

TOWN OF NEWBURGH PLANNING BOARD TECHNICAL REVIEW COMMENTS

PROJECT NAME: MOFFAT PROPERTIES, LLC

PROJECT NO.: 22-14

PROJECT LOCATION: 224 & 226 NY - 17K

SECTION 32, BLOCK 29, LOT 64 & 65

REVIEW DATE: 28 OCTOBER 2022
MEETING DATE: 3 NOVEMBER 2022

PROJECT REPRESENTATIVE: INDEPENDENCE ENGINEERING, LLC

- 1. Orange County Planning comments have been received identifying a Local Determination.
- 2. A City of Newburgh Flow Acceptance letter will be required. This office will forward a flow request to the city on behalf of the applicant. The applicant should provide a narrative of the proposed hydraulic loading from the site based on NYSDEC standards.
- 3. A revised SWPPP has been submitted to this office and is being reviewed. Separate comment letter will be provided.
- 4. The Stormwater Management Facilities have been located further into the site and the building located further in from NYS Route 17K to address the required 35 ft. buffer from NYS 17K. Karen Arent's office is reviewing the site landscaping.
- 5. A Stormwater Facilities Maintenance Agreement will be required. This should be a condition of any approvals issued by the Planning Board.
- 6. Status of NYSDOT's review of the project should be addressed. All correspondence should be copied to the Planning Board.
- 7. The existing municipal sanitary sewer line in the Route 17K right-of-way functions as a low pressure force main in the vicinity of the project. A sanitary sewer pump station will be required to convey effluent into the low pressure force main. Copies of the As-Built plans have been submitted by the Sewer Department to the applicant's representative.
- 8. Copy of the Town's water and sewer notes are attached to this memo.
- 9. The applicant's are requested to reply to each of the County Planning comments on how they can be addressed on the plans.
- 10. County Planning identifies that the project will require an FAA review as the project is located in close proximity to the Stewart International Airport.

11. The project is subject to architectural review by the Planning Board. Future submissions should contain and ARB submission.

Respectfully submitted,

MHE Engineering, D.P.C.

Patril & Offenes

Patrick J. Hines

Principal

PJH/kbw

TOWN OF NEWBURGH WATER SYSTEM NOTES FOR SITE PLANS

- "Construction of potable water utilities and connection to the Town of Newburgh water system requires a permit from the Town of Newburgh Water Department. All work and materials shall conform to the requirements of the NYSDOH and the Town of Newburgh."
- 2. All water service lines four (4) inches and larger in diameter shall be cement lined class 52 ductile iron pipe conforming to ANSI\AWWA C151\A21.51 for Ductile Iron Pipe, latest revision. Joints shall be either push-on or mechanical joint as required.
- 3. Thrust restraint of the pipe shall be through the use of joint restraint. Thrust blocks are not acceptable. Joint restraint shall be through the use of mechanical joint pipe with retainer glands. All fittings and valves shall also be installed with retainer glands for joint restraint. Retainer glands shall be EBBA Iron Megalug Series 1100 or approved equal. The use of a manufactured restrained joint pipe is acceptable with prior approval of the Water Department.
- 4. All fittings shall be cast iron or ductile iron, mechanical joint, class 250 and conform to ANSI\AWWA C110\A21.10 for Ductile and Gray Iron Fittings or ANSI\AWWA C153\A21.53 for Ductile Iron Compact Fittings, latest revision.
- 5. All valves 4 to 12 inches shall be Resilient Wedge Gate Valves conforming to ANSI\AWWA C509 such as Mueller Model A-2360-23 or approved equal. All gate valves shall open left (counterclockwise).
- 6. Tapping sleeve shall be mechanical joint such as Mueller H-615 or equal. Tapping valves 4 to 12 inches shall be Resilient Wedge Gate Valves conforming to ANSI\AWWA C509 such as Mueller Model T-2360-19 or approved equal. All tapping sleeves and valves shall be tested to 150 psi minimum; testing of the tapping sleeve and valve must be witnessed and accepted by the Town of Newburgh Water Department prior to cutting into the pipe.

TOWN OF NEWBURGH WATER SYSTEM NOTES FOR SITE PLANS

- 7. All hydrants shall be Clow-Eddy F-2640 conforming to AWWA Standard C-502, latest revision. All hydrants shall include a 5 ¼ inch main valve opening, two 2 ½ inch diameter NPT hose nozzles, one 4 inch NPT steamer nozzle, a 6 inch diameter inlet connection and a 1 ½ inch pentagon operating nut. All hydrants shall open left (counter-clockwise). Hydrants on mains to be dedicated to the Town shall be Equipment Yellow. Hydrants located on private property shall be Red.
- 8. All water service lines two (2) inches in diameter and smaller shall be type K copper tubing. Corporation stops shall be Mueller H-15020N for ¾ and 1 inch, Mueller H-15000N or B-25000N for 1½ and 2 inch sizes. Curb valves shall be Mueller H-1502-2N for ¾ and 1 inch and Mueller B-25204N for 1½ and 2 inch sizes. Curb boxes shall be Mueller H-10314N for ¾ and 1 inch and Mueller H-10310N for 1½ and 2 inch sizes.
- 9. All pipe installation shall be subject to inspection by the Town of Newburgh Water Department. The contractor shall be responsible for coordinating all inspections as required with the Town of Newburgh Water Department.
- 10. The water main shall be tested, disinfected and flushed in accordance with the Town of Newburgh requirements. All testing, disinfection and flushing shall be coordinated with the Town of Newburgh Water Department. Prior to putting the water main in service satisfactory sanitary results from a certified lab must be submitted to the Town of Newburgh Water Department. The test samples must be collected by a representative of the testing laboratory and witnessed by the Water Department.
- 11. The final layout of the proposed water and/or sewer connection, including all materials, size and location of service and all appurtenances, is subject to the review and approval of the Town of Newburgh Water and/or Sewer Department. No permits shall be issued for a water and/or sewer connection until a final layout is approved by the respective Department.

FINAL LAND DEVELOPMENT PLAN SET

FOR

SUNBELT RENTALS - NEWBURGH

224 & 226 NEW YORK ROUTE 17K, TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK

PROPERTY:

224 NY ROUTE 17K TAX LOT 89-1-64 14479 P.10 0.372 ACRES

226 NY ROUTE 17K TAX LOT 89-1-65 14479 P.10 5.543 ACRES

ZONING: ID INTEDCHANCE BUSINESS

OWNER:

EUGENE A. MAZZARELLI LIVING TRU 739 HEWIT LANE NEW WINDSOR, NY 12553

APPLICANT:

MOFFAT PROPERTIES, INC. 701 FINGER LAKES DRIVE WAKE FOREST, NC 27587

ENGINEER:

INDEPENDENCE ENGINEERING LLC 102 FARNSWORTH AVENUE, SUITE 310 BORDENTOWN, NJ 08505

SURVEYOR:

LANC & TULLY ENGINEERING & SURVEYING, P.C. PO BOX 687 ROUTE 207 GOSHEN, NY 10924

GEOTECHNICAL CONSULTANT:

MULA DESIGN GROUP 325 COTTAGE HILL ROAD YORK, PA 17401

ARCHITECT:

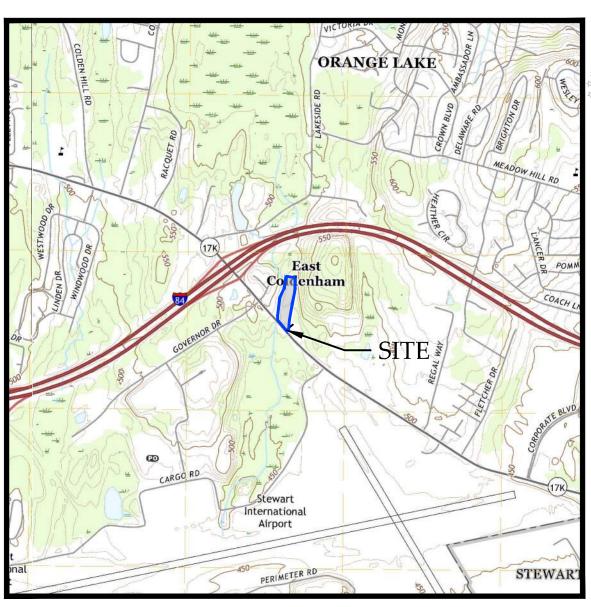
ALIGN DESIGN ASSOCIATES 145 CHURCH STREET NE, SUITE 240 MARIETTA, GA 30060

DEVELOPMENT DESCRIPTION:

THE DEVELOPMENT PROPOSES TO DEMOLISH AN EXISTING VACANT STRUCTURE AND CONSTRUCT A NEW INDUSTRIAL EQUIPMENT YARD, INCLUDING PARKING, UTILITIES, AND STORM WATER MANAGEMENT FACILITIES.

TABLE OF LOT REQUIREMENTS FOR IB DISTRICT FOR THE TOWN OF NEWBURGH:

BULK & AREA CRITERIA	REQUIRED	EXISTING	PROPOSED
MINIMUM TOTAL LOT AREA (SQUARE FEET)	40,000	257,660	257,660
MINIMUM WIDTH (FEET)	150	346.20	346.20
MINIMUM DEPTH (FEET)	150	1040.44	1040.44
MAXIMUM LOT BUILDING COVERAGE (%)	40 %	4.13%	5.00%
MAXIMUM BUILDING HEIGHT (FEET)	40	15	25
MAXIMUM LOT SURFACE COVERAGE (%)	80 %	16.90%	49.06%
FRONT YARD SETBACK (FEET)	50	103.00	134.38
SIDE YARD SETBACK (FEET)	30 (SINGLE)	46.65	64.50
SIDE YARD SETBACK (FEET)	80 (COMBINED)	162.54	129.31
REAR YARD SETBACK (FEET)	60	780	652.37

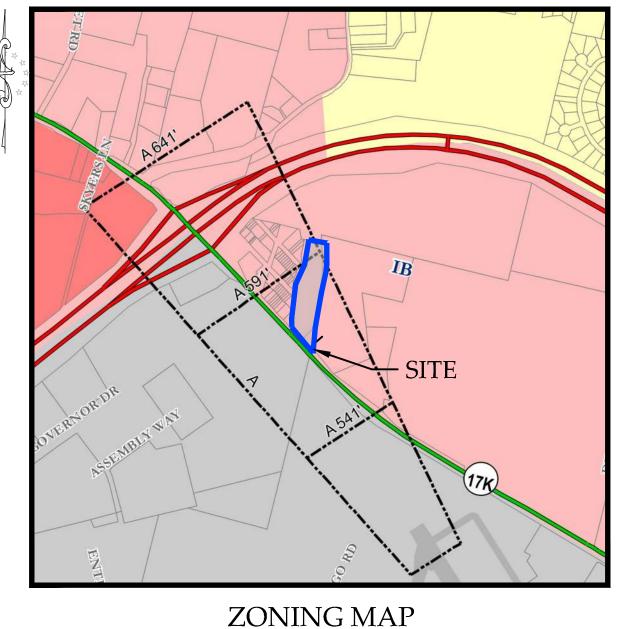






AERIAL MAP

SCALE: 1" = 1,000'



SCALE: 1" = 1,000'

SHEET INDEX		
SHEET NO.	REFERENCE	SHEET TITLE
1	C000	COVER SHEET
2	C300	DEMOLITION PLAN
3	C400	SITE PLAN
4	C500	GRADING PLAN
5	C600	UTILITY PLAN
6	C800	SITE DETAILS
7	C810	UTILITY DETAILS
8	C820	STORMWATER MANAGEMENT DETAILS
9	C900	LANDSCAPING PLAN AND DETAILS
10	C1000	VEHICLE TURNING PLAN-WB 67
11	C2000	SOIL EROSION & SEDMENT CONTROL PLAI
12	C2100	E&S DETAILS

DATE

DESCRIPTION

08/30/22

UPDATED PRE MHE REVIEW LETTERS DATED 07/21/22 AND CREIGHTON

MANNING REVIEW LETTER DATED 07/20/22

10/24/22

REVISED PER TOWN COMMENTS



AND DEVELOPMENT PLAN SET
COVER SHEET



PROJECT 028-004

DATE

06/17/2022

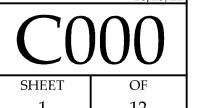
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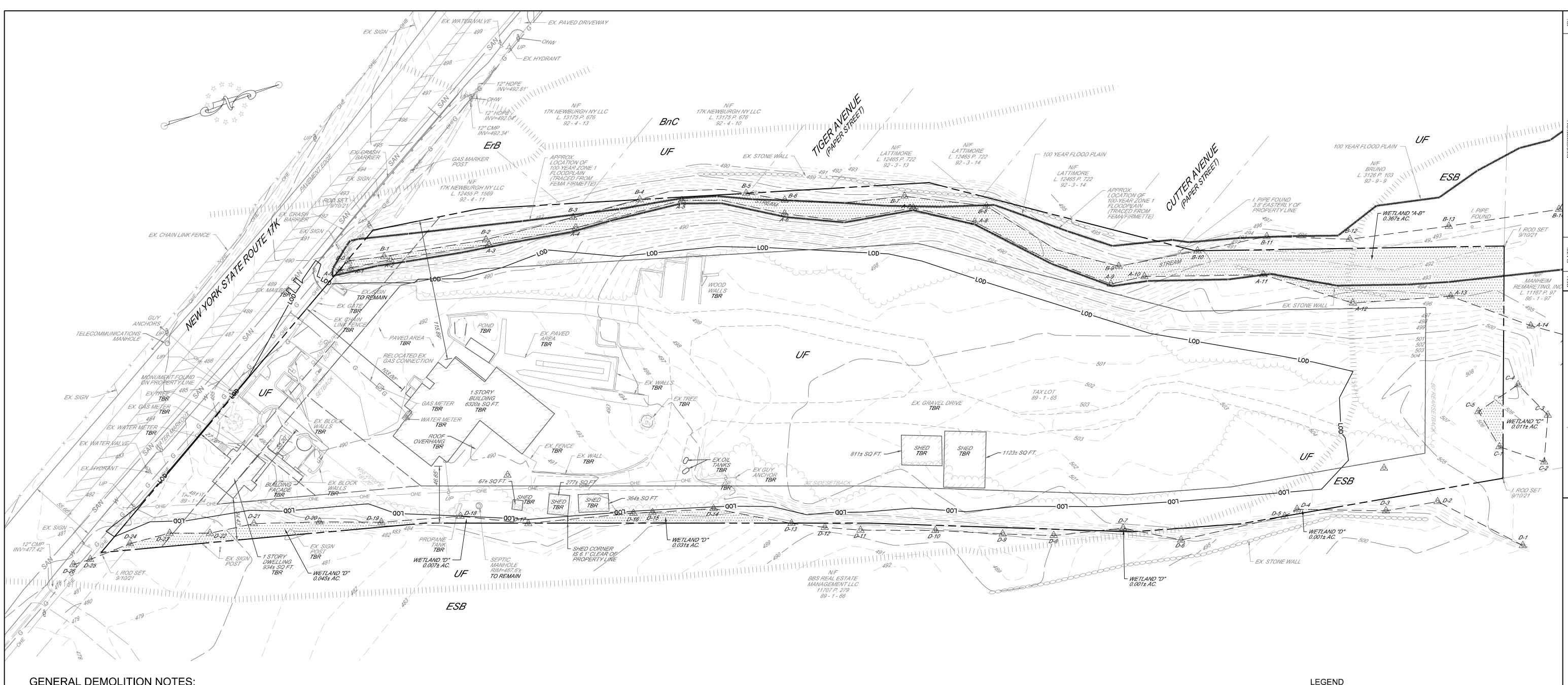
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JWJ NES/JWJ









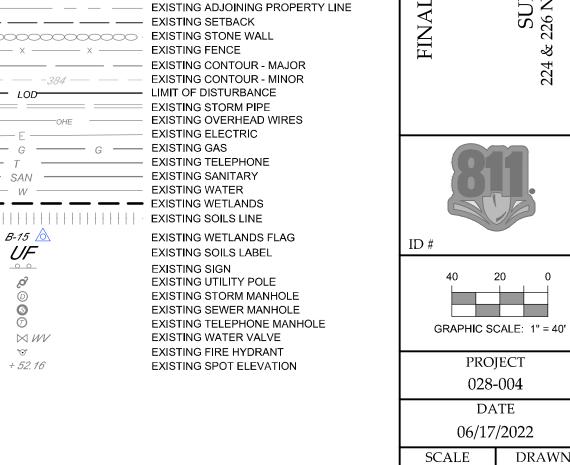
GENERAL DEMOLITION NOTES:

- 1. ALL CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING A BID, AND SHALL BE ADJUSTED IF NECESSARY. BASE MAP AND BOUNDARY INFORMATION SHOWN HEREON TAKEN FROM A PLAN ENTITLED "ALTA/NSPS SURVEY PREPARED FOR MOFFAT PROPERTIES TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK" DATED MAY 16, 2022 PREPARED BY LANC & TULLY ENGINEERING AND SURVEYING,
- 2. CONTRACTOR IS RESPONSIBLE TO CALL DIG SAFE 811 FOR UTILITY MARK OUT PRIOR TO ANY EXCAVATION. 3. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ANY EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING PRIOR TO COMMENCEMENT OF
- 4. ALL DEMOLITION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
- 5. DEMOLITION SHALL PROCEED FROM THE TOP OF THE STRUCTURE TO THE GROUND.
- STRUCTURAL ELEMENTS OF THE LOWER FLOORS ARE DISTURBED.
- 7. CONCRETE AND MASONRY SHALL BE DEMOLISHED IN SMALL SECTIONS.
- 8. STRUCTURAL MEMBERS SHALL BE REMOVED AND LOWERED TO THE GROUND USING HOISTS, DERRICKS, 24. A DEMOLITION PERMIT FOR ANY MATERIALS PROPOSED TO BE REMOVED FROM THE SITE IS REQUIRED.
- AND/OR OTHER INDUSTRY-ACCEPTED METHODS. 9. CONCRETE SLABS-ON-GRADE SHALL BE BROKEN UP UNLESS OTHERWISE DIRECTED.
- 10. DEMOLITION EQUIPMENT SHALL BE LOCATED SPARSELY THROUGHOUT THE STRUCTURE AND MATERIALS
- REMOVED IN A MANNER TO AVOID THE IMPOSITION OF EXCESSIVE LOADS ON REMAINING STRUCTURAL
- 11. INTERIOR AND EXTERIOR SHORING, BRACING, AND/OR SUPPORTS SHALL BE PROVIDED TO PREVENT MOVEMENT, SETTLEMENT, AND COLLAPSE OF STRUCTURES TO BE DEMOLISHED AND ADJACENT FACILITIES.
- 12. ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE FOOTPRINT OF THE FUTURE STRUCTURE SHALL BE DEMOLISHED. ALL OTHER FOUNDATION SYSTEMS SHALL BE DEMOLISHED TO A DEPTH OF NO LESS THAN TWELVE (12) INCHES BELOW THE GRADE OF PROPOSED PAVEMENT. BASEMENT FLOOR SLABS SHALL BE BROKEN. ALL OPEN UTILITY LINES SHALL BE SEALED WITH CONCRETE.
- 13. COVERED PASSAGEWAYS SHALL BE ERECTED ADJACENT TO AREAS OF DEMOLITION TO PROVIDE SAFE PASSAGE TO PEDESTRIANS. ALL DEMOLITION OPERATIONS SHALL BE PERFORMED TO PREVENT DAMAGE
- TO STRUCTURES AND ADJACENT BUILDINGS, AND INJURY TO PERSONS. 14. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF OWNER AND AUTHORITIES HAVING JURISDICTION.
- 15. DEMOLITION SHALL BE PERFORMED TO MINIMIZE INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER WAYS. ROADS, STREETS, WALKS, AND OTHER WAYS SHALL NOT BE CLOSED WITHOUT PRIOR WRITTEN CONSENT OF OWNER AND AUTHORITIES HAVING JURISDICTION. ALTERNATE TRAVEL ROUTES SHALL BE PROVIDED AROUND CLOSED OR OBSTRUCTED WAYS IF REQUIRED BY AUTHORITIES HAVING
- JURISDICTION. 16. WATERING, TEMPORARY ENCLOSURES, AND/OR OTHER APPROPRIATE METHODS SHALL BE EMPLOYED AS NECESSARY TO MINIMIZE THE AMOUNT OF DUST LEAVING THE DEMOLITION SITE. ADJACENT IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. ALL ADJACENT AREAS SHALL BE RETURNED TO THE CONDITIONS IN EXISTENCE AT THE COMMENCEMENT OF
- 17. DEMOLITION SHALL BE PERFORMED TO PREVENT UNAUTHORIZED ENTRY OF ANY PERSONS TO THE SITE AT
- 18. BELOW GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES AND FOUNDATIONS SHALL BE FILLED WITH SOIL MATERIALS CONSISTING OF STONE, GRAVEL, AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS, AND OTHER ORGANIC MATTER. STONES LARGER THAN SIX (6) INCHES IN DIMENSION SHALL NOT BE USED. DEMOLITION MATERIALS MAY NOT BE USED AS FILL. AREAS TO BE FILLED SHALL BE FREE STANDING WATER, FROST, FROZEN MATERIAL, TRASH, AND DEBRIS PRIOR TO FILLING. FILL MATERIALS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING SIX (6) INCHES IN LOOSE DEPTH, AND EACH COMPACTED TO 95% OPTIMUM DRY DENSITY. THE SURFACE SHALL BE GRADED

TO MEET ADJACENT CONTOURS AND TO PROVIDE ADEQUATE SURFACE DRAINAGE AWAY FROM FILL AREA.

- 19. ALL DEBRIS, RUBBISH, SALVAGEABLE ITEMS, AND HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE REMOVED FROM THE SITE AT THE EARLIEST POSSIBLE TIME. MATERIALS TO BE REMOVED MAY NOT BE STORED, SOLD, OR BURNED ON SITE. HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE REMOVED IN CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, AND PROCEDURES ENFORCED BY THE FIRE DEPARTMENT AND OTHER AUTHORITIES HAVING JURISDICTION.
- 20. ALL UTILITIES SERVICING STRUCTURES TO BE DEMOLISHED SHALL BE DISCONNECTED, SHUT OFF, AND SEALED IN CONCRETE PRIOR TO THE COMMENCEMENT OF DEMOLITION. ALL UTILITY, DRAINAGE, AND SANITARY LINES SHALL BE MARKED FOR POSITION PRIOR TO DISCONNECTION, AND ALL ACTIVE LINES SHALL BE PROTECTED CONSISTENT WITH ACCEPTED INDUSTRY STANDARDS. ALL UTILITY SERVICES TO BE INTERRUPTED SHALL BE CLEARLY MARKED PRIOR TO DEMOLITION, AND ALL LOCAL UTILITY AGENCIES SHALL BE NOTIFIED TO ENSURE THE CONTINUATION OF SERVICE.
- 21. ALL EXISTING UTILITIES SHALL BE REMOVED, AS NECESSARY, IN ACCORDANCE WITH LOCAL UTILITY AGENCY REQUIREMENTS.
- 6. ALL DEMOLITION WORK SHALL BE COMPLETED ON A GIVEN FLOOR OF A BUILDING BEFORE ANY 22. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS NECESSARY.
 - 23. TEMPORARY SEEDING TO BE IN ACCORDANCE WITH LOCAL AND STATE EROSION AND SEDIMENT CONTROL
 - STANDARDS.
 - 25. PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF X AND A ON FLOOD INSURANCE RATE MAP NO. 36071C0138E WITH A DATE OF AUGUST 3, 2009, FOR COMMUNITY NUMBER 360627 IN ORANGE

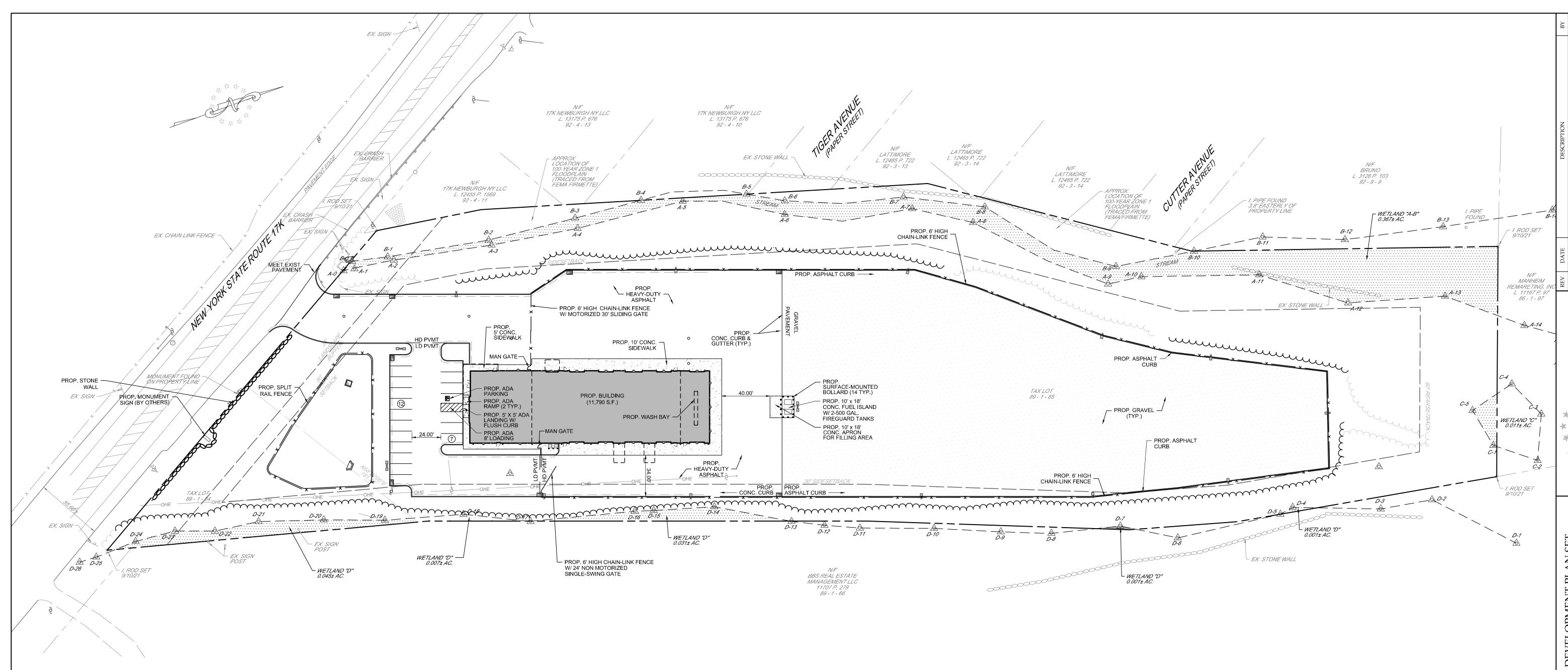
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1'' = 40'

DRAWN



SITE PLAN NOTES:

MOFFAT PROPERTIES, INC.

APPLICANT:

701 FINGER LAKES DRIVE WAKE FOREST, NC 27857

ENGINEER: INDEPENDENCE ENGINEERING LLC

> 102 FARNSWORTH AVENUE, SUITE 310 BORDENTOWN, NJ 08505

SURVEYOR:

LANC & TULLY ENGINEERING & SURVEYING, P.C. PO BOX 687 ROUTE 207

GOSHEN, NY 10924

4. GEOTECHNICAL CONSULTANT: MULA DESIGN GROUP 325 COTTAGE HILL ROAD YORK, PA 17401

ARCHITECT:

ALIGN DESIGN ASSOCIATES 145 CHURCH STREET NE, SUITE 240 MARIETTA, GA 30060

- 6. BASE MAP AND BOUNDARY INFORMATION SHOWN HEREON TAKEN FROM A PLAN ENTITLED "ALTA/NSPS SURVEY PREPARED FOR MOFFAT PROPERTIES TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK" DATED MAY 16, 2022, PREPARED BY LANC & TULLY ENGINEERING AND SURVEYING P.C."
- 7. A SOILS REPORT ENTITLED "REPORT OF GEOTECHNICAL ENGINEERING" HAS BEEN PREPARED BY JRS ENGINEERING SERVICES PLLC C/O MULA GROUP, DATED 04/18/2022.
- 8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUESTED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS PROVIDED BY ALL APPLICABLE PERMITTING AUTHORITIES.
- 9. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
- 10. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL UNDERGROUND TANKS, PIPES, VALVES, ETC. CONTRACTOR SHALL REPAIR ANY DISTURBED AREAS TO EXISTING CONDITION, INCLUDING
- PAVED AREAS AND LANDSCAPED AREAS.
- FEDERAL REGULATIONS. 12. ALL UNSUITABLE EXCAVATED MATERIAL SHALL BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING REQUIRED DURING CONSTRUCTION. SHORING SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH CURRENT OSHA STANDARDS. CONTRACTOR SHALL MAKE SUFFICIENT ADDITIONAL PROVISIONS TO ENSURE STABILITY OF ALL CONTIGUOUS AND ADJACENT STRUCTURES, AS FIELD CONDITIONS MAY DICTATE.

- 14. CONTRACTOR AND ANY SUBCONTRACTORS SHALL CARRY STATUTORY WORKERS' COMPENSATION INSURANCE, EMPLOYERS' LIABILITY INSURANCE, AND COMMERCIAL GENERAL LIABILITY INSURANCE AT REQUIRED LIMITS OF COVERAGE. ALL CONTRACTORS SHALL HAVE CGL POLICIES ISSUED TO INCLUDE INDEPENDENCE ENGINEERING LLC, WITH ITS SUBCONSULTANTS LISTED AS ADDITIONAL INSURED. ALL CONTRACTORS MUST FURNISH INDEPENDENCE ENGINEERING LLC WITH CERTIFICATES OF INSURANCE PRIOR TO THE COMMENCEMENT OF WORK, AND UPON RENEWAL OF EACH POLICY DURING THE TERM OF CONSTRUCTION. CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS INDEPENDENCE ENGINEERING LLC AND ITS SUBCONSULTANTS AGAINST ANY DAMAGES, LIABILITIES, OR COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY CONTRACTOR'S EMPLOYEES, TO THE FULLEST EXTENT PERMITTED BY LAW.
- 15. NEITHER THE PROFESSIONAL ACTIVITIES OF INDEPENDENCE ENGINEERING LLC NOR THE PRESENCE OF ITS EMPLOYEES AT THE PROJECT SITE SHALL RELIEVE THE CONTRACTOR OF ITS DUTIES, OBLIGATIONS, AND/OR RESPONSIBILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MEANS, METHODS, SEQUENCING AND/OR PROTOCOLS NECESSARY FOR PERFORMING, COORDINATING, AND/OR SUPERINTENDING THE WORK IN ACCORDANCE WITH THE PROJECT DOCUMENTS AND APPLICABLE HEALTH AND SAFETY REGULATIONS. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR SITE SAFETY PLANNING, PROVISIONING, IMPLEMENTATION, AND MAINTENANCE. INDEPENDENCE ENGINEERING LLC BEARS NO AUTHORITY TO EXERCISE CONTROL OVER CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH CONSTRUCTION.
- 16. INDEPENDENCE ENGINEERING LLC SHALL REVIEW AND TAKE APPROPRIATE ACTION ON SUBMITTALS TO BE SUBMITTED BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PRODUCT, DATA, AND MATERIAL SAMPLES. INDEPENDENCE ENGINEERING LLC SHALL REVIEW SUBMITTALS ONLY FOR CONSISTENCY WITH THE DESIGN DRAWINGS. SUBMITTALS SHALL NOT BE REVIEWED FOR CONSTRUCTION MEANS AND METHODS, COORDINATION OF TRADES, OR SITE SAFETY, WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. INDEPENDENCE ENGINEERING LLC SHALL NOT BE LIABLE FOR DEVIATIONS OR THE RESULTS THEREFROM FROM THE APPROVED CONSTRUCTION DRAWINGS, UNLESS SAID DEVIATIONS ARE PROVIDED IN WRITING BY THE CONTRACTOR PRIOR TO IMPLEMENTATION, AND APPROVED IN WRITING BY INDEPENDENCE ENGINEERING LLC.
- 17. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES THEREON, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM INDEPENDENCE ENGINEERING LLC AND THE PROJECT OWNER. SHOULD THE CONTRACTOR DEVIATE FROM THE APPROVED PROJECT DOCUMENTS, HE SHALL BEAR SOLE RESPONSIBILITY FOR FINES, PENALTIES, AND ALL COMPENSATORY AND PUNITIVE DAMAGES RESULTING THEREFROM. IN SUCH CASE, THE CONTRACTOR SHALL INDEMNIFY AND HOLD INDEPENDENCE ENGINEERING LLC HARMLESS AGAINST ANY DAMAGES, LIABILITIES, OR COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY CONTRACTOR'S EMPLOYEES, TO THE FULLEST EXTENT PERMITTED BY LAW.
- 18. DISPUTES BETWEEN INDEPENDENCE ENGINEERING LLC AND THE CONTRACTOR SHALL BE SUBMITTED TO NONBINDING MEDIATION UNLESS THE PARTIES MUTUALLY AGREE OTHERWISE.
- 19. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL INCLUDE A PROVISION IN THEIR CONTRACTS WITH THEIR SUBCONTRACTORS, SUBCONSULTANTS, AND SUPPLIERS, PROVIDING FOR MEDIATION AS THE PRIMARY METHOD OF DISPUTE RESOLUTION BETWEEN THOSE PARTIES.
- UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION, INCLUDING LOCALLY ADOPTED REVISIONS THERETO. 11. SOLID WASTE SHALL BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, AND 21. BUILDING SETBACKS SHOWN HEREON ARE MEASURED FROM THE EXTERIOR FACE OF BUILDING WALLS.

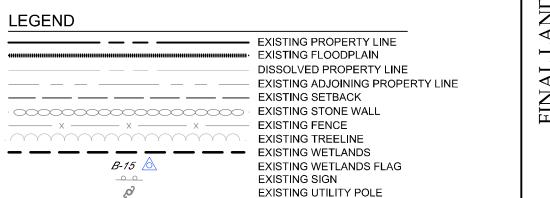
20. ALL TRAFFIC SIGNS AND STRIPING SHALL FOLLOW THE REQUIREMENTS SPECIFIED IN THE "MANUAL ON

SETBACKS DO NOT ACCOUNT FOR ROOF OVERHANGS, ORNAMENTAL ARCHITECTURAL ELEMENTS, SIGNAGE, OR OTHER EXTERIOR EXTENSION UNLESS OTHERWISE NOTED. 22. LOCATION OF ALL EXISTING AND PROPOSED SERVICES AND CONNECTION POINTS ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY IN THE FIELD AND WITH LOCAL UTILITY COMPANIES PRIOR TO

IMMEDIATELY IN WRITING TO THE ENGINEER.

COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL DISCREPANCIES SHALL BE REPORTED

- 23. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY "DIG SAFE 811" 72 HOURS PRIOR TO ANY EXCAVATION ON SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER AND SEWER AUTHORITIES TO MARK OUT THEIR SYSTEMS.
- 24. THE CONTRACTOR SHALL COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES AND FOUNDATIONS WITH SOIL MATERIALS CONSISTING OF STONE, GRAVEL, AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS, AND OTHER ORGANIC MATTER. STONES SHALL NOT BE LARGER THAN 6 INCHES IN ANY DIMENSION. DEMOLITION MATERIALS MAY NOT BE USED AS FILL. FILL MATERIALS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN
- LOOSE DEPTH CONTOURS AND TO PROVIDE SURFACE DRAINAGE. 25. ALL DEBRIS, RUBBISH, SALVAGE, HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE REMOVED AT THE EARLIEST POSSIBLE TIME. REMOVED MATERIALS MAY NOT BE STORED, SOLD, OR BURNED ON SITE. HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE REMOVED IN ACCORDANCE WITH PROCEDURES ADOPTED BY THE LOCAL FIRE DEPARTMENT AND OTHER JURISDICTIONAL AGENCIES.



EXISTING STORM MANHOLE

EXISTING SEWER MANHOLE EXISTING TELEPHONE MANHOLE EXISTING WATER VALVE $\bowtie wv$ EXISTING FIRE HYDRANT PROPOSED OUTFALL CONTROL STRUCTURE PROPOSED HEADWALL PROPOSED STORM INLET PROPOSED SANITARY CLEANOUT PROPOSED UTILITY POLE

PROPOSED TREELINE — X — X — PROPOSED FENCE • PROPOSED STONE WALL

LEGEND

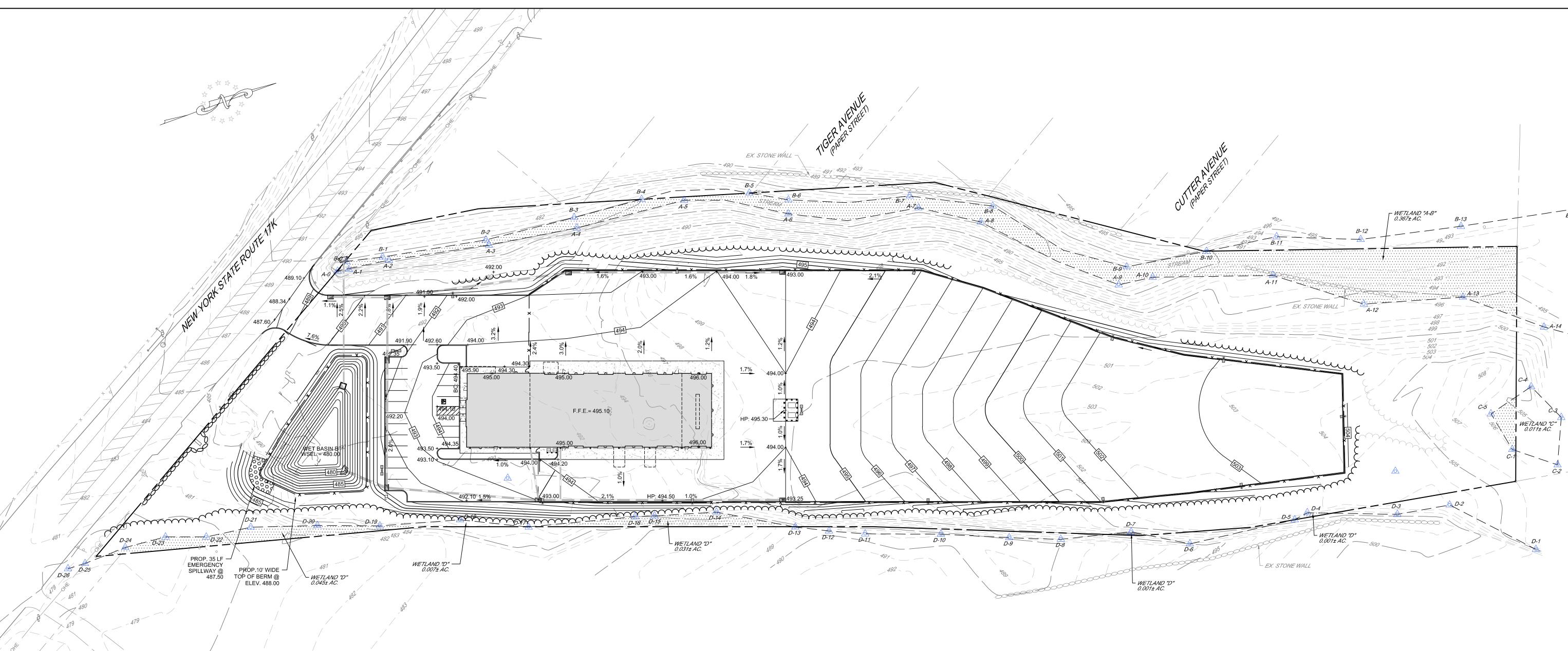


40 20 0 GRAPHIC SCALE: 1" = 40'

PROJECT 028-004 DATE 06/17/2022

SCALE DRAWN 1'' = 40'ESC DESIGNED | CHECKED NES/JWJ





GRADING NOTES:

- 1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING, OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT (IF ONE HAS BEEN PREPARED). ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST D-1557. MOISTURE CONTENT AT THE TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED IN THE STATE IN WHICH THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.
- 2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, CURBS, AND MINIMUM 0.7% SLOPE ON ALL CONCRETE AND ASPHALT SURFACES TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OF PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITH KNOWN DESIGN TOLERANCE DISCREPANCIES SHALL BE AT THE CONTRACTOR'S RISK.
- 3. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY, AS DETERMINED BY MODIFIED PROCTOR METHOD.
- 4. IN CASE OF DISCREPANCIES BETWEEN THE PLANS, THE SITE PLAN SHALL SUPERSEDE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICT IMMEDIATELY.
- 5. MAXIMUM CROSS-SLOPE OF 2.0% ON ALL SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESSIBLE ROUTES, AND ACCESSIBLE STRIPING AREAS.
- 6. OWNER SHALL RETAIN A QUALIFIED GEOTECHNICAL ENGINEER TO TEST PERMEABILITY AND PROVIDE CONSTRUCTION PHASE INSPECTIONS OF BASIN BOTTOM MATERIALS, INCLUDING INFILTRATION AND RETENTION BASINS. CONTRACTOR SHALL REMOVE UNSUITABLE OR OVERLY COMPACT SOIL OR ROCK MATERIAL AS NEEDED TO ACHIEVE REQUIRED PERMEABILITY AS DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER, AND PLACED FILL SHALL HAVE A PERMEABILITY GREATER THAN OR EQUAL TO DESIGN CRITERIA.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNER'S GEOTECHNICAL ENGINEER PRIOR
 TO CONSTRUCTION TO CONFIRM MEANS, METHODS, AND MATERIALS, AND TO SCHEDULE REQUIRED
 INSPECTIONS.
- 8. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT PLANS AND GRADE CONTROL UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
- 22. PERMANENT SEEDING TO BE IN ACCORDANCE WITH LOCAL AND STATE EROSION AND SEDIMENT CONTROL STANDARDS.
- 23. REFER TO SITE PLAN NOTES FOR ADDITIONAL NOTES.

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	EXISTING RCP PIPE
OHEOHE	EXISTING OVERHEAD WIRES
E	EXISTING ELECTRIC
G G G	EXISTING GAS
<i>T</i>	EXISTING TELEPHONE
— SAN —	EXISTING SANITARY
W	EXISTING WATER
	EXISTING WETLANDS
{	EXISTING SOILS LINE
<i>B-15</i> 🛆	EXISTING WETLANDS FLAG
//F	EXISTING SOILS LABEL
	EXISTING SIGN
Ø	EXISTING UTILITY POLE
©	EXISTING STORM MANHOLE
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Ö	EXISTING TELEPHONE MANHOLE
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β	PROPOSED UTILITY POLE
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L LAND DEVELOPMENT PLAN SET
GRADING PLAN

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DATE

06/17/2022

SCALE DRAWN

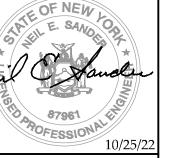
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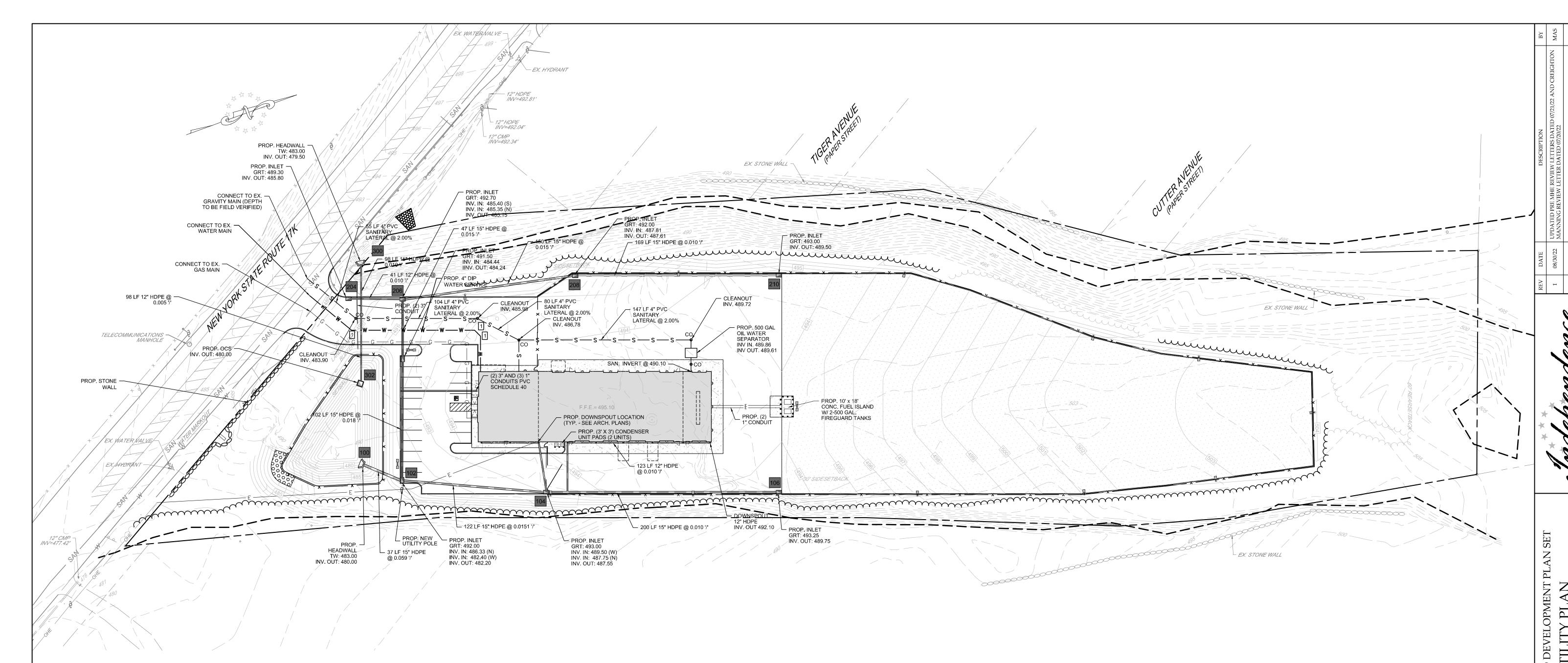
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EXISTING UTILITY NOTES:

SEWER DEPARTMENT PRIOR TO COMPLETION.

NEWBURGH SEWER DEPARTMENT PRIOR TO COMPLETION.

- 1. CONTRACTOR TO LOCATE AND UTILIZE EXISTING WATER SERVICE CONNECTION IF FEASIBLE. 2. IF REUSE OF EXISTING WATER SERVICE IS INFEASIBLE, THEN IT SHALL BE REMOVED AND CAPPED AT THE PUBLIC MAIN, IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF
- 3. NEW WATER SERVICE LOCATIONS SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER

NEWBURGH SEWER DEPARTMENT. TERMINATION MUST BE APPROVED BY THE TOWN OF NEWBURGH

- WATER SERVICES AND/OR INSTALLATION OF NEW WATER SERVICES. 5. CONTRACTOR TO LOCATE AND UTILIZE EXISTING GAS SERVICE CONNECTION IF FEASIBLE.
- 6. IF REUSE OF EXISTING GAS SERVICE IS INFEASIBLE, THEN IT SHALL BE REMOVED AND CAPPED AT THE MAIN, IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL GAS COMPANY.
- TERMINATION MUST BE APPROVED BY THE LOCAL GAS COMPANY PRIOR TO COMPLETION. 7. NEW GAS SERVICE LOCATIONS SHALL BE COORDINATED WITH THE LOCAL GAS COMPANY.
- 8. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING GAS SERVICES AND/OR INSTALLATION OF NEW GAS SERVICES.
- 9. CONTRACTOR TO LOCATE AND UTILIZE EXISTING SANITARY SEWER SERVICE CONNECTION IF FEASIBLE AND ADEQUATELY SIZED.
- 10. IF REUSE OF EXISTING SANITARY SEWER SERVICE IS INFEASIBLE, THEN IT SHALL BE REMOVED AND CAPPED AT THE PUBLIC MAIN, IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF NEWBURGH SEWER DEPARTMENT. TERMINATION MUST BE APPROVED BY THE TOWN OF
- 11. NEW SANITARY SEWER SERVICE LOCATIONS SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
- 12. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SANITARY SEWER SERVICES AND/OR INSTALLATION OF NEW SANITARY SEWER SERVICES.

UTILITY NOTES:

- 1. LOCATION OF ALL EXISTING AND PROPOSED SERVICES, INCLUDING BUT NOT LIMITED TO SANITARY, WATER, ELECTRIC, STORM, GAS, AND TELECOMMUNICATIONS, ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY AGENCIES AND AUTHORITIES PRIOR TO ANY CONSTRUCTION OR EXCAVATION. ANY DISCREPANCY SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER.
- 2. CONSTRUCTION OF SANITARY AND STORM FACILITIES SHALL BEGIN AT THE LOWEST ELEVATION (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED CROSSINGS WITH EXISTING UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING 3. CONTRACTOR IS RESPONSIBLE TO NOTIFY DIG SAFE 811 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION ON SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL UTILITY AGENCIES AND AUTHORITIES TO MARK OUT FACILITIES PRIOR TO EXCAVATION.
 - 4. EXACT LOCATIONS AND SERVICE SIZES OF BUILDING UTILITY CONNECTIONS ARE SHOWN ON THE ARCHITECTURAL PLANS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO
 - CONSTRUCTION. 5. ALL PROPOSED UTILITIES TO BE INSTALLED UNDERGROUND UNLESS OTHERWISE SPECIFIED.
 - 6. ALL SEWER AND WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE TOWN OF NEWBURGH SEWER DEPARTMENT.
 - 7. WATER SERVICE MATERIALS SHALL BE SPECIFIED BY THE LOCAL WATER UTILITY. ENGINEER IS NOT RESPONSIBLE FOR THE COSTS ASSOCIATED WITH FEES AND APPURTENANCES REQUIRED BY THE LOCAL 8. SANITARY SEWER MAINS SHALL BE SEPARATED FROM WATER MAINS BY AT LEAST TEN (10) FEET
 - HORIZONTALLY. WHERE SUCH SEPARATION IS NOT POSSIBLE, SEWER AND WATER MAINS SHALL BE IN SEPARATE TRENCHES, WITH THE SEWER MAIN AT LEAST EIGHTEEN (18) INCHES BELOW THE WATER MAIN. 9. ALL SEWER PIPE INSTALLED WITH LESS THAN THREE (3) FEET OF COVER, GREATER THAN TWENTY (20) FEET OF COVER, OR WITHIN EIGHTEEN (18) INCHES OF A WATER MAIN SHALL BE CONSTRUCTED OF
 - DUCTILE IRON PIPE, UNLESS OTHERWISE SPECIFIED. 10. WHERE SANITARY SEWER LATERAL CONNECTIONS ARE GREATER THAN TEN (10) FEET DEEP AT THE POINT OF CONNECTION TO THE MAIN, A CONCRETE DROP MANHOLE SHALL BE USED.
 - 11. GAS, ELECTRIC, AND TELECOMMUNICATIONS LINES LOCATED HEREON ARE APPROXIMATE. ACTUAL LOCATION AND LAYOUT FOR GAS, ELECTRIC, AND TELECOMMUNICATIONS SHALL BE AT THE DIRECTION OF
 - 12. MEANS, METHODS, AND MATERIALS SHALL BE DONE IN ACCORDANCE WITH THE OWNER'S SPECIFICATIONS. IF SAID SPECIFICATIONS DO NOT EXIST, ALL MEANS, METHODS, AND MATERIALS SHALL BE PROVIDED CONSISTENT WITH ACCEPTED INDUSTRY STANDARDS.

RESTRAINT JOINT PIPE SCHEDULE

#	TYPE	MATERIAL	QUANTITY	
1	4"	DIP	3	

LEGEND

	EXIOTING ADDOUGHTOT THOSE EITH LINE
	EXISTING SETBACK
· 000000000000000000000000000000000000	EXISTING STONE WALL
x x x	EXISTING FENCE
	EXISTING CONTOUR - MAJOR
— — — — — -384 — —	EXISTING CONTOUR - MINOR
	EXISTING RCP PIPE
———ОНЕ ———ОНЕ ———	EXISTING OVERHEAD WIRES
E	
— G — G — G —	EXISTING GAS
	EXISTING TELEPHONE
SAN	EXISTING SANITARY
W	EXISTING WATER
	EXISTING WETLANDS
	EXISTING SOILS LINE
<i>B-15</i> 🛆	EXISTING WETLANDS FLAG
UF	EXISTING SOILS LABEL
0 0	EXISTING SIGN
Ø	EXISTING UTILITY POLE
0	EXISTING STORM MANHOLE
⊚ ⊘	EXISTING SEWER MANHOLE
Ō	EXISTING TELEPHONE MANHOLE
$\bowtie wv$	EXISTING WATER VALVE
"⊙"	EXISTING FIRE HYDRANT
+ 52.16	EXISTING SPOT ELEVATION
	PROPOSED OUTFALL CONTROL STRUCTURE
	PROPOSED HEADWALL
	PROPOSED STORM INLET
Ø	PROPOSED UTILITY POLE
	PROPOSED TREELINE
x x x	PROPOSED FENCE
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o co	PROPOSED SANITARY CLEANOUT
— <u>s</u> — <u>s</u> — <u>s</u> — <u>s</u> — <u>s</u> —	
wwww	PROPOSED WATER SERVICE
——— E ———	
— G — G — G — G — G —	PROPOSED GAS LATERAL

PROPOSED STORM PIPE

— EXISTING PROPERTY LINE

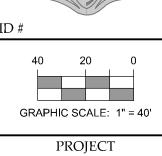
· EXISTING FLOODPLAIN

DISSOLVED PROPERTY LINE

PROPOSED CONTOUR - MAJOR PROPOSED CONTOUR - MINOR

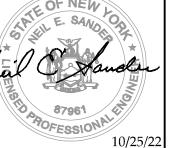
EXISTING ADJOINING PROPERTY LINE

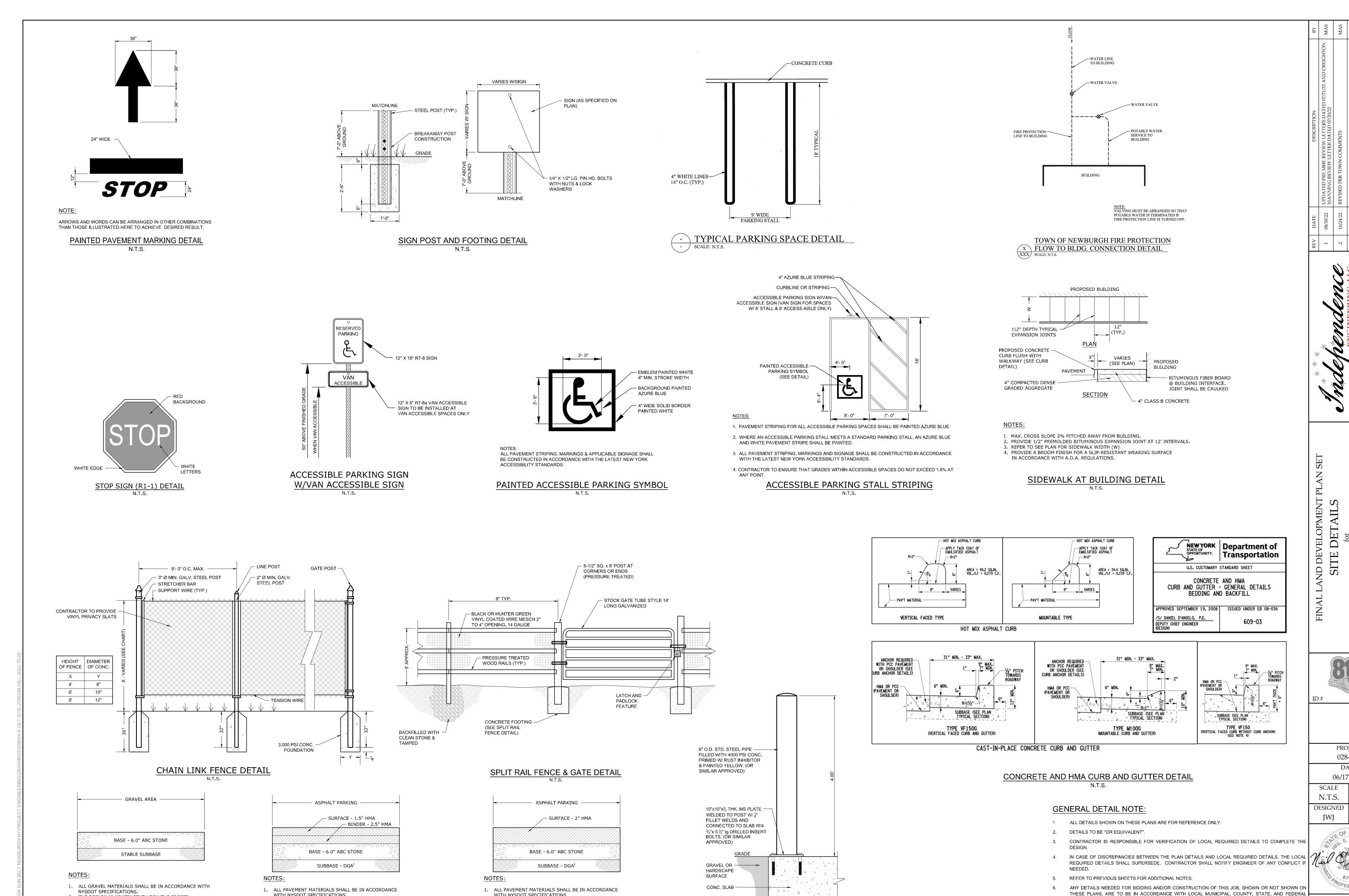




GRAPHIC SCALE: 1" = 40'
PROJECT
028-004
DATE
06/17/2022

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SCALE	DRAWN				
1'' = 40'	ESC				
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SURFACE MOUNTED BOLLARD DETAIL

WITH NYSDOT SPECIFICATIONS.

2. THE DESIGN IS CONTINGENT UPON THE PROPER

CONSTRUCTION, INSPECTION, AND MAINTENANCE.

HEAVY DUTY PAVEMENT DETAIL

2. THE DESIGN IS CONTINGENT UPON THE PROPER

CONSTRUCTION, INSPECTION, AND MAINTENANCE.

GRAVEL SURFACE DETAIL

WITH NYSDOT SPECIFICATIONS.

2. THE DESIGN IS CONTINGENT UPON THE PROPER

CONSTRUCTION, INSPECTION, AND MAINTENANCE.

LIGHT DUTY PAVEMENT DETAIL

PROJECT

028-004

DATE

06/17/2022

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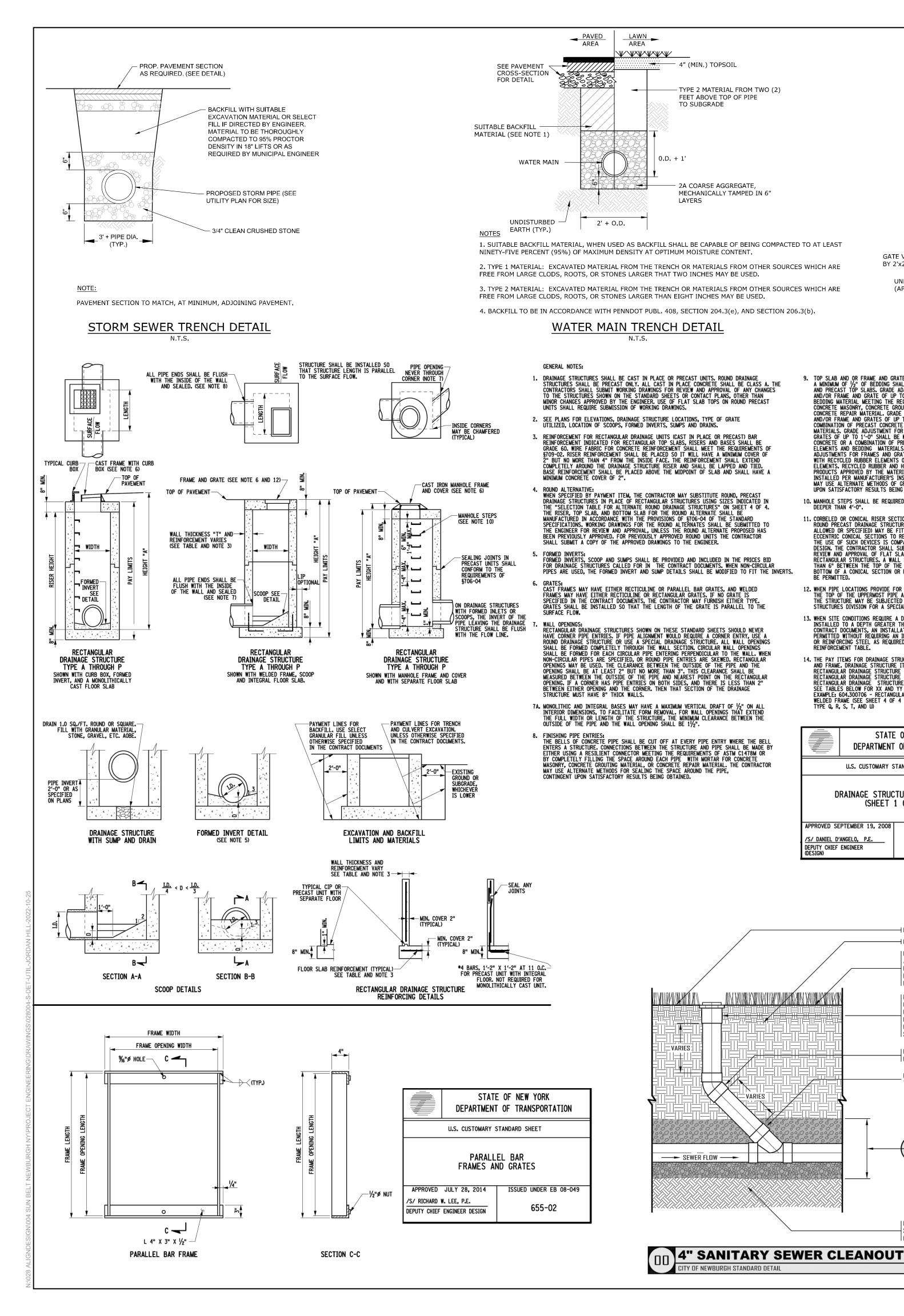
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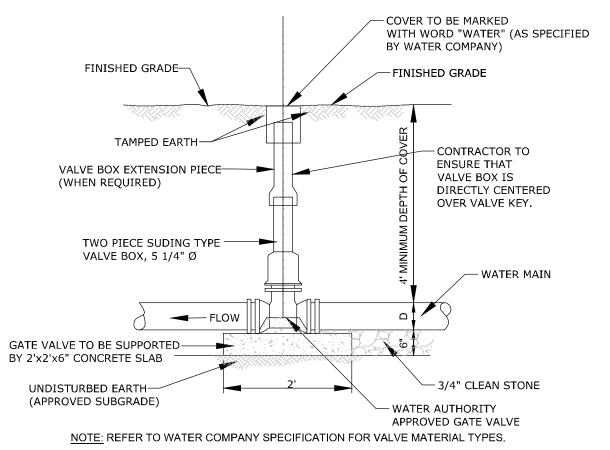
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STANDARDS, IT IS THE CONTRACTORS' RESPONSIBILITY TO BID AND/OR CONSTRUCT THE APPROPRIATE SHEET OF

REGULATIONS AND STANDARDS. IF ANY DETAIL SHOWN ON THESE PLANS DOES NOT MEET THESE

STANDARD DETAILS.





GATE VALVE AND BOX DETAIL

. TOP SLAB AND OR FRAME AND GRATE ADJUSTMENT
A MINIMUM OF 1/2" OF BEDDING SHALL BE PLACED BETWEEN RISER
AND PRECAST TOP SLABS, GRADE ADJUSTMENT FOR TOP SLABS
AND/OR FRAME AND GRATE OF UP TO 21/2" SHALL BE MADE WITH
BEDDING MATERIAL MEETING THE REQUIREMENTS OF MORTAR FOR
CONCRETE MASONRY, CONCRETE GROUTING MATERIALS OR
CONCRETE REPAIR MATERIAL. GRADE ADJUSTMENT FOR TOP SLABS
AND/OR FRAME AND GRATES OF UP TO 6" SHALL BE MADE WITH
COMBINATION OF PRECAST CONCRETE PAVERS AND BEDDING
MATERIALS, GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAME AND
GRATES OF UP TO 1'-0" SHALL BE MADE WITH CAST-IN-PLACE
CONCRETE OR A COMBINATION OF PRECAST CONCRETE ADJUSTMENT
ELEMENTS AND BEDDING MATERIALS. ALTERNATELY, GRADE
ADJUSTMENTS FOR FRAMES AND GRATES OF UP TO 2" MAY BE MADE
WITH RECYCLED RUBBER ELEMENTS OR UP TO 3" WITH HDPE
ELEMENTS. RECYCLED RUBBER AND HDPE ELEMENTS SHALL BE
PRODUCTS APPROVED BY THE MATERIALS BUREAU AND SHALL BE
INSTALLED PER MANUFACTURER'S INSTRUCTIONS. THE CONTRACTOR
MAY USE ALTERNATE METHODS OF GRADE ADJUSTMENT, CONTINGENT
UPON SATISFACTORY RESULTS BEING OBTAINED.

MANHOLE STEPS SHALL BE REQUIRED IN ALL DRAINAGE STRUCTURES DEEPER THAN 4'-0".

11. CORBELED OR CONICAL RISER SECTIONS AND FLAT SLAB REDUCERS. ROUND PRECAST DRAINAGE STRUCTURES OR MANHOLES(WHEN ALLOWED OR SPECIFIED) MAY BE FITTED WITH CONCENTRIC OR ECCENTRIC CONICAL SECTIONS TO REDUCE THEIR DIAMETERS. PROVIDED THE USE OF SUCH DEVICES IS COMPATIBLE WITH THE DRAINAGE SYSTEM DESIGN. THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS FOR REVIEW AND APPROVAL OF FLAT SLAB REDUCERS FOR ROUND OR RECTANGULAR STRUCTURES. A WALL SECTION WITH A HEIGHT LESS THAN 6" BETWEEN THE TOP OF THE HIGHEST PIPE ENTRY AND THE BOTTOM OF A CONICAL SECTION OR FLAT SLAB REDUCER SHALL NOT BE PERMITTED.

WHEN PIPE LOCATIONS PROVIDE FOR LESS THAN 8" BETWEEN
THE TOP OF THE UPPERMOST PIPE AND THE TOP OF THE RISER AND
THE STRUCTURE MAY BE SUBJECTED TO HIGHWAY LOADS, CONTACT

OR REINFORCING STEEL AS REQUIRED BY THE DRAINAGE STRUCTURE REINFORCEMENT TABLE.

14. THE PAY ITEMS FOR DRAINAGE STRUCTURES SPECIFY THE STRUCTURE AND FRAME. DRAINAGE STRUCTURE ITEM NUMBERS: RECTANGULAR DRAINAGE STRUCTURE ITEM 604.30XXYY RECTANGULAR DRAINAGE STRUCTURE WITH ROUND OPTION ITEM 604.31XXYY RECTANGULAR DRAINAGE STRUCTURE WITH CONCRETE CAP ITEM 604.32XXYY SEE TABLES BELOW FOR XX AND YY CODES. EXAMPLE: 604.300706 - RECTANGULAR STRUCTURE TYPE G WITH TYPE 6 WELDED FRAME (SEE SHEET 4 OF 4 FOR ITEM NUMBERS FOR STRUCTURE TYPE Q, R, S, T, AND U)

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

DRAINAGE STRUCTURE DETAILS (SHEET 1 OF 4)

APPROVED SEPTEMBER 19, 2008 | ISSUED UNDER EB 08-036

604-02

FINAL GRADE.

HROUGH GRADE.

SURFACE.

ELBOW, TYP.

GRASS, PAVERS, SIDEWALK

AND/OR OTHER SITE PLAN

REFER TO SITE PLAN.

FOUR (4) INCH SDR 35 CLEANOUT, TYP. A CAST IRON

CLEANOUT BOX SHALL BE INSTALLED WHERE THE

CLEANOUT IS WITHIN A PAVED

|FOUR (4) INCH SDR 35 45°

FOUR (4) INCH SDR 35 WYE,

XX PIPE BACKFILL, 12" OR

| FIRM AND UNYIELDING

NECESSARY.

SUBGRADE, COMPACT AS

1" = 1'-0"

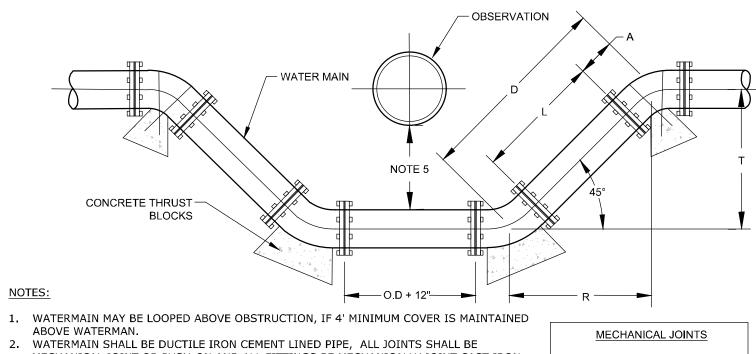
ELEMENT. GRASS SHOWN FOR

ILLUSTRATIVE PURPOSES ONLY,

S/ DANIEL D'ANGELO, P.E.

DEPUTY CHIEF ENGINEER (DESIGN)

13. WHEN SITE CONDITIONS REQUIRE A DRAINAGE STRUCTURE TO BE INSTALLED TO A DEPTH GREATER THAN THAT SHOWN IN THE CONTRACT DOCUMENTS, AN INSTALLATION TOLERANCE OF 8" IS PERMITTED WITHOUT REQUIRING AN INCREASE IN WALL THICKNESS



MECHANICAL JOINT OR PUSH-ON AND ALL FITTINGS BE MECHANICALLY JOINT CAST IRON.

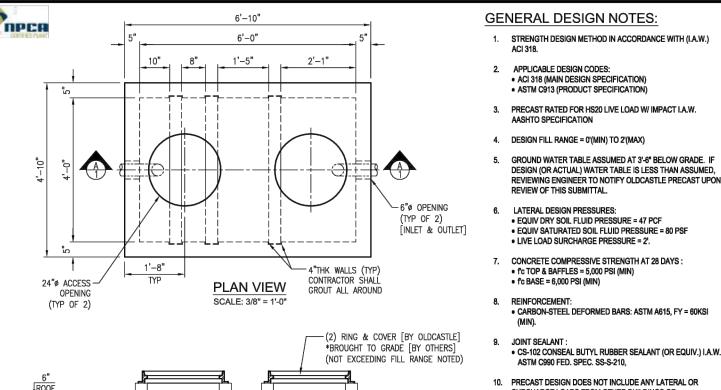
WATER SERVICE SHALL BE AS SHOWN ON UTILITY PLAN C600. OFFSETS MAY BE SUBSTITUTED FOR A TEE OF UP TO 24' IF APPROVED BY THE ENGINEER. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS AND DIRECTION CHANGES. 11.25° T = 5.126 T = 5.007 D-2A MINIMUM CLEARANCE BETWEEN SANITARY SEWER AND WATERMAIN SHALL BE 18".

CLEARANCE BETWEEN WATERMAIN AND OTHER OBSTRUCTIONS SHALL BE 4'. . TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS. DETAILS OF TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RESTRAIN THRUST AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF TIE RODS.

UTILITY CROSSING DETAIL

T = 1.414 T = 1.000 D-2A

22.5° T = 2.613 T = 2.414 D-2A



SURCHARGE LOADS FROM OTHER BUILDINGS OR FOUNDATIONS ADJACENT TO THIS STRUCTURE. THIS STRUCTURE SHALL BE KEPT A MINIMUM OF 1:1 RATIO AWAY NOTES TO CONTRACTOR 1. PLEASE VERIFY ALL SIZES, LOCATIONS, AND ELEVATIONS OF 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER

WATER DEPT

RETAINING

FLOW —
DIFFUSER
BAFFLE

`— SEDIMENT WEIR

REVISIONS

SECTION A-A STANDARD

DESCRIPTION OF REVISION

SECTION A-A

COORDINATION TO ENSURE THAT AN ADEQUATE BEARING SURFACE IS PROVIDED (I.E. LEVEL AND COMPACTED) PER PROJECT SPECIFICATIONS AND DRAWINGS,. 3. AFTER PIPES ARE INSTALLED IN BLOCKOUTS, ALL ANNULAR SPACES SHALL BE FILLED WITH A MIN. OF 3,000 psi CONCRETE TIGHT TO THE UNDERSIDE OF UPPER SECTION FOR FULL

THICKNESS OF VAULT WALL. 4. CONTRACTOR TO RESPONSIBLE FOR THE FOLLOWING: SUPPLY & INSTALL ALL PIPING & SAMPLING TEES GROUT IN ALL BAFFLES ON BOTH SIDES

5. DESIGN, AS SHOWN HEREIN, IS APPLICABLE ONLY TO STRUCTURAL PERFORMANCE OF PRECAST, CAPACITY (GALLONS) SHALL BE DETERMINED BY OTHERS BASED ON SPECIFIC PROJECT REQUIREMENT

** Oldcastle Precast 4905 STOUGH RD. CONCORD, NC OFFICE 704-788-4050, FAX 704-788-4060 500 GALLON OIL WATER SEPARATOR

— SEWER MAIN RIGHT-OF-WAY OR EASEMENT LINE 6" LATERAL └-6" 45° BEND - 6" LATERAL CONNECTION 1/4"/FT SLOPE MIN. - SEWER MAIN BY 6" WYE -PIPELINE BEDDING MATERIAL (REFER TO BEDDING DETAIL)

STANDARD LATERAL CONNECTION DETAIL

PLAN

INFORMATION NEEDED:

INLET PIPE SIZE ______
INLET PIPE ELEVATION _____
OUTLET PIPE SIZE ______

OUTLET PIPE ELEVATION ___

REV DATE BY SHEET

TOP OF SEPARATOR ELEVATION _____

GENERAL DETAIL NOTE:

- ALL DETAILS SHOWN ON THESE PLANS ARE FOR REFERENCE ONLY.
- CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF LOCAL REQUIRED DETAILS TO COMPLETE THE
- IN CASE OF DISCREPANCIES BETWEEN THE PLAN DETAILS AND LOCAL REQUIRED DETAILS, THE LOCAL REQUIRED DETAILS SHALL SUPERSEDE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICT IF NEEDED.
- REFER TO PREVIOUS SHEETS FOR ADDITIONAL NOTES.
- ANY DETAILS NEEDED FOR BIDDING AND/OR CONSTRUCTION OF THIS JOB, SHOWN OR NOT SHOWN ON THESE PLANS, ARE TO BE IN ACCORDANCE WITH LOCAL MUNICIPAL, COUNTY, STATE, AND FEDERAL REGULATIONS AND STANDARDS. IF ANY DETAIL SHOWN ON THESE PLANS DOES NOT MEET THESE STANDARDS, IT IS THE CONTRACTORS' RESPONSIBILITY TO BID AND/OR CONSTRUCT THE APPROPRIATE

RE



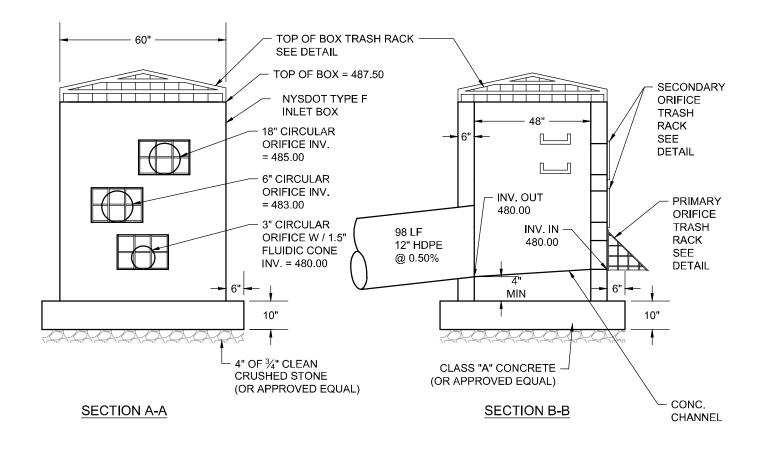
PROJECT 028-004 DATE 06/17/2022

SCALE DRAWN AS NOTED ESC DESIGNED CHECKED

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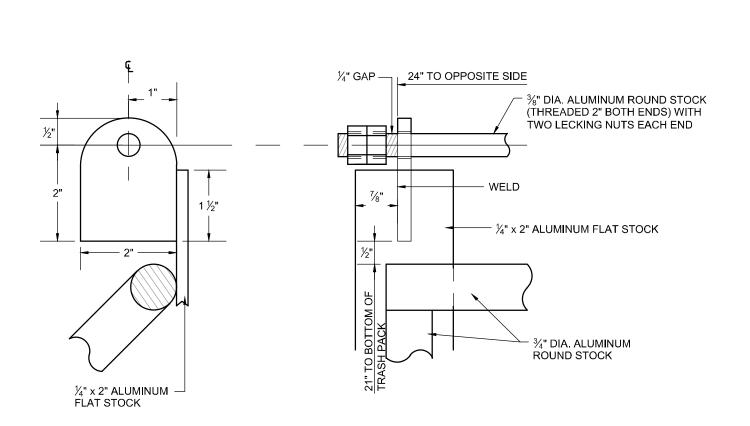


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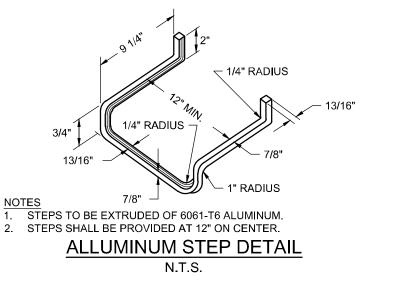


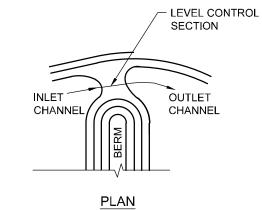
1. WATERTIGHT SEALS TO BE USED ON ALL JOINTS.

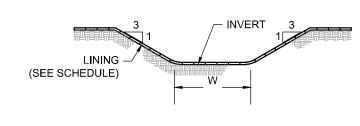
OUTLET STRUCTURE #300 DETAIL



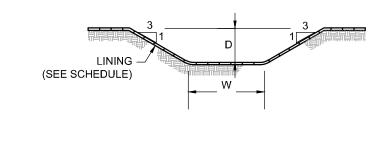
HINGE ASSEMBLY DETAIL



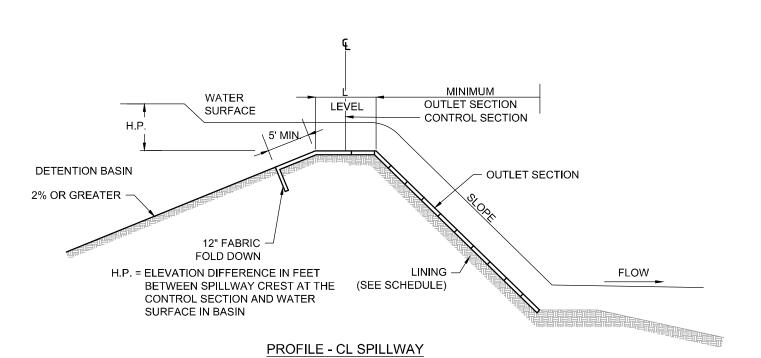




CONTROL SECTION

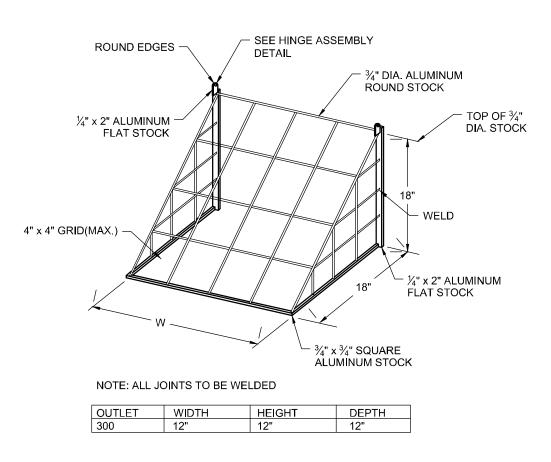


OUTLET SECTION

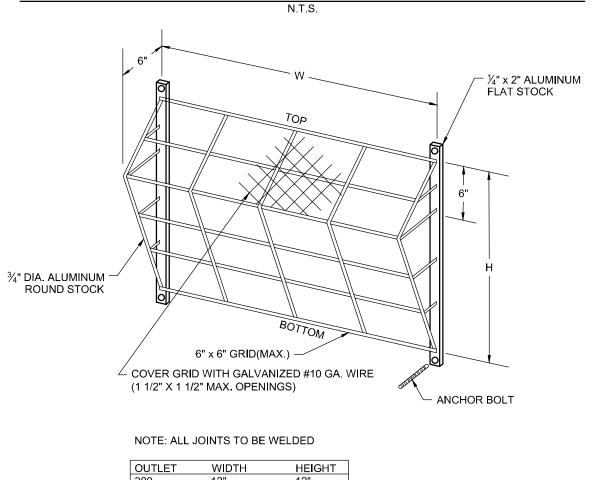


	TOP	PERMANENT			TEMPORARY		OUTLET SECTION				
OF		CC	ONTROL SECT	ION	Co	CONTROL SECTION		MAX			
BASIN	BERM	WIDTH	INVERT	LINING	WIDTH	INVERT	LINING	SLOPE	W	D	LINING
	ft.	ft.	ft.		ft.	ft.		ft.	ft.	ft.	
D	400.00	25	407.00	C125		CAME		2.00	4 E	2.0	C125

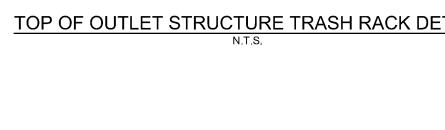
EMERGENCY SPILLWAY SCHEDULE DETAIL



PRIMARY ORIFICE OUTLET STRUCTURE TRASH RACK DETAIL



RECTANGULAR SECONDARY STAGE TRASH RACK DETAIL



1/4" x 2" FLAT STOCK

VORTEX VALVES

The Vortex Valve from Contech® is an exceptional solution to designer/engineers looking to precisely control the discharge flow rate from their drainage, detention or infiltration systems. The Vortex Valve is a device for controlling surface stormwater flow by hydraulic effect without requiring moving parts.

Precise flow control

compared to orifice

jetting or cleaning

Large flow path open area

How Does it Work?

The design of the Vortex Valve produces a unique head/discharge relationship. The device self activates by utilizing the upstream hydraulic head. The unit consists of an intake, a volute and an outlet. Flow is directed tangentially into the volute to form a vortex that reduces the design peak discharge flow rate from the Vortex Valve far below an equivalent diameter simple orifice.

During low flow conditions, water entering through the inlet of the Vortex Valve passes through the volute section of the valve with negligible pressure

During high flow conditions, a vortex flow pattern

develops within the device creating an air filled core. This phenomenon restricts and throttles flow through the device, creating a back pressure in the device immediately upstream of its discharge. During high flow rates, a Vortex Valve with a relatively large outlet opening performs similarly to

a conventional orifice with a much smaller outlet opening; however, debris that might clog a smaller orifice is able to pass through the Vortex Valve because of the relatively larger flow path opening.

Applications

The Vortex Valve flow control can be used wherever there is a need to limit the rate of flow of surface stormwater within a drainage system implementing Sustainable Urban Drainage System (SUDS) Source Control Schemes and design tenets. Typical applications include:

- Traditional detention/storage systems
- Media filtration systems

Coalescing plate oil water separators

CINTECH

800.338.1122 • www.ContechES.com

- Wetlands, Ponds and Swales
- Excess flows from soakaways/infiltration systems

Fluidic-Cone Model Vortex Valve — typical for controlling large flows



Fluidic-Amp Model Vortex Valve — typical for controlling small flows



maintenance from the surface

Flow Control for Surface Stormwater Drainage and **Storage Systems**

VORTEX VALVES

Pivoting Bypass Door

Pivoting Bypass Door

CINTECH

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UG VX VALVES- 01/16

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WWW.CONTECHES.COM/COS) FOR MORE INFORMATION

7,296,692; 7,297,266 related foreign patents or other patents pending.

The Vortex Valve flow control can be fitted with an door is fitted with a stainless steel wire rope that can be pulled from ground level, the door opens exposing a large aperture on the front plate of the unit allowing the system to be drained of water. Once the water level in the housing structure, which best suited to meet the low flow rate control is typically a round manhole, subsides, the blockage can be easy accessed and cleared.

PROTECTED WITH A BITUMINOUS COATING LENGTH WIDTH BASIN STRUCTURE # O.S. #300

NOTE:

1. ALL JOINTS SHALL BE WELDED

2. ALL ROUND STOCK & FLAT STOCK TO BE

4 ANCHOR BOLTS



Types of Vortex Valves & Design Flow Control Rates

The Fluidic-Amp and Fluidic-Cone Vortex Valves are available to control flow ranges from 0 to 4.23 cfs integral pivoting bypass door mounted on the front (0 to 120 L/s) from driving design head ranges of 0 to 10 ft (0 to 3 m) in height/depth. The Fluidic-Amp face of the unit. If a blockage occurs it is likely to

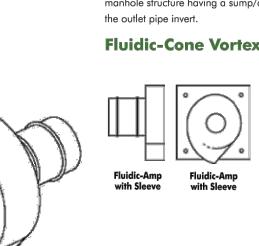
Valve is best for low design discharge flow rate control applications and the Fluidic-Cone Vortex valve is occur on the intake of a flow control. The bypass better suited for controlling higher rate discharges. Several economical sleeve, plate or flange attachment options are available for each of these valves to provide the easiest possible installation for specific site.

Fluidic-Amp Vortex Valve

The design of the Fluidic-Amp Vortex Valve is The Fluidic-Cone Vortex Valves are generally used requirements associated with smaller catchment/ drainage areas: peak design discharge rates of 0 to applied to control design flow rates ranging from 1.8 cfs (0 to 50 L/s) produced by design heads from 0 to 4.23 cfs (0 to 120- L/s) from driving design 0 to 5.2 ft (0 to 1.6 m) in height/depth.

standard equivalent orifice. Typically these valves are configured for horizontal discharges from a manhole structure having a sump/catch pit below

Fluidic-Cone Vortex Valve



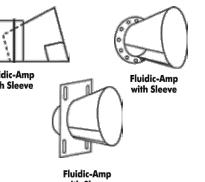
NOTHING IN THIS CATALOG SHOULD BE CONSTRUED AS AN EXPRESSED WARRANTY OR AN IMPLIED WARRANTY OF

 $MERCHANTABILITY\ OR\ FITNESS\ FOR\ ANY\ PARTICULAR\ PURPOSE.\ SEE\ THE\ CONTECH\ STANDARD\ CONDITION\ OF\ SALES\ (VIEWABLE\ AT$

The product(s) described may be protected by one or more of the following US patents. 5,322,629; 5,624,576; 5,707,527; 5,759,415; 5,788,848; 5,985,157; 6,027,639; 6,350,374; 6,406,218; 6,641,720; 6,511,595; 6,649,048; 6,991,114; 6,998,038; 7,186,058;

for larger surface stormwater design flow control applications. The Fluidic-Cone Valves are best heads of 0 to 10 ft (0 to 3 m) in height/depth. This valve has a flow path opening larger than the | The Fluidic-Cones have similar head/discharge curve characteristics to the Fluidic-Amp Valve.





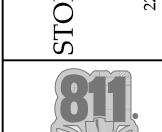
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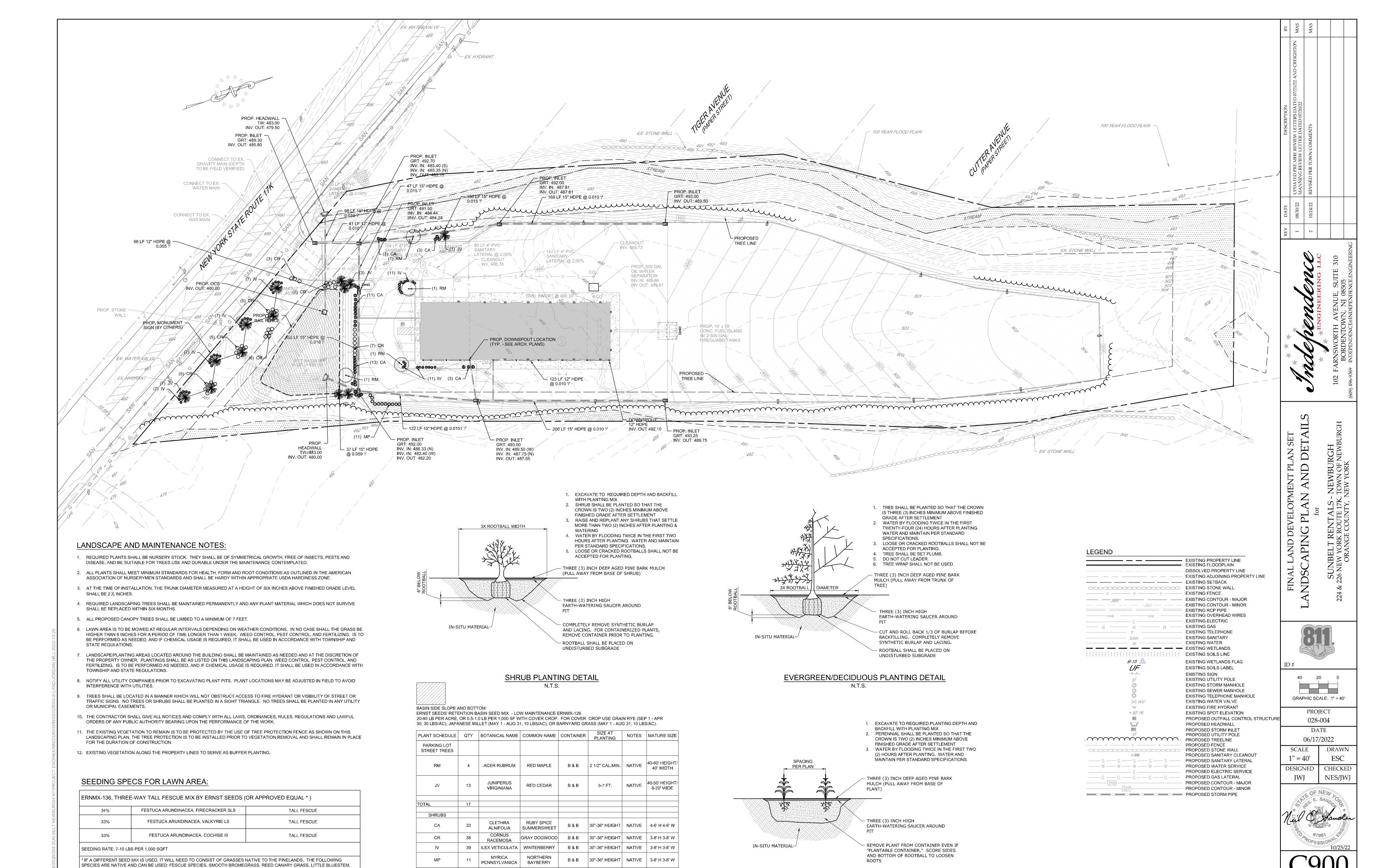
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PROJECT 028-004



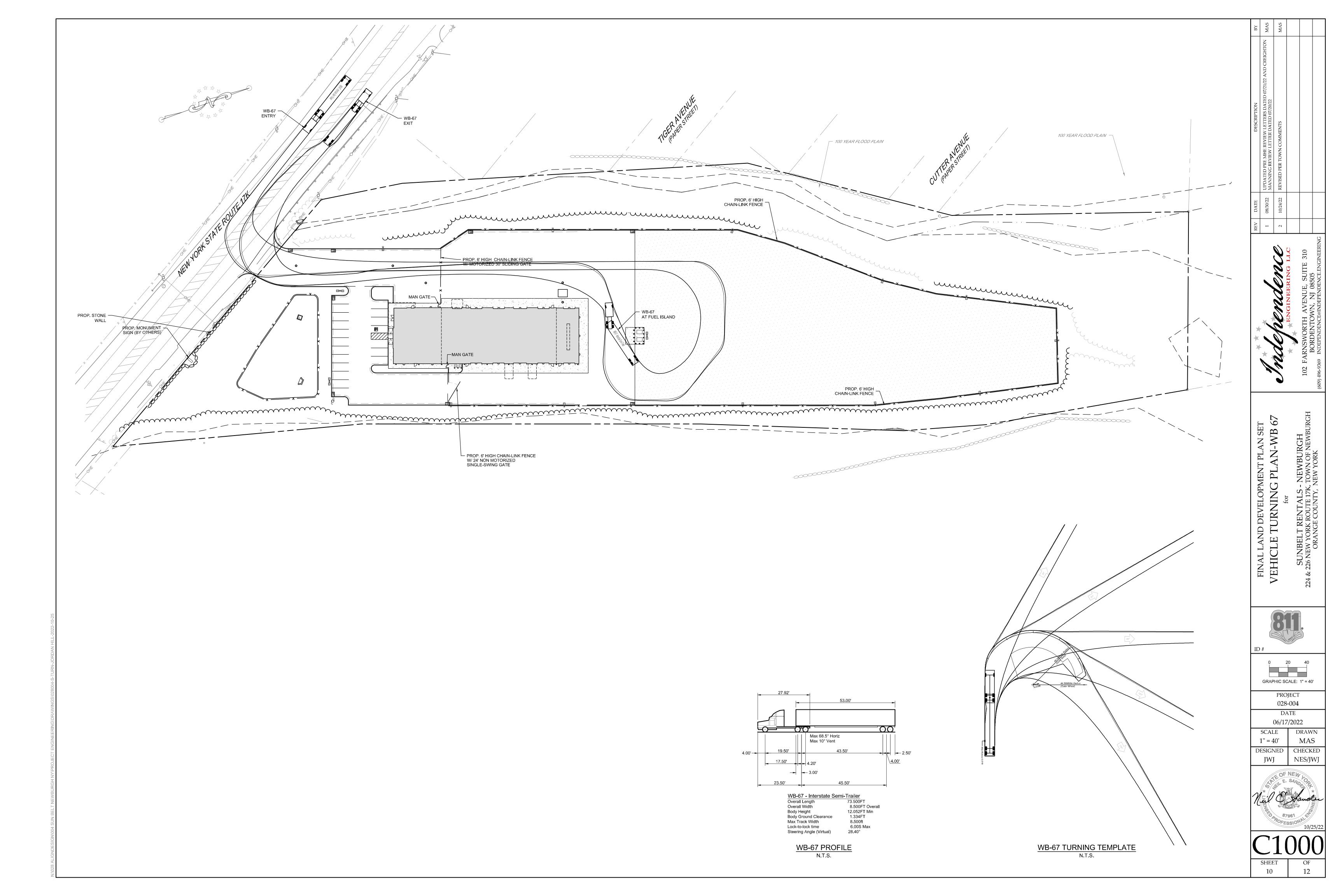
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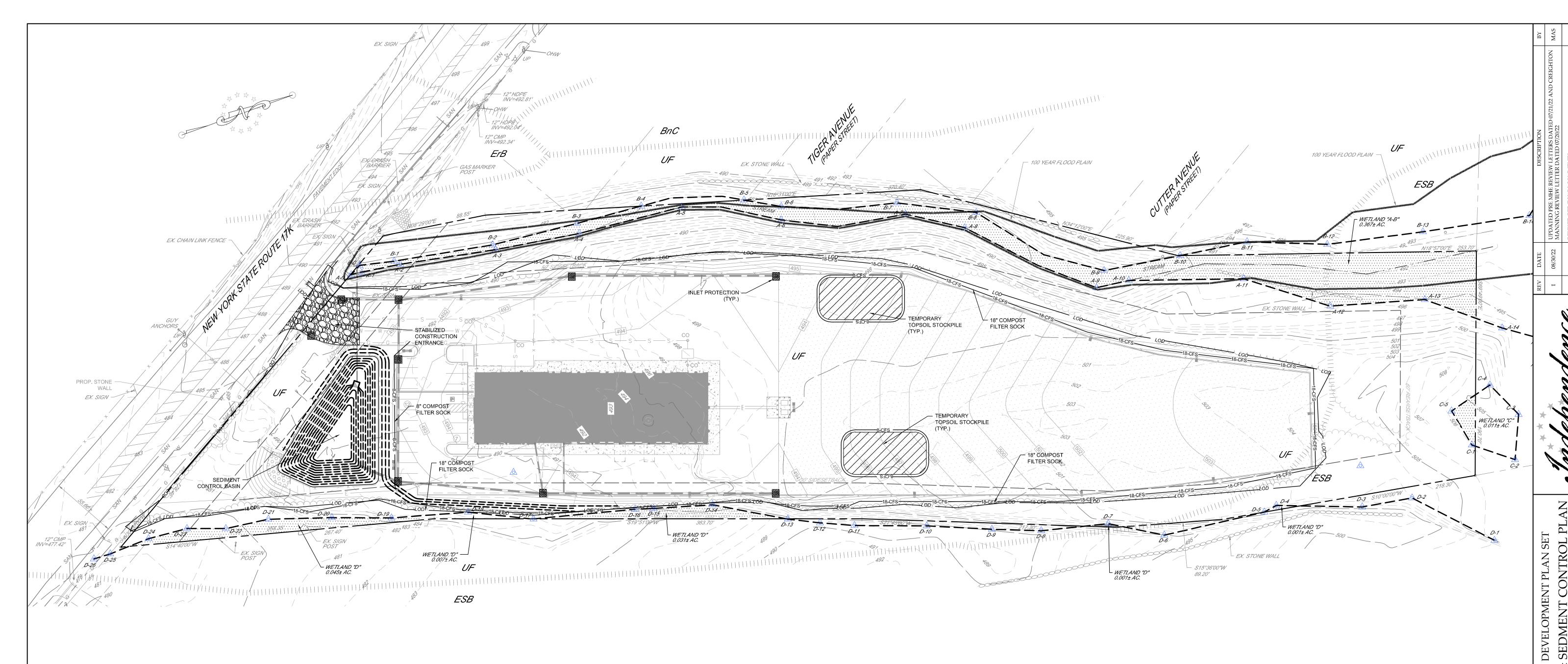




PERENNIAL PLANTING DETAIL

DEERTONGUE, RED TOP, OR SWITCH GRASS.





EROSION/SEDIMENT CONTROL PLAN NOTES:

- LATEST EDITION. 2. THE OPERATOR/RESPONSIBLE PERSON (O/RP) ON SITE SHALL ASSURE THAT THE APPROVED EROSION AND

 THE FOLLOWING SOIL TYPES ARE FOUND ON THE SITE: SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- 3. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR SOIL TYPE ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE O/RP SHALL IMPLEMENT APPROPRIATE BEST UDIFLUVENTS - FLUVAQUENTS COMPLEX (95%), FREQUENTLY FLOODED
- SEDIMENT POLLUTION. 4. THE O/RP SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED AND CONSTRUCTION SEQUENCE: APPROVED BY THE CONSERVATION DISTRICT AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOILS
- AND/OR ROCK SPOIL AND BORROW AREAS REGARDLESS OF THEIR LOCATIONS.
- PUMPED WATER FILTER BAG DISCHARGING OVER AN UNDISTURBED AREA.
- DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS.
- 8. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP 5. CLEAR THE AREAS DESIGNATED FOR THE NEW PROPOSED BUILDING. CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING THE REMOVAL OF THE BMPS MUST BE 6. GRADE THE AREA DESIGNATED FOR, AND START THE CONSTRUCTION OF, THE NEW PROPOSED BUILDING. STABILIZED IMMEDIATELY.
- 9. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, THE O/RP SHALL INVITE ALL CONTRACTORS INVOLVED IN THAT ACTIVITY, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL 7. INSTALL SANITARY LATERAL, INCLUDING OIL AND WATER TRAP, AND WATER LATERAL CONNECTION. OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN DESIGNER AND THE CONSERVATION DISTRICT TO A PRE-CONSTRUCTION MEETING.
- 10. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITY CEASES, THE O/RP SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT SPECIFIED RATES. DISTURBED AREAS THAT ARE NOT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS.
- YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- 12. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% VEGETATIVE OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- 13. UNTIL A SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND REONETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED,
- REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED, WILL BE REQUIRED. 14. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN SOIL STOCKPILES AND STABILIZED.
- 15. ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.) AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

SOIL TYPES AND LIMITATIONS

1. ALL EROSION AND SEDIMENT DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE NEW YORK THE SOILS INFORMATION FOR THE PROJECT IS FOUND ON THE 'NATURAL RESOURCES CONSERVATION STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, NOVEMBER 2016 OR SERVICE" ON THE "WEB SOIL SURVEY, HTTP://WEBSOILSURVEY.NRCS.USDA.GOV". THE SOIL SURVEY AREA IS ORANGE COUNTY, NY AND THE SURVEY AREA DATA IS VERSION 22, AUGUST 19, 2021.

MANAGEMENT PRACTICES (BMPS) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR ERIE EXTREMELY STONY SOILS (5%), GENTLY SLOPING

- 5. ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP SUCH AS A
 - SHALL BE SCHEDULED TO REVIEW PLANS AND ADDRESS ANY COMMENTS PRIOR TO CONSTRUCTION.
- 6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE ON THE PROJECT

 2. INSTALL THE CONSTRUCTION ENTRANCE WHERE SHOWN ON THE PLAN. 3. INSTALL THE COMPOST FILTER SOCKS WHERE INDICATED ON THE PLAN.
- 7. EROSION AND SEDIMENT BMPS MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE 4. REMOVE AND CLEAR ANY AND ALL STRUCTURES AND UTILITIES PER THE DEMOLITION PLAN AND IN ACCORDANCE WITH THE DEMOLITION NOTES ON THAT DEMOLITION PLAN.
 - INSTALL THE NEW PAVEMENT IN FRONT AND ON THE SIDE OF THE BUILDING. INCLUDING THE ADA PARKING
 - 8. PLACE ANY TOPSOIL FROM THE BUILDING SITE IN THE LOCATION SHOWN ON THE PLAN. TEMPORARILY
 - SEED AND STRAW-MULCH THE STOCKPILE AS REQUIRED. 9. AFTER MAIN BUILDING CONSTRUCTION HAS COMMENCED, CLEAN THE ENTIRE REMAINING NEW AND FROST ACTION
 - EXISTING PAVED AREA. REMOVE ANY PADS, CONCRETE CURBS, ETC. THAT ARE NOT REQUIRED. 10. INSPECT, MAINTAIN, AND REPAIR EROSION CONTROLS AROUND THE SITE ON A WEEKLY BASIS AND AFTER
- MEASURABLE (MIN. 0.25") RAINFALL UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED. 11. DISTURBED AREAS THAT ARE AT A FINISHED GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE 11. AFTER BUILDING CONSTRUCTION, PAVEMENT AND PARKING CONSTRUCTION, AND GENERAL AREA SHRINK-SWELL CONSTRUCTION HAS ENDED, DEMOLITION AND CONSTRUCTION OF THE NEW CONCRETE ENTRANCE CAN
 - 12. ***CRITICAL STAGE*** ONCE ALL TRIBUTARY AREAS HAVE BEEN STABILIZED AND AUTHORIZATION FROM THE BUCKS COUNTY CONSERVATION DISTRICT AND BRISTOL TOWNSHIP HAS BEEN RECEIVED, EROSION WETNESS CONTROLS CAN BE REMOVED. DISPOSE OF/RECYCLE ANY SILT FENCE, CONSTRUCTION WASTES, AND/OR OTHER BMP'S. PERMANENTLY STABILIZE AREAS DISTURBED BY REMOVAL OF THE BMP'S. REMOVE ANY SEDIMENT OUT OF THE BASINS WITHOUT COMPACTING THE BOTTOMS (MANUALLY) AND REPLACE TOPSOIL WHERE NEEDED.
 - 13. CLEAN ANY AREAS AFTER CONSTRUCTION OF ANY DEBRIS.

SOIL LIMITATION

CORROSIVE TO CONCRETE/STEEL

DROUGHTY

EASILY ERODIBLE

DEPTH TO SATURATED ZONE / SEASONAL HIGH WATER TABLE

HYDRIC / HYDRIC INCLUSION

LOW STRENGHTH / LANDSLIDE PRONE

POOR SOURCE OF TOPSOIL

SLOW PERCOLATION

RESOLUTION

THE CONTRACTOR SHALL TAKE EXTRA CARE WHILE CONSTRUCTING CUTBANKS. ADDITIONAL EROSION CONTROL MEASURE, SUCH AS TRENCH BOXES, SHALL BE USED AS NEEDED.

THE CONTRACTOR SHALL REMAIN COGNIZANT OF THE CORROSION

POTENTIAL OF THESE SOILS AND CONSIDER WHAT MATERIALS SHOULD BE USED FOR BACKFILL. SOILS SHALL BE AMENDED WITH COMPOST AS NEEDED TO INCREASE THE SOIL'S WATER HOLDING CAPACITY. IF THE DRY SOIL CREATES A

DUST NUISANCE DURING CONSTRUCTION, THEN A WATER TRUCK SHALL BE AVAILABLE ON-SITE AS A MEANS OF CONTROL. EROSION CONTROL MEASURES SHALL BE INSTALLED AS DEPICTED

ON THE APPROVED PLAN. USE ADDITIONAL E&S MEASURES IF SITE CONDITIONS REQUIRE THEM.

DURING CONSTRUCTION. THE CONTRACTOR SHALL AVOID DISTURBANCE TO HYDRIC SOIL AS MUCH AS POSSIBLE.

DEWATERING EQUIPMENT SHALL BE AVAILABLE ON-SITE AT ALL TIME

THE CONTRACTOR SHALL PROPERLY STABILIZE ALL SLOPES TO PREVENT LANDSLIDES. EROSION CONTROL BLANKET AND OTHER E&S MEASURES SHALL BE USED AS NEEDED.

DEWATERING EQUIPMENT SHALL BE AVAILABLE ON-SITE AT ALL TIMES DURING CONSTRUCTION.

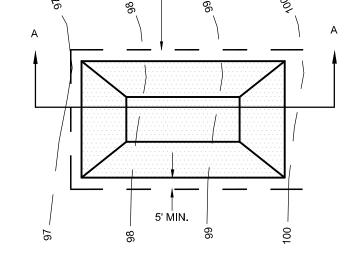
THE CONTRACTOR SHALL VERIFY THAT ANY SOILS USED FOR TOPSOIL ARE APPROPRIATE FOR SUCH USE. THE CONTRACTOR SHALL TAKE EXTRA CARE WHILE PERFORMING

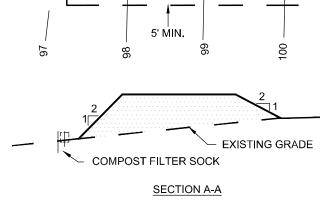
THE CONTRACTOR SHALL ENSURE THAT ALL SOILS ARE PROPERLY COMPACTED. IF UNANTICIPATED SHRINK-SWELL RESULTS IN A EARTHWORK MISBALANCE, THE CONTRACTOR SHALL VERIFY THAT ANY SOIL IMPORTED TO OR EXPORTED FROM THE SITE IS CLEAN FILL.

GRADING OPERATIONS IN THESE SOILS DURING THE WINTER MONTHS

AND UTILIZE ADDITIONAL EROSION & SEDIMENT CONTROL MEASURES

DEWATERING EQUIPMENT SHALL BE AVAILABLE ON-SITE AT ALL TIMES DURING CONSTRUCTION.





1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION ANS SEDIMENT CONTROL PLAN.

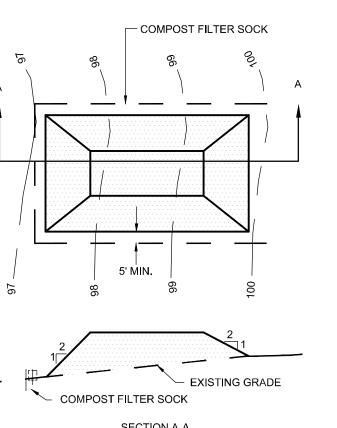
2. HEIGHT SHALL NOT EXCEED 35 FEET. ALL SIDE SLOPES SHALL BE 2 TO 1 OR FLATTER.

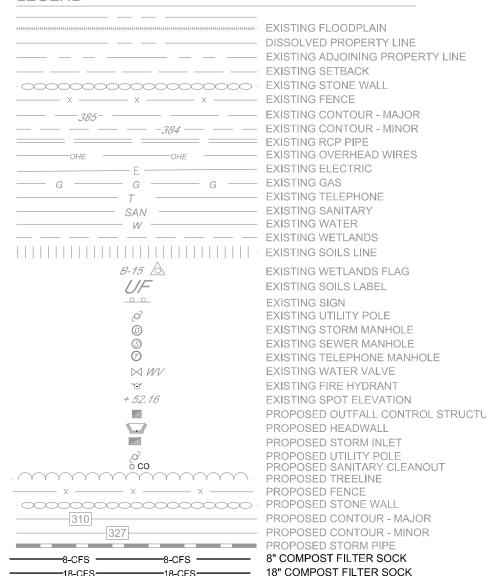
3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS TO MINIMIZE EROSION. 4. COMPOST FILTER SOCK SHALL BE INSTALLED AS DETAILED HEREON. 5. LOCATION OF PROPOSED STOCKPILE WHICH AFFECT EROSION CONTROLS ARE SHOWN SCHEMATICALLY ONLY. ACTUALLY STOCKPILE

6. SEE SEQUENCE OF CONSTRUCTION NOTES ON SHEET 67.

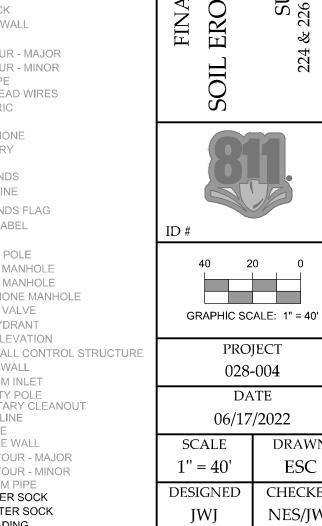
LOCATION MAY CHANGE DURING CONSTRUCTION.

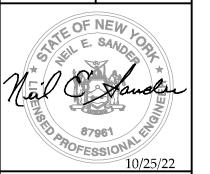
MAINTENANCE AND INSPECTION 7. INSPECT STOCKPILES REGULARLY, ESPECIALLY AFTER LARGE STORMS. STABILIZE ANY AREAS THAT HAVE ERODED.











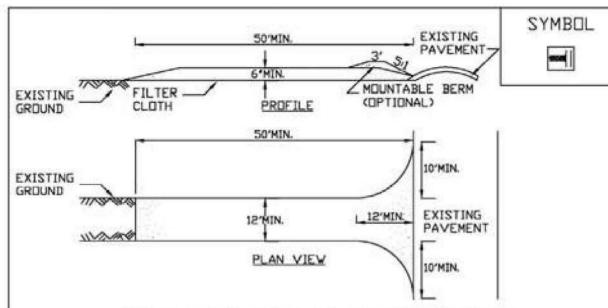
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Figure 2.1 **Stabilized Construction Access**



CONSTRUCTION SPECIFICATIONS

- STONE SIZE USE 1-4 INCH STONE, DR RECLAIMED DR RECYCLED CONCRETE EQUIVALENT.
- 2. LENGTH NDT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLYX.
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- 5. GEDTEXTILE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CON-STRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 54 SLOPES WILL BE PERMITTED.
- MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH

	A	DAPTE	D F	ROM	DETA	AIL	S PRI	IVI	DED	BY:	USDA	- NRCS	
	. N	IEW Y	ORK	STA	ATE I	DEP	ARTM	ENT	T OF	TRA	NSPO	RTATION	
NEW	YUR	RK ST	ATE	DEF	ARTM	EN	T OF	EN	VIR	DINME	NTAL	CONSER	VATIE
N	EW	YURK	STA	TE	SOIL		WATE	ER	CON	SERV	ATION	COMMI	TTEE

STABILIZED CONSTRUCTION ACCESS

New York State Standards and Specifications For Erosion and Sediment Control

November 2016

For Erosion and Sediment Control

BLOWN/PLACED FILTER MEDIA -

DISTURBED AREA

Figure 3.1 **Stone Check Dam Detail**

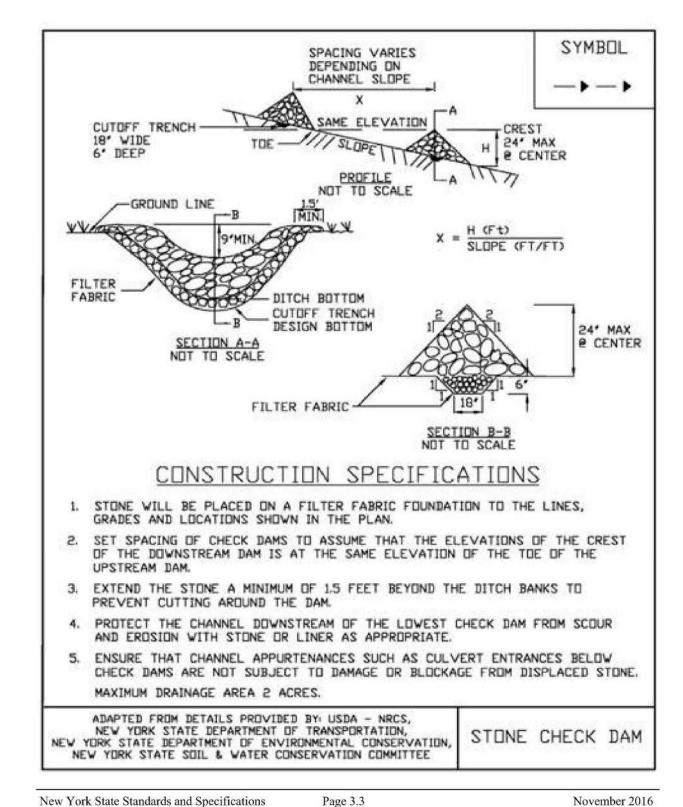


Figure 5.2

Compost Filter Sock

SECTION VIEW

DISTURBED

UNDISTURBED

PLAN VIEW

Page 5.9

New York State Standards and Specifications For Erosion and Sediment Control

RISER -

d/2 / PIPE

NOTE: APRON @ ZERO GRADE A-

NOTE: SEE RIPRAP STANDARDS AND SPECIFICATIONS

MINIMUM TAILWATER CONDITIONS

Figure 3.18

Riprap Outlet Protection Detail (1)

PLANVIEW

GRADED AGGREGATE -

GRADED AGGREGATE — FILTER OR FILTER CLOTH

ADAPTED FROM DETAILS PROVIDED BY USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION,

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

FILTER OR FILTER CLOTH

NO OVERFALL -

PROFILE VIEW

CROSS SECTION A-A

November 2016

SYMBOL

STABILIZED

CHANNEL

SEE RIPRAP STANDARDS

RIPRAP DUTLET

PROTECTION

EXAMPLE

AND SPECIFICATIONS

DISCHARGE TO UNCONFINED SECTION

CONDITION)

(FLARED DUTLET) (MINIMUM TAILWATER

Figure 4.1 Angles of Repose of Riprap Stones (FHWA)

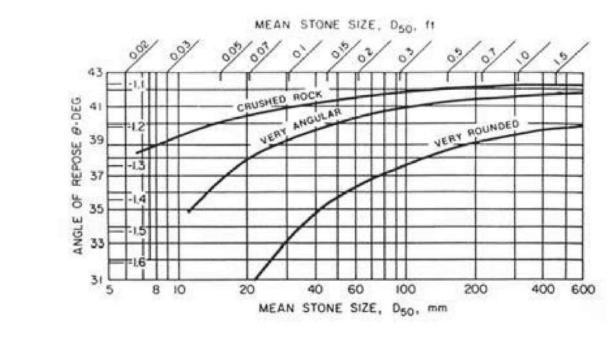
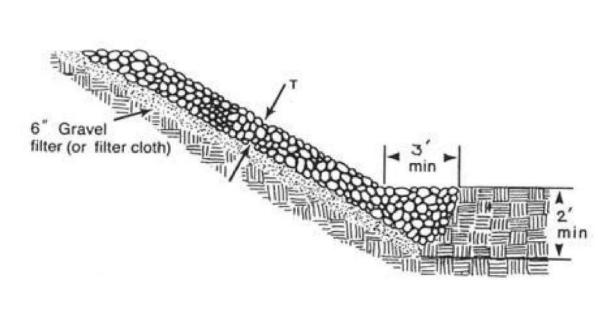


Figure 4.2 **Typical Riprap Slope Protection Detail**



New York State Standards and Specifications For Erosion and Sediment Control

Page 4.9

November 2016

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T R ORK

Figure 4.11 **Landgrading - Construction Specifications**

CONSTRUCTION SPECIFICATIONS

- ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
- ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED. APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- 3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
- 4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO
- SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. 7. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES
- 8. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN
- PARTICLES, BRUSH, RODTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH DR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 9. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
- 10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
- 12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- FINISHED GRADING.
- SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

LANDGRADING SPECIFICATIONS

> New York State Standards and Specifications For Erosion and Sediment Control

S'xS' WOODEN_

ADAPTED FROM DETAILS PROVIDED BY FILTREXX

STAKES PLACED 10' D.C.

COMPOST FILTER SOCK-

COMPOST FILTER

SOCK

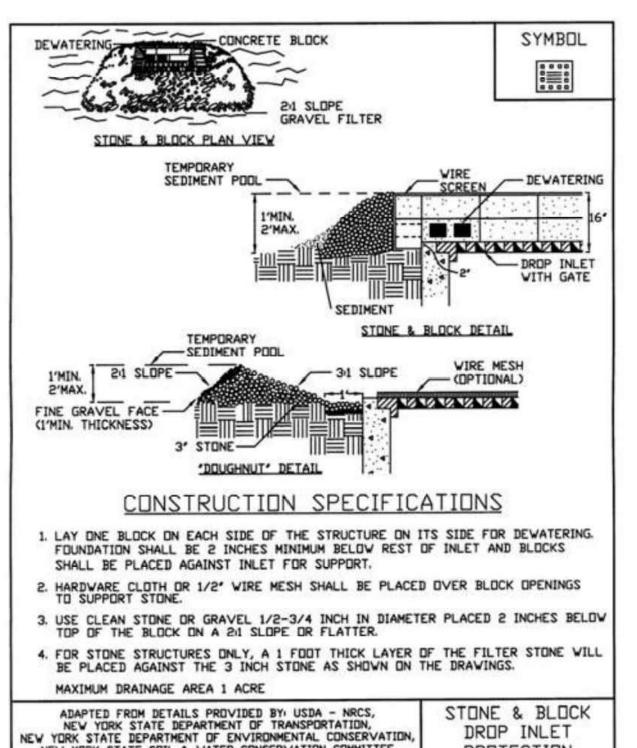
- 2'x2' WOODEN STAKES PLACED 10' O.C

UNDISTURBED

- COMPOST FILTER SOCK

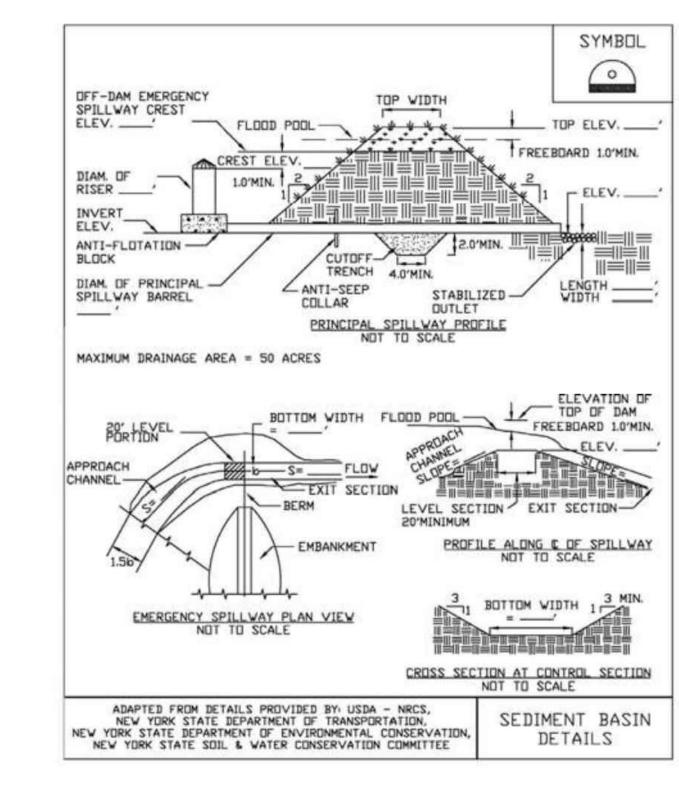
VONDONONO AREA

Figure 5.33 **Stone & Block Drop Inlet Protection**



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Figure 5.9 **Sediment Basin**



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PROJECT

028-004

DATE

06/17/2022

DRAWN

ESC

CHECKED

NES/JW]

SCALE

N.T.S.

DESIGNED

JWJ

SHEET OF

13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING 14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

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EXISTING CONTOURS-

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