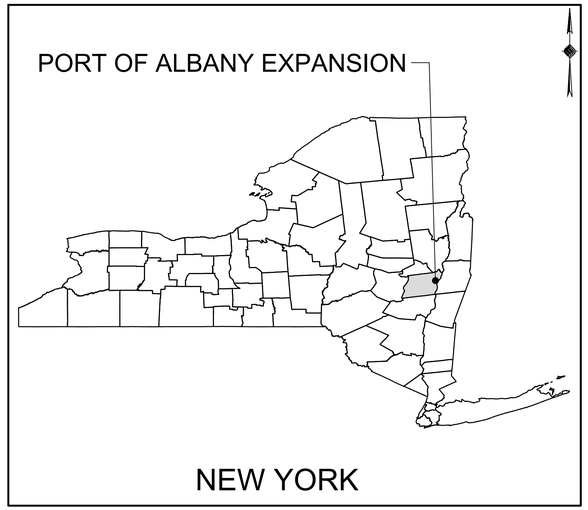
ALBANY PORT DISTRICT COMMISSION

PORT OF ALBANY EXPANSION SITE

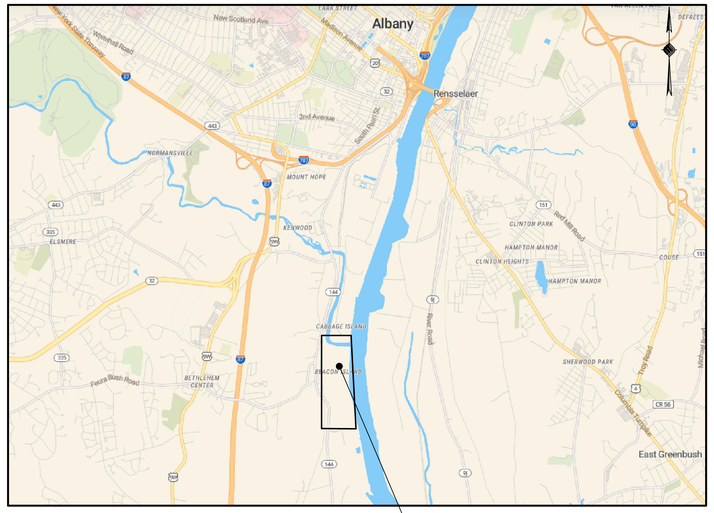


LOCATION MAP

GMP BID SET

JUNE 8, 2022

TOWN OF BETHLEHEM
ALBANY COUNTY
NEW YORK



VICINITY MAP

PLANNING BOARD HTE# 21-00100006

PREPARED FOR:

PORT OF ALBANY

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

PREPARED BY:

McFarland Johnson

60 RAILROAD PLACE, SUITE 402
SARATOGA SPRINGS, NEW YORK 12866

MCFARLAND JOHNSON PROJECT # 18641.00

SEALED ADAM J. FROSINO

PE_NO 088870

PE_DATE JUNE 8, 2022

STATE OF NEW YORK · ADAM J FROSINO · 088870 · LICENSED PROFESSIONAL ENGINEER

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-COVR.DWG

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 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 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 PLANS.

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.

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 HELD 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 CONTRACTORS 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. SEE OFFSITE IMPROVEMENT PLANS FOR ROADWAY, UTILITY AND WORKZONE TRAFFIC CONTROL WORK WITHIN THE NYSDOT R.O.W.

18. SEE BRIDGE PLANS AND NORMANSKILL STREET REHABILITATION PLANS FOR ALL WORK ASSOCIATED WITH THE EXTENSION OF NORMANSKILL TO ACCESS THE SITE.

19. SEE WHARF PLANS FOR ALL WORK ASSOCIATED WITH THE WHARF AND WORK ALONG THE HUDSON RIVER BELOW THE MHHW ELEVATIONS, INCLUDING PROPOSED DREDGING.

20. ALL WORK INCLUDED IN THESE PLANS SUBJECT TO SECTION 128-49 OF THE TOWN ZONING SHALL BE CERTIFIED BY DESIGNATED PROFESSIONALS PURSUANT TO SECTION 128-49(f)(2)(I).

21. ANY GROUND DISTURBANCE WITHIN THE LIMITS OF THE PROPOSED SUBJECT PARCEL SHALL BE PERFORMED IN ACCORDANCE WITH THE SOIL MANAGEMENT PLAN - PORT OF ALBANY EXPANSION PROJECT, BEACON ISLAND PARCEL, BETHLEHEM, ALBANY COUNTY, NEW YORK PREPARED BY ATL DATED "AUGUST 13, 2021".

SEQUENCE OF CONSTRUCTION

1. HOLD A PRE-CONSTRUCTION MEETING WITH PROJECT MANAGER, OPERATOR'S ENGINEER, CONTRACTORS & SUB-CONTRACTORS, AND REPRESENTATIVES OF THE TOWN OF BETHLEHEM (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. CONSTRUCT TEMPORARY STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN ON THE DRAWINGS.

4. INSTALL PERIMETER CONTROLS AND INLET PROTECTION AT THE LOCATIONS SHOWN ON THE DRAWINGS.

5. 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.

6. BEGIN CLEARING AND GRUBBING OPERATIONS. CLEARING AND GRUBBING SHALL ONLY BE DONE IN AREAS WHERE EARTHWORK WILL BE PERFORMED.

7. STRIP AND STOCKPILE TOPSOIL, INSTALL PERIMETER EROSION CONTROL AROUND STOCKPILES, SEED AND MULCH PER PLANS.

8. 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.

9. STABILIZE ALL AREAS IDLE IN EXCESS OF 7 DAYS IN WHICH CONSTRUCTION WILL NOT COMMENCE WITHIN 7 DAYS.

10. 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.

11. BEGIN UTILITY INSTALLATION AND BACKFILL. UTILITY INSTALLATION AREA SHALL BE STABILIZED WITH SEED AND MULCH PROGRESSIVELY AT THE END OF EACH WORK DAY.

12. CONSTRUCT CATCH BASINS, AREA INLETS AND STORM SEWER MANHOLES, AS SHOWN ON THE PLANS.

13. INSTALL INLET/OUTLET PROTECTION PROGRESSIVELY AS THE STORM SEWER IS INSTALLED.

14. AS LAWN AREAS ARE BROUGHT TO GRADE, STABILIZE WITH TOPSOIL, SEED AND MULCH PER SPECIFICATIONS.

15. FINALIZE PAVEMENT SUB-GRADE PREPARATION.

16. INSTALL ASPHALT SUB-BASE MATERIAL AS REQUIRED FOR PAVEMENT.

17. 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.

18. 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.

NATIONAL GRID NOTES:

THESE NOTES APPLY FOR ALL WORK WITHIN NATIONAL GRID PROPERTY. REFERENCE THE LICENSE AGREEMENT BETWEEN NATIONAL GRID AND THE ALBANY PORT DISTRICT COMMISSION WHICH CONTAINS THE FULL CONTENT OF ALL THE TERMS AND CONDITIONS FOR ACCESS AND ANY WORK WITHIN NATIONAL GRID PROPERTY. THIS DOCUMENT SHALL BE REVIEWED BY ANY CONTRACTOR PERFORMING WORK WITHIN THE NATIONAL GRID PROPERTY.

1. A CONSTRUCTION ACCESS AND WORK PLAN FOR ALL WORK TO BE COMPLETED ON THE NATIONAL GRID PROPERTY SHALL BE PROVIDED DURING THE BIDDING PROCESS AND APPROVED BY NATIONAL GRID PRIOR TO COMMENCEMENT OF ANY WORK TAKING PLACE WITHIN NATIONAL GRID PROPERTY. AT A MINIMUM THIS PLAN SHALL INCLUDE SPECIFICATION FOR THE PROPOSED EQUIPMENT TO BE USED TO COMPLETE THE WORK AND ACCESS ROUTES NECESSARY TO ALL WORK AREAS.

2. DURING CONSTRUCTION, EQUIPMENT SHALL CROSS OVER UNDERGROUND UTILITIES ONLY AS DESIGNATED AREAS. A LIST OF EQUIPMENT TO CROSS THESE AREAS SHALL BE PROVIDED TO NATIONAL GRID FOR REVIEW TO DETERMINE IF ANY STEEL PLATING AND/OR AIR BRIDGING WILL BE REQUIRED TO PREVENT DAMAGE TO THE EXISTING UNDERGROUND UTILITIES.

3. NATIONAL GRID RESERVES THE RIGHT TO HAVE THERE OWN INSPECTOR OVERSEE ANY WORK PERFORMED ON NATIONAL GRID PROPERTY. NATIONAL GRID AND THEIR CONTRACTORS SHALL HAVE UNRESTRICTED ACCESS TO NATIONAL GRID CORRIDOR.

4. ALL EXCAVATION ON NATIONAL GRID PROPERTY SHALL BE OSHA COMPLIANT.

5. NO TEMPORARY STOCKPILING OF MATERIAL IN THE NATIONAL GRID CORRIDOR IS ALLOWED.

6. TRUCKS ARE NOT ALLOWED TO STOP IN THE NATIONAL GRID CORRIDOR TO UNLOAD, LOAD, INSTALL OR REMOVE TARPS. ABSOLUTELY NO INSTALLATION OF REMOVAL OF STRAPS UNDER CONDUCTORS.

7. IF IN THE NATIONAL GRID CORRIDOR A WIRE IS DISCOVERED, NOTIFY NATIONAL GRID ASAP AS THIS COULD BE PART OF A GROUNDING SYSTEM BETWEEN STRUCTURES. DO NOT TOUCH - TREAT AS ENERGIZED.

8. ANY METALLIC FENCES OR GUIDERAILS PLACED IN THE NATIONAL GRID CORRIDOR SHALL BE GROUNDED IN ACCORDANCE WITH NATIONAL GRID REQUIREMENTS.

9. THE CONTRACTOR WILL BE REQUIRED TO:
   - 9.1. CONDUCT A PLANNING MEETING WITH THE OPERATOR AND THE OTHER WORKERS WHO WILL BE IN THE AREA OF THE EQUIPMENT OR LOAD TO REVIEW THE LOCATION OF THE POWER LINES, AND THE STEPS THAT WILL BE IMPLEMENTED TO PREVENT ENCROACHMENT/ELECTROCUTION
   - 9.2. INSTALL A NON-CONDUCTIVE ELEVATED WARNING LINE OR BARRICADE ("GOAL POST") EQUIPPED WITH FLAGS OR SIMILAR VISIBILITY MARKINGS AT 15-FT FROM CONDUCTORS
   - 9.3. REFER TO NATIONAL GRID "SAFETY PROCEDURE - CONTRACTOR SAFETY REQUIREMENTS" ON THE NATIONAL GRID WEBSITE FOR THE LATEST VERSION.

NATIONAL GRID NOTES (CONTINUED):

- 9.4. PROVIDE A DEDICATED ELECTRICALLY QUALIFIED SPOTTER WHO IS CONTINUOUSLY IN CONTACT WITH OPERATOR. AN ELECTRICALLY QUALIFIED SPOTTER MUST BE TRAINED AND COMPETENT IN THE FOLLOWING:
  - THE SKILLS AND TECHNIQUES NECESSARY TO DISTINGUISH EXPOSED LIVE PARTS OF ELECTRICAL EQUIPMENT
  - THE SKILLS AND TECHNIQUES NECESSARY TO DETERMINE THE NOMINAL VOLTAGE OF EXPOSED LIVE PARTS
  - THE MAD SPECIFIED IN 1910.269 CORRESPONDING TO THE VOLTAGES TO WHICH THE QUALIFIED EMPLOYEE WILL BE EXPOSED
  - THE PROPER USE OF SPECIAL PRECAUTIONARY TECHNIQUES, PERSONAL PROTECTIVE EQUIPMENT, INSULATION AND SHIELDING MATERIALS AND INSULATED TOOLS FOR WORKING ON OR NEAR EXPOSED ENERGIZED PART OF ELECTRICAL EQUIPMENT
  - REFER TO THE NATIONAL GRID WEBSITE UNDER CONTRACTOR SAFETY REQUIREMENTS FOR ADDITIONAL GUIDANCE ON SPOTTER/WORKER REQUIREMENTS AND OTHER SAFETY PROCEDURES.

10. CONTRACTOR SHALL NOT STORE, MIX, OR LOAD ANY PETROLEUM PRODUCTS, PESTICIDES, HAZARDOUS MATERIALS, OR CHEMICALS LABELED TOXIC ON NATIONAL GRID'S ROW AND NO REFUELING OF VEHICLES OR EQUIPMENT WILL BE ALLOWED ON NATIONAL GRID'S ROW.

11. NO EXCAVATION SPOILS, SOIL, CONSTRUCTION DEBRIS, OR MATERIALS OF ANY KIND ARE TO BE REMOVED FROM NATIONAL GRID'S ROW WITHOUT PRIOR NOTIFICATION AND APPROVAL FROM NATIONAL GRID.

TOWN OF BETHLEHEM SEQRA NOTES:

1. CONTRACTOR SHALL ENSURE CONFORMANCE WITH THE TOWN'S NOISE ORDNANCE. THIS INCLUDES BUT IS NOT LIMITED TO TAKING NOISE READINGS ON A REGULAR BASIS AT THE PROPERTY LINE AND PROVIDING DOCUMENTATION OF NOISE LEVELS. SHOULD NOISE LEVEL EXCEED THE TOWN'S ORDINANCE REQUIREMENTS, IT IS THE CONTRACTORS RESPONSIBILITY TO MODIFY THEIR MEANS AND METHODS TO REDUCE THE NOISE LEVELS AND/OR PROVIDE MITIGATION TO REDUCE THE NOISE LEVEL TO VALUES WITHIN THE TOWN REQUIREMENTS.

2. THE CONTRACTOR SHALL PREPARE A COMMUNITY AIR MONITORING PLAN (CAMP) PURSUANT TO THE NYSDEC DER 10. SEE PAGES 211-216 FOR GUIDANCE ON THE CONTENT OF THE CAMP. IN ADDITION THE CAMP SHALL COMPLY WITH SECTION 4.3 OF THE SITE'S SOIL MANAGEMENT PLAN WHICH IS PROVIDED AS APPENDIX H IN THE STORM WATER POLLUTION PREVENTION PLAN.

PLANNING BOARD HTE# 21-00100006

Sheet List Table

SHEET NUMBER	SHEET TITLE	DRAWING NUMBER
COVR	COVER SHEET	--
GN-01	GENERAL NOTES	1
--	BOUNDARY SURVEY	2
DE-01	EXISTING CONDITION & DEMOLITION PLANS	3
SP-00	SITE PLAN OVERALL	4
SP-01	SITE PLAN	5
SP-02	SITE PLAN	6
SP-03	SITE PLAN	7
SP-04	SITE PLAN	8
SP-05	SITE PLAN	9
SP-06	SITE PLAN	10
SP-07	SITE DETAILS	11
SP-08	SITE DETAILS	12
SP-09	SITE DETAILS	13
SP-10	SITE DETAILS	14
TP-01	TYPICAL SECTION	15
TP-02	TYPICAL SECTION	16
PR-01	ENTRANCE ROAD PROFILE	17
PR-02	RETAINING WALL	18
GR-00	GRADING, DRAINAGE NOTES & INDEX	19
GR-01	GRADING & DRAINAGE	20
GR-02	GRADING & DRAINAGE	21
GR-03	GRADING & DRAINAGE	22
GR-04	GRADING & DRAINAGE	23
GR-05	GRADING & DRAINAGE	24
GR-06	GRADING & DRAINAGE	25
GR-07	DRAINAGE PROFILES	26
GR-08	DRAINAGE PROFILES	27
GR-09	DRAINAGE PROFILES	28
GR-10	DRAINAGE PROFILES	29
GR-11	DRAINAGE PROFILES	30
GR-12	DRAINAGE PROFILES & TABLES	31
GR-13	DRAINAGE TABLES	32
GR-14	DRAINAGE DETAILS	33
GR-15	DRAINAGE DETAILS	34
GR-16	DRAINAGE DETAILS	35
UT-00	UTILITY NOTES & INDEX	36
UT-01	UTILITY PLAN	37
UT-02	UTILITY PLAN	38
UT-03	UTILITY PLAN	39
UT-04	UTILITY PLAN	40
UT-05	UTILITY PLAN	41
UT-06	UTILITY PLAN	42
UT-07	SANITARY SYSTEM PROFILE	43
UT-08	SANITARY SYSTEM PROFILE	44
UT-09	SANITARY SYSTEM PROFILE & TABLES	45
UT-09A	SANITARY SYSTEM PROFILE	45A
UT-10	WATER SYSTEM PROFILE	46
UT-11	WATER SYSTEM PROFILE	47
UT-12	WATER SYSTEM PROFILE	48
UT-13	WATER SYSTEM PROFILE	49
UT-14	SANITARY SYSTEM DETAILS	50
UT-15	SANITARY SYSTEM DETAILS	51
UT-16	SANITARY SYSTEM DETAILS	52
UT-17	SANITARY SYSTEM DETAILS	53
UT-18	WATER DETAILS	54
UT-19	WATER DETAILS	55
UT-20	WATER DETAILS	56
ESC-01	EROSION & SEDIMENT CONTROL PLAN-PH.1	57
ESC-02	EROSION & SEDIMENT CONTROL PLAN-PH.2	58
ESC-03	EROSION & SEDIMENT CONTROL PLAN-PH.3	59
ESC-04	EROSION & SEDIMENT CONTROL PLAN-PH.4	60
ESC-05	EROSION & SEDIMENT CONTROL PLAN-PH.5	61
ESC-06	EROSION & SEDIMENT CONTROL NOTES	62
ESC-07	EROSION & SEDIMENT CONTROL DETAILS	63
ESC-08	EROSION & SEDIMENT CONTROL DETAILS	64
LA-01	LANDSCAPING PLAN (1 OF 2)	65
LA-02	LANDSCAPING PLAN (2 OF 2)	66
LT-01	LIGHTING PLAN (1 OF 2)	67
LT-02	LIGHTING PLAN (2 OF 2)	68
FA-01	FIRE ACCESS PLAN	69

2

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE

ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINOS · 088870 · LICENSED PROFESSIONAL ENGINEER

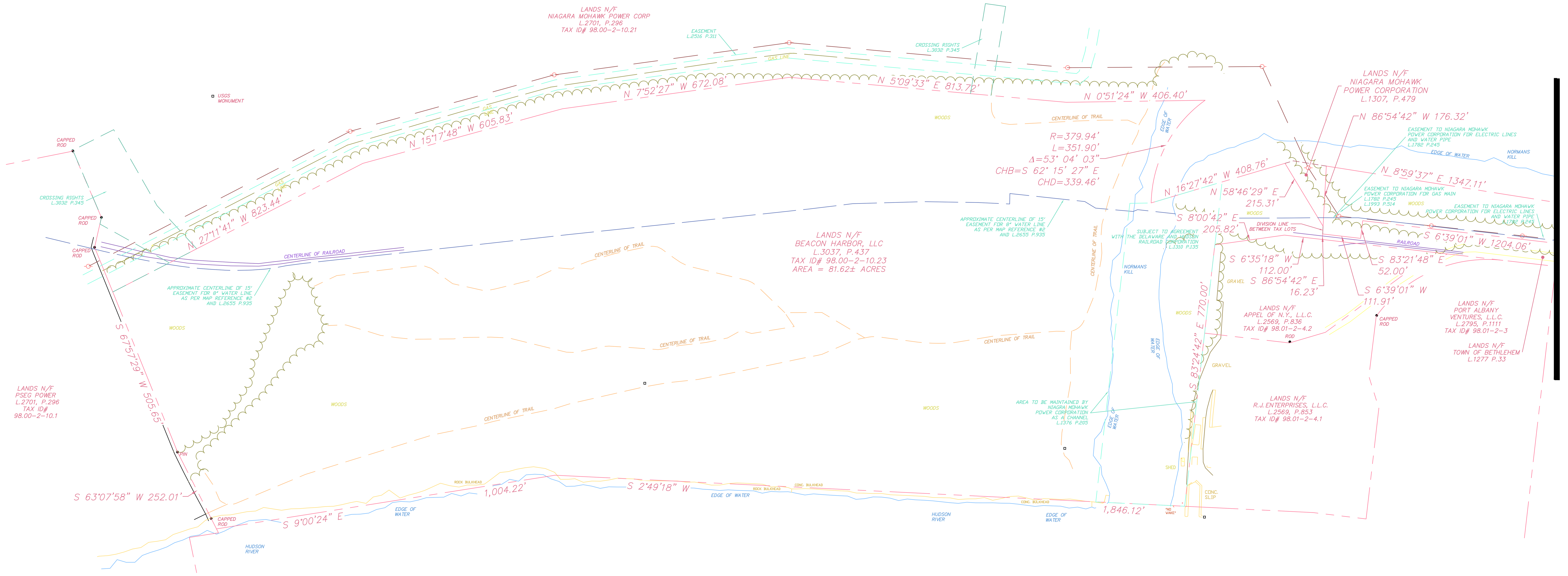
DRAWING TITLE

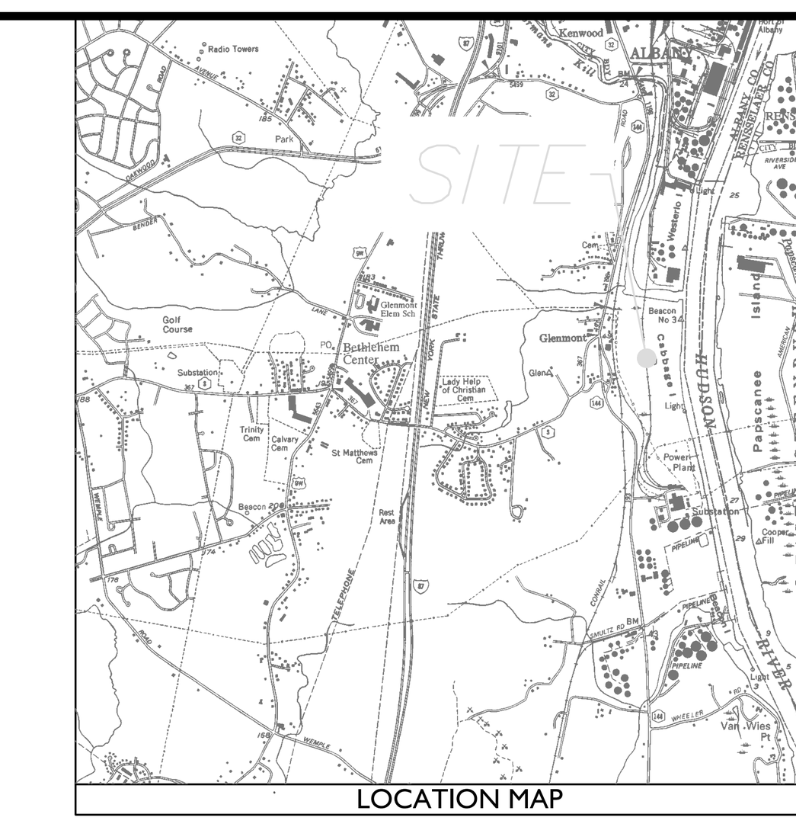
GENERAL NOTES

DRAWING NUMBER

GN-01

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-GEN-NOTE.DWG





MASER CONSULTING P.A.

Customer Loyalty through Client Satisfaction
www.maserconsulting.com
Engineers ■ Planners ■ Surveyors
Landscape Architects ■ Environmental Scientists

PROTECT YOURSELF
811 Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

PLANNING BOARD FILE# 21-00000000

RECORD DESCRIPTION

Commencing at a Point at the southwesterly property corner of lands now or formerly of OG Real Estate Development, LLC (Bk.2703, Pg. 757) at its intersection with the division line between lands now or formerly of Niagara Mohawk Power Corp. (Bk.1265 Pg.75) on the west and lands now or formerly of PSEG Power New York, Inc. (Bk. 2655, Pg. 935) on the south; thence along said division line between the aforementioned OG Real Estate Development, LLC on the east and the aforementioned Niagara Mohawk Power Corp. on the west the following five (5) courses and distances:

1. North 27°13'40" West, 823.44 feet to a point; thence
2. North15°19'47"West, 605.83feettoapoint; thence
3. North 07°54'26" West, 672.08 feet to a point; thence
4. North 05°07'34" East, 813.72 feet to a point; thence
5. North 00°53'23" West, 406.40 feet to a point in the division line between lands of the State of New York (Normans Kill) and lands of the aforementioned OG Real Estate Development, LLC; thence along said division line the following two (2) courses and distances:

1. along an arc to the left having a central angle of 53°03'33", a radius of 380.00 feet and an arc length of 351.90 feet, chord bearing South 62°17'26" East, 339.46 feet to a point; thence
2. North 16°29'41" West, 408.76 feet to a point in the common division line between other lands now or formerly of Niagara Mohawk Power Corp. on the west and lands of the aforementioned OG Real Estate Development, LLC on the east; thence along said division line the following two (2) courses and distances:

1. North 58°44'30" East, 215.31 feet to a point; thence
2. North 86°56'41" West, 176.32 feet to a point in the common division line between lands of the aforementioned State of New York (Normans Kill) on the west and other lands now or formerly of OG Real Estate Development, LLC (Bk. 2905, Pg. 204) on the east; thence along said common division line the following three (3) courses and distances:

1. North 08°57'38" East, 1347.11 feet to a point; thence
2. North 22°21'38" East, 586.00 feet to a point; thence
3. North 17°53'38" East, 352.00 feet to a point; thence

South 66°41'22" East, 18.13 feet to a point in the westerly road boundary of South Port Road; thence along said westerly and also southerly road boundary the following five (5) courses and distances:

1. along an arc to the right having a central angle of 13°05'31", a radius of 452.35 feet and an arc length of 103.36 feet to a point; thence
2. South 17°30'19" West, 711.96 feet to a point of curvature; thence
3. along an arc to the left having a central angle of 10°53'17", a radius of 633.69 feet and an arc length of 120.42 feet to a point; thence
4. South 06°37'02" West, 1204.06 feet to a point; thence
5. South 83°23'47" East, 52.00 feet to a point in the westerly boundary of the D & H Railroad; thence along said westerly boundary and also the southerly boundary of said D & H Railroad the following two (2) courses and distances:

1. South 06°37'02" West, 111.91 feet to a point; thence
2. South 86°56'41" East, 16.23 feet to a point in the easterly boundary line of lands of the aforementioned OG Real Estate Development, LLC (Bk. 2703, Pg. 757); thence along said easterly boundary line the following three (3) courses and distances:

1. South 06°33'19" West, 112.00 feet to a point; thence
2. South 08°02'41" East, 205.82 feet to a point; thence
3. South 83°26'41" East, 770.00 feet to a point along the Hudson River; thence along said Hudson River the following two (2) courses and distances:

1. South 02°47'19" West, 1846.12 feet to a point; thence
2. South 09°02'23" East, 1004.22 feet to a point in the common division line between lands of the aforementioned PSEG Power New York, Inc. on the south and lands of the aforementioned OG Real Estate Development, LLC on the north; thence along said common division line the following two (2) courses and distances:

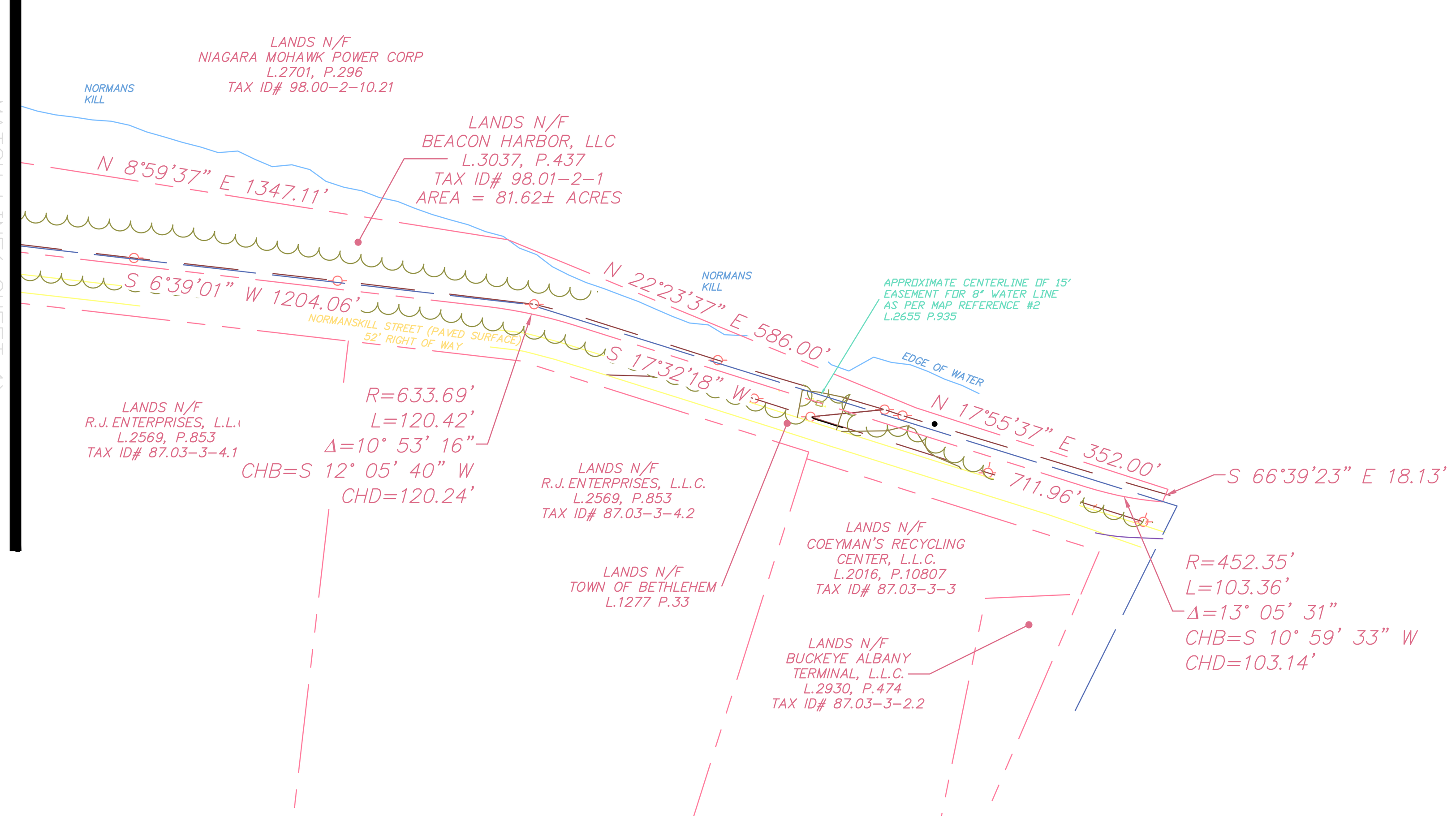
1. South 63°05'59" West, 252.01 feet to a point; thence
2. South 67°55'30" West, 505.65 feet to the Point or Place of Beginning.

MAP REFERENCES:

1. MAP ENTITLED "ALTA/ACSM LAND TITLE SUREY (URBAN CLASS) FOR ALBANY STEAM STATION, LANDS TO BE CONVEED TO PSEG POWER NEW YORK INC." PREPARED BY NIAGARA MOHAWK POWER CORPORATION, DATED DECEMBER 06, 1999, LAST REVISED MARCH 13, 2000.
2. MAP ENTITLED "ALBANY STEAM STATION SERVICE WATER LINE GENERAL PLAN AND PROFILE" BY PREPARED BY NIAGARA MOHAWK POWER CORPORATION, DATED MAY 15, 1952 AND LAST REVISED JUNE 27, 1989.
3. MAP ENTITLED "BOUNDARY SURVEY SHOWING LANDS N/F OF OG REAL ESTATE DEVELOPMENT, LLC" BY WSP SELLS, DATED SEPTEMBER 16, 2009.

GENERAL NOTES:

1. UNDERGROUND UTILITIES SHOWN HEREON BASED ON UTILITY EVIDENCE VISIBLE AT GROUND SURFACE AND RECORD DRAWINGS AND ARE SUBJECT TO FIELD VERIFICATION BY EXCAVATION. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES.
2. THE OFFSETS OR DIMENSIONS SHOWN HEREON, FROM THE PROPERTY LINES TO THE STRUCTURES, ARE FOR A SPECIFIC PURPOSE AND USE; THEREFORE, THEY ARE NOT INTENDED TO MONUMENT THE PROPERTY LINES OR TO GUIDE THE ERECTION OF FENCES, ADDITIONAL STRUCTURES OR ANY OTHER IMPROVEMENTS.
3. EASEMENTS AND/OR SUBSURFACE STRUCTURES RECORDED OR UNRECORDED ARE NOT GUARANTEED UNLESS PHYSICALLY EVIDENT ON THE PREMISES AT THE TIME OF THE SURVEY.
4. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS AND RESTRICTIONS OF RECORD.
5. BASIS OF BEARING IS NEW YORK STATE PLANE COORDINATE SYSTEM EAST ZONE. CONTROL WAS ESTABLISHED USING NYSNET VRS SYSTEM. THE HORIZONTAL DATUM IS RELATIVE TO NAD83
6. THE VERTICAL POSITION OF THE HEREIN SURVEY IS BASED ON THE STATIC GPS OBSERVATIONS AND IS SUBJECT TO FURTHER ADJUSTMENT TO ANY LOCAL NGS BENCHMARKS. THE VERTICAL DATUM IS RELATIVE TO NAVD 1988 VIA THE APPLICATION OF GEOID MODEL 12B.
7. NO EVIDENCE OF RECENT EARTH MOVING WORK BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WERE OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
8. NO WETLAND DELINEATION OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK.



SCALE: 1" = 150'

LEGEND

ABBREVIATIONS

PAT T. VANHAVERBEKE
NEW YORK LICENSED
LAND SURVEYOR - LICENSE NUMBER: #050931

BOUNDARY SURVEY OF LANDS NOW OR FORMERLY OF

BEACON HARBOR, LLC

TAX ID # 98.00-2-10.23
TAX ID# 98.01-2-1

TOWN OF BETHLEHEM
ALBANY COUNTY
STATE OF NEW YORK

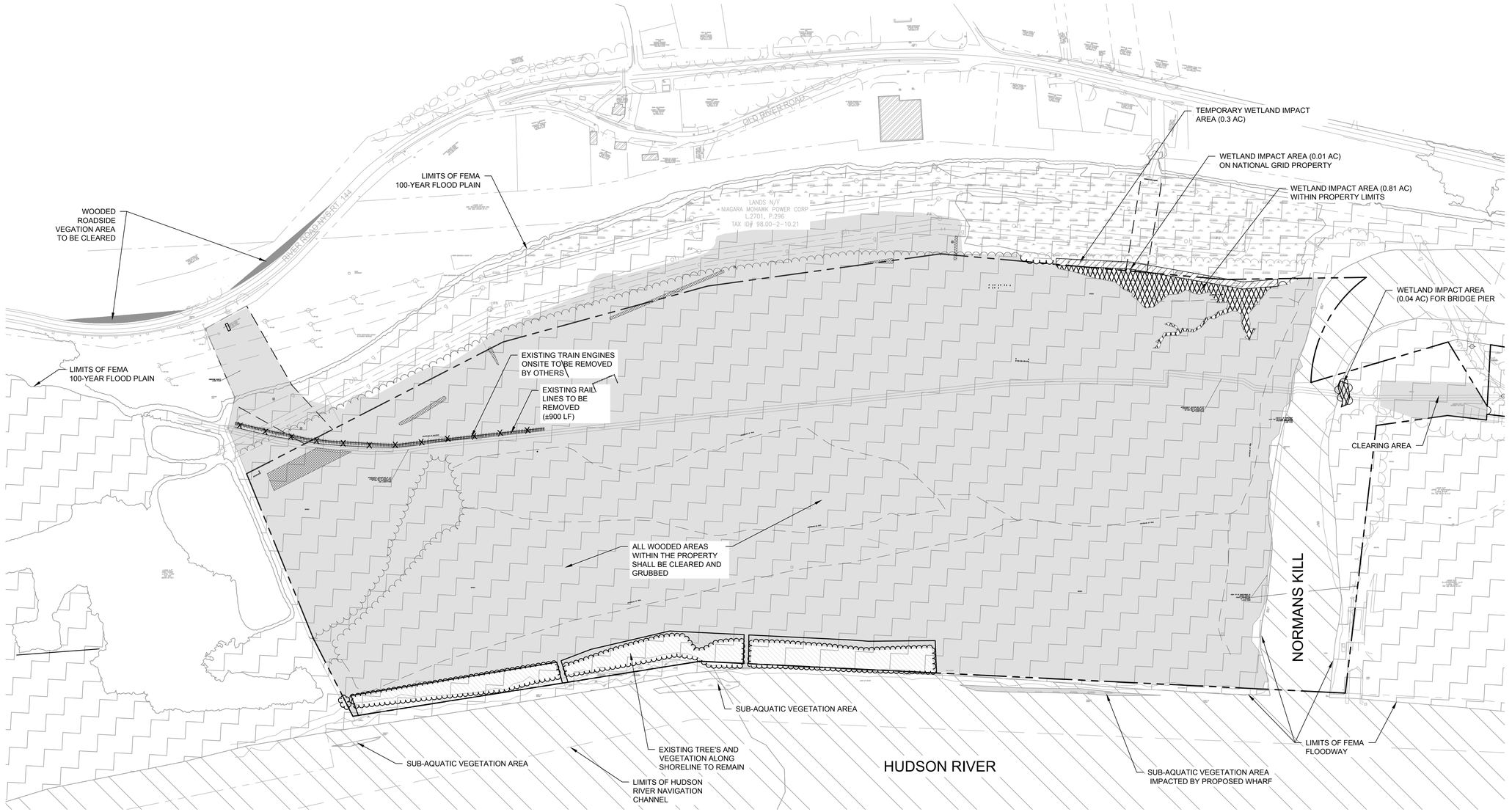
ALBANY OFFICE
18 Computer Drive East
Suite 203
Albany, NY 12205
Phone: 518.459.3252
Fax: 518.459.3284

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	07/10/18	BEB	PTV

PROJECT NUMBER:	DRAWING NAME:
18001376A	V-SURV-MASR

SHEET TITLE: BOUNDARY SURVEY

SHEET NUMBER: 01 of 01



DEMOLITION LEGEND

- TREE CLEARING AREA
- EXISTING TREE LINE
- PROPOSED TREE LINE
- EXIST. CROSSING RIGHTS
- PROPERTY LINE
- ABANDONED WATER LINE DEMO
- CENTERLINE OF EXIST. RAIL LINE
- RAIL LINE DEMO — X
- EXIST. WETLAND AREA
- EXIST. WETLAND AREA TO BE IMPACTED
- TEMPORARY WETLAND IMPACT AREA
- EXIST. SUBMERGED AQUATIC VEGETATION AREA TO BE IMPACTED
- FEMA 100-YEAR FLOODPLAIN
- FEMA FLOODWAY

PLANNING BOARD HTE# 21-00100006

0 150 300 450 FT

SCALE

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE

ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINA · 088870 · LICENSED PROFESSIONAL ENGINEER

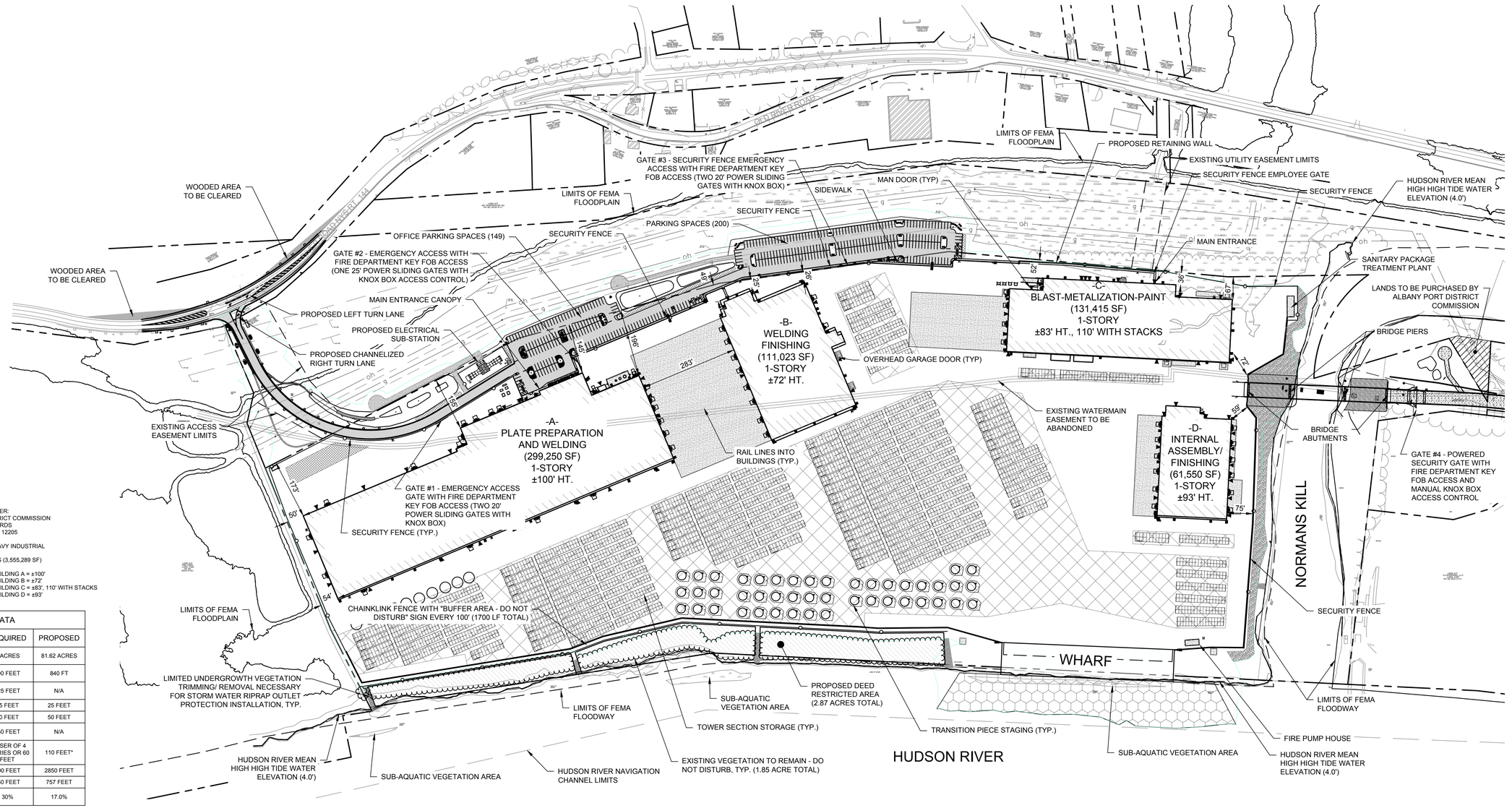
DRAWING TITLE

EXISTING CONDITION & DEMOLITION PLANS

DRAWING NUMBER

DE-01

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\DRAWINGS\SHEET FILES\18641.00 DEMO.DWG



PROJECT DATA

1. APPLICANT / LAND OWNER:
   ALBANY PORT DISTRICT COMMISSION
   106 SMITH BOULEVARDS
   ALBANY, NEW YORK 12205
2. EXISTING ZONING: HEAVY INDUSTRIAL
3. LOT AREA: 81.62 ACRES (3,555,289 SF)
4. BUILDING HEIGHT: - BUILDING A = ±100'
   - BUILDING B = ±72'
   - BUILDING C = ±83', 110' WITH STACKS
   - BUILDING D = ±93'

SITE DATA		
FEATURE	REQUIRED	PROPOSED
MINIMUM LOT SIZE, NONRESIDENTIAL	5 ACRES	81.62 ACRES
MINIMUM FRONT YARD, FROM RIGHT-OF-WAY	100 FEET	840 FT
MINIMUM FRONT YARD, FROM CENTER LINE	125 FEET	N/A
MINIMUM SIDE YARD	25 FEET	25 FEET
MINIMUM REAR YARD	50 FEET	50 FEET
MINIMUM HIGHWAY FRONTAGE	150 FEET	N/A
MAXIMUM HEIGHT	LESSER OF 4 STORIES OR 60 FEET	110 FEET*
MINIMUM LOT DEPTH	200 FEET	2850 FEET
MINIMUM LOT WIDTH	150 FEET	757 FEET
MAXIMUM LOT COVERAGE	30%	17.0%

* WILL REQUEST A VARIANCE

ZONING:

EXISTING: ±81.62 ACRES HEAVY INDUSTRIAL

PROPOSED: ±81.62 ACRES HEAVY INDUSTRIAL

TAX ACCOUNT NUMBERS: 98.00-2-10.23
98.01-2-1

* ENTIRE SITE IS WITHIN 100-YR FLOODPLAIN

PARKING:

1 SPACE FOR EACH 2 EMPLOYEES ON MAXIMUM WORKING SHIFT.

TOTAL EMPLOYEES = 550

REQUIRED:
275 TOTAL SPACES REQUIRED

PROVIDED:
THE LARGEST SHIFT INCLUDES 180 EMPLOYEES WITH THE LARGEST SHIFT CHANGE INVOLVING 320 EMPLOYEES. INDIVIDUAL BUILDING PARKING DEMANDS FROM MARMEN WELCON HAVE BEEN PROVIDED BELOW:

BUILDING A = 168 SPACES
BUILDING B = 87 SPACES
BUILDING C & D = 100 SPACES TOTAL
TOTAL OPERATOR REQUESTED SPACES = 355

349 TOTAL SPACES PROVIDED

ADA SPACES REQUIRED:
PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

REQUIRED (349 SPACE LOT): 8 SPACES (6 STANDARD & 2 VAN)
FOR TOTAL PARKING 301-400 SPACES

PROVIDED (349 SPACE LOT): 9 SPACES (7 STANDARD & 2 VAN)

PLANNING BOARD HTE# 21-00100006

LEGEND

- PROPERTY LINE
- EASEMENT LIMITS
- DITCH CENTERLINE
- ROADSIDE SWALE
- BUILDING SETBACK
- OVERHEAD DOORS
- MAN DOORS
- EXISTING BUILDING
- PROPOSED BUILDING FOOTPRINT
- MATERIAL STORAGE AREAS
- WETLAND AREA
- WHARF DREDGING AREA
- PAVEMENT AREA
- CONCRETE AREA
- RIP-RAP WATER EMBANKMENT STABILIZATION
- PROPOSED DEED RESTRICTED AREA

0 150 300 450 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
SITE PLAN OVERALL

DRAWING NUMBER
SP-00

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00 GEN LAYO.DWG

LEGEND

PROPERTY LINE

PROPOSED BOX BEAM GUIDE RAIL

DITCH CENTERLINE

WETLAND AREA

SECURITY FENCE

MAN DOORS
(WITH 4' X 5' CONCRETE LANDING PAD)

OVERHEAD DOORS (SEE BUILDING PLANS FOR CONCRETE PAD DETAILS)

GRADING LIMIT LINE

EXISTING OVERHEAD ELECTRIC — OH

EXISTING GAS LINE — G

EXISTING WATERLINE — W

PROPOSED PAVEMENT

PROPOSED CONCRETE

HUDSON RIVER DREDGING

MATERIAL STORAGE AREA

RIP-RAP WATER EMBANKMENT
STABILIZATION W/ LIVE STAKES

PORT ROAD EXTENSION CURVE TABLE

Curve #	Radius	Length	Chord Bearing	Start Point (EASTING, NORTHING)	End Point (EASTING, NORTHING)	START STATION	END STATION
CURVE #1	375.0000	621.2005	N15° 49' 39.65"E	(689567.5505,1372681.9120)	(689718.2615,1373213.5327)	1+86.62	8+07.82

PLANNING BOARD HTE# 21-00100006

ALL WORK WITHIN NYSDOT ROW, SEE OFF-SITE DESIGN PLANS

RIVER ROAD (NYS ROUTE 9J)

RIVER ROAD

PROPOSED CULVERT

BACKFLOW PREVENTION ENCLOSURE (HOT BOX)

ELECTRIC SERVICE FOR WATER HOT BOX

UTILITY POLE SP-54 TO BE RELOCATED BY OTHERS

PROPOSED ROADWAY
12' LANE WIDTH 2' SHOULDERS
(SEE DRAWING PR-01)

PPC: 1+86.62

EXISTING ACCESS EASEMENT

PROPOSED GUIDE RAIL
(TYP. - SEE DRAWING PR-01)

GRADING LIMIT LINE (TYP.)

PROPERTY LINE

GUIDE RAIL

CURVE #1
SEE TABLE THIS SHEET

LANDS N/F
PSEG POWER
TAX ID# 98.00-2-10.1

LANDS N/F
NIAGARA MOHAWK POWER CORP.
TAX ID# 98.00-2-10.21

LANDS N/F
ALBANY PORT DISTRICT COMMISSION
TAX ID# 98.00-2-10.23

25' x 25' GRAVEL PAD

PROPOSED ELECTRIC SUBSTATION
(SEE SUBSTATION PLANS)

8' CHAINLINK FENCE WITH BARBED WIRE (SEE SUBSTATION PLANS)

GRAVEL POND ACCESS
DRIVEWAY (12' WIDE)

30' GAS EASEMENT TO BNE

STORMWATER
TREATMENT SIGN

PROPOSED
FOREBAY #2

PROPOSED STORMWATER
RETENTION POND #2

SEDIMENT DEPTH GAUGE(TYP.)

PROPOSED FOREBAY #1

STORMWATER
TREATMENT SIGN

SNOW STORAGE AREA

GATE #1 - EMERGENCY ACCESS
GATE WITH FIRE DEPARTMENT KEY
FOB ACCESS (TWO 20' POWER
SLIDING GATES WITH KNOX BOX
ACCESS CONTROL)

8' HIGH CHAINLINK 8'
HIGH CHAINLINK
SECURITY FENCE (TYP.)

4' X 5' CONC. LANDING PAD
(TYP. OF ALL MAN DOORS)

BUILDING - A
PLATE PREPARATION
AND WELDING
(299,250 SF)

SNOW STORAGE AREA

MATCH LINE SEE SHEET SP-02

MATCH LINE SEE SHEET SP-04

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
SITE PLAN

DRAWING NUMBER
SP-01

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00 LAYO.DWG

PLANNING BOARD HTE# 21-00100006

LEGEND

- PROPERTY LINE
- PROPOSED BOX BEAM GUIDE RAIL
- DITCH CENTERLINE
- WETLAND AREA
- SECURITY FENCE
- MAN DOORS (WITH 4' X 5' CONCRETE LANDING PAD)
- OVERHEAD DOORS (SEE BUILDING PLANS FOR CONCRETE PAD DETAILS)
- GRADING LIMIT LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING GAS LINE
- EXISTING WATERLINE
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- HUDSON RIVER DREDGING
- MATERIAL STORAGE AREA
- RIP-RAP WATER EMBANKMENT STABILIZATION W/ LIVE STAKES

EXISTING WETLANDS #1
CURBED LANDSCAPE ISLANDS (TYP)
PROPOSED PARKING (9' X 20' TYP.) (200 TOTAL SPACES)
STORMWATER TREATMENT SIGN
GRAVEL POND ACCESS DRIVEWAY (12' WIDE)
SEDIMENT DEPTH GAUGE(TYP.)
FOREBAY
PERMANENT POOL
PROPOSED STORMWATER RETENTION POND #1
CURBING/PAVEMENT RADII (TYP) MAIN RADII = 10' MINOR RADII = 3'
GRADING LIMIT LINE (TYP.)
CURBED LANDSCAPE ISLANDS (TYP.)
SNOW STORAGE AREA
STORMWATER TREATMENT SIGN
FLUSH CURB WITH TYPE B CURB RAMPS
PROPERTY LINE
PROPOSED SNOW STORAGE AREA
SITE LIGHTING (TYP.)
STOP BAR AND STOP SIGN (TYP.)
BUILDING MOUNTED SITE LIGHTING, NTS (TYP.)
GATE #3 - SECURITY FENCE EMERGENCY ACCESS WITH FIRE DEPARTMENT KEY FOB ACCESS (TWO 20' POWER SLIDING GATES WITH KNOX BOX ACCESS CONTROL)
CONC. PAD WITH RAIL LINES (SEE BUILDING PLANS)
PROPOSED ELECTRIC SUBSTATION SHELTER
PROPOSED PARKING (9' X 20' TYP.) (149 SPACES)
GRAVEL SNOW STORAGE AREA
FIRE HYDRANT
8' HIGH CHAINLINK SECURITY FENCE (TYP.)
5' WIDE SIDEWALK / CURB (TYP.)
MAIN ENTRANCE
ACCESSIBLE CURB RAMP (TYP B)
PROPOSED ACCESSIBLE SPACES WITH SIGNS (3 TYP.)
ACCESSIBLE CURB RAMP (TYP B)
4' X 5' CONC. LANDING PAD (TYP. OF ALL MAN DOORS)
STOP BAR AND STOP SIGN (TYP.)
FIRE HYDRANT
4 EV PARKING SPACES
GATE #2 - SECURITY FENCE EMERGENCY ACCESS WITH FIRE DEPARTMENT KEY FOB ACCESS (ONE 25' POWER SLIDING GATE WITH KNOX BOX ACCESS CONTROL)
MAN GATE (TYP OF 2)
METAL RECYCLING BINS
FLUSH CURB WITH TYPE B CURB RAMPS
COMPRESSED GAS TANK STORAGE AREA 26' X 67' CONCRETE PAD
CURBED ISLAND TO BE NYSDOT TYPE M6 MOUNTABLE CURB
MAIN EMPLOYEE ENTRANCE (SEE BUILDING PLANS FOR FRONT ENTRANCE DETAILS)
ACCESSIBLE CURB RAMP (TYPE A)
PROPOSED ACCESSIBLE SPACES WITH SIGNS (3 TYP.)
START 6" CURB/SIDEWALK
PROPOSED ACCESSIBLE AISLE WITH SIGNS (2 TYP.)
4' X 5' CONC. LANDING PAD (TYP. OF ALL MAN DOORS)
CHAINLINK FENCE WITH 30 BOLLARDS SPACED 4' O.C. (TYP) NFPA 55 - CHAPTER 9
GATE #5 - 6' WIDE SLIDING GATE
CONC. PAD WITH RAIL LINES (SEE BUILDING PLANS)
DENSE GRADED AGGREGATE YARD
MATERIAL STORAGE AREA

BUILDING - A
PLATE PREPARATION AND WELDING
(299,250 SF)

BUILDING - B
WELDING FINISHING
(111,023 SF)

0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET SP-01
MATCH LINE SEE SHEET SP-03
MATCH LINE SEE SHEET SP-05

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-LAYO.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINO · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
SITE PLAN

DRAWING NUMBER
SP-02

PLANNING BOARD HTE# 21-00100006

LEGEND

- PROPERTY LINE
- PROPOSED BOX BEAM GUIDE RAIL
- DITCH CENTERLINE
- WETLAND AREA
- SECURITY FENCE
- MAN DOORS (WITH 4' X 5' CONCRETE LANDING PAD)
- OVERHEAD DOORS (SEE BUILDING PLANS FOR CONCRETE PAD DETAILS)
- GRADING LIMIT LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING GAS LINE
- EXISTING WATERLINE
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- HUDSON RIVER DREDGING
- MATERIAL STORAGE AREA
- RIP-RAP WATER EMBANKMENT STABILIZATION W/ LIVE STAKES

EXISTING WETLAND #1
GRADING LIMIT LINE (TYP.)
CURBING/PAVEMENT RADII (TYP)
MAIN RADII = 10'
MINOR RADII = 3'
PROPOSED ACCESSIBLE SPACES WITH SIGNS (3 TYP.)
PROPOSED ACCESSIBLE AISLE WITH SIGNS (2 TYP.)
5' WIDE EMPLOYEE ACCESS SIDEWALK (TYP.)
BEGIN RETAINING WALL
SNOW STORAGE AREA
ACCESSIBLE RAMPS (TYP C)
5' WIDE SIDEWALK / CURB
8' HIGH CHAINLINK SECURITY FENCE (TYP.)
KEY CARD ACCESS TURN STYLE ACCESS GATE WITH SUPPLEMENTAL ACCESSIBLE SWING GATE
KEY CARD ACCESS TURN STYLE GATE WITH SUPPLEMENTAL ACCESSIBLE SWING GATE
PROPOSED SEGMENTAL BLOCK RETAINING WALL (823 LF)
4' X 5' CONC. LANDING PAD (TYP. OF ALL MAN DOORS)
WETLAND IMPACT AREA (0.01 ACRE) ON NATIONAL GRID PROPERTY
EXISTING UTILITY POLE POTENTIAL SERVICE POINT FOR ELECTRIC / COMMUNICATIONS
MOUNT SECURITY FENCE ON TOP OF RETAINING WALL
WETLAND IMPACT AREA (0.73 ACRE) WITHIN PROPERTY LIMITS
MAIN EMPLOYEE ENTRANCE
END RETAINING WALL
SANITARY PACKAGE TREATMENT PLANT 20' X 60' STRUCTURAL CONCRETE PAD
BEGIN CURB
8' HIGH CHAINLINK SECURITY FENCE (TYP.)
LIVE STAKES TO BE INSTALLED WITHIN LIMITS OF MEDIUM STONE FILL AREA
WETLAND #9 IMPACT (0.04 ACRE) FOR BRIDGE PIER
12" CONCRETE CURB
CONC. PAD WITH RAIL LINES (SEE BUILDING PLANS - TYP.)
BUILDING MOUNTED SITE LIGHTING, NTS (TYP.)
CONCRETE EQUIPMENT PAD 12' X 36' WITH 12 BOLLARDS
AIR HANDLING EQUIPMENT
BUILDING - C
BLAST - METALIZATION - PAINT
(131,968 SF)
BRIDGE GUIDERAILING
PROPOSED BRIDGE
END CURB
5' GEOGRID OVERLAP WITH BRIDGE APPROACH GEOGRID (SEE BRIDGE PLANS)
4' X 5' CONC. LANDING PAD (TYP. OF ALL MAN DOORS)
PROPOSED BRIDGE PIERS
SITE DESIGN LIMITS SEE BRIDGE PLANS
PROPOSED BRIDGE ABUTMENT/ RETAINING WALL
MEDIUM STONE FILL BANK STABILIZATION / EROSION CONTROL (TYP.)
MATERIAL STORAGE AREA
LANDS N/F
ALBANY PORT DISTRICT COMMISSION
TAX ID# 98.00-2-10.23
DENSE GRADED AGGREGATE YARD
BUILDING - D
INTERNAL ASSEMBLY/ FINISHING
(61,550 SF)
NORMANS KILL
HUDSON RIVER/ NORMANS KILL MEAN HIGH HIGH WATER LIMIT (ELEV = 3.78')
0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET SP-02
MATCH LINE SEE SHEET SP-04
MATCH LINE SEE SHEET SP-06

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\DRAWINGS\SHEET FILES\18641.00-LAYO.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/27/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

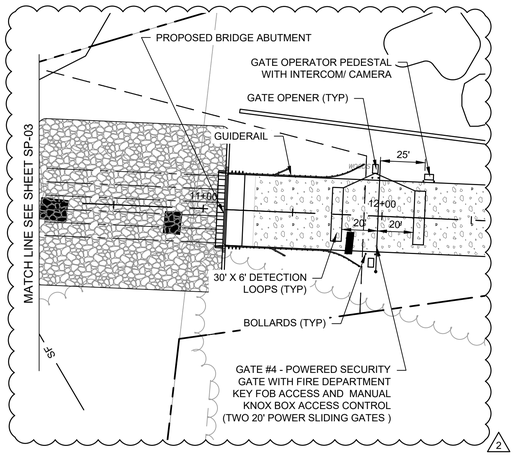
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J. FROSINO · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
SITE PLAN

DRAWING NUMBER
SP-03

MATCH LINE SEE SHEET SP-01



PLANNING BOARD HTE# 21-00100006

10' X 20' FENCED GAS METER ENCLOSURE WITH 8 BOLLARDS SPACES 4' O.C. (TYP)

BUILDING - A
PLATE PREPARATION AND WELDING
(299,250 SF)

46'

4' X 5' CONC. LANDING PAD (TYP. OF ALL MAN DOORS)

HYDRANT (TYP)

PROP. BUILDING LIGHTING (TYP.)

8' HIGH CHAINLINK SECURITY FENCE (TYP.)

LANDS N/F
ALBANY PORT DISTRICT COMMISSION
TAX ID# 98.00-2-10.23

DENSE GRADED AGGREGATE YARD

BEGIN "BUFFER AREA - DO NOT DISTURB" SIGNAGE EVERY 100 LF ON FENCE

PROPOSED FINISHED PRODUCT STORAGE AREA

BEGIN CURB

12" CONCRETE CURB

10'

GRADING LIMIT LINE (TYP.)

HUDSON RIVER/ NORMANS KILL MEAN HIGH HIGH WATER LIMIT (ELEV = 3.78')

MEDIUM STONE FILL OUTLET PROTECTION

WETLAND #4 HUDSON RIVER

PROPOSED DEED RESTRICTION AREA

SAV AREA #1

HUDSON RIVER

HUDSON RIVER NAVIGATION CHANNEL LIMIT

0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET SP-05

LEGEND

- PROPERTY LINE
- PROPOSED BOX BEAM GUIDE RAIL
- DITCH CENTERLINE
- WETLAND AREA
- SECURITY FENCE
- MAN DOORS (WITH 4' X 5' CONCRETE LANDING PAD)
- OVERHEAD DOORS (SEE BUILDING PLANS FOR CONCRETE PAD DETAILS)
- GRADING LIMIT LINE
- EXISTING OVERHEAD ELECTRIC (OH)
- EXISTING GAS LINE (G)
- EXISTING WATERLINE (W)
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- HUDSON RIVER DREDGING
- MATERIAL STORAGE AREA
- RIP-RAP WATER EMBANKMENT STABILIZATION W/ LIVE STAKES

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINO · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
SITE PLAN

DRAWING NUMBER
SP-04

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-LAYO.DWG

MATCH LINE SEE SHEET SP-02

BUILDING - A
PLATE PREPARATION AND WELDING
(299,250 SF)

BUILDING MOUNTED SITE LIGHTING, NTS (TYP.)

4' X 5' CONC. LANDING PAD (TYP. OF ALL MAN DOORS)

LANDS N/F
ALBANY PORT DISTRICT COMMISSION
TAX ID#: 98.00-2-10.23

PROPOSED FINISHED PRODUCT STORAGE AREA

DENSE GRADED AGGREGATE YARD

12" CONCRETE CURB

8' HIGH CHAINLINK SECURITY FENCE WITH "BUFFER AREA - DO NOT DISTURB" SIGNAGE EVERY 100 LF

MEDIUM STONE FILL OUTLET PROTECTION

GRADING LIMIT LINE (TYP.)

MEDIUM STONE FILL OUTLET PROTECTION

ROCK BULKHEAD

EDGE OF WATER

WETLAND #3

HUDSON RIVER/ NORMANS KILL MEAN HIGH HIGH WATER LIMIT (ELEV = 3.78')

PROPOSED DEED RESTRICTION AREA (TYP.)

SAV AREA #2

HUDSON RIVER NAVIGATION CHANNEL LIMIT

HUDSON RIVER

LEGEND

- PROPERTY LINE
- PROPOSED BOX BEAM GUIDE RAIL
- DITCH CENTERLINE
- WETLAND AREA
- SECURITY FENCE
- MAN DOORS (WITH 4' X 5' CONCRETE LANDING PAD)
- OVERHEAD DOORS (SEE BUILDING PLANS FOR CONCRETE PAD DETAILS)
- GRADING LIMIT LINE
- EXISTING OVERHEAD ELECTRIC (OH)
- EXISTING GAS LINE (G)
- EXISTING WATERLINE (W)
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- HUDSON RIVER DREDGING
- MATERIAL STORAGE AREA
- RIP-RAP WATER EMBANKMENT STABILIZATION W/ LIVE STAKES

PLANNING BOARD HTE# 21-00100006

0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET SP-04

MATCH LINE SEE SHEET SP-06

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00_LAYO.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSHEISER
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
SITE PLAN

DRAWING NUMBER
SP-05

MATCH LINE SEE SHEET SP-03

MATCH LINE SEE SHEET SP-05

BUILDING - D
INTERNAL ASSEMBLY/
FINISHING
(61,550 SF)

LANDS N/F
ALBANY PORT DISTRICT COMMISSION
TAX ID# 98.00-2-10.23

DENSE GRADED AGGREGATE YARD

4' X 5' CONC. LANDING PAD
(TYP. OF ALL MAN DOORS)

BUILDING MOUNTED
SITE LIGHTING, NTS
(TYP.)

12" CONCRETE CURB

MEDIUM STONE FILL BANK
STABILIZATION / EROSION
CONTROL (TYP.)

8' HIGH CHAINLINK
SECURITY FENCE (TYP.)

LIVE STAKES TO BE INSTALLED WITHIN
LIMITS OF MEDIUM STONE FILL AREA

HUDSON RIVER/ NORMANS
KILL MEAN HIGH HIGH WATER
LIMIT (ELEV = 4')

MEDIUM STONE FILL
OUTLET PROTECTION

PROPOSED FINISHED PRODUCT STORAGE AREA

PROPOSED DEED RESTRICTION AREA

END 8' HIGH CHAINLINK
SECURITY FENCE WITH
"BUFFER AREA - DO NOT
DISTURB" SIGNAGE
EVERY 100 LF

HIGH MAST WHARF LIGHTING
(SEE WHARF PLANS)

12" CONCRETE CURB

WHARF MOORING DOLPHINS
(SEE WHARF PLANS)

END CURB

PROPOSED WHARF
(SEE SEPARATE WHARF
DESIGN PLANS BY OTHERS)

HIGH MAST WHARF LIGHTING
(SEE WHARF PLANS)

WHARF MOORING DOLPHINS
(SEE WHARF PLANS)

END CURB

NORMANS KILL

GRADING LIMIT LINE (TYP.)

END SECURITY FENCE

MEDIUM STONE FILL
OUTLET PROTECTION

MATERIAL LOADING ZONE

UNSATURATED UPLAND MATERIAL
EXCAVATED FOR THE CONSTRUCTION OF
THE WHARF TO BE DEPOSITED ON THE SITE
AS FILL MATERIAL

SAV AREA #3

FIRE PUMP HOUSE

PLANNING BOARD HTE# 21-00100006

HUDSON RIVER NAVIGATION CHANNEL LIMIT

SITE DESIGN LIMITS
SEE WHARF DESIGN PLANS

HUDSON RIVER

LEGEND

- PROPERTY LINE
- PROPOSED BOX BEAM GUIDE RAIL
- DITCH CENTERLINE
- WETLAND AREA
- SECURITY FENCE
- MAN DOORS (WITH 4' X 5' CONCRETE LANDING PAD)
- OVERHEAD DOORS (SEE BUILDING PLANS FOR CONCRETE PAD DETAILS)
- GRADING LIMIT LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING GAS LINE
- EXISTING WATERLINE
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- HUDSON RIVER DREDGING
- MATERIAL STORAGE AREA
- RIP-RAP WATER EMBANKMENT STABILIZATION W/ LIVE STAKES

0 40 80 120 FT
SCALE

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-LAYO.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

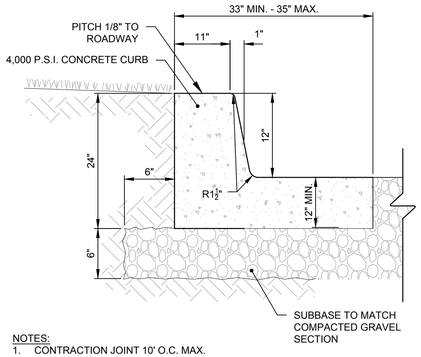
PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

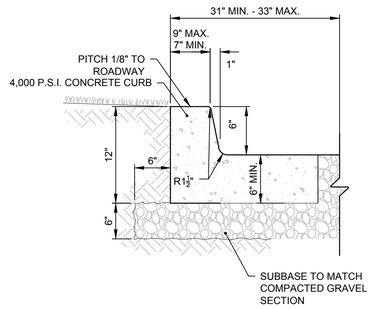
DRAWING TITLE
SITE PLAN

DRAWING NUMBER
SP-06



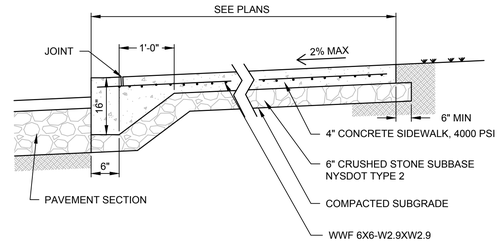
NOTES:
1. CONTRACTION JOINT 10' O.C. MAX.
2. EXPANSION JOINTS 100' O.C. MAX.
3. CURB TO BE CONSTRUCTED USING MATERIAL AND CONSTRUCTION REQUIREMENTS OF SECTION 609 OF THE NYSDOT STANDARD SPECIFICATIONS

12" CONCRETE CURB DETAIL
N.T.S.

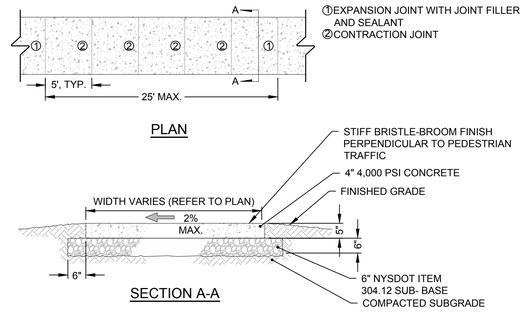


NOTES:
1. CONTRACTION JOINT 10' O.C. MAX.
2. EXPANSION JOINTS 100' O.C. MAX.
3. CURB TO BE CONSTRUCTED USING MATERIAL AND CONSTRUCTION REQUIREMENTS OF SECTION 609 OF THE NYSDOT STANDARD SPECIFICATIONS

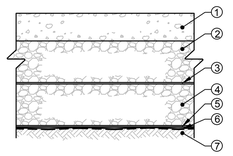
6" CONCRETE CURB DETAIL
N.T.S.



INTERGRAL CURB AND SIDEWALK SECTION DETAIL
N.T.S.



CONCRETE SIDEWALK DETAIL
N.T.S.

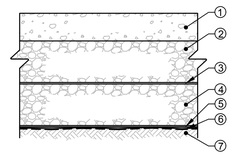


① 12" SURFACE AGGRAGATE, NYSDOT ITEM 304.13 TYPE 2
② 18" BASE AGGREGATE, NYSDOT ITEM 304.13 TYPE 2 (OR AASHTO #57 BLEND)
③ SINGLE PLY GEOGRID, TENSAR NX850 OR APPROVED EQUAL
④ 18" BASE AGGREGATE, NYSDOT ITEM 304.13 TYPE 2 (OR AASHTO #57 BLEND)
⑤ SINGLE PLY GEOGRID, TENSAR NX850 OR APPROVED EQUAL
⑥ MIRAFI 600X GEOTEXTILE FABRIC OR APPROVED EQUAL
⑦ COMPACTED SUBGRADE

NOTES:

1. COMPACT SUBGRADE TO A MODIFIED PROCTOR DENSITY OF 95%
2. 12" SUBBASE COURSE SHALL HAVE NO MORE THAN (7%) SEVEN PERCENT BY WEIGHT FINER THAN NO. 200 SIEVE.
3. REFER TO GEOTECHNICAL ENGINEERING REPORT FOR SUBGRADE PREPARATION/COMPACTION REQUIREMENTS.
4. GEOGRID SHALL BE INSTALLED ACCORDANCE WITH NYSDOT ITEM 207.69000017
5. GEOGRID INSTALLATION SHALL BE COORDINATED AND SEQUENCED WITH UTILITY INSTALLATIONS TO AVOID ANY BREAKS IN THE PROPOSED GEOGRID.

DENSE GRADED AGGREGATE YARD SECTION
N.T.S.



① 2" 9.5 F2 TOP COURSE HMA, NYSDOT ITEM 402.096204
② 3" BINDER COURSE HMA, NYSDOT ITEM 402.196904
③ SINGLE PLY GEOGRID, TENSAR NX850 OR APPROVED EQUAL
④ 12" SUBBASE COURSE, NYSDOT ITEM 304.15 OPTIONAL TYPE
⑤ SINGLE PLY GEOGRID, TENSAR NX850 OR APPROVED EQUAL
⑥ MIRAFI 600X GEOTEXTILE FABRIC OR APPROVED EQUAL
⑦ COMPACTED SUBGRADE

NOTES:

1. COMPACT SUBGRADE TO A MODIFIED PROCTOR DENSITY OF 95%
2. 12" SUBBASE COURSE SHALL HAVE NO MORE THAN (7%) SEVEN PERCENT BY WEIGHT FINER THAN NO. 200 SIEVE.
3. REFER TO GEOTECHNICAL ENGINEERING REPORT FOR SUBGRADE PREPARATION/COMPACTION REQUIREMENTS.
4. GEOGRID SHALL BE INSTALLED ACCORDANCE WITH NYSDOT ITEM 207.69000017
5. GEOGRID INSTALLATION SHALL BE COORDINATED AND SEQUENCED WITH UTILITY INSTALLATIONS TO AVOID ANY BREAKS IN THE PROPOSED GEOGRID.

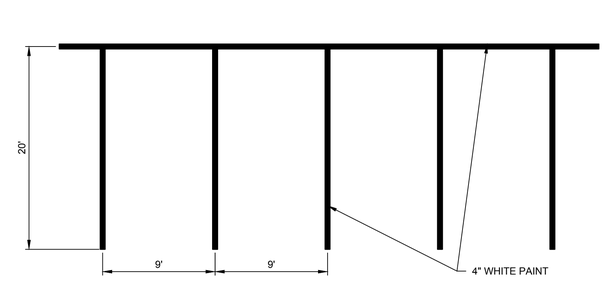
PARKING LOT PAVEMENT SECTION
N.T.S.

① 12" SUBBASE COURSE, NYSDOT ITEM 304.15 OPTIONAL TYPE
② MIRAFI 600X GEOTEXTILE FABRIC OR APPROVED EQUAL
③ COMPACTED SUBGRADE

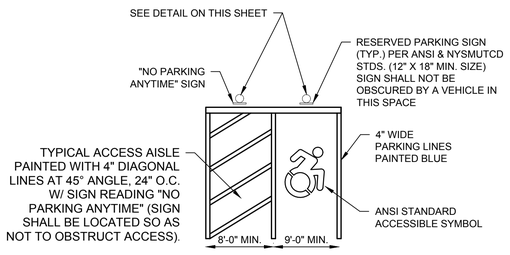
NOTES:

1. COMPACT SUBGRADE TO A MODIFIED PROCTOR DENSITY OF 95%
2. 12" SUBBASE COURSE SHALL HAVE NO MORE THAN (7%) SEVEN PERCENT BY WEIGHT FINER THAN NO. 200 SIEVE.
3. REFER TO GEOTECHNICAL ENGINEERING REPORT FOR SUBGRADE PREPARATION/COMPACTION REQUIREMENTS.
4. GEOGRID SHALL BE INSTALLED ACCORDANCE WITH NYSDOT ITEM 207.69000017
5. GEOGRID INSTALLATION SHALL BE COORDINATED AND SEQUENCED WITH UTILITY INSTALLATIONS TO AVOID ANY BREAKS IN THE PROPOSED GEOGRID.

GRAVEL ACCESS ROAD SECTION
N.T.S.

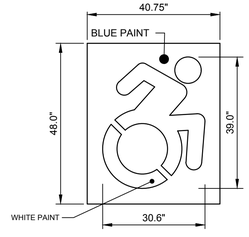


TYPICAL PARKING STALL STRIPING
N.T.S.

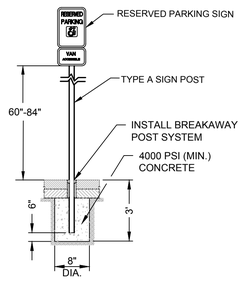


NOTES:
1. MAXIMUM SLOPE WITHIN ACCESSIBLE PARKING SPACE AND/OR NO PARKING AISLE SHALL NOT EXCEED 1:50 IN ALL DIRECTIONS.
2. SIGNS SHALL BE PERMANENTLY INSTALLED AT A MIN. CLEAR HEIGHT OF 84" ABOVE WALKWAY SURFACE AND SHALL NOT INTERFERE WITH AN ACCESSIBLE ROUTE FROM AN ACCESS AISLE.
3. SIGNS SHALL MEET THE LATEST REQUIREMENTS FOR RETROREFLECTIVITY

TYPICAL ACCESSIBLE PARKING DETAIL
N.T.S.

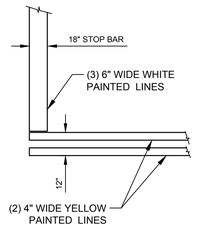


ACCESSIBLE PARKING PAINTING DETAIL
N.T.S.

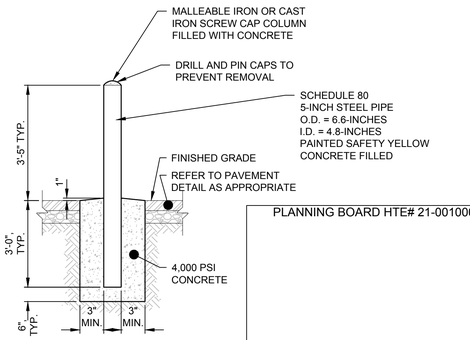


NOTE:
1. CENTER SIGN POST ON PARKING STALL STRIPE.

TYPICAL ACCESSIBLE 'NO PARKING' SIGN
N.T.S.



STOP BAR PAINTING DETAIL
N.T.S.



6" GALVANIZED STEEL PIPE BOLLARD
N.T.S.

PLANNING BOARD HTE# 21-00100006

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
GMP BID SET

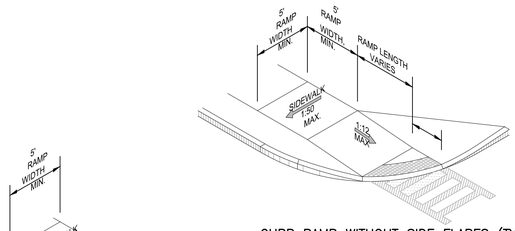
NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

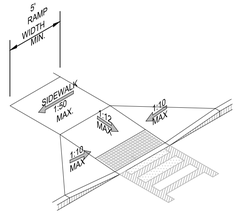
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
SITE DETAILS

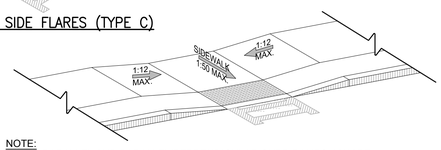
DRAWING NUMBER
SP-07



CURB RAMP WITHOUT SIDE FLARES (TYPE C)

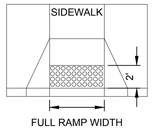


PERPENDICULAR SIDEWALK CURB RAMP WITH SIDE FLARES (TYPE A)



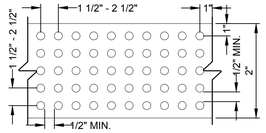
NOTE:
THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

COMBINED PARALLEL/PERPENDICULAR CURB RAMP (TYPE B)

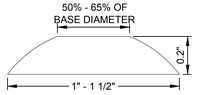


FULL RAMP WIDTH

DETECTABLE WARNING AT CURB RAMP



DOME SPACING

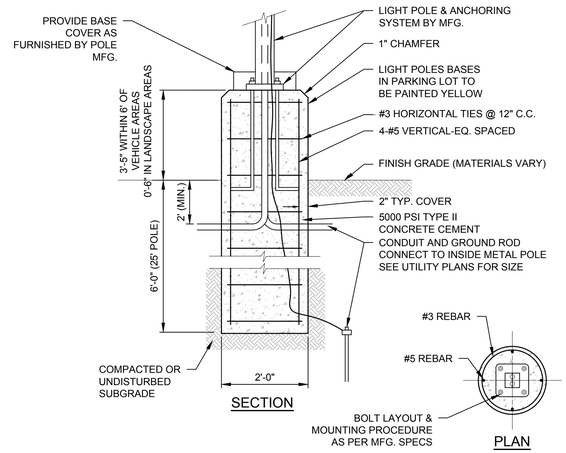


DOME SECTION

NOTES:

1. THE DETECTABLE WARNING DETAILS PROVIDED ARE NOT DRAWN TO SCALE, THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING FIELD (THE DOMES AND THE ENTIRE 2' LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.
2. LOCATION OF DETECTABLE WARNINGS. DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OF THE WARNING FIELD NEAREST TO THE ROADWAY OR STREET SURFACE IS 6" TO 9" (1" WHERE TRANSVERSABLE CURB IS USED) FROM THE EDGE OF THE ROADWAY/STREET, OR FROM THE FACE OF THE DROPPED CURB, WHERE A DROPPED CURB CONTINUES ACROSS THE BOTTOM OF THE SIDEWALK CURB RAMP. THE DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
3. DOME ALIGNMENT. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL.
4. PAYMENT LINES ARE THE 2' DIMENSION SHOWN IN THE DETAILS EXTENDING THE FULL WIDTH OF THE CURB RAMP AND/OR APPLICABLE SURFACES. LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF A 5' BY 5' SQUARE.
5. LANDINGS MAY OVERLAP WITH ADJACENT LANDINGS OR A SINGLE LANDING MAY SERVE MULTIPLE CURB RAMPS OR PARALLEL OR PARALLEL/PERPENDICULAR RAMPS. LANDINGS MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.
6. CROSS SLOPES: THE MAXIMUM CROSS SLOPE OF CURB RAMPS SHALL BE 2 PERCENT. THE MAXIMUM CROSS SLOPE AT LANDINGS IS 2 PERCENT IN ANY DIRECTION. SURFACES SHALL GENERALLY LIE IN CONTINUOUS PLANES WITH A MINIMUM OF SURFACE WARP.
7. THE RUNNING GRADE OF CURB RAMPS SHOULD BE AS FLAT AS PRACTICABLE. THE MAXIMUM RUNNING GRADE OF ANY PORTION OF ANY CURB RAMP SHALL BE 1:12 (8.3%). CURB RAMPS ARE NOT REQUIRED TO BE LONGER THAN 15'.
8. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
9. CURB RAMPS LOCATED WHERE PEDESTRIANS MAY WALK ACROSS THE CURB RAMP SHALL HAVE FLARED SIDES. THE LENGTH OF THE FLARES SHALL BE AT LEAST TEN (10) THE TIMES THE CURB HEIGHT, MEASURED ALONG THE CURB LINE. WHEN INFEASIBLE OR IMPRACTICABLE TO PROVIDE A LANDING THAT IS AT LEAST 4' WIDE (MEASURED FROM THE TOP OF THE RAMP TO THE BACK OF THE SIDEWALK), THE LENGTH OF THE FLARES SHALL BE TWELVE (12) TIMES THE CURB HEIGHT MEASURED ALONG THE CURB LINE.
10. COORDINATE ALL TRAFFIC CONTROL DEVICES, UTILITY LOCATIONS, SIGNS, STREET FURNITURE AND DRAINAGE TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE FOR CROSSWALK MARKINGS AND TRAFFIC CONTROL DEVICES IS PROVIDED IN THE MUTCD. DRAINAGE GRATES AND UTILITY ACCESS COVERS ARE NOT ALLOWED IN RAMP WALKING SURFACES OR LANDINGS.
11. AT MARKED CROSSINGS, THE FULL WIDTH OF THE RAMP SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS. THE SIDES OF THE RAMPS (THE FLARES) NEED NOT BE WITHIN THE WIDTH OF THE MARKINGS.
12. RAMP TRANSITIONS BETWEEN WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES (1/4" MAX).

ACCESSIBLE RAMPS WITH DETECTABLE WARNING STRIP DETAILS

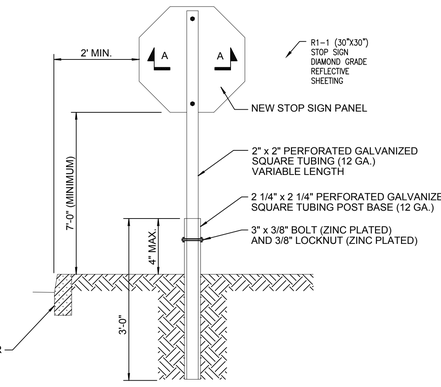


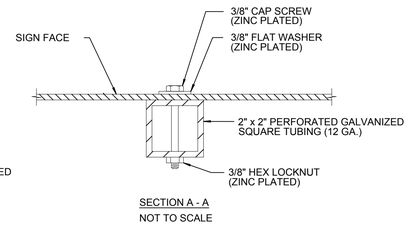
SECTION

PLAN

EXTERIOR LIGHT POLE BASE

N.T.S.





SECTION A - A

NOT TO SCALE

POST MOUNTED SIGN INSTALLATION

N.T.S.

STORMWATER MANAGEMENT PRACTICE - RETENTION POND #1

PROJECT IDENTIFICATION - SPDES CONSTRUCTION PERMIT # NYRXXXXXX

MUST BE MAINTAINED IN ACCORDANCE WITH O&M PLAN

DO NOT REMOVE OR ALTER

WARNING

SWIMMING, WADING, AND SKATING IS PROHIBITED

POSSIBLE CONTAMINATION OR POLLUTION OF POND WATER

MAXIMUM POND DEPTH IS 8.0 FEET

SEE SHEET SP-02 FOR LOCATION, ORIENTATION, AND QUANTITY

STORMWATER MANAGEMENT PRACTICE - RETENTION POND #2

PROJECT IDENTIFICATION - SPDES CONSTRUCTION PERMIT # NYRXXXXXX

MUST BE MAINTAINED IN ACCORDANCE WITH O&M PLAN

DO NOT REMOVE OR ALTER

WARNING

SWIMMING, WADING, AND SKATING IS PROHIBITED

POSSIBLE CONTAMINATION OR POLLUTION OF POND WATER

MAXIMUM POND DEPTH IS 7.5 FEET

SEE SHEET SP-01 FOR LOCATION, ORIENTATION, AND QUANTITY

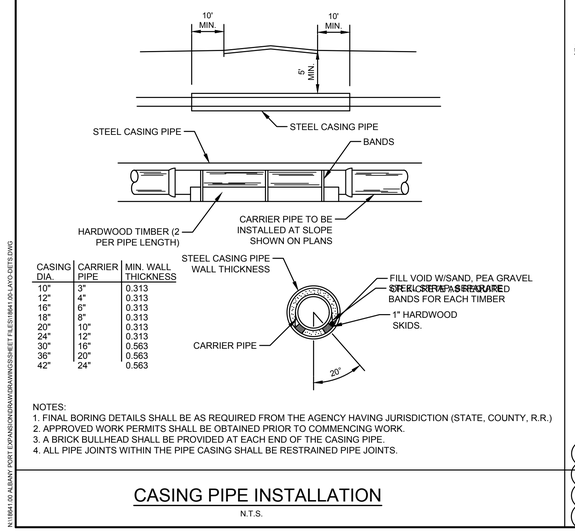
STORMWATER TREATMENT SIGNS

N.T.S.

NOTES:
1. METAL SIGNS WITH GREEN BACKGROUND AND WHITE LETTERING.
2. SIGNS SHALL BE MINIMUM OF 12" X 24".

2

PLANNING BOARD HTE# 21-00100006

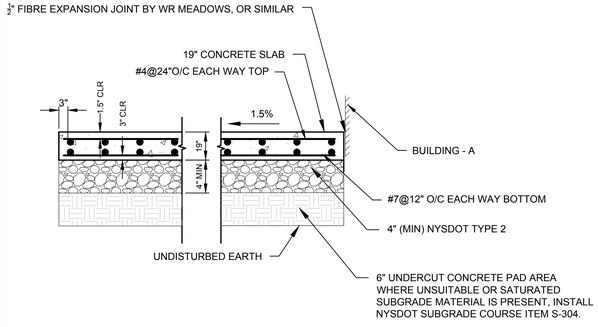


CASING DIA.	CARRIER PIPE	MIN. WALL THICKNESS
10"	3"	0.313
12"	4"	0.313
16"	6"	0.313
18"	8"	0.313
20"	10"	0.313
24"	12"	0.313
30"	16"	0.563
36"	20"	0.563
42"	24"	0.563

NOTES:
1. FINAL BORING DETAILS SHALL BE AS REQUIRED FROM THE AGENCY HAVING JURISDICTION (STATE, COUNTY, R.R.)
2. APPROVED WORK PERMITS SHALL BE OBTAINED PRIOR TO COMMENCING WORK.
3. A BRICK BULLHEAD SHALL BE PROVIDED AT EACH END OF THE CASING PIPE.
4. ALL PIPE JOINTS WITHIN THE PIPE CASING SHALL BE RESTRAINED PIPE JOINTS.

CASING PIPE INSTALLATION

N.T.S.

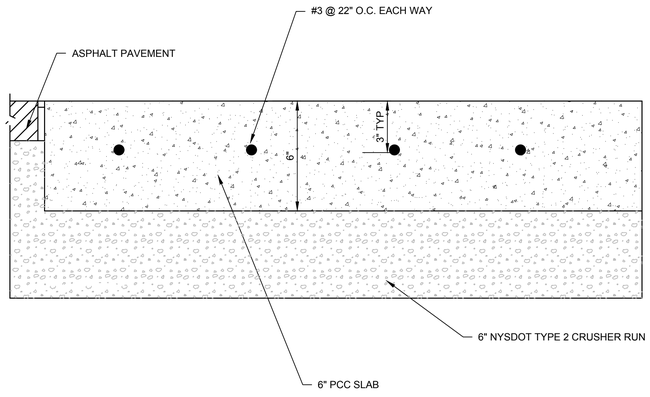


NOTE:
1. CONCRETE TO MEET THE REQUIREMENTS OF NYSDOT CLASS A 4,000 PSI CONCRETE
2. WHERE CONCRETE PAD MEETS EXISTING PAVEMENT PROVIDE ½" EXPANSION JOINT
3. TOP OF SLAB TO RECEIVE TWO COATS OF A SURFACE APPLIED CORROSION INHIBITOR, SIKA FERROGARD-908, OR EQUAL.

2

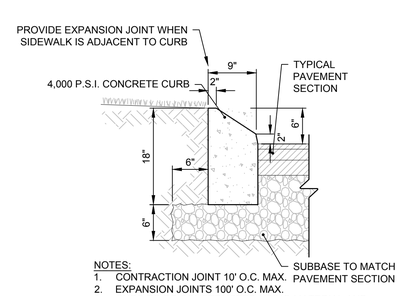
CONCRETE - STUCTURAL SLAB DETAIL (GAS TANKS & WWTP)

NOT TO SCALE



STANDARD DUTY CONCRETE PAVEMENT SECTION

N.T.S.



NOTES:
1. CONTRACTION JOINT 10' O.C. MAX.
2. EXPANSION JOINTS 100' O.C. MAX.
3. CURB TO BE CONSTRUCTED USING MATERIAL AND CONSTRUCTION REQUIREMENTS OF SECTION 609 OF THE NYSDOT STANDARD SPECIFICATIONS
4. CURB TO BE NYSDOT STANDARD TYPE M6 MOUNTABLE CURB.

6" CONCRETE MOUNTABLE CURB DETAIL

N.T.S.

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE

ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

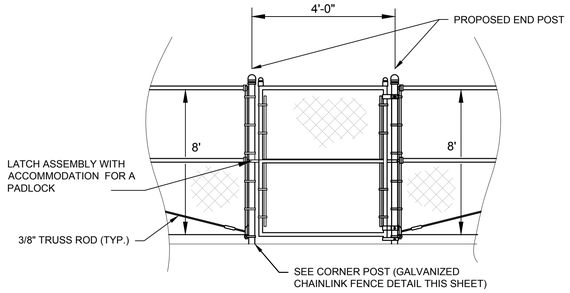
DRAWING TITLE

SITE DETAILS

DRAWING NUMBER

SP-08

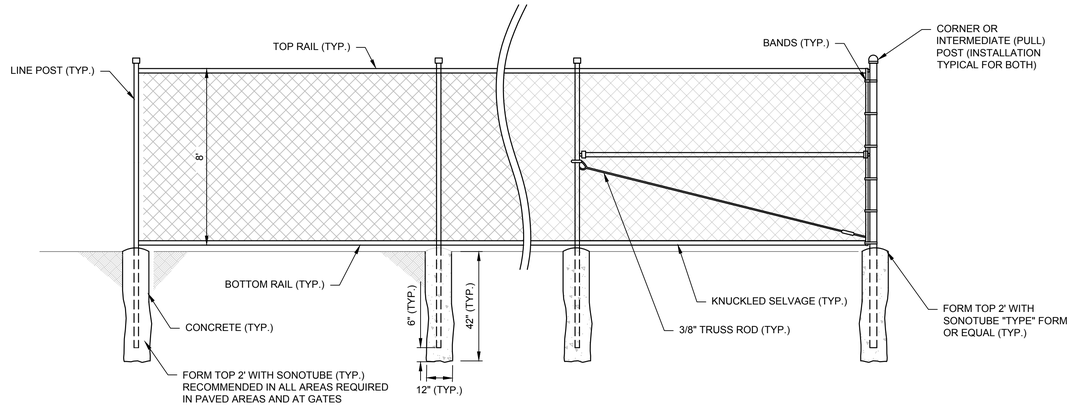
N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-LAYO-DETS.DWG



PEDESTRIAN GATE

NOTES:
1. NEW FENCING AND GATE SHALL BE FABRICATED USING THE SAME METHODS AND MATERIALS AS THE INTERMEDIATE POSTS USED FOR THE EXISTING FENCING FOR THE SIDES, TOP, MIDDLE, AND BOTTOM RAILS.
2. ALL FENCING TO COMPLY WITH NYSDOT STANDARD SHEET 607

FENCE / PEDESTRIAN GATE DETAIL
N.T.S.

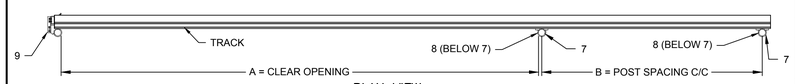


LINE SECTION

PULL OR CORNER SECTION

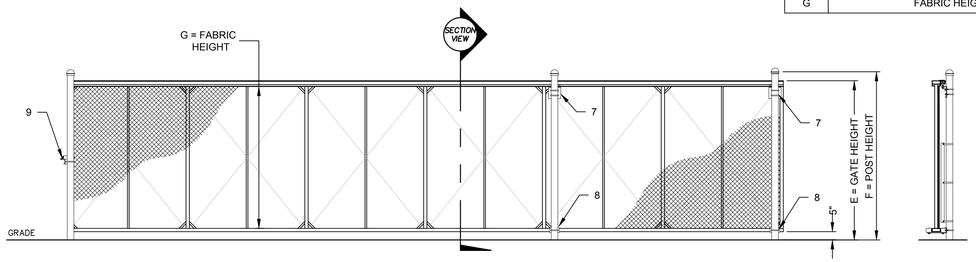
NOTES:
1.ALL FENCING TO COMPLY WITH NYSDOT STANDARD SHEET 607

8' GALVANIZED CHAIN LINK FENCE
N.T.S.



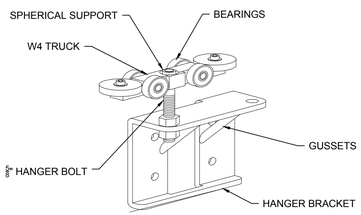
PLAN VIEW

CRITICAL GATE DIMENSION CHART							
MARK	DESCRIPTION	FORMULA	#1	#2	#3	#4	#5
A	CLEAR OPENING	A	20' (2)	25' (1)	20' (2)	20' (2)	6'
B	COUNTERBALANCE POST SPACING C/C	(A/2)-11"	9'-1"	11'-7"	9'-1"	9'-1"	2'-1"
C	OVERALL GATE LENGTH	A x 1.5	30'	37.5'	30'	30'	9'
D	COUNTERBALANCE LENGTH	A x 0.5	10'	12.5'	10'	10'	3'
E	NOMINAL GATE HEIGHT	E	8'	8'	8'	8'	8'
F	POST HEIGHT (W BARB ARMS)	E + 1'-6"	9'-6"	9'-6"	9'-6"	9'-6"	9'-6"
G	FABRIC HEIGHT	E - 1'-0"	7'	7'	7'	7'	7'

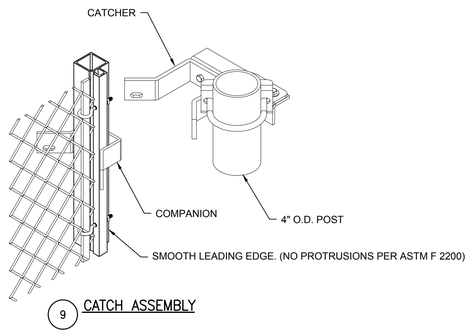


ELEVATION

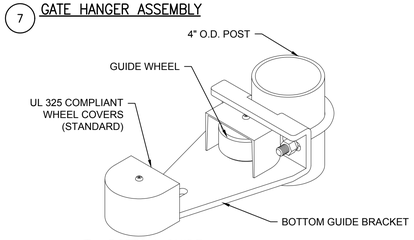
SECTION



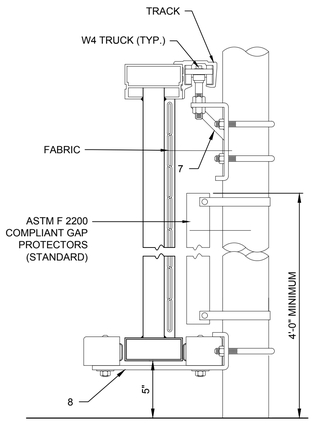
7 GATE HANGER ASSEMBLY



9 CATCH ASSEMBLY



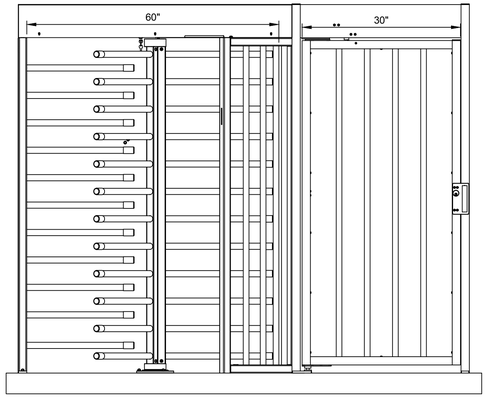
8 BOTTOM GUIDE



ENLARGED SECTION

NOTES:
1. ALL FITTINGS STANDARDLY PROVIDED FOR 4" O.D. POSTS. OTHER SIZES AVAILABLE UPON REQUEST.
2. BARB ARMS (FOR BARBED WIRE) OPTIONAL.
3. MANUFACTURED BY TYMETAL CORP. OR APPROVED EQUAL
4. ALL FENCING TO COMPLY WITH NYSDOT STANDARS SHEET 607

HEAVY DUTY CANTILEVER SLIDE GATE (GATES #1, #2, #3 & #4)
N.T.S.



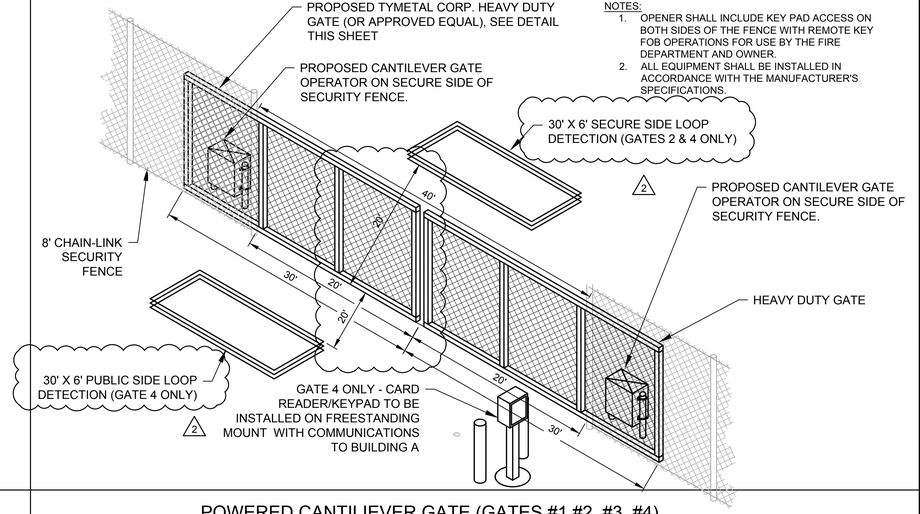
GENERAL NOTES:
-LEFT HAND GATE SHOWN.
GATE TO BE BRACED AT TOP.
-USE TURNLOCK-100-60 OR APPROVED EQUAL.

GATE MATERIALS:
EC: GALVANIZED STEEL
ECP: POWDERCOATED STEEL
EA: ANODIZED ALUMINUM
ES: STAINLESS STEEL

ELECTRICAL:
VOLTAGE: 24 VDC REQUIRED (FOR LOCK). OPTIONAL POWER SUPPLY AVAILABLE. AUTHORIZATION REQUIRES DRY CONTACT FROM ACCESS CONTROL.

PLANNING BOARD HTE# 21-00100006

FULL HEIGHT SECURITY TURNSTILE/ACCESSIBLE GATE
N.T.S.



NOTES:
1. OPENER SHALL INCLUDE KEY PAD ACCESS ON BOTH SIDES OF THE FENCE WITH REMOTE KEY FOB OPERATIONS FOR USE BY THE FIRE DEPARTMENT AND OWNER.
2. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

POWERED CANTILIEVER GATE (GATES #1,#2, #3, #4)

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
GMP BID SET

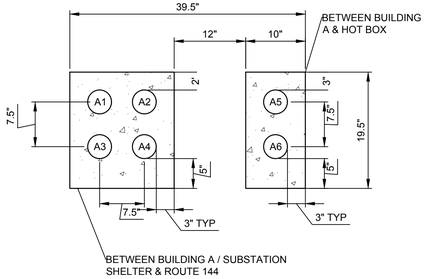
NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
SITE DETAILS

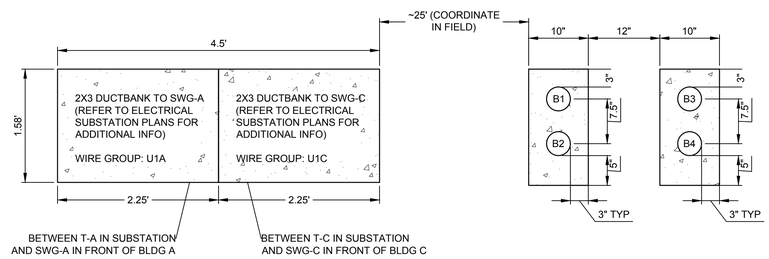
DRAWING NUMBER
SP-09



DUCTS:
A1. 4" - FIBER (ROGERS)
A2. 4" - FIBER (VERIZON)
A3. 4" - SPARE COMMUNICATION
A4. 4" - SPARE COMMUNICATION

A5. 4" - HOT BOX CIRCUIT
A6. 4" - SPARE POWER

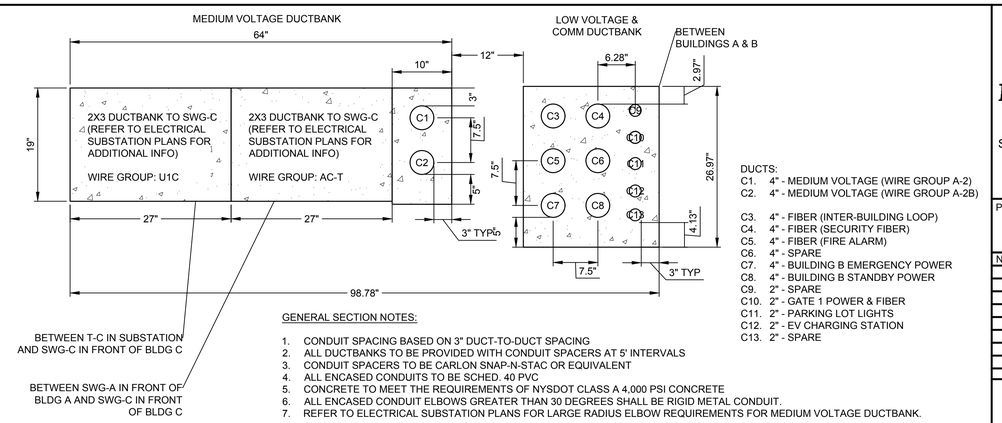
SECTION A
(BETWEEN ROUTE 144 AND BUILDING A)



DUCTS:
B1. 4" - FIBER (ROGERS)
B2. 4" - SPARE COMMUNICATION

B3. 4" - HOT BOX CIRCUIT
B4. 4" - SPARE POWER

SECTION B
(UNDERNEATH ACCESS ROAD LOCATED BETWEEN SUBSTATION AND BUILDING A)



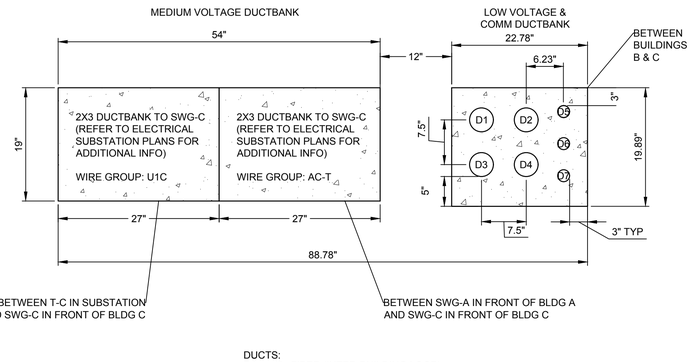
DUCTS:
C1. 4" - MEDIUM VOLTAGE (WIRE GROUP A-2)
C2. 4" - MEDIUM VOLTAGE (WIRE GROUP A-2B)

C3. 4" - FIBER (INTER-BUILDING LOOP)
C4. 4" - FIBER (SECURITY FIBER)
C5. 4" - FIBER (FIRE ALARM)
C6. 4" - SPARE
C7. 4" - BUILDING B EMERGENCY POWER
C8. 4" - BUILDING B STANDBY POWER
C9. 2" - SPARE
C10. 2" - GATE 1 POWER & FIBER
C11. 2" - PARKING LOT LIGHTS
C12. 2" - EV CHARGING STATION
C13. 2" - SPARE

GENERAL SECTION NOTES:

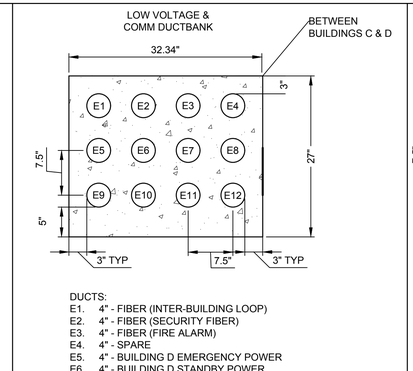
1. CONDUIT SPACING BASED ON 3" DUCT-TO-DUCT SPACING
2. ALL DUCTBANKS TO BE PROVIDED WITH CONDUIT SPACERS AT 5' INTERVALS
3. CONDUIT SPACERS TO BE CARLON SNAP-N-STAC OR EQUIVALENT
4. ALL ENCASED CONDUITS TO BE SCHED. 40 PVC
5. CONCRETE TO MEET THE REQUIREMENTS OF NYSDOT CLASS A 4,000 PSI CONCRETE
6. ALL ENCASED CONDUIT ELBOWS GREATER THAN 30 DEGREES SHALL BE RIGID METAL CONDUIT.
7. REFER TO ELECTRICAL SUBSTATION PLANS FOR LARGE RADIUS ELBOW REQUIREMENTS FOR MEDIUM VOLTAGE DUCTBANK.

SECTION C
(BETWEEN BUILDING A & BUILDING B)



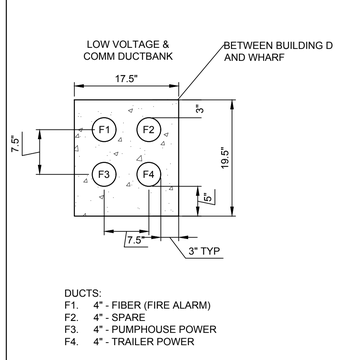
DUCTS:
D1. 4" - FIBER (INTER-BUILDING LOOP)
D2. 4" - FIBER (SECURITY FIBER)
D3. 4" - FIBER (FIRE ALARM)
D4. 4" - SPARE
D5. 2" - PARKING LOT LIGHTS
D6. 2" - SPARE
D7. 2" - SPARE

SECTION D
(BETWEEN BUILDING B & BUILDING C)



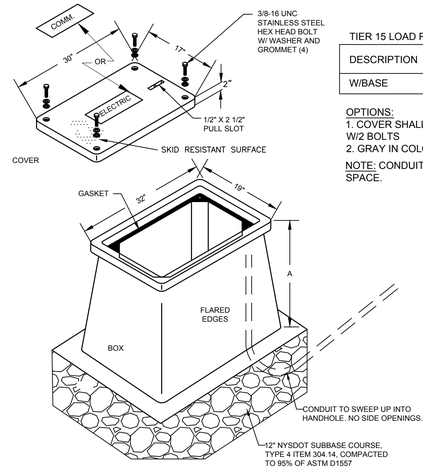
DUCTS:
E1. 4" - FIBER (INTER-BUILDING LOOP)
E2. 4" - FIBER (SECURITY FIBER)
E3. 4" - FIBER (FIRE ALARM)
E4. 4" - SPARE
E5. 4" - BUILDING D EMERGENCY POWER
E6. 4" - BUILDING D STANDBY POWER
E7. 4" - PACKAGED TREATMENT PLANT
E8. 4" - SPARE
E9. 4" - BUILDING D NORMAL POWER
E10. 4" - BUILDING D NORMAL POWER
E11. 4" - BUILDING D NORMAL POWER
E12. 4" - BUILDING D NORMAL POWER

SECTION E
(BETWEEN BUILDING C & BUILDING D)



DUCTS:
F1. 4" - FIBER (FIRE ALARM)
F2. 4" - SPARE
F3. 4" - PUMPHOUSE POWER
F4. 4" - TRAILER POWER

SECTION F
(BETWEEN BUILDING D & WHARF)



TIER 15 LOAD RATED BOXES (STACKABLE)

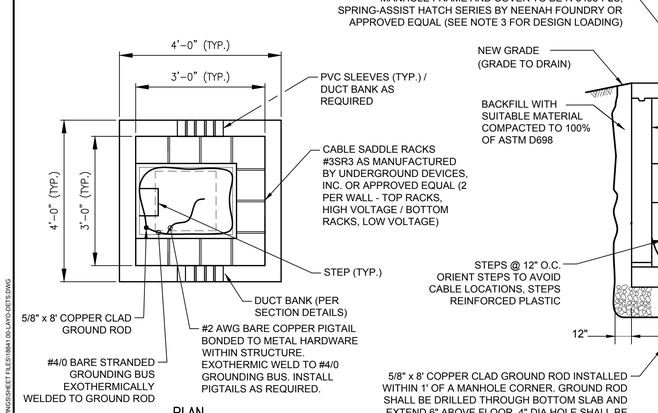
DESCRIPTION	PART NO.	WEIGHT	DIMENSIONS A
W/BASE	PT1730BG24	126#	18"

OPTIONS:
1. COVER SHALL SAY ELECTRIC (OR COMM.) & BE GASKETED HEAVY DUTY W/2 BOLTS
2. GRAY IN COLOR

NOTE: CONDUITS SHALL COME UP THRU HANDHOLE AND SWEEP INTO SPACE.

LIGHTWEIGHT PRECAST CONCRETE HANDHOLE
NOT TO SCALE

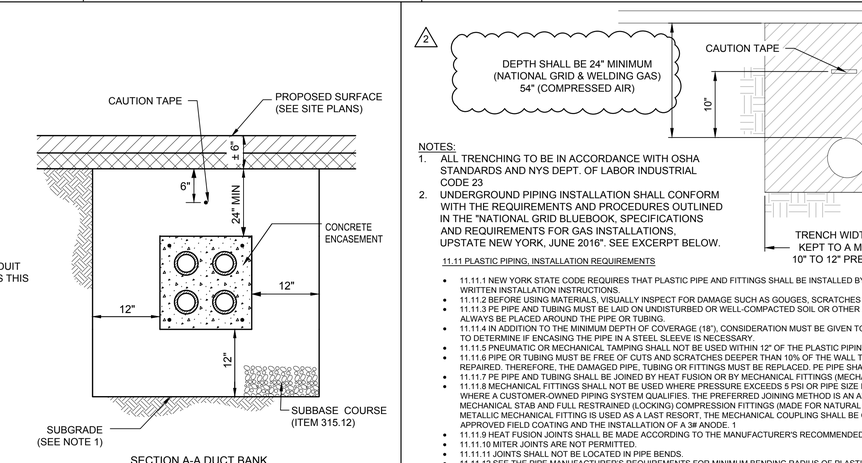
PLANNING BOARD HTE# 21-00100006



NOTES:
1. SUBGRADE SURFACE SHALL BE COMPACTED TO MEET A MINIMUM OF 100% OF ASTM D698.
2. MANHOLE DESIGN LOADING - HS-25 LIVE LOADING.
3. PROVIDE THE FOLLOWING LABELING ON ALL MANHOLE COVERS: "ELECTRIC"
4. PROVIDE PERMANENT LABELING OF ALL CABLES WITHIN MANHOLE.

SECTION A-A DUCT BANK
NOT TO SCALE

CONCRETE ENCASED ELECTRICAL DUCTBANK AND MANHOLE DETAIL
NOT TO SCALE



NOTES:
1. ALL TRENCHING TO BE IN ACCORDANCE WITH OSHA STANDARDS AND NYS DEPT. OF LABOR INDUSTRIAL CODE 23
2. UNDERGROUND PIPING INSTALLATION SHALL CONFORM WITH THE REQUIREMENTS AND PROCEDURES OUTLINED IN THE "NATIONAL GRID BLUEBOOK, SPECIFICATIONS AND REQUIREMENTS FOR GAS INSTALLATIONS, UPSTATE NEW YORK, JUNE 2016". SEE EXCERPT BELOW.

11.11 PLASTIC PIPING, INSTALLATION REQUIREMENTS

- 11.11.1 NEW YORK STATE CODE REQUIRES THAT PLASTIC PIPE AND FITTINGS SHALL BE INSTALLED BY QUALIFIED PERSONNEL ACCORDING TO THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- 11.11.2 BEFORE USING MATERIALS, VISUALLY INSPECT FOR DAMAGE SUCH AS GOUGES, SCRATCHES AND KINKS, AND DISCARD ANY DAMAGED MATERIALS.
- 11.11.3 PE PIPE AND TUBING MUST BE LAID ON UNDISTURBED OR WELL-COMPACTED SOIL OR OTHER CONTINUOUS SUPPORT. SUITABLE ROCK-FREE BACK-FILL SHALL ALWAYS BE PLACED AROUND THE PIPE OR TUBING.
- 11.11.4 IN ADDITION TO THE MINIMUM DEPTH OF COVERAGE (18"), CONSIDERATION MUST BE GIVEN TO FUTURE LOADING AND ACTIVITY ABOVE AND AROUND THE PIPING TO DETERMINE IF ENCASING THE PIPE IN A STEEL SLEEVE IS NECESSARY.
- 11.11.5 PNEUMATIC OR MECHANICAL TAMPING SHALL NOT BE USED WITHIN 12" OF THE PLASTIC PIPING.
- 11.11.6 PIPE OR TUBING MUST BE FREE OF CUTS AND SCRATCHES DEEPER THAN 10% OF THE WALL THICKNESS. DEFECTS IN PIPE, TUBING OR FITTINGS CANNOT BE REPAIRED. THEREFORE, THE DAMAGED PIPE, TUBING OR FITTINGS MUST BE REPLACED. PE PIPE SHALL NOT BE USED INSIDE BUILDINGS OR ABOVE GROUND.
- 11.11.7 PE PIPE AND TUBING SHALL BE JOINED BY HEAT FUSION OR BY MECHANICAL FITTINGS (MECHANICAL SERVICE HEAD ADAPTERS).
- 11.11.8 MECHANICAL FITTINGS SHALL NOT BE USED WHERE PRESSURE EXCEEDS 5 PSI OR PIPE SIZE IS GREATER THAN 4" DIAMETER, EXCEPT IN CERTAIN INSTANCES WHERE A CUSTOMER-OWNED PIPING SYSTEM QUALIFIES. THE PREFERRED JOINING METHOD IS AN ALL FUSED PLASTIC SYSTEM (ELECTROFUSION OR BUTT FUSION). PE MECHANICAL STAB AND FULL RESTRAINED (LOCKING) COMPRESSION FITTINGS (MADE FOR NATURAL GAS) ARE PERMITTED AS APPROVED BY NATIONAL GRID. IF A METALLIC MECHANICAL FITTING IS USED AS A LAST RESORT, THE MECHANICAL COUPLING SHALL BE CATHODICALLY PROTECTED FROM CORROSION BY INDUSTRY APPROVED FIELD COATING AND THE INSTALLATION OF A 3# ANODE. 1
- 11.11.9 HEAT FUSION JOINTS SHALL BE MADE ACCORDING TO THE MANUFACTURER'S RECOMMENDED HEAT FUSION PROCEDURES.
- 11.11.10 MITER JOINTS ARE NOT PERMITTED.
- 11.11.11 JOINTS SHALL NOT BE LOCATED IN PIPE BENDS.
- 11.11.12 SEE THE PIPE MANUFACTURER'S REQUIREMENTS FOR MINIMUM BENDING RADIUS OF PLASTIC PIPE.
- 11.11.13 HEAT FUSION JOINTS SHALL BE PERFORMED ONLY BY PERSONNEL QUALIFIED IN THE APPROPRIATE JOINING TECHNIQUES.
- 11.11.14 A #14 AWG, MINIMUM, INSULATED SOLID COPPER WIRE SHALL BE INSTALLED ALONGSIDE BUT NOT TOUCHING THE PLASTIC PIPE TO FACILITATE LOCATING WITH A PIPE LOCATOR. TRACER WIRES SHALL TERMINATE IN AN ACCESSIBLE LOCATION ABOVE GROUND SO THAT A PIPE LOCATOR CAN BE CONNECTED.
- 11.11.15 A BRIGHT-COLORED PLASTIC WARNING TAPE SHALL BE BURIED APPROXIMATELY 12" BELOW FINAL GRADE TO MARK THE LOCATION OF THE PIPE AND TO WARN FUTURE EXCAVATORS.
- 11.11.16 INSULATING COUPLINGS OR FITTINGS SHALL BE USED TO ELECTRICALLY SEPARATE THE UNDERGROUND PORTION OF PLASTIC PIPING FROM THE ABOVE-GROUND STEEL PIPING OR THE PIPING IN A BUILDING. THIS IS NECESSARY TO PROTECT THE GAS RISER, AND ALSO IS NECESSARY FOR ANODE LESS, PRE-COATED RISER.
- 11.11.17 PLASTIC FUEL GAS PIPING INSTALLATIONS SHALL BE PERFORMED BY TRAINED, QUALIFIED AND CERTIFIED PERSONNEL BY NATIONAL GRID.

GAS SERVICE TRENCH DETAIL
N.T.S.

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

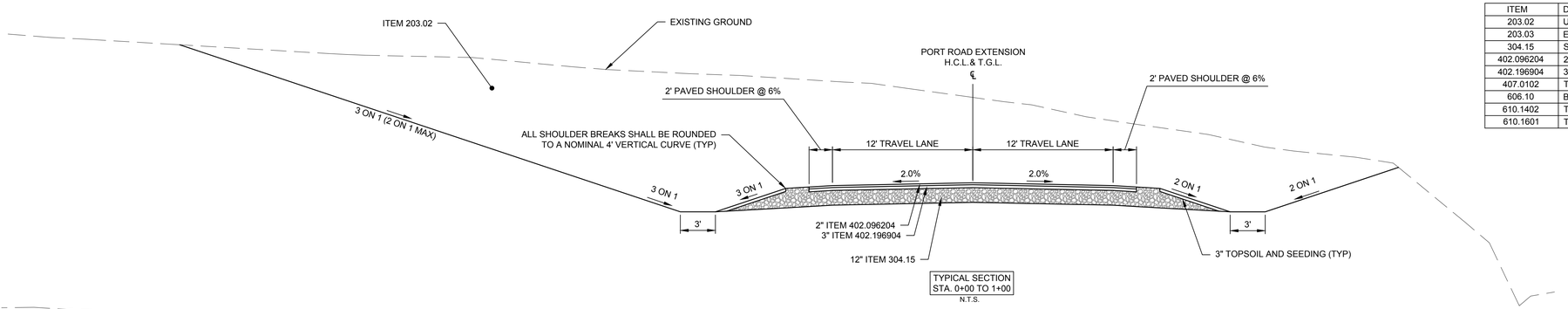
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINETTI · LICENSED PROFESSIONAL ENGINEER · 088870

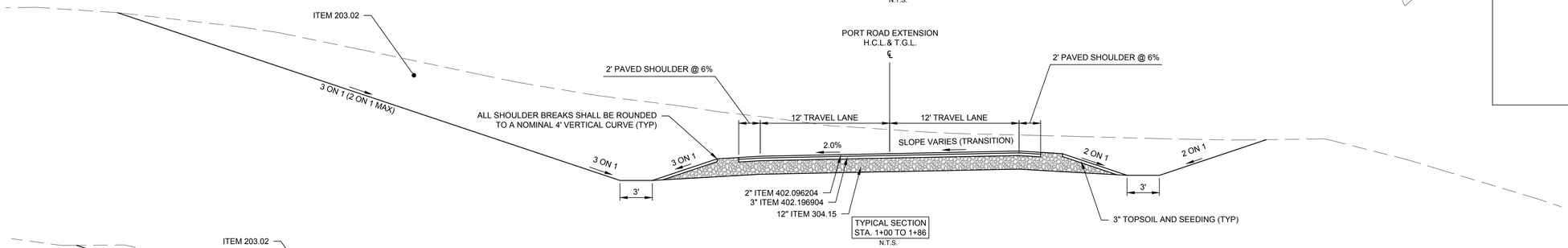
DRAWING TITLE
SITE DETAILS

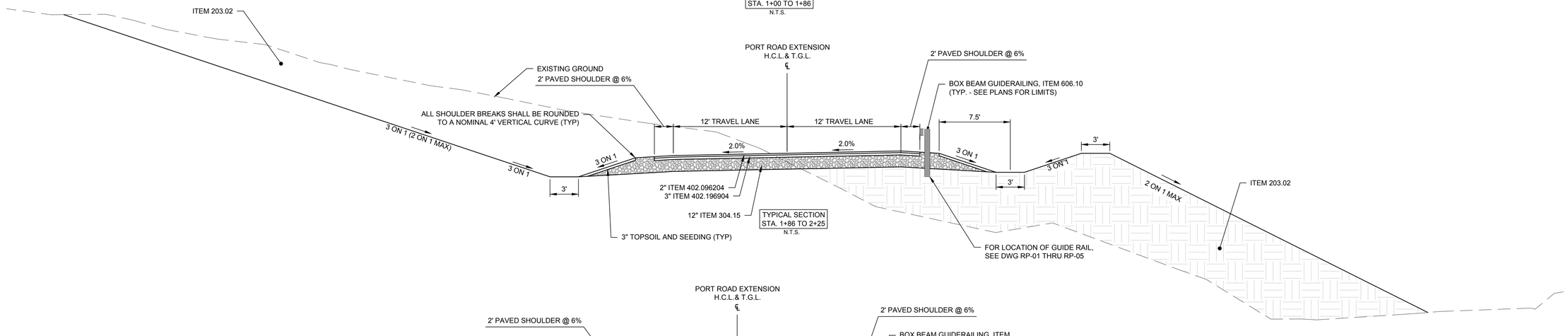
DRAWING NUMBER
SP-10

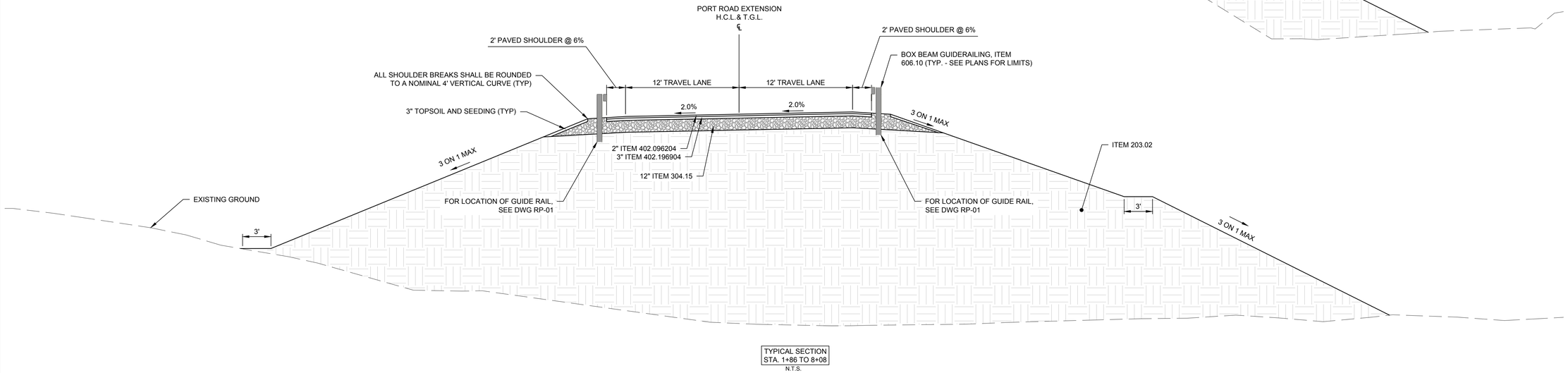
ITEM	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY
203.03	EMBANKMENT IN PLACE	CY
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY
402.096204	2" 9.5 F2 TOP COURSE HMA, 60 SERIES COMPACTION	TON
402.196904	3" BINDER COURSE HMA, 60 SERIES COMPACTION	TON
407.0102	TACK COAT	GALLON
606.10	BOX BEAM GUIDE RAILING	LF
610.1402	TOPSOIL - ROADSIDE	CY
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY



PLANNING BOARD HTE# 21-00100006







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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

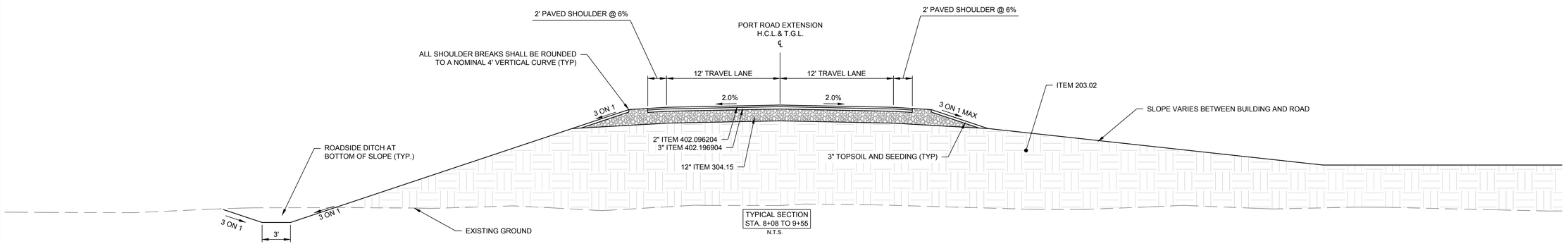
TYPICAL SECTION

DRAWING NUMBER

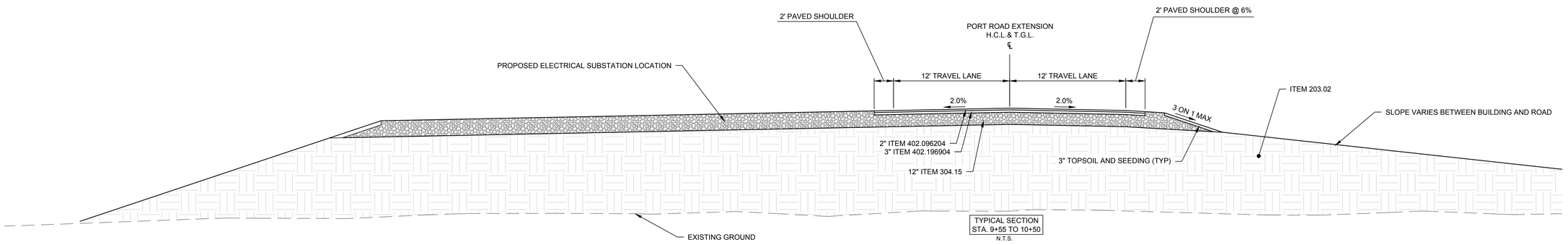
TP-01

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\DRAWINGS\SHEET FILES\18641.00-TSEC.DWG

ITEM	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY
203.03	EMBANKMENT IN PLACE	CY
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY
402.096204	2" 9.5 F2 TOP COURSE HMA, 60 SERIES COMPACTION	TON
402.196904	3" BINDER COURSE HMA, 60 SERIES COMPACTION	TON
407.0102	TACK COAT	GALLON
606.10	BOX BEAM GUIDE RAILING	LF
610.1402	TOPSOIL - ROADSIDE	CY
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY



TYPICAL SECTION
STA. 8+08 TO 9+55
N.T.S.



TYPICAL SECTION
STA. 9+55 TO 10+50
N.T.S.

PLANNING BOARD HTE# 21-00100006

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

TYPICAL SECTION

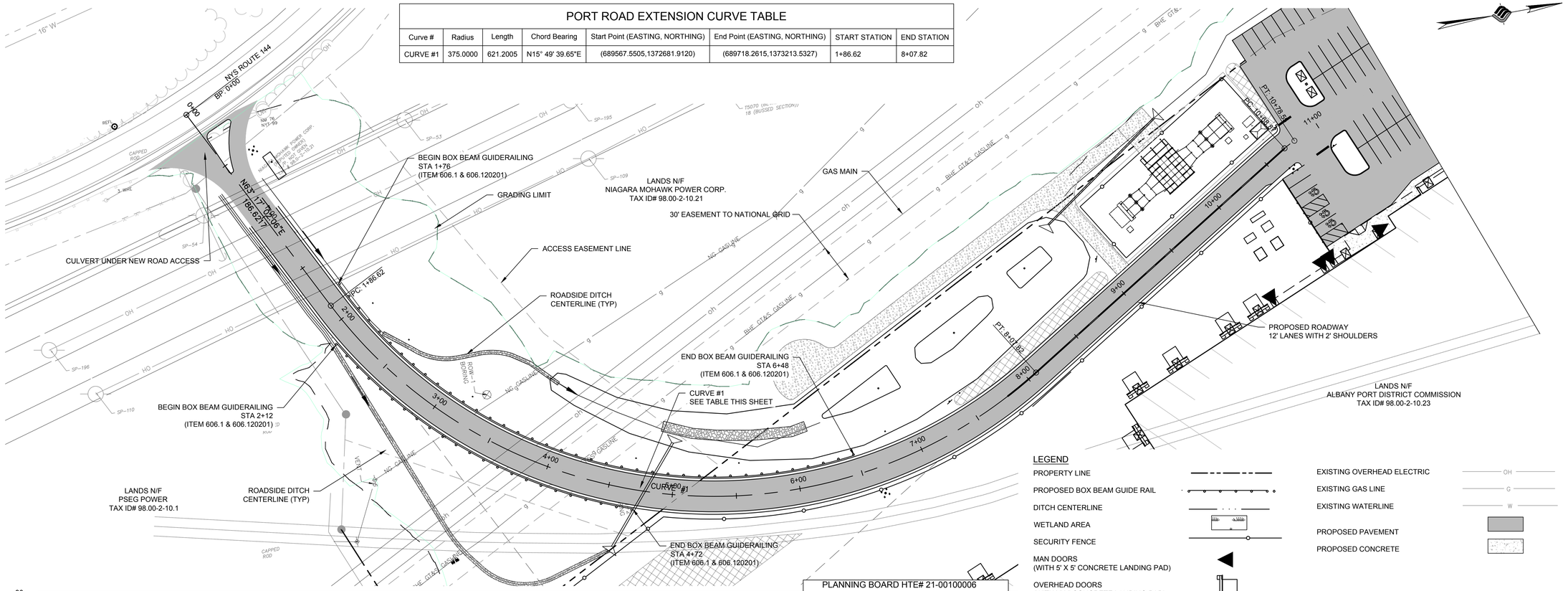
DRAWING NUMBER

TP-02

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-TSEC.DWG

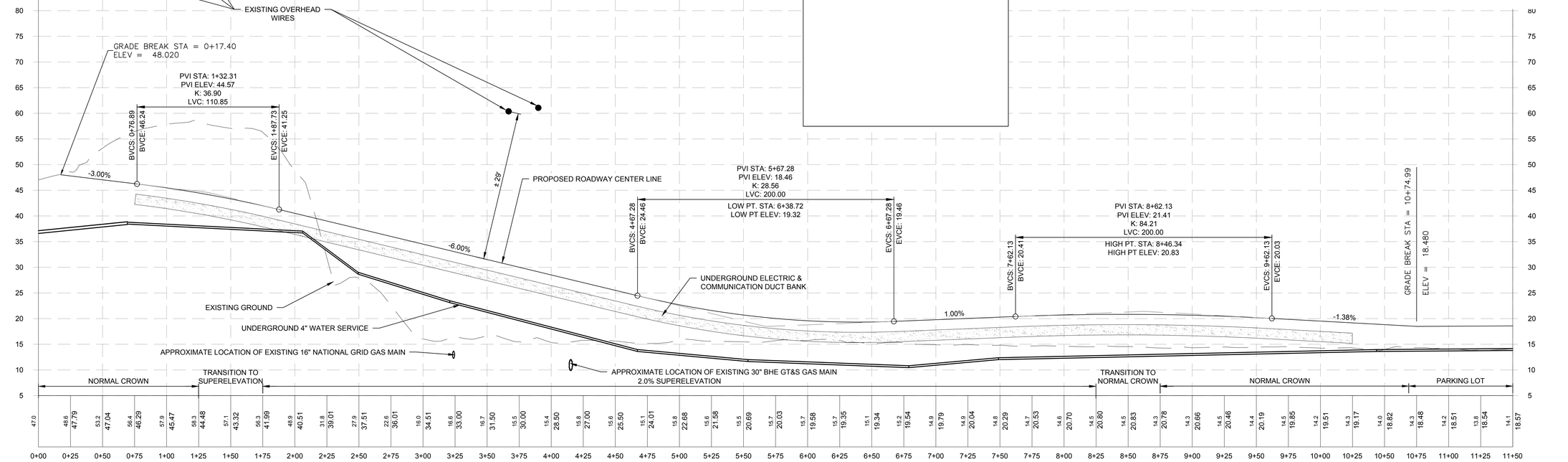
PORT ROAD EXTENSION CURVE TABLE

Curve #	Radius	Length	Chord Bearing	Start Point (EASTING, NORTHING)	End Point (EASTING, NORTHING)	START STATION	END STATION
CURVE #1	375.0000	621.2005	N15° 49' 39.65"E	(689567.5505,1372681.9120)	(689718.2615,1373213.5327)	1+86.62	8+07.82



LEGEND

- PROPERTY LINE
- PROPOSED BOX BEAM GUIDE RAIL
- DITCH CENTERLINE
- WETLAND AREA
- SECURITY FENCE
- MAN DOORS (WITH 5' X 5' CONCRETE LANDING PAD)
- OVERHEAD DOORS (WITH X' X' CONCRETE LANDING PAD)
- EXISTING OVERHEAD ELECTRIC (OH)
- EXISTING GAS LINE (G)
- EXISTING WATERLINE (W)
- PROPOSED PAVEMENT
- PROPOSED CONCRETE



NEW PORT ROAD - 1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

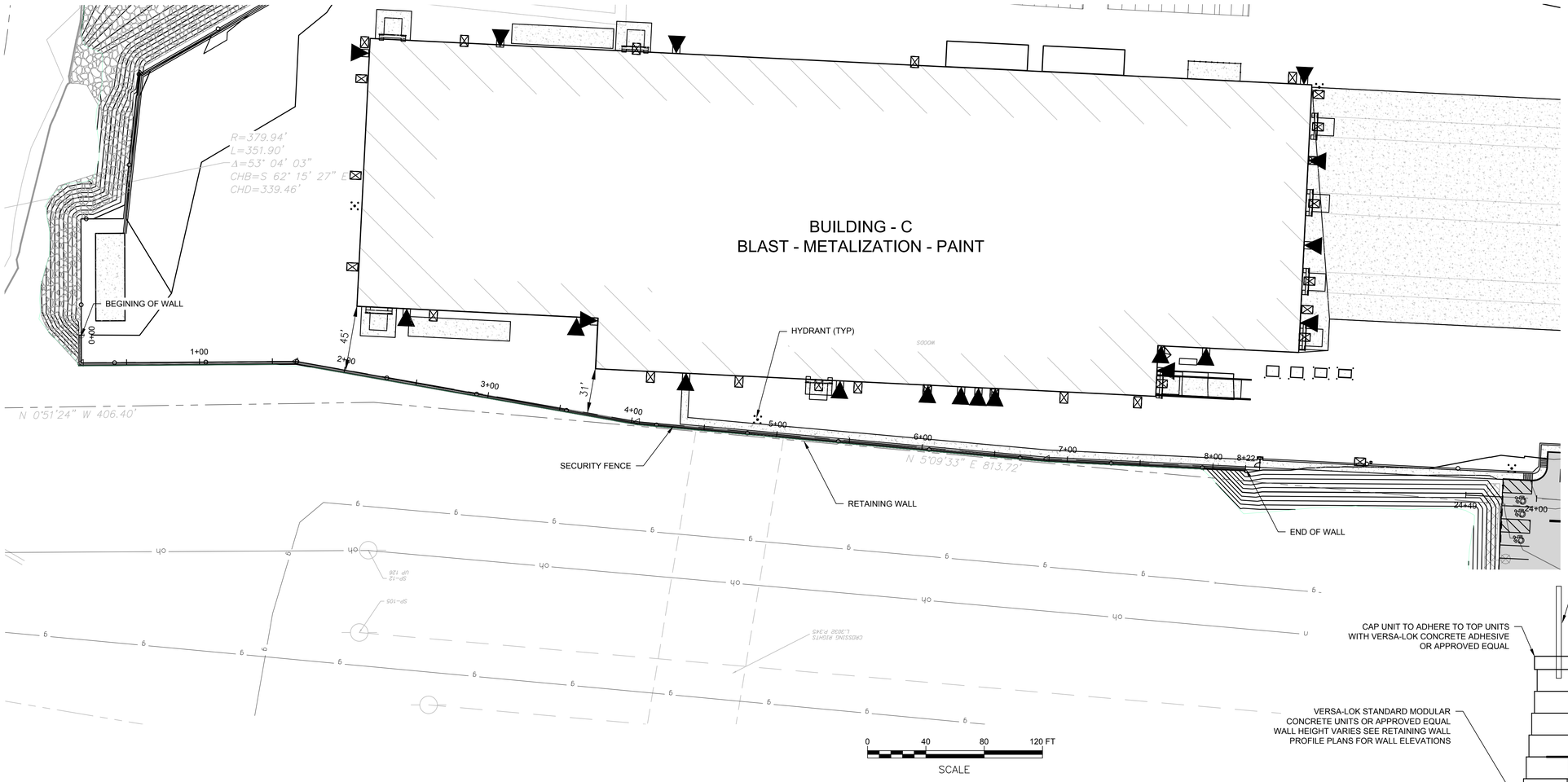
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

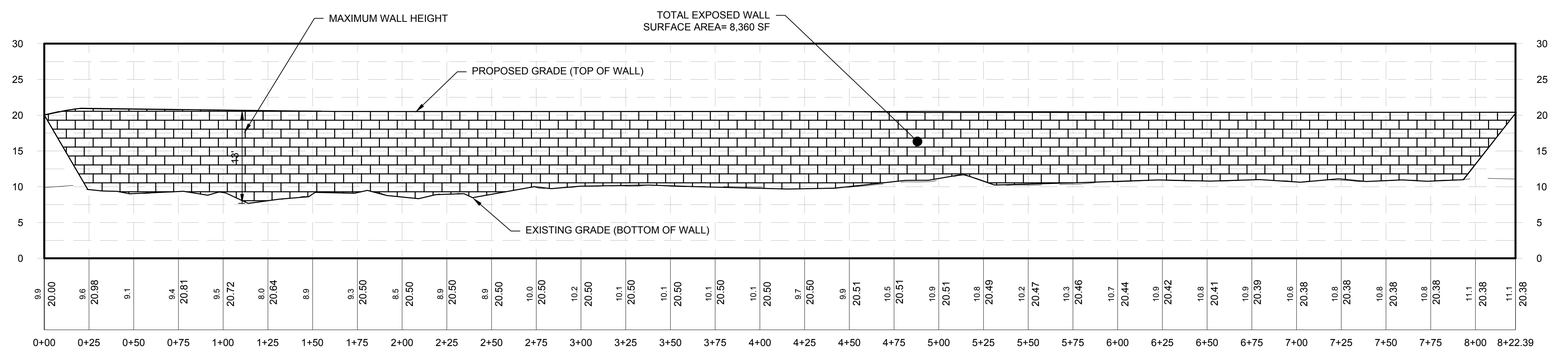
STATE OF NEW YORK · ADAM J FROSINA · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
ENTRANCE ROAD PROFILE

DRAWING NUMBER
PR-01

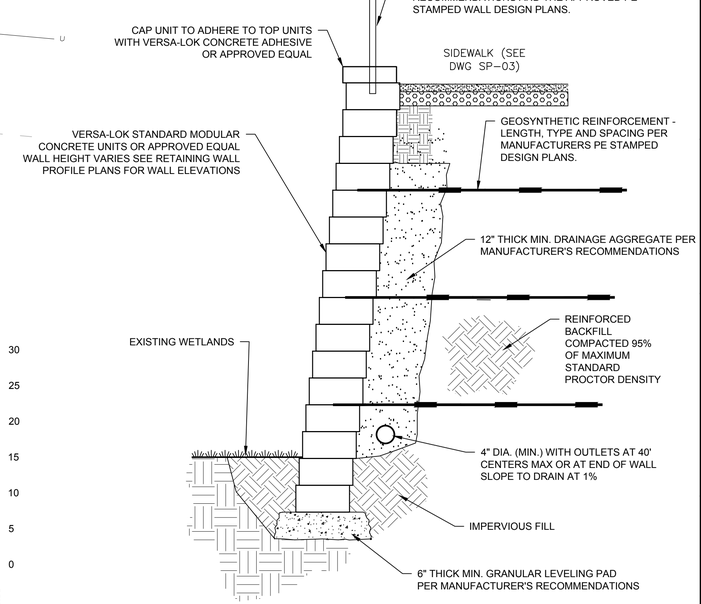
N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-PROF.DWG





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

PLANNING BOARD HTE# 21-00100006



REINFORCED SEGMENTAL BLOCK RETAINING WALL
NOT TO SCALE

RETAINING WALL NOTES:

1. DETAILED WALL DESIGN CALCULATIONS SHALL BE PROVIDED BY THE CONTRACTOR/WALL MANUFACTURER IN ADDITION TO PROVIDING STAMPED AND SEALED PLANS BY A NYS PROFESSIONAL ENGINEER.

2. SPECIAL CONSIDERATION SHALL BE GIVEN TO THE GEOSYNTHETIC REINFORCEMENT WHEN PLACING BACKFILL AND INSTALLING THE HAND RAILING AND FENCING TO MAINTAIN RECOMMENDED SPACING. INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE WALL MANUFACTURERS RECOMMENDATIONS.

3. AN ALTERNATIVE LARGE BLOCK GRAVITY WALL IS AN ACCEPTABLE ALTERNATIVE THAT CAN BE CONSIDERED DURING THE SUBMITTAL REVIEW PROCESS AND REQUIRES THE SAME SUPPORTING DOCUMENTATION, CALCULATIONS AND PLANS BY A NYS PROFESSIONAL ENGINEER PRIOR TO APPROVAL.

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

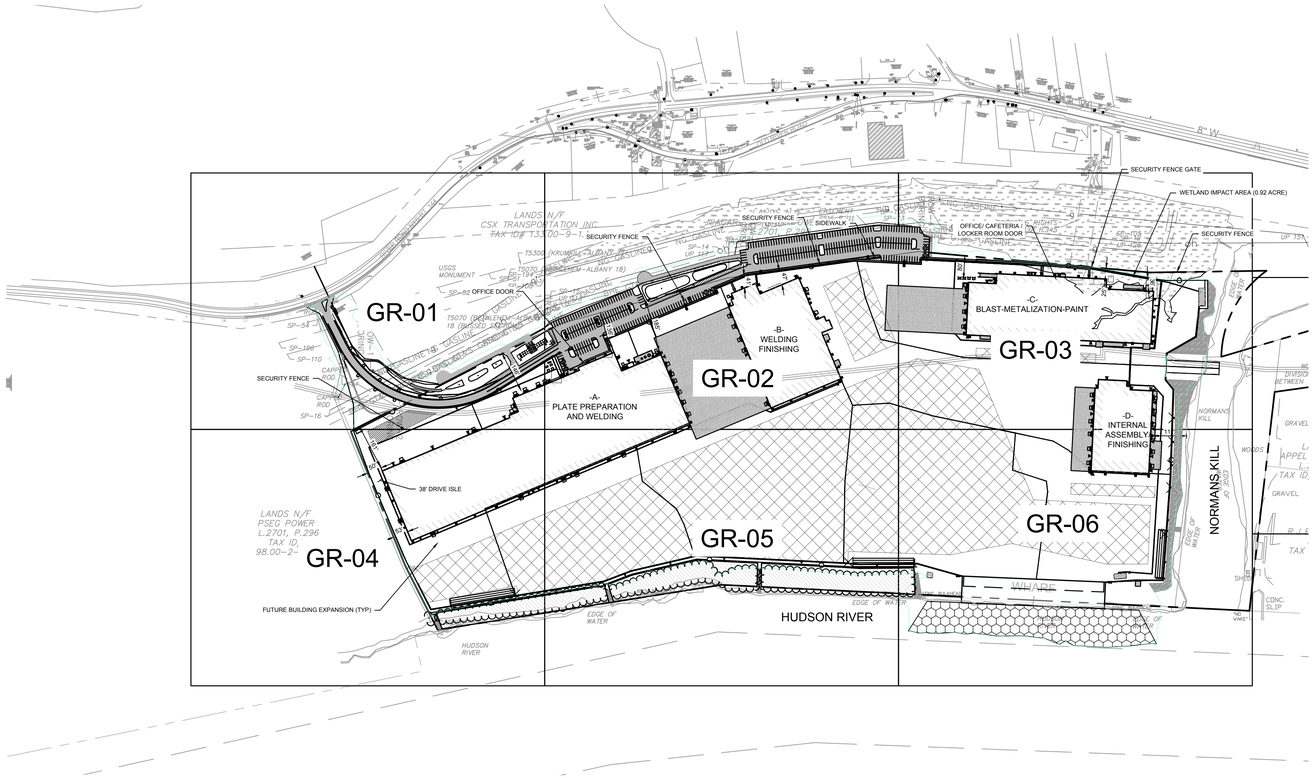
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
RETAINING WALL

DRAWING NUMBER
PR-02

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\DRAWINGS\SSM\18641.00-PROF-WALL.DWG



PLANNING BOARD HTE# 21-00100006

GRADING NOTES:

1. REMOVE AND STOCKPILE TOPSOIL AS DIRECTED BY THE CONSTRUCTION MANAGER. REPLACE TOPSOIL TO A MINIMUM 3" 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 TO 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 PROJECTS EROSION AND SEDIMENT CONTROL PLANS, THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, ALBANY COUNTY HEALTH DEPARTMENT, AND THE TOWN OF BETHLEHEM 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 PRACTICE SHALL BE USED ON STEEP SLOPES ANDWHEREVER NECESSARY TO CONTROL EROSION AND SILTATION OF EXISTING DRAINAGE SYSTEMS AS ORDERED BY THE ENGINEER OR SPECIFIED ON PLANS.
7. THE CONTRACTOR SHALL DESIGNATE A REPRESENTATIVE WITH NYSDEC CERTIFICATION TO MONITOR EROSION CONTROL PRACTICES, TREE PROTECTION AND PRESERVATION THROUGHOUT CONSTRUCTION.
8. 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.
9. ALL PROPOSED ELEVATIONS SHOWN HEREON ARE FINISHED GRADE ELEVATION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RIM ELEVATIONS IN RELATION TO PROPOSED GRADE PRIOR TO INSTALLATION.
11. CAUTION SHOULD BE USED WHEN COMPLETING ANY EXCAVATION WITHIN THE SITE WITH REGARD TO THE EXISTING CONDITIONS. ALL GRADING WORK SHALL BE IN COMPLIANCE WITH THE SOIL MANAGEMENT PLAN - PORT OF ALBANY EXPANSION PROJECT, BEACON ISLAND PARCEL, BETHLEHEM, ALBANY COUNTY , NEW YORK PREPARED BY ATL DATED "AUGUST 13, 2021".

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.

LEGEND

PROPERTY LINE
WETLAND AREA
STORAGE AREA
DREDGING AREA
PAVEMENT AREA
CONCRETE AREA

0 250 500 750 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
GRADING, DRAINAGE NOTES & INDEX

DRAWING NUMBER
GR-00

LEGEND

PROPERTY LINE
BUILDING SETBACK
EXISTING CONTOUR
PROPOSED CONTOUR
DITCH CENTERLINE
PROPOSED CHECK DAM
WETLAND AREA
PROPOSED DRAINAGE PIPE
PROPOSED RIP RAP
MATERIAL STORAGE AREA
HUDSON RIVER DREDGING
EXCAVATION FOR WHARF

RIVER ROAD

PROPOSED CULVERT (SEE OFF-SITE DESIGN PLANS)

ALL WORK WITHIN NYSDOT ROW, SEE OFF-SITE DESIGN PLANS

PROPOSED ROADWAY 12' LANE WIDTH 2' SHOULDERS

CHECK DAM (TYP.)

PROPOSED ACCESS EASEMENT

NATIONAL GRID UTILITY POLE SP-54 TO BE RELOCATED BY OTHERS

PROPOSED DITCH STONE LINING WITH CHECK DAMS

PROPERTY LINE

NO ELEVATION CHANGE AROUND EXISTING NATIONAL GRID CASING VENT

CHECK DAM (TYP.)

PROPERTY LINE

C3-A
INV: 16.50 (18")

C3-B
INV: 16.00 (18")

8' WIDE LIGHT STONE LINING OUTLET PROTECTION & DITCH LINING

PROPOSED DITCH STONE LINING WITH CHECK DAMS

STORMWATER RETENTION POND #2

PERMANENT POOL

SPILLWAY CREST ELEV.: 14.5'

FOREBAY #1

SPILLWAY CREST ELEV.: 16.6'

PO-2
RIM: 16.50
INV OUT: 14.00 (12")

ES-P2
INV: 13.77 (12")

FOREBAY #2

SPILLWAY CREST ELEV.: 14.5'

C2-B
INV: 15.50 (12")

C2-A
INV: 15.71 (12")

SWALE CULVERT

DS1-10
RIM: 20.81
INV IN: 14.48 (30")
INV OUT: 14.48 (30")

DS1-9
RIM: 20.88
INV IN: 14.09 (30")
INV OUT: 14.09 (30")

DS1-8
RIM: 20.97
INV IN: 13.82 (30")
INV OUT: 13.82 (30")

DS1-7
RIM: 20.75
INV IN: 13.07 (30")
INV OUT: 13.07 (30")

BUILDING - A
FFE = 21.0

PLANNING BOARD HTE# 21-00100006

2 NOTE:
POND FOREBAYS AND DETENTION BASINS SHALL BE LINED WITH 12" IMPERMEABLE SOIL MEETING USCS SOIL CLASSIFICATION CH, MH, OR OH. THE BASIN BOTTOMS CAN ALSO BE LINED WITH A 20MIL HDPE LINER WITH 6" SOIL COVER.

0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET GR-02

MATCH LINE SEE SHEET GR-04

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\SHEET FILES\18641.00 GRADING.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
GRADING & DRAINAGE

DRAWING NUMBER
GR-01

LEGEND

PROPERTY LINE
BUILDING SETBACK
EXISTING CONTOUR
PROPOSED CONTOUR
DITCH CENTERLINE
PROPOSED CHECK DAM
WETLAND AREA
PROPOSED DRAINAGE PIPE
PROPOSED RIP RAP
MATERIAL STORAGE AREA
HUDSON RIVER DREDGING
EXCAVATION FOR WHARF

PLANNING BOARD HTE# 21-00100006

NOTE:
2 POND FOREBAYS AND DETENTION BASINS SHALL BE LINED WITH 12" IMPERMEABLE SOIL MEETING USCS SOIL CLASSIFICATION CH, MH, OR OH. THE BASIN BOTTOMS CAN ALSO BE LINED WITH A 20MIL HDPE LINER WITH 6" SOIL COVER.

STORM WATER RETENTION POND #1
SPILLWAY CREST ELEV.: 14.5'
SPILLWAY CREST ELEV.: 16.25'
PO-1
RIM: 16.00
INV OUT: 13.50 (12")
ES-P1
INV: 13.23 (12")
PERMANENT POOL
FOREBAY
C1-A
INV: 16.00 (8")
SWALE CULVERT
C1-B
INV: 15.00 (8")
PROPERTY LINE
DS6-10
RIM: 20.50
INV IN: 15.95 (24")
INV OUT: 15.95 (30")
DS6-11
RIM: 20.43
INV IN: 16.50 (18")
INV OUT: 16.50 (24")
DS6-12
RIM: 20.67
INV OUT: 17.00 (18")
DS3-12
RIM: 20.72
INV OUT: 17.50 (12")
DS3-10
RIM: 20.40
INV IN: 16.90 (12")
INV IN: 16.58 (12")
INV OUT: 16.58 (18")
DS3-9
RIM: 20.50
INV IN: 16.46 (18")
INV OUT: 16.46 (18")
DS3-11
RIM: 20.34
INV OUT: 17.38 (12")
DS3-8
RIM: 20.50
INV IN: 16.24 (18")
INV OUT: 16.24 (18")
DS3-7
RIM: 20.50
INV IN: 16.02 (18")
INV OUT: 16.02 (18")
DS1-13
RIM: 20.65
INV IN: 16.31 (18")
INV OUT: 16.31 (18")
DS3-6
RIM: 20.50
INV IN: 15.81 (18")
INV OUT: 15.81 (24")
DS1-12
RIM: 20.52
INV IN: 15.69 (18")
INV OUT: 15.69 (24")
CONCRETE PAD
ELEV. 21.0'
DS1-14
RIM: 20.96
INV OUT: 16.62 (18")
DS3-5
RIM: 20.50
INV IN: 15.38 (24")
INV OUT: 15.38 (24")
DS1-11
RIM: 20.55
INV IN: 14.94 (24")
INV OUT: 14.94 (30")
3" ROOF DRAINS TO BE TIED INTO 12" DOWNSPOUT PIPES (TYP)
DS3-4
RIM: 20.50
INV IN: 14.97 (24")
INV OUT: 14.97 (24")
DS3-14
RIM: 20.55
INV OUT: 17.26 (12")
DS6-9
RIM: 20.94
INV IN: 15.04 (30")
INV OUT: 15.04 (30")
DS7-8
RIM: 20.50
INV OUT: 17.50 (12")
DS6-8
RIM: 20.50
INV IN: 14.42 (30")
INV OUT: 14.42 (30")
DS6-7
RIM: 18.90
INV IN: 13.64 (30")
INV OUT: 13.64 (30")
DS3-3
RIM: 19.96
INV IN: 15.59 (18")
INV IN: 14.55 (24")
INV OUT: 14.55 (24")
DS3-13
RIM: 20.58
INV IN: 16.44 (12")
INV OUT: 16.44 (18")

BUILDING - A
FFE = 21.0

BUILDING - B
FFE = 21.0

0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET GR-01
MATCH LINE SEE SHEET GR-03
MATCH LINE SEE SHEET GR-05

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\GIS\SHEET FILES\18641.00-GRAD.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
GRADING & DRAINAGE

DRAWING NUMBER
GR-02

PLANNING BOARD HTE# 21-00100006

LEGEND

PROPERTY LINE		WETLAND AREA	
BUILDING SETBACK		PROPOSED DRAINAGE PIPE	
EXISTING CONTOUR	12	PROPOSED RIP RAP	
PROPOSED CONTOUR	12	MATERIAL STORAGE AREA	
DITCH CENTERLINE		HUDSON RIVER DREDGING	
PROPOSED CHECK DAM		EXCAVATION FOR WHARF	

NOTES:

1. SEE TABLE ON SHEET GR-04 FOR INFILTRATION TEST INFORMATION. (2)

NO ELEVATION CHANGE AROUND UTILITY POLE SP-13 FOUNDATION, REVEAL SHALL REMAIN 12" MINIMUM

EXISTING 40" WETLAND OUTLET PIPE

DS7-20
RIM: 20.50
INV OUT: 17.00 (18")

DS7-19
RIM: 20.50
INV IN: 16.35 (18")
INV OUT: 16.35 (18")

DS7-18
RIM: 20.83
INV IN: 15.83 (18")
INV OUT: 15.83 (18")

DS7-17
RIM: 20.82
INV IN: 15.33 (18")
INV OUT: 15.33 (24")

DS7-16
RIM: 20.78
INV IN: 14.83 (24")
INV OUT: 14.83 (24")

DS7-15
RIM: 20.81
INV IN: 14.20 (24")
INV OUT: 14.20 (24")

DS7-14
RIM: 20.89
INV IN: 13.96 (24")
INV OUT: 13.96 (30")

DS7-13
RIM: 20.83
INV IN: 13.13 (30")
INV OUT: 13.13 (30")

DS7-12
RIM: 20.00
INV IN: 12.43 (30")
INV OUT: 12.43 (30")

PROPOSED PACKAGE TREATMENT PLANT
FFE = 21.0'

DS7-11
RIM: 19.61
INV IN: 11.98 (30")
INV OUT: 11.98 (30")

JM-7A
RIM: 19.01
INV IN: 11.47 (36")
INV OUT: 11.47 (18")
INV OUT: 11.47 (18")
INV OUT: 13.00 (36")

DS7
RIM: 19.15
INV IN: 11.94 (24")
INV IN: 11.52 (30")
INV OUT: 11.52 (36")

PROPOSED CURB

J-9
RIM: 19.22
INV IN: 11.38 (18")
INV OUT: 10.88 (18")

J-9 ES
INV: 10.70 (18")

ES7
INV: 12.77 (36")

J-8
RIM: 19.11
INV IN: 11.39 (18")
INV OUT: 10.89 (18")

J-8 ES
INV: 10.70 (18")

DS7-1
RIM: 20.47
INV IN: 12.34 (24")
INV OUT: 12.34 (24")

DS7-2
RIM: 20.55
INV IN: 12.74 (24")
INV OUT: 12.74 (24")

DS7-3
RIM: 20.50
INV IN: 13.55 (24")
INV OUT: 13.55 (24")

DS7-4
RIM: 20.50
INV IN: 14.30 (24")
INV OUT: 14.30 (24")

DS7-5
RIM: 20.49
INV IN: 15.05 (24")
INV OUT: 15.05 (24")

DS7-6
RIM: 20.87
INV IN: 15.61 (24")
INV OUT: 15.61 (24")

DS7-7
RIM: 20.50
INV IN: 16.81 (12")
INV IN: 16.28 (18")
INV OUT: 16.28 (24")

CONCRETE PAD
ELEV. 21.0'

DS7-9
RIM: 20.50
INV IN: 16.71 (18")
INV OUT: 16.71 (18")

DS7-10
RIM: 20.62
INV OUT: 17.00 (18")

BUILDING - C
FFE = 21.0

DS6-3
RIM: 20.50
INV IN: 10.14 (36")
INV OUT: 10.14 (36")

DS6-2
RIM: 20.50
INV IN: 9.54 (36")
INV OUT: 9.54 (36")

BRIDGE ABUTMENT

LIMITS OF SITE DESIGN, SEE BRIDGE PLANS

DS6-1
RIM: 20.58
INV IN: 9.05 (36")
INV OUT: 9.05 (36")

DS6-4
RIM: 20.50
INV IN: 10.67 (18")
INV IN: 10.57 (36")
INV OUT: 10.57 (36")

DS6-5
RIM: 18.90
INV IN: 11.79 (36")
INV OUT: 11.79 (36")

DS6-6
RIM: 18.50
INV IN: 12.80 (30")
INV OUT: 12.80 (36")

DS6-13
RIM: 20.10
INV OUT: 15.10 (18")

20.50
FG

BUILDING - D
FFE = 21.0

DS6
RIM: 19.82
INV IN: 8.52 (36")
INV IN: 8.73 (18")
INV OUT: 8.52 (36")

J-7
RIM: 20.64
INV IN: 8.40 (18")
INV OUT: 7.90 (18")

J-7 ES
INV: 7.65 (18")

ES6
INV: 8.79 (36")

J-6 ES
INV: 7.65 (18")

J-6
RIM: 20.66
INV IN: 8.39 (18")
INV OUT: 7.89 (18")

JM-6A
RIM: 20.70
INV IN: 8.48 (36")
INV OUT: 8.48 (18")
INV OUT: 11.50 (36")
INV OUT: 8.48 (18")

IT-11

PROPOSED CURB

0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET GR-02

MATCH LINE SEE SHEET GR-06

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\DRAWING\SHEET FILES\18641.00 GRAD.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
GRADING & DRAINAGE

DRAWING NUMBER
GR-03

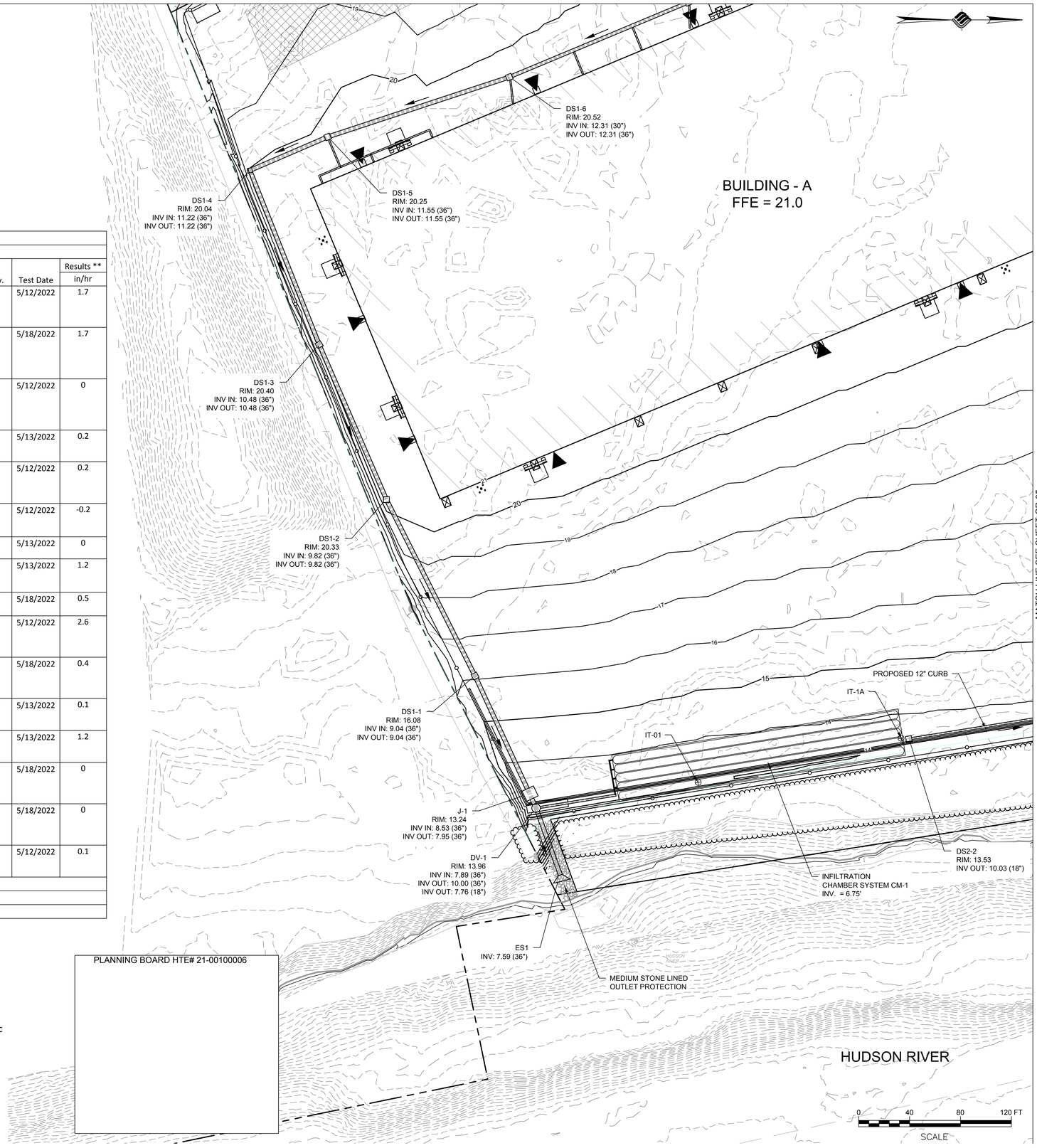
MATCH LINE SEE SHEET GR-01

Port of Albany Expansion Site										
Infiltration Test Information Table										
	Location									Results **
Test #	Northing	Easting	Lat	Long	Soil Profile ***	Test Elev.	EG Elev. *	FG Elev.	Test Date	in/hr
1	1373126.03	690476.39	N042° 36' 00.83"	W073° 45' 47.69"	0-0.3' Topsoil 0.3-3.5' FILL - Silty Sand 3.5-11.0' FILL - Coal Ash 11.0-14.0' SILT	6.5'	16.6'	14.2'	5/12/2022	1.7
1A	1373285.45	690441.73	N042° 36' 02.41"	W073° 45' 48.14"	0-3.5' FILL - Silty Sand with Gravel 3.5-9.0' FILL - Coal Ash 9.0-11.0' FILL - Poorly graded Sand	6.5'	14.3'	14.5'	5/18/2022	1.7
2	1373428.1	690427.42	N042° 36' 03.82"	W073° 45' 48.31"	0-1.0' Topsoil 1.0-2.0' FILL - Sandy Silt 2.0-8.5' FILL - Silty Sand 8.5-10.0' Sandy Silt 10.0-12.0' SILT	6.5'	15.3'	14.8'	5/12/2022	0
3	1373669.92	690372.95	N042° 36' 06.21"	W073° 45' 49.01"	0-0.5' Topsoil 0.5-3.0' FILL - Silty Sand 3.0-8.0' SILT	6.5'	10.8'	13.7'	5/13/2022	0.2
4	1373828.59	690333.82	N042° 36' 07.78"	W073° 45' 49.51"	0-6.0' FILL - Sandy Silt with Gravel 6.0-8.0' Varved Silt and Clay 8.0-10.0' Silt with Sand	6.5'	12.8'	14.6'	5/12/2022	0.2
5	1374016.28	690316.2	N042° 36' 09.64"	W073° 45' 49.73"	0-3.0' FILL - Silty Sand 3.0-4.0' Silt 4.0-6.0' Poorly graded Sand	6.5'	9.1'	16.0'	5/12/2022	-0.2
6	1374286.56	690329.4	N042° 36' 12.31"	W073° 45' 49.52"	0-4.0' Silty Clay 4.0-8.0' Silt with Sand	6.5'	10.7'	15.5'	5/13/2022	0
7	1374550.28	690339.68	N042° 36' 14.91"	W073° 45' 49.35"	0-2.0' Varved Silt and Clay 2.0-5.5' Silt 5.5-6.0' Poorly graded Sand	6.5'	9.6'	16.1'	5/13/2022	1.2
7A	1374449.39	690328.11	N042° 36' 13.92"	W073° 45' 49.52"	0-2.5' Silty Clay 2.5-8.0' Sandy Silt	6.5'	11.2'	15.5'	5/18/2022	0.5
8	1375558.9	690328.24	N042° 36' 24.88"	W073° 45' 49.39"	0-2.5' Topsoil 2.5-6.5' FILL - Silty Sand 6.5-8.0' Silty Clay 8.0-10.0' SILT	6.5'	12.4'	17.4'	5/12/2022	2.6
8A	1375555.8	690230.63	N042° 36' 24.86"	W073° 45' 50.69"	0-4.5' Silty Sand 4.5-6.0' Silt 6.0-8.0' Silty Sand 8.0-12.0' SILT	6.5'	14.8'	17.6'	5/18/2022	0.4
9	1375569.02	690181.72	N042° 36' 24.99"	W073° 45' 51.35"	0-5.0' Silty Sand 5.0-8.0' Silt with Sand 8.0-10.0' Silt	6.5'	13.6'	19.1'	5/13/2022	0.1
10	1375581.89	689989.53	N042° 36' 25.13"	W073° 45' 53.91"	0-9.0' Silt with Sand 9.0-12.0' Silty Clay 12.0-14.0' Silt	6.5'	17.3'	20.6'	5/13/2022	1.2
10A	1375579.21	690067.6	N042° 36' 25.10"	W073° 45' 52.87"	0-0.5' Topsoil 0.5-7.5' Sandy Silt 3.5-11.0' FILL - Coal Ash 11.0-14.0' SILT	6.5'	17.4'	20.6'	5/18/2022	0
10B	1375586.34	689908.31	N042° 36' 25.18"	W073° 45' 55.00"	0-2.0' No Results 2.0-6.0' Vared Silt and Clay 6.0-10.5' Sandy Silt 10.5-13.0' SILT	6.5'	16.7'	20.8'	5/18/2022	0
11	1375587.41	689824.53	N042° 36' 25.20"	W073° 45' 56.12"	0-0.5' Topsoil 0.5-7.0' Silt with Sand 7.0-12.0' Silt	6.5'	15.4'	20.6'	5/12/2022	0.1

* Note EG elevations may have changed from the tree clearing work.

** Represents result of final trial at each location.

*** Summary of soil profiles, see Terracon Infiltration Testing Results Letter Dated June 7, 2022 for more detailed descriptions.



PLANNING BOARD HTE# 21-00100006

LEGEND

PROPERTY LINE		WETLAND AREA	
BUILDING SETBACK		PROPOSED DRAINAGE PIPE	
EXISTING CONTOUR	12	PROPOSED RIP RAP	
PROPOSED CONTOUR	12	MATERIAL STORAGE AREA	
DITCH CENTERLINE		HUDSON RIVER DREDGING	
PROPOSED CHECK DAM		EXCAVATION FOR WHARF	

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

GRADING & DRAINAGE

DRAWING NUMBER

GR-04

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-GRAD.DWG

MATCH LINE SEE SHEET GR-02

MATCH LINE SEE SHEET GR-04

MATCH LINE SEE SHEET GR-06

BUILDING - A
FFE = 21.0

DS3-2
RIM: 19.21
INV IN: 14.00 (24")
INV OUT: 14.00 (24")

DS4-6
RIM: 18.06
INV OUT: 14.56 (18")

DS3-18
RIM: 18.14
INV OUT: 13.69 (18")

DS3-1
RIM: 16.54
INV IN: 12.54 (24")
INV OUT: 12.04 (30")

DS3-17
RIM: 16.50
INV IN: 13.00 (18")
INV OUT: 13.00 (18")

DS4-5
RIM: 16.58
INV IN: 13.08 (18")
INV OUT: 13.08 (18")

DS3
RIM: 15.01
INV IN: 9.57 (24")
INV IN: 10.43 (18")
INV IN: 10.09 (30")
INV OUT: 9.57 (36")

DS2-3
RIM: 13.73
INV IN: 9.15 (18")
INV OUT: 9.15 (24")

DS3-16
RIM: 14.67
INV IN: 11.17 (18")
INV OUT: 10.67 (24")

DS3-15
RIM: 15.02
INV IN: 10.06 (24")
INV OUT: 10.06 (24")

JM-3A
RIM: 15.40
INV IN: 9.53 (36")
INV OUT: 10.50 (36")
INV OUT: 9.50 (18")
INV OUT: 9.50 (18")

DS4-3
RIM: 15.57
INV IN: 11.87 (24")
INV OUT: 11.87 (24")

PROPOSED 12" CURB

J-2
RIM: 15.00
INV IN: 8.43 (30")
INV OUT: 7.93 (30")

DS2-4
RIM: 13.53
INV OUT: 9.73 (18")

IT-05

IT-06

IT-7A

IT-07

DS2-1
RIM: 13.80
INV IN: 9.23 (18")
INV OUT: 9.23 (24")

ES2
INV: 7.78 (30")

DS2
RIM: 14.01
INV IN: 8.68 (24")
INV IN: 8.50 (24")
INV OUT: 8.50 (30")

IT-04

IT-03

J-3
RIM: 15.49
INV IN: 9.41 (18")
INV OUT: 8.90 (18")

J-4
RIM: 15.31
INV IN: 9.41 (18")
INV OUT: 8.91 (18")

DS3-19
RIM: 14.57
INV IN: 11.02 (18")
INV OUT: 11.02 (18")

DS3-20
RIM: 15.07
INV OUT: 11.57 (18")

DS4-4
RIM: 15.61
INV IN: 12.41 (18")
INV IN: 12.42 (12")
INV OUT: 12.41 (24")

INFILTRATION
CHAMBER SYSTEM
CM-4 INV = 6.75'

J-3 ES
INV: 8.71 (18")

J-4 ES
INV: 8.73 (18")

DS4-9
RIM: 15.52
INV OUT: 12.52 (12")

ES3
INV: 8.66 (36")

IT-02

MEDIUM STONE LINED
OUTLET PROTECTION

EDGE OF WATER

EDGE OF WATER

HUDSON RIVER

PLANNING BOARD HTE# 21-00100006

0 40 80 120 FT
SCALE

LEGEND

PROPERTY LINE		WETLAND AREA	
BUILDING SETBACK		PROPOSED DRAINAGE PIPE	
EXISTING CONTOUR	12	PROPOSED RIP RAP	
PROPOSED CONTOUR	12	MATERIAL STORAGE AREA	
DITCH CENTERLINE		HUDSON RIVER DREDGING	
PROPOSED CHECK DAM		EXCAVATION FOR WHARF	

NOTES:

1. SEE TABLE ON SHEET GR-04 FOR INFILTRATION TEST INFORMATION.

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\DRAWINGS\SHEET FILES\18641.00 GRAD.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINOS
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
GRADING & DRAINAGE

DRAWING NUMBER
GR-05

MATCH LINE SEE SHEET GR-03

MATCH LINE SEE SHEET GR-05

BUILDING - D
FFE = 21.0

DS4-2
RIM: 18.66
INV OUT: 13.35 (12")

DS4-1
RIM: 16.50
INV IN: 11.38 (12")
INV OUT: 11.38 (18")

DS4
RIM: 15.47
INV IN: 11.22 (24")
INV IN: 9.66 (24")
INV IN: 10.50 (18")
INV OUT: 9.66 (36")

J-5
RIM: 14.62
INV IN: 9.56 (36")
INV OUT: 9.00 (36")

INFILTRATION
CHAMBER SYSTEM
CM-4 INV = 6.75'

DV-4
RIM: 15.37
INV IN: 8.50 (36")
INV OUT: 11.00 (36")
INV OUT: 7.50 (18")

DS4-7
RIM: 14.10
INV IN: 10.11 (24")
INV OUT: 10.11 (24")

DS4-8
RIM: 14.64
INV OUT: 10.64 (24")

ES4
INV: 9.42 (36")

DV-04
RIM: 12.63
ENV IN: 8.70 (36")
ENV OUT: 7.50 (12")
ENV OUT: 7.50 (36")
WEIR INV: 10.00

MEDIUM STONE LINED
OUTLET PROTECTION

DS5-7
RIM: 18.87
INV OUT: 14.31 (12")

DS5-6
RIM: 19.52
INV IN: 13.63 (12")
INV OUT: 13.63 (18")

DS5-5
RIM: 19.80
INV IN: 12.85 (18")
INV OUT: 12.75 (18")

PROPOSED CURB

DS6-14
RIM: 19.80
INV OUT: 15.30 (18")

IT-10B

IT-10

IT-10A

DS5-4
RIM: 19.19
INV IN: 11.81 (18")
INV OUT: 11.71 (18")

DV-5
RIM: 17.73
INV IN: 8.68 (18")
INV IN: 8.68 (24")
INV OUT: 12.60 (36")
INV OUT: 6.79 (24")

IT-09

MEDIUM STONE LINED
OUTLET PROTECTION

DS5
RIM: 17.71
INV IN: 8.74 (24")
INV OUT: 8.74 (24")

ES5
INV: 12.29 (36")

IT-08A

NORMANS KILL

DS5-2
RIM: 14.69
INV IN: 10.00 (24")
INV OUT: 10.00 (24")

ISOLATOR ROW (IS-5)

INFILTRATION CHAMBER
SYSTEM CM-5
INVERT = 6.75'

IT-08

FIRE PUMP HOUSE FFE = 16.0'

DS5-3
RIM: 14.62
INV OUT: 10.62 (24")

PROPOSED WHARF ELEV. 15.5'
SEE SEPARATE WHARF DESIGN
PLANS BY OTHERS

DS5-1
RIM: 14.90
INV IN: 9.64 (24")
INV OUT: 9.64 (24")

LIMITS OF SITE DESIGN,
SEE WHARF DESIGN PLANS

CONCEPTUAL WHARF GRADING TO
EXISTING. SEE SEPARATE WHARF
DESIGN PLANS BY OTHERS

HUDSON RIVER

WOODS

SHED

EDGE OF WATER

LEGEND

PROPERTY LINE		WETLAND AREA	
BUILDING SETBACK		PROPOSED DRAINAGE PIPE	
EXISTING CONTOUR	12	PROPOSED RIP RAP	
PROPOSED CONTOUR	12	MATERIAL STORAGE AREA	
DITCH CENTERLINE		HUDSON RIVER DREDGING	
PROPOSED CHECK DAM		EXCAVATION FOR WHARF	

NOTES:

1. SEE TABLE ON SHEET GR-04 FOR INFILTRATION TEST INFORMATION.

PLANNING BOARD HTE# 21-00100006

0 40 80 120 FT
SCALE

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-GRAD.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	08/26/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

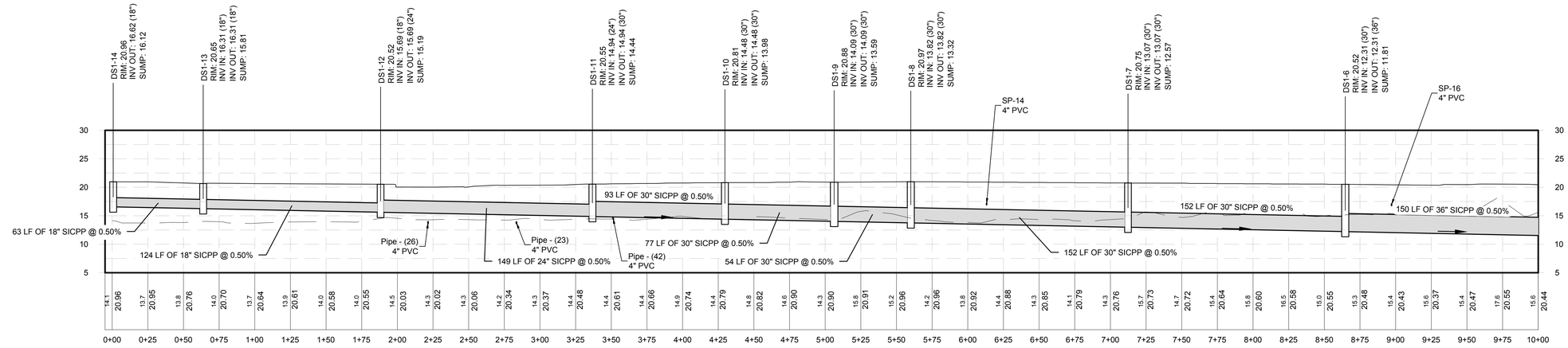
PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

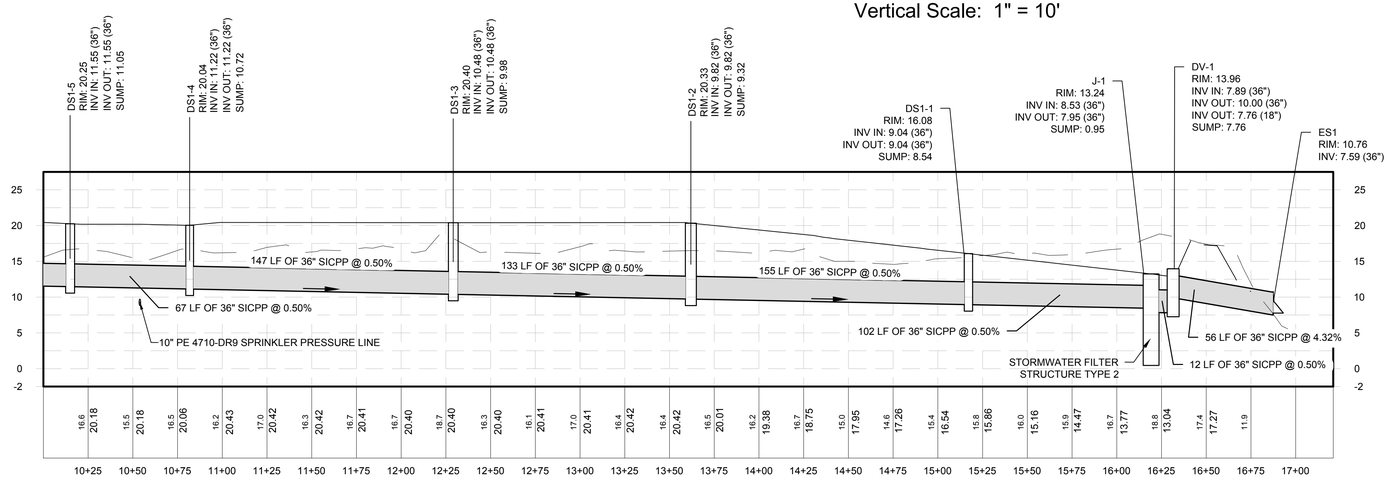
STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
GRADING & DRAINAGE

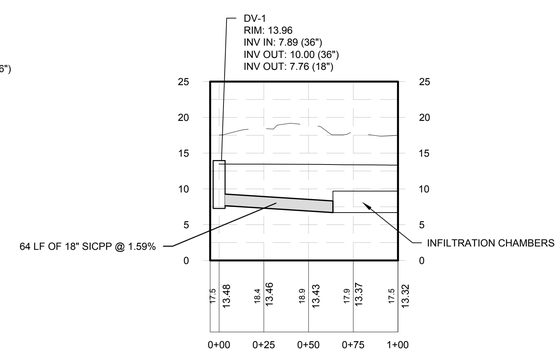
DRAWING NUMBER
GR-06



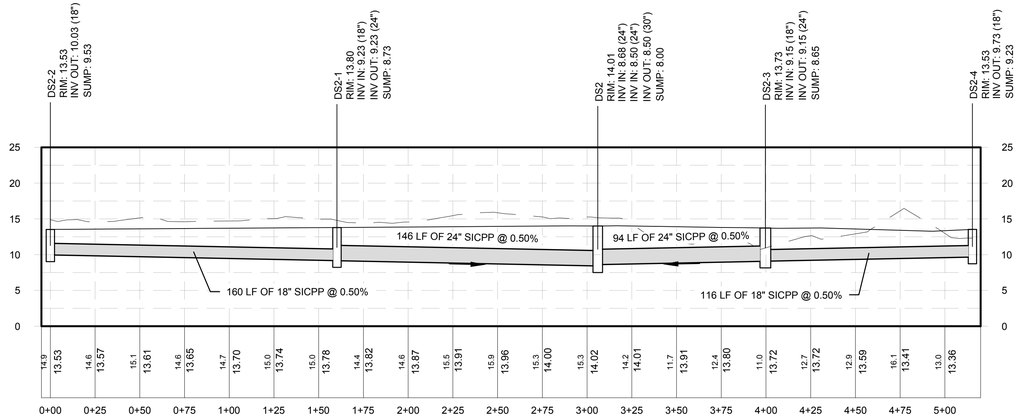
NETWORK 1 (1 OF 3)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



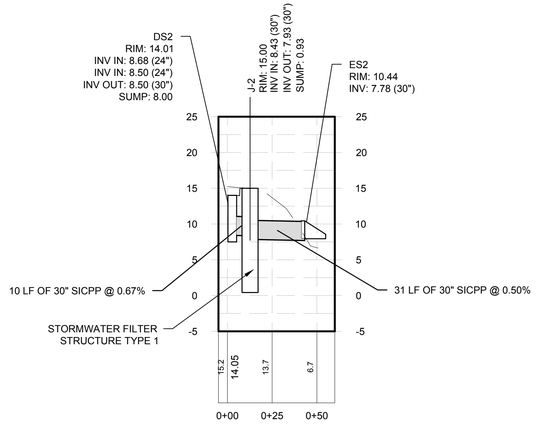
NETWORK 1 (2 OF 3)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 1 (3 OF 3)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



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



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

PLANNING BOARD HTE# 21-00100006

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

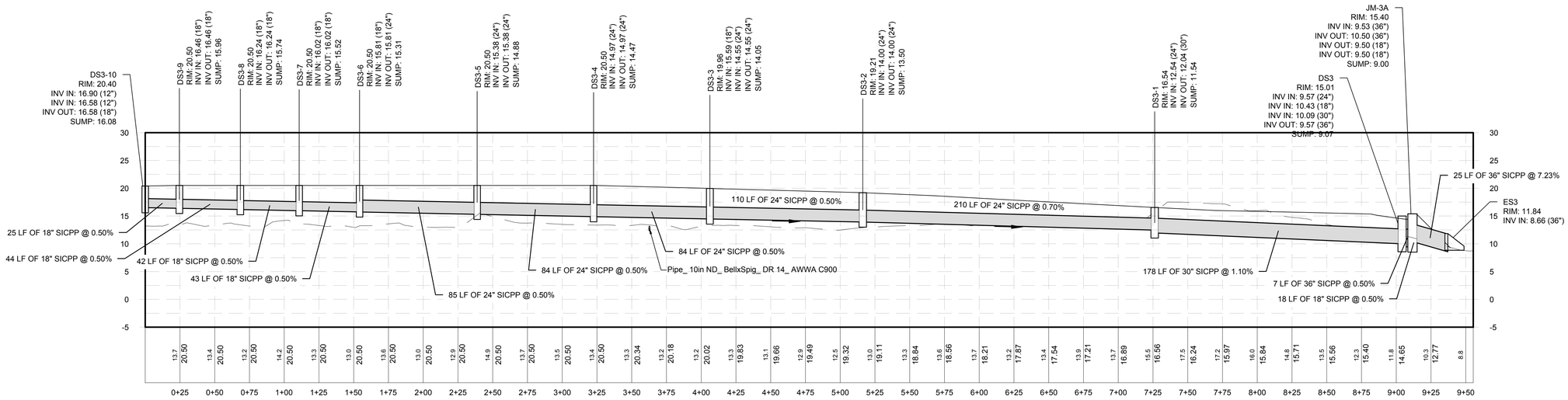
PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

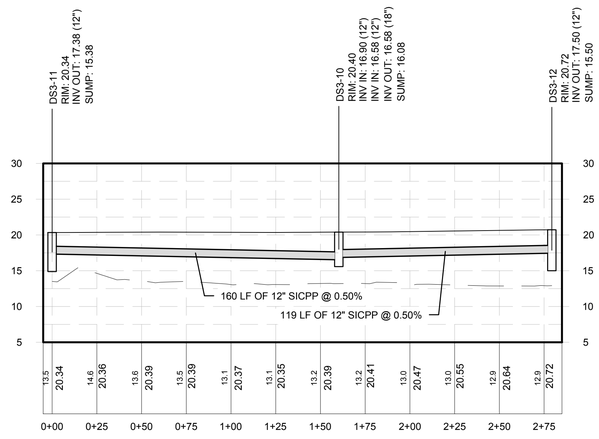
STATE OF NEW YORK
ADAM J FROSINO
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
DRAINAGE PROFILES

DRAWING NUMBER
GR-07

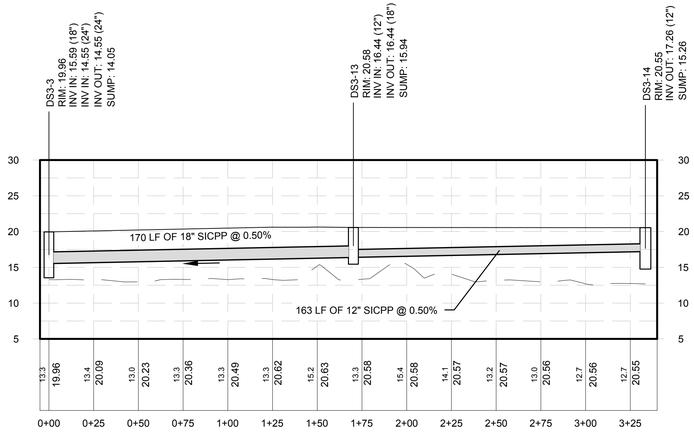


NETWORK 3 (1 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

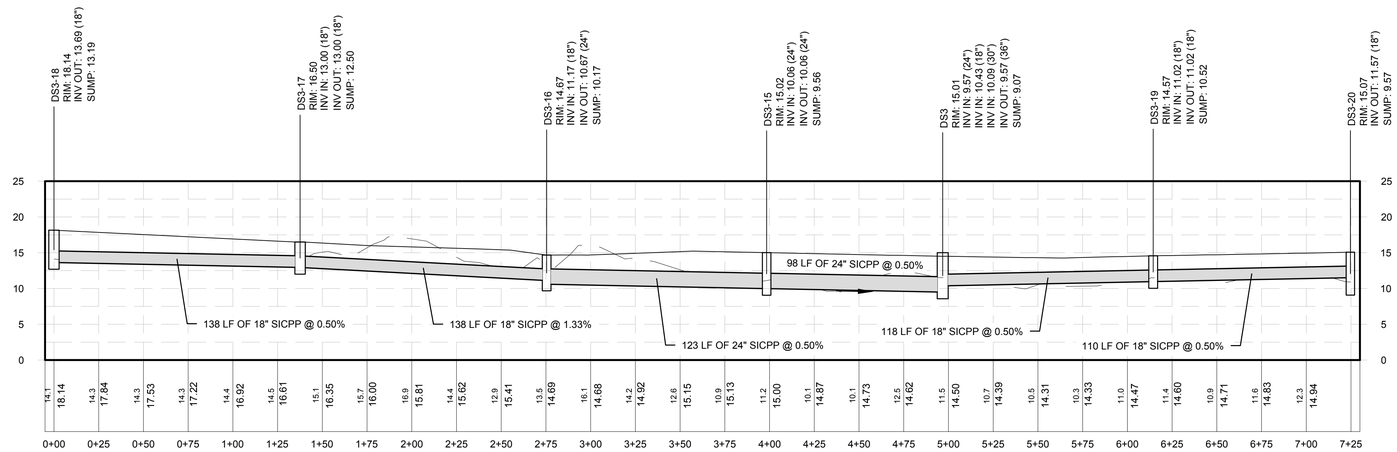


NETWORK 3 (2 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

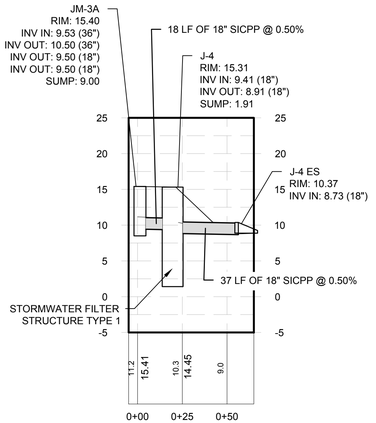
PLANNING BOARD HTE# 21-00100006



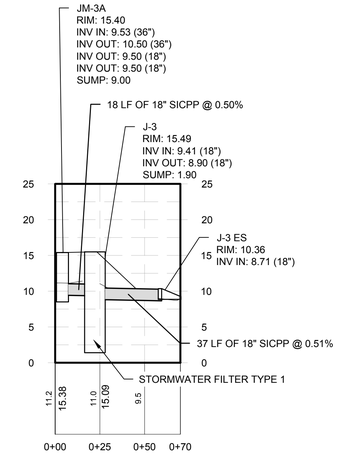
NETWORK 3 (3 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 3 (4 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 3 (5 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 3 (6 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION

PROJECT:
PORT OF ALBANY EXPANSION SITE

ALBANY, NEW YORK

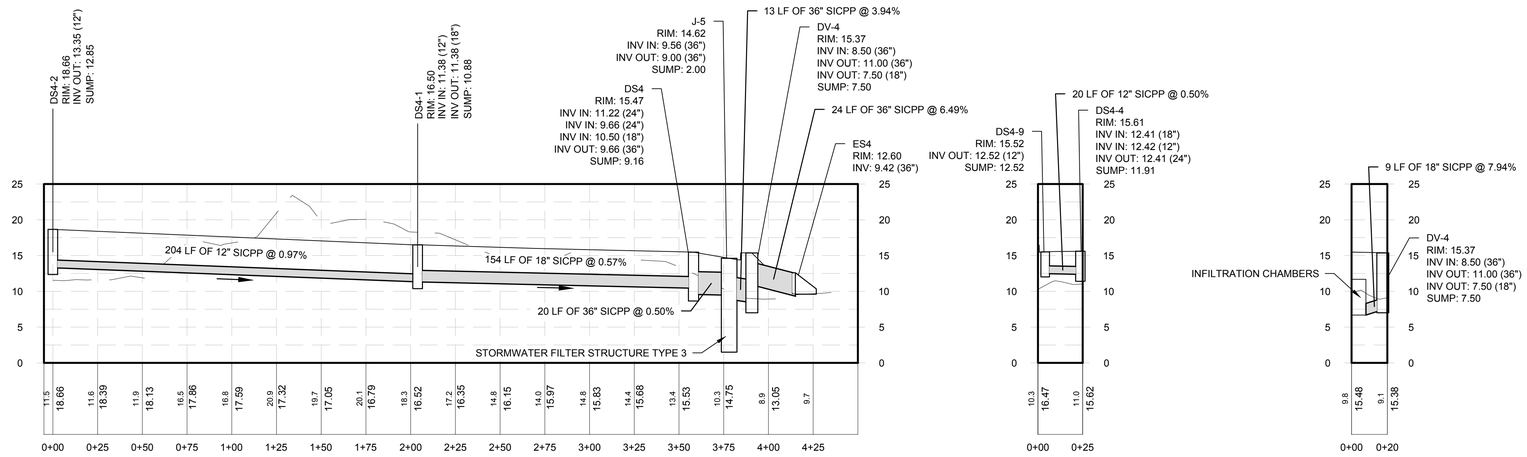
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINO
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
DRAINAGE PROFILES

DRAWING NUMBER
GR-08

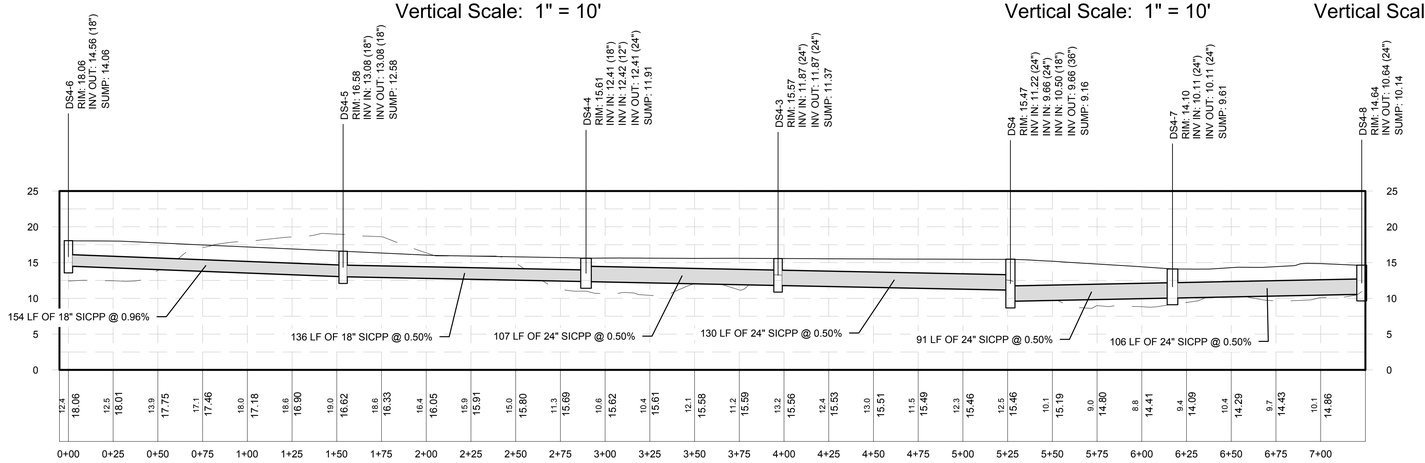
N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-DRNG-PROF.DWG



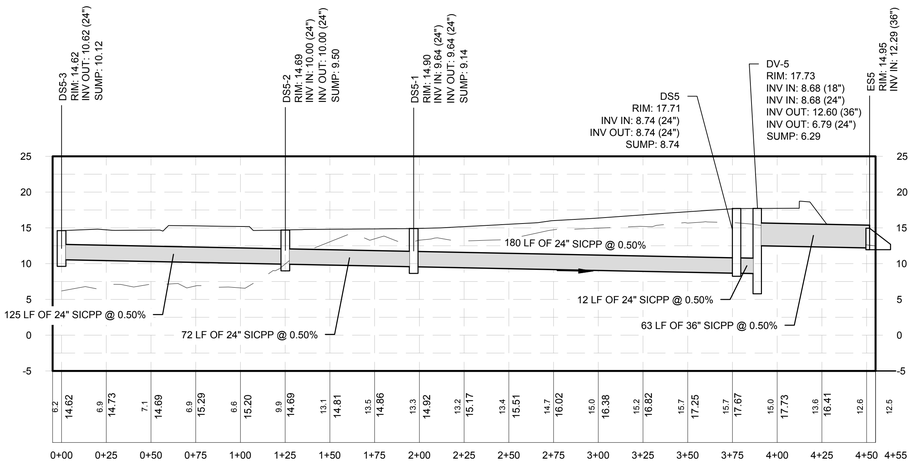
NETWORK 4 (1 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

NETWORK 4 (2 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

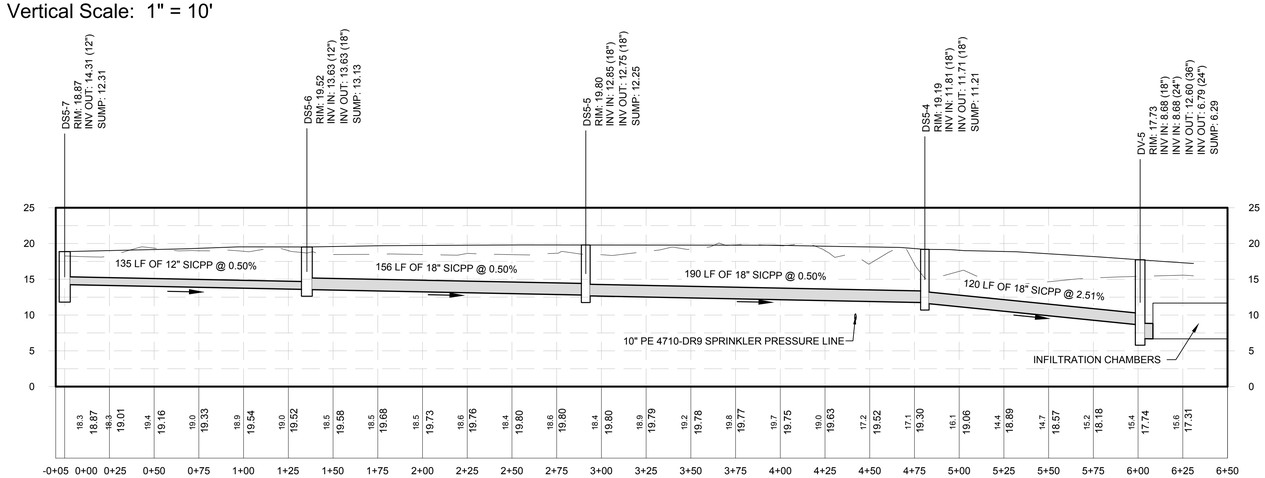
NETWORK 4 (3 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 4 (4 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 5 (1 OF 2)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 5 (2 OF 2)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

0 40 80 120 FT
SCALE

PLANNING BOARD HTE# 21-00100006

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

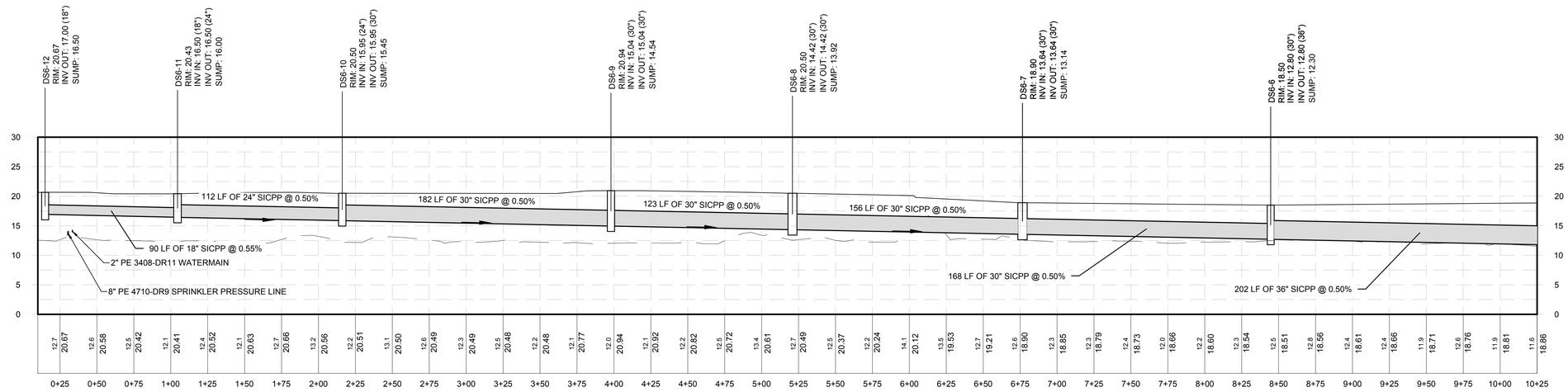
PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

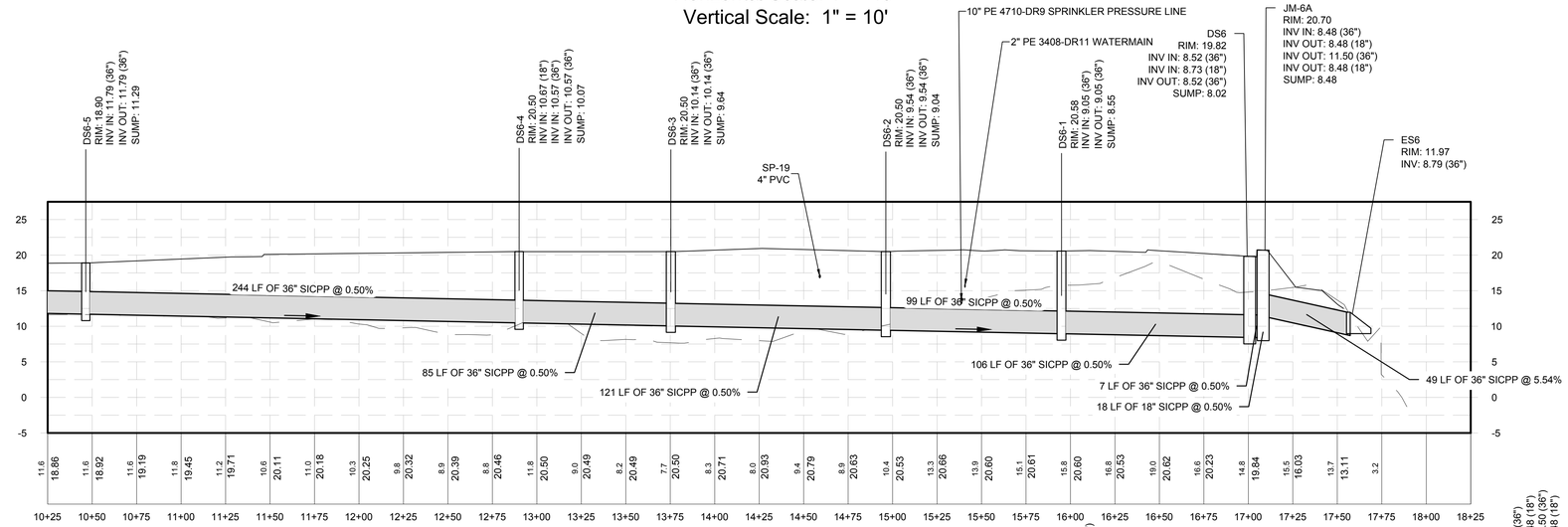
STATE OF NEW YORK
ADAM J FROHNHOFER
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
DRAINAGE PROFILES

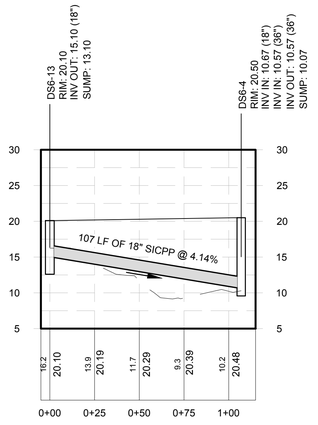
DRAWING NUMBER
GR-09



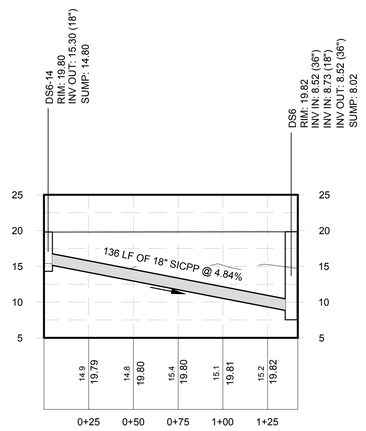
NETWORK 6 (1 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



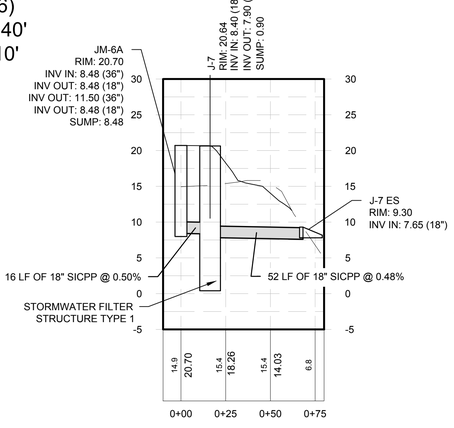
NETWORK 6 (2 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



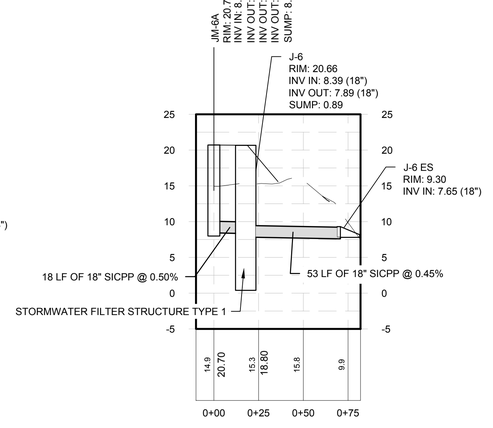
NETWORK 6 (3 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 6 (4 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 6 (5 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 6 (6 OF 6)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

PLANNING BOARD HTE# 21-00100006

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

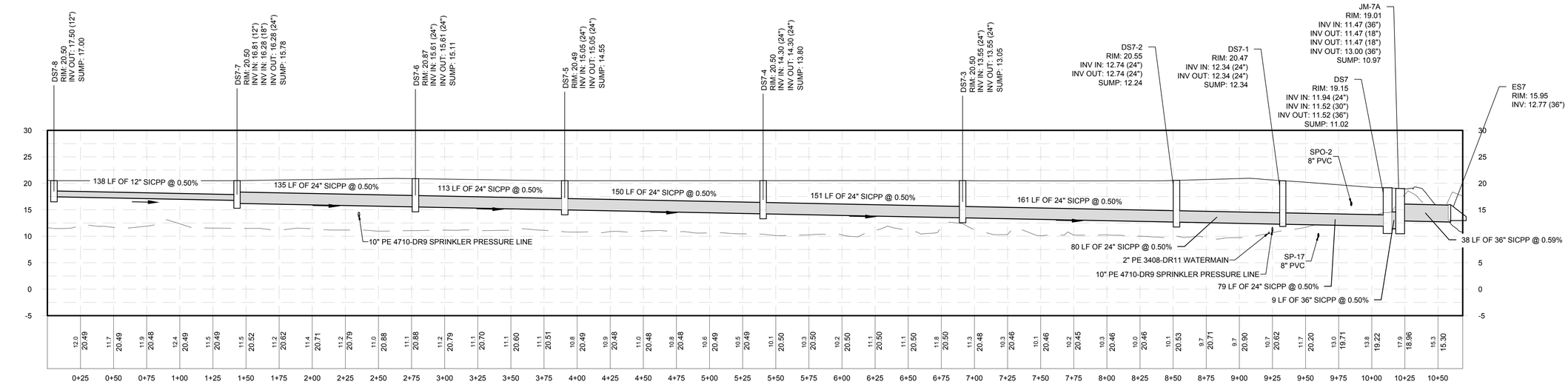
PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

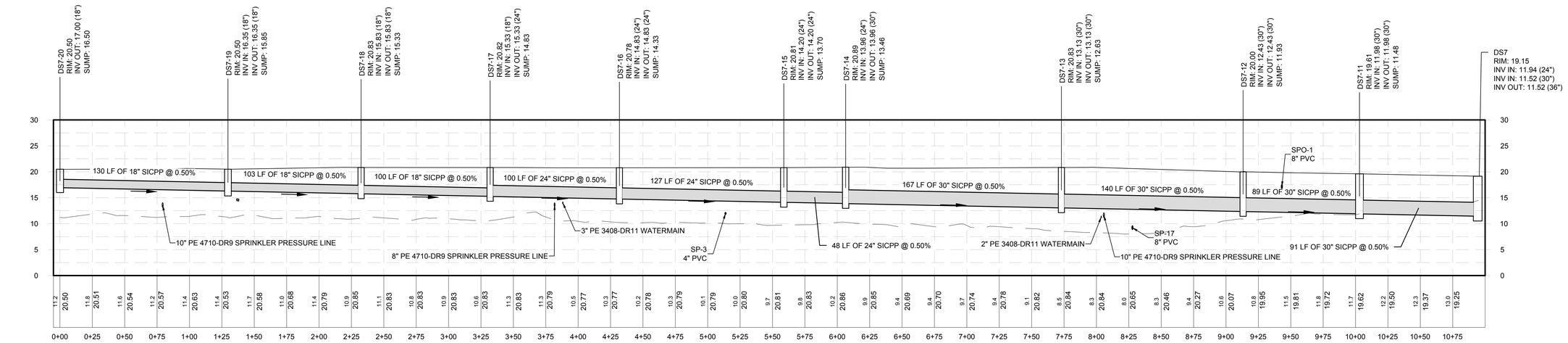
STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
DRAINAGE PROFILES

DRAWING NUMBER
GR-10

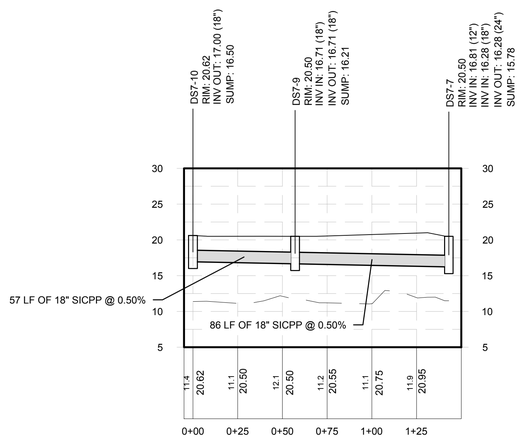


NETWORK 7 (1 OF 5)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

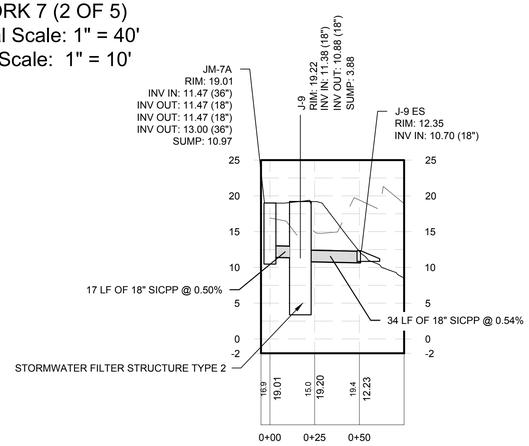


NETWORK 7 (2 OF 5)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

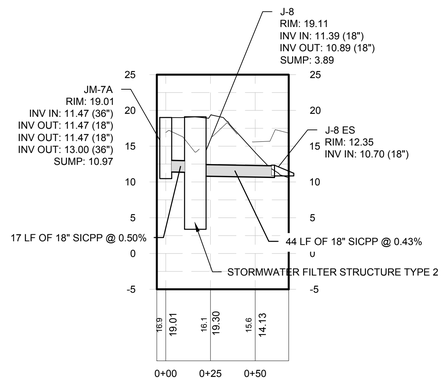
PLANNING BOARD HTE# 21-00100006



NETWORK 7 (3 OF 5)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 7 (4 OF 5)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



NETWORK 7 (5 OF 5)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

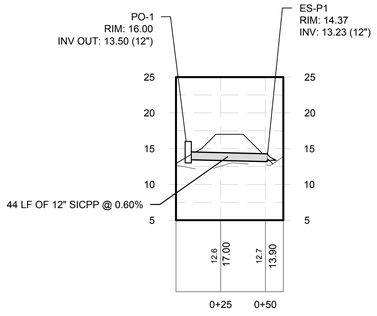
PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

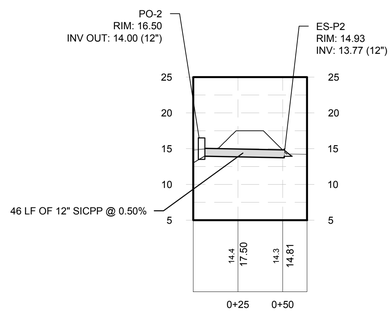
STATE OF NEW YORK
ADAM J FROSINO
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
DRAINAGE PROFILES

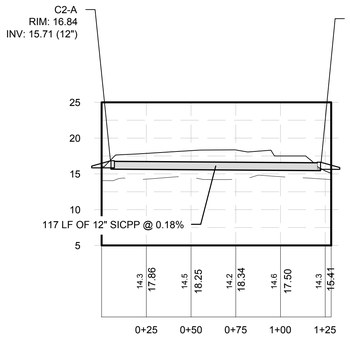
DRAWING NUMBER
GR-11



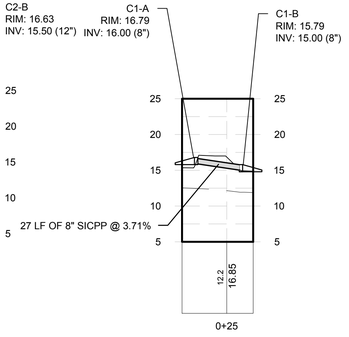
PO-1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



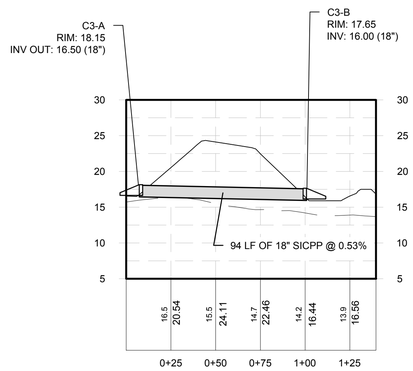
PO-2
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



Gravel Path Crossing 1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



GRAVEL ROAD CROSSING 2
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



ENTRANCE ROAD CULVERT
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

STRUCTURE TABLE

CULVERTS

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
C1-A	16.79		16.00 (C1)	CMP END SECTION	1374056.35	689250.62
C1-B	15.79	15.00 (C1)		CMP END SECTION	1374054.69	689277.52
C2-A	16.84		15.71 (C2)	CMP END SECTION	1373340.05	689539.68
C2-B	16.63	15.50 (C2)		CMP END SECTION	1373243.91	689606.59
C3-A	18.15		16.50 (C3)	CMP END SECTION	1372863.95	689791.97
C3-B	17.65	16.00 (C3)		CMP END SECTION	1372924.77	689720.92

POND OUTLETS

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
ES-P1	14.37	13.23 (PO-1)		CMP END SECTION	1373786.41	689308.09
ES-P2	14.93	13.77 (PO-2)		CMP END SECTION	1373135.01	689618.12
PO-1	16.00		13.50 (PO-1)	NYSDOT STRUCTURE	1373801.49	689349.54
PO-2	16.50		14.00 (PO-2)	NYSDOT STRUCTURE	1373158.88	689657.65

NETWORK 1

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
DS1-1	16.08	9.04 (DP1-2)	9.04 (DP1-1)	NYSDOT TYPE G	1372950.69	690392.76
DS1-2	20.33	9.82 (DP1-3)	9.82 (DP1-2)	NYSDOT TYPE G	1372881.05	690254.10
DS1-3	20.40	10.48 (DP1-4)	10.48 (DP1-3)	NYSDOT TYPE G	1372828.17	690132.28
DS1-4	20.04	11.22 (DP1-5)	11.22 (DP1-4)	NYSDOT TYPE G	1372773.75	689995.36
DS1-5	20.25	11.55 (DP1-6)	11.55 (DP1-5)	NYSDOT TYPE G	1372834.87	689969.04
DS1-6	20.52	12.31 (DP1-7)	12.31 (DP1-6)	NYSDOT TYPE G	1372977.60	689922.02
DS1-7	20.75	13.07 (DP1-8)	13.07 (DP1-7)	NYSDOT TYPE F	1373118.16	689863.29
DS1-8	20.97	13.82 (DP1-9)	13.82 (DP1-8)	NYSDOT TYPE F	1373257.96	689804.87
DS1-9	20.88	14.09 (DP1-10)	14.09 (DP1-9)	NYSDOT TYPE F	1373238.60	689754.47
DS1-10	20.81	14.48 (DP1-11)	14.48 (DP1-10)	NYSDOT TYPE F	1373308.58	689723.33
DS1-11	20.55	14.94 (DP1-12)	14.94 (DP1-11)	NYSDOT TYPE F	1373392.73	689683.93
DS1-12	20.52	15.69 (DP1-13)	15.69 (DP1-12)	NYSDOT TYPE A	1373527.70	689621.87
DS1-13	20.65	16.31 (DP1-14)	16.31 (DP1-13)	NYSDOT TYPE A	1373642.73	689574.50
DS1-14	20.96		16.62 (DP1-14)	NYSDOT TYPE A	1373668.96	689631.51
DV-1	13.96	7.89 (JP-1A)	10.00 (DP1) 7.76 (JP-1B)	NYSDOT 72" ROUND	1372998.68	690496.63
ES1	10.76	7.59 (DP1)		CMP END SECTION	1373017.76	690549.19
J-1	13.24	8.53 (DP1-1)	7.95 (JP-1A)	STRM FILTER TYPE 2	1372993.63	690485.39

STRUCTURE TABLE (CONT.)

NETWORK 2

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
DS2	14.01	8.68 (DP2-3) 8.50 (DP2-1)	8.50 (JP-2)	NYSDOT TYPE F	1373593.64	690392.84
DS2-1	13.80	9.23 (DP2-2)	9.23 (DP2-1)	NYSDOT TYPE A	1373449.84	690416.79
DS2-2	13.53		10.03 (DP2-2)	NYSDOT TYPE A	1373291.69	690442.31
DS2-3	13.73	9.15 (DP2-4)	9.15 (DP2-3)	NYSDOT TYPE A	1373681.77	690361.00
DS2-4	13.53		9.73 (DP2-4)	NYSDOT TYPE A	1373793.63	690331.42
ES2	10.44	7.78 (DP2)		CMP END SECTION	1373608.15	690430.67
J-2	15.00	8.43 (JP-2)	7.93 (DP2)	STRM FILTER TYPE 1	1373597.10	690402.15

NETWORK 3

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
DS3	15.01	9.57 (DP3-15) 10.43 (DP3-19) 10.09 (DP3-1)	9.57 (JP-3E)	NYSDOT TYPE K	1374140.34	690313.95
DS3-1	16.54	12.54 (DP3-2)	12.04 (DP3-1)	NYSDOT TYPE F	1374146.75	690136.09
DS3-2	19.21	14.00 (DP3-3)	14.00 (DP3-2)	NYSDOT 48" ROUND	1374114.60	689928.57
DS3-3	19.96	15.59 (DP3-13) 14.55 (DP3-4)	14.55 (DP3-3)	NYSDOT TYPE K	1374047.44	689841.46
DS3-4	20.50	14.97 (DP3-5)	14.97 (DP3-4)	NYSDOT TYPE A	1374015.32	689764.21
DS3-5	20.50	15.38 (DP3-6)	15.38 (DP3-5)	NYSDOT TYPE A	1373982.78	689687.04
DS3-6	20.50	15.81 (DP3-7)	15.81 (DP3-6)	NYSDOT TYPE A	1373950.23	689608.94
DS3-7	20.50	16.02 (DP3-8)	16.02 (DP3-7)	NYSDOT TYPE A	1373933.50	689568.85
DS3-8	20.50	16.24 (DP3-9)	16.24 (DP3-8)	NYSDOT TYPE A	1373916.96	689529.88
DS3-9	20.50	16.46 (DP3-10)	16.46 (DP3-9)	NYSDOT TYPE A	1373900.43	689489.27
DS3-10	20.40	16.90 (DP3-12) 16.58 (DP3-11)	16.58 (DP3-10)	NYSDOT TYPE A	1373890.52	689466.77
DS3-11	20.34		17.38 (DP3-11)	NYSDOT TYPE A	1373744.03	689531.77
DS3-12	20.72		17.50 (DP3-12)	NYSDOT TYPE A	1374000.31	689420.68
DS3-13	20.58	16.44 (DP3-14)	16.44 (DP3-13)	NYSDOT TYPE A	1374215.20	689812.83
DS3-14	20.55		17.26 (DP3-14)	NYSDOT TYPE A	1374366.78	689752.27
DS3-15	15.02	10.06 (DP3-16)	10.06 (DP3-15)	NYSDOT TYPE A	1374042.18	690306.87
DS3-16	14.67	11.17 (DP3-17)	10.67 (DP3-16)	NYSDOT TYPE A	1373919.51	690300.58
DS3-17	16.50	13.00 (DP3-18)	13.00 (DP3-17)	NYSDOT TYPE A	1373881.39	690168.12
DS3-18	18.14		13.69 (DP3-18)	NYSDOT TYPE A	1373843.35	690035.92
DS3-19	14.57	11.02 (DP3-20)	11.02 (DP3-19)	NYSDOT TYPE A	1374257.92	690317.71
DS3-20	15.07		11.57 (DP3-20)	NYSDOT TYPE A	1374367.98	690323.93
ES3	11.84	8.66 (DS3)		CMP END SECTION	1374139.84	690346.83
J-3	15.49	9.41 (JP-3B)	8.90 (JP-3A)	STRM FILTER TYPE 1	1374121.92	690322.40
J-3 ES	10.36	8.71 (JP-3A)		CMP END SECTION	1374133.41	690357.79
J-4	15.31	9.41 (JP-3D)	8.91 (JP-3C)	STRM FILTER TYPE 1	1374158.17	690323.43
J-4 ES	10.37	8.73 (JP-3C)		CMP Rectangular End Section	1374145.54	690357.87
JM-3A	15.40	9.53 (JP-3E)	10.50 (DS3) 9.50 (JP-3B) 9.50 (JP-3D)	NYSDOT 72" ROUND	1374140.00	690321.41

STRUCTURE TABLE (CONT.)

NETWORK 4

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
DS4	15.47	11.22 (DP4-3) 9.66 (DP4-7) 10.50 (DP4-1)	9.66 (JP-4B)	NYSDOT TYPE K	1374697.14	690309.15
DS4-1	16.50	11.38 (DP4-2)	11.38 (DP4-1)	NYSDOT TYPE A	1374749.79	690164.22
DS4-2	18.66		13.35 (DP4-2)	NYSDOT TYPE A	1374784.09	689963.21
DS4-3	15.57	11.87 (DP4-4)	11.87 (DP4-3)	NYSDOT TYPE A	1374567.27	690310.51
DS4-4	15.61	12.41 (DP4-5) 12.42 (DP4-9)	12.41 (DP4-4)	NYSDOT TYPE A	1374459.94	690311.57
DS4-5	16.58	13.08 (DP4-6)	13.08 (DP4-5)	NYSDOT TYPE A	1374481.61	690177.53
DS4-6	18.06		14.56 (DP4-6)	NYSDOT TYPE A	1374482.36	690023.98
DS4-7	14.10	10.11 (DP4-8)	10.11 (DP4-7)	NYSDOT TYPE A	1374775.70	690354.33
DS4-8	14.64		10.64 (DP4-8)	NYSDOT TYPE A	1374879.33	690375.41
DS4-9	15.52		12.52 (DP4-9)	NYSDOT TYPE A	1374460.58	690331.22
DV-4	15.37	8.50 (JP-4A)	11.00 (DP4) 7.50 (DVP4)	NYSDOT 72" ROUND	1374689.00	690340.73
ES4	12.60	9.42 (DP4)		CMP END SECTION	1374686.71	690364.94
J-5	14.62	9.56 (JP-4B)	9.00 (JP-4A)	STRM FILTER TYPE 3	1374691.92	690328.39

NETWORK 5

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
DS5	17.71	8.74 (DP5-1)	8.74 (IS 5-2)	NYSDOT TYPPE F	1375526.96	690208.24
DS5-1	14.90	9.64 (DP5-2)	9.64 (DP5-1)	NYSDOT TYPE F	1375513.69	690388.25
DS5-2	14.69	10.00 (DP5-3)	10.00 (DP5-2)	NYSDOT TYPE A	1375441.96	690388.31
DS5-3	14.62		10.62 (DP5-3)	NYSDOT TYPE A	1375316.98	690393.68
DS5-4	19.19	11.81 (DP5-5)	11.71 (DP5-4)	NYSDOT TYPE A	1375567.28	690092.37
DS5-5	19.80	12.85 (DP5-6)	12.75 (DP5-5)	NYSDOT TYPE A	1375378.09	690080.72
DS5-6	19.52	13.63 (DP5-7)	13.63 (DP5-6)	NYSDOT TYPE A	1375222.43	690072.18
DS5-7	18.87		14.31 (DP5-7)	NYSDOT TYPE A	1375098.98	690016.64
DV-5	17.73	8.68 (DP5-4) 8.68 (IS 5-2)	12.60 (DP5) 6.79 (IS 5-1)	NYSDOT TYPE F	1375538.44	690209.21
ES5	14.95	12.29 (DP5)		CMP END SECTION	1375601.03	690214.59

PLANNING BOARD HTE# 21-00100006

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINO
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
DRAINAGE PROFILES & TABLES

DRAWING NUMBER
GR-12

STRUCTURE TABLE (CONT.)

NETWORK 6

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
DS6	19.82	8.52 (DP6-1) 8.73 (DP6-14)	8.52 (JP-6E)	NYSDOT 72" ROUND	1375580.78	689740.56
DS6-1	20.58	9.05 (DP6-2)	9.05 (DP6-1)	NYSDOT TYPE K	1375487.52	689690.63
DS6-2	20.50	9.54 (DP6-3)	9.54 (DP6-2)	NYSDOT TYPE G	1375389.41	689679.32
DS6-3	20.50	10.14 (DP6-4)	10.14 (DP6-3)	NYSDOT TYPE G	1375268.69	689673.63
DS6-4	20.50	10.67 (DP6-13) 10.57 (DP6-5)	10.57 (DP6-4)	NYSDOT TYPE G	1375185.29	689691.50
DS6-5	18.90	11.79 (DP6-6)	11.79 (DP6-5)	NYSDOT TYPE G	1374941.78	689684.09
DS6-6	18.50	12.80 (DP6-7)	12.80 (DP6-6)	NYSDOT TYPE G	1374740.25	689673.81
DS6-7	18.90	13.64 (DP6-8)	13.64 (DP6-7)	NYSDOT 60" ROUND	1374572.38	689665.83
DS6-8	20.50	14.42 (DP6-9)	14.42 (DP6-8)	NYSDOT 60" ROUND	1374435.02	689592.48
DS6-9	20.94	15.04 (DP6-10)	15.04 (DP6-9)	NYSDOT TYPE F	1374389.86	689478.22
DS6-10	20.50	15.95 (DP6-11)	15.95 (DP6-10)	NYSDOT TYPE K	1374311.52	689313.86
DS6-11	20.43	16.50 (DP6-12)	16.50 (DP6-11)	NYSDOT TYPE A	1374200.61	689325.51
DS6-12	20.67		17.00 (DP6-12)	NYSDOT TYPE A	1374112.51	689342.06
DS6-13	20.10		15.10 (DP6-13)	NYSDOT TYPE A	1375180.02	689798.34
DS6-14	19.80		15.30 (DP6-14)	NYSDOT TYPE A	1375576.32	689876.35
ES6	11.97	8.79 (DP6)		CMP END SECTION	1375636.86	689736.21
J-6	20.66	8.39 (JP-6B)	7.89 (JP-6A)	STRM FILTER TYPE 1	1375589.41	689759.02
J-6 ES	9.30	7.65 (JP-6A)		CMP END SECTION	1375640.05	689743.85
J-7	20.64	8.40 (JP-6D)	7.90 (JP-6C)	STRM FILTER TYPE 1	1375590.45	689725.15
J-7 ES	9.30	7.65 (JP-6C)		CMP END SECTION	1375642.36	689726.45
JM-6A	20.70	8.48 (JP-6E)	8.48 (JP-6D) 11.50 (DP6) 8.48 (JP-6B)	NYSDOT 72" ROUND	1375588.17	689741.27

NETWORK 7

STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
DS7	19.15	11.94 (DP7-1) 11.52 (DP7-11)	11.52 (JP-7E)	NYSDOT 72" ROUND	1375606.68	689552.87
DS7-1	20.47	12.34 (DP7-2)	12.34 (DP7-1)	NYSDOT 48" ROUND	1375529.41	689570.08
DS7-2	20.55	12.74 (DP7-3)	12.74 (DP7-2)	NYSDOT TYPE F	1375449.21	689572.28
DS7-3	20.50	13.55 (DP7-4)	13.55 (DP7-3)	NYSDOT TYPE A	1375287.96	689563.66
DS7-4	20.50	14.30 (DP7-5)	14.30 (DP7-4)	NYSDOT TYPE A	1375137.47	689557.17
DS7-5	20.49	15.05 (DP7-6)	15.05 (DP7-5)	NYSDOT TYPE A	1374987.87	689549.50
DS7-6	20.87	15.61 (DP7-7)	15.61 (DP7-6)	NYSDOT TYPE A	1374875.35	689542.60
DS7-7	20.50	16.81 (DP7-8) 16.28 (DP7-9)	16.28 (DP7-7)	NYSDOT TYPE A	1374740.71	689538.37
DS7-8	20.50		17.50 (DP7-8)	NYSDOT TYPE A	1374602.76	689529.78
DS7-9	20.50	16.71 (DP7-10)	16.71 (DP7-9)	NYSDOT TYPE A	1374744.43	689452.51
DS7-10	20.62		17.00 (DP7-10)	NYSDOT TYPE A	1374746.87	689395.47
DS7-11	19.61	11.98 (DP7-12)	11.98 (DP7-11)	NYSDOT 60" ROUND	1375666.39	689483.79
DS7-12	20.00	12.43 (DP7-13)	12.43 (DP7-12)	NYSDOT 60" ROUND	1375646.72	689396.85
DS7-13	20.83	13.13 (DP7-14)	13.13 (DP7-13)	NYSDOT TYPE F	1375509.92	689366.00
DS7-14	20.89	13.96 (DP7-15)	13.96 (DP7-14)	NYSDOT TYPE F	1375347.07	689331.11
DS7-15	20.81	14.20 (DP7-16)	14.20 (DP7-15)	NYSDOT TYPE F	1375299.84	689324.34
DS7-16	20.78	14.83 (DP7-17)	14.83 (DP7-16)	NYSDOT TYPE A	1375173.23	689316.34
DS7-17	20.82	15.33 (DP7-18)	15.33 (DP7-17)	NYSDOT TYPE A	1375073.62	689309.81
DS7-18	20.83	15.83 (DP7-19)	15.83 (DP7-18)	NYSDOT TYPE A	1374974.05	689307.09
DS7-19	20.50	16.35 (DP7-20)	16.35 (DP7-19)	NYSDOT TYPE A	1374872.04	689319.75
DS7-20	20.50		17.00 (DP7-20)	NYSDOT TYPE A	1374742.73	689310.29
ES7	15.95	12.77 (DP7)		CMP END SECTION	1375644.70	689580.44
J-8	19.11	11.39 (JP-7B)	10.89 (JP-7A)	STRM FILTER TYPE 2	1375599.57	689570.28
J-8 ES	12.35	10.70 (JP-7A)		CMP END SECTION	1375640.71	689586.64
J-9	19.22	11.38 (JP-7D)	10.88 (JP-7C)	STRM FILTER TYPE 2	1375628.64	689554.69
J-9 ES	12.35	10.70 (JP-7C)		CMP END SECTION	1375654.35	689576.33
JM-7A	19.01	11.47 (JP-7E)	11.47 (JP-7B) 11.47 (JP-7D) 13.00 (DP7)	NYSDOT 72" ROUND	1375612.48	689559.96

PIPE TABLE

NETWORK 1

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
DP1	36"	55.91'	4.32%	SICPP	DV-1	ES1
DP1-1	36"	102.10'	0.50%	SICPP	DS1-1	J-1
DP1-2	36"	155.16'	0.50%	SICPP	DS1-2	DS1-1
DP1-3	36"	132.81'	0.50%	SICPP	DS1-3	DS1-2
DP1-4	36"	147.34'	0.50%	SICPP	DS1-4	DS1-3
DP1-5	36"	66.55'	0.50%	SICPP	DS1-5	DS1-4
DP1-6	36"	150.27'	0.50%	SICPP	DS1-6	DS1-5
DP1-7	30"	152.33'	0.50%	SICPP	DS1-7	DS1-6
DP1-8	30"	151.52'	0.50%	SICPP	DS1-8	DS1-7
DP1-9	30"	53.99'	0.50%	SICPP	DS1-9	DS1-8
DP1-10	30"	76.60'	0.50%	SICPP	DS1-10	DS1-9
DP1-11	30"	92.92'	0.50%	SICPP	DS1-11	DS1-10
DP1-12	24"	148.55'	0.50%	SICPP	DS1-12	DS1-11
DP1-13	18"	124.39'	0.50%	SICPP	DS1-13	DS1-12
DP1-14	18"	62.75'	0.50%	SICPP	DS1-14	DS1-13
JP-1A	36"	12.32'	0.50%	SICPP	J-1	DV-1
JP-1B	18"	63.64'	1.59%	SICPP	DV-1	

NETWORK 2

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
DP2	30"	30.59'	0.50%	SICPP	J-2	ES2
DP2-1	24"	145.78'	0.50%	SICPP	DS2-1	DS2
DP2-2	18"	160.20'	0.50%	SICPP	DS2-2	DS2-1
DP2-3	24"	93.70'	0.50%	SICPP	DS2-3	DS2
DP2-4	18"	115.71'	0.50%	SICPP	DS2-4	DS2-3
JP-2	30"	9.93'	0.67%	SICPP	DS2	J-2

NETWORK 3

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
DP3-1	30"	177.98'	1.10%	SICPP	DS3-1	DS3
DP3-2	24"	209.99'	0.70%	SICPP	DS3-2	DS3-1
DP3-3	24"	109.99'	0.50%	SICPP	DS3-3	DS3-2
DP3-4	24"	83.67'	0.50%	SICPP	DS3-4	DS3-3
DP3-5	24"	83.75'	0.50%	SICPP	DS3-5	DS3-4
DP3-6	24"	84.60'	0.50%	SICPP	DS3-6	DS3-5
DP3-7	18"	43.45'	0.50%	SICPP	DS3-7	DS3-6
DP3-8	18"	42.33'	0.50%	SICPP	DS3-8	DS3-7
DP3-9	18"	43.84'	0.50%	SICPP	DS3-9	DS3-8
DP3-10	18"	24.59'	0.50%	SICPP	DS3-10	DS3-9
DP3-11	12"	160.26'	0.50%	SICPP	DS3-11	DS3-10
DP3-12	12"	119.07'	0.50%	SICPP	DS3-12	DS3-10
DP3-13	18"	170.19'	0.50%	SICPP	DS3-13	DS3-3
DP3-14	12"	163.23'	0.50%	SICPP	DS3-14	DS3-13
DP3-15	24"	98.41'	0.50%	SICPP	DS3-15	DS3
DP3-16	24"	122.84'	0.50%	SICPP	DS3-16	DS3-15
DP3-17	18"	137.83'	1.33%	SICPP	DS3-17	DS3-16
DP3-18	18"	137.57'	0.50%	SICPP	DS3-18	DS3-17
DP3-19	18"	117.65'	0.50%	SICPP	DS3-19	DS3
DP3-20	18"	110.23'	0.50%	SICPP	DS3-20	DS3-19
DS3	36"	25.42'	7.23%	SICPP	JM-3A	ES3
JP-3A	18"	37.21'	0.51%	SICPP	J-3	J-3 ES
JP-3B	18"	18.11'	0.50%	SICPP	JM-3A	J-3
JP-3C	18"	36.68'	0.50%	SICPP	J-4	J-4 ES
JP-3D	18"	18.28'	0.50%	SICPP	JM-3A	J-4
JP-3E	36"	7.47'	0.50%	SICPP	DS3	JM-3A

PIPE TABLE (CONT.)

NETWORK 4

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
DP4	36"	24.32'	6.49%	SICPP	DV-4	ES4
DP4-1	18"	154.20'	0.57%	SICPP	DS4-1	DS4
DP4-2	12"	203.91'	0.97%	SICPP	DS4-2	DS4-1
DP4-3	24"	129.88'	0.50%	SICPP	DS4-3	DS4
DP4-4	24"	107.34'	0.50%	SICPP	DS4-4	DS4-3
DP4-5	18"	135.78'	0.50%	SICPP	DS4-5	DS4-4
DP4-6	18"	153.55'	0.96%	SICPP	DS4-6	DS4-5
DP4-7	24"	90.62'	0.50%	SICPP	DS4-7	DS4
DP4-8	24"	105.76'	0.50%	SICPP	DS4-8	DS4-7
DP4-9	12"	19.66'	0.50%	SICPP	DS4-9	DS4-4
DVP4	18"	9.44'	7.94%	SICPP	DV-4	
JP-4A	36"	12.68'	3.94%	SICPP	J-5	DV-4
JP-4B	36"	19.93'	0.50%	SICPP	DS4	J-5

NETWORK 5

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
DP5	36"	62.82'	0.50%	SICPP	DV-5	ES5
DP5-1	24"	180.50'	0.50%	SICPP	DS5-1	DS5
DP5-2	24"	71.73'	0.50%	SICPP	DS5-2	DS5-1
DP5-3	24"	125.09'	0.50%	SICPP	DS5-3	DS5-2
DP5-4	18"	120.34'	2.51%	SICPP	DS5-4	DV-5
DP5-5	18"	189.54'	0.50%	SICPP	DS5-5	DS5-4
DP5-6	18"	155.90'	0.50%	SICPP	DS5-6	DS5-5
DP5-7	12"	135.37'	0.50%	SICPP	DS5-7	DS5-6
IS 5-1	24"	7.25'	0.50%	SICPP	DV-5	
IS 5-2	24"	11.52'	0.50%	SICPP	DS5	DV-5

NETWORK 6

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
DP6	36"	48.95'	5.54%	SICPP	JM-6A	ES6
DP6-1	36"	105.79'	0.50%	SICPP	DS6-1	DS6
DP6-2	36"	98.75'	0.50%	SICPP	DS6-2	DS6-1
DP6-3	36"	120.86'	0.50%	SICPP	DS6-3	DS6-2
DP6-4	36"	85.30'	0.50%	SICPP	DS6-4	DS6-3
DP6-5	36"	243.62'	0.50%	SICPP	DS6-5	DS6-4
DP6-6	36"	201.79'	0.50%	SICPP	DS6-6	DS6-5
DP6-7	30"	168.06'	0.50%	SICPP	DS6-7	DS6-6
DP6-8	30"	155.71'	0.50%	SICPP	DS6-8	DS6-7
DP6-9	30"	122.86'	0.50%	SICPP	DS6-9	DS6-8
DP6-10	30"	182.07'	0.50%	SICPP	DS6-10	DS6-9
DP6-11	24"	111.52'	0.50%	SICPP	DS6-11	DS6-10
DP6-12	18"	89.64'	0.55%	SICPP	DS6-12	DS6-11
DP6-13	18"	106.97'	4.14%	SICPP	DS6-13	DS6-4
DP6-14	18"	135.86'	4.84%	SICPP	DS6-14	DS6
JP-6A	18"	52.87'	0.45%	SICPP	J-6	J-6 ES
JP-6B	18"	17.79'	0.50%	SICPP	JM-6A	J-6
JP-6C	18"	51.92'	0.48%	SICPP	J-7	J-7 ES
JP-6D	18"	16.28'	0.50%	SICPP	JM-6A	J-7
JP-6E	36"	7.43'	0.50%	SICPP	DS6	JM-6A

PIPE TABLE (CONT.)

NETWORK 7

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
DP7	36"	38.18'	0.59%	SICPP	JM-7A	ES7
DP7-1	24"	79.16'	0.50%	SICPP	DS7-1	DS7
DP7-2	24"	80.23'	0.50%	SICPP	DS7-2	DS7-1
DP7-3	24"	161.48'	0.50%	SICPP	DS7-3	DS7-2
DP7-4	24"	150.63'	0.50%	SICPP	DS7-4	DS7-3
DP7-5	24"	149.80'	0.50%	SICPP	DS7-5	DS7-4
DP7-6	24"	112.73'	0.50%	SICPP	DS7-6	DS7-5
DP7-7	24"	134.71'	0.50%	SICPP	DS7-7	DS7-6
DP7-8	12"	138.21'	0.50%	SICPP	DS7-8	DS7-7
DP7-9	18"	85.94'	0.50%	SICPP	DS7-9	DS7-7
DP7-10	18"	57.09'	0.50%	SICPP	DS7-10	DS7-9
DP7-11	30"	91.31'	0.50%	SICPP	DS7-11	DS7
DP7-12	30"	89.14'	0.50%	SICPP	DS7-12	DS7-11
DP7-13	30"	140.23'	0.50%	SICPP	DS7-13	DS7-12
DP7-14	30"	166.54'	0.50%	SICPP	DS7-14	DS7-13
DP7-15	24"	47.72'	0.50%	SICPP	DS7-15	DS7-14
DP7-16	24"	126.86'	0.50%	SICPP	DS7-16	DS7-15
DP7-17	24"	99.82'	0.50%	SICPP	DS7-17	DS7-16
DP7-18	18"	99.61'	0.50%	SICPP	DS7-18	DS7-17
DP7-19	18"	102.80'	0.50%	SICPP	DS7-19	DS7-18
DP7-20	18"	129.65'	0.50%	SICPP	DS7-20	DS7-19
JP-7A	18"	44.27'	0.43%	SICPP	J-8	J-8 ES
JP-7B	18"	16.53'	0.50%	SICPP	JM-7A	J-8
JP-7C	18"	33.61'	0.54%	SICPP	J-9	J-9 ES
JP-7D	18"	17.00'	0.50%	SICPP	JM-7A	J-9
JP-7E	36"	9.15'	0.50%	SICPP	DS7	JM-7A

CULVERTS

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
C1	8"	26.96'	3.71%	SICPP	C1-A	C1-B
C2	12"	117.13'	0.18%	SICPP	C2-A	C2-B
C3	18"	93.53'	0.53%	SICPP	C3-A	C3-B

POND OUTLETS

NAME	SIZE	LENGTH	SLOPE	MAT.	FROM STRC	TO STRC
PO-1	12"	44.11'	0.60%	SICPP	PO-1	ES-P1
PO-2	12"	46.19'	0.50%	SICPP	PO-2	ES-P2

PLANNING BOARD HTE# 21-00100006

ROOF LEADERS

NAME	SIZE	LENGTH	SLOPE	MAT.
R1	12"	6.20'	0.50%	SICPP
R2	12"	30.36'	0.00%	SICPP
R2 (1)	12"	35.89'	0.50%	SICPP
R3	12"	42.35'	0.50%	SICPP
R4	12"	26.62'	0.50%	SICPP
R5	12"	6.19'	3.39%	SICPP
R6	12"	6.49'	20.03%	SICPP
R7	12"	13.81'	2.90%	SICPP
R8	12"	13.83'	4.84%	SICPP
R9A	12"	23.82'	5.02%	SICPP
R10	12"	22.32'	5.38%	SICPP
R11	12"	20.68'	6.77%	SICPP
R11A	12"	21.72'	2.58%	SICPP
R13	12"	17.32'	12.24%	SICPP
R14	12"	14.25'	24.56%	SICPP
R15	12"	14.41'	14.93%	SICPP
R16	12"	17.67'	5.66%	SICPP
R16 (1)	12"	32.80'	3.05%	SICPP
R17	12"	19.56'	13.60%	SICPP
R18	12"	18.69'	15.20%	SICPP
R19	12"	18.18'	5.50%	SICPP
R20	12"	18.70'	17.49%	SICPP
R21	12"	18.71'	19.08%	SICPP
R22	12"	18.44'	5.42%	SICPP
R23	12"	6.12'	0.50%	SICPP
R24	12"	53.08'	0.48%	SICPP
R25	12"	22.85'	0.50%	SICPP
R26	12"	23.30'	2.62%	SICPP
R27	12"	6.06'	4.62%	SICPP
R28	12"	6.36'	0.47%	SICPP
R29	12"	17.80'	2.02%	SICPP
R30	12"	68.59'	0.77%	SICPP
R31	12"	18.19'	0.50%	SICPP
R32	12"	30.52'	0.50%	SICPP
R32 (1)	12"	59.85'	0.50%	SICPP
R33	12"	23.06'	3.44%	SICPP
R34	12"	17.41'	2.87%	SICPP
R35	12"	12.75'	0.50%	SICPP
R36	12"	44.17'	0.56%	SICPP
R38	12"	34.45'	2.26%	SICPP
R39	12"	19.78'	6.42%	SICPP
R41	12"	11.57'	33.19%	SICPP
R41A	12"	11.75'	2.17%	SICPP
R42	12"	9.35'	43.42%	SICPP
R43	12"	38.35'	11.55%	SICPP
R44	12"	36.98'	12.98%	SICPP
R48	12"	5.52'	27.91%	SICPP
R48A	12"	28.80'	0.39%	SICPP
R49	12"	35.33'	0.33%	SICPP
R50	12"	5.53'	23.51%	SICPP
R51	12"	14.32'	3.49%	SICPP
R52	12"	13.17'	4.63%	SICPP
R53	12"	13.27'	6.71%	SICPP
R54	12"	12.51'	4.00%	SICPP
R55	12"	11.89'	11.27%	SICPP
R55 (1)	12"	11.89'	11.27%	SICPP
R56	12"	10.99'	16.29%	SICPP
R57	12"	8.41'	5.94%	SICPP
R57 (1)	12"	7.91'	6.32%	SICPP
R58	12"	2.64'	18.96%	SICPP
R59	12"	4.50'	0.56%	SICPP
R60	12"	50.00'	0.50%	SICPP
R61	12"	8.65'	26.48%	SICPP
R62	12"	50.00'	0.50%	SICPP
R63	12"	4.50'	6.00%	SICPP
R64	12"	38.59'	0.50%	SICPP
R65	12"	4.50'	11.56%	SICPP
R66	12"	6.99'	10.15%	SICPP
R67	12"	16.24'	3.08%	SICPP

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINO · 088870 · LICENSED PROFESSIONAL ENGINEER

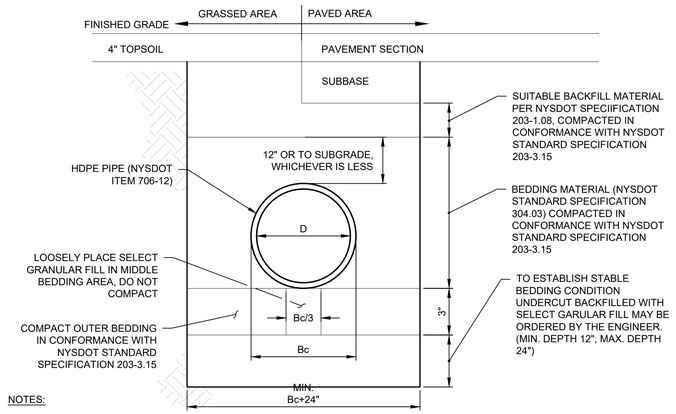
DRAWING TITLE

DRAINAGE TABLES

DRAWING NUMBER

GR-13

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\DRAWINGS\SHEET FILES\18641.00 GENC-PROF.DWG

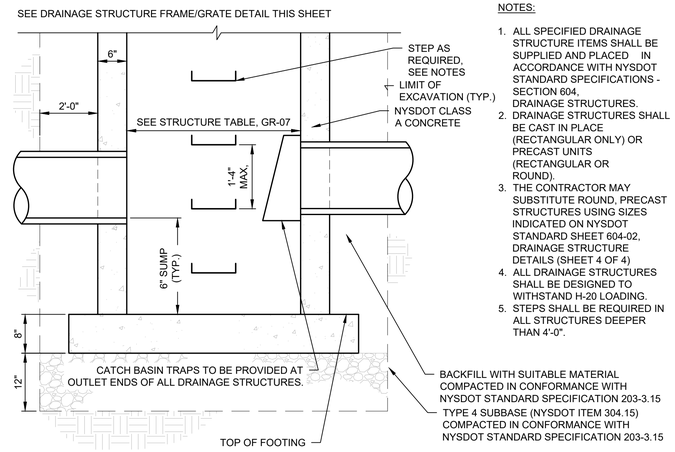


NOTES:

1. BRACING, SHEETING OR SHORING AS REQUIRED BY THE LATEST VERSION OF THE NEW YORK STATE DEPARTMENT OF LABOR AND U.S. DEPARTMENT OF LABOR O.S.H.A. REGULATIONS SHALL BE PREPARED BY A NYS LICENSED PROFESSIONAL ENGINEER.
2. ALL SPECIFIED STORM PIPE ITEMS SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS - SECTION 603, CULVERT AND STORM DRAINS.

STORM PIPE BEDDING

N.T.S.

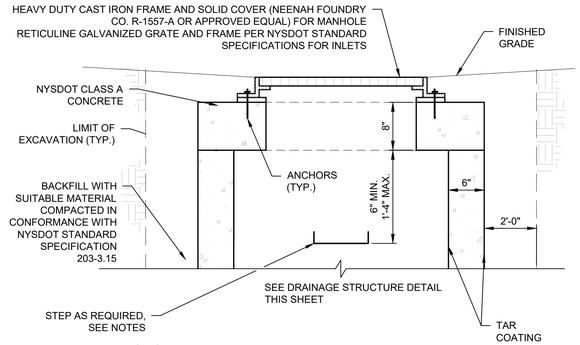


NOTES:

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

DRAINAGE STRUCTURE

N.T.S.



NOTES:

1. ALL SPECIFIED STORM STRUCTURE ITEMS SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS - SECTION 604, DRAINAGE STRUCTURES.
2. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H-20 LOADING.
3. STEPS SHALL BE REQUIRED IN ALL STRUCTURES DEEPER THAN 4'-0".

DRAINAGE STRUCTURE FRAME AND GRATE

N.T.S.

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

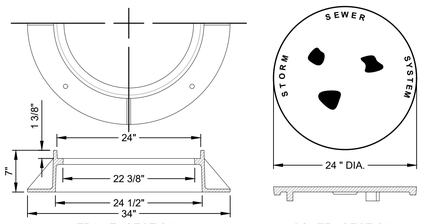
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE



FRAME SECTION

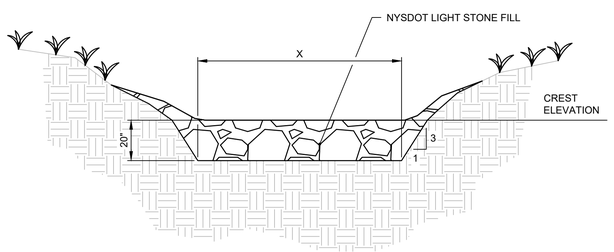
COVER SECTION

NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON CONFORMING TO A.S.T.M. A48 (LATEST REVISION) CLASS 30B.
2. UNITS DESIGNED HEAVY DUTY FOR A.A.S.H.T.O. HS20-44 WHEEL LOADS.
3. EACH FRAME AND COVER SHALL HAVE MACHINED HORIZONTAL BEARING SURFACES.
4. ALL SURFACES TO BE BITUMINOUS COATED

STORM SEWER MANHOLE FRAME & COVER

N.T.S.

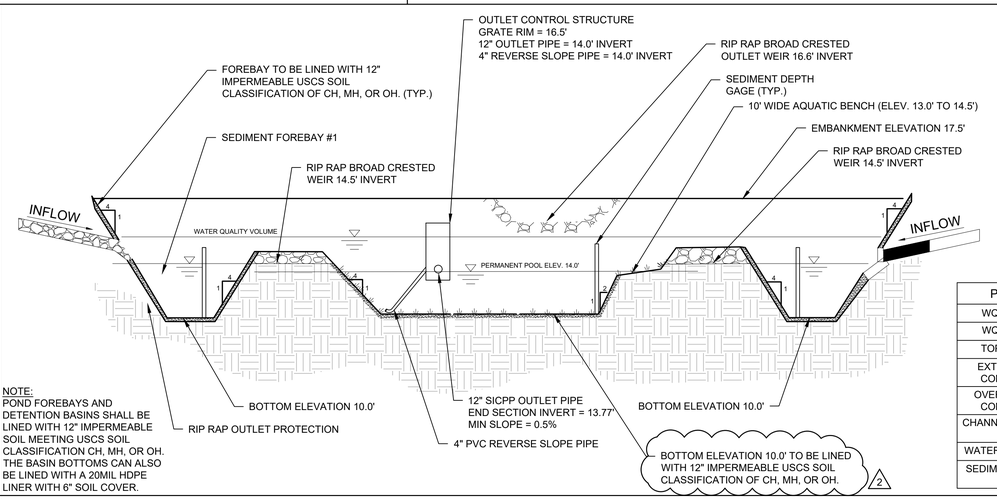


SECTION

POND NO.	SPILLWAY	X (FEET)	SIDE SLOPE	CREST ELEVATION
STORMWATER POND #1	FOREBAY	6	3:1	14.5'
	PERMANENT POOL	6	3:1	16.25'
STORMWATER POND #2	FOREBAY #1	6	3:1	14.5'
	FOREBAY #2	6	3:1	14.5'
	PERMANENT POOL	10	3:1	16.6'

SPILLWAY

N.T.S.

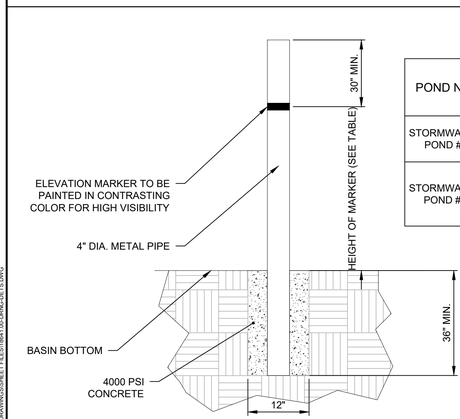


NOTE:
POND FOREBAYS AND DETENTION BASINS SHALL BE LINED WITH 12" IMPERMEABLE SOIL MEETING USCS SOIL CLASSIFICATION CH, MH, OR OH. THE BASIN BOTTOMS CAN ALSO BE LINED WITH A 20MIL HDPE LINER WITH 6" SOIL COVER.

POND #2 STATISTICS	
WQv REQUIRED	13,361 CF
WQv PROVIDED	13,386 CF
TOP ELEVATION	18.10'
EXTREME FLOOD CONTROL ELEV.	17.07'
OVERBANK FLOOD CONTROL ELEV.	16.47'
CHANNEL PROTECTION ELEV.	15.45'
WATER QUALITY ELEV.	14.68'
SEDIMENT CLEANOUT ELEV.	12.0'

RETENTION BASIN #2 DETAIL

N.T.S.

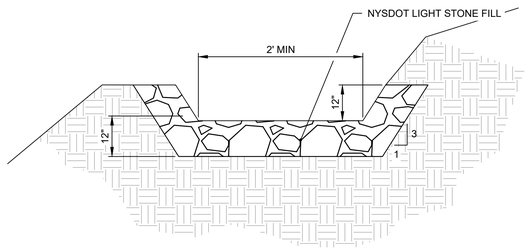


POND NO.	BASIN IDENTIFIER	HEIGHT OF MARKER (FT)
STORMWATER POND #1	PERMANENT POOL	3
	FOREBAY	2
STORMWATER POND #2	PERMANENT POOL	2
	FOREBAY #1	2
	FOREBAY #2	2

NOTES:
1. CONTRACTOR SHALL PLACE A 4" DIA. METAL PIPE AT A MINIMUM OF 36" BELOW THE BASIN BOTTOM ELEVATION ENCASED IN 12" OF 4000 PSI CONCRETE.
2. CONTRACTOR SHALL MARK THE CORRESPONDING ELEVATION FOR SEDIMENT STORAGE CLEANOUT ON THE PVC PIPE TO INDICATE WHEN MAINTENANCE IS REQUIRED.
3. SEDIMENT DEPTH GAUGE REQUIRED FOR SEDIMENT BASINS, FOREBAYS, AND INFILTRATION BASINS.

SEDIMENT DEPTH GAUGE

N.T.S.



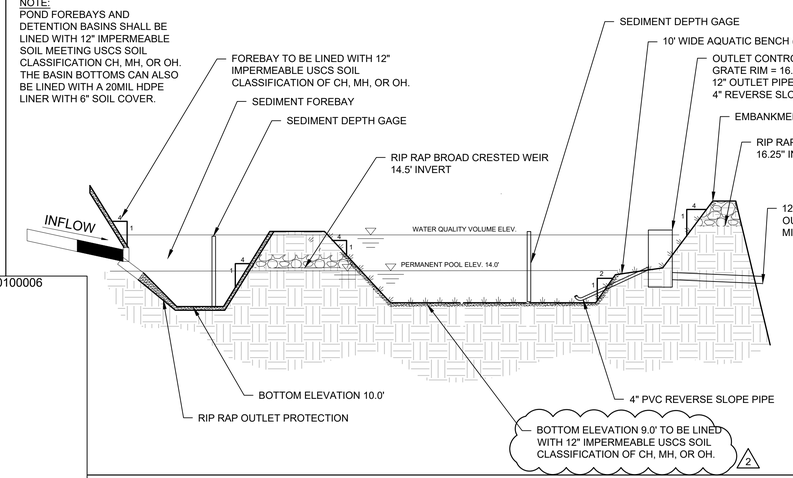
SECTION

TYPICAL DITCH SECTION

N.T.S.

PLANNING BOARD HTE# 21-00100006

NOTE:
POND FOREBAYS AND DETENTION BASINS SHALL BE LINED WITH 12" IMPERMEABLE SOIL MEETING USCS SOIL CLASSIFICATION CH, MH, OR OH. THE BASIN BOTTOMS CAN ALSO BE LINED WITH A 20MIL HDPE LINER WITH 6" SOIL COVER.



POND #1 STATISTICS	
WQv REQUIRED	8,437 CF
WQv PROVIDED	22,131 CF
TOP ELEVATION	17.23'
EXTREME FLOOD CONTROL ELEV.	16.23'
OVERBANK FLOOD CONTROL ELEV.	15.59'
CHANNEL PROTECTION ELEV.	15.0'
WATER QUALITY ELEV.	14.47'
SEDIMENT CLEANOUT ELEV.	12.0'

RETENTION BASIN #1 DETAIL

N.T.S.

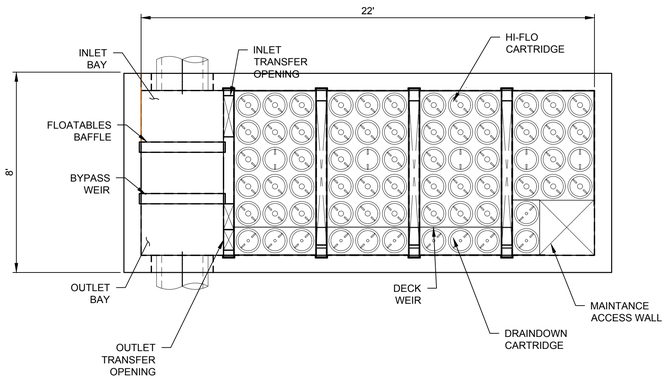
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

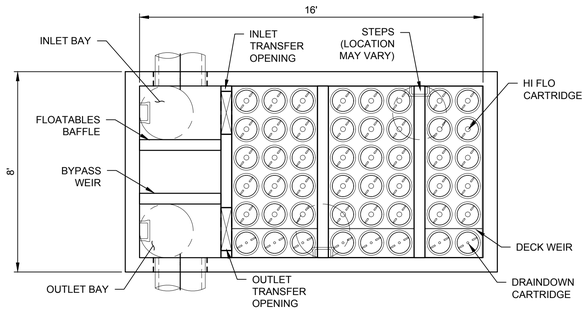
DRAINAGE DETAILS

DRAWING NUMBER

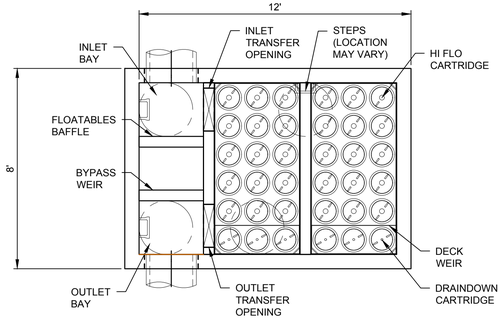
GR-14



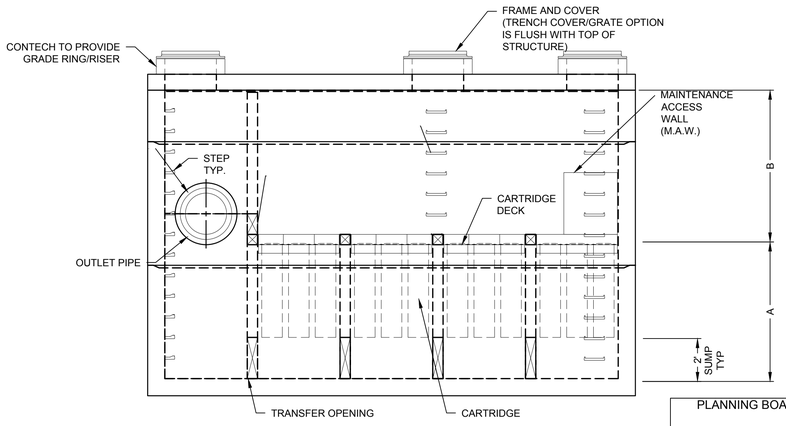
PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



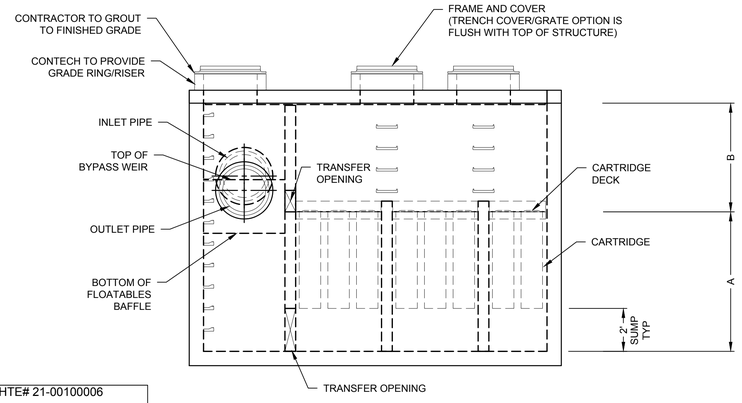
PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

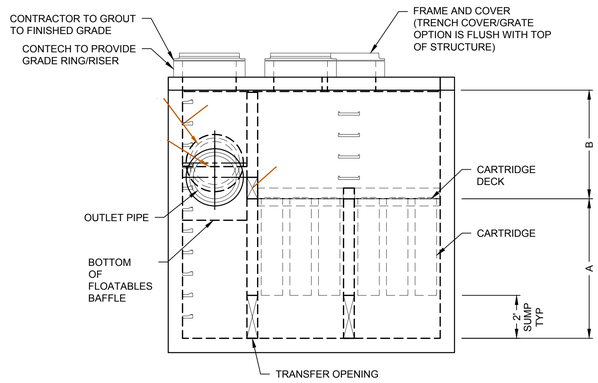
STORMWATER FILTER STRUCTURE TYPE 1
(JFPD0822)

PLANNING BOARD HTE# 21-00100006



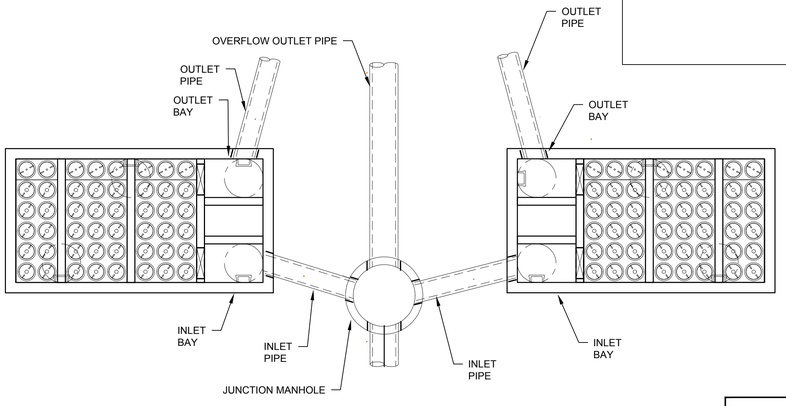
ELEVATION VIEW

STORMWATER FILTER STRUCTURE TYPE 2
(JFPD0816)



ELEVATION VIEW

STORMWATER FILTER STRUCTURE TYPE 3
(JFPD0812)

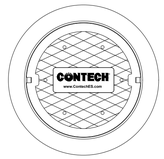


PARALLEL CONFIGURATION

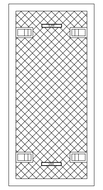
GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC STRUCTURE DESIGN ELEVATIONS SEE THE TABLE ON THIS SHEET.
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 10', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS SHALL CONFORM TO THE DRAINAGE STRUCTURE DETAILS ON DRAWING GR-14.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

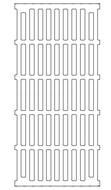
JELLYFISH DESIGN NOTES	
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CONTAINED IN THE PROJECT'S DRAINAGE DESIGN REPORT FOR EACH STRUCTURE.	
CARTRIDGE SELECTION	
CARTRIDGE LENGTH	54"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"
FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089
DECK TO INSIDE TOP (MIN) (B)	5.00



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24"
TRENCH COVER
(LENGTH VARIES)
N.T.S.



24"
TRENCH GRATE
(LENGTH VARIES)
N.T.S.

JELLYFISH STRUCTURE INFORMATION

NO.	STRUCTURE TYPE	DRAINAGE NETWORK	CONFIG.	RIM ELEV.	INV.(S) IN	INV. OUT	WQ FLOW RATE (cfs)	PEAK FLOW RATE (cfs)	RETURN PERIOD OF PEAK FLOW (yrs)	# OF CARTRIDGES REQUIRED (HF/DD)	CARTRIDGE LENGTH
J-1	2	1	SINGLE	13.24	8.53	7.95	7.78	44.3	10	40 / 8	54
J-2	1	2	SINGLE	15.00	8.43	7.93	9.46	25.70	10	49 / 10	54
J-3	1	3	PARALLEL	15.49	9.41	8.90	9.46	24.30	10	49 / 10	54
J-4	1	3	PARALLEL	15.31	9.41	8.91	9.46	24.30	10	49 / 10	54
J-5	3	4	SINGLE	14.62	9.56	9.00	6.48	39.7	10	33 / 7	54
J-6	1	6	PARALLEL	20.66	8.39	7.89	10.35	24.65	10	53 / 11	54
J-7	1	6	PARALLEL	20.64	8.40	7.90	10.35	24.65	10	53 / 11	54
J-8	2	7	PARALLEL	19.11	11.39	10.89	7.50	18.25	10	39 / 8	54
J-9	2	7	PARALLEL	19.22	11.38	10.88	7.50	18.25	10	39 / 8	54

STORMWATER FILTER STRUCTURES
N.T.S.

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
DRAINAGE DETAILS

DRAWING NUMBER
GR-15

STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500 AND STORM TECH MC-4500.
2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
5. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
   a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
   b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
   c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
8. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500/ MC-4500 CHAMBER SYSTEM

1. STORMTECH CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

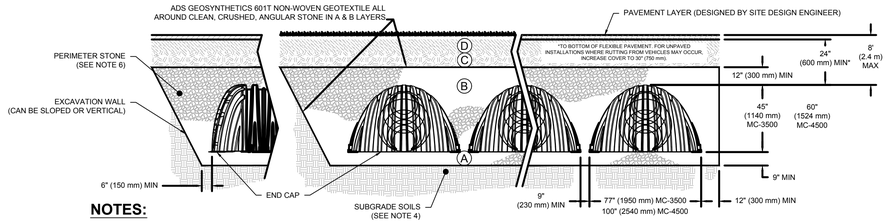
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500/ MC-4500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	ROLL TO ACHIEVE A FLAT SURFACE[2,3]

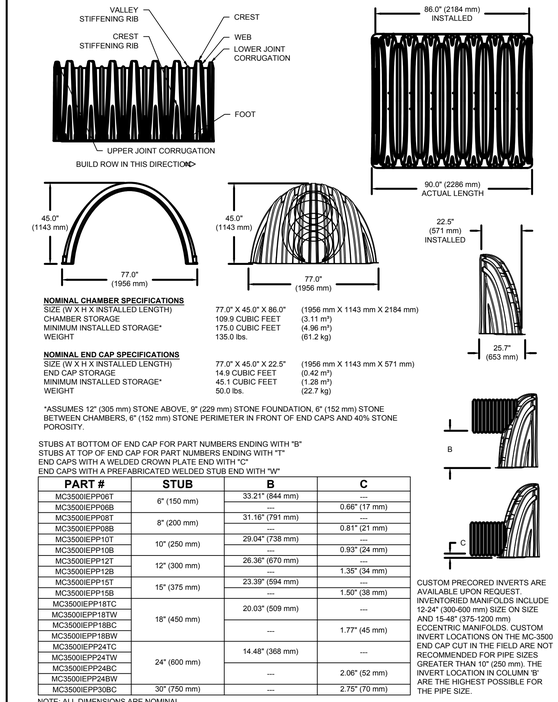
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

1. CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

MC-3500/ MC-4500 CROSS SECTION DETAIL
NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	135.0 lbs.	(61.2 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 22.5"	(1956 mm X 1143 mm X 571 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	50.0 lbs.	(22.7 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

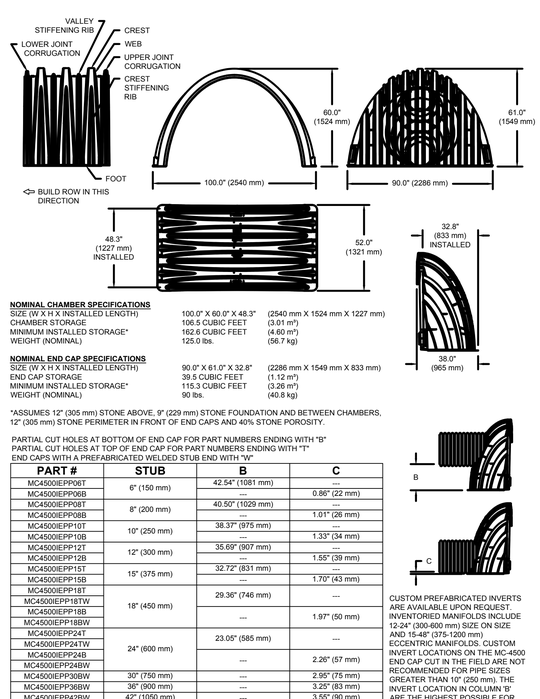
STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

MC-3500 TECHNICAL SPECIFICATIONS
NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 48.3"	(2540 mm X 1524 mm X 1227 mm)
CHAMBER STORAGE	106.5 CUBIC FEET	(3.01 m³)
MINIMUM INSTALLED STORAGE*	162.6 CUBIC FEET	(4.60 m³)
WEIGHT (NOMINAL)	125.0 lbs.	(56.7 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m³)
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET	(3.26 m³)
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

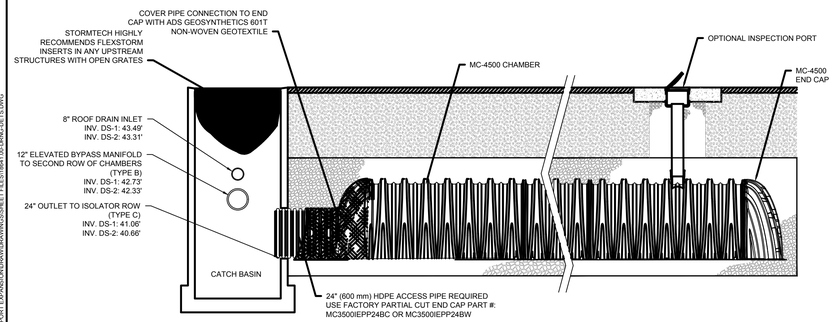
PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC4500IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC4500IEPP06B		---	0.86" (22 mm)
MC4500IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC4500IEPP08B		---	1.01" (26 mm)
MC4500IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC4500IEPP10B		---	1.33" (34 mm)
MC4500IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC4500IEPP12B		---	1.55" (39 mm)
MC4500IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC4500IEPP15B		---	1.70" (43 mm)
MC4500IEPP18T	18" (450 mm)	29.36" (746 mm)	---
MC4500IEPP18TW			
MC4500IEPP18B		---	1.97" (50 mm)
MC4500IEPP18BW			
MC4500IEPP24T	24" (600 mm)	23.05" (585 mm)	---
MC4500IEPP24TW			
MC4500IEPP24B		---	2.26" (57 mm)
MC4500IEPP24BW			
MC4500IEPP30BW	30" (750 mm)	---	2.95" (75 mm)
MC4500IEPP36BW	36" (900 mm)	---	3.25" (83 mm)
MC4500IEPP42BW	42" (1050 mm)	---	3.55" (90 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-4500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

MC-4500 TECHNICAL SPECIFICATIONS
NOT TO SCALE



MC-4500 ISOLATOR ROW PLUS DETAIL
NOT TO SCALE

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

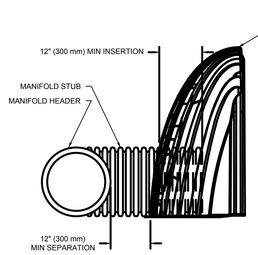
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

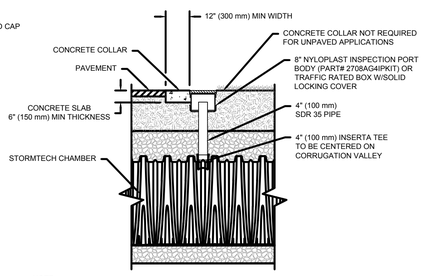
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

PLANNING BOARD HTE# 21-00100006



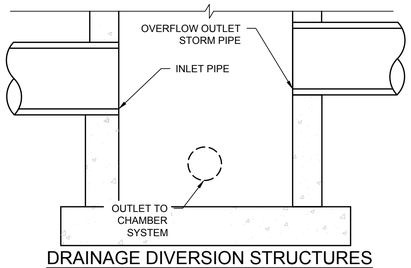
NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-SERIES END CAP INSERTION DETAIL
NOT TO SCALE



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4" PVC INSPECTION PORT DETAIL
NOT TO SCALE



DRAINAGE DIVERSION STRUCTURES
N.T.S.

INFILTRATION CHAMBER SYSTEM DATA							
SYSTEM NO.	SYSTEM TYPE [1]	DRAINAGE NETWORK	CHAMBER INV.	CHAMBER CROWN	WQv STORAGE VOLUME	WQv STORAGE ELEV.	PRE-TREATMENT
CM-1	MC-3500	1	6.75'	10.5'	23,600 FT³	10.0'	J-1
CM-4	MC-3500	4	6.75'	10.5'	20,500 FT³	11.0'	J-5
CM-5	MC-4500	5	6.75'	11.75'	20,300 FT³	12.6'	IS-5 [2]

NOTES:

1. ENGINEER APPROVED EQUAL ALTERNATIVE MANUFACTURER UNDERGROUND STORM WATER STORAGE WILL BE CONSIDERED; IF AN ALTERNATIVE SYSTEM IS PROPOSED, IT SHALL MEET THE SAME PERFORMANCE CRITERIA WITH THE REQUIRED STORAGE VOLUME AT THE STATED WQv ELEVATION.
2. PRE-TREATMENT SHALL BE PROVIDED BY A MC-4500 ISOLATOR ROW OR AN APPROVED EQUAL DEVICE APPROVED BY THE NYSDEC TO PROVIDE PRE-TREATMENT.

STRUCTURE	INLET INVERT/ PIPE SIZE	OUTLET TO CHAMBER/ PIPE SIZE	OVERFLOW OUTLET/ PIPE SIZE
DV-1	7.89/ 36"	7.76/ 18"	10.00/ 36"
DV-4	8.50/ 36"	7.50/ 18"	11.00/ 36"
DV-5	8.68/ 24" 8.28/18"	6.79/ 24"	12.60/ 36"

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

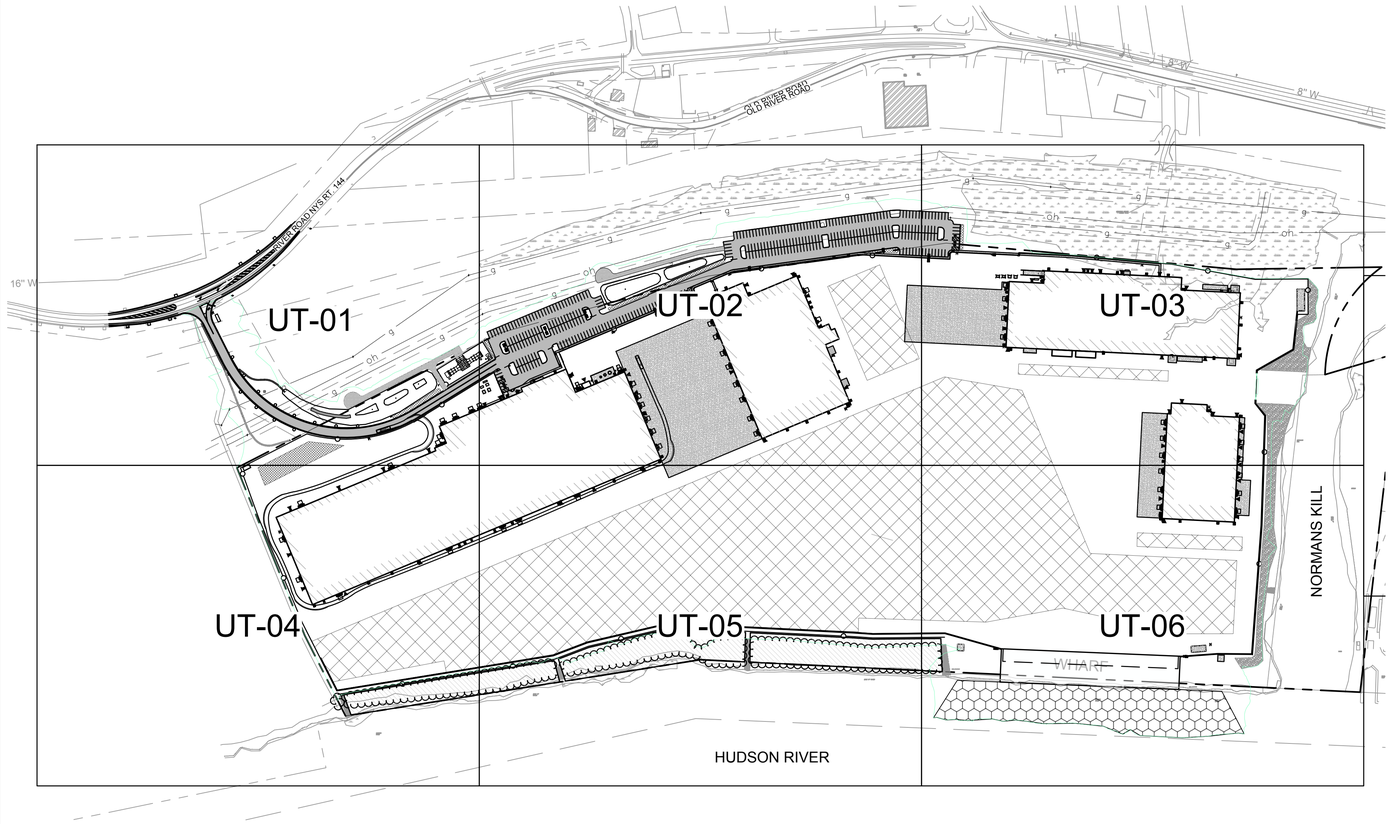
DRAWING TITLE

DRAINAGE DETAILS

DRAWING NUMBER

GR-16

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\SHEET FILES\18641.00-DRNG-DETS.DWG



LEGEND

- PROPERTY LINE
- WETLAND AREA
- STORAGE AREA
- DREDGING AREA
- PAVEMENT AREA
- CONCRETE AREA

PLANNING BOARD HTE# 21-00100006

WATER MAIN INSTALLATION:

1. 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. LOCATIONS WHERE THERE ARE 90° BENDS SHALL BE CONSTRUCTED WITH 2 - 45° FITTINGS.
5. 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 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 TOWN OF BETHLEHEM. 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 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.
10. WATER SERVICE LINES SHALL BE SEPARATED AT LEAST 10 FEET, MEASURED FROM OUTSIDE OF THE PIPES, FROM SEWER MAINS AND SEPTIC SYSTEMS.
11. BACKFLOW PREVENTION SHALL BE PROVIDED IN BUILDING. (SEE BUILDING PLANS)
12. 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 APPROVALS.

WATER MAIN MATERIALS:

1. POLYETHYLENE (PE) PRESSURE PIPE MUST BE PE 3408-DR9 (DOMESTIC) PE 4710-DR11 (FIRE PROTECTION) MATERIAL MINIMUM. CONFORMING TO THE LATEST REVISION OF AWWA C901 AND C906.

WATER SYSTEM TESTS:

1. 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. THE COMPLETED WORKS SHALL BE VERIFIED WITH ALBANY COUNTY HEALTH DEPARTMENT. 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.

SANITARY SEWER NOTES:

2

1. 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 PLANS. ALL 8" PVC SANITARY MAINS SHALL BE SDR 35. UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL 4" PVC SANITARY LINES SHALL BE SDR-21 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3. A MINIMUM OF 4 FEET OF COVER SHALL BE PROVIDED OVER ENTIRE LENGTH OF ALL SANITARY LATERALS.
4. THE TOWN OF BETHLEHEM WATER AND SEWER MANAGER SHALL BE NOTIFIED FORTY-EIGHT HOURS IN ADVANCE OF CONNECTION OR TAP. [518-439-4955].
5. SANITARY SEWER LATERAL(S) AND APPURTENANCES SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE TOWN OF BETHLEHEM.
6. 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.
7. MAXIMUM SPACING BETWEEN CLEANOUTS ON SANITARY LATERALS MAY NOT EXCEED SEVENTY-FIVE (75) FEET.
8. MAXIMUM SPACING BETWEEN SANITARY MANHOLES MAY NOT EXCEED FOUR-HUNDRED (400) FEET.
9. 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.
10. 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/ EXFILTRATION 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.
11. 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.
12. MIN DEFLECTION OF 3" PVC SDR21 ASTM D2241 FORCE MAIN SEWER LINE IS 0.7' FOR 20' LENGTHS.

0 250 500 750 FT

SCALE

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINA · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE

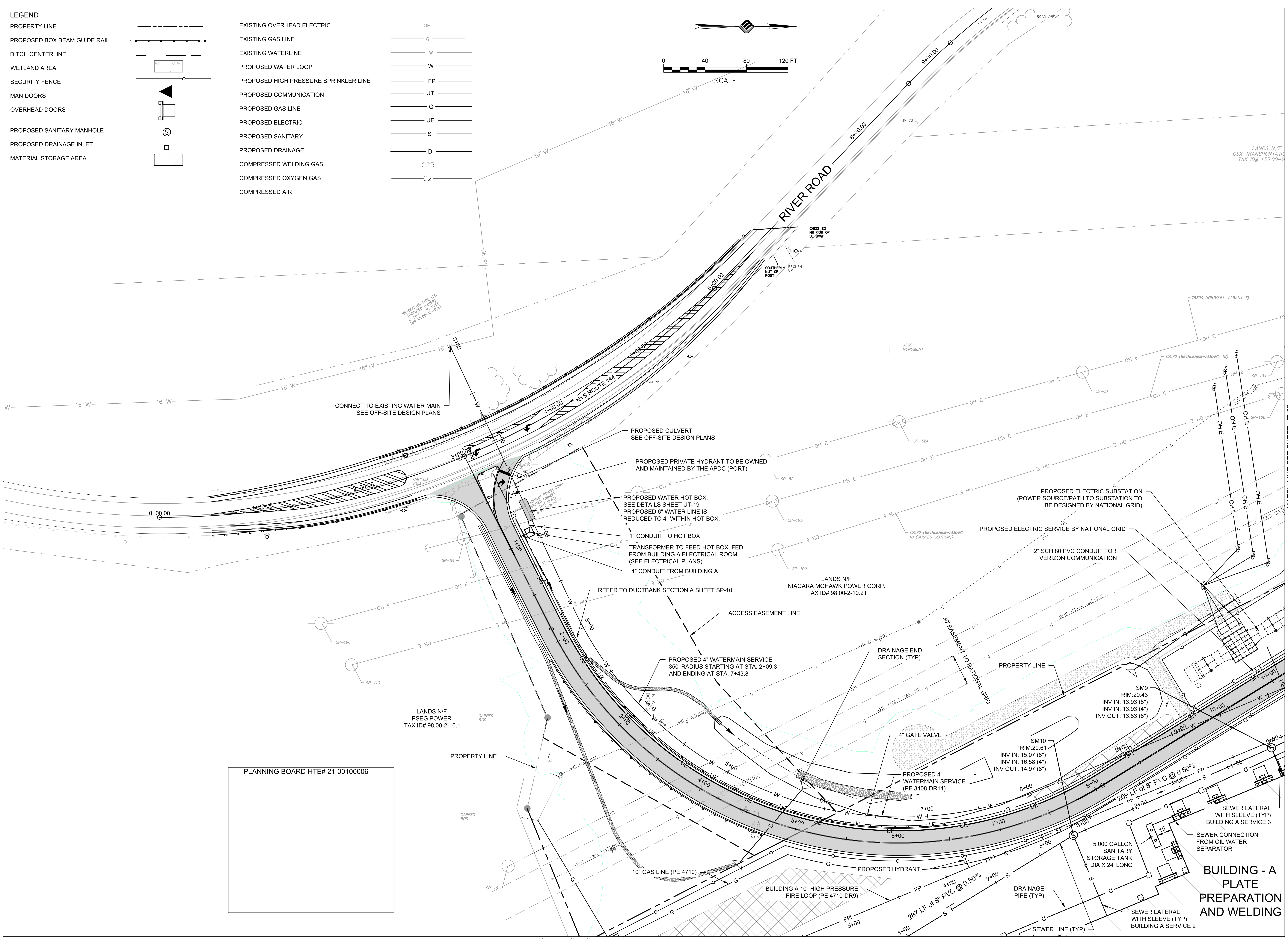
UTILITY NOTES & INDEX

DRAWING NUMBER

UT-00

LEGEND

PROPERTY LINE	
PROPOSED BOX BEAM GUIDE RAIL	
DITCH CENTERLINE	
WETLAND AREA	
SECURITY FENCE	
MAN DOORS	
OVERHEAD DOORS	
PROPOSED SANITARY MANHOLE	
PROPOSED DRAINAGE INLET	
MATERIAL STORAGE AREA	
EXISTING OVERHEAD ELECTRIC	OH
EXISTING GAS LINE	G
EXISTING WATERLINE	W
PROPOSED WATER LOOP	W
PROPOSED HIGH PRESSURE SPRINKLER LINE	FP
PROPOSED COMMUNICATION	UT
PROPOSED GAS LINE	G
PROPOSED ELECTRIC	UE
PROPOSED SANITARY	S
PROPOSED DRAINAGE	D
COMPRESSED WELDING GAS	C25
COMPRESSED OXYGEN GAS	O2
COMPRESSED AIR	



0 40 80 120 FT
SCALE
RIVER ROAD
NYS ROUTE 144
CONNECT TO EXISTING WATER MAIN
SEE OFF-SITE DESIGN PLANS
PROPOSED CULVERT
SEE OFF-SITE DESIGN PLANS
PROPOSED PRIVATE HYDRANT TO BE OWNED AND MAINTAINED BY THE APDC (PORT)
PROPOSED WATER HOT BOX, SEE DETAILS SHEET UT-19
PROPOSED 6" WATER LINE IS REDUCED TO 4" WITHIN HOT BOX.
1" CONDUIT TO HOT BOX
TRANSFORMER TO FEED HOT BOX, FED FROM BUILDING A ELECTRICAL ROOM (SEE ELECTRICAL PLANS)
4" CONDUIT FROM BUILDING A
REFER TO DUCTBANK SECTION A SHEET SP-10
LANDS N/F
NIAGARA MOHAWK POWER CORP.
TAX ID# 98.00-2-10.21
ACCESS EASEMENT LINE
PROPOSED 4" WATERMAIN SERVICE
350' RADIUS STARTING AT STA. 2+09.3
AND ENDING AT STA. 7+43.8
DRAINAGE END SECTION (TYP)
30' EASEMENT TO NATIONAL GRID
PROPERTY LINE
PROPOSED ELECTRIC SUBSTATION
(POWER SOURCE/PATH TO SUBSTATION TO BE DESIGNED BY NATIONAL GRID)
PROPOSED ELECTRIC SERVICE BY NATIONAL GRID
2" SCH 80 PVC CONDUIT FOR VERIZON COMMUNICATION
SM9
RIM:20.43
INV IN: 13.93 (8")
INV IN: 13.93 (4")
INV OUT: 13.83 (8")
SM10
RIM:20.61
INV IN: 15.07 (8")
INV IN: 16.58 (4")
INV OUT: 14.97 (8")
4" GATE VALVE
PROPOSED 4" WATERMAIN SERVICE (PE 3408-DR11)
209 LF of 8" PVC @ 0.50%
287 LF of 8" PVC @ 0.50%
LANDS N/F
PSEG POWER
TAX ID# 98.00-2-10.1
PROPERTY LINE
PLANNING BOARD HTE# 21-00100006
10" GAS LINE (PE 4710)
PROPOSED HYDRANT
BUILDING A 10" HIGH PRESSURE FIRE LOOP (PE 4710-DR9)
DRAINAGE PIPE (TYP)
SEWER LINE (TYP)
SEWER LATERAL WITH SLEEVE (TYP) BUILDING A SERVICE 2
5,000 GALLON SANITARY STORAGE TANK 6' DIA X 24' LONG
SEWER CONNECTION FROM OIL WATER SEPARATOR
SEWER LATERAL WITH SLEEVE (TYP) BUILDING A SERVICE 3
BUILDING - A
PLATE PREPARATION AND WELDING
LANDS N/F
CSX TRANSPORTATION
MATCH LINE SEE SHEET UT-02
MATCH LINE SEE SHEET UT-04

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

UTILITY PLAN

DRAWING NUMBER

UT-01

LEGEND

PROPERTY LINE
PROPOSED BOX BEAM GUIDE RAIL
DITCH CENTERLINE
WETLAND AREA
SECURITY FENCE
MAN DOORS
OVERHEAD DOORS
PROPOSED SANITARY MANHOLE
PROPOSED DRAINAGE INLET
MATERIAL STORAGE AREA

EXISTING OVERHEAD ELECTRIC
EXISTING GAS LINE
EXISTING WATERLINE
PROPOSED WATER LOOP
PROPOSED HIGH PRESSURE SPRINKLER LINE
PROPOSED COMMUNICATION
PROPOSED GAS LINE
PROPOSED ELECTRIC
PROPOSED SANITARY
PROPOSED DRAINAGE
COMPRESSED WELDING GAS
COMPRESSED OXYGEN GAS
COMPRESSED AIR

UTILITY CORRIDOR VIEW

HIGH PRESSURE FIRE LINE (10")
DOMESTIC WATER LINE (4")
UNDERGROUND COMMUNICATIONS LINE
UNDERGROUND GAS LINE
UNDERGROUND ELECTRIC LINE
SECURITY FENCE
UNDERGROUND COMPRESSED AIR LINE (PE 4710-DR9)
UNDERGROUND WELDING GAS LINE (PE 4710-DR9)
UNDERGROUND OXYGEN LINE (PE 4710-DR9)
SANITARY LINE

EXISTING WETLANDS
LANDS N/F NIAGARA MOHAWK POWER CORP. TAX ID# 98.00-2-10.21
LANDS N/F NIAGARA MOHAWK POWER CORP. L.2701, P.296 TAX ID# 98.00-2-10.21
PROPERTY LINE
EASEMENT L.2516 P.311
PROPOSED 4" DOMESTIC LINE (PE 3408-DR11)
(2) #10, #8G IN 1" CONDUIT
ELECTRIC/ COMMUNICATION MANHOLE (TYP)
6" GAS LINE (PE 4710)
11.5° BEND
10"X10"X10" TEE
4"X4"X2" TEE
PROPOSED HYDRANT
REFER TO DUCTBANK SECTION C SHEET SP-10
PROPOSED UNDERGROUND COMMUNICATION LINE
BASIS OF DESIGN: LITHONIA LIGHTING RSX2 LED P4 50K R3 MVOLT SPA SF NLTAIR2 PIRHN (FINISH TO BE DETERMINED) POLE: LITHONIA SSA 25 6G DM19AS/DM29AS UL (FINISH TO MATCH FIXTURE HEAD), (TYPICAL FOR ALL LIGHT POLES)
170 LF of 8" PVC @ 0.50%
COMPRESSED WELDING GAS (PE 4710-DR9)
PROPOSED UNDERGROUND COMPRESSED AIR LINE (PE 4710-DR9)
REFER TO DUCTBANK SECTION D SHEET SP-10
SANITARY CLEANOUT
PROPOSED SANITARY FORCE MAIN
4" GATE VALVE (TYP.)
NATURAL GAS CONNECTION
SANITARY SEWER LATERAL BUILDING B SERVICE 1
2" DOMESTIC WATER SERVICE CONNECTION (PE 3408-DR11)
10" HIGH PRESSURE SPRINKLER LINE (PE 3408-DR11)
REFER TO DUCTBANK SECTION B SHEET SP-10
PROPOSED 10" HIGH PRESSURE FIRE LINE (PE 3408-DR11)
PROPOSED ELECTRIC SUBSTATION SHELTER
2 EV LEVEL 2 CHARGING STATIONS (2 PORTS PER PEDESTAL)
ELECTRIC HANDHOLE
4"X4"X4" TEE
PROPOSED NATURAL GAS LINE
PROPOSED HYDRANT
PROPOSED 4" DOMESTIC LINE (PE 3408-DR11)
SEE DRAWING P-411A, DETAIL 3 FOR GAS PIPING TO EMERGENCY GENERATOR
10"X10"X10" TEE
231 LF of 8" PVC @ 0.50%
4" GATE VALVE
8" GAS LINE (PE 4710)
PROPOSED SEWER LINE
PROPOSED HYDRANT
8" GAS LINE (PE 4710)
SM7 RIM:20.18 INV IN: 16.04 (4") INV IN: 12.09 (8") INV OUT: 11.99 (8")
SANITARY SEWER LATERAL WITH SLEEVE (TYP) BUILDING A SERVICE 7
SANITARY SEWER LATERAL WITH SLEEVE (TYP) BUILDING A SERVICE 6
120 LF of 8" PVC @ 0.50%
MAIN EMPLOYEE ENTRANCE
GAS TANK STORAGE AREA
NATURAL GAS CONNECTION
77 LF of 8" PVC @ 0.50%
BUILDING A 10" WATER LOOP (PE 4710-DR9)
SM8 RIM:19.86 INV IN: 13.18 (4") INV IN: 13.18 (8") INV OUT: 13.08 (8")
SANITARY SEWER LATERAL WITH SLEEVE (TYP) BUILDING A SERVICE 5
62 LF of 8" PVC @ 0.50%
4" DOMESTIC WATER SERVICE CONNECTION (PE 3408-DR11)
SANITARY SEWER LATERAL WITH SLEEVE (TYP) BUILDING A SERVICE 4
10" HIGH PRESSURE SPRINKLER LINE (PE 4710-DR9)
BUILDING A ELECTRIC TRANSFORMERS
68 LF of 8" PVC @ 0.50%
SANITARY SEWER LIFT STATION
(2) #10, #8G IN 1" CONDUIT
SM5 RIM:20.60 INV IN: 9.88 (8") INV IN: 14.93 (4")
SM6 RIM:20.34 INV IN: 10.83 (8") INV OUT: 10.73 (8")
BUILDING B ELECTRIC TRANSFORMER
DRAINAGE PIPE (TYP)
LANDS N/F ALBANY PORT DISTRICT COMMISSION TAX ID# 98.00-2-10.23
BUILDING - B WELDING FINISHING
BUILDING - A PLATE PREPARATION AND WELDING
SANITARY SEWER LATERAL BUILDING B SERVICE 1
DRAINAGE PIPE (TYP)
PROPOSED HYDRANT
FIRE DEPARTMENT CONNECTION
PROPOSED HYDRANT
PLANNING BOARD HTE# 21-00100006

MATCH LINE SEE SHEET UT-01
MATCH LINE SEE SHEET UT-03
MATCH LINE SEE SHEET UT-05

0 40 80 120 FT
SCALE

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\DRAWING\SHEET FILES\18641.00-UTIL.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK ADAM J FROSINA 088870 LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
UTILITY PLAN

DRAWING NUMBER
UT-02

MATCH LINE SEE SHEET UT-02

EXISTING WETLANDS

UTILITY CORRIDOR VIEW

SIDEWALK
SECURITY FENCE
HIGH PRESSURE FIRE LINE (10")
DOMESTIC WATER LINE (4")
UNDERGROUND COMMUNICATIONS LINE
UNDERGROUND GAS LINE
UNDERGROUND ELECTRIC LINE
UNDERGROUND COMPRESSED AIR LINE (PE 4710-DR9)
SANITARY FORCE MAIN

LEGEND

PROPERTY LINE
PROPOSED BOX BEAM GUIDE RAIL
DITCH CENTERLINE
WETLAND AREA
SECURITY FENCE
MAN DOORS
OVERHEAD DOORS
PROPOSED SANITARY MANHOLE
PROPOSED DRAINAGE INLET
MATERIAL STORAGE AREA

EXISTING OVERHEAD ELECTRIC
EXISTING GAS LINE
EXISTING WATERLINE
PROPOSED WATER LOOP
PROPOSED HIGH PRESSURE SPRINKLER LINE
PROPOSED COMMUNICATION
PROPOSED GAS LINE
PROPOSED ELECTRIC
PROPOSED SANITARY
PROPOSED DRAINAGE
COMPRESSED WELDING GAS
COMPRESSED OXYGEN GAS
COMPRESSED AIR

PROPOSED HYDRANT
10"x10"x10" TEE
(2) #10, #8G IN 1" CONDUIT
BUILDING C ELECTRIC TRANSFORMERS
SANITARY SEWER LATERAL BUILDING C SERVICE 1
COMPRESSED AIR FEED TO BUILDING B (PE 4710-DR9)
BUILDING C 10" WATER FIRE LOOP (PE 4710-DR9)
PROPOSED HYDRANT
LANDS N/F
ALBANY PORT DISTRICT COMMISSION
TAX ID# 98.00-2-10.23
DRAINAGE PIPE (TYP)
FIRE DEPARTMENT CONNECTION
318 LF of 8" PVC @ 0.50%
SM4
RIM:20.69
INV IN: 13.90 (4")
INV OUT: 13.80 (8")
PROPOSED DOMESTIC LINE AND FIRE LINE 150' RADIUS (MIN)
10" HIGH PRESSURE FIRE LINE (PE 4710-DR9)
PROPOSED 4" DOMESTIC LINE (PE 3408-DR11)
10" x 10" x 10" TEE
MANGATE ACCESS
4" x 3" x 2" TEE
6" GAS LINE (PE 4710)
10" HIGH PRESSURE SPRINKLER LINE (PE 4710-DR9)
NATURAL GAS CONNECTION
2" DOMESTIC WATER SERVICE CONNECTION (PE 3408-DR11)
SANITARY SEWER LATERAL BUILDING C SERVICE 2
MAIN EMPLOYEE ENTRANCE
WETLANDS DELINEATED IN APRIL, 2019 (USACE)
SM3
RIM:20.62
INV IN: 12.21 (8")
INV IN: 10.50 (4")
INV OUT: 10.37 (8")
3" GAS LINE (PE 4710)
PROPOSED 3" DOMESTIC LINE (PE 3408-DR11)
REFER TO DUCTBANK SECTION E SHEET SP-10
289 LF of 8" PVC @ 0.50%
3" x 2" TEE
FIRE LINE 90° BEND
ELECTRIC/ COMMUNICATION MANHOLE (TYP)
PROPOSED DOMESTIC WATER LINE 150' RADIUS (MIN)
SM2
RIM:20.62
INV IN: 8.92 (8")
INV IN: 8.82 (8")
INV OUT: 8.72 (8")
PACKAGE TREATMENT PLANT WATER SERVICE (±2")
110 LF of 8" PVC @ 0.50%
SANITARY PACKAGE TREATMENT PLANT
SM1
RIM:20.82
INV IN: 8.17 (8")
SMO1
RIM:20.96
INV OUT: 17.00 (8")
SANITARY PACKAGE TREATMENT PLANT OUTLET SYSTEM
100 LF of 8" PVC @ 0.66%
SMO6
RIM:20.21
INV IN: 16.34 (8")
INV OUT: 16.24 (8")
236 LF of 8" PVC @ 0.50%
114 LF of 8" PVC @ 0.50%
SECURITY FENCE (TYP.)
SMO7
RIM:19.26
INV IN: 15.67 (8")
INV OUT: 15.57 (8")
111 LF of 8" PVC @ 0.50%
PROPOSED BRIDGE ABUTMENT/ RETAINING WALL
NORMANS KILL

BUILDING - C
BLAST - METALIZATION - PAINT

COMPRESSED AIR FEED TO BUILDING D (PE 4710-DR9)
ELECTRICAL CONDUIT (PVC), COMMUNICATION CONDUIT (PVC), 4" SPARE CONDUIT (PVC) (BETWEEN BUILDING C &D)
DRAINAGE INLET STRUCTURE (TYP)
PROPOSED DOMESTIC LINE 90° BEND
10" x 10" x 10" TEE
SM3
RIM:20.48
INV IN: 15.01 (8")
INV OUT: 14.92 (8")
PROPOSED DOMESTIC LINE AND FIRE LINE 90° BEND
SM13
RIM:20.29
INV IN: 15.98 (4")
INV OUT: 14.35 (8")
10" HIGH PRESSURE FIRE LINE (PE 4710-DR9)
SM12
RIM:19.37
INV IN: 10.10 (8")
INV OUT: 10.00 (8")
PROPOSED 2" DOMESTIC LINE (PE 3408-DR11)
98 LF of 8" PVC @ 0.50%
UTILITY LINES RUN IN STEEL CASING PIPES SEE DETAILS
SEWER LINE IN STEEL CASING PIPE SEE DETAILS
SANITARY SEWER LATERAL BUILDING D SERVICE
3" GAS LINE (PE 4710)
10" x 10" x 10" TEE
PROPOSED HYDRANT
86 LF of 8" PVC @ 0.55%
FIRE DEPARTMENT CONNECTION
45° BEND
DRAINAGE PIPE (TYP)
10" HIGH PRESSURE SPRINKLER LINE (PE 4710-DR9)
SMO2
RIM:20.77
INV IN: 14.43 (8")
INV OUT: 14.33 (8")
SMO5
RIM:20.55
INV IN: 13.85 (8")
INV OUT: 13.75 (8")
2" DOMESTIC WATER SERVICE CONNECTION (PE 3408-DR11)
NATURAL GAS CONNECTION
PROPOSED HYDRANT
10" HIGH PRESSURE FIRE LINE (PE 3408-DR11)
PROPOSED 2" DOMESTIC LINE (PE 3408-DR11)
SECURITY FENCE (TYP.)
297 LF of 8" PVC @ 0.50%

BUILDING - D
INTERNAL ASSEMBLY/ FINISHING

PLANNING BOARD HTE# 21-00100006

MATCH LINE SEE SHEET UT-06

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-UTIL.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

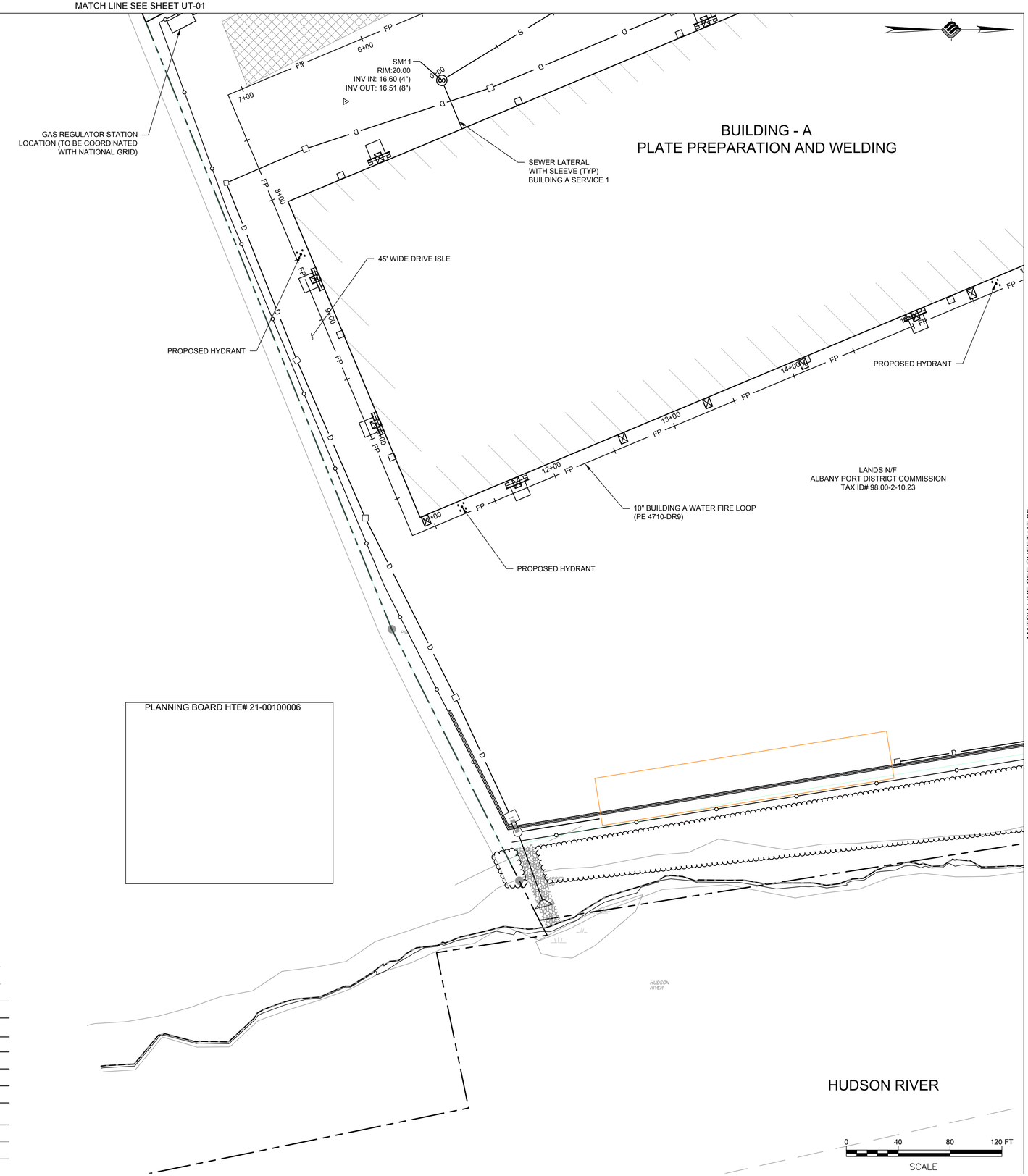
STATE OF NEW YORK
ADAM J FROSINO
LICENSED PROFESSIONAL ENGINEER
088870

DRAWING TITLE
UTILITY PLAN

DRAWING NUMBER
UT-03

0 40 80 120 FT
SCALE

MATCH LINE SEE SHEET UT-01



MATCH LINE SEE SHEET UT-05

LEGEND

PROPERTY LINE		EXISTING OVERHEAD ELECTRIC	OH
PROPOSED BOX BEAM GUIDE RAIL		EXISTING GAS LINE	G
DITCH CENTERLINE		EXISTING WATERLINE	W
WETLAND AREA		PROPOSED WATER LOOP	W
SECURITY FENCE		PROPOSED HIGH PRESSURE SPRINKLER LINE	FP
MAN DOORS		PROPOSED COMMUNICATION	UT
OVERHEAD DOORS		PROPOSED GAS LINE	G
		PROPOSED ELECTRIC	UE
PROPOSED SANITARY MANHOLE	Ⓢ	PROPOSED SANITARY	S
PROPOSED DRAINAGE INLET	□	PROPOSED DRAINAGE	D
MATERIAL STORAGE AREA		COMPRESSED WELDING GAS	C25
		COMPRESSED OXYGEN GAS	O2
		COMPRESSED AIR	

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE

UTILITY PLAN

DRAWING NUMBER

UT-04

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-UTIL.DWG

MATCH LINE SEE SHEET UT-02

BUILDING - A
PLATE PREPARATION AND WELDING

FIRE DEPARTMENT CONNECTION

10" BUILDING A WATER FIRE LOOP
(PE 4710-DR9)

DRAINAGE PIPE (TYP)

PLANNING BOARD HTE# 21-00100006

ROCK BULKHEAD

EDGE OF WATER

HUDSON RIVER

MATCH LINE SEE SHEET UT-04

MATCH LINE SEE SHEET UT-06

LEGEND

PROPERTY LINE	EXISTING OVERHEAD ELECTRIC — OH
PROPOSED BOX BEAM GUIDE RAIL	EXISTING GAS LINE — G
DITCH CENTERLINE	EXISTING WATERLINE — W
WETLAND AREA	PROPOSED WATER LOOP — W
SECURITY FENCE	PROPOSED HIGH PRESSURE SPRINKLER LINE — FP
MAN DOORS	PROPOSED COMMUNICATION — UT
OVERHEAD DOORS	PROPOSED GAS LINE — G
PROPOSED SANITARY MANHOLE	PROPOSED ELECTRIC — UE
PROPOSED DRAINAGE INLET	PROPOSED SANITARY — S
MATERIAL STORAGE AREA	PROPOSED DRAINAGE — D
	COMPRESSED WELDING GAS — C25
	COMPRESSED OXYGEN GAS — O2
	COMPRESSED AIR

0 40 80 120 FT
SCALE

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\DRAWINGS\SHEET FILES\18641.00-UTIL.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINA · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
UTILITY PLAN

DRAWING NUMBER
UT-05

MATCH LINE SEE SHEET UT-03

MATCH LINE SEE SHEET UT-05

BUILDING - D
INTERNAL ASSEMBLY/
FINISHING

SANITARY PACKAGE
TREATMENT PLANT
OUTLET SYSTEM

SMO4
RIM:20.63
INV IN: 12.27 (8")
INV OUT: 10.10 (8")

289 LF of 8" PVC @ 0.50%

DRAINAGE PIPE (TYP)

1" WATER (PE 3408-DR11),
REFER TO DUCTBANK SECTION F SHEET SP-10

NORMANS KILL

PLANNING BOARD HTE# 21-00100006

SMO8
RIM:16.24
INV IN: 8.66 (8")
INV OUT: 8.56 (8")

10" HIGH PRESSURE FIRE LINE (PE 4710-DR9)

PROPOSED HYDRANT

CHECK VALVE/ POST INDICATOR

UTILITY PEDESTAL

16'X40' FIRE PUMP HOUSE

FIRE LINE
90° BEND

1+00

ELECTRIC/ COMMUNICATION MANHOLE (TYP)

PROPOSED WHARF
(SEE SEPARATE WHARF
DESIGN PLANS BY OTHERS)

136 LF of 8" PVC @ 1.43%

SANITARY PACKAGE
TREATMENT PLANT
OUTLET TO THE
HUDSON RIVER

HUDSON RIVER

SCALE 0 40 80 120 FT

LEGEND

PROPERTY LINE	EXISTING OVERHEAD ELECTRIC — OH
PROPOSED BOX BEAM GUIDE RAIL	EXISTING GAS LINE — G
DITCH CENTERLINE	EXISTING WATERLINE — W
WETLAND AREA	PROPOSED WATER LOOP — W
SECURITY FENCE	PROPOSED HIGH PRESSURE SPRINKLER LINE — FP
MAN DOORS	PROPOSED COMMUNICATION — UT
OVERHEAD DOORS	PROPOSED GAS LINE — G
PROPOSED SANITARY MANHOLE	PROPOSED ELECTRIC — UE
PROPOSED DRAINAGE INLET	PROPOSED SANITARY — S
MATERIAL STORAGE AREA	PROPOSED DRAINAGE — D
	COMPRESSED WELDING GAS — C25
	COMPRESSED OXYGEN GAS — O2
	COMPRESSED AIR

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-UTIL.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

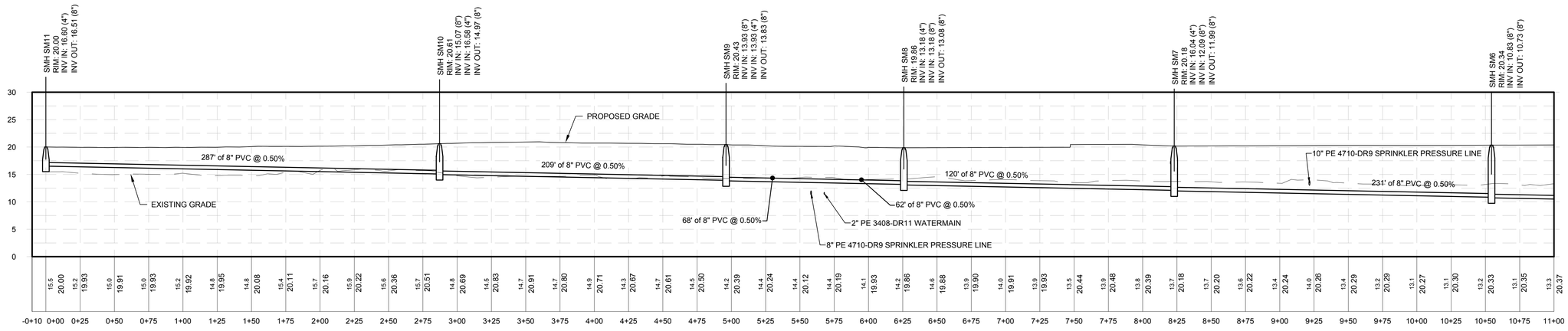
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

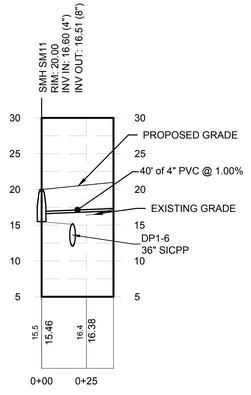
DRAWING TITLE
UTILITY PLAN

DRAWING NUMBER
UT-06

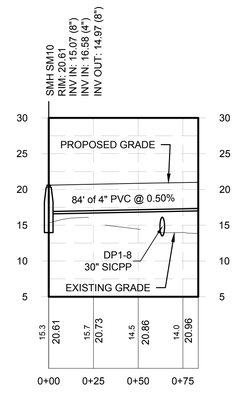


SM11 TO SM6
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

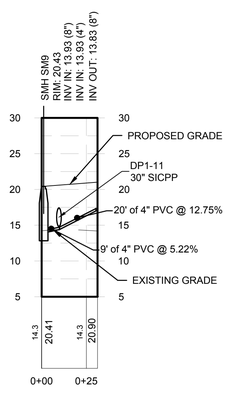
PLANNING BOARD HTE# 21-00100006



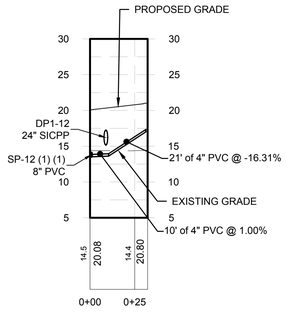
Bldg A service 1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



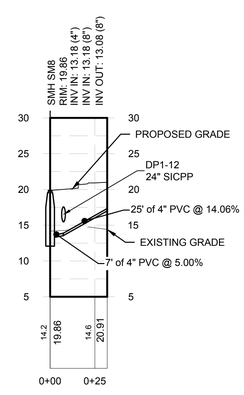
Bldg A service 2
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



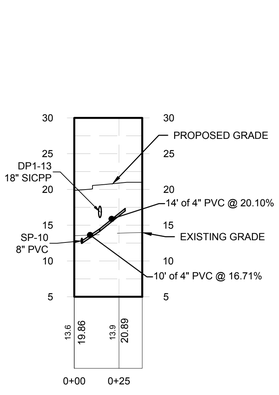
Bldg A- Service 3
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



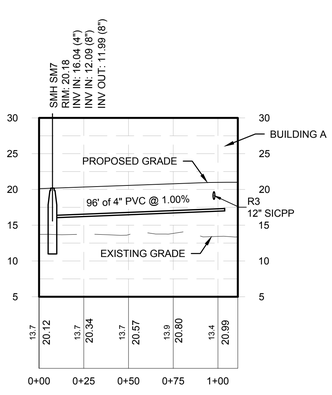
Bldg A- Service 4
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



Bldg A service 5
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



Bldg A- Service 6
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



Bldg A- Service 7
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

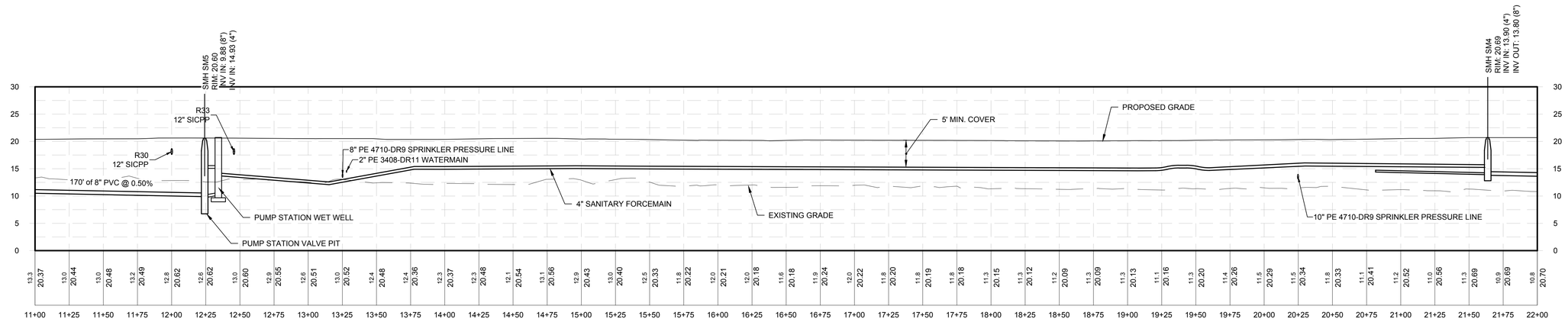
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

ADAM J FROSINOS 088870 LICENSED PROFESSIONAL ENGINEER STATE OF NEW YORK

DRAWING TITLE
SANITARY SYSTEM PROFILE

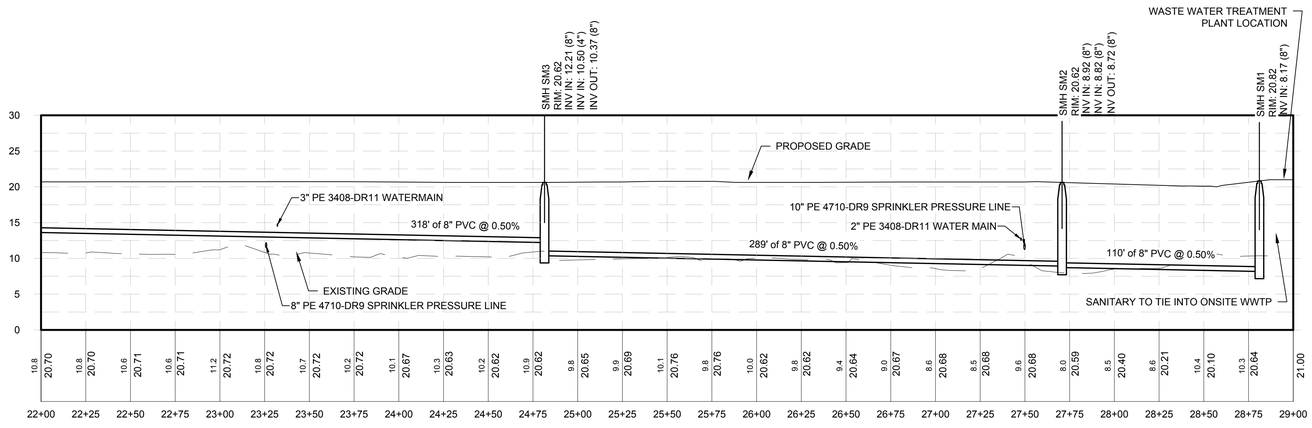
DRAWING NUMBER
UT-07

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-SSWR-PROF.DWG

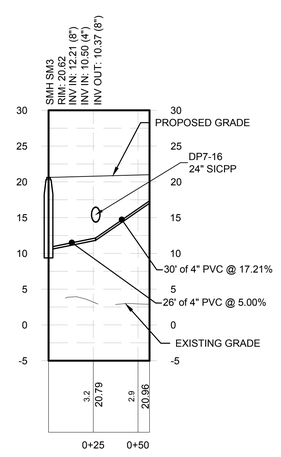


SM5 TO SM4
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

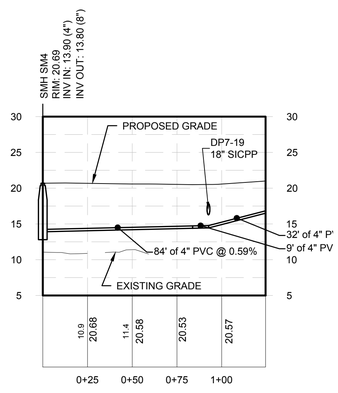
PLANNING BOARD HTE# 21-00100006



SM3 TO SM1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



Bldg C service 2
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



Bldg C service 1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

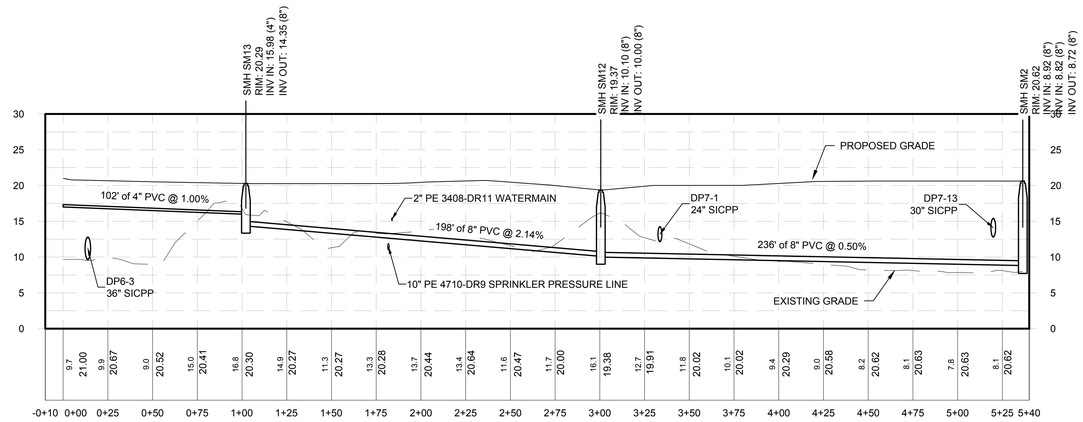
CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

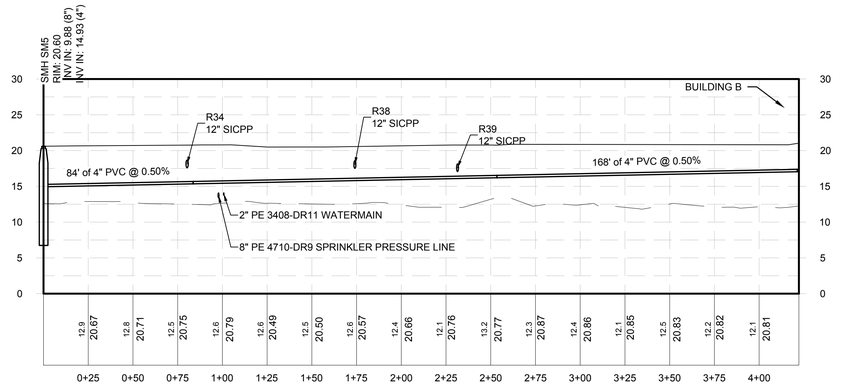
ADAM J FROSINOS — 088870 — LICENSED PROFESSIONAL ENGINEER — STATE OF NEW YORK

DRAWING TITLE
SANITARY SYSTEM PROFILE

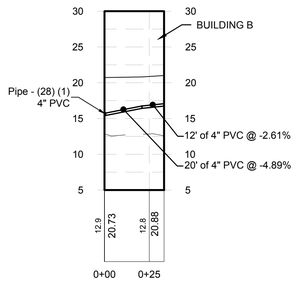
DRAWING NUMBER
UT-08



SM13 TO SM2
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



Bldg B - Service
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



BLDG B SERVICE 1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

STRUCTURE TABLE						
STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
SM1	20.82	8.17		Concentric Cylindrical Structure	1375669.74	689393.32
SM2	20.62	8.92 8.82	8.72	Concentric Cylindrical Structure	1375564.11	689361.57
SM3	20.62	12.21 10.50	10.37	Concentric Cylindrical Structure	1375279.19	689311.41
SM4	20.69	13.90	13.80	Concentric Cylindrical Structure	1374961.80	689295.77
SM5	20.60	9.88 14.93		Concentric Cylindrical Structure	1374035.04	689372.69
SM6	20.34	10.83	10.73	Concentric Cylindrical Structure	1373885.22	689452.44
SM7	20.18	16.04 12.09	11.99	Concentric Cylindrical Structure	1373674.34	689547.82
SM8	19.86	13.18 13.18	13.08	Concentric Cylindrical Structure	1373494.56	689628.88
SM9	20.43	13.93 13.93	13.83	Concentric Cylindrical Structure	1373376.33	689682.17
SM10	20.61	15.07 16.58	14.97	Concentric Cylindrical Structure	1373185.17	689766.52
SM11	20.00	16.60	16.51	Concentric Cylindrical Structure	1372940.09	689916.22
SM12	19.37	10.10	10.00	Concentric Cylindrical Structure	1375554.26	689597.25
SM13	20.29	15.98	14.35	Concentric Cylindrical Structure	1375356.04	689589.29
Structure - (27)	14.22	13.49 13.52	13.49	Null Structure	1373438.09	689654.33
Structure - (29)	13.20	12.48 12.48	12.48	Null Structure	1373604.41	689579.35
Structure - (30)	14.52	14.15	14.15	Null Structure	1373608.27	689588.58
Structure - (31)	13.92	13.55	13.55	Null Structure	1373497.39	689635.65
Structure - (32)	15.72	15.35	15.35	Null Structure	1374114.45	689346.57
Structure - (33)	16.57	16.20	16.20	Null Structure	1374282.54	689322.39
Structure - (34)	12.18	11.81	11.81	Null Structure	1375254.89	689321.47
Structure - (35)	13.99		13.62 13.62	Null Structure	1373441.76	689663.12
Structure - (36)	15.79	15.42	15.42	Null Structure	1374127.90	689344.63
Structure - (47)	16.79	16.42	16.42	Null Structure	1374142.86	689363.11
Structure - (49)	14.82		14.45 14.45	Null Structure	1374878.83	689318.99
Structure - (50)	14.76	14.39	14.39	Null Structure	1374879.25	689310.09
Structure - (51)	14.77	14.40	14.39	Null Structure	1373379.75	689690.35

STRUCTURE TABLE						
STRUCTURE	RIM	INV(S) IN	INV OUT	TYPE	NORTHING	EASTING
SMO1	20.96		17.00	Concentric Cylindrical Structure	1375674.11	689406.12
SMO2	20.77	14.43	14.33	Concentric Cylindrical Structure	1375454.50	689699.41
SMO3	20.48	15.01	14.92	Concentric Cylindrical Structure	1375463.28	689601.90
SMO4	20.63	12.27	10.10	Concentric Cylindrical Structure	1375521.43	690004.82
SMO5	20.55	13.85	13.75	Concentric Cylindrical Structure	1375540.04	689708.21
SMO6	20.21	16.34	16.24	Concentric Cylindrical Structure	1375600.63	689474.56
SMO7	19.26	15.67	15.57	Concentric Cylindrical Structure	1375573.29	689585.46
SMO8	16.24	8.66	8.56	Concentric Cylindrical Structure	1375503.31	690293.58

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	MATERIAL	FROM STRC	TO STRC
Pipe - (22)	4"	8.87'	5.22%	PVC	Structure - (51)	SM9
Pipe - (23)	4"	9.52'	1.00%	PVC	Structure - (35)	Structure - (27)
Pipe - (24)	4"	10.00'	16.71%	PVC	Structure - (30)	Structure - (29)
Pipe - (25)	4"	14.18'	20.10%	PVC	Structure - (30)	
Pipe - (26)	4"	24.56'	14.06%	PVC		Structure - (31)
Pipe - (27)	4"	83.59'	0.50%	PVC	SM5	Structure - (32)
Pipe - (28)	4"	13.60'	0.50%	PVC	Structure - (32)	Structure - (36)
Pipe - (28) (1)	4"	156.23'	0.50%	PVC	Structure - (36)	Structure - (33)
Pipe - (29)	4"	167.83'	0.50%	PVC	Structure - (33)	
Pipe - (30)	4"	30.13'	17.21%	PVC		Structure - (34)
Pipe - (31)	4"	20.73'	-16.31%	PVC	Structure - (35)	
Pipe - (32)	4"	20.43'	-4.89%	PVC		Structure - (47)
Pipe - (33)	4"	12.25'	-2.61%	PVC	Structure - (47)	
Pipe - (40)	4"	31.83'	-6.45%	PVC	Structure - (49)	
Pipe - (41)	4"	8.91'	0.59%	PVC	Structure - (49)	Structure - (50)
Pipe - (42)	4"	20.39'	12.75%	PVC	Structure - (51)	
SP-1	8"	110.30'	0.50%	PVC	SM2	SM1
SP-2	8"	289.30'	0.50%	PVC	SM3	SM2
SP-3	4"	26.30'	5.00%	PVC	Structure - (34)	SM3
SP-4	8"	317.77'	0.50%	PVC	SM4	SM3
SP-5	4"	83.79'	0.59%	PVC	Structure - (50)	SM4
SP-6	8"	169.72'	0.50%	PVC	SM6	SM5
SP-8	8"	231.45'	0.50%	PVC	SM7	SM6
SP-9	4"	96.28'	1.00%	PVC		SM7
SP-10	8"	120.49'	0.50%	PVC	SM8	Structure - (29)
SP-10 (1)	8"	76.71'	0.50%	PVC	Structure - (29)	SM7
SP-11	4"	7.34'	5.00%	PVC	Structure - (31)	SM8
SP-12 (1)	8"	67.75'	0.50%	PVC	SM9	Structure - (27)
SP-12 (1) (1)	8"	61.95'	0.50%	PVC	Structure - (27)	SM8
SP-13	8"	208.94'	0.50%	PVC	SM10	SM9
SP-14	4"	83.57'	0.50%	PVC		SM10
SP-15	8"	287.18'	0.50%	PVC	SM11	SM10
SP-16	4"	40.18'	1.00%	PVC		SM11
SP-17	8"	235.89'	0.50%	PVC	SM12	SM2
SP-18	8"	198.38'	2.14%	PVC	SM13	SM12
SP-19	4"	102.15'	1.00%	PVC		SM13

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	MATERIAL	FROM STRC	TO STRC
SPO-1	8"	100.42'	0.66%	PVC	SMO1	SMO6
SPO-2	8"	114.22'	0.50%	PVC	SMO6	SMO7
SPO-3	8"	111.23'	0.50%	PVC	SMO7	SMO3
SPO-4	8"	97.90'	0.50%	PVC	SMO3	SMO2
SPO-5	8"	86.00'	0.55%	PVC	SMO2	SMO5
SPO-6	8"	297.19'	0.50%	PVC	SMO5	SMO4
SPO-7	8"	289.33'	0.50%	PVC	SMO4	SMO8
SPO-8	8"	135.97'	1.43%	PVC	SMO8	

PLANNING BOARD HTE# 21-00100006

0 40 80 120 FT
SCALE

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
GMP BID SET

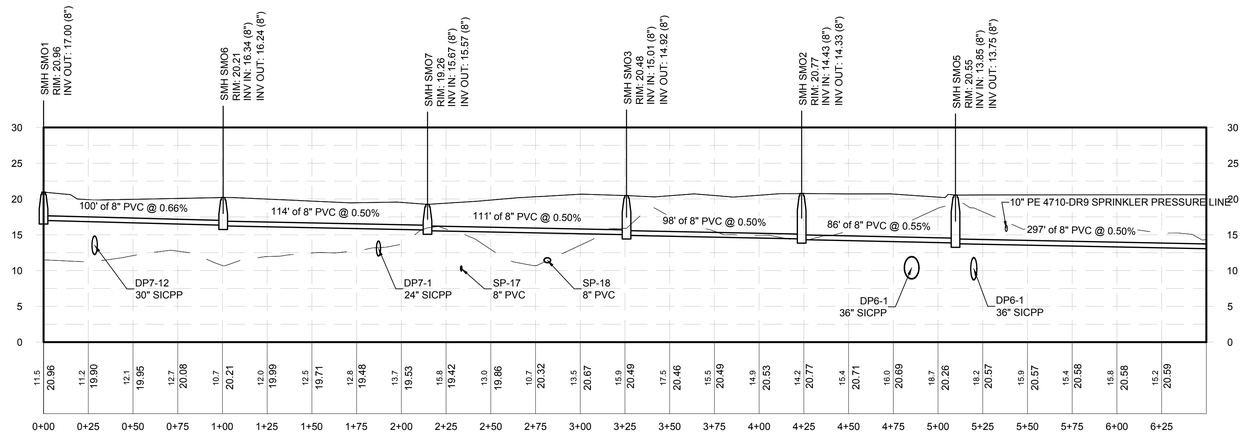
NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

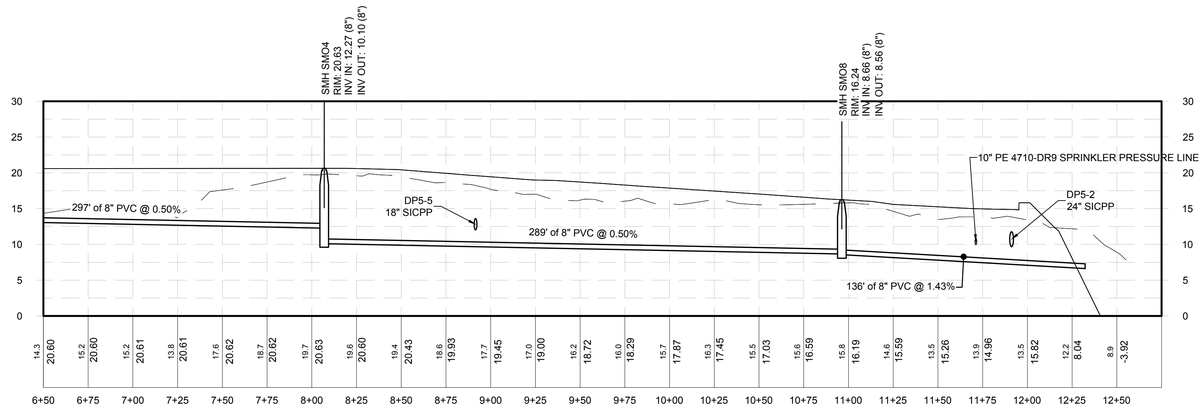
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
SANITARY SYSTEM PROFILE & TABLES

DRAWING NUMBER
UT-09



PACKAGE PLANT OUTLET (1 OF 2)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



PACKAGE PLANT OUTLET (2 OF 2)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

PLANNING BOARD HTE# 21-00100006

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

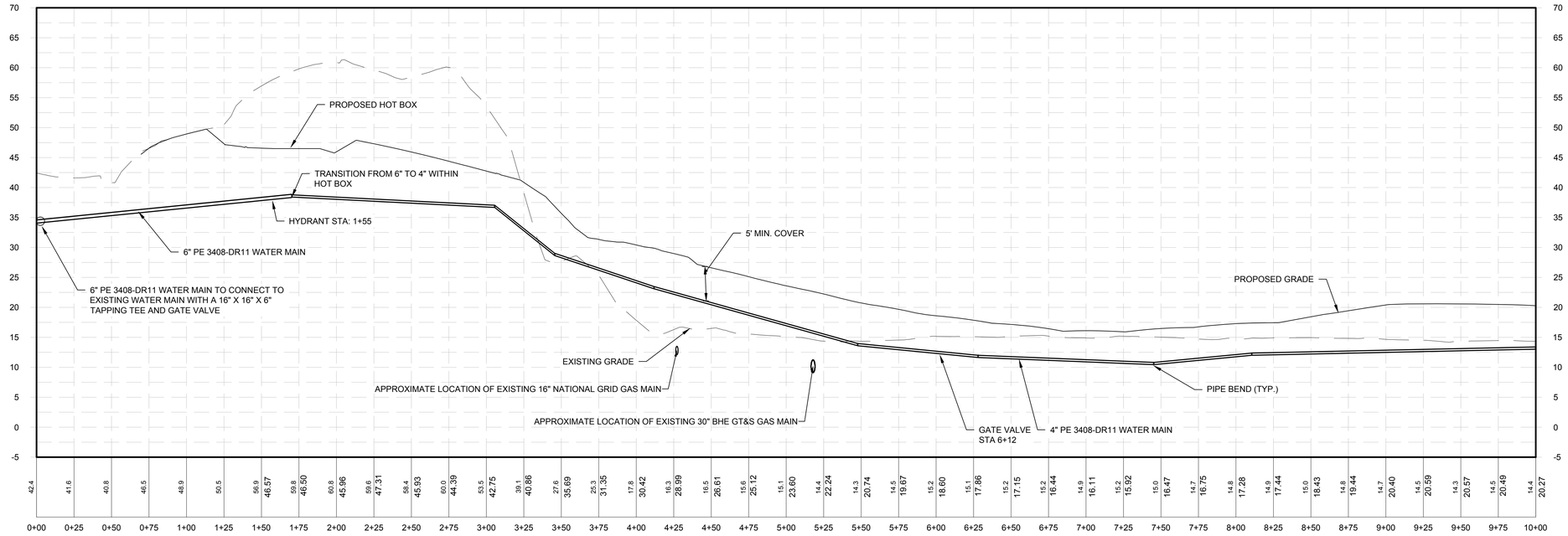
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINOS
088870
LICENSED PROFESSIONAL ENGINEER

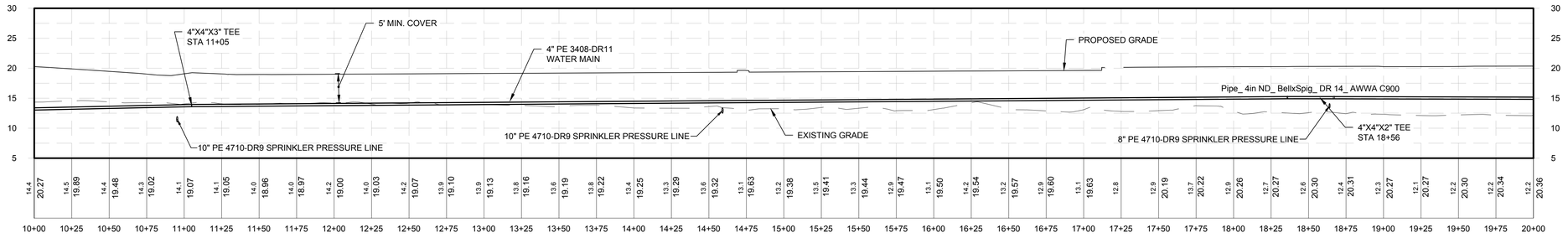
DRAWING TITLE
SANITARY SYSTEM PROFILE

DRAWING NUMBER
UT-09A

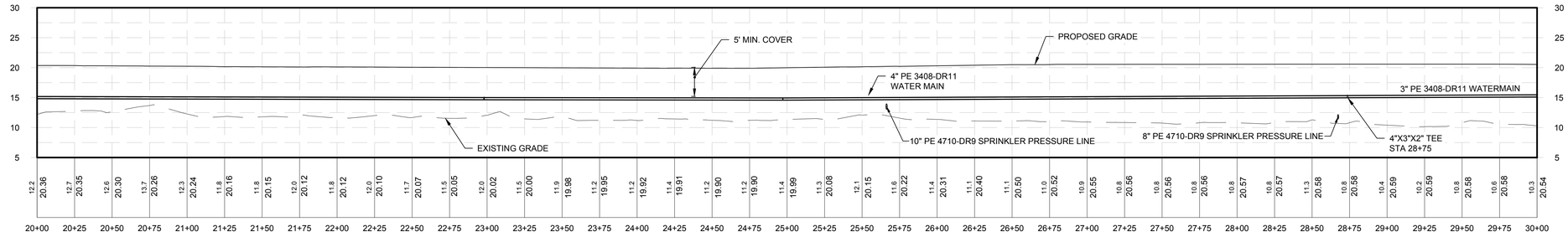
N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\DRAWING\GIS\SHEET FILES\18641.00-SSWR-PROF.DWG



WATER SERVICE (1 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



WATER SERVICE (2 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



WATER SERVICE (3 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

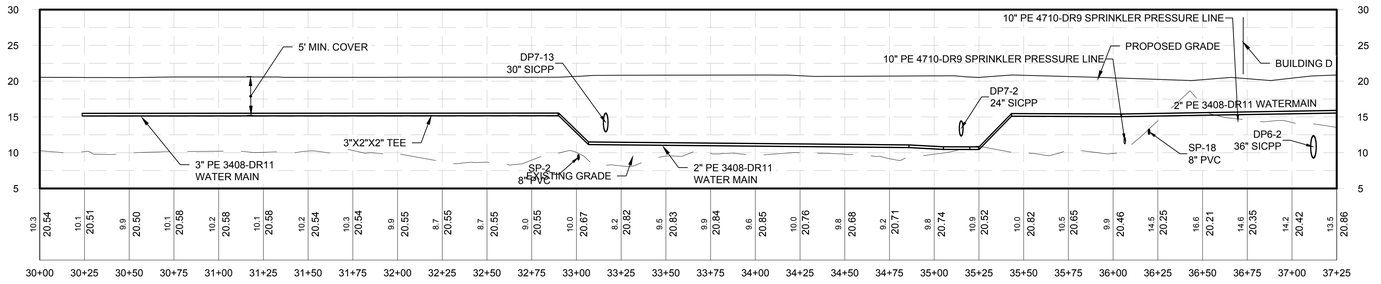
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

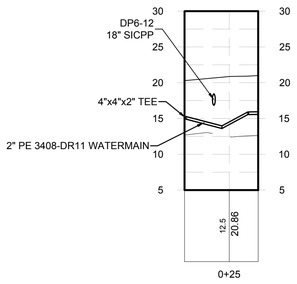
PLANNING BOARD HTE# 21-00100006

DRAWING TITLE
WATER SYSTEM PROFILE

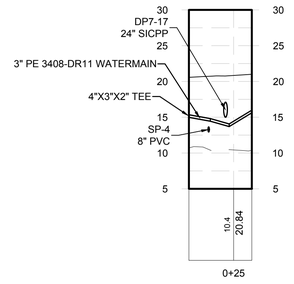
DRAWING NUMBER
UT-10



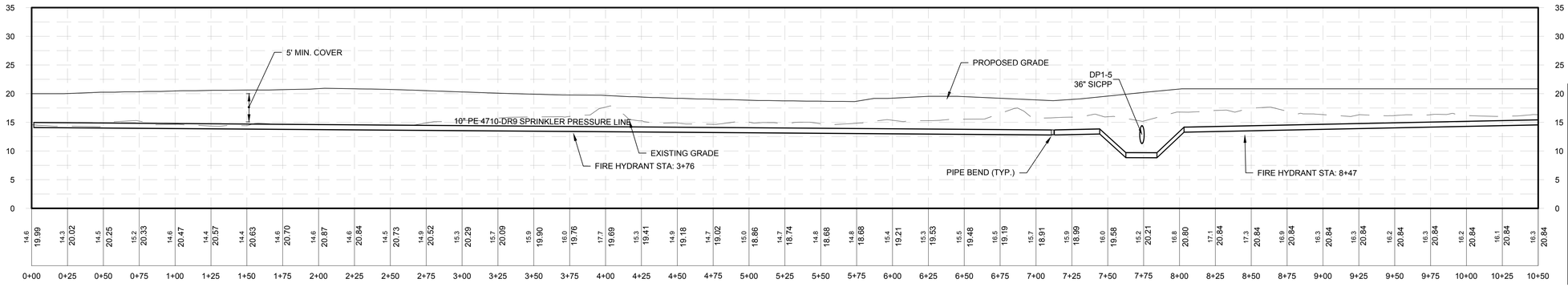
WATER SERVICE (4 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



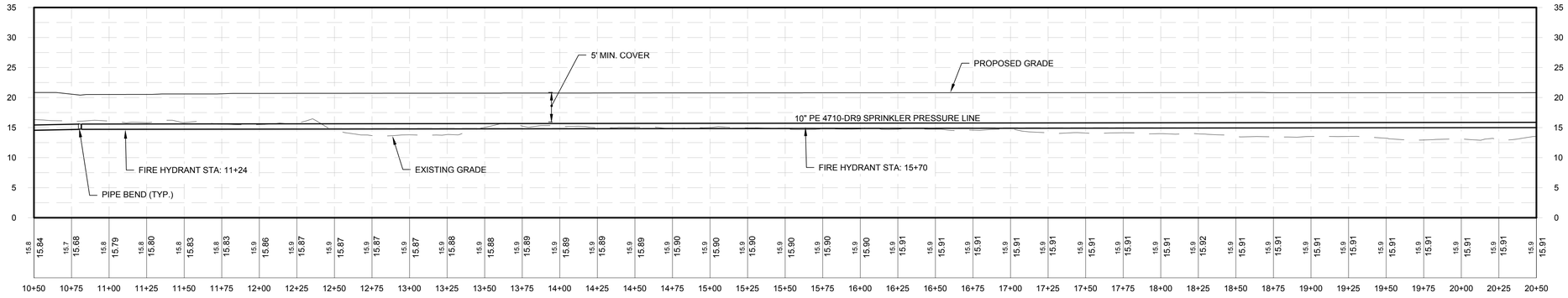
Bldg B service 1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



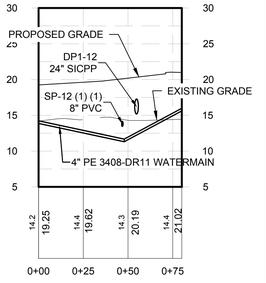
BUILDING C SERVICE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



BUILDING A FIRE LOOP (1 OF 3)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



BUILDING A FIRE LOOP (2 OF 3)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



BLDG A SERVICE 1
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

PLANNING BOARD HTE# 21-00100006

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
GMP BID SET

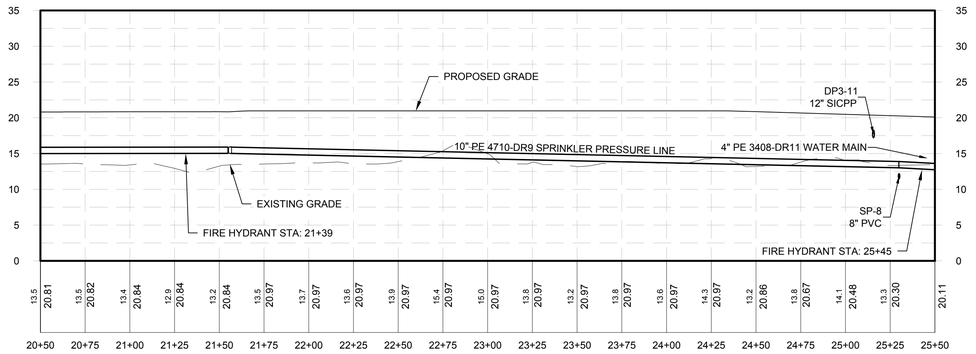
NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

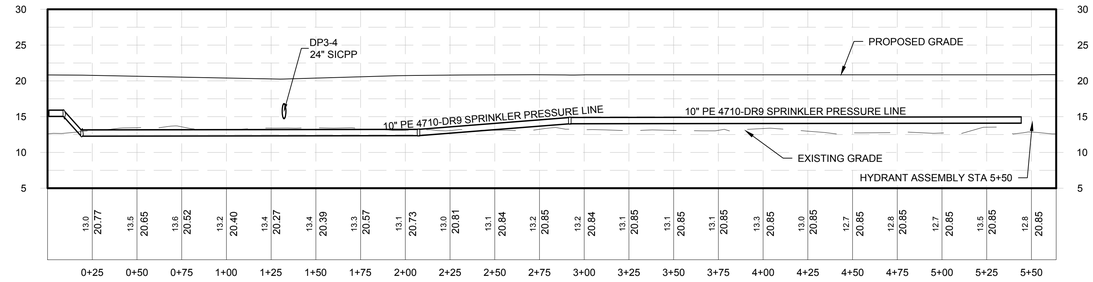
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
WATER SYSTEM PROFILE

DRAWING NUMBER
UT-11

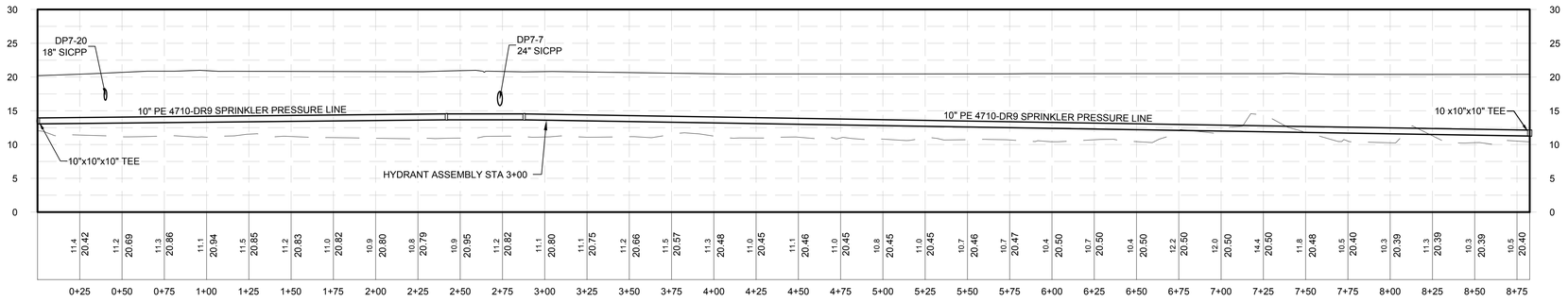


BUILDING A FIRE LOOP (3 OF 3)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

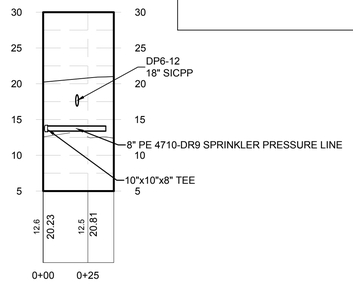


FIRE LINE BLDG A TO NW CORNER OF BLDG B
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

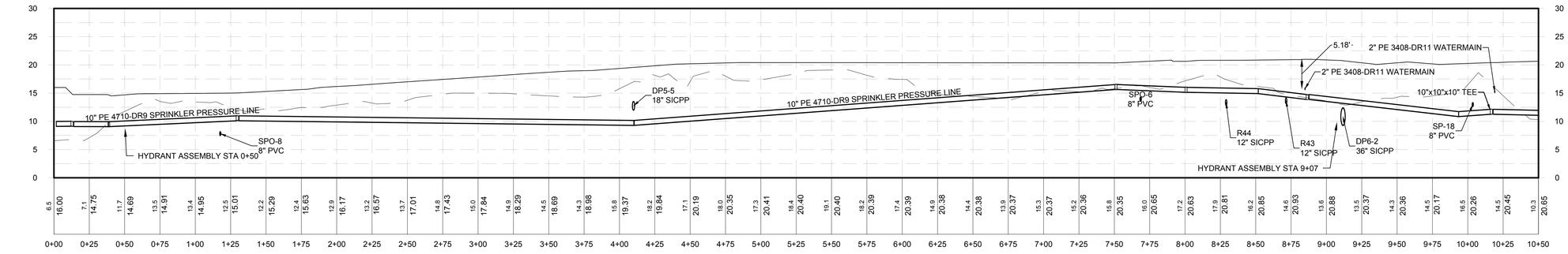
PLANNING BOARD HTE# 21-00100006



BUILDING C FIRE LOOP
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



BUILDNG B FIRE SERVICE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



FIRE TRUNKLINE (1 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

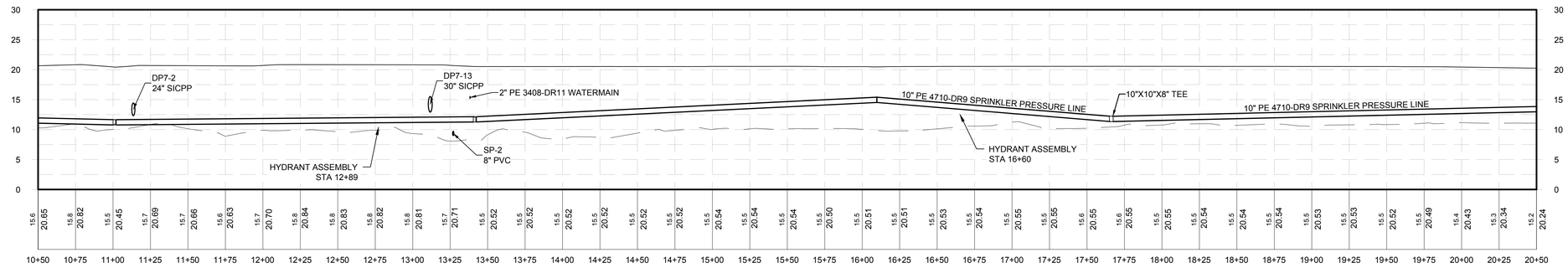
CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

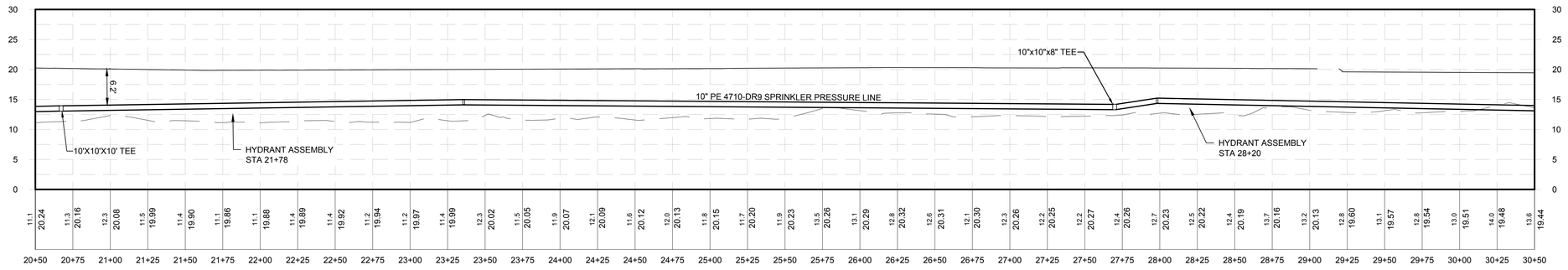
STATE OF NEW YORK
ADAM J FROSINOS
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
WATER SYSTEM PROFILE

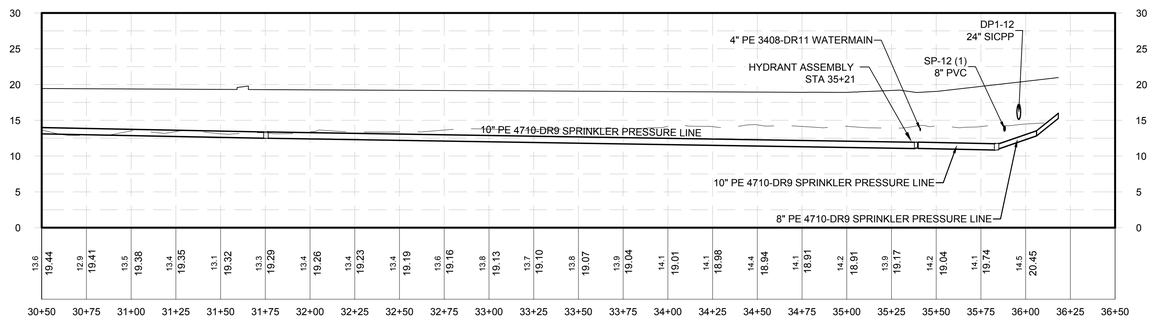
DRAWING NUMBER
UT-12



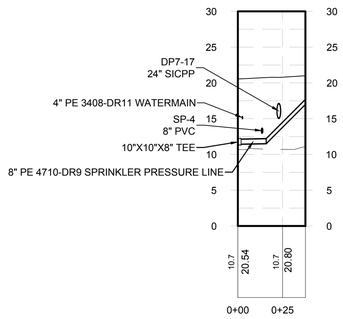
FIRE TRUNKLINE (2 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



FIRE TRUNKLINE (3 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



FIRE TRUNKLINE (4 OF 4)
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'



BUILDING C FIRE SERVICE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 10'

PLANNING BOARD HTE# 21-00100006

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

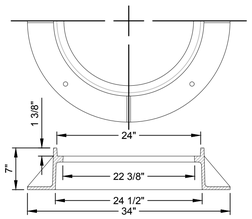
CLIENT:
ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
WATER SYSTEM PROFILE

DRAWING NUMBER
UT-13



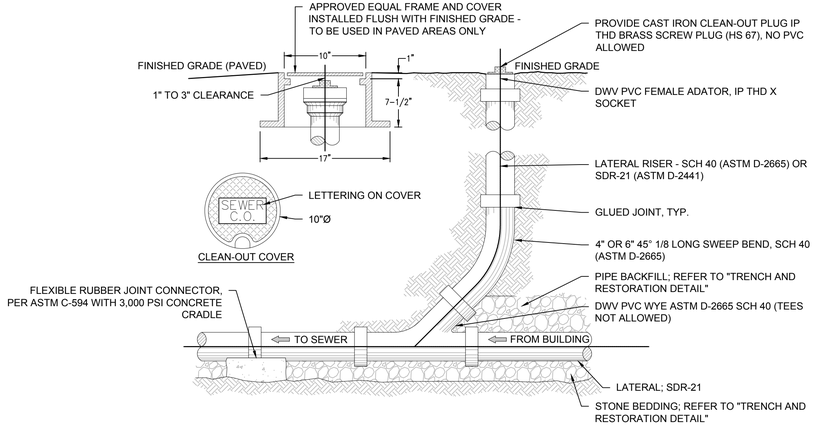
FRAME SECTION

COVER SECTION

NOTES:
1. MATERIAL SHALL BE GRAY CAST IRON CONFORMING TO A.S.T.M. A48 (LATEST REVISION) CLASS 30B.
2. UNITS DESIGNED HEAVY DUTY FOR A.A.S.H.T.O. HS20-44 WHEEL LOADS.
3. EACH FRAME AND COVER SHALL HAVE MACHINED HORIZONTAL BEARING SURFACES.

SANITARY SEWER MANHOLE FRAME & COVER

N.T.S.



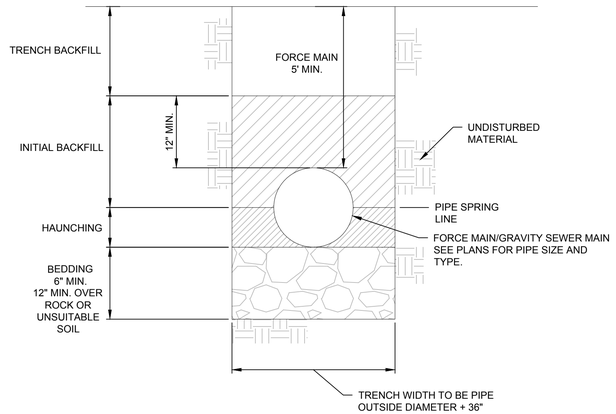
SANITARY SEWER LATERAL CLEAN-OUT

N.T.S.

NOTES:
1. IT IS RECOMMENDED THAT ALL SOLVENT WELD JOINTS BE MADE AS FOLLOWS:
   - CLEAN DRY HUBS AND SPOTS
   - PRIMER APPLIED TO PARTS BEING CONNECTED
   - PVC SOLVENT WELD CEMENT APPLIED DIRECTLY OVER PRIMER
   - PVC TYPE I IS COMPATIBLE FOR SOLVENT WELDING TO SDR-21 OR ANY OTHER PVC TYPE I PIPE MADE TO "STEEL PIPE" OUTSIDE DIMENSIONS
2. FILL SHALL BE PLACED IN 6" LIFTS AND TAMPED AFTER EACH LIFT.
3. AVAILABLE LATERAL/CLEANOUT CONFIGURATIONS:
   - 4" x 4" x 4"
   - 6" x 6" x 6"
   - 6" x 6" X 4"

PLANNING BOARD HTE# 21-00100006

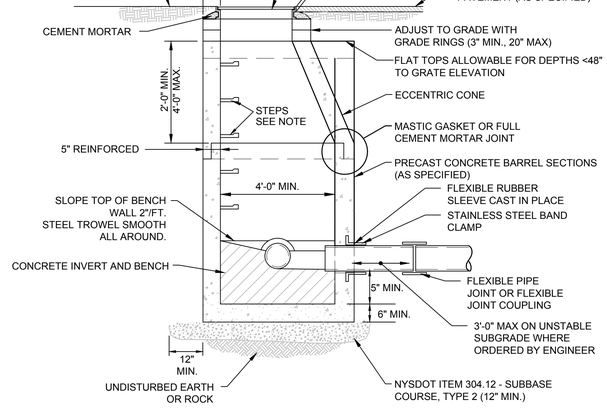
PIPE MATERIALS
SEE UTILITY PLANS FOR
PIPE SIZE AND MATERIAL



NOTES:
1. ALL TRENCHING TO BE IN ACCORDANCE WITH OSHA STANDARDS AND NYS DEPT. OF LABOR INDUSTRIAL CODE 23
2. BEDDING, HAUNCHING AND INITIAL BACKFILL SHALL CONSIST OF #1 AND #2 CRUSHED STONE BEDDING PER NYSDOT SPECIFICATION 703-02
3. TRENCH BACKFILL - BACKFILL UNDER ROADS, DRIVES, SIDEWALKS, CURBS AND UTILITIES SHALL BE SELECT GRANULAR FILL PER NYSDOT SPECIFICATION 203-2.06, PLACED AND COMPACTED IN LIFTS NOT TO EXCEED 6". BACKFILL IN OTHER AREAS SHALL BE A SUITABLE EXCAVATED MATERIAL (NO STONES LARGER THAN 6"), PLACED AND COMPACTED IN LIFTS NO GREATER THAN 6" TO SAFETY COVER.

GRAVITY SEWER MAIN AND FORCE MAIN TRENCH

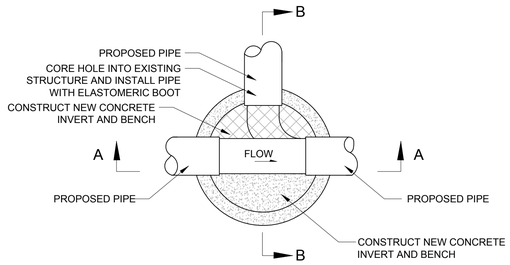
N.T.S.



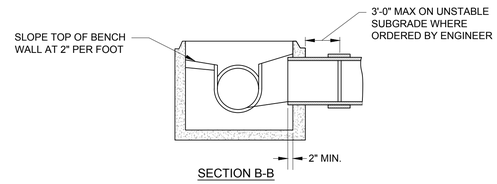
NOTES:
1. ALUMINUM OR PLASTIC MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
2. PRECAST REINFORCED CONCRETE MANHOLE SHALL CONFORM TO ASTM C478.
3. CONCRETE SHALL BE 4000 PSI AT 28 DAYS, 5% AIR ENTRAINED, AND MEET AASHTO H-20 LOADING AS MANUFACTURED BY FORT MILLER CO. OR APPROVED EQUAL.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A615 - A497.

PRECAST CONCRETE GRAVITY SEWER MANHOLE

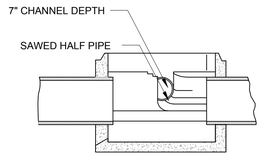
N.T.S.



PLAN



SECTION B-B



SECTION A-A

NOTE:
1. CARE SHALL BE TAKEN TO ENSURE THAT THE INVERTS ARE A SMOOTH CONTINUATION.
2. INVERT AND SHELF SHALL BE CAST-IN-PLACE CONCRETE 3000 PSI MIN. AND AIR ENTRAINED.

SEWER BOTTOM WITH CHANNEL

N.T.S.

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
GMP BID SET

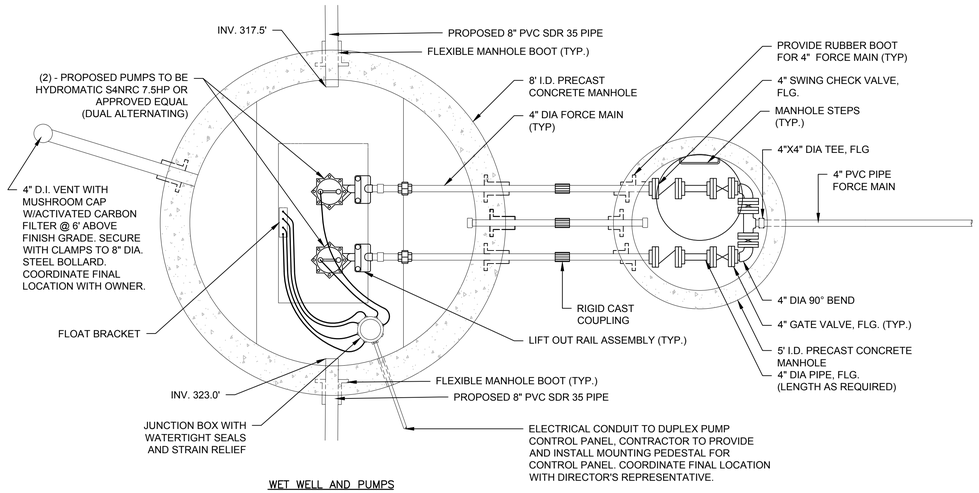
NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

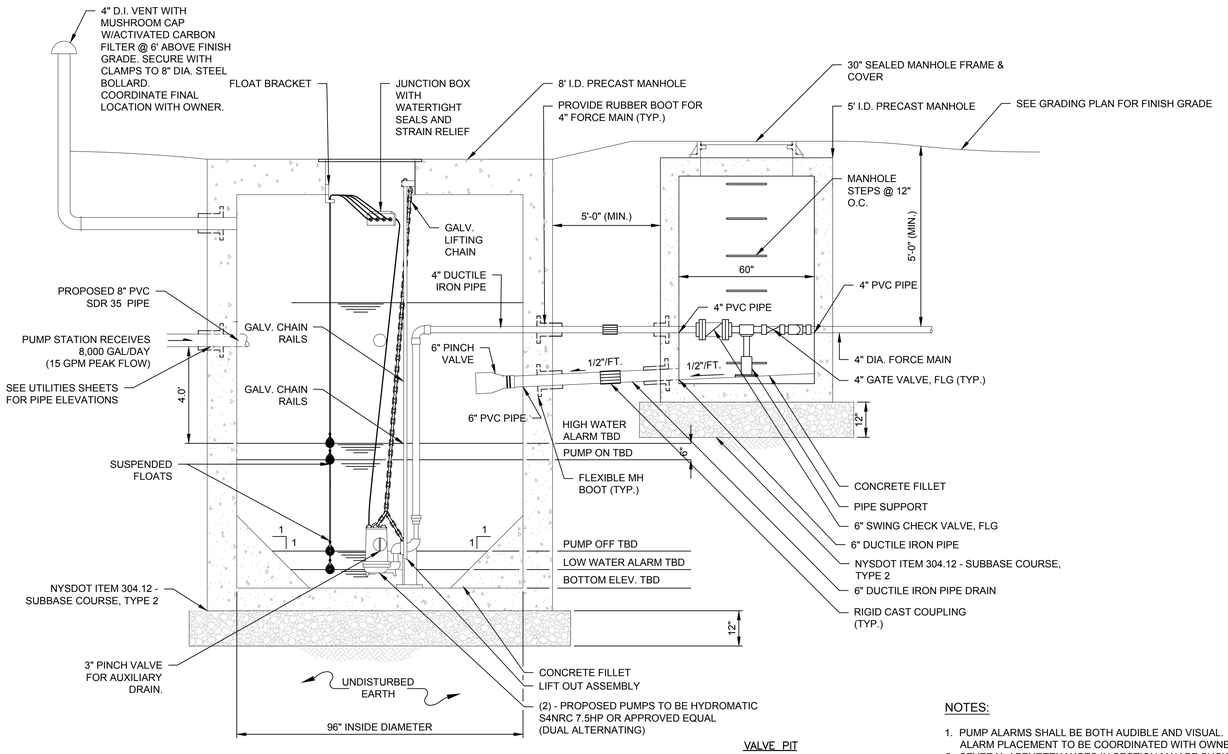
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
SANITARY SYSTEM DETAILS

DRAWING NUMBER
UT-14



PLAN VIEW



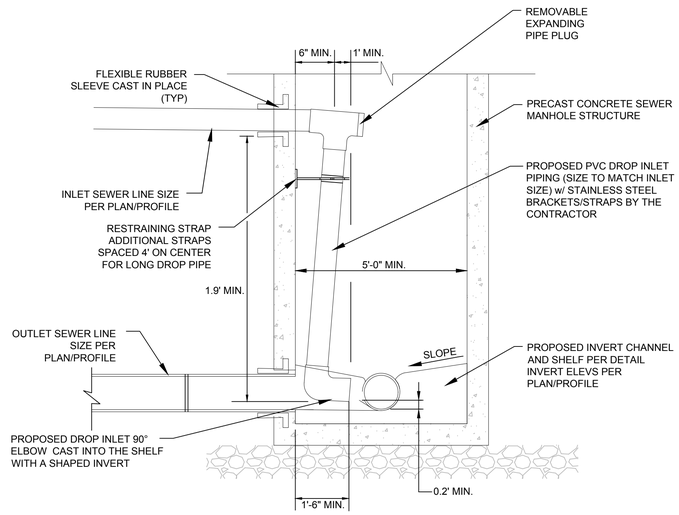
SECTION VIEW

NOTES:

1. PUMP ALARMS SHALL BE BOTH AUDIBLE AND VISUAL. ALARM PLACEMENT TO BE COORDINATED WITH OWNER.
2. SEVERAL APPURTENANCES IN SECTION MAY BE SHOWN OUT OF LOCATION FOR INFORMATIONAL PURPOSES.
3. PUMPS SHALL BE SIZED TO BE DUAL ALTERNATING PUMPS, EACH CAPABLE OF HANDLING PEAK HOURLY FLOWS WITH ONE UNIT OUT OF SERVICE.

PUMP STATION

N.T.S.



DROP MANHOLE

N.T.S.

PLANNING BOARD HTE# 21-00100006

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE

ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

SANITARY SYSTEM DETAILS

DRAWING NUMBER

UT-15

PROCESS DIAGRAM NOTES

1. THE DRAWINGS DEPICTED HEREIN REPRESENT PRELIMINARY LAYOUT(S) OF A WASTEWATER TREATMENT SYSTEM CAPABLE OF TREATING THE DESIGN INFLUENT FLOW AND LOAD TO THE EFFLUENT WATER QUALITY DENOTED IN THE EFFLUENT WASTELOAD SUMMARY.
2. THE PROCESS SCHEMATIC SHOWS THE GENERAL FLOW LAYOUT. SPECIFIC REACTOR COMPONENTS, SIZES, AND CONFIGURATIONS MAY DIFFER. REFER TO ARRANGEMENT DRAWINGS FOR DETAILS.
3. PRELIMINARY BASIN SIZING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. FINAL DESIGN VALUES SHALL BE ESTABLISHED BY THE ENGINEER OF RECORD.
4. SEE THE PROJECT SPECIFIC QUOTE FOR MORE INFORMATION REGARDING SCOPE OF SUPPLY AND CORRESPONDING TERMS AND CONDITIONS.

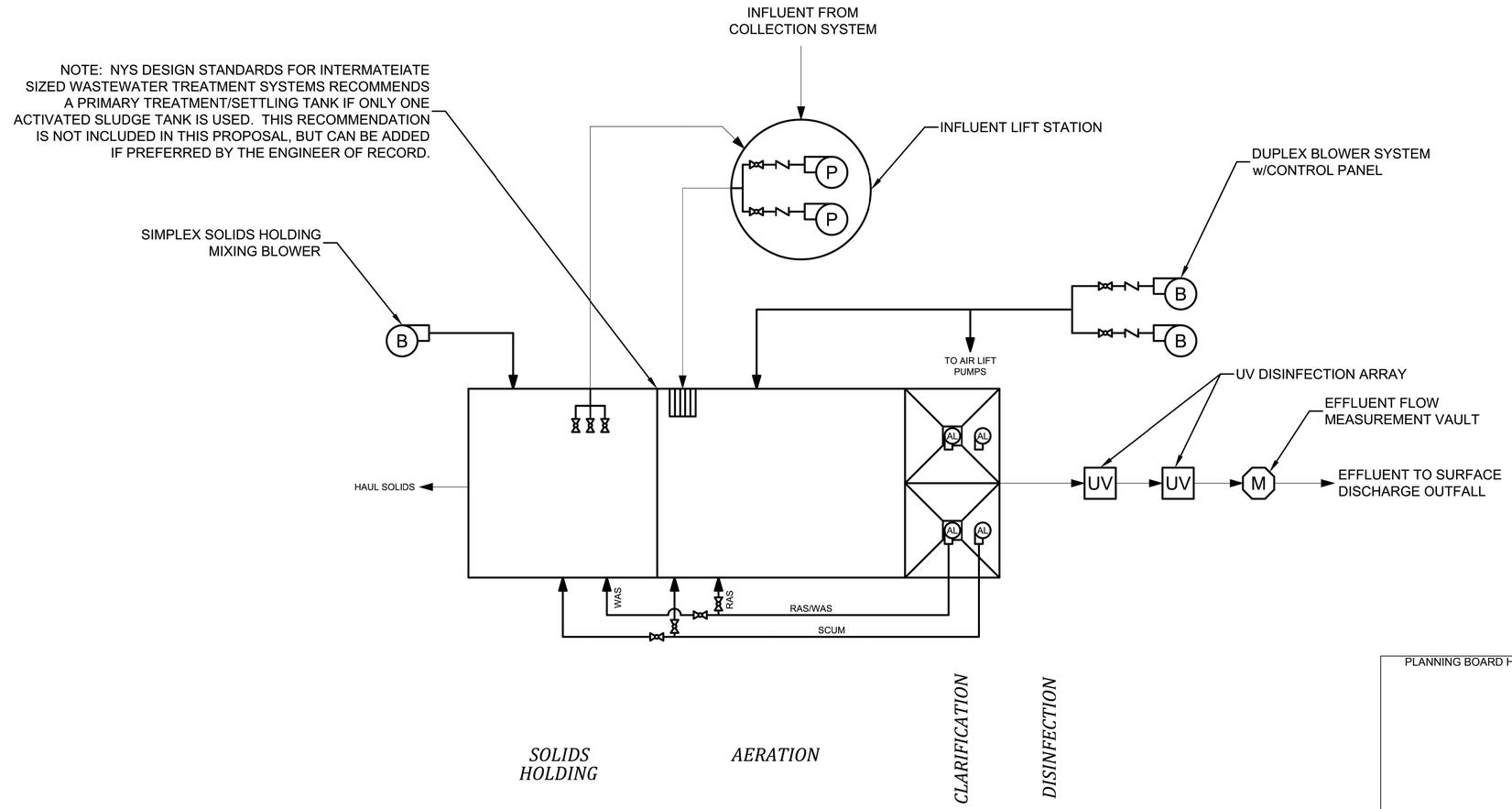
TANK SIZES						
TANK	QTY	WIDTH (FT)	LENGTH (FT)	HEIGHT (FT)	SWD (FT)	VOLUME (GAL)
AERATION	1	10	19	11.17	9.67	13,700
CLARIFIER	1	10	5	11.17	9.67	2,400 (APPROX.)
SOLIDS HOLDING	1	10	8	11.17	9.67	5,800
LIFT STATION	1	4 (DIA.)	-	TBD	-	400 (APPROX. OPERATIONAL)

ALL DIMENSIONS ARE INSIDE OF TANK UNLESS NOTED OTHERWISE.

MOTOR LOADS						
DEVICE	QTY	CONCURRENTLY OPERATING	POWER (HP)	VOLTAGE (V)	STARTING CURRENT (A)	FULL LOAD CURRENT (A)
LIFT STATION PUMP	2	1	0.5	230 V-3 PH	18.2	5.3
MAIN AIR BLOWER	2	1	5	230 V-3 PH	92	13
UV SYSTEM	2	2	TBD	230 V-1 PH	TBD	TBD
ULTRASONIC FLOW METER	1	1	< 0.1	230 V-1 PH	TBD	TBD
SOLIDS HOLDING BLOWER	1	1	1.5	230 V-3 PH	34.2	4.5

△1

- DIAPHRAGM VALVE
- GLOBE/NEEDLE VALVE
- BALL VALVE
- CHARACTERIZED BALL VALVE
- BALL CHECK VALVE
- PLUG VALVE
- BUTTERFLY VALVE
- GATE VALVE
- 3-WAY VALVE
- CHECK VALVE
- B — BLOWER
- P — MECHANICAL PUMP
- AL — AIR LIFT PUMP
- M — MIXER
- M — FLOW METER
- C — CHEMICAL DOSING PUMP
- F — FILTER
- UV — ULTRAVIOLET DISINFECTION UNIT
- BAR SCREEN
- MECHANICAL BAR SCREEN
- CL — TABLET FEEDER



SANITARY PACKAGE TREATMENT PLANT - PROCESS DIAGRAM

N.T.S.

WASTELOAD SUMMARY:

INFLUENT WASTELOAD AS PROVIDED BY ENGINEER OF RECORD
280 mg/L (26 LB/D) BOD_5
300 mg/L (28 LB/D) TSS
7.0-7.1 pH (ASSUMED)
68 F (20 C) WATER TEMPERATURE (ASSUMED)

EFFLUENT TARGETS
30 mg/L BOD_5 30-D AVERAGE
30 mg/L TSS 30-D AVERAGE
200 N/100 mL FCB 30-D GEO. MEAN

ORGANIC LOADING

14.3 LB BOD/D/KCF
DELTA MODEL BASIS A-13.0

AERATION SYSTEM DESIGN

AOR: 59 LB O_2/D
SOTR: 114 LB O_2/D

PROCESS AIR DEMAND: 76 SCFM
RAS/WAS AIRLIFT PUMP AIR DEMAND: 20 SCFM
SCUM AIRLIFT PUMP AIR DEMAND: 16 SCFM
TOTAL MAIN AIR BLOWER DEMAND: 112 SCFM
SITE ELEVATION: 50 FT AMSL (ASSUMED)
MAXIMUM AIR TEMPERATURE: 115 F (ASSUMED)
PROCESS AIR INLET FLOW: 133 ICFM
BLOWER AIRFLOW: 1 DUTY/1 STANDBY, 133 ICFM @ 4.7 PSIG
SELECTED BLOWER: GARDNER DENVER MODEL 3M @ 2,760 RPM
SELECTED MOTOR: 5 HP

SOLIDS HOLDING MIXING AIR DEMAND:
30 SCFM / 1,000 CF x 0.77 KCF = 23 SCFM :: 28 ICFM @ 4.7 PSIG
SELECTED BLOWER: GARDNER DENVER MODEL 2M @ 2,760 RPM
SELECTED MOTOR: 1.5 HP

EQUIPMENT LIST			
DESCRIPTION	QTY.	MAKE	MODEL
LIFT STATION PUMP	2	CHAMPION	CPSE532, 0.5HP
MAIN AIR BLOWER	2	GARDNER DENVER	SUTORBILT 3M W/ TOSHIBA 5HP TEFC GENERAL DUTY MOTOR
UV SYSTEM	2	AQUA AZUL	AZ-400
ULTRASONIC FLOW METER	1	PULSAR	ULTRA 4 W/ DB MACH 3 ULTRASONIC SENSOR
SOLIDS MIXING BLOWER	1	GARDNER DENVER	SUTORBILT 2M W/ TOSHIBA 1.5HP TEFC GENERAL DUTY MOTOR

△1

FLOW SUMMARY			
Flow Parameter	GPD	GPH	GPM
AVERAGE DAILY FLOW (ADF)	11,200	470	7.8
PEAK DAILY FLOW (PDF)	-	-	-
PEAK HOURLY FLOW (PHF)	-	-	-
0.5 x ADF	5,600	230	3.9
1.5 x ADF	16,800	700	12

PLANNING BOARD HTE# 21-00100006

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINOS · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE

SANITARY SYSTEM DETAILS

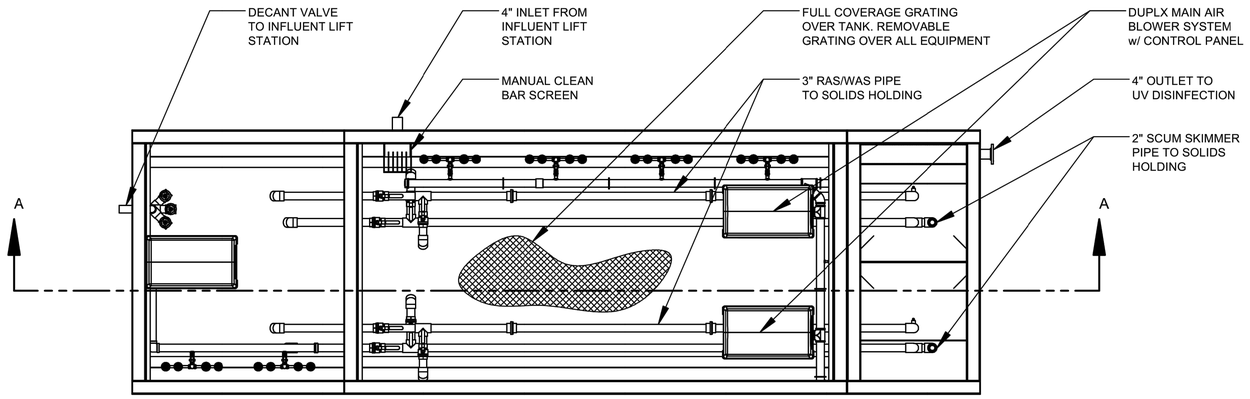
DRAWING NUMBER

UT-16

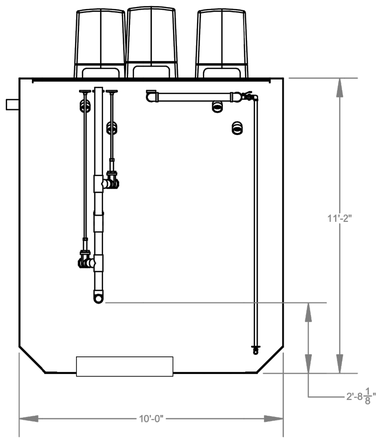
N:\18641.00 ALBANY PORT EXPANSION\DRAWING\SHEET FILES\18641.00 UTIL DETS.DWG

GENERAL ARRANGEMENT NOTES

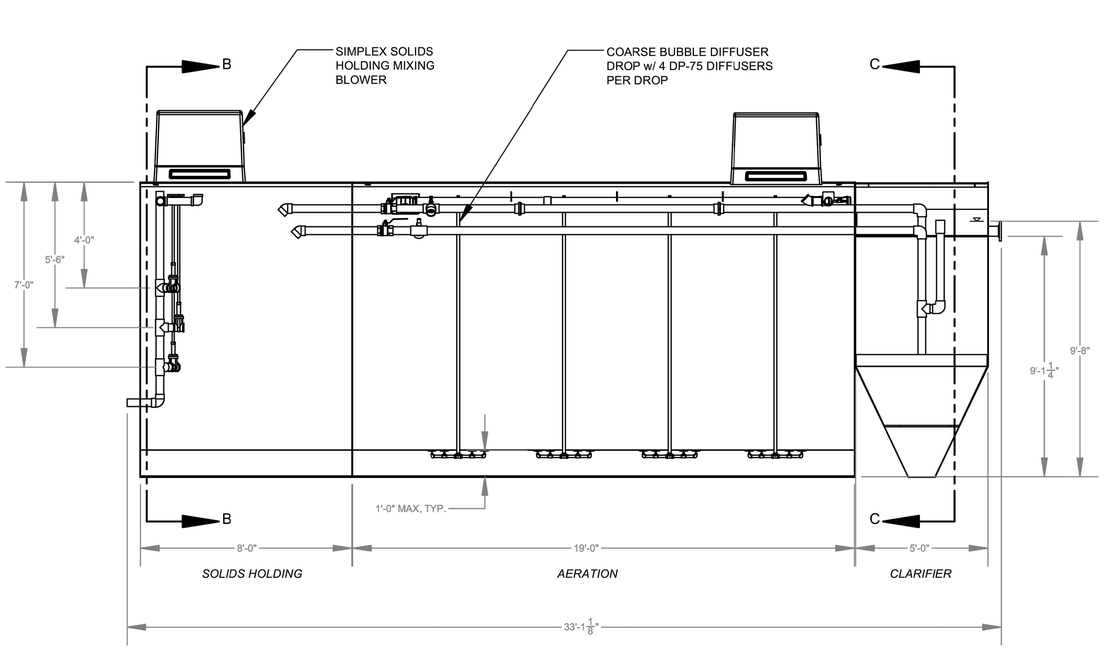
1. THESE DRAWINGS DEPICT PRELIMINARY LAYOUT(S) OF A WASTEWATER TREATMENT SYSTEM CAPABLE OF TREATING THE DESIGN AVERAGE INFLUENT FLOW AND LOAD TO THE EFFLUENT WATER QUALITY DENOTED IN THE WASTELOAD SUMMARY.
2. THE EQUIPMENT ARRANGEMENT/LAYOUT IS SCHEMATIC IN NATURE AND SOME OBJECTS MAY NOT BE DRAWN TO SCALE. REFER TO THE ENGINEER-OF-RECORD PROJECT DOCUMENTS FOR FINAL SITE AND/OR EQUIPMENT ARRANGEMENT.
3. ALL REACTORS SHALL BE CONSTRUCTED OF A36 CARBON STEEL, MINIMUM 1/4" THICKNESS, PER ENGINEER-OF-RECORD REQUIREMENTS.
4. BLOWERS, WEIRS, CONTROL PANELS, AND VARIOUS SMALL PARTS SHALL BE SHIPPED UNASSEMBLED AND SECURELY PACKAGED, TO BE INSTALLED BY CONTRACTOR. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ADDITIONAL DETAIL.
5. CONTRACTOR TO PROVIDE AND INSTALL ALL FIELD PIPING AND SECURE ALL EQUIPMENT CONNECTIONS AS SHOWN IN THE ENGINEER OF RECORD'S PROJECT DOCUMENTS.
6. REACTORS AND INTERNAL DEVICES SHALL BE INSTALLED PLUMB AND LEVEL.
7. SEE THE PROJECT SPECIFIC QUOTE FOR MORE INFORMATION REGARDING SCOPE OF SUPPLY AND CORRESPONDING TERMS AND CONDITIONS.



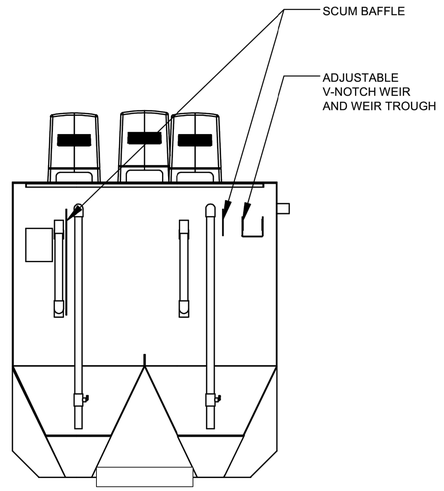
PLAN VIEW



SECTION B-B



SECTION A-A
ELEVATION VIEW



SECTION C-C

SANITARY PACKAGE TREATMENT PLANT - GENERAL ARRANGEMENT

N.T.S.

PLANNING BOARD HTE# 21-00100006

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

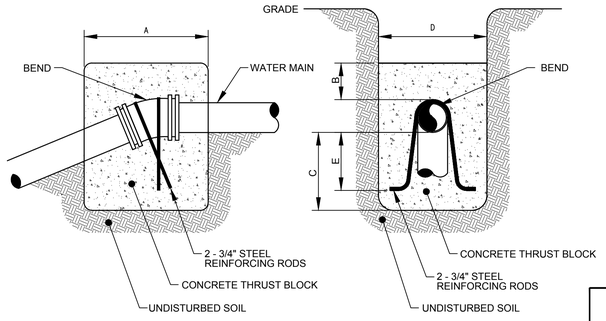
STATE OF NEW YORK
ADAM J FROSHEISER
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE

SANITARY SYSTEM DETAILS

DRAWING NUMBER

UT-17



PLAN ELEVATION

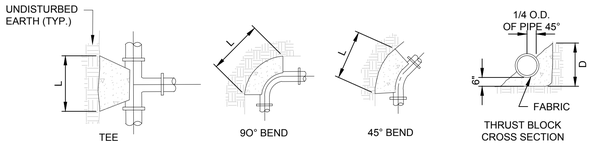
NOTES:

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.

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

VERTICAL THRUST BLOCK DETAILS

N.T.S.



REQUIRED BEARING AREAS & DIMENSIONS FOR CONCRETE THRUST BLOCKS (DIMENSIONS SHOWN IN FT)										
	TEE		90° BEND		45° BEND		22-1/2° BEND		11-1/4° BEND	
PIPE SIZE (IN)	AREA (SQFT)	DIM D X L	AREA (SQFT)	DIM D X L	AREA (SQFT)	DIM D X L	AREA (SQFT)	DIM D X L	AREA (SQFT)	DIM D X L
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 1.5
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 1.5
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 2.0

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
4. 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
5. 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 BELOW.

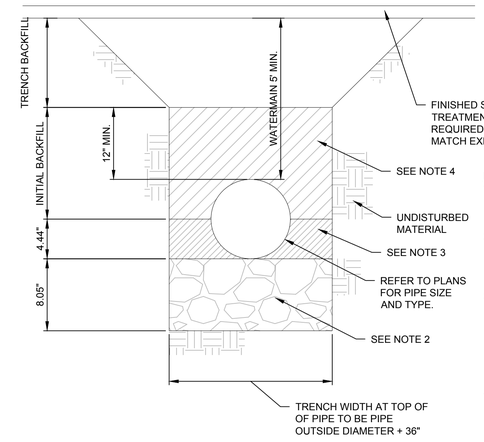
SOIL	ALLOWABLE SOIL PRESSURE (LBS/SQFT)	CORRECTION FACTOR
SOFT CLAY	1,000	2.00
SAND	2,000	1.00
SAND & GRAVEL	3,000	0.67
SAND AND GRAVEL CEMENTED WITH CLAY	4,000	0.50
HARD SHALE	10,000	0.20

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

N.T.S.

PLANNING BOARD HTE# 21-00100006

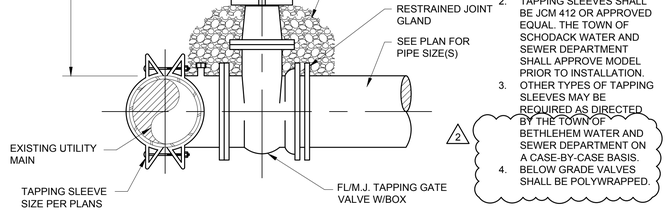


NOTES:

1. ALL TRENCHING TO BE IN ACCORDANCE WITH OSHA STANDARDS AND NYS DEPT. OF LABOR INDUSTRIAL CODE 23
2. BEDDING - CLASS I OR II MATERIAL; WASHED SAND, SEA GRAVEL OR CRUSHED STONE. COMPACT CLASS II MATERIAL TO 85% STANDARD PROCTOR DENSITY.
3. HAUNCHING AND INITIAL BACKFILL - CLASS II MATERIAL; COARSE SAND OR SELECT GRAVEL. PLACE IN LIFTS; TO PIPE SPRING LINE, TO TOP OF PIPE AND TO 12" MINIMUM OVER TOP OF PIPE. COMPACT EACH LIFT TO 85% STANDARD PROCTOR DENSITY.
4. TRENCH BACKFILL - APPROVED ON SITE OR IMPORTED MATERIAL. PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY.

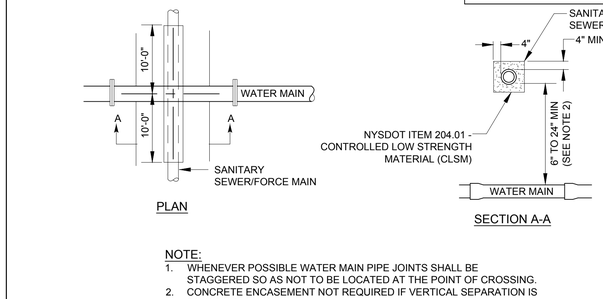
WATER MAIN TRENCH

N.T.S.



TRENCH UNDER GRASS AND DRIVEWAY DETAIL

N.T.S.



PLAN SECTION A-A

NOTE:

1. WHENEVER POSSIBLE WATER MAIN PIPE JOINTS SHALL BE STAGGERED SO AS NOT TO BE LOCATED AT THE POINT OF CROSSING.
2. CONCRETE ENCASEMENT NOT REQUIRED IF VERTICAL SEPARATION IS 24" OR GREATER

WATER MAIN/SEWER CROSSING DETAIL

N.T.S.

NOTES:

1. IMMEDIATELY PRIOR TO THE AUTHORITY PLACING WATER MAIN IN SERVICE CONTRACTOR SHALL REMOVE ALL CORPORATIONS ASSOCIATED WITH TEMPORARY FACILITIES (I.E. SAMPLING TAPS, ETC.) AND REPLACE WITH THREADED BRASS PLUGS.

DISINFECTION/BLOW-OFF/SAMPLING TAP

N.T.S.

NOTES:

1. TAPPING VALVES SHALL BE IRON BODY, BRONZE MOUNTED, RESILIENT WEDGE CONFORMING TO AWWA C509 AND SHALL HAVE A MINIMUM OPERATING PRESSURE OF 200 PSI AND BE FACTORY TESTED AT 400 PSI. ALL TAPPING VALVES SHALL BE MODEL T-2360 AS MANUFACTURED BY MUELLER CO OR APPROVED EQUAL.
2. TAPPING SLEEVES SHALL BE JCM 412 OR APPROVED EQUAL. THE TOWN OF SCHODACK WATER AND SEWER DEPARTMENT SHALL APPROVE MODEL PRIOR TO INSTALLATION.
3. OTHER TYPES OF TAPPING SLEEVES MAY BE REQUIRED AS DIRECTED BY THE TOWN OF BETHLEHEM WATER AND SEWER DEPARTMENT ON A CASE-BY-CASE BASIS.
4. BELOW GRADE VALVES SHALL BE POLYWRAPPED.

WET TAP DETAIL

N.T.S.

NOTES:

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'.
3. MARKING TAPE SHALL BE INSTALLED 18" ABOVE PVC PIPE. MARKER TAPE SHALL BE AT LEAST 3" IN WIDTH AND COLOR CODED PER SERVICE.

WATERMAIN/SANITARY SEWER FORCE MAIN TRACER WIRE/MARKER TAPE DETAIL

N.T.S.

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

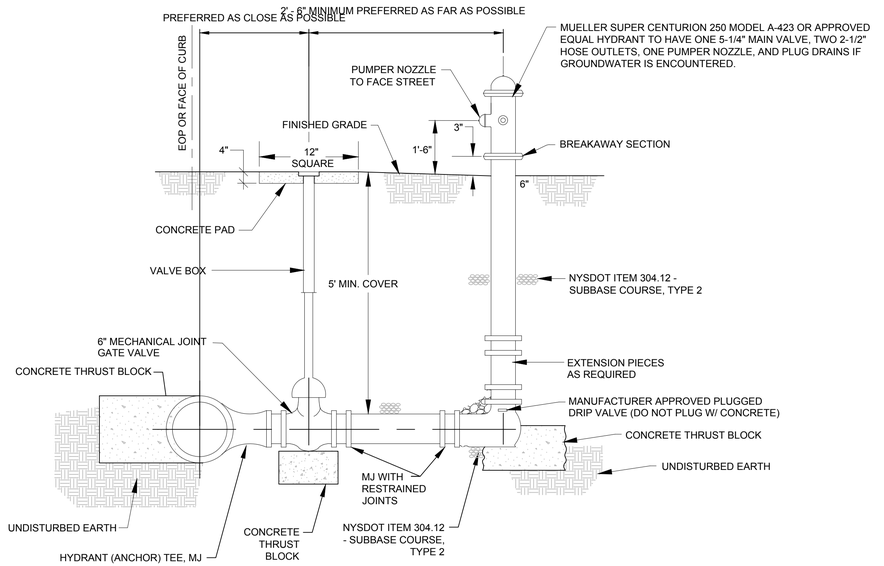
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

WATER DETAILS

DRAWING NUMBER

UT-18



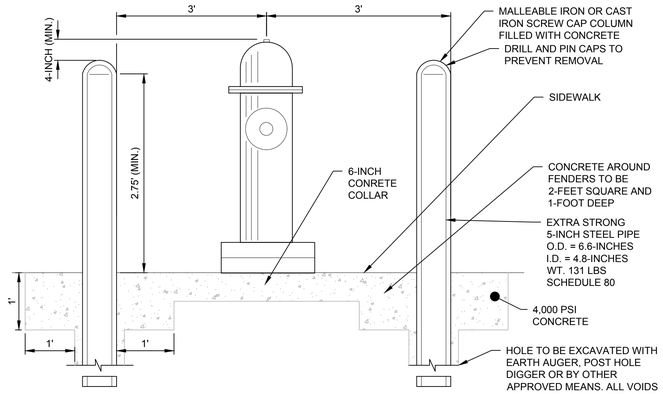
NOTES:

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 FINISTED GRADE, THE HYDRANT DRAINS SHALL BE PLUGGED.
9. BELOW GRADE VALVES SHALL BE POLYWRAPPED.

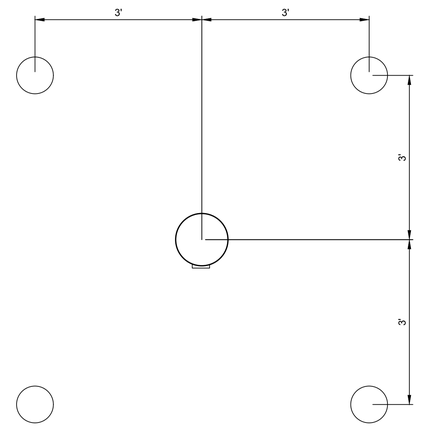
2

FIRE HYDRANT ASSEMBLY

N.T.S.



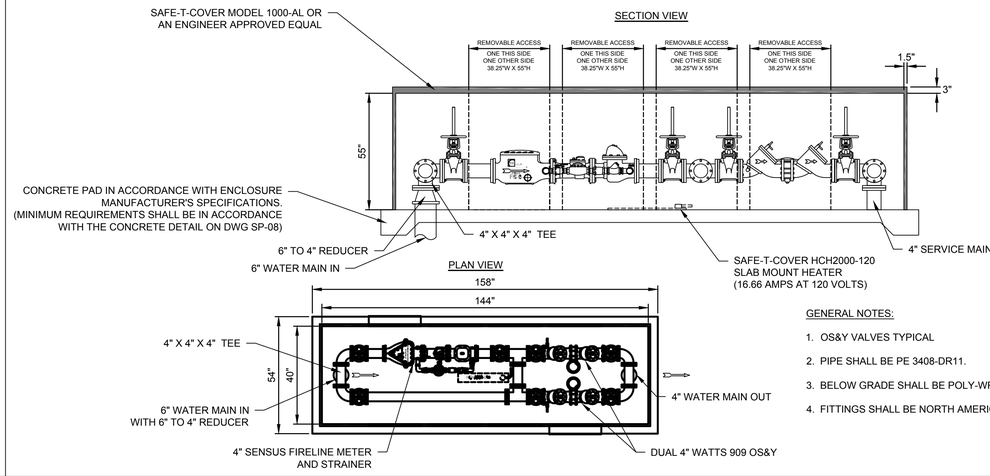
PROFILE



TYPICAL BOLLARD LAYOUT

HYDRANT BOLLARDS

N.T.S.



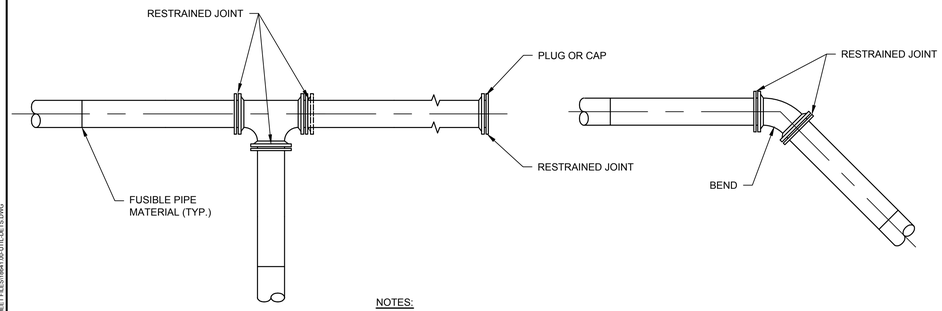
PLANNING BOARD HTE# 21-00100006

GENERAL NOTES:

1. OS&Y VALVES TYPICAL
2. PIPE SHALL BE PE 3408-DR11.
3. BELOW GRADE SHALL BE POLY-WRAPPED.
4. FITTINGS SHALL BE NORTH AMERICAN MADE.

WATER METER/BACKFLOW PREVENTER ENCLOSURE

N.T.S.



NOTES:

1. RESTRAINED JOINTS AND THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES AND DEAD ENDS.
2. PIPE TRENCH AND INSTALLATION SHALL BE AS SHOWN ON DETAILS.
3. RETAINER GLANDS SHALL BE MEGALUG SERIES 2000PV JOINT RESTRAINTS AS MANUFACTURED BY EBBA IRON, INC. OR APPROVED EQUAL.

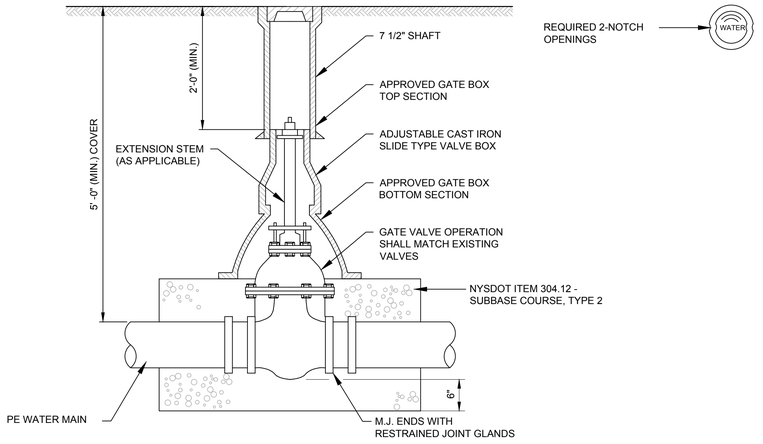
RESTRAINED JOINT DETAIL

N.T.S.

NOTE:

1. ALL GATE VALVES SHALL BE MUELLER MODEL A-2361 AND INSTALLED IN ACCORDANCE WITH AWWA C600 OR APPROVED EQUAL.
2. BELOW GRADE VALVES SHALL BE POLYWRAPPED.

2



GATE VALVE DETAIL

N.T.S.

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

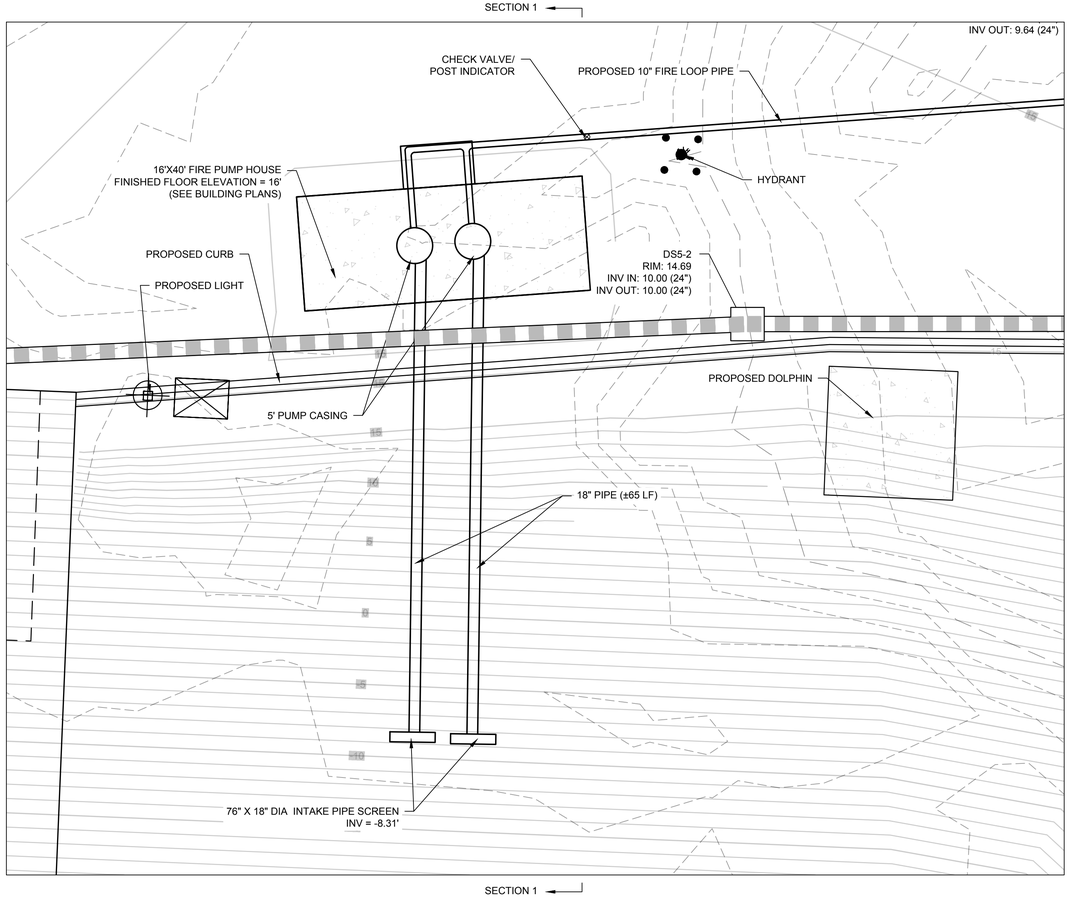
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

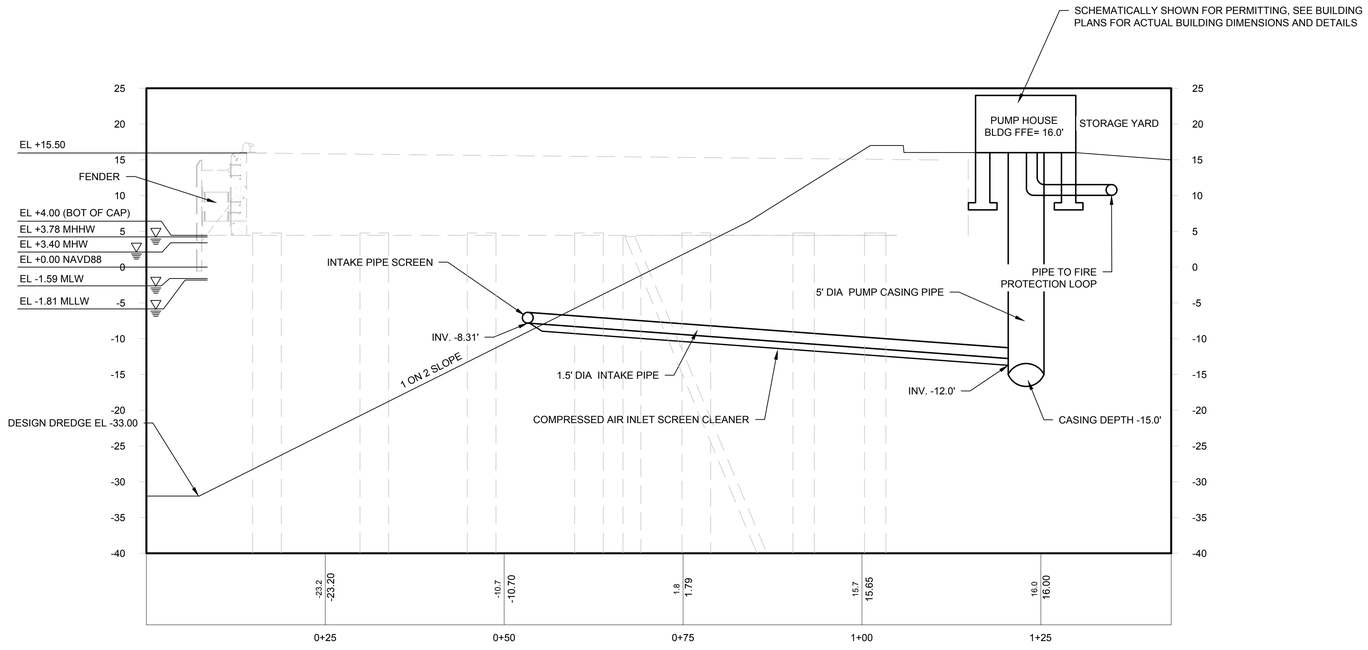
DRAWING TITLE

WATER DETAILS

DRAWING NUMBER

UT-19





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

** REFER TO F-100P FOR DETAILS ON THE PUMPHOUSE. ALL BUILDING INFORMATION SHOWN ON THIS PLAN IS SCHEMATIC IN NATURE FOR THE ENVIRONMENTAL PERMITTING AND NOT INTENDED FOR CONSTRUCTION.

PLANNING BOARD HTE# 21-00100006

0 10 20 40 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

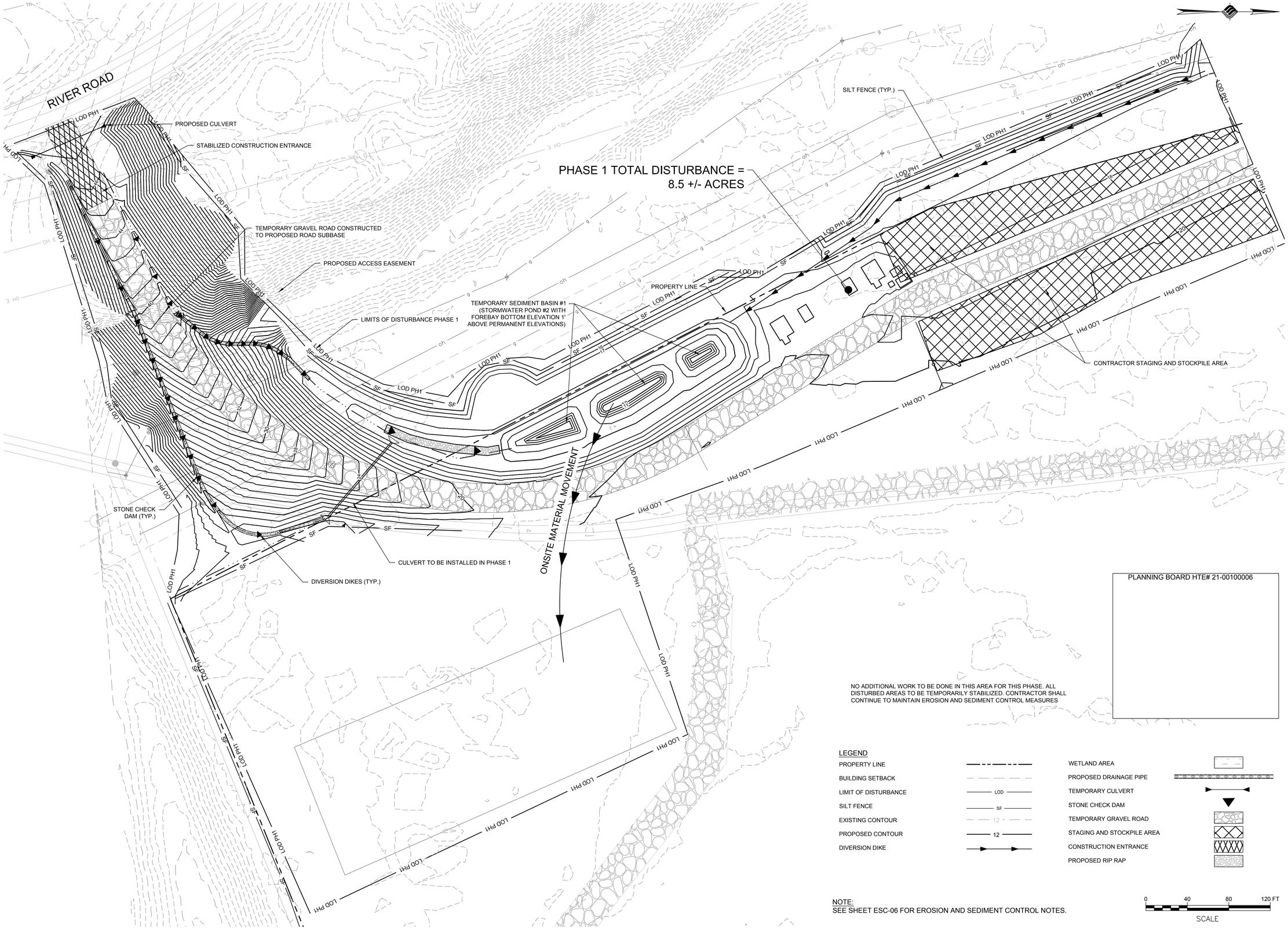
CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINO
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
WATER DETAILS

DRAWING NUMBER
UT-20



NO ADDITIONAL WORK TO BE DONE IN THIS AREA FOR THIS PHASE. ALL DISTURBED AREAS TO BE TEMPORARILY STABILIZED. CONTRACTOR SHALL CONTINUE TO MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES

PLANNING BOARD HTE# 21-00100006

LEGEND

PROPERTY LINE		WETLAND AREA	
BUILDING SETBACK		PROPOSED DRAINAGE PIPE	
LIMIT OF DISTURBANCE	LOD	TEMPORARY CULVERT	
SILT FENCE	SF	STONE CHECK DAM	
EXISTING CONTOUR	12	TEMPORARY GRAVEL ROAD	
PROPOSED CONTOUR	12	STAGING AND STOCKPILE AREA	
DIVERSION DIKE		CONSTRUCTION ENTRANCE	
		PROPOSED RIP RAP	

NOTE:
SEE SHEET ESC-06 FOR EROSION AND SEDIMENT CONTROL NOTES.

0 40 80 120 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN-PH.1

DRAWING NUMBER
ESC-01

LEGEND

PROPERTY LINE
BUILDING SETBACK
LIMIT OF DISTURBANCE — LOD
SILT FENCE — SF
EXISTING CONTOUR — 12
PROPOSED CONTOUR — 12
DIVERSION DIKE

WETLAND AREA
PROPOSED DRAINAGE PIPE
TEMPORARY CULVERT
STONE CHECK DAM
TEMPORARY GRAVEL ROAD
STAGING AND STOCKPILE AREA
CONSTRUCTION ENTRANCE
PROPOSED RIP RAP

OLD RIVER ROAD
RIVER ROAD
PROPERTY LINE
ORANGE CONSTRUCTION FENCE
AREA GRADED AND STABILIZED IN PHASE 1
DIVERSION DIKES (TYP.)
TEMPORARY GRAVEL ROAD INSTALLED IN PHASE 1
CONTRACTOR STAGING AND STOCKPILE AREA INSTALLED IN PHASE 1
SEDIMENTATION BASIN #1 INSTALLED IN PHASE 1
EXISTING GRAVEL ROAD (FORMER RAILROAD)
NO ADDITIONAL WORK TO BE DONE IN THIS AREA FOR THIS PHASE. ALL DISTURBED AREAS TO BE TEMPORARILY STABILIZED. CONTRACTOR SHALL CONTINUE TO MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES
PHASE 2 TOTAL DISTURBANCE = 11.3 +/- ACRES
LIMITS OF DISTURBANCE PHASE 2
SEDIMENTATION BASIN #2 INSTALLED IN PHASE 2
EXISTING ONSITE MATERIAL MOVEMENT
PERIMETER DIKE (TYP.)
BOTTOM ELEV. 6.0'
PEAK STORAGE ELEV. 11.0'
SEDIMENTATION BASIN #3 INSTALLED IN PHASE 2
EXISTING TEMPORARY GRAVEL ROAD (APPROXIMATE LOCATION)
SEDIMENTATION BASIN #2
SEDIMENTATION BASIN #3
DOUBLE SILT FENCE ALONG HUDSON RIVER SHORELINE (TYP.)
DEED RESTRICTED AREA
HUDSON RIVER
NORMANS KILL
LIMIT OF DISTURBANCE / SILT FENCE
ORANGE CONSTRUCTION FENCE
SECOND LAYER OF SILT FENCE WHERE SHOWN
2'
0-6"
EDGE OF CUTTING BOUNDARY VIEW
DOUBLE SILT FENCE ALONG SHORELINE (TYP.)
PLANNING BOARD HTE# 21-00100006

NOTE:
SEE SHEET ESC-05 FOR EROSION AND SEDIMENT CONTROL NOTES.

0 100 200 300 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

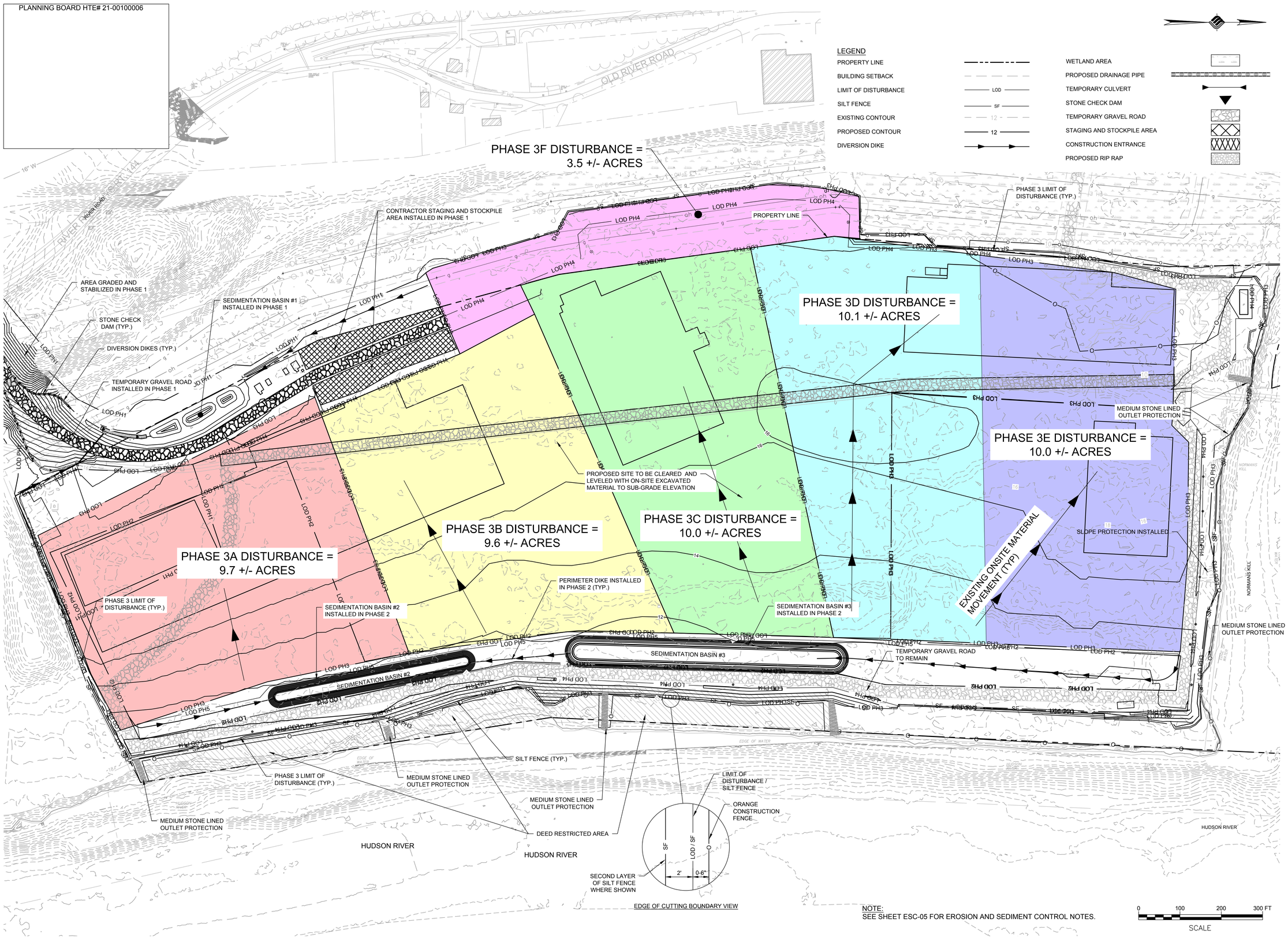
DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINO
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN-PH.2

DRAWING NUMBER
ESC-02

PLANNING BOARD HTE# 21-00100006



NOTE:
SEE SHEET ESC-05 FOR EROSION AND SEDIMENT CONTROL NOTES.

0 100 200 300 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINETTI
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN-PH.3

DRAWING NUMBER
ESC-03

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\SHEET FILES\18641.00 ESC-PH03-03.DWG

PLANNING BOARD HTE# 21-00100006

NO NEW DISTURBED AREA IN PHASE 4

LEGEND

PROPERTY LINE		WETLAND AREA	
BUILDING SETBACK		PROPOSED DRAINAGE PIPE	
LIMIT OF DISTURBANCE	LOD	TEMPORARY CULVERT	
SILT FENCE	SF	STONE CHECK DAM	
EXISTING CONTOUR	12	TEMPORARY GRAVEL ROAD	
PROPOSED CONTOUR	12	STAGING AND STOCKPILE AREA	
DIVERSION DIKE		CONSTRUCTION ENTRANCE	
		PROPOSED RIP RAP	

PROPOSED BUILDING PADS TO BE SURCHARGED WITH AGGREGATE MATERIAL

CONTRACTOR STAGING AND STOCKPILE AREA INSTALLED IN PHASE 1

PROPERTY LINE

PHASE 4 LIMIT OF DISTURBANCE (TYP.)

AREA GRADED AND STABILIZED IN PHASE 1

SEDIMENTATION BASIN #1 INSTALLED IN PHASE 1

STONE CHECK DAM (TYP.)

DIVERSION DIKES (TYP.)

TEMPORARY GRAVEL ROAD INSTALLED IN PHASE 1

PROPOSED BUILDING PADS TO BE SURCHARGED WITH AGGREGATE MATERIAL

PROPOSED BUILDING PADS TO BE SURCHARGED WITH AGGREGATE MATERIAL

PERIMETER DIKE INSTALLED IN PHASE 2 (TYP.)

SEDIMENTATION BASIN #2 INSTALLED IN PHASE 2

SEDIMENTATION BASIN #3 INSTALLED IN PHASE 2

SEDIMENTATION BASIN #2

SEDIMENTATION BASIN #3

TEMPORARY GRAVEL ROAD TO REMAIN

AREA GRADED AND STABILIZED IN PHASE 3

AREA GRADED AND STABILIZED IN PHASE 3

PHASE 4 LIMIT OF DISTURBANCE (TYP.)

SILT FENCE (TYP.)

PHASE 4 LIMIT OF DISTURBANCE (TYP.)

MEDIUM STONE LINED OUTLET PROTECTION INSTALLED IN PHASE 3

DEED RESTRICTED AREA

HUDSON RIVER

HUDSON RIVER

HUDSON RIVER

HUDSON RIVER

LIMIT OF DISTURBANCE / SILT FENCE

ORANGE CONSTRUCTION FENCE

SECOND LAYER OF SILT FENCE WHERE SHOWN

EDGE OF CUTTING BOUNDARY VIEW

NOTE:
SEE SHEET ESC-05 FOR EROSION AND SEDIMENT CONTROL NOTES.

0 100 200 300 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINA
088870
LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN-PH.4

DRAWING NUMBER
ESC-04

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-ESC-PH01-04.DWG

PLANNING BOARD HTE# 21-00100006

TEMPORARY SEDIMENT BASIN TO BE CONVERTED TO PERMANENT STORMWATER MANAGEMENT FACILITY

CONCRETE WASHOUT AREA

CONTRACTOR STAGING AND STOCKPILE AREA TO BE REMOVED

PAVE PROPOSED PARKING LOTS (TYP.)

POUR CONCRETE RAIL PADS (TYP.)

CONSTRUCTION ENTRANCE TO BE REMOVED

DIVERSION DIKES (TYP.)

TEMPORARY GRAVEL ROAD TO BE PAVED

BRIDGE TO BE CONSTRUCTED IN PHASE 5. SEE BRIDGE PLANS FOR DETAIL.

BUILDING C PAD

TEMPORARY GRAVEL ROAD

STONE CHECK DAM (TYP.)

INLET PROTECTION (TYP.)

BUILDING B PAD

TEMPORARY SEDIMENT BASINS TO BE REMOVED ONCE CURB AND INLET PROTECTION ARE INSTALLED

PROPOSED SITE TO BE RAISED WITH AGGREGATE MATERIAL TO CREATE THE DENSE GRADED AGGREGATE STORAGE YARD

BUILDING D PAD

BUILDING A PAD

INSTALL PROPOSED CURBING

PROPERTY LINE

LIMITS OF DISTURBANCE PHASE 5

HUDSON RIVER

PRELIMINARY WHARF GRADING TO EXISTING. SEE SEPARATE WHARF DESIGN PLANS BY OTHERS

DOUBLE SILT FENCE TO BE REMOVED ONCE UPLAND AND SHORLINE IS PERMANENTLY STABILIZED (TYP.)

SILT FENCE TO BE REMOVED ONCE UPLAND IS PERMANENTLY STABILIZED (TYP.)

1:4 OR FLATTER SLOPE FROM CURB TO EXISTING GRADE (TYP.)

MEDIUM STONE LINED OUTLET PROTECTION (TYP.)

PHASE 5 TOTAL DISTURBANCE = 5.1 +/- ACRES

LEGEND

PROPERTY LINE		WETLAND AREA	
BUILDING SETBACK		PROPOSED DRAINAGE PIPE	
LIMIT OF DISTURBANCE	LOD	TEMPORARY CULVERT	
SILT FENCE	SF	STONE CHECK DAM	
EXISTING CONTOUR	12	TEMPORARY GRAVEL ROAD	
PROPOSED CONTOUR	12	STAGING AND STOCKPILE AREA	
DIVERSION DIKE		CONSTRUCTION ENTRANCE	
		PROPOSED RIP RAP	

NOTE:
SEE SHEET ESC-05 FOR EROSION AND SEDIMENT CONTROL NOTES.

0 150 300 450 FT
SCALE

N:\18641.00 ALBANY PORT EXPANSION\DRAWING\DRAWINGS\SHEET FILES\18641.00 ESC-PHS1-5S.DWG

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINA · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN-PH.5

DRAWING NUMBER
ESC-05

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 WILL 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.

3. 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.

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 BEEN PROPERLY STABILIZED.

5. 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 WILL 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 WILL 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.

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 ACCUMULATED SILT WHEN STORAGE CAPACITY HAS BEEN REDUCED BY 50% OF THEIR DESIGN CAPACITY.
   B. ALL SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE AND STRAW BALES WHEN IT 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.

12. ALL DISTURBED AREAS SHALL BE STABILIZED, SEEDED AND MULCHED WITHIN 7 DAYS OF CEASED CONSTRUCTION ACTIVITY.

13. TOTAL PROJECT DISTURBANCE AREA PER THE NYSDEC SPDES STANDARDS IS 79 ACRES.

14. 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. SEED PER SCHEDULE SPECIFIED ON LANDSCAPE PLANS.
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.
5. MULCH WITH CLEAN (WEED FREE) STRAW IF SPECIFIED ON PLANS.

PERMANENT SEEDING 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. 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.
4. IMMEDIATELY SEED PER SEED SCHEDULE SPECIFIED ON LANDSCAPE PLAN.
5. PROVIDE JUTE MESH IF SPECIFIED ON PLANS OR MULCH WITH CLEAN (WEED FREE) STRAW.

EROSION AND SEDIMENT CONTROL SEQUENCE:

THE TOWN OF BETHLEHEM SHOULD BE NOTIFIED PRIOR TO CONSTRUCTION ACTIVITIES STARTING AND CEASING DISTURBANCE OF OVER 5 ACRES AT ONE TIME.

PHASE I:

- INSTALL CONSTRUCTION ENTRANCE ROADS
- ESTABLISH THE PROJECT CONSTRUCTION STAGING/OFFICE AREA
- USE ANY ACCESS ROAD CUT MATERIAL AS FILL FOR THE CONSTRUCTION STAGING AREA
- TEMPORARILY STABILIZE ALL DISTURBED AREAS
- INSTALL SILT FENCE DOWNSTREAM OF ALL DISTURBED AREAS
- CONSTRUCT SEDIMENTATION BASIN #1 FOREBAYS TO 1' HIGHER THEN PROPOSED GRADING FOR THE PERMANENT STORM WATER MANAGEMENT POND #2 FOREBAYS.
- MATERIAL FROM THE POND EXCAVATION TO BE PLACED AND COMPACTED AS PART OF THE BUILDING A EMBANKMENT.
- BASED ON THE POTENTIAL FOR PROPOSED ROCK CUT WHEN EXCAVATING THE ROADWAY SECTION PHASE II MAY PROGRESS PRIOR TO THE COMPLETION OF PHASE I. THE PHASE I AREA SHALL BE STABILIZED TO THE MINIMIZE DISTURBANCE AREA PRIOR TO PROGRESSION TO PHASE II

PHASE II:

- INSTALL PERIMETER CONTROLS
- INSTALL ADDITIONAL CONSTRUCTION ACCESS ROAD
- CONSTRUCT SEDIMENTATION BASINS AND DIVERSION DIKES TO BASINS
- THE PROPOSED TEMPORARY STORM WATER TREATMENT FACILITIES SHALL BE INSTALLED BEFORE PROGRESSING INTO PHASE III

PHASE III:

- SITE TO BE GRUBBED AND GRADED TO THE TOP OF SUB-GRADE ELEVATION IN SUB-PHASES
- BALANCE CUT AND FILLS IN THE SITE.
- COMPACT/IMPROVE EXISTING GROUND CONDITIONS ACCORDING TO GEOTECHNICAL REPORT
- IMPORT MATERIAL TO RAISE THE SITE TO PROPOSED SUB-GRADE ELEVATIONS
- LIMITS OF DISTURBANCE DISTURBANCE TO BE MINIMIZED IN EACH SUB-PHASE BY STABILIZING AREAS WITHIN 2 DAYS AFTER FINAL GRADE IS ACHIEVED
- THE SUB-PHASE AREAS WILL BE DISTURBED AND STABILIZE IN A ROLLING OPERATION AS THE EARTHWORK PROGRESSES FROM THE SOUTH END OF THE SITE TO THE NORTH END. TO AVOID STOCKPILING AVAILABLE CUT MATERIAL FROM ONE SUB-PHASE AREA MAY BE DEPOSITED AND STABILIZED WITHIN ANOTHER SUB-PHASE AREA; HOWEVER THE OVERALL TOTAL DISTURBED AREA SHALL NOT EXCEED 11 ACRES.
- PHASE IV AGGREGATE PLACEMENT WORK WILL OCCUR SIMULTANEOUSLY AND PROVIDE STABILIZATION ONCE SUB-GRADE ELEVATIONS HAVE BEEN ACHIEVED.

PHASE IV:

- HAUL IN PROPOSED AGGREGATE MATERIAL TO SURCHARGE THE BUILDING FOOTPRINTS AND CONCRETE AREAS
- MAINTAIN EXISTING PHASE III EROSIONAL AND SEDIMENT CONTROL MEASURES
- MONITOR SETTLEMENT OF THE SUB-GRADE MATERIAL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

PHASE V:

- INSTALL STORM SEWER SYSTEM WITH INLET PROTECTION FOR DRAINAGE STRUCTURES AND STONE LINING OUTLET PROTECTION
- INSTALL SITE UTILITIES
- SPREAD AGGREGATE MATERIAL TO STORAGE AREAS
- INSTALL INFILTRATION CHAMBERS
- POUR ALL PROPOSED CONCRETE RAIL PADS AND SIDEWALKS
- INSTALL PROPOSED CONCRETE CURBING
- PAVE PARKING LOT AREAS
- REMOVE CONSTRUCTION STAGING AREA
- CONVERT TEMPORARY SEDIMENT BASIN TO PERMANENT STORM WATER MANAGEMENT FACILITIES BY EXCAVATING THE PERMANENT POOL AND FOREBAYS DOWN TO FINAL GRADE AND CONVERTING THE OUTLET STRUCTURE.
- REMOVE TEMPORARY SEDIMENT BASINS, WHICH ARE NOT TO BE CONVERTED TO PERMANENT PRACTICES
- FINAL STABILIZATION FOR EMBANKMENT SLOPES ALONG THE NORMANS KILL AND HUDSON RIVER

TEMPORARY SEEDING:

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 ON LANDSCAPE PLAN.
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.

SOIL RESTORATION NOTES:

SOIL RESTORATION PROCEDURE:

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:

1. 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. 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 FORECAST OR;
   B. THE WORK IS IN DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS OPEN UTILITY TRENCHES, FOUNDATION EXCAVATIONS, OR WATER MANAGEMENT AREAS.
3. 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.

SOIL DISTURBANCE PHASING	
PHASE	DISTURBANCE AREA
1	8.5 ACRES
2	11.3 ACRES
3	11 ACRES MAX.
3A	9.7 ACRES
3B	9.6 ACRES
3C	10.0 ACRES
3D	10.1 ACRES
3E	10.0 ACRES
3F	3.5 ACRES
4	NO NEW AREAS (MAY OCCUR SIMULTANEOUSLY WITH PHASE 3)
5	5.1 ACRES

NOTE: A 5-ACRE WAIVER REQUEST MUST BE APPROVED BY THE TOWN OF BETHLEHEM (MS4) PRIOR TO DISTURBING MORE THAN 5 ACRES.

PLANNING BOARD HTE# 21-00100006

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

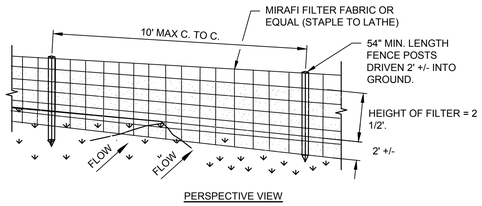
CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

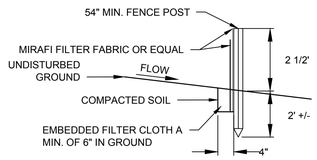
STATE OF NEW YORK · ADAM J FROSINO · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
EROSION & SEDIMENT CONTROL NOTES

DRAWING NUMBER
ESC-06



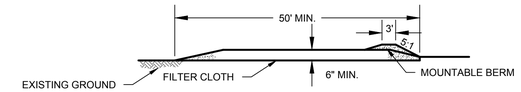
PERSPECTIVE VIEW



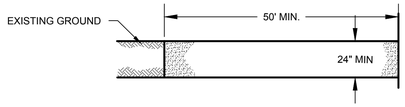
SECTION VIEW

NOTES:
1. MIRAFI FILTER FABRIC TO BE SECURED TO FENCE POSTS WITH STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE
N.T.S.



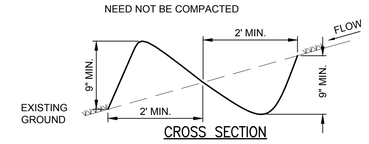
PROFILE



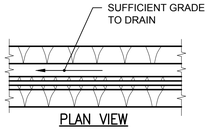
PLAN VIEW

NOTES:
1. STONE SIZE - USE #3 CRUSHED STONE OR GRAVEL (PER NYSDOT SECTION 209).
2. LENGTH - NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. 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.
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 TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
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.

STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



CROSS SECTION



PLAN VIEW

NOTES:
1. ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSION VELOCITY.
4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
5. STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR TEMPORARY SEEDING AND MULCHING, AND SHALL BE DONE WITHIN 10 DAYS.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

PERIMETER DIKE
N.T.S.

PLANNING BOARD HTE# 21-00100006

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

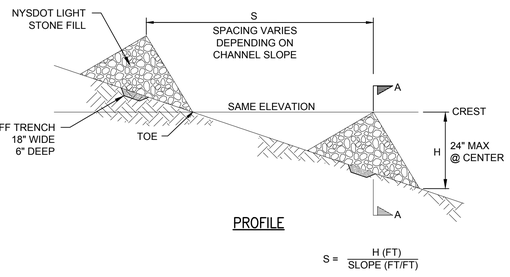
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

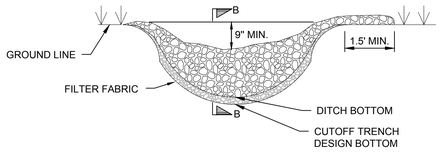
ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

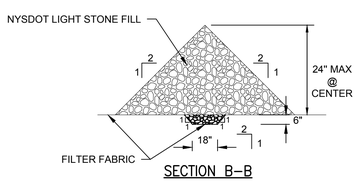


PROFILE

$$S = \frac{H\ (FT)}{SLOPE\ (FT/FT)}$$



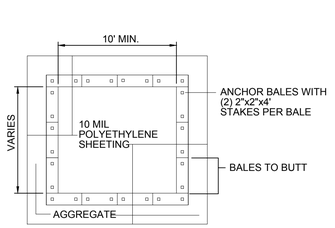
SECTION A–A



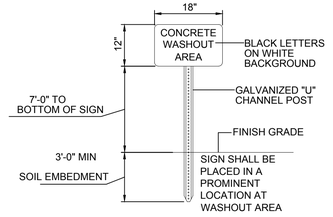
SECTION B–B

CONSTRUCTION SPECIFICATIONS
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES GRADES AND LOCATIONS SHOWN ON THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWESTCHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

LIGHT STONE CHECK DAM
N.T.S.

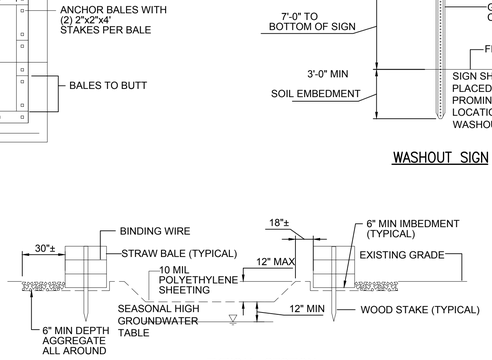


PLAN



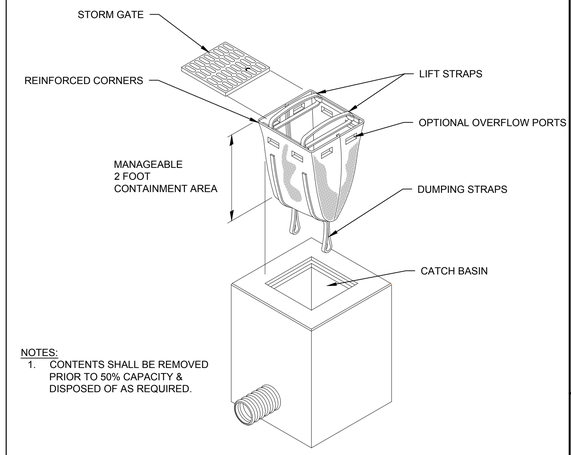
WASHOUT SIGN

NOTES:
1. 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.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. 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.



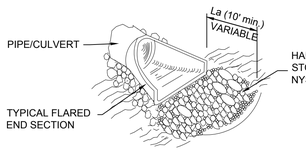
TYPICAL SECTION

CONCRETE WASHOUT
N.T.S.

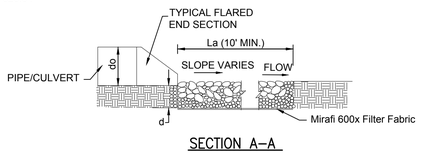


NOTES:
1. CONTENTS SHALL BE REMOVED PRIOR TO 50% CAPACITY & DISPOSED OF AS REQUIRED.

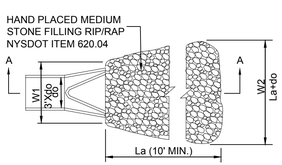
INLET PROTECTION
N.T.S.



ISOMETRIC VIEW



SECTION A–A

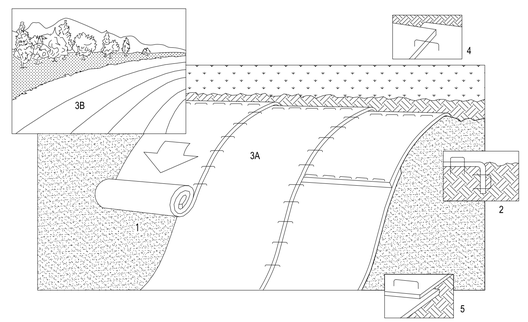


PLAN

do = Pipe Dia. (see plans)
La = Apron Length
W = Apron Width (centered on pipe)
d = Apron Depth

NOTES:
1. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NO LESS THAN 6".
2. INSTALL FILTER MIRAFI 500X OR APPROVED EQUAL FILTER FABRIC BETWEEN RIP-RAP AND SUBGRADE.

OUTLET PROTECTION - RIP RAP
N.T.S.



INSTALLATION OF GEOSYNTHETICS EROSION CONTROL MATS:
1. EROSION CONTROL MATS SHALL BE UTILIZED ON ALL SLOPES OF 3:1 OR GREATER REQUIRING PERMANENT STABILIZATION.
2. SLOPES SHALL BE PREPARED AND EROSION CONTROL MATS SHALL BE INSTALLED, ANCHORED AND SOIL FILLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION PROCEDURES.
3. SEEDING SHALL BE COMPLETED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS ABOVE PRIOR TO PLACEMENT OF THE EROSION CONTROL MAT. A SECOND APPLICATION OF PERMANENT SEEDING SHALL BE APPLIED AFTER THE MAT IS IN PLACE, PRIOR TO SOIL FILLING THE MAT.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE, RESEEDING AND REPAIR OF MATS AND SLOPES UNTIL PERMANENT STABILIZATION IS ACHIEVED.

NOTES:
REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
6. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL SUPERCEDE THIS DETAIL.

EROSION CONTROL MAT INSTALLATION
N.T.S.

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

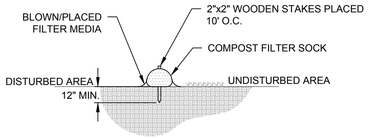
EROSION & SEDIMENT CONTROL DETAILS

DRAWING NUMBER

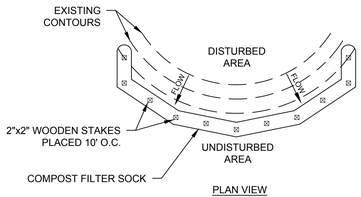
ESC-07

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-ESC-DETS.DWG

PLANNING BOARD HTE# 21-00100006



SECTION VIEW

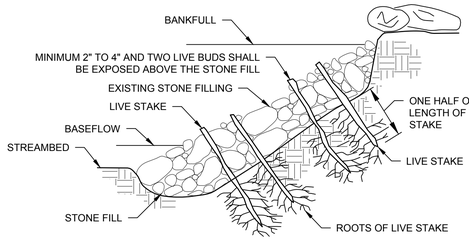


PLAN VIEW

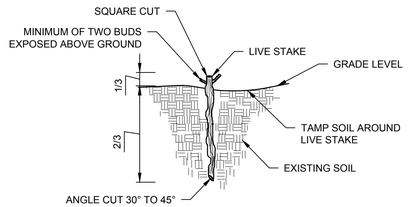
NOTES:
1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 5.1 OF NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. COMPOST SHALL MEET THE STANDARDS LISTED ON TABLE 5.2 OF NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 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 FOR EROSION AND SEDIMENT CONTROL. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO 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 EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO 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 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.

COMPOST FILTER SOCK

N.T.S.



LIVE STAKE JOINT PLANTING CROSS SECTION

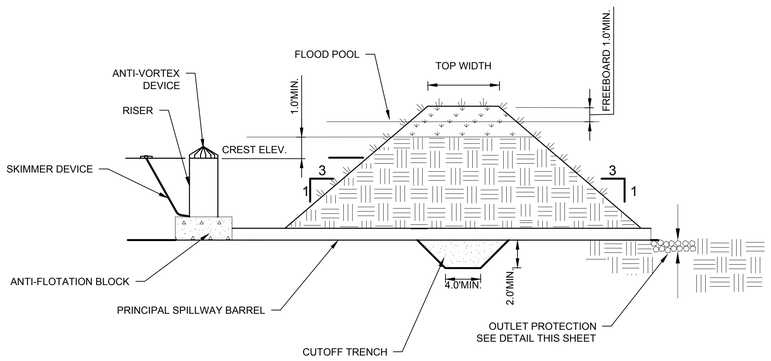


LIVE STAKE CROSS SECTION

NOTES:
1. CARE SHALL BE TAKEN NOT TO DAMAGE THE LIVE STAKES DURING INSTALLATION. THOSE DAMAGED SHALL BE LEFT IN PLACE AND SUPPLEMENTED WITH AN INTACT LIVE STAKE.
2. THE LENGTHS OF LIVE STAKES DEPENDS UPON THE APPLICATION. THE LENGTH SHALL EXTEND THROUGH THE SURFACE OF THE STONE FILL AT LEAST HALF THE LENGTH SHALL BE INSERTED IN TO THE SOIL, BELOW THE STONE FILL.
3. A PILOT HOLE IS REQUIRED TO ENSURE THAT THE LIVE STAKE IS NOT DAMAGED WHEN DRIVEN THROUGH THE STONE FILLING. ACCESS SHALL BE MADE THROUGH THE USE OF A DIBBLE BAR, OR SIMILAR TOOL TO WORK AN OPENING THROUGH THE ROCK LAYER.
4. MINIMUM 2" TO 4" AND TWO LIVE BUDS OF THE LIVE STAKE SHALL BE EXPOSED ABOVE THE STONE FILLING.
5. LIVE STAKES SHALL RANGE FROM 1" TO 4" IN DIAMETER AND BE FROM 5' TO 6' IN LENGTH.
6. LIVE STAKES SHALL BE CUT TO A POINT ON THE BASAL END FOR INSERTION IN THE GROUND.
7. USE A DEAD BLOW HAMMER TO DRIVE STAKES INTO THE GROUND. (HAMMER HEAD FILLED WITH SHOT OR SAND). A DIBBLE, IRON BAR, OR SIMILAR TOOL SHALL BE USED TO MAKE A PILOT HOLE TO PREVENT DAMAGING THE MATERIAL DURING INSTALLATION.
8. ~~WHEN POSSIBLE, TAMP SOIL AROUND LIVE STAKES.~~
9. PLACE STAKES IN A TRIANGLE PATTERN AT ABOUT 2 TO 3 FEET APART, WITH A MAXIMUM OF 4 STAKES PER YARD.

2

LIVE STAKE

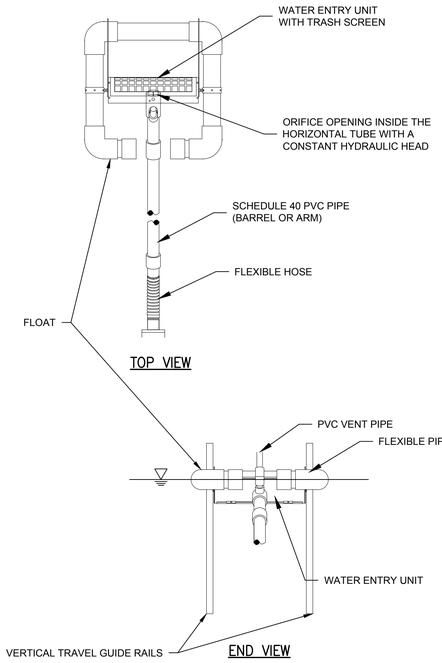


SEDIMENT BASIN CHART											
BASIN NUMBER	BOTTOM ELEV. (FT)	TOP OF DAM ELEV. (FT)	TOP OF RISER ELEV. (FT)	INV. OUT (FT)	SEDIMENT STORAGE ZONE VOLUME REQ'D (FT³)	SEDIMENT STORAGE ZONE VOLUME PROVIDED (FT³)	SEDIMENT STORAGE ZONE ELEV. (FT)	DEWATERING ZONE VOLUME REQ'D (FT³)	DEWATERING ZONE VOLUME PROVIDED (FT³)	DEWATERING ZONE ELEV. (FT)	CLEANOUT ELEVATION (FT.)
1	10	14	–	–	5300	5300	–	19080	19080	–	-
2	6	14	11	6.5	15200	16370	7.5	54720	55416	11	6.75
3	6	14	11	6.5	33000	36859	7.5	118800	119226	11	6.75

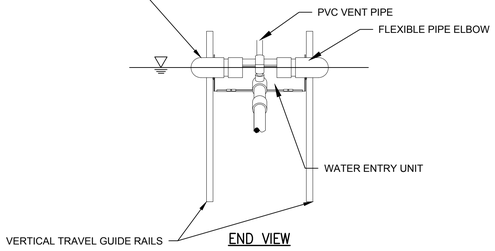
NOTES:
1. TEMPORARY SEDIMENT BASIN 1 CALCULATIONS HAVE BEEN SHOWN FOR CAPACITY VERIFICATION ONLY.
2. BASIN 1 WILL BE GRADED OUT PER WQV POND DETAIL ON SHEET GR-14. ALL OUTLET STRUCTURES ARE TO BE COVERED WITH FILTER FABRIC DURING CONSTRUCTION. EXCAVATION OF BASIN 1 TO FINAL GRADE ELEVATIONS SHALL OCCUR ONCE FINAL STABILIZATION HAS BEEN REACHED.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.

TEMPORARY SEDIMENT BASIN

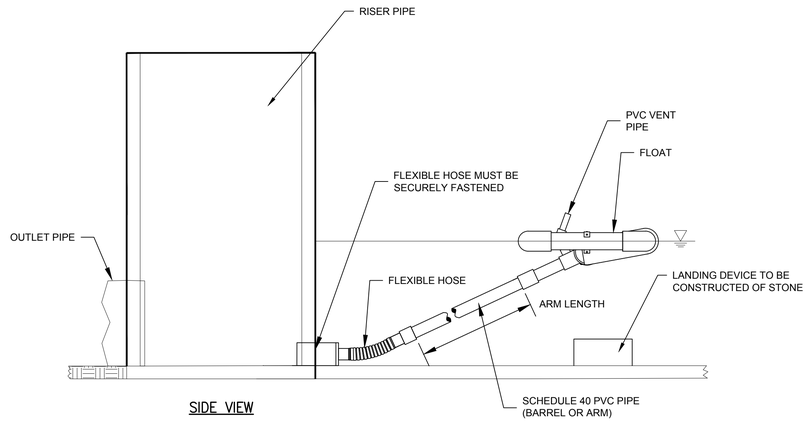
N.T.S.



TOP VIEW



END VIEW



SIDE VIEW

NOTES:
1. SKIMMER SHALL BE CONSTRUCTED WITH A 4 FOOT LONG FLEXIBLE PIPE ELBOW TO ALLOW FOR VERTICAL MOVEMENT OF THE SKIMMER FOR ITS DESIGNATED RANGE OF OPERATION.
2. THE SKIMMER WILL BE PROVIDED WITH VERTICAL TRAVEL GUIDES AND A LANDING DEVICE CONSTRUCTED OF STONE.
3. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.

SKIMMER DEWATERING DEVICE							
BASIN NUMBER	WATER SURFACE ELEVATION (FT)	ARM LENGTH (FT)	ARM DIA. (in)	ORIFICE SIZE (in)	TOP OF LANDING DEVICE ELEVATION (FT)	FLEXIBLE HOSE LENGTH (in)	FLEXIBLE HOSE ATTACHMENT ELEVATION (FT)
2	11	16	5	5	7.5	12	6
3	11	16	7	7	7.5	12	6

SKIMMER DEWATERING DEVICE DETAILS

N.T.S.

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE

EROSION & SEDIMENT CONTROL DETAILS

DRAWING NUMBER

ESC-08

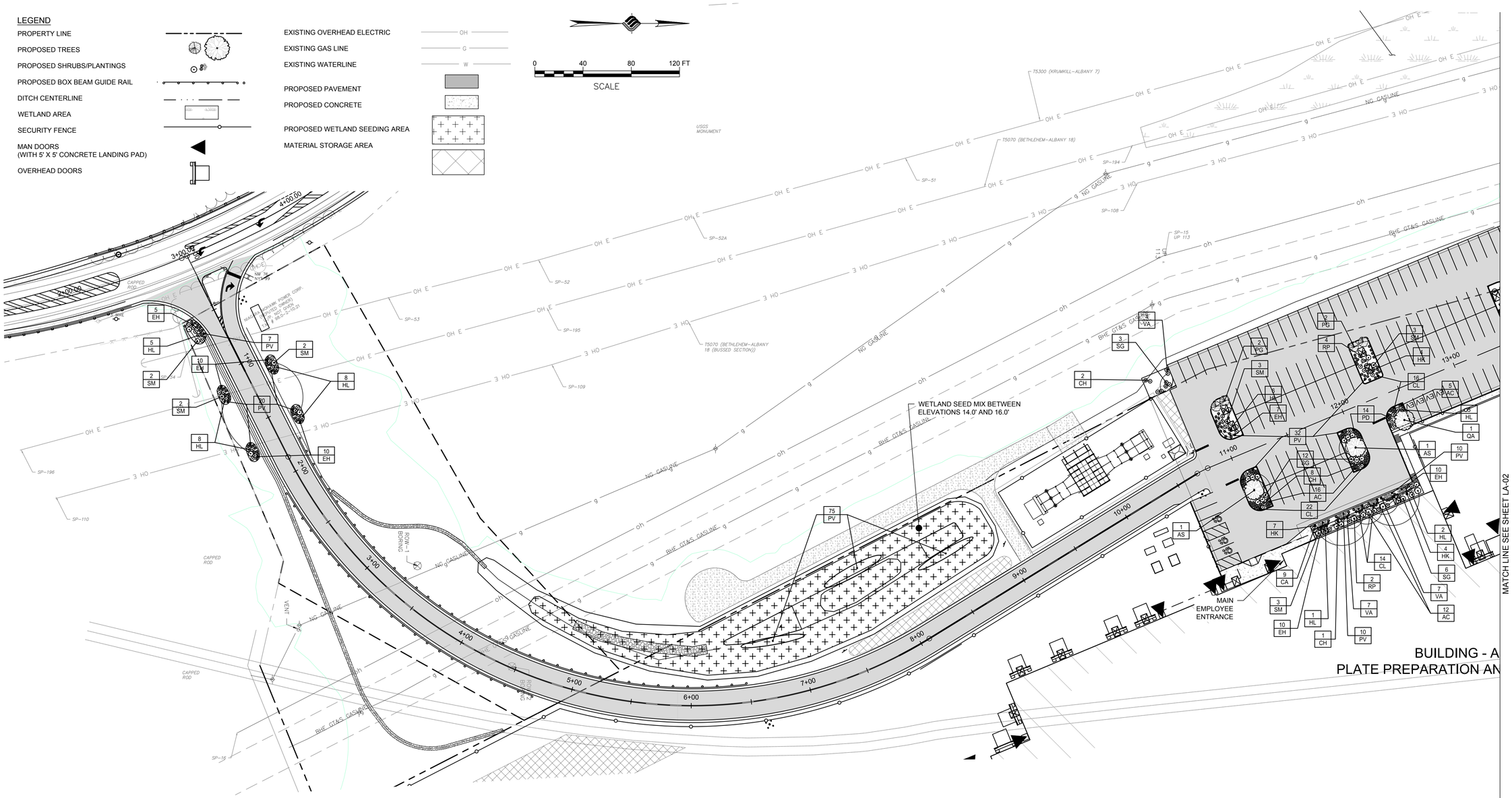
N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-ESC-DETS.DWG

LEGEND

PROPERTY LINE
PROPOSED TREES
PROPOSED SHRUBS/PLANTINGS
PROPOSED BOX BEAM GUIDE RAIL
DITCH CENTERLINE
WETLAND AREA
SECURITY FENCE
MAN DOORS (WITH 5' X 5' CONCRETE LANDING PAD)
OVERHEAD DOORS

EXISTING OVERHEAD ELECTRIC
EXISTING GAS LINE
EXISTING WATERLINE
PROPOSED PAVEMENT
PROPOSED CONCRETE
PROPOSED WETLAND SEEDING AREA
MATERIAL STORAGE AREA

0 40 80 120 FT
SCALE



PLANTING NOTES

1. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMAL GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. PROVIDE QUALITY, SIZE, GENUS, SPECIES, VARIETY OF TREES AND SHRUBS INDICATED, AND ROOT BALL SIZE COMPLYING WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK." ALL PLANTS SHOULD BE NURSERY GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
2. PLANT SIZES: MEASURE TREES AND SHRUBS ACCORDING TO ANSI Z60.1 WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE GROUND FOR TREES UP TO 4-INCH CALIPER SIZE, MEASURE MAIN BODY OF TREE OR SHRUB FOR HEIGHT AND SPREAD; DO NOT MEASURE BRANCHES OR ROOTS TIP-TO-TIP.
3. ALL CONTAINER GROWN PLANTS SHALL SIZED ACCORDING TO ANSI Z60.1 FOR TYPE AND SIZE OF PLANT REQUIRED. PLANTS SHALL BE PREMIUM QUALITY, APPEAR 'FULL', OR 'HEAVY' WITHIN THEIR CONTAINER, AND BE REPRESENTATIVE OF THE CONTAINER SIZE SPECIFIED. PLANTS DEEMED TO BE SUBSTANDARD IN SIZE BY THE OWNERS REPRESENTATIVE WILL BE REJECTED.
4. ALL NEW PLANTS TO BE BALLED AND BURLAPPED OR CONTAINER GROWN UNLESS OTHERWISE NOTED ON PLANT LIST.
5. TREES SHOULD BE FRESHLY DUG DURING THE SEASON OF PLANTING, MARCH 1ST TO MAY 1ST FOR SPRING PLANTING AND OCTOBER 15TH TO DECEMBER 15TH FOR FALL PLANTING. PLANTS KNOWN AS FALL DIG HAZARDS SHALL BE DUG IN THE SPRING ONLY.
6. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS.
7. IN GENERAL, PLANT SPECIES SUBSTITUTIONS WILL NOT BE ACCEPTED. IF SPECIFIED MATERIAL IS NOT OBTAINABLE, CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY ALONG WITH PROPOSED SUBSTITUTION. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, SIZE, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE OWNERS REPRESENTATIVE.
8. THE OWNERS REPRESENTATIVE RETAINS THE RIGHT TO INSPECT TREES AND SHRUBS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS, INJURIES AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. CONTRACTOR SHALL REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE.
9. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE OWNERS REPRESENTATIVE.
10. INSTALLED PLANTS SHALL BEAR THE SAME RELATIONSHIP TO PROPOSED GRADE AS THEY BORE TO PREVIOUS GRADE. NO TREES SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING.
11. CONTRACTOR SHALL PROVIDE LONG LASTING, SLOW RELEASE STARTER FERTILIZER IN EACH PLANTING PIT FOR TREES, SHRUBS AND PERENNIALS.
12. ALL PLANT BEDS SHALL RECEIVE THREE INCHES (3") OF SHREDDED BARK MULCH. MULCH SHALL BE FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS, CONSISTING OF DOUBLE HAMMERED SHREDDED BARK MULCH COMPRISED OF EITHER HARDWOOD OR SOFTWOOD SHREDDED BARK. SHREDDED BARK MULCH SHALL NOT EXCEED 3" IN GREATEST DIMENSION, AND SHALL BE DARK BROWN IN COLOR.
13. PLANTS SHALL BE DELIVERED ONLY AS THEY CAN BE INSTALLED IN REASONABLE TIME. ALL PLANTS ARE SUBJECTED TO INSPECTION AT DELIVERY BY THE OWNER'S REPRESENTATIVE.
14. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE PLANT LIST, THE PLANTING PLAN SHALL GOVERN.
15. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE FOR A MINIMUM 30-DAY MONITORING PERIOD AFTER NOTIFICATION OF SUBSTANTIAL COMPLETION OF PLANTING, AND UNTIL FINAL ACCEPTANCE. MAINTENANCE INCLUDES PRUNING, WEEDING, WATERING, FERTILIZATION, AND RE-SEEDING AS NECESSARY.
16. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.
17. ACCEPTANCE STANDARDS:
    17.1. PLANTS SHALL BE FREE OF FROST CRACKS; SUN SCALD; DAMAGE DUE TO INSECTS, PESTS, AND DISEASE; STRUCTURAL DEFECTS; AND DAMAGE RESULTING FROM MACHINERY OR TOOLS. ALL PLANTS REGARDLESS OF THE SEASON OF REVIEW SHALL HAVE A MINIMUM OF 75 PERCENT HEALTHY, BALANCED BRANCHING STRUCTURE WITH A HEALTHY TERMINAL LEADER(S) WITH VIABLE TERMINAL BUD(S). TREES SHALL BE PLUMB AND SHOW NO SIGNS OF UNEVEN SETTLING OR LEANING.
    17.2. LAWN AREAS SHALL HAVE A HEALTHY, UNIFORM STAND OF GRASS FREE OF WEEDS, SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90% OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5"X5"
18. CONTRACTOR SHALL REPLACE ALL PLANTS THAT ARE MORE THAN 25% DEAD OR, AS DETERMINED BY THE OWNERS REPRESENTATIVE, ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION. CONTRACTOR SHALL BEAR THE COST OF COMPLETE REPLACEMENT(S). REPLACEMENTS SHALL BE OF THE SAME SIZE AND SPECIES AS SPECIFIED ON THE PLANTING LIST.
19. GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL TO REMAIN ALIVE AND BE IN A HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF PLANTING WORK, AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY WORK.
20. 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:

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

21. PLANTING SOIL & TOPSOIL SHALL HAVE A SANDY LOAM, LOAMY SAND, OR LOAM TEXTURE AS DETERMINED BY MECHANICAL ANALYSIS (ASTM 422) AND BASED ON THE 'USDA CLASSIFICATION SYSTEM' MAXIMUM CLAY CONTENT SHALL BE 10%. TOPSOIL SHALL BE FERTILE, FRIABLE SOIL FREE OF STONES LARGER THAN ONE INCH IN ANY DIRECTION, LUMPS, PLANTS AND THEIR ROOTS, DEBRIS AND OTHER EXTRANEOUS MATTER AS DETERMINED BY THE OWNER'S REPRESENTATIVE, AND TOXIC MATTER HARMFUL TO PLANT GROWTH.

PLANTING SOIL /TOPSOIL SPECIFICATION:

GRADATION:

SIEVE % PASSING BY WEIGHT	MIN.	MAX.
#10	100	
#20	78	95
#40	67	87
#60	48	78
#100	40	75
#200	28	63
#270	22	55
.002	2	7

CHEMICAL ANALYSIS	
PH RANGE	5.2-7.0
ORGANIC MATTER	4%-6%
MAGNESIUM	35LB. PER AC
PHOSPHORUS	75LB/AC
POTASSIUM	85LB/AC
SOLUBLE SALTS	NOT TO EXCEED 500 PPM

PLANNING BOARD HTE# 21-00100006

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK · ADAM J FROSINA · 088870 · LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
LANDSCAPING PLAN (1 OF 2)

DRAWING NUMBER
LA-01

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00 LAND.DWG

LEGEND

PROPERTY LINE
PROPOSED TREES
PROPOSED SHRUBS/PLANTINGS
PROPOSED BOX BEAM GUIDE RAIL
DITCH CENTERLINE
WETLAND AREA
SECURITY FENCE
MAN DOORS (WITH 5' X 5' CONCRETE LANDING PAD)
OVERHEAD DOORS

EXISTING OVERHEAD ELECTRIC
EXISTING GAS LINE
EXISTING WATERLINE
PROPOSED PAVEMENT
PROPOSED CONCRETE
PROPOSED WETLAND SEEDING AREA
MATERIAL STORAGE AREA

PLANNING BOARD HTE# 21-00100006

EXISTING WETLAN

LANDS N/F NIAGARA MOHAWK POWER CORP. L.2701, P.295 TAX ID# 98.00-2-10.21

EASEMENT L.2516 P.311

WETLAND SEED MIX BETWEEN ELEVATIONS 14.0' AND 16.0'

PROPERTY LINE

8' HIGH CHAINLINK SECURITY FENCE (TYP.)

MAIN ENTRANCE

BUILDING - B
WELDING FINISHING

MATCH LINE SEE SHEET LA-01

0 40 80 120 FT
SCALE

1 EVERGREEN TREE PLANTING
SCALE: NTS

NOTES:
TREE SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IN THE NURSERY. NEVER CUT A LEADER. TREE SHALL BE PLUMB & STRAIGHT.

INSTALL 3 GUYS PER TREE EQUALLY SPACED AROUND ROOTBALL. ATTACH 1/8" GALV. STEEL CABLES @ 2/3 HEIGHT OF TREE. PROVIDE REINFORCED RUBBER HOSE TO ENCASE CABLE AROUND TRUNK. SECURE ALL ENDS OF CABLE W/ GALV. CLAMPS.

GALV. TURNBUCKLE >1 PER CABLE

3" DEPTH PINE BARK MULCH (OR STONE); PULL MATERIAL AWAY FROM TRUNK.

3" Ø X 2'-0" CEDAR STAKES, 3 PER TREE, DRIVEN IN AT A 25° ANGLE; STAKES TO BE OUTSIDE OF TREE PIT.

3" HT. PLANTING SOIL SAUCER

AMENDED PLANTING SOIL, COMPACTED

CUT ROPE SURROUNDING BOTTOM OF TREE TRUNK AFTER BACKFILLING BUT BEFORE MULCHING. DO NOT REMOVE BURLAP.

NATIVE SOIL DRAINAGE MOUND, COMPACTED TO 92%

UNDISTURBED SUBGRADE

EQ. EQ. 2"

2 DECIDUOUS TREE PLANTING
SCALE: NTS

NOTES:
-TREE SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IN THE NURSERY. -THIN BRANCHES & FOLIAGE AS DIRECTED WHILE RETAINING NORMAL SHAPE OF TREE. NEVER CUT A LEADER.
-TREE SHALL BE PLUMB & STRAIGHT.

STAKE AND GUY TREE-CONTRACTOR SHALL PROVIDE METHOD AND MANUFACTURER SAMPLE TO OWNER'S REPRESENTATIVE FOR APPROVAL.

NEATLY WRAP ALL DECIDUOUS TRUNKS TO A HEIGHT OF THE SECOND LOWEST BRANCH (FALL PLANTING ONLY)

3" DEPTH PINE BARK MULCH (OR STONE); PULL MATERIAL AWAY FROM TRUNK.

3" HT. PLANTING SOIL SAUCER

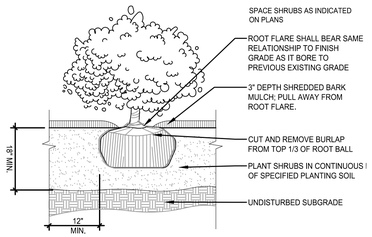
AMENDED PLANTING SOIL, COMPACTED

CUT ROPE SURROUNDING BOTTOM OF TREE TRUNK AFTER BACKFILLING BUT BEFORE MULCHING. DO NOT REMOVE BURLAP.

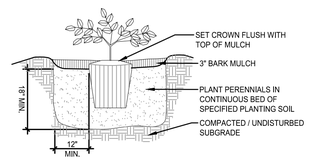
NATIVE SOIL DRAINAGE MOUND, COMPACTED TO 92%

UNDISTURBED SUBGRADE

EQ. EQ. 2"



3 SHRUB PLANTING
SCALE: NTS



4 PERENNIAL PLANTING
SCALE: NTS

PLANT LIST:

SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS/SPACING
DECIDUOUS TREES					
AS	3	Acer saccharum	Sugar Maple	2-2 1/2" cal.	
QA	2	Quercus alba	White Oak	2-2 1/2" cal.	
EVERGREEN TREES					
PP	2	Picea pungens	Colorado Blue Spruce	5' ht.	
PG	4	Picea glauca	White Spruce	5' ht.	
SHRUBS					
CA	16	Clethra alnifolia	Summersweet	30"-36" ht	
CH	17	Boxus microphylla var. japoncia "Winter Gem"	Japanese Boxwood	24" ht	
HL	44	Hydrangea 'Limelight'	Limelight Hydrangea	24" ht	
SG	37	Spirea x bumalda 'Goldflame'	Goldflame Spirea	3 Gal.	
RP	14	Rhododendron 'Purpureum Elogons'	Purpureum Elogons Rhododendron	30"-36" ht	
VA	22	Viburnum acerfolium	Maple Leaf Viburnum	30"-36" ht	
SM	29	Syringa mayeri	Plabin Lilac	30"-36" ht	
PERENIALS					
AC	33	Astilbe chinensis 'Visions in Red'	Visions in Red Astilbe	#2 Cont.	
EH	52	Echinacea 'Harvest Moon'	Harvest Moon Cone Flower	#2 Cont	
HK	15	Hosta 'Krossa Regal'	Regal Hosta	#2 Cont	
PD	14	Phlox divaricata	Woodland Phlox	#2 Cont	
ORNAMENTAL GRASS					
CL	52	Chasmanthium latifolium	Northern Sea Oats	#2 Cont	
PV	229	Panicum varigotum 'Shanendoah'	Shanendoah Switchgrass	5" Plugs	18" OC within the Pond's Aquatic Bench

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
ALBANY, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK ADAM J FROSINO 088870 LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE
LANDSCAPING PLAN (2 OF 2)

DRAWING NUMBER
LA-02

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-LAND.DWG

Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Lum. Watts	Arr. Watts	Lum. Lumens	Arr. Lum. Lumens
	29	W2 185W	SINGLE	N.A.	0.950	WDGE4 LED P6 70CRI RFT 50K	185.23	185.23	25586	25586
	46	W1 109W	SINGLE	N.A.	0.950	WDGE4 LED P2 70CRI RFT 50K	109.02	109.02	16134	16134
	26	W4 646W AWFD	SINGLE	N.A.	0.950	RSXF4 LED P8 40K AWFD	645.6021	645.6021	84772	84772
	16	W3 320W AWFD	SINGLE	N.A.	0.950	RSXF4 LED P2 40K AWFD	320.4525	320.4525	46827	46827
	9	P1 189W	SINGLE	N.A.	0.950	RSX2 LED P4 40K R3	189.54	189.54	25000	25000
	3	P2 189W	SINGLE	N.A.	0.950	RSX2 LED P4 40K R4	189.54	189.54	25328	25328
	1	P2 189W B2B	BACK-BACK	N.A.	0.950	RSX2 LED P4 40K R4	189.54	379.08	25328	50656
	2	W5 109W	SINGLE	N.A.	0.950	WDGE4 LED P2 70CRI R2 50K	109.02	109.02	16238	16238

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bldg A Parking Lot_Planar	Illuminance	Fc	3.82	11.7	1.2	3.18	9.75
Bldg A Side Lots and Drive_Plana	Illuminance	Fc	1.81	8.4	0.0	N.A.	N.A.
Bldg B Parking Lot_Planar	Illuminance	Fc	0.93	8.7	0.0	N.A.	N.A.
Drive Lanes in front of Bldg B_P	Illuminance	Fc	2.04	5.3	0.9	2.27	5.89
Light Spill - East	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
Light Spill Areas_Planar	Illuminance	Fc	0.01	1.7	0.0	N.A.	N.A.
Wharf Area_Planar	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
Yard & Bldg Surroundings_Planar	Illuminance	Fc	1.80	250.1	0.0	N.A.	N.A.

0 60 120 180 FT

SCALE

PLANNING BOARD HTE# 21-00100006

MATCH LINE SEE SHEET LT-02

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00-LAND.DWG

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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION SITE

DRAWN	BFD
DESIGNED	BFD
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

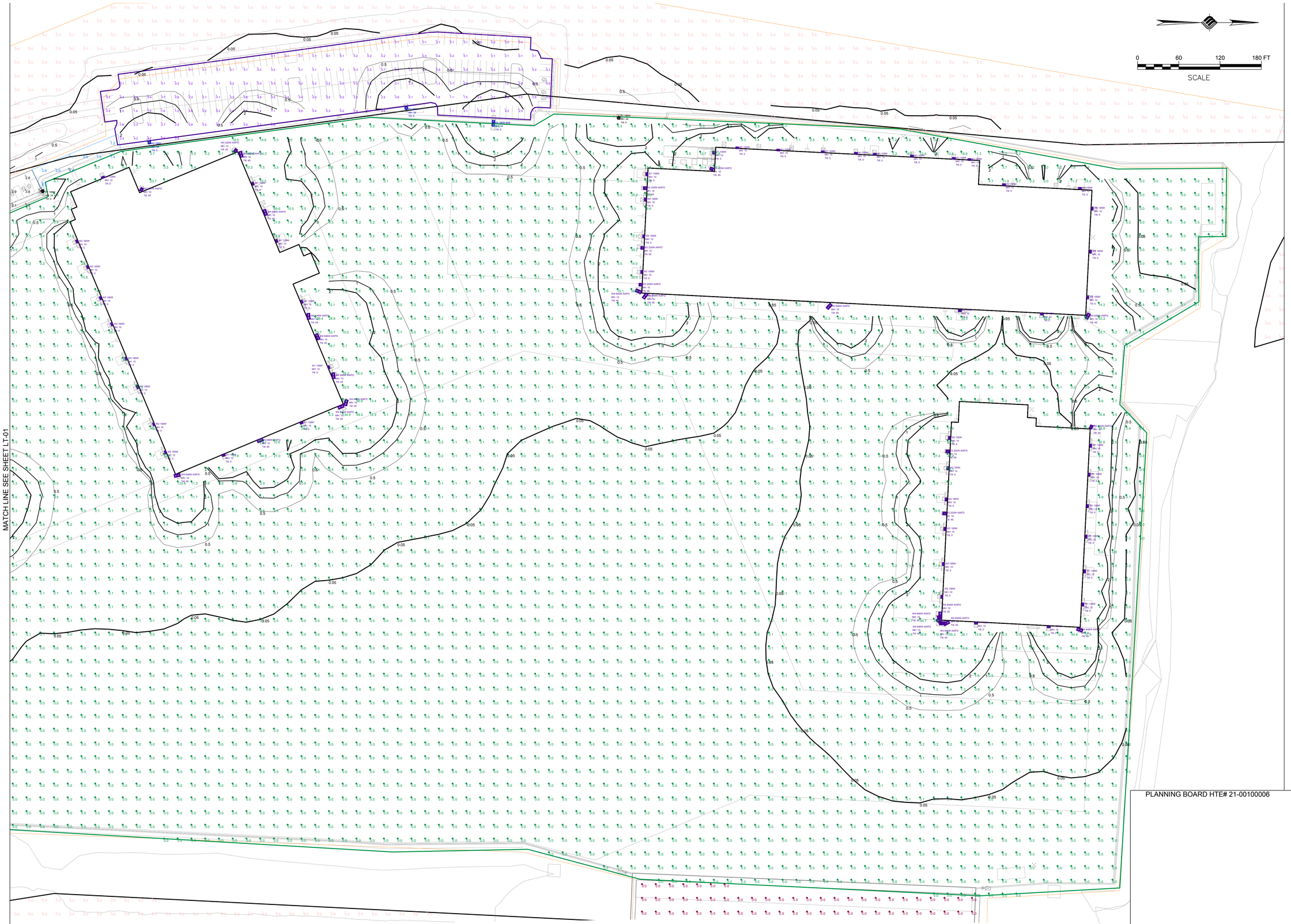
STATE OF NEW YORK ADAM J FROSINO 088870 LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE

LIGHTING PLAN (1 OF 2)

DRAWING NUMBER

LT-01



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

GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	10/28/22	GMP BID SET REVISIONS

CLIENT:
ALBANY PORT DISTRICT COMMISSION

ALBANY, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION SITE

DRAWN	BFD
DESIGNED	BFD
CHECKED	AJF
SCALE	AS SHOWN
DATE	05/10/2022
PROJECT	18641.00

STATE OF NEW YORK
ADAM J FROSINOS
088870
LICENSED PROFESSIONAL ENGINEER

PLANNING BOARD HTE# 21-00100006

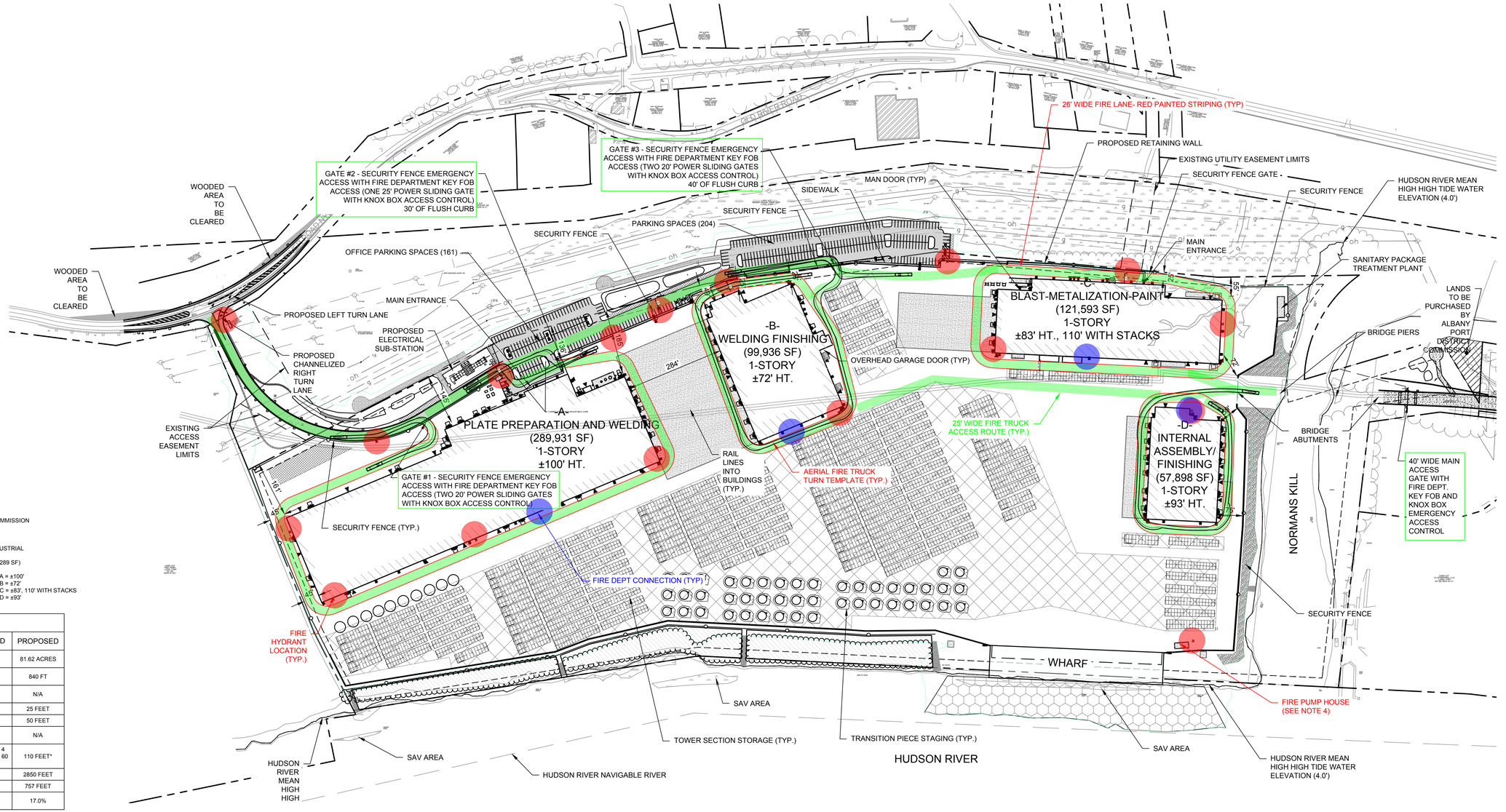
DRAWING TITLE

LIGHTING PLAN (2 OF 2)

DRAWING NUMBER

LT-02

N:\18641.00 ALBANY PORT EXPANSION\DRAWX\DRAWINGS\SHEET FILES\18641.00-LAND.DWG



PROJECT DATA

1. APPLICANT / LAND OWNER:
   ALBANY PORT DISTRICT COMMISSION
   106 SMITH BOULEVARDS
   ALBANY, NEW YORK 12205
2. EXISTING ZONING: HEAVY INDUSTRIAL
3. LOT AREA: 81.62 ACRES (3,555,289 SF)
4. BUILDING HEIGHT: - BUILDING A = ±100'
   - BUILDING B = ±72'
   - BUILDING C = ±83', 110' WITH STACKS
   - BUILDING D = ±93'

SITE DATA		
FEATURE	REQUIRED	PROPOSED
MINIMUM LOT SIZE, NONRESIDENTIAL	5 ACRES	81.62 ACRES
MINIMUM FRONT YARD, FROM RIGHT-OF-WAY	100 FEET	840 FT
MINIMUM FRONT YARD, FROM CENTER LINE	125 FEET	N/A
MINIMUM SIDE YARD	25 FEET	25 FEET
MINIMUM REAR YARD	50 FEET	50 FEET
MINIMUM HIGHWAY FRONTAGE	150 FEET	N/A
MAXIMUM HEIGHT	LESSER OF 4 STORIES OR 60 FEET	110 FEET*
MINIMUM LOT DEPTH	200 FEET	2850 FEET
MINIMUM LOT WIDTH	150 FEET	757 FEET
MAXIMUM LOT COVERAGE	30%	17.0%

* WILL REQUEST A VARIANCE

ZONING:

EXISTING: ±81.62 ACRES HEAVY INDUSTRIAL

PROPOSED: ±81.62 ACRES HEAVY INDUSTRIAL

TAX ACCOUNT NUMBERS: 98.00-2-10.23
98.01-2-1

* ENTIRE SITE IS WITHIN 100-YR FLOODPLAIN

PARKING:

1 SPACE FOR EACH 2 EMPLOYEES ON MAXIMUM WORKING SHIFT.

TOTAL EMPLOYEES = 550

REQUIRED:
275 TOTAL SPACES REQUIRED

PROVIDED:
THE LARGEST SHIFT INCLUDES 180 EMPLOYEES WITH THE LARGEST SHIFT CHANGE INVOLVING 320 EMPLOYEES. INDIVIDUAL BUILDING PARKING DEMANDS FROM MARMEN WELCON HAVE BEEN PROVIDED BELOW:

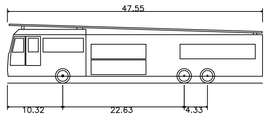
BUILDING A = 168 SPACES
BUILDING B = 87 SPACES
BUILDING C & D = 100 SPACES TOTAL
TOTAL OPERATOR REQUESTED SPACES = 355

349 TOTAL SPACES PROVIDED

ADA SPACES REQUIRED:
PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

REQUIRED (349 SPACE LOT): 8 SPACES (6 STANDARD & 2 VAN)
FOR TOTAL PARKING 301-400 SPACES

PROVIDED (349 SPACE LOT): 9 SPACES (7 STANDARD & 2 VAN)



Elsmere Fire Truck	
Overall Length	47.550ft
Overall Width	8.000ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.280ft
Track Width	7.690ft
Lock-to-lock time	4.00s
Max Wheel Angle	48.70°

NOTE:

1. THE SURFACE OF THE FIRE APPARATUS ACCESS ROAD SHALL BE ASPHALT, CONCRETE OR A SURFACE APPROVED TO HANDLE AN 80,000 LBS. LADDER TRUCK IN ALL WEATHER CONDITIONS AND BE MAINTAINED YEAR-ROUND (INCLUDING SNOW PLOWING).
2. ALL FIRE APPARATUS ACCESS ROADS SHALL BE ADEQUATELY MARKED SHOWING THE LIMITS OF THE ROADWAY TO PREVENT STORAGE.
3. BUILDING MOUNTED FIRE DEPARTMENT RADIO COVERAGE ANTENNA(S) MAY BE REQUIRE ON SITE. REFER TO ITEM 9-X OF THE TOWN OF BETHLEHEM SITE PLAN APPROVAL DOCUMENT CERTIFICATION NO. 304 DATED MAY, 17, 2022.
4. THE PROPOSED FIRE PUMP SYSTEM SHALL MEET THE FOLLOWING DESIGN REQUIREMENTS:
   - DESIGN FOR ADEQUACY OF 2000 GPM TO THE SITE FROM THESE PUMPS FOR A COMBINATION OF FIRE PROTECTION AND FIREFIGHTING WATER.
   - PUMPS ARE PROVIDED STANDBY POWER DUE TO POWER OUTAGES.
   - DESIGNED TO ENSURE WATER IS AVAILABLE AND PUMPS ARE OPERABLE FOR ALL POTENTIAL WATER LEVELS AND PROTECTION AGAINST ICE AND DEBRIS.
   - THE PUMPS SHOULD BE ACCESSIBLE FOR MAINTENANCE AND INSPECTION IN ALL WEATHER CONDITIONS AND TO BE ABOVE-GRADE.
   - A CHECK VALVE OR POST INDICATOR VALVE SHALL BE ON THE DISCHARGE SIDE OF THE PUMPS WITH A FIRE HYDRANT LOCATED JUST AFTER SUCH VALVE TO BE ABLE TO MANUALLY PUMP THE SYSTEM IN CASE OF COMPLETE PUMP FAILURE.

LEGEND

- PROPERTY LINE
- EASEMENT LIMITS
- DITCH CENTERLINE
- ROADSIDE SWALE
- BUILDING SETBACK
- OVERHEAD DOORS
- MAN DOORS
- PROPOSED BUILDING
- EXISTING BUILDING
- PROPOSED BUILDING FOOTPRINT
- MATERIAL STORAGE AREAS
- WETLAND AREA
- WHARF DREDGING AREA
- PAVEMENT AREA
- CONCRETE AREA
- RIP-RAP WATER EMBANKMENT STABILIZATION
- FIRE HYDRANT LOCATION
- FIRE DEPARTMENT CONNECTION

0 150 300 450 FT
SCALE

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
GMP BID SET

NO.	DATE	DESCRIPTION
1	06/08/22	GMP BID SET
2	08/29/22	ADDENDUM #1 REVISIONS

CLIENT: ALBANY PORT DISTRICT COMMISSION
PROJECT: PORT OF ALBANY EXPANSION SITE
ALBANY, NEW YORK

DRAWN	JES
DESIGNED	NSO
CHECKED	AJF
SCALE	1"=40'
DATE	05/10/2022
PROJECT	18641.00

DRAWING TITLE
FIRE ACCESS PLAN

DRAWING NUMBER
FA-01

N:\18641.00 ALBANY PORT EXPANSION\DRAWINGS\SHEET FILES\18641.00 FIRE ACCESS.DWG