAL(S) AND APPURTENANCES SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE TOWN OF BETHLEHEM.
- 7. FLOOR DRAINS, IF CONSTRUCTED, SHALL BE CONNECTED TO THE SANITARY SEWER. FLOOR DRAINS DO NOT INCLUDE FOUNDATION/FOOTER DRAINS. NOTE: ALL DISCHARGES TO THE SANITARY SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR ALBANY COUNTY SEWER USE LAW.
- 8. MAXIMUM SPACING BETWEEN CLEANOUTS ON SANITARY LATERALS MAY NOT EXCEED SEVENTY-FIVE (75) FEET.
- 9. MAXIMUM SPACING BETWEEN SANITARY MANHOLES MAY NOT EXCEED FOUR-HUNDRED (400) FEET.
- 10. EXFILTRATION AND/OR INFILTRATION FOR SANITARY SEWERS SHALL BE LIMITED TO 100 GALLONS PER DAY, PER MILE OF PIPE, PER INCH DIAMETER, AND SHALL BE PERFORMED IN ACCORDANCE WITH DISTRICT PROCEDURES. AIR TESTS, INCLUDING VACUUM TESTS, SHALL NOT BE ALLOWED ON SANITARY MANHOLES.
- 11. UPON COMPLETING CONSTRUCTION AND AFTER THE PIPE BACKFILL HAS BEEN IN PLACE FOR A PERIOD OF 30 DAYS, THE NEW SANITARY SEWER SHALL BE SUBJECT TO THE FOLLOWING TESTS AND PROCEDURES. FLUSH AND CLEAN THE SYSTEM, SEWER MAIN AIR PRESSURE/ EXFILITRATION TESTING, SEWER MANHOLE VACUUM/INFILTRATION TESTING (PERFORMED ONLY AFTER INVERTS AND BENCHES ARE FORMED), AND SEWER MAIN DEFLECTION TEST. DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER ALL FINAL BACKFILL HAS BEEN IN PLACE AT LEAST THIRTY (30) DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF FIVE PERCENT (5%). IF THE DEFLECTION TEST IS RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A MINIMUM DIAMETER EQUAL TO NINETY-FIVE PERCENT (95%) OF THE INSIDE DIAMETER OF THE PIPE. TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
- 12. MANHOLES SHALL BE 4' INSIDE DIAMETER UNLESS OTHERWISE SPECIFIED ON PLANS. MANHOLE FRAMES AND COVERS SHALL BE CAMPBELL MODEL NO. 1009, NEENAH FOUNDRY, INC. MODEL NO. R-1556, OR APPROVED EQUAL PER THE CITY OF ALBANY WATER AND SEWER DEPARTMENT STANDARDS.
- 13. MIN DEFLECTION OF 3" PVC SDR21 ASTM D2241 FORCE MAIN SEWER LINE IS 0.7' FOR 20' LENGTHS.
- 14. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED FOR SANITARY SEWER CONNECTION FROM THE CITY OF ALBANY WATER DEPARTMENT.

STORM SEWER:

- 1. ALL HDPE PIPES SHALL FOLLOW NYSDOT SECTION 603-2 AND 706-12, BE SMOOTH INTERIOR.
- 2. PLACE RIP-RAP AROUND ALL END SECTIONS.
- 3. IN INSTANCES WHERE THE STORM SEWER CROSSES THE SANITARY SEWER A CRUSHED STONE ENCASEMENT SHALL BE PROVIDED AROUND THE SANITARY SEWER UP TO THE STORM SEWER-COMPACT WITH APPROVED EQUIPMENT.
- 4. ALL CATCH BASINS AND STORM MANHOLES WITHIN PAVEMENT TO BE CONSTRUCTED TO WITHSTAND HS-20 LOADING.

WATER MAIN INSTALLATION:

- WATER SERVICE LINE (LATERALS) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND SPECIFICATIONS OF THE ALBANY COUNTY HEALTH DEPARTMENT, AND THE LOCAL WATER AUTHORITY.
- 2. ALL EROSION CONTROL MEASURES SHALL BE EMPLOYED DURING ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH ALL APPROPRIATE STANDARDS AND REQUIREMENTS. BEST MANAGEMENT PRACTICES ARE TO BE FOLLOWED.
- 3. WATER MAINS AND ALL WATER SERVICE LINES SHALL HAVE A MINIMUM OF 5 FEET OF COVER FROM FINISH GRADE TO TOP OF PIPE.
- 4. THE MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER MAINS SHALL BE 18" MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SEWER MAINS SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE
- 5. PIPES. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE, WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECT FILL) SHALL BE PROVIDED FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING ON AND BREAKING THE WATER MAINS.
- 6. HYDRANT TYPE SHALL BE AS NOTED ON THE PLANS OR AS REQUIRED BY THE CITY OF ALBANY. GUARD VALVES SHALL BE USED AND ALL HYDRANT STUB PIPING SHALL BE MECHANICAL JOINT. FIRE HYDRANT WEEP HOLES (DRAINS) SHALL BE PLUGGED WHEN GROUND WATER IS ENCOUNTERED WITHIN 7 FEET OF THE FINISHED GRADE. ALL PLUGS SHALL BE MECHANICAL METAL PLUGS. ALL HYDRANTS WITH PLUGGED WEEP HOLES SHALL BE APPROPRIATELY TAGGED.
- 7. ALL MECHANICAL JOINTS, FITTINGS (TEES, BENDS, PLUGS), ETC. SHALL BE BACKED WITH 3,000 P.S.I. CONCRETE THRUST BLOCKS OR APPROVED MECHANICAL RESTRAINTS.
- 8. WHERE PIPING IS TO BE PLACED WITHIN FILL AREAS, THE FILL SHALL BE PLACED AND COMPACTED TO AT LEAST 95% MODIFIED PROCTOR PRIOR TO TRENCH EXCAVATION.
- 9. SHUTDOWN OF EXISTING WATER MAINS SHALL BE IN ACCORDANCE WITH THE LOCAL WATER AUTHORITY. THE TOWN OF BETHLEHEM WATER AND SEWER MANAGER MUST BE NOTIFIED IN ADVANCE OF ALL PROPOSED SHUTDOWNS IN
- 10. ACCORDANCE WITH THEIR DIRECTION. WATER MUST BE TURNED BACK ON AS SOON AS POSSIBLE. ALL ENDS OF WATER MAINS MUST BE PROVIDED WITH ADEQUATE PLUG, BLOCK, AND BLOW-OFF AS INDICATED ON THE PLANS.
- 11. WATER SERVICE LINES SHALL BE SEPARATED AT LEAST 10 FEET, MEASURED FROM OUTSIDE OF THE PIPES, FROM SEWER MAINS AND SEPTIC SYSTEMS.
- 12. BACKFLOW PREVENTION SHALL BE PROVIDED IN BUILDING (SEE BUILDING PLANS).
- 13. BACKFLOW PREVENTION APPLICATION MUST BE SUBMITTED TO AND APPROVED BY THE SUPPLIER WHO WILL FORWARD THE PLANS TO THE NYS DEPARTMENT OF HEALTH FOR THEIR APPROVAL. THE APPROVAL PROCESS MUST BE COMPLETED PRIOR TO INSTALLATION. THE APPROVAL PROCESS SHOULD BE STARTED EARLY TO AVOID UNNECESSARY DELAYS OR CONFLICTS WITH OTHER HEALTH DEPARTMENT
- 14. THE CITY OF ALBANY DEPARTMENT OF WATER AND WATER SUPPLY SHALL BE NOTIFIED 48-HOURS IN ADVANCE OF CONNECTION OR TAP FOR INSPECTIONS.
- 15. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED FOR WATER SERVICE CONNECTION FROM THE CITY OF ALBANY WATER DEPARTMENT.

WATER SYSTEM TESTS:

- SOIL TEST. THE CONTRACTOR SHALL PROVIDE A SOIL TEST EVALUATION TO DETERMINE THE NEED FOR POLYETHYLENE ENCASEMENT PER ANSI/AWWS C105/AZ1.5-82 PRIOR TO WATER MAIN INSTALLATION. SOIL TESTING SHALL BE CONDUCTED BY AN APPROVED SOIL TESTING LABORATORY IN ACCORDANCE WITH LOCAL WATER AUTHORITY STANDARDS.
- 2. WATER PIPING SHALL BE FLUSHED AND TESTED IN CONFORMANCE WITH THE LATEST REVISION OF ANSI/AWWA C600 STANDARD FOR DUCTILE IRON PIPE, C605 FOR PVC PIPE, OR EQUIVALENT OF C600 AND/OR C605 FOR PE PIPE.
- 3. THE PROPOSED WORKS MUST CONFORM TO THE LATEST REVISION OF ANSI/AWWA C651 STANDARD, TABLET METHOD EXCEPTED. FOLLOWING FLUSHING AND TESTING, THE ENGINEER SHALL OVERSEE COLLECTION OF AN APPROPRIATE NUMBER OF BACTERIOLOGICAL SAMPLES FOR THE TOTAL AND FECAL COLIFORM AND FOR STANDARD BACTERIAL PLATE COUNT AFTER THE FIELD FREE CHLORINE RESIDUAL IS LESS THAN 1.5 PPM AND THE SAMPLING POINTS HAVE BEEN DECONTAMINATED. PRIOR TO SAMPLING, THE ENGINEER SHALL COORDINATE THE APPROPRIATE NUMBER AND LOCATION OF SAMPLES TO BE COLLECTED WITH THE ALBANY COUNTY HEALTH DEPARTMENT.
- 4. PRESSURE AND LEAKAGE TESTING OF THE WATER MAIN SHALL BE WITNESSED BY THE CITY OF ALBANY WATER DEPARTMENT STAFF AND ACCEPTABLE BACTERIOLOGICAL TESTING MUST BE SUBMITTED AND ACCEPTED BY THE DEPARTMENT PRIOR TO FINAL ACCEPTANCE OF THE NEW WATER MAIN. PRIOR TO ISSUANCE, A NYS-LICENCED PROFESSIONAL ENGINEER MUST SUBMIT CERTIFICATION TO THE HEALTH DEPARTMENT THAT: THEY OR THEIR DESIGNATED REPRESENTATIVE WITNESSED THAT CONSTRUCTION WAS IN CONFORMANCE WITH THE PLANS AS APPROVED; FLUSHING, TESTING, AND DISINFECTION PROCEDURES NOTED HEREIN HAD BEEN PROPERLY PERFORMED; AND, MICROBACTERIAL SAMPLE RESULTS FROM THE COMPLETED WORKS WERE ACCEPTABLE. COPIES OF THE OFFICIAL LABORATORY RESULTS ARE TO BE INCLUDED WITH THE CERTIFICATION.
- 5. FIRE HYDRANTS ARE NOT ACCEPTABLE TESTING/SAMPLING POINTS.
- 6. WATER SERVICE LINES SIZED 4-INCHES OR GREATER SHALL BE:

- PRESSURE TESTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE LOCAL WATER AUTHORITY. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE FROM THE LOCAL WATER AUTHORITY.

- DISINFECTION BY USING THE CONTINUOUS FEED METHOD ACCORDING TO AWWA STANDARD SPECIFICATIONS. AFTER FLUSHING AND DISINFECTING THE SERVICE LINE, WATER SAMPLES SHALL BE COLLECTED BY THE ALBANY COUNTY HEALTH DEPARTMENT. APPROVAL AND NOTIFICATION BY THE HEALTH DEPARTMENT MUST BE RECEIVED BEFORE THE LATERAL IS PLACED IN SERVICE.

WATER MAIN MATERIALS:

- POLYVINYL CHLORIDE (PVC) PIPE MUST BE WITH INTEGRAL BELL AND SPIGOT JOINTS; CLASS 150, DR 18; CONFORMING WITH THE LATEST REVISION OF ANSI/AWWA C900 (FOR 4"-12" PIPE) OR C905 (FOR LARGER PIPE) STANDARD. MAXIMUM DEFLECTION OF 12" POLYVINYL CHLORIDE (PVC) AWWA C900 WATER LINE IS 0.7' FOR 20' LENGTHS. INSTALLATION TO INCLUDE TRACER TAPE AS PER MANUFACTURER'S INSTRUCTIONS.
- 2. CEMENT-LINED DUCTILE-IRON (DI) PIPE MUST BE CLASS 52 MINIMUM CONFORMING WITH THE LATEST REVISION OF ANSI/AWWA C151 STANDARD. IF REQUIRED BY WATER SUPPLIER THE PIPE SHALL BE ENCASED WITH A MINIMUM 8 MIL. POLYETHYLENE WRAP AS PER LATEST REVISION OF ANSI/AWWA C105 STANDARD.
- 3. POLYETHYLENE (PE) PRESSURE PIPE MUST BE PE 3408 MATERIAL MINIMUM. CONFORMING TO THE LATEST REVISION OF AWWA C901 AND C906.

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McFarland Johnson 60 RAILROAD PLACE SUITE 402 SARATOGA SPRINGS, NEW YORK 12866 P:518-580-9380 F:518-580-9383 SaratogaROM@mjinc.com PROJECT MILESTONE FINAL DESIGN PLANS NO. DATE DESCRIPTION

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SMITH BLVD

ALBANY, NEW YORK
PROJECT:

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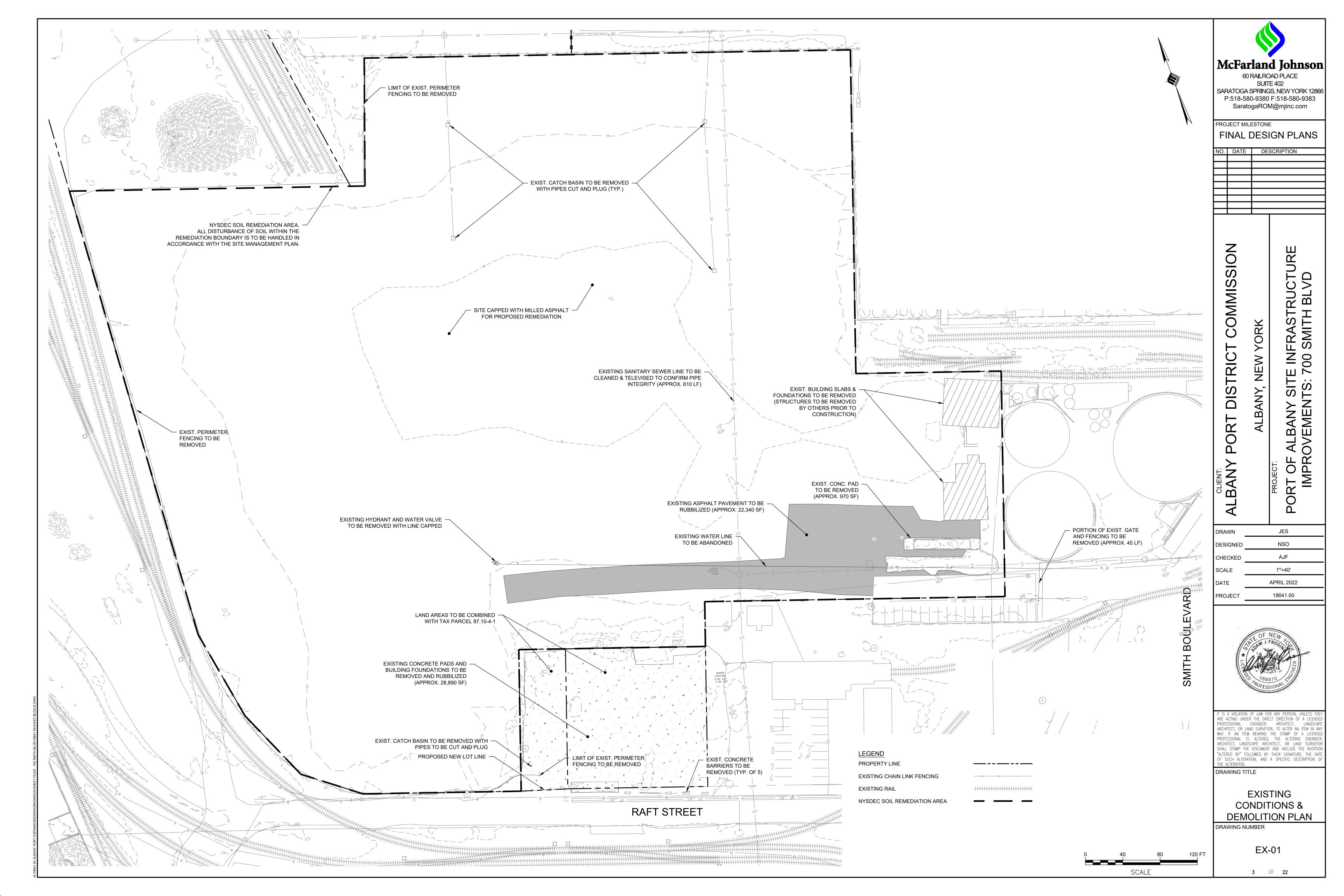
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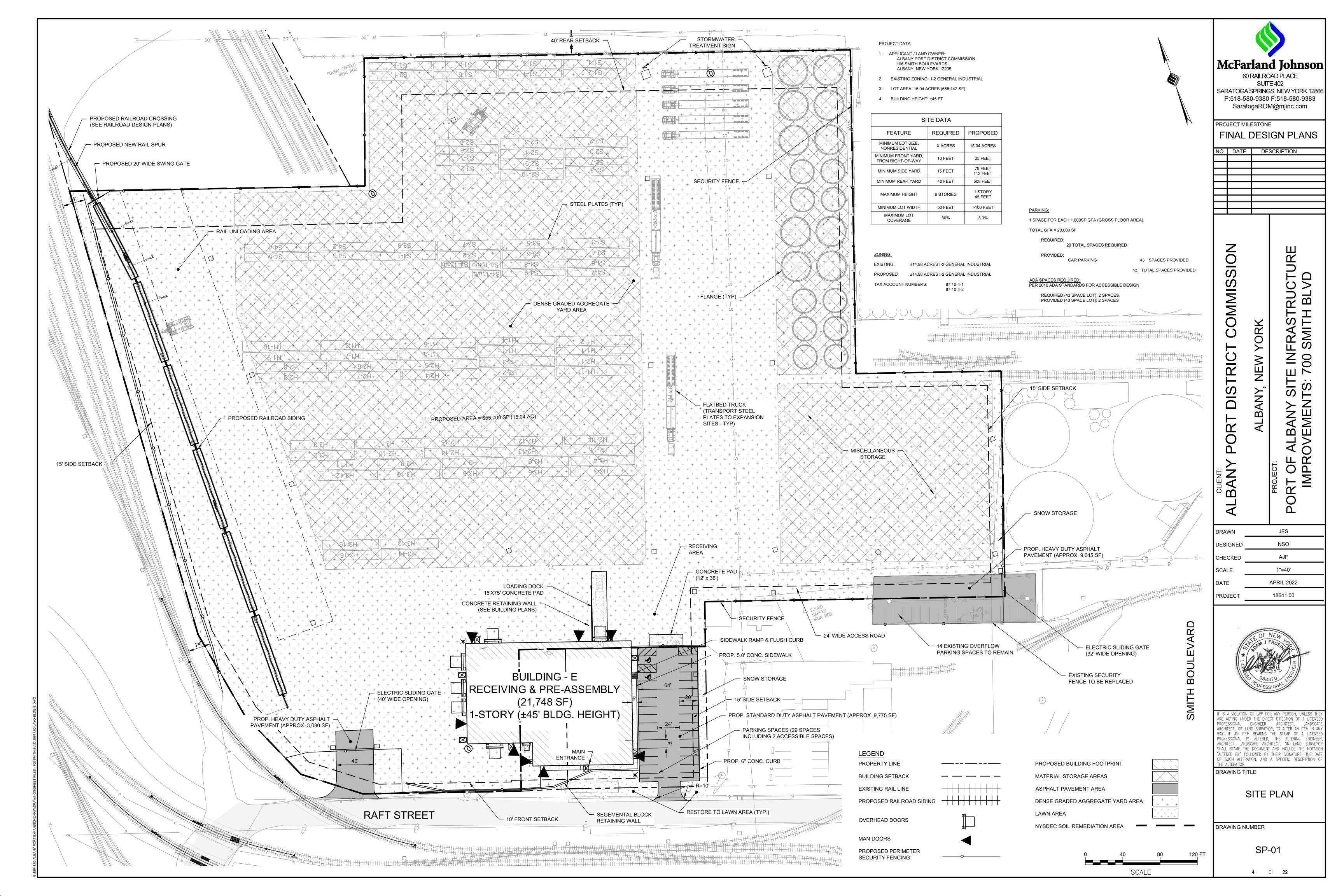
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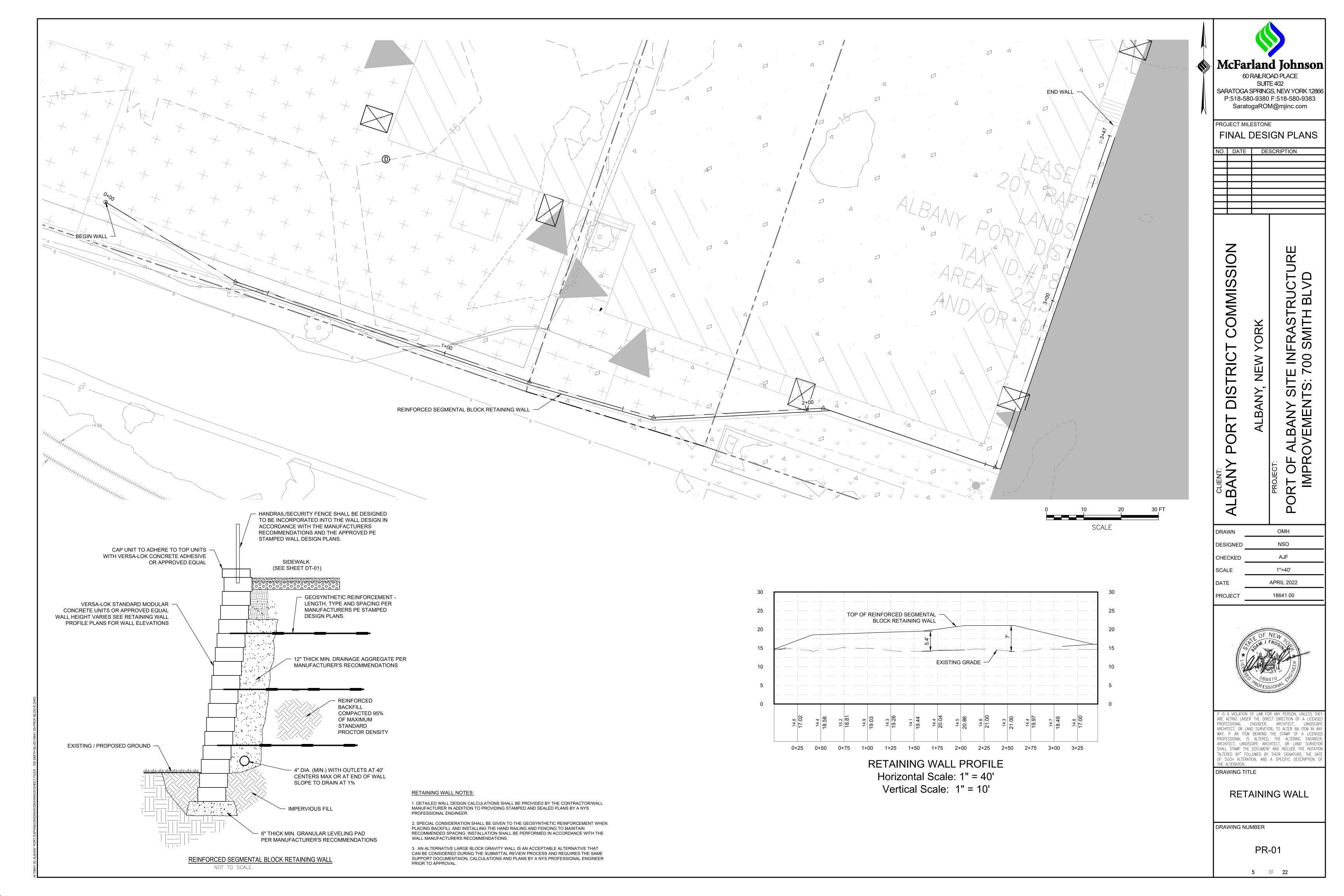
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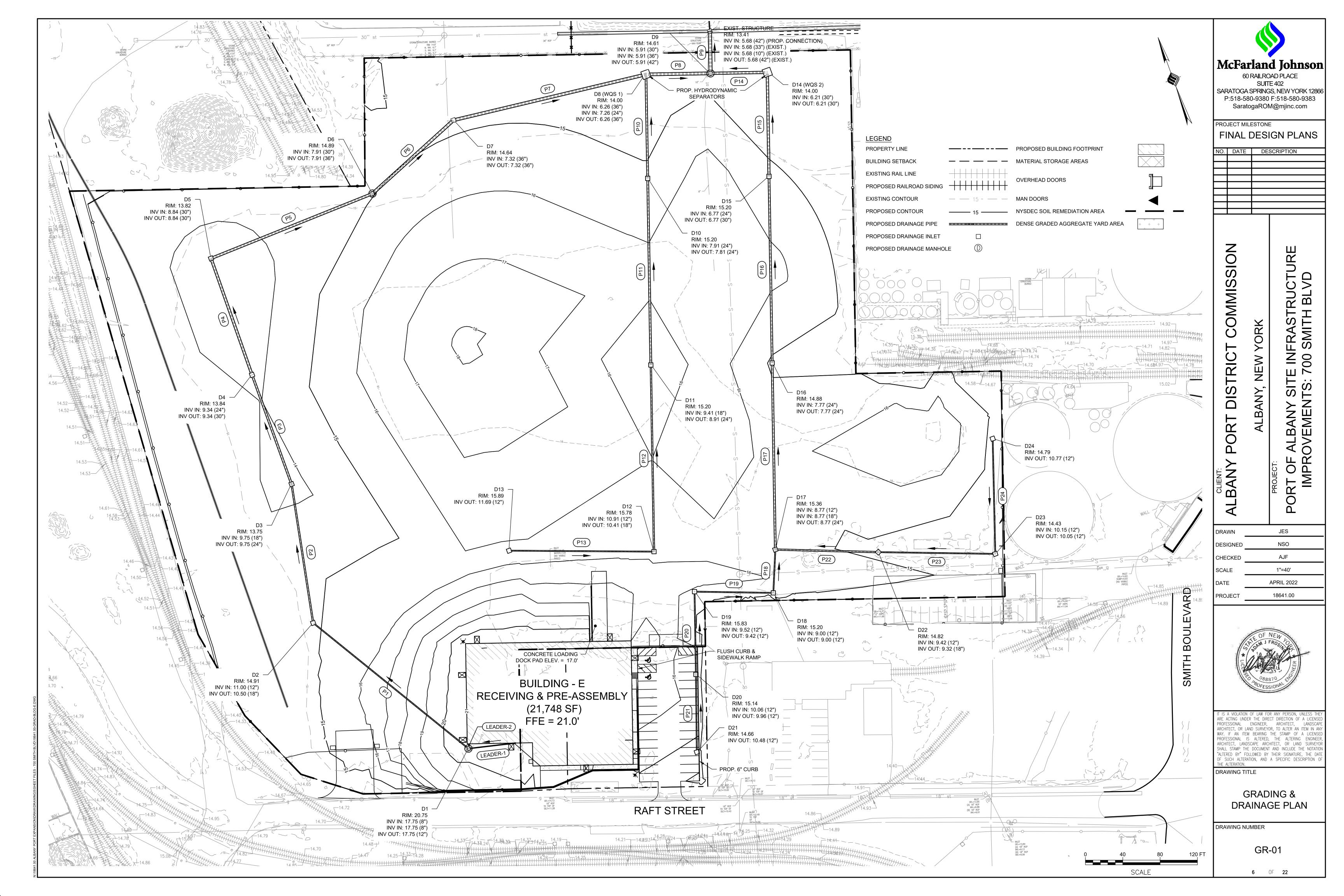
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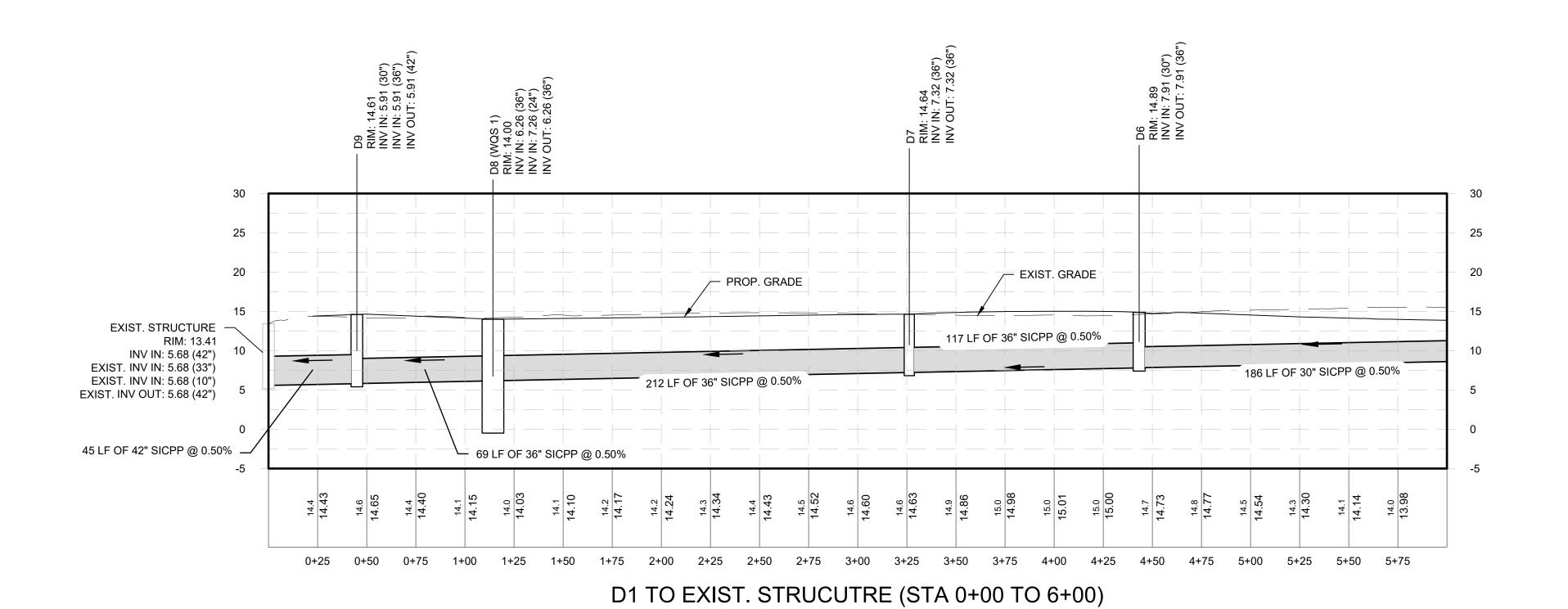
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Vertical Scale: 1" = 10'

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Horizontal Scale: 1" = 40'

Vertical Scale: 1" = 10'

- D2 RIM: 14.91 INV IN: 11.00 (12") INV OUT: 10.50 (18") D4 RIM: 13.84 INV IN: 9.34 (24") INV OUT: 9.34 (30") 25 __ EXIST. GRADE 20 15 RIM: 20.75 214 LF OF 12" SICPP @ 3.15% INV IN: 17.75 (8") (LEADER-1) INV IN: 17.75 (8") (LEADER-2) 10 INV OUT: 17.75 (12") 151 LF OF 18" SICPP @ 0.50% 132 LF OF 30" SICPP @ 0.38% 124 LF OF 24" SICPP @ 0.33% 15.6 15.61 15.21 15.2 15.15 15.2 15.16 15.6 15.61 15.2 15.24 6+25 6+50 6+75 7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50

| McFarland Johnson 60 RAILROAD PLACE SUITE 402 SARATOGA SPRINGS, NEW YORK 12866 P:518-580-9380 F:518-580-9383

SaratogaROM@mjinc.com

PROJECT MILESTONE

FINAL DESIGN PLANS

NO.	DATE	DESCRIPTION

COMMISSION **NEW YORK** PORT DISTRICT

ALBANY

ORT OF ALBANY SITE INFRASTRUCTURE IMPROVEMENTS: 700 SMITH BLVD OMH

DRAWN NSO DESIGNED AJF CHECKED 1"=40' SCALE APRIL 2022 18641.00 PROJECT



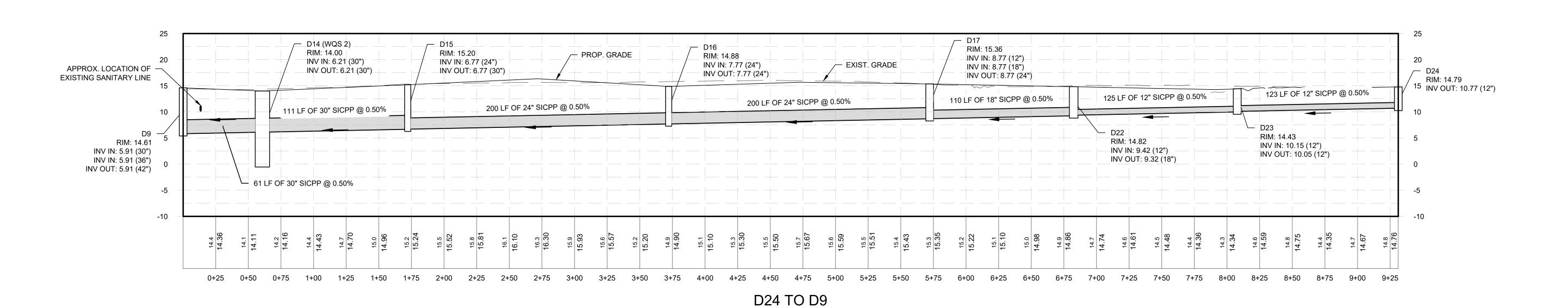
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THE ARE ACTING UNDER THE DIRECT DIRECTION OF A LICENSEE PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF

DRAWING TITLE

DRAINAGE PROFILES (1 OF 2)

DRAWING NUMBER

GR-02

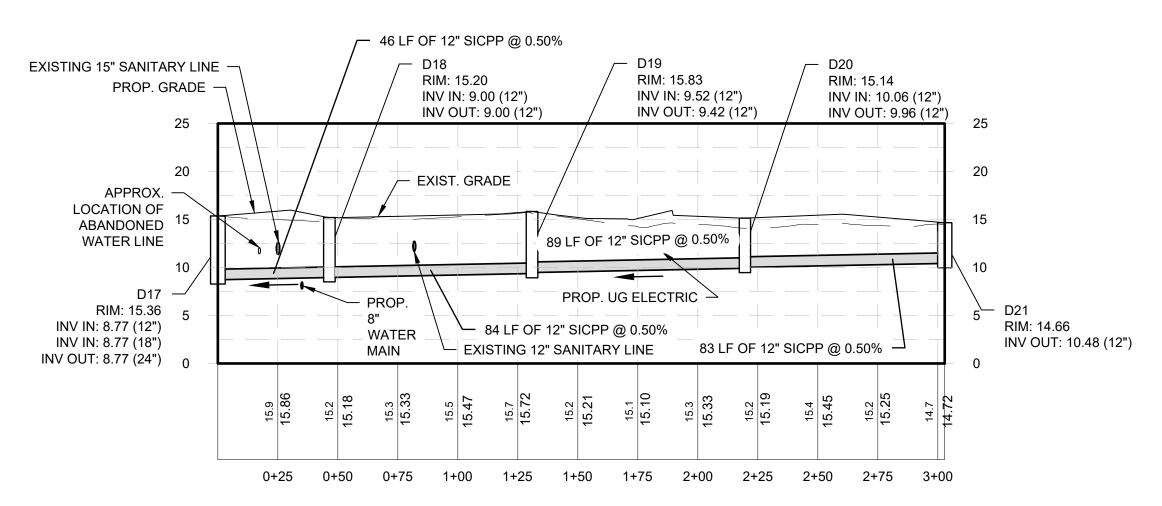


Horizontal Scale: 1" = 40'

Vertical Scale: 1" = 10'

25 - D8 (WQS 1) --RIM: 14.00 - D10 RIM: 15.20 /— D11 RIM: 15.20 D12 RIM: 15.78 RIM: 15.78
INV IN: 10.91 (12")
INV OUT: 10.41 (18") INV IN: 6.26 (36") 20 INV IN: 7.91 (24") INV IN: 9.41 (18") EXIST. GRADE INV IN: 7.26 (24") INV OUT: 7.81 (24") INV OUT: 8.91 (24") -INV OUT: 6.26 (36")-15 155 LF OF 12" SICPP @ 0.50% PROP. GRADE 200 LF OF 18" SICPP @ 0.50% 200 LF OF 24" SICPP @ 0.50% 111 LF OF 24" SICPP @ 0.50% 15.6 15.62 15.7 15.8 15.78 14.8 15.94 15.94 16.2 16.19 15.3 15.31 15.5 15.51 15.91 16.0 15.98 15.9 15.92 15.9 15.86 15.8 15.78 15.8 15.78 14.3 14.27 0+25 0+50 0+75 1+00 1+25 1+50 1+75 2+00 2+25 2+50 2+75 3+00 3+25 3+50 3+75 4+00 4+25 4+50 4+75 5+00 5+25 5+50 5+75 6+00 6+25 6+50

D13 TO D8 (WQS 1) Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



D21 TO D 17 Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



PROJECT MILESTONE FINAL DESIGN PLANS

NO.	DATE	DESCRIPTION

ORT OF ALBANY SITE INFRASTRUCTURE IMPROVEMENTS: 700 SMITH BLVD

COMMISSION YORK DISTRICT **PORT** LBAN)

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DRAWN	ОМН
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	APRIL 2022
PROJECT	18641.00



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DRAWING TITLE

DRAINAGE PROFILES (2 OF 2)

DRAWING NUMBER

GR-03 8 OF **22**



			STRUC	TURE TABLE					
STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING			
D1	20.75	17.75 17.75	17.75	NYSDOT 72" ROUND MANHOLE	1381314.12	690535.00			
D2	14.91	11.00	10.50	NYSDOT TYPE A	1381497.58	690424.72			
D3	13.75	9.75	9.75	NYSDOT TYPE A	1381645.23	690453.88			
D4	13.84	9.34	9.34	NYSDOT TYPE A	1381769.69	690454.11			
D5	13.82	8.84	8.84	NYSDOT TYPE F	1381901.93	690455.48			
D6	14.89	7.91	7.91	NYSDOT 60" ROUND MANHOLE	1381908.07	690641.83			
D7	14.64	7.32	7.32	NYSDOT TYPE K	1381952.26	690750.18			
D8 (WQS 1)	14.00	6.26 7.26	6.26	CS-8 WQS	1381927.86	690960.75			
D9	14.61	5.91 5.91	5.91	NYSDOT 96" ROUND MANHOLE	1381905.27	691026.23			
D10	15.20	7.91	7.81	NYSDOT TYPE A	1381822.60	690924.45			
D11	15.20	9.41	8.91	NYSDOT TYPE A	1381633.51	690859.23			
D12	15.78	10.91	10.41	NYSDOT TYPE A	1381444.43	690794.02			
D13	15.89		11.69	NYSDOT TYPE A	1381498.50	690648.44			
D14 (WQS 2)	14.00	6.21	6.21	CS-8 WQS	1381885.47	691083.65			
D15	15.20	6.77	6.77	NYSDOT TYPE A	1381780.19	691047.34			
D16	14.88	7.77	7.77	NYSDOT TYPE A	1381591.12	690982.13			
D17	15.36	8.77 8.77	8.77	NYSDOT TYPE A	1381402.05	690916.91			
D18	15.20	9.00	9.00	NYSDOT TYPE A	1381359.17	690899.02			
D19	15.83	9.52	9.42	NYSDOT TYPE A	1381389.29	690820.13			
D20	15.14	10.06	9.96	NYSDOT TYPE A	1381305.44	690791.22			
D21	14.66		10.48	NYSDOT TYPE A	1381226.89	690763.65			
D22	14.82	9.42	9.32	NYSDOT TYPE A	1381361.71	691019.63			
D23	14.43	10.15	10.05	NYSDOT TYPE A	1381317.13	691136.76			
D24	14.79		10.77	NYSDOT TYPE A	1381434.04	691176.37			
EXIST. STRUCTURE	13.41	5.68 5.68 5.68	5.68	EXISTING STRUCTURE	1381947.83	691040.91			

PIPE TABLE								
NAME	SIZE	LENGTH	SLOPE	MATERIAL	FROM STRC	TO STRC		
EXIST. 10"	10"	73.28'	-4.27%	VCP		EXIST. STRUCTURE		
EXIST. 33"	33"	163.13'	0.01%	VCP		EXIST. STRUCTURE		
EXIST. 42"	42"	341.40'	0.73%	VCP	EXIST. STRUCTURE			
LEADER-1	8"	50.87'	0.50%	SICPP		D1		
LEADER-2	8"	5.15'	-0.50%	SICPP		D1		
P1	12"	214.05'	3.15%	SICPP	D1	D2		
P2	18"	150.51'	0.50%	SICPP	D3	D2		
P3	24"	124.46'	0.33%	SICPP	D4	D3		
P4	30"	132.25'	0.38%	SICPP	D4	D5		
P5	30"	186.45'	0.50%	SICPP	D5	D6		
P6	36"	117.02'	0.50%	SICPP	D6	D7		
P7	36"	211.98'	0.50%	SICPP	D7	D8 (WQS 1)		
P8	36"	69.26'	0.50%	SICPP	D8 (WQS 1)	D9		
P9	42"	45.02'	0.50%	SICPP	D9	EXIST. STRUCTURE		
P10	24"	111.34'	0.50%	SICPP	D10	D8 (WQS 1)		
P11	24"	200.01'	0.50%	SICPP	D11	D10		
P12	18"	200.01'	0.50%	SICPP	D12	D11		
P13	12"	155.30'	0.50%	SICPP	D13	D12		
P14	30"	60.74'	0.50%	SICPP	D14 (WQS 2)	D9		
P15	30"	111.37'	0.50%	SICPP	D15	D14 (WQS 2)		
P16	24"	200.00'	0.50%	SICPP	D16	D15		
P17	24"	200.00'	0.50%	SICPP	D17	D16		
P18	12"	46.46'	0.50%	SICPP	D18	D17		
P19	12"	84.44'	0.50%	SICPP	D19	D18		
P20	12"	88.70'	0.50%	SICPP	D20	D19		
P21	12"	83.24'	0.50%	SICPP	D21	D20		
P22	18"	110.35'	0.50%	SICPP	D22	D17		
P23	12"	125.32'	0.50%	SICPP	D23	D22		
P24	12"	123.44'	0.50%	SICPP	D24	D23		



McFarland Johnson

60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
SaratogaROM@mjinc.com

PROJECT MILESTONE

FINAL DESIGN PLANS

NO.	DATE	DESCRIPTION

ALBANY PORT DISTRICT COMMISSION ALBANY, NEW YORK

ORT OF ALBANY SITE INFRASTRUCTURE IMPROVEMENTS: 700 SMITH BLVD DRAWN OMH NSO DESIGNED CHECKED AJF 1"=40' SCALE APRIL 2022

18641.00



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECT DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

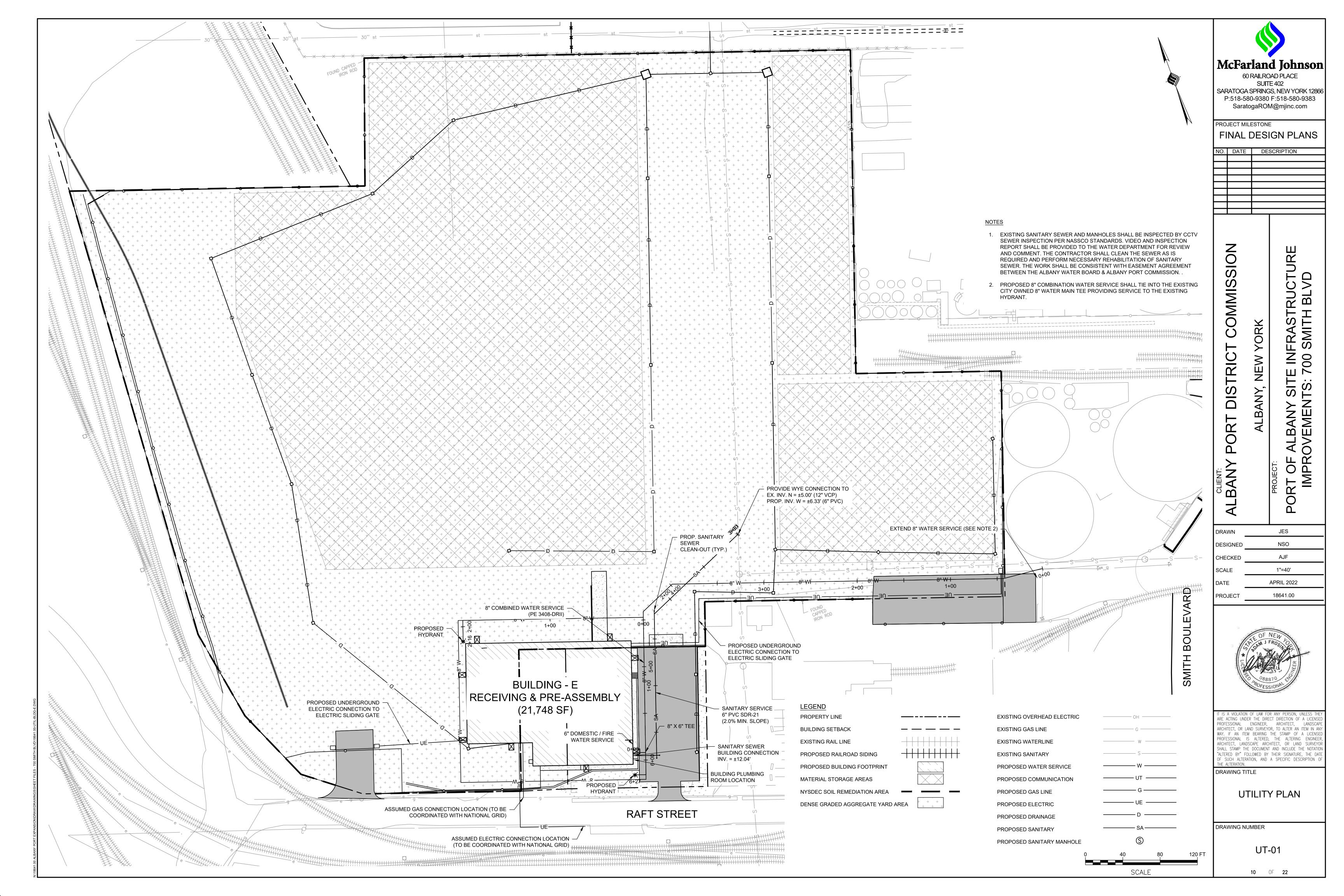
DRAWING TITLE

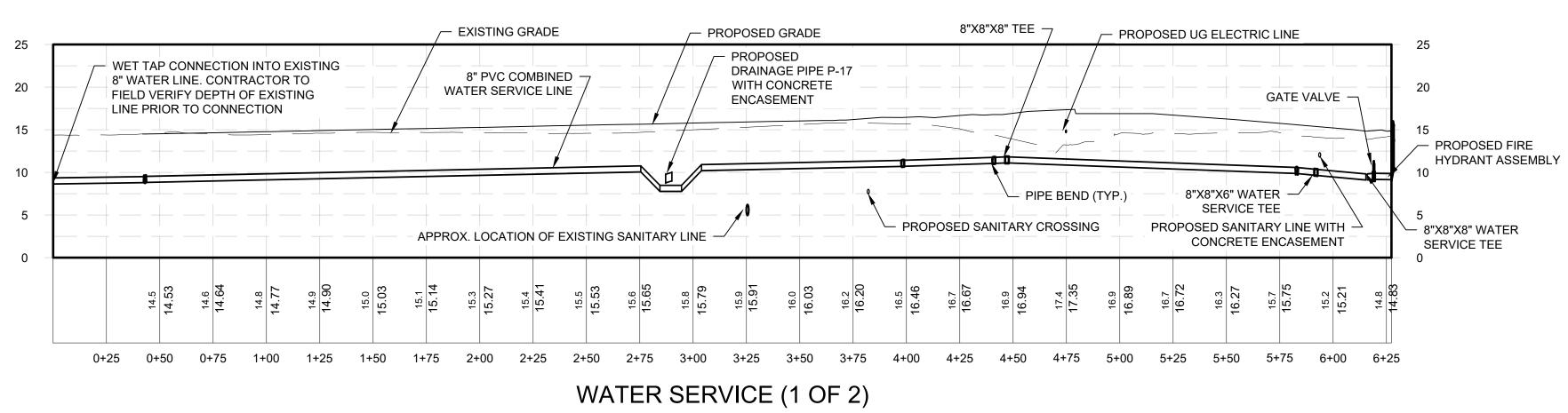
PROJECT

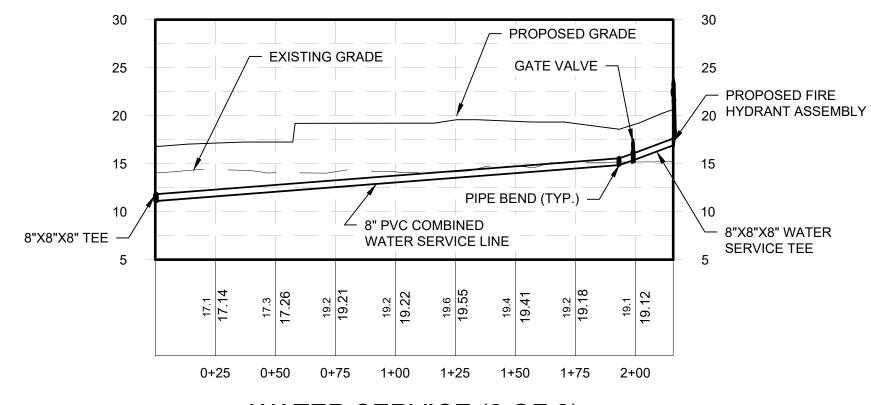
DRAINAGE TABLES

DRAWING NUMBER

GR-04

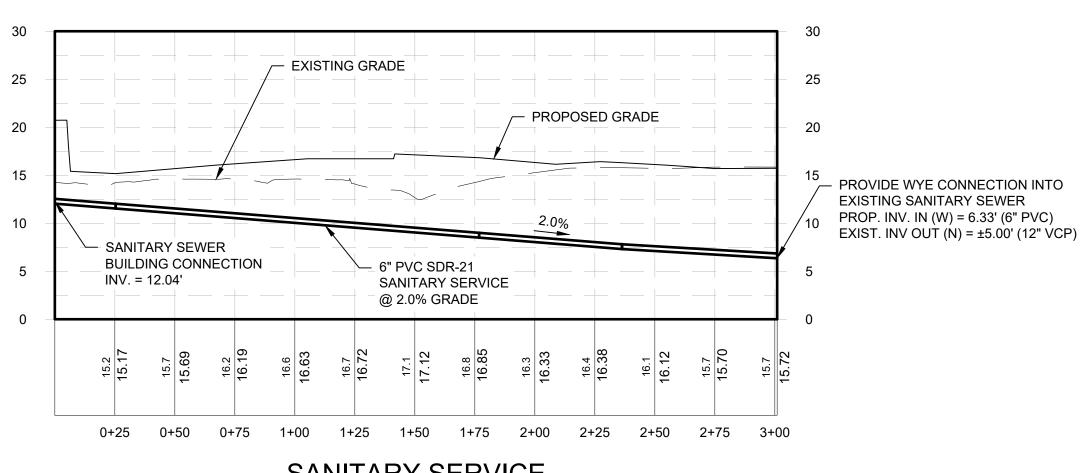






WATER SERVICE (2 OF 2) Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'

Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



SANITARY SERVICE Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'

- 1. EXISTING SANITARY SEWER MANHOLE SHALL BE LOCATED AND REHABILITATED TO MEET THE CITY OF ALBANY STANDARDS. RIM SHALL BE RAISED TO PROPOSED ELEVATION.
- 2. PROPOSED 8" COMBINATION WATER SERVICE SHALL TIE INTO THE EXISTING CITY OWNED 8" WATER MAIN PROVIDING SERVICE TO THE EXISTING



PROJECT MILESTONE FINAL DESIGN PLANS

NO. DATE DESCRIPTION

ORT OF ALBANY SITE INFRASTRUCTURE IMPROVEMENTS: 700 SMITH BLVD

COMMISSION YORK DISTRICT **PORT**

ALBAN) DRAWN OMH NSO DESIGNED AJF CHECKED SCALE 1"=40' APRIL 2022 18641.00 PROJECT



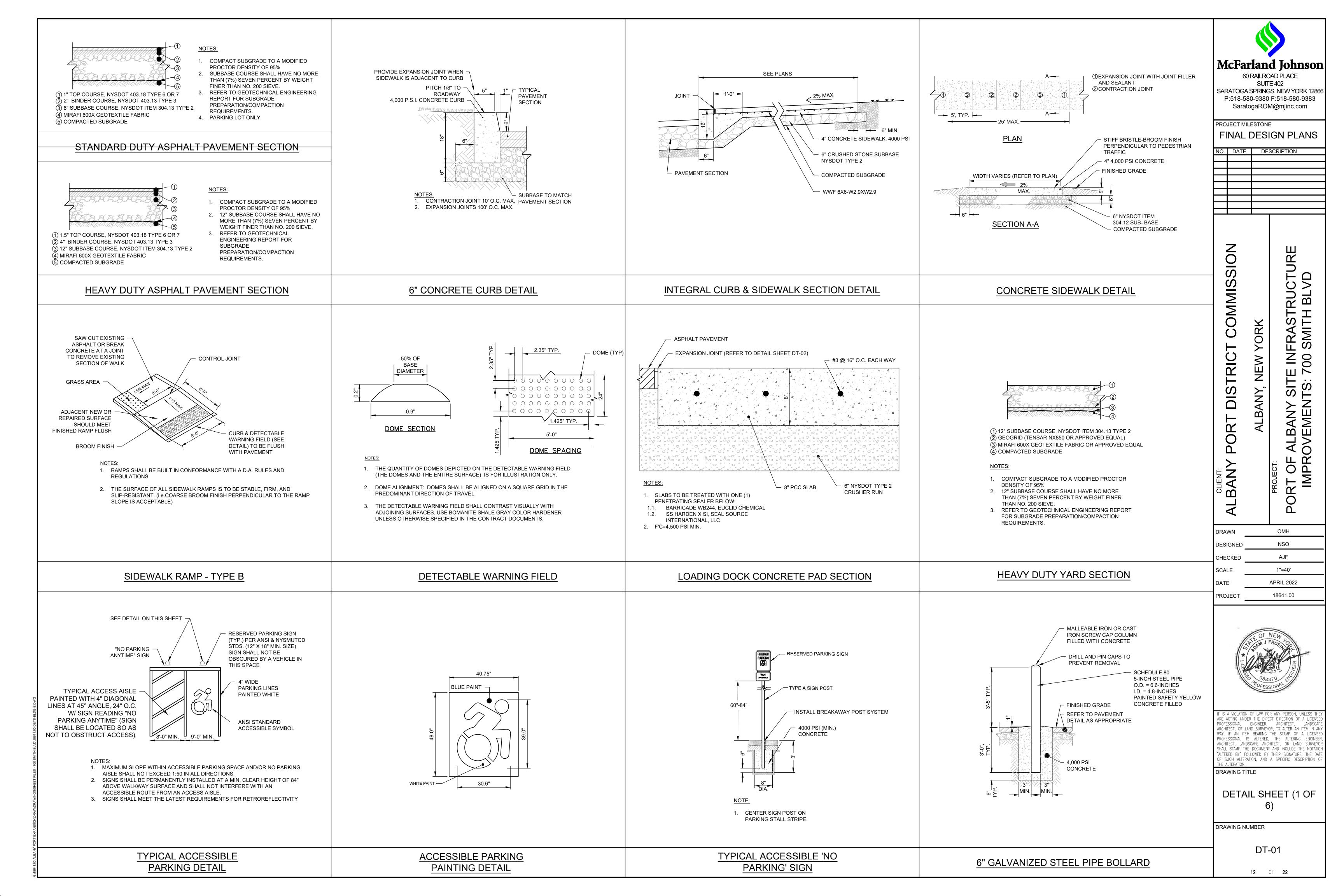
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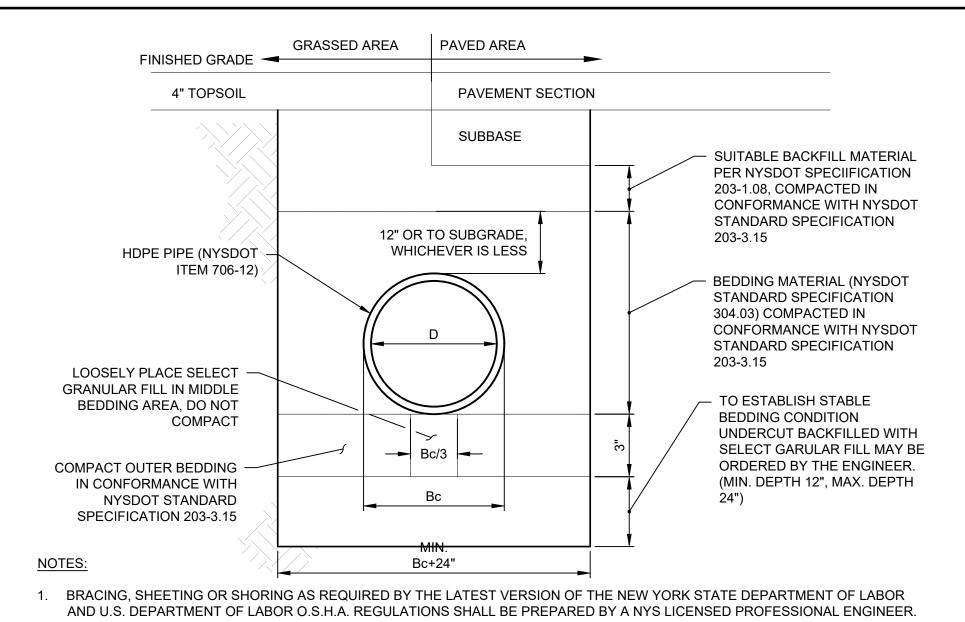
DRAWING TITLE

UTILITY PROFILES

DRAWING NUMBER

UT-02





STORM PIPE BEDDING

MATERIAL SHALL BE GRAY CAST IRON CONFORMING TO

EACH FRAME AND COVER SHALL HAVE MACHINED HORIZONTAL BEARING

ALL SURFACES TO BE

BITUMINOUS COATED

UNITS DESIGNED HEAVY DUTY FOR A.A.S.H.T.O. HS20-44

A.S.T.M. A48 (LATEST REVISION) CLASS 30B.

WHEEL LOADS.

SURFACES.

—— 24 " DIA. — ►

BOND BREAKER

CONCRETE /

STRUCTURE

COVER SECTION

STORM SEWER MANHOLE FRAME & COVER

2. ALL SPECIFIED STORM PIPE ITEMS SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS - SECTION 603, CULVERT AND STORM DRAINS

22 3/8" ----

24 1/2" ----

FRAME SECTION

SEALANT MATERIAL $\frac{1}{8}$ " - $\frac{3}{8}$ "

NON-EXTRUDING PREMOLDED

COMPRESSIBLE MATERIAL

ASTM D1751

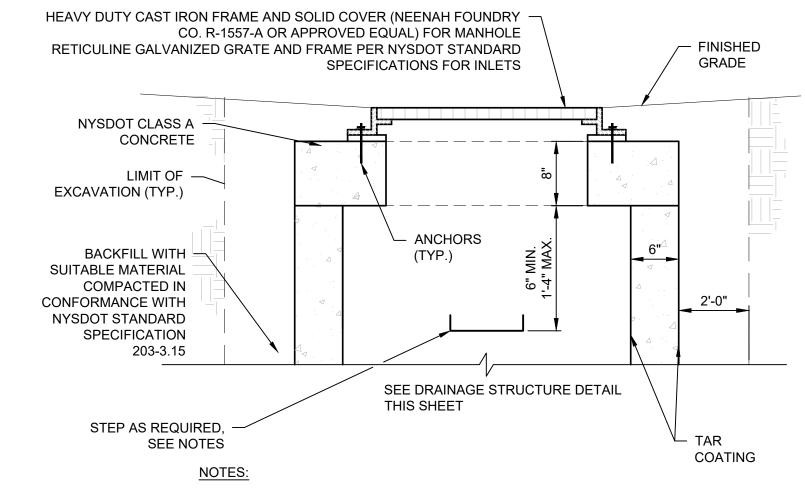
BELOW SURFACE (MEETING SPECIFICATION S-605)

1. ALL SPECIFIED DRAINAGE STRUCTURE ITEMS SHALL BE STEP AS SUPPLIED AND PLACED IN REQUIRED, ACCORDANCE WITH NYSDOT **SEE NOTES** STANDARD SPECIFICATIONS -LIMIT OF SECTION 604, EXCAVATION (TYP.) DRAINAGE STRUCTURES. 2'-0" NYSDOT CLASS 2. DRAINAGE STRUCTURES SHALL SEE STRUCTURE TABLE A CONCRETE BE CAST IN PLACE (RECTANGULAR ONLY) OR PRECAST UNITS (RECTANGULAR OR ROUND). 3. THE CONTRACTOR MAY SUBSTITUTE ROUND, PRECAST STRUCTURES USING SIZES INDICATED ON NYSDOT STANDARD SHEET 604-02, DRAINAGE STRUCTURE DETAILS (SHEET 4 OF 4) 4. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H-20 LOADING. 5. STEPS SHALL BE REQUIRED IN ALL STRUCTURES DEEPER THAN 4'-0". CATCH BASIN TRAPS TO BE PROVIDED AT BACKFILL WITH SUITABLE MATERIAL OUTLET ENDS OF ALL DRAINAGE STRUCTURES. COMPACTED IN CONFORMANCE WITH NYSDOT STANDARD SPECIFICATION 203-3.15 TYPE 4 SUBBASE (NYSDOT ITEM 304.15) COMPACTED IN CONFORMANCE WITH NYSDOT STANDARD SPECIFICATION 203-3.15 TOP OF FOOTING -

DRAINAGE STRUCTURE

SEE DRAINAGE STRUCTURE FRAME/GRATE DETAIL THIS SHEET

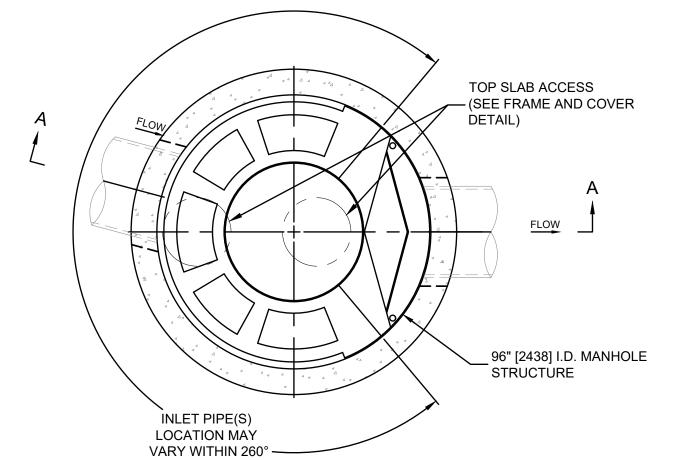
NOTES:



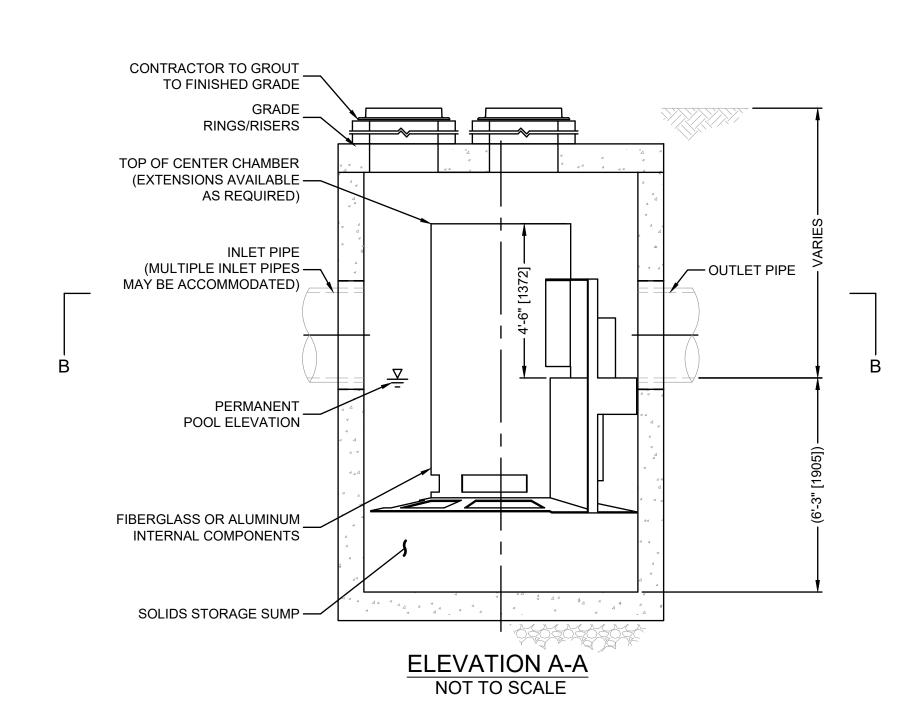
1. ALL SPECIFIED STORM STRUCTURE ITEMS SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS - SECTION 604, DRAINAGE STRUCTURES.

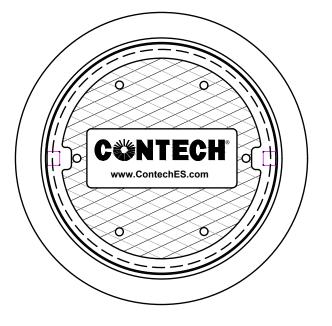
DRAINAGE STRUCTURE FRAME AND GRATE

- 2. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H-20 LOADING.
- 3. STEPS SHALL BE REQUIRED IN ALL STRUCTURES DEEPER THAN 4'-0".



PLAN VIEW B-B NOT TO SCALE





FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

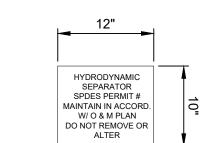
SITE SPECIFIC DATA REQUIREMENTS							
STRUCTURE ID			WQS1				
WATER QUALITY FLO	W RATE (cfs [L/s	s])	7.20				
PEAK FLOW RATE (cfs	s [L/s])		26.55				
RETURN PERIOD OF I	PEAK FLOW (yrs	s)	10				
RIM ELEVATION			14.00				
PIPE DATA:	INVERT	MATERIAL	DIAMETER				
INLET PIPE 1	HDPE	36"					
INLET PIPE 2	24"						
OUTLET PIPE	36"						
STRUCTURE ID			WQS2				
WATER QUALITY FLO	W RATE (cfs [L/s	s])	7.20				
PEAK FLOW RATE (cfs	s [L/s])		26.55				
RETURN PERIOD OF I	PEAK FLOW (yrs	s)	10				
RIM ELEVATION			14.00				
PIPE DATA:	INVERT	MATERIAL	DIAMETER				
INLET PIPE 1	HDPE	30"					
INLET PIPE 2	-	-	-				
OUTLET PIPE	6.94	HDPE	30"				

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- 2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- 3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- 4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- 5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478
- AND AASHTO LOAD FACTOR DESIGN METHOD. 6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE
- INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



SIGNAGE NOT TO SCALE

- 1. STORMWATER MANAGEMENT PRACTICE SIGN TO BE POSTED IN THE
- 2. SPDES GENERAL PERMIT NUMBER TO BE DETERMINED ONCE THE SWPPP IS

IMMEDIATE VICINITY OF THE HYDRODYNAMIC SEPARATOR.



SARATOGA SPRINGS, NEW YORK 12866 P:518-580-9380 F:518-580-9383 SaratogaROM@mjinc.com

PROJECT MILESTONE FINAL DESIGN PLANS

NO.	DATE	DESCRIPTION

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CHECKED

PROJECT

SCALE

ORK **Z** 0

OMH NSO AJF 1"=40' APRIL 2022

18641.00



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DRAWING TITLE

DETAIL SHEET (2 OF

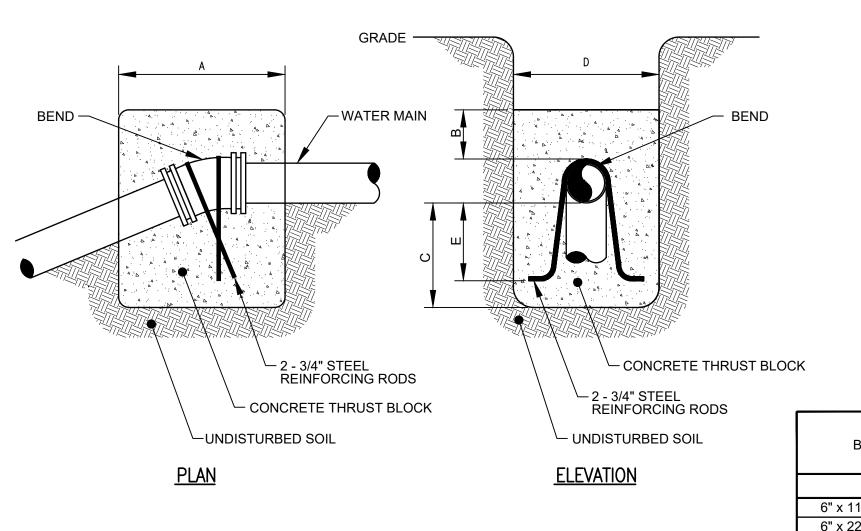
DRAWING NUMBER

DT-02

13 OF **22**

EXPANSION JOINT

CONTECH® CASCADE SEPARATOR STANDARD DETAIL



1" CURB STOP

TAPS, ETC.) AND REPLACE WITH THREADED BRASS PLUGS.

— 1" COPPER (MIN)

1. IMMEDIATELY PRIOR TO THE AUTHORITY PLACING WATER MAIN IN SERVICE CONTRACTOR SHALL REMOVE ALL CORPORATIONS ASSOCIATED WITH TEMPORARY FACILITIES (I.E. SAMPLING

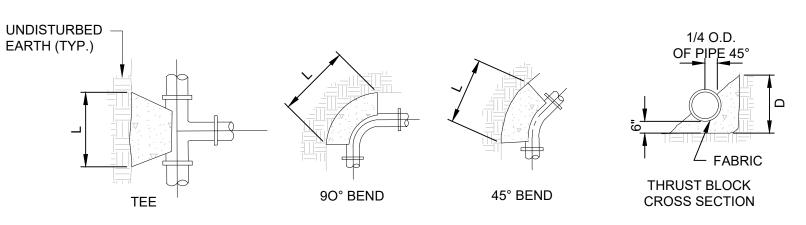
CORPORATION STOP

VERTICAL THRUST BLOCK DETAILS

1. CONCRETE FOR THRUST BLOCKS SHALL BE CONCRETE CLASS A (OR CLASS G IF UNDERWATER) IN ACCORDANCE WITH NYSDOT SECTION 501.

2. CONCRETE NOT TO OVERLAP ANY JOINT.

BEND	MINIMUM VOLUME OF CONCRETE	MINIMUM ALLOWABLE DIMENSIONS FOR VERTICAL THRUST BLOCKS (IN FEET)						
	DIMENSIONS	A B C D E						
6" x 11-1/4°	1.00 CY	3.0	1.0	1.3	3.0	1.0		
6" x 22-1/2°	1.50 CY	4.0	1.0	1.8	3.0	1.5		
6" x 45°	2.00 CY	6.0	1.5	2.0	3.0	1.7		
8" x 11-1/4°	1.00 CY	3.0	1.0	1.3	3.0	1.0		
8" x 22-1/2°	1.50 CY	4.0	1.0	1.8	3.0	1.5		
8" x 45°	2.50 CY	6.0	1.5	2.0	3.0	1.7		



	REQUIRED BEARING AREAS & DIMENSIONS										
			_	CONCR			_				
	TEE 90° BEND 45° BEND 22-1/2° BEND 11-1/4° BEND										
PIPE	AREA	DIM	AREA	DIM	AREA	DIM	AREA	DIM	AREA	DIM	
SIZE (IN)	(SQFT)	DXL	(SQFT)	DXL	(SQFT)	DXL	(SQFT)	DXL	(SQFT)	DXL	
6	3.2	1.5 X 2.5	4.5	2.0 X 2.5	2.4	1.5 X 2.0	1.2	1.0 X 1.5	0.6	0.5 X 1.	
8	5.7	2.0 X 3.0	8	2.0 X 4.0	4.3	2.0 X 2.5	2.2	1.5 X 1.5	1.1	1.0 X 1.	
12	12.7	3.5 X 3.5	18.0	4.0 X 4.5	9.7	2.5 X 4.0	5.0	2.0 X 2.5	2.5	1.5 X 2.	
	1		1		1		1		1		

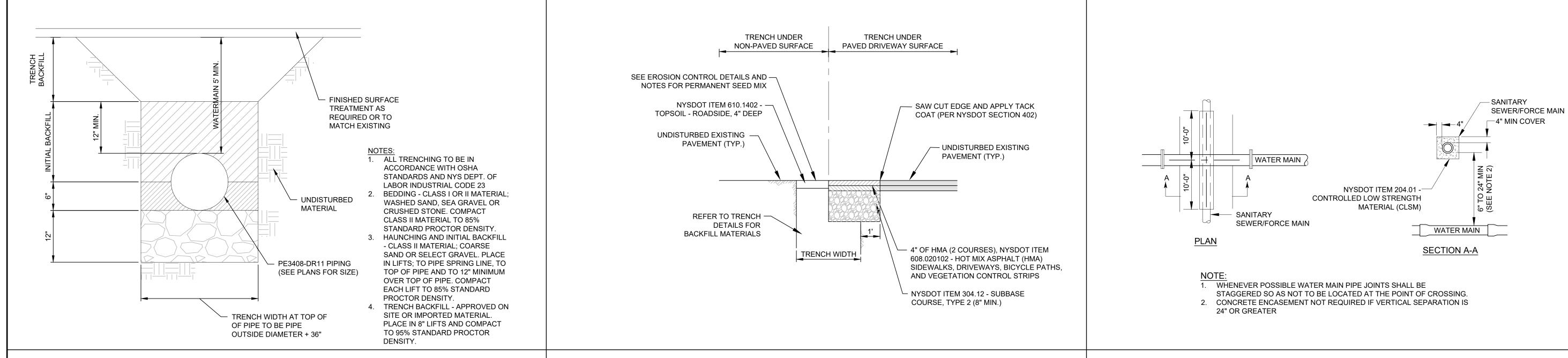
NOTES:

- 1. CONCRETE FOR THRUST BLOCKS SHALL BE CONCRETE CLASS A (OR CLASS G IF UNDERWATER) IN ACCORDANCE WITH NYSDOT SECTION 501.
- 2. CONCRETE NOT TO OVERLAP ANY JOINT. 3. VALUES FOR TEE ALSO APPLY TO END PLUGS, CAPS, AND TAPPING SLEEVES
- . REQUIRED BEARING AREAS ARE DUE TO THRUSTS CAUSED BY 150 PSI WORKING PRESSURE PLUS 50% (75 PSI) SURGE ALLOWANCE RESULTING IN 225 PSI TOTAL INTERNAL PRESSURE
- REQUIRED BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 2000 POUNDS PER SQUARE FOOT FOR SAND. DUE TO OTHER SOIL CONDITIONS ENCOUNTERED, BEARING AREAS MAY BE MODIFIED BY THE ENGINEER BY MULTIPLYING THE AREA GIVEN IN THE TABLE FOR THE APPROPRIATE PIPE SIZE AND FITTING BY THE CORRECTION FACTORS LISTED

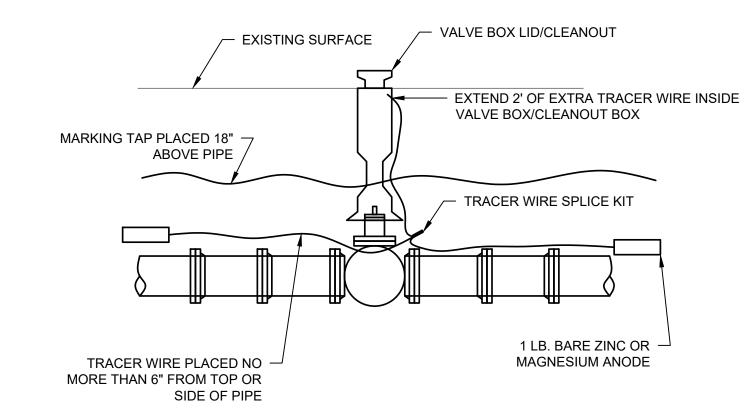
SOIL	ALLOWABLE SOIL PRESSURE (LBS/SQFT)	CORRECTION FACTOR	
SOFT CLAY	1,000	2.00	
SAND	2,000	1.00	
SAND & GRAVEL	3,000	0.67	
SAND AND GRAVEL CEMENTED WITH CLAY	4,000	0.50	
HARD SHALE	10,000	0.20	

6. IN MUCK, PEAT, OR RECENTLY PLACED FILL ALL THRUST BLOCKS SHALL BE RESISTED BY PILES OF TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS, ALL AS REQUIRED BY THE ENGINEER.

HORIZONTAL THRUST BLOCK DETAILS



WATER MAIN TRENCH TRENCH UNDER GRASS AND DRIVEWAY DETAIL



WATER MAIN/SEWER CROSSING DETAIL

- 1. ANODES SHALL BE ONE POUND (1 LB.) BARE ZINC OR MAGNESIUM (OR APPROVED EQUAL) PLACED AT THE BEGINNING AND THE END OF THE WATERLINE/SEWER AND AT EVERY VALVE BOX/MANHOLE AND/OR AT LEAST EVERY FIVE HUNDRED FEET (500') WITHIN.
- 2. TRACER WIRE SHALL BE 12AWG ANNEALED SOFT COPPER (SOLID) WITH COLOR CODED 30MIL HDPE JACKET PER SERVICE. TRACER WIRE SHALL BE PLACED NO FURTHER THAN 6" TO THE SIDE OR ABOVE THE PIPE. TRACER WIRE SHALL BE ACCESSIBLE AT EVERY VALVE BOX/MANHOLE OR TEST
- STATIONS AS LEAST EVERY 500'. MARKING TAPE SHALL BE INSTALLED 18" ABOVE PVC PIPE. MARKER TAPE SHALL BE AT LEAST 3" IN
- WIDTH AND COLOR CODED PER SERVICE.

DRAWING NUMBER

14 OF **22**



OMH

NSO

AJF

1"=40'

APRIL 2022

18641.00

McFarland Johnson

60 RAILROAD PLACE

SUITE 402

SARATOGA SPRINGS, NEW YORK 12866

P:518-580-9380 F:518-580-9383

SaratogaROM@mjinc.com

FINAL DESIGN PLANS

NO. DATE DESCRIPTION

PROJECT MILESTONE

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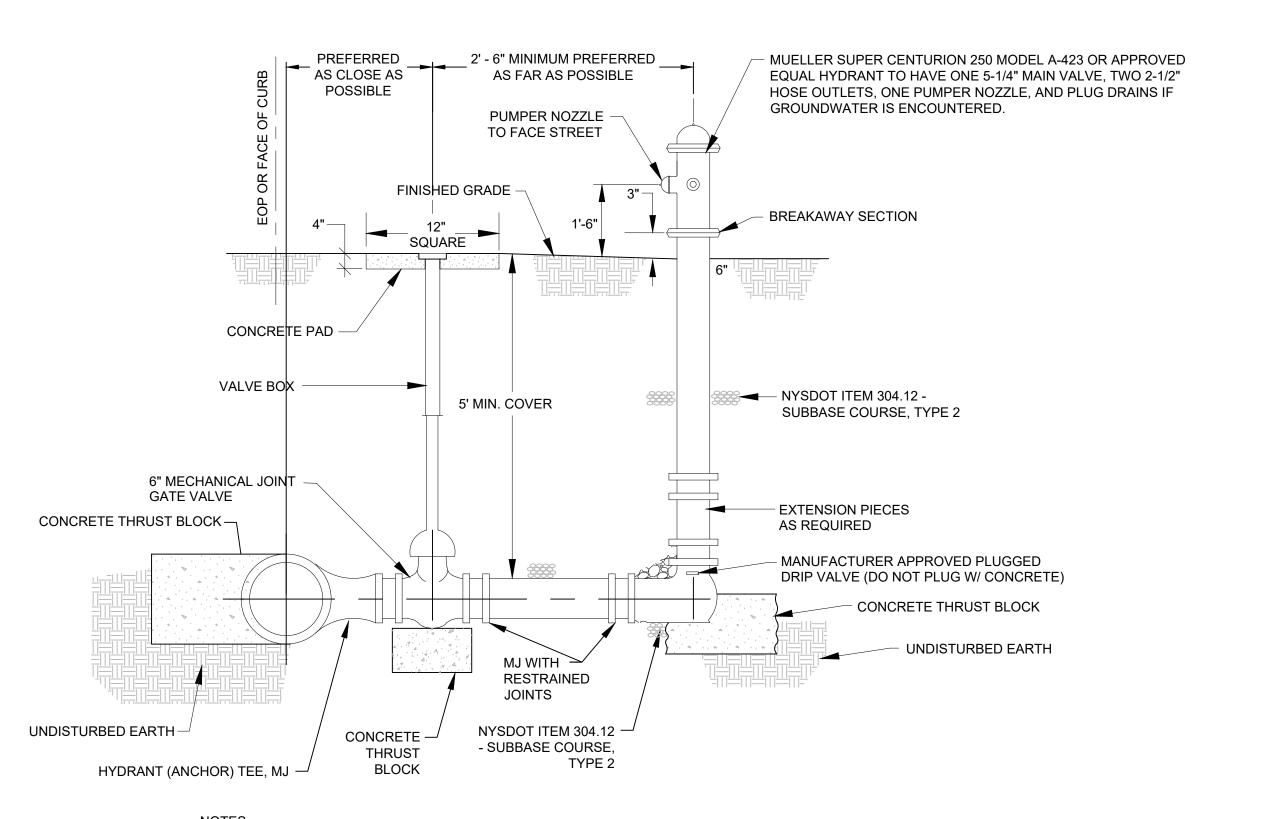
ARE ACTING UNDER THE DIRECT DIRECTION OF A LICENS PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAF ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY VAY. IF AN ITEM BEARING THE STAMP OF A LICENSI PROFESSIONAL IS ALTERED, THE ALTERING ENGINEE RCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYO SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DAT F SUCH ALTERATION, AND A SPECIFIC DESCRIPTION

DETAIL SHEET (3 OF

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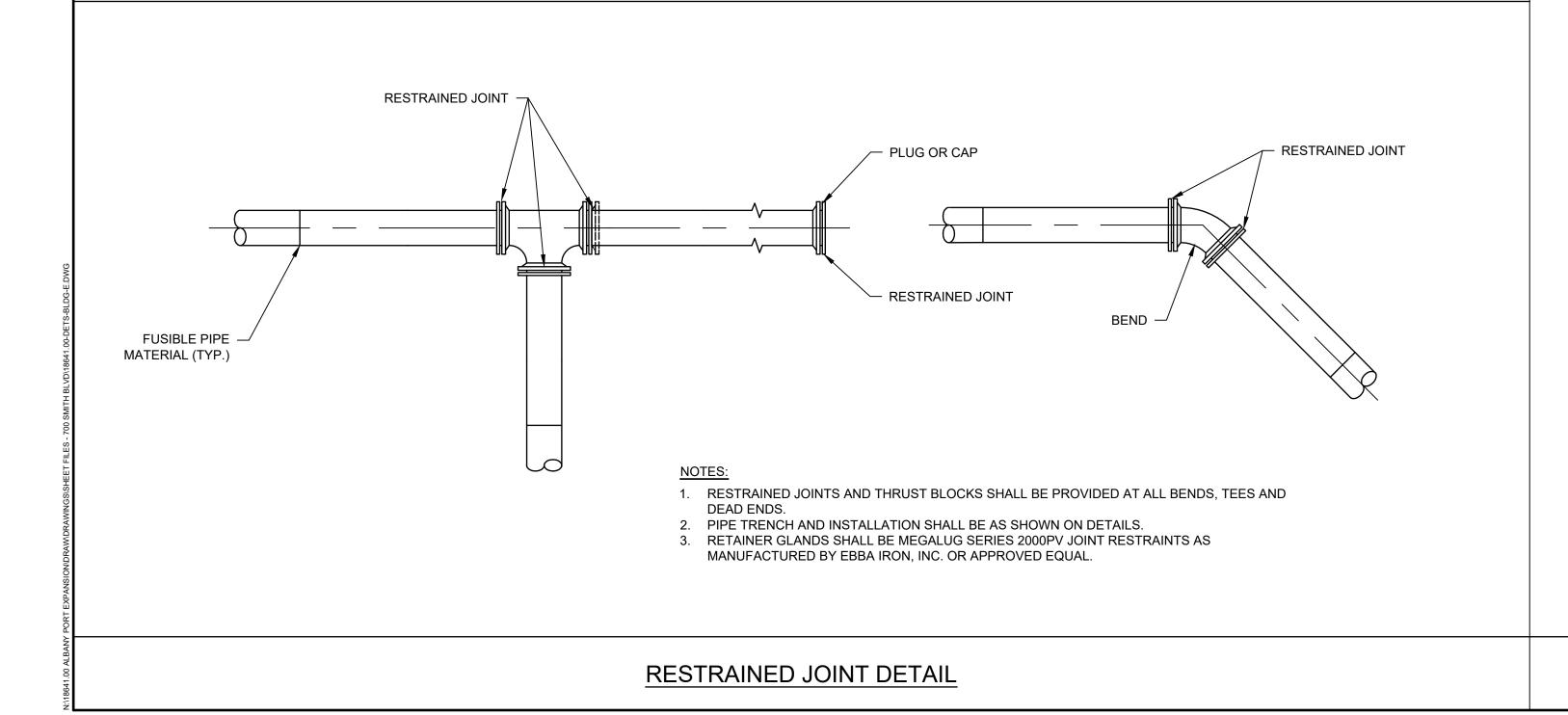
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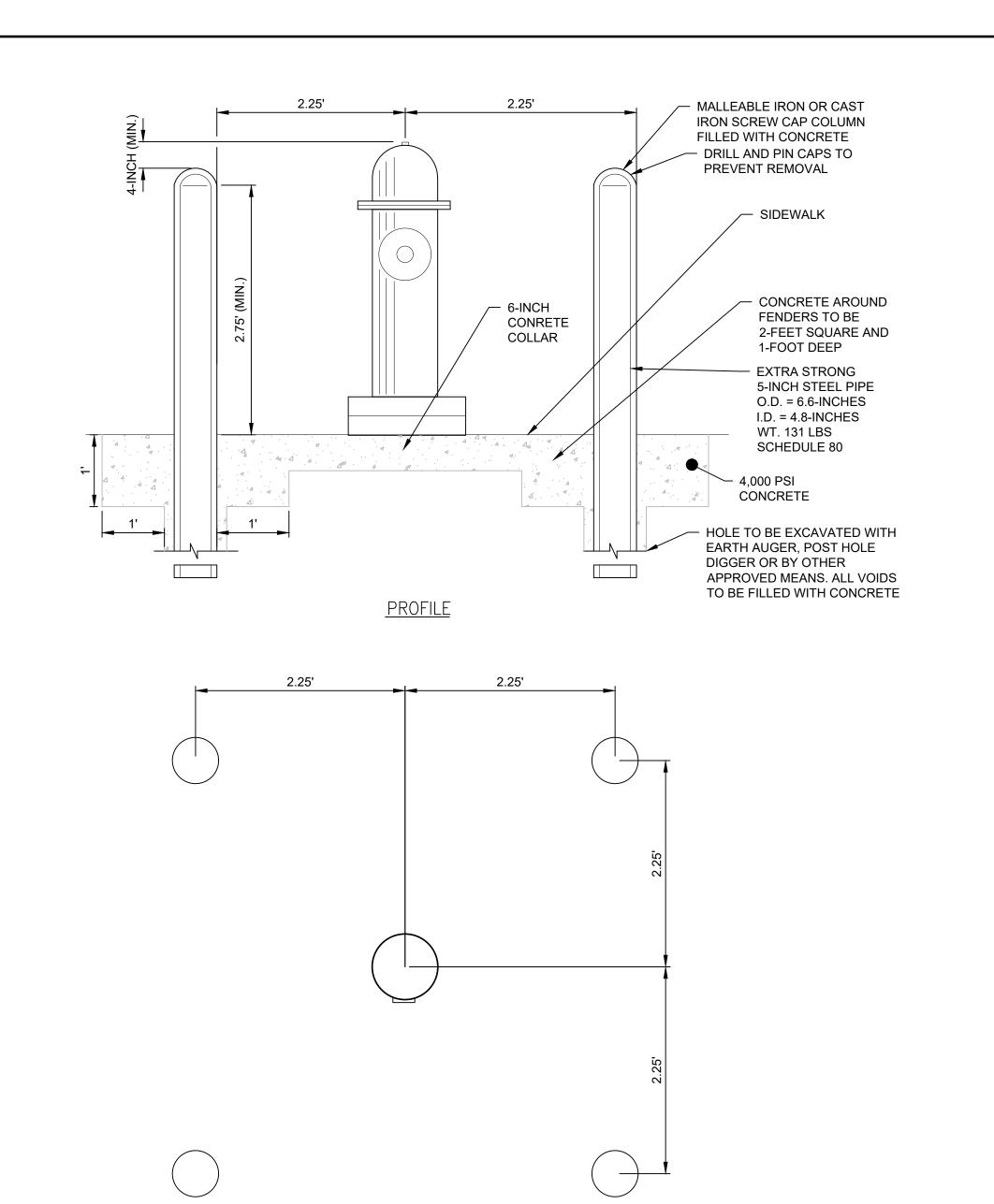
DISINFECTION/BLOW-OFF/SAMPLING TAP WATERMAIN/SANITARY SEWER FORCE MAIN TRACER WIRE/MARKER TAPE DETAIL



- 1. THE VALVE BOX SHALL BE INSTALLED PLUMB IN RELATION TO VALVE IN WHICH IT CONTROLS.
- 2. SIMILAR INSTALLATION FOR WATER AND FIRE PROTECTION MAINS.
- 3. VALVE COVER FOR FIRE PROTECTION MAINS SHALL READ "FIRE".
- 4. HYDRANT SHALL BE PAINTED RED FOR FIRE PROTECTION AND POTABLE USE AND BLACK FOR RAW WATER AND MAINTENANCE.
- 4. MATCH NOZZLE THREADS AND OPERATING DIRECTION TO EXISTING HYDRANTS.
- 5. CONTRACTOR SHALL PROVIDE CHAIN WITH I.D. TAG ON ALL NEW HYDRANTS (BLACK HYDRANTS LABELED AS NON-POTABLE). CHAIN AND TAG SHALL BE APPROVED BY OWNER PRIOR TO INSTALLATION. ALL EXISTING HYDRANTS SHALL BE REMOVED OR REPLACED AS SHOWN ON PLANS. SEE PLANS FOR NUMBERING SEQUENCE.
- 6. HYDRANT THRUST BLOCKS SHALL BE PROVIDED AS FOR A DEAD END AT LOCATIONS SHOWN ON THE DETAIL AND/OR AS REQUIRED BY THE OWNER. THRUST BLOCKS AT HYDRANTS SHALL BE USED TO COINCIDE WITH RESTRAINED JOINTS (NOT AS A REPLACEMENT).
- 7. STAINLESS STEEL, THREADED ROD JOINT RESTRAINTS SHALL BE INSTALLED BETWEEN THE TEE FITTING AND VALVE, AS WELL AS THE VALVE AND HYDRANT ASSEMBLY.
- 8. THE HYDRANT DRAIN HOLE SHALL BE KEPT UNOBSTRUCTED, CARE SHALL BE USED TO KEEP THRUST RESTRAINTS FROM BLOCKING DRAIN HOLE. IF THE HYDRANT DRAIN IS LOCATED WITHIN 10'-0" OF A SANITARY SEWER OR STORM DRAIN, OR IF GROUNDWATER IS FOUND WITHIN 6'-6" OF FINISHED GRADE, THE HYDRANT DRAINS SHALL BE PLUGGED.
- 9. THY HYDRANT ASSEMBLY SHALL BE REVIEWED AND APPROVED BY THE CITY OF ALBANY WATER DEPARTMENT FOR ITS CONFORMITY TO CITY AND STATE STANDARDS

FIRE HYDRANT ASSEMBLY





HYDRANT BOLLARDS

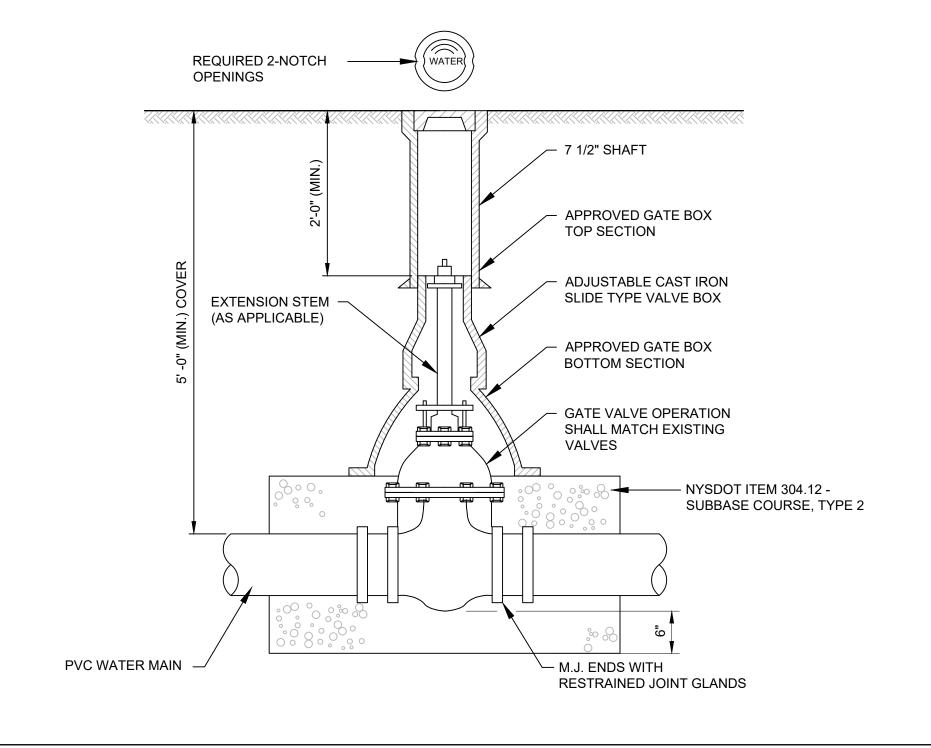
1. ALL GATE VALVES SHALL BE MUELLER MODEL A-2361

AND INSTALLED IN

ACCORDANCE WITH AWWA

C600 OR APPROVED EQUAL.

TYPICAL BOLLARD LAYOUT



OMMIS ORK TRIC DIS ALBAN

| McFarland Johnson

60 RAILROAD PLACE

SUITE 402

SARATOGA SPRINGS, NEW YORK 12866

P:518-580-9380 F:518-580-9383 SaratogaROM@mjinc.com

FINAL DESIGN PLANS

NO. DATE DESCRIPTION

PROJECT MILESTONE

OMH DRAWN NSO DESIGNED AJF CHECKED SCALE 1"=40' APRIL 2022 18641.00 PROJECT



ARE ACTING UNDER THE DIRECT DIRECTION OF A LICENSE PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAP ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSI PROFESSIONAL IS ALTERED, THE ALTERING ENGINEE ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYO SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATIO "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION

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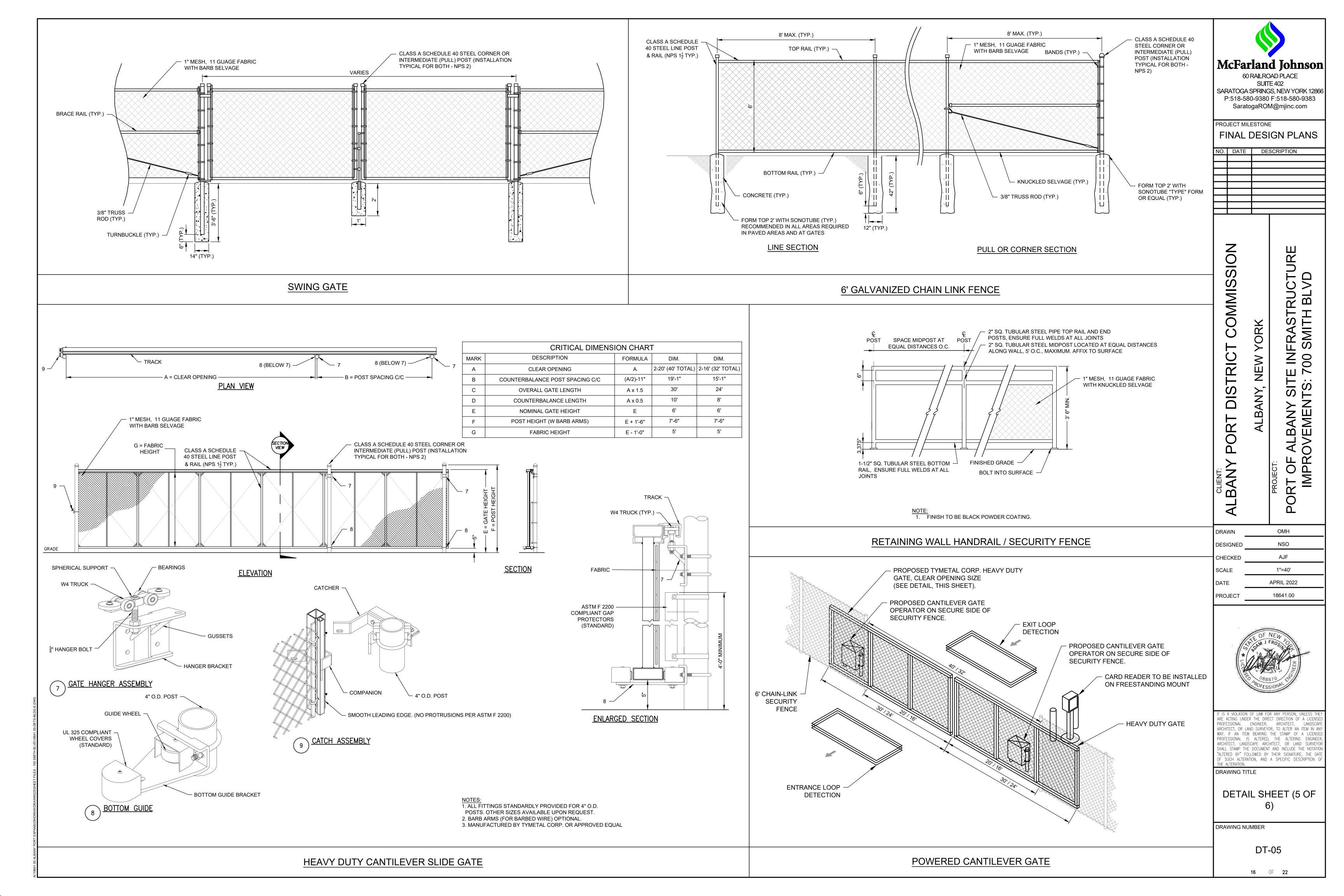
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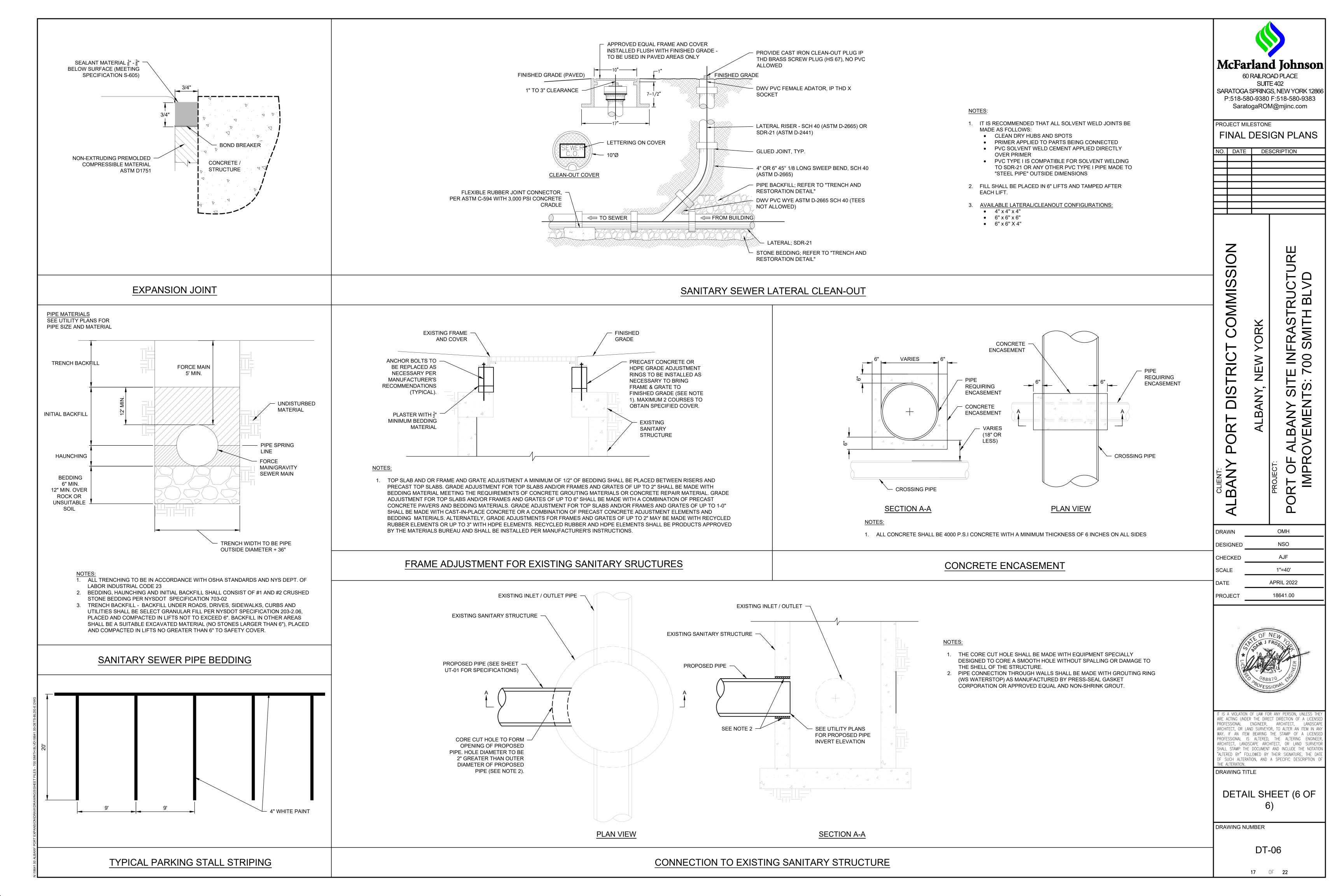
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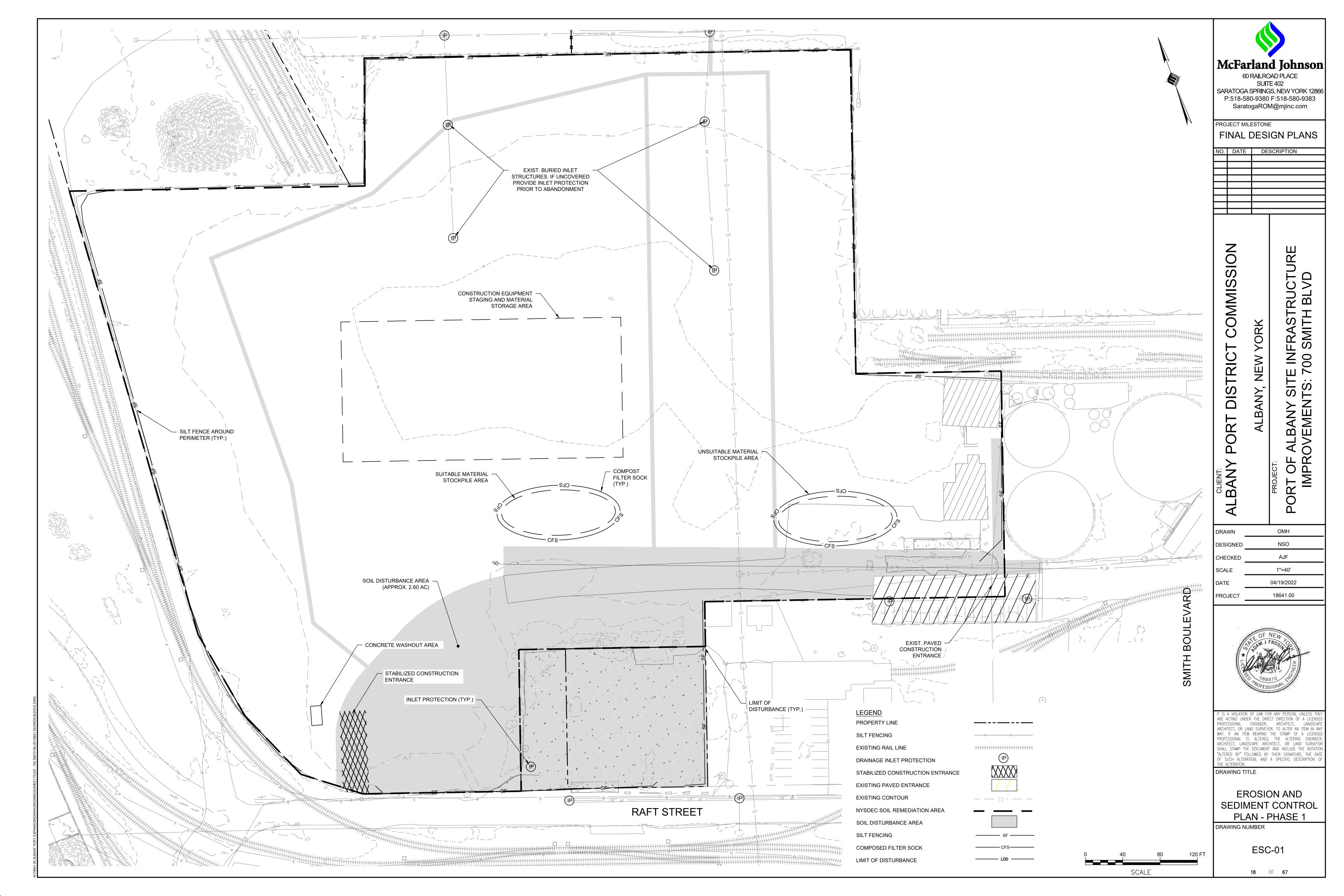
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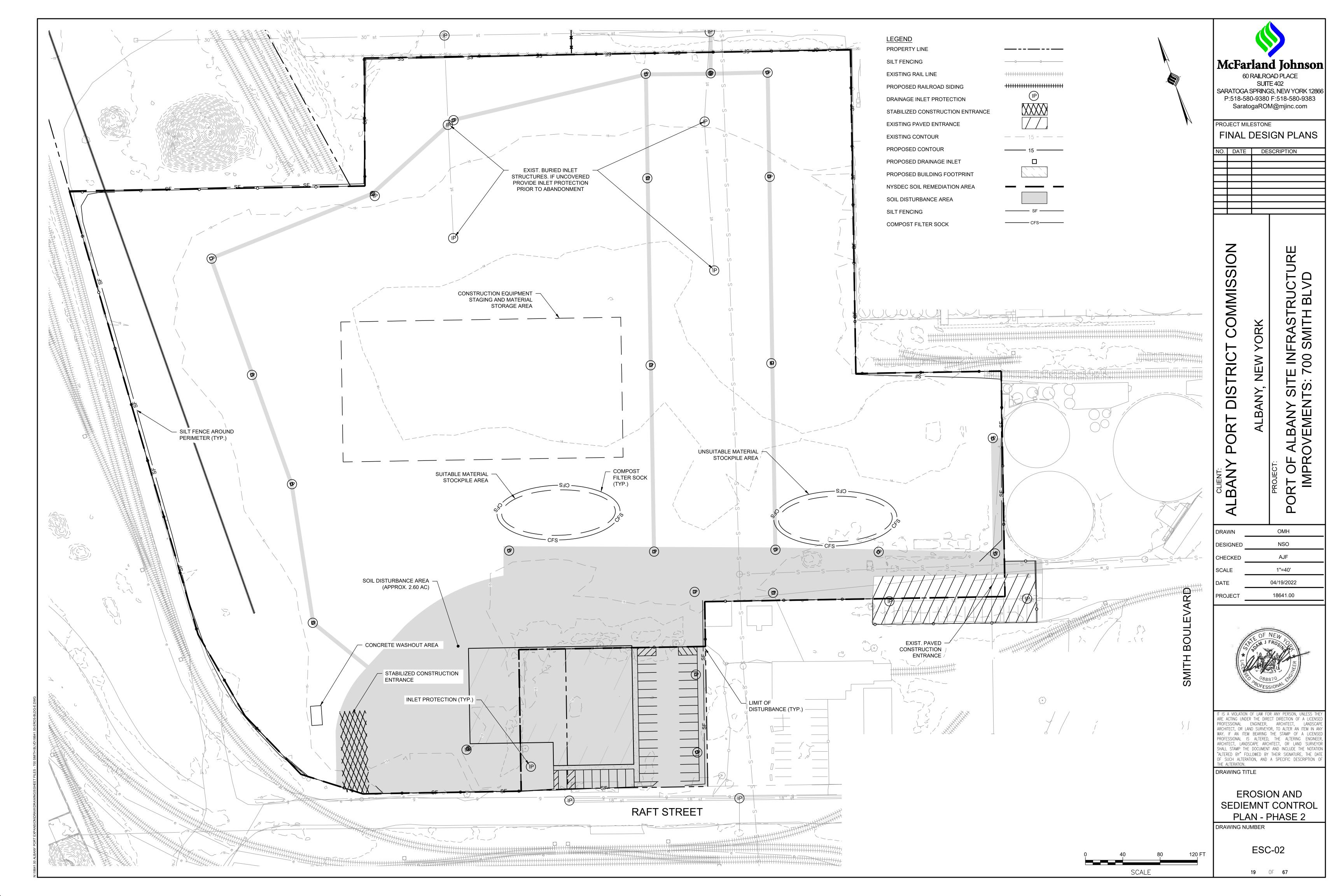
15 OF **22**

GATE VALVE DETAIL









EROSION AND SEDIMENT CONTROL PLAN NOTES:

- 1. THE EROSION AND SEDIMENT CONTROL PLAN IS INTENDED TO REPRESENT A CONCEPTUAL APPROACH TO EROSION AND SEDIMENT CONTROL. IT IS FURTHER INTENDED THAT THE OWNER AND CONTRACTOR SHALL IMPLEMENT PRACTICES, AS REQUIRED, TO CONTROL EROSION AND SEDIMENT IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND SWPPP.
- 2. INSTALL SILT FENCE, AND ALL OTHER EROSION CONTROL MEASURES AS INDICATED ON THE PLAN PRIOR TO THE START OF ANY EXCAVATION WORK. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND THE GOVERNING MUNICIPALITY REQUIREMENTS.
- REMOVE AND STOCKPILE TOPSOIL IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN. REPLACE TOPSOIL TO A MINIMUM 4" DEPTH. ALL DISTURBED AREAS ARE TO BE HYDROSEEDED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS (NOT
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS, INCLUDING INLET PROTECTION AND SILT FENCE. EROSION CONTROL MEASURES SHALL NOT BE REMOVED BEFORE AREAS HAVE ACHIEVED 80% STABILIZATION.
- CONTRACTOR SHALL MAINTAIN A STOCK PILE OF EROSION AND SEDIMENT CONTROL MEASURES ON SITE AS INDICATED ON THE PLAN.
- 6. NO PETROLEUM PRODUCTS ARE TO BE STORED ON SITE WITHOUT PRIOR APPROVAL OF THE LOCAL STORMWATER INSPECTOR. ANY PETROLEUM ON SITE SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL GOVERNMENT REGULATIONS.
- 7. WRAP YARD INLET GRATES IN FILTER FABRIC PROGRESSIVELY AS STORM SEWER AND YARD INLETS ARE INSTALLED.
- 8. ALL EROSION CONTROL MEASURES ARE TO BE REPLACED WHENEVER THEY BECOME CLOGGED OR INOPERABLE AND SHALL BE REPLACED AT A MINIMUM OF EVERY 3 MONTHS.
- 9. JUTE MESH SHALL BE USED ON SLOPES STEEPER THAN 3:1 AND WHEREVER NECESSARY TO CONTROL EROSION AND SILTATION OF EXISTING DRAINAGE SYSTEMS AS ORDERED BY THE ENGINEER (NOT ANTICIPATED).
- 10. ALL DISTURBED AREAS SHALL BE FINISH GRADED TO PROMOTE VEGETATION ON ALL EXPOSED AREAS AS SOON AS PRACTICABLE. STABILIZATION PRACTICES (TEMPORARY/PERMANENT SEEDING, MULCHING, GEOTEXTILES, ETC.) MUST BE IMPLEMENTED WITHIN SEVEN (7) DAYS WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND NOT EXPECTED TO RESUME WITHIN FOURTEEN (14) DAYS.
- 11. ALL RIP-RAP OUTLET PROTECTION TO BE CONSTRUCTED PER NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- 12. CONTRACTOR SHALL TAKE THE NECESSARY MEASURES, INCLUDING WATER SPRINKLING, TO PROVIDE DUST CONTROL DURING CONSTRUCTION.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL FEATURES THROUGHOUT THE DURATION OF CONSTRUCTION. A. ALL SEDIMENT TRAPPING DEVICES AND INLET PROTECTION DEVICES SHALL BE CLEANED OF
- DESIGN CAPACITY. B. ALL SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE AND STRAW BALES WHEN IT

ACCUMULATED SILT WHEN STORAGE CAPACITY HAS BEEN REDUCED BY 50% OF THEIR

- ACCUMULATES TO A MAXIMUM HEIGHT OF 6". C. AFTER VEGETATION HAS BEEN SUBSTANTIALLY ESTABLISHED, EXCAVATE SWALES OF
- ACCUMULATED SILT. RE-ESTABLISHED VEGETATION ON DISTURBED AREAS.
- D. SEDIMENT COLLECTED BY EROSION CONTROL MEASURES SHALL BE DISPOSED OF BY SPREADING ON-SITE OR HAULED AWAY IF DETERMINED TO BE UNSUITABLE FOR FILL.
- 14. ALL DISTURBED AREAS SHALL BE STABILIZED. SEEDED AND MULCHED WITHIN 7 DAYS OF CEASED CONSTRUCTION ACTIVITY.
- 15. TOTAL PROJECT DISTURBANCE AREA PER THE NYSDEC SPDES STANDARDS IS 2.58 ACRES.
- 16. ALL AREAS TO REMAIN AS PERVIOUS VEGETATED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE NYS STORMWATER MANAGEMENT DESIGN MANUAL TABLE 5.3 SOIL RESTORATION REQUIREMENTS.

PERMANENT SEEDING NON-SLOPED AREAS:

- 1. IF SOILS ARE COMPACTED. SCARIFY UPPER TWO INCHES BY BACKBLADING WITH DOZER. RAKING, OR DISKING.
- 2. PLACE TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES.
- 3. GRASS SEED SHALL BE FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES. PROVIDE SEED MIXTURE COMPOSED OF SPECIES, PROPORTIONS AND MINIMUM PERCENTAGES OF PURITY, GERMINATION, AND MAXIMUM PERCENTAGE OF WEED SEED, AS FOLLOWS:

	PROPORTION	GERMINATION	PURITY
COMMON NAME	BY WEIGHT	MINIMUM	MINIMUM
CREEPING FESCUE	50%	85%	95%
OR CHEWINGS FESCUE			
KENTUCKY BLUEGRASS	25%	85%	90%
PERENNIAL RYE	25%	90%	90%

- 4. FERTILIZE WITH 600 POUNDS PER ACRE OF 10-10-10. LIME TO ACHIEVE A PH OF NOT LESS THAN 5.5 OR GREATER THAN 7.6. IF HYDROSEEDER IS NOT USED, SEED AND FERTILIZER SHOULD BE LIGHTLY RAKED INTO SOIL.
- MULCH WITH CLEAN (WEED FREE) STRAW IF SPECIFIED ON PLANS.

EROSION AND SEDIMENT CONTROL SEQUENCE:

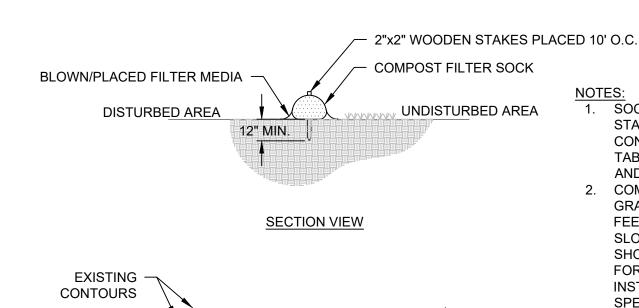
THE CITY OF ALBANY SHOULD BE NOTIFIED PRIOR TO CONSTRUCTION ACTIVITIES STARTING.

- INSTALL CONSTRUCTION ENTRANCE
- ESTABLISH THE PROJECT CONSTRUCTION STAGING/OFFICE AREA
- INSTALLATION OF SILT FENCE
- ESTABLISHMENT OF THE STOCKPILE AND CONCRETE WASHOUT
- EXCAVATION AND REMOVAL OF ALL EXISTING FOUNDATIONS/CONCRETE AREAS

- CONSTRUCT THE PROPOSED BUILDING
- CONSTRUCT THE PROPOSED PARKING LOT, LOADING DOCKS AND ENTRANCE ROADS
- INSTALL THE PROPOSED RAIL SIDING
- INSTALL THE PROPOSED CLOSED DRAINAGE SYSTEM
- PLACE/COMPACT THE PROPOSED DENSE GRADED AGGREGATE STORAGE YARD

TEMPORARY SEEDING (NOT ANTICIPATED)

- 1. IF SOILS ARE COMPACTED, SCARIFY UPPER TWO INCHES BY BACKBLADING WITH DOZER, RAKING, OR DISKING. FERTILIZE WITH 300 POUNDS PER ACRE OF 10-10-10.
- 2. NOTE: NO FERTILIZER SHOULD BE USED AFTER OCTOBER 1ST IF THERE IS DANGER OF LEACHING INTO WATER RESOURCE.
- 3. IMMEDIATELY SEED PER SEED SCHEDULE SPECIFIED ABOVE.
- 4. APPLY STRAW MULCH AS NECESSARY TO HOLD IN MOISTURE, PROTECT SOIL FROM EROSION, HOLD SEED IN PLACE, AND KEEP SOIL TEMPERATURES MORE CONSTANT; 2 TONS PER ACRE.



DISTURBED

UNDISTURBED

AREA

PLAN VIEW

STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. COMPOST SHALL MEET THE STANDARDS LISTED ON TABLE 5.2 OF NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. 2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FOR EROSION AND SEDIMENT CONTROL. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO

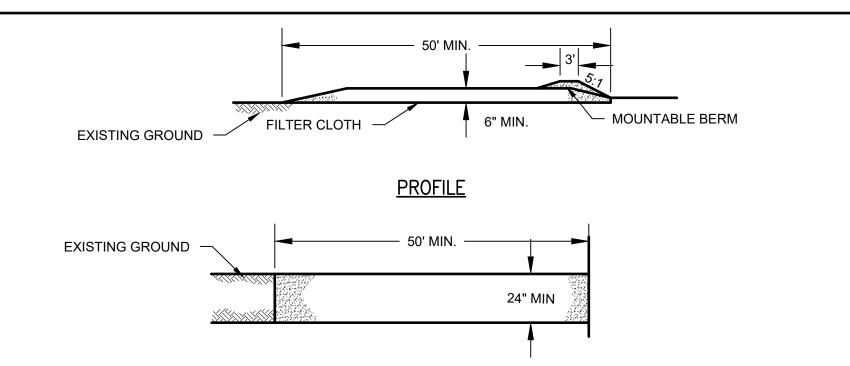
FEET UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE X.X OF NYS STANDARDS AND SPECIFICATIONS SPECIFIED BY THE MANUFACTURER. 3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS. 4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. 5. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 5.1 OF NYS

MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. 6. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO

EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO

MANUFACTURER'S RECOMMENDATIONS. 7. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCKS. STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.



PLAN VIEW

STONE SIZE - USE #3 CRUSHED STONE OR GRAVEL (PER NYSDOT SECTION 209).

- 2. LENGTH NOT LESS THAN 50 FEET.
- THICKNESS NOT LESS THAN SIX (6) INCHES. WIDTH - TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 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 TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED
- SEDIMENT TRAPPING DEVICE. 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

COMPOST FILTER SOCK

STABILIZED CONSTRUCTION ENTRANCE

SOIL RESTORATION PROCEDURE (NOT ANTICIPATED):

2"x2" WOODEN STAKES

PLACED 10' O.C.

COMPOST FILTER SOCK

DURING PERIODS OF RELATIVELY LOW TO MODERATE SUBSOIL MOISTURE, THE DISTURBED SUBSOILS ARE RETURNED TO ROUGH GRADE AND THE FOLLOWING SOIL RESTORATION STEPS APPLIED:

1. APPLY 3 INCHES OF COMPOST OVER SUBSOIL

- 2. TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC, OR TILLER, MIXING, AND CIRCULATING AIR AND COMPOST INTO SUBSOILS
- 3. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE
- 4. APPLY TOPSOIL TO A DEPTH OF 6 INCHES
- 5. VEGETATE AS REQUIRED BY APPROVED PLAN.

AT THE END OF THE PROJECT AN INSPECTOR SHOULD BE ABLE TO PUSH A 3/8" METAL BAR 12 INCHES INTO THE SOIL JUST WITH BODY WEIGHT. TILLING (STEP 2 ABOVE) SHOULD NOT BE PERFORMED WITHIN THE DRIP LINE OF ANY EXISTING TREES OR OVER UTILITY INSTALLATIONS THAT ARE WITHIN 24 INCHES OF THE SURFACE.

COMPOST SPECIFICATIONS:

COMPOST SHALL BE AGED, FROM PLANT DERIVED MATERIALS, FREE OF VIABLE WEED SEEDS, HAVE NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING, PASS THROUGH A HALF INCH SCREEN AND HAVE A PH SUITABLE TO GROW DESIRED PLANTS.

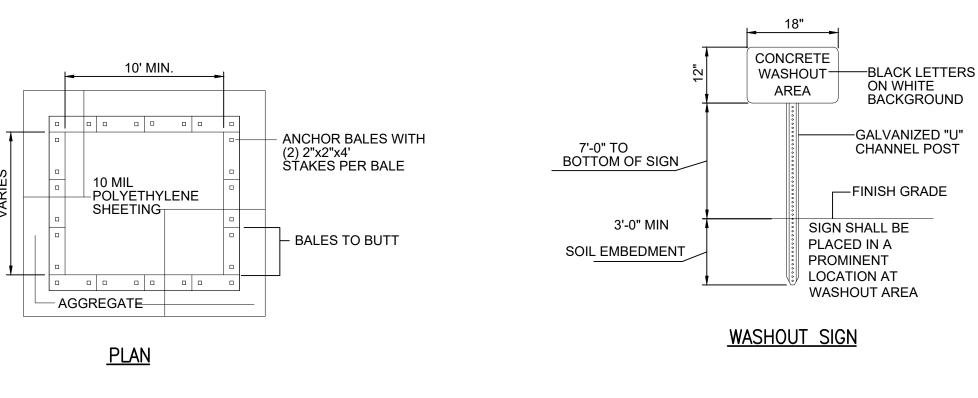
WINTER STABILIZATION:

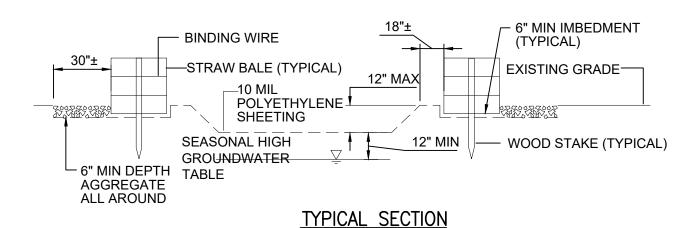
THE BELOW STANDARDS APPLY TO ALL CONSTRUCTION ACTIVITIES INVOLVED WITH ONGOING LAND DISTURBANCE AND EXPOSURE BETWEEN NOVEMBER 15TH TO THE FOLLOWING APRIL 1ST.

- PREPARE A SNOW MANAGEMENT PLAN WITH ADEQUATE STORAGE FOR SNOW AND CONTROL OF MELT WATER, REQUIRING CLEARED SNOW TO BE STORED IN A MANNER NOT AFFECTING ONGOING CONSTRUCTION ACTIVITIES.
- 2. ENLARGE AND STABILIZE ACCESS POINTS TO PROVIDE FOR SNOW MANAGEMENT AND STOCKPILING. SNOW MANAGEMENT ACTIVITIES MUST NOT DESTROY OR DEGRADE INSTALLED EROSION AND SEDIMENT CONTROL PRACTICES.
- 3. A MINIMUM 25 FOOT BUFFER SHALL BE MAINTAINED FROM ALL PERIMETER CONTROLS SUCH AS SILT FENCE. MARK SILT FENCE WITH TALL STAKES THAT ARE VISIBLE ABOVE THE SNOW PACK.
- 4. DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS. ALL DEBRIS ICE DAMS, OR DEBRIS FROM PLOWING OPERATIONS, THAT RESTRICT THE FLOW OF RUNOFF AND MELTWATER SHALL BE REMOVED.
- 5. SEDIMENT BARRIERS MUST BE INSTALLED AT ALL APPROPRIATE PERIMETER AND SENSITIVE LOCATIONS. SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED BEFORE THE GROUND FREEZES.
- 6. SOIL STOCKPILES MUST BE PROTECTED BY THE USE OF ESTABLISHED VEGETATION, ANCHORED STRAW MULCH, ROLLED STABILIZATION MATTING, OR OTHER DURABLE COVERING. A BARRIER MUST BE INSTALLED AT LEAST 15 FEET FROM THE TOE OF THE STOCKPILE TO PREVENT SOIL MIGRATION AND TO CAPTURE LOOSE SOIL.
- 7. IN AREAS WHERE SOIL DISTURBANCE HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES SHOULD BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN THREE (3) DAYS.
- 8. IF STRAW MULCH ALONE IS USED FOR TEMPORARY STABILIZATION, IT SHALL BE APPLIED AT DOUBLE THE STANDARD RATE OF 2 TONS PER ACRE, MAKING THE APPLICATION RATE 4 TONS PER ACRE. OTHER MANUFACTURED MULCHES SHOULD BE APPLIED AT DOUBLE THE MANUFACTURER'S RECOMMENDED RATE.

9. TO ENSURE ADEQUATE STABILIZATION OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT.

- AREAS OF DISTURBED SOIL SHOULD BE STABILIZED AT THE END OF EACH WORK DAY UNLESS: A. WORK WILL RESUME WITHIN 24 HOURS IN THE SAME AREA AND NO PRECIPITATION IS B. THE WORK IS IN DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS OPEN UTILITY TRENCHES, FOUNDATION EXCAVATIONS, OR WATER MANAGEMENT
- 10. USE STONE PATHS TO STABILIZE ACCESS PERIMETERS OF BUILDINGS UNDER CONSTRUCTION AND AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED. STONE PATHS SHOULD BE A MINIMUM 10 FEET IN WIDTH BUT WIDER AS NECESSARY TO ACCOMMODATE EQUIPMENT.
- 11. IF THE SITE WILL NOT HAVE EARTH DISTURBING ACTIVITIES ONGOING DURING THE "WINTER SEASON". ALL BARE EXPOSED SOIL MUST BE STABILIZED BY ESTABLISHED VEGETATION. STRAW OR OTHER ACCEPTABLE MULCH, MATTING, ROCK OR OTHER APPROVED MATERIAL SUCH AS ROLLED EROSION CONTROL PRODUCTS. SEEDING OF AREAS WITH MULCH COVER IS PREFERRED BUT SEEDING ALONE IS NOT ACCEPTABLE FOR PROPER STABILIZATION.

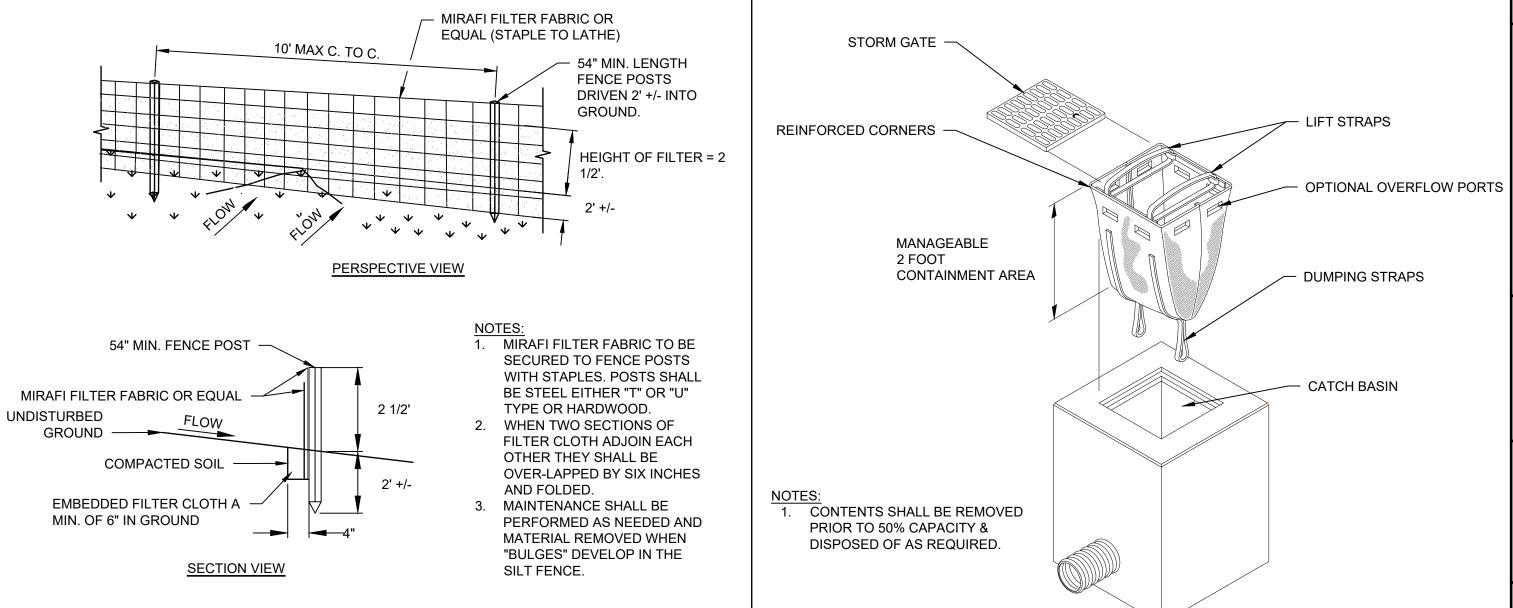


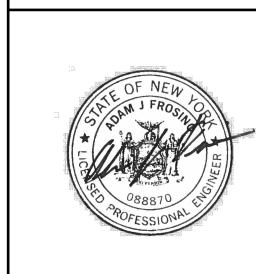


CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES 2. CONTAINMENT DEVICES MUST BE OF

- SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED. WASHOUT MUST BE CLEANED OR NEW **FACILITIES CONSTRUCTED AND READY**
- TO USE ONCE WASHOUT IS 75% FULL. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY
- CONCRETE TRUCKS. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
- 6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

CONCRETE WASHOUT





RE ACTING UNDER THE DIRECT DIRECTION OF A LICENS PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAF ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN AN VAY. IF AN ITEM BEARING THE STAMP OF A LICENS PROFESSIONAL IS ALTERED, THE ALTERING ENGINEE ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYO SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DAT

DRAWING TITLE

ESC NOTES & DETAIL

DRAWING NUMBER

ESC-03

INLET PROTECTION

SILT FENCE

 $\mathbf{\Omega}$ OMH DRAWN NSO DESIGNED AJF CHECKED SCALE 1"=40' APRIL 2022 18641.00 PROJECT

McFarland Johnson

60 RAILROAD PLACE

SUITE 402

SARATOGA SPRINGS, NEW YORK 12866

P:518-580-9380 F:518-580-9383

SaratogaROM@mjinc.com

FINAL DESIGN PLANS

NO. DATE DESCRIPTION

PROJECT MILESTONE

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F SUCH ALTERATION, AND A SPECIFIC DESCRIPTION

