

TOWN OF NEWBURGH PLANNING BOARD TECHNICAL REVIEW COMMENTS

PROJECT NAME: MKJC REALTY, LLC

PROJECT NO.: 2025-17

PROJECT LOCATION: SECTION 35, BLOCK 3, LOT 3.22/ NYS ROUTE 32

REVIEW DATE: 9 JULY 2025 MEETING DATE: 17 JULY 2025

PROJECT REPRESENTATIVE: LANC & TULLY ENGINEERS- JOHN QUEENAN, PE

- 1. This office circulated the project to Orange County Planning. Project received a local determination with an advisory comment regarding coordination with New York State Department of Transportation.
- 2. Watermain details should be revised to provide restrained joint pipe. Restrained joint pipe chart should be added to the plans. Town of Newburgh's standard water and sewer notes, copies attached should be added to the plans.
- 3. Septic system plans should contain a note requiring submission of as-built Engineers' Certification prior to the issuance of a CO.

Respectfully submitted,

MHE Engineering, D.P.C.

Patrick J. Hines

Principal PJH/kmm

Michael W. Weeks, P.E.

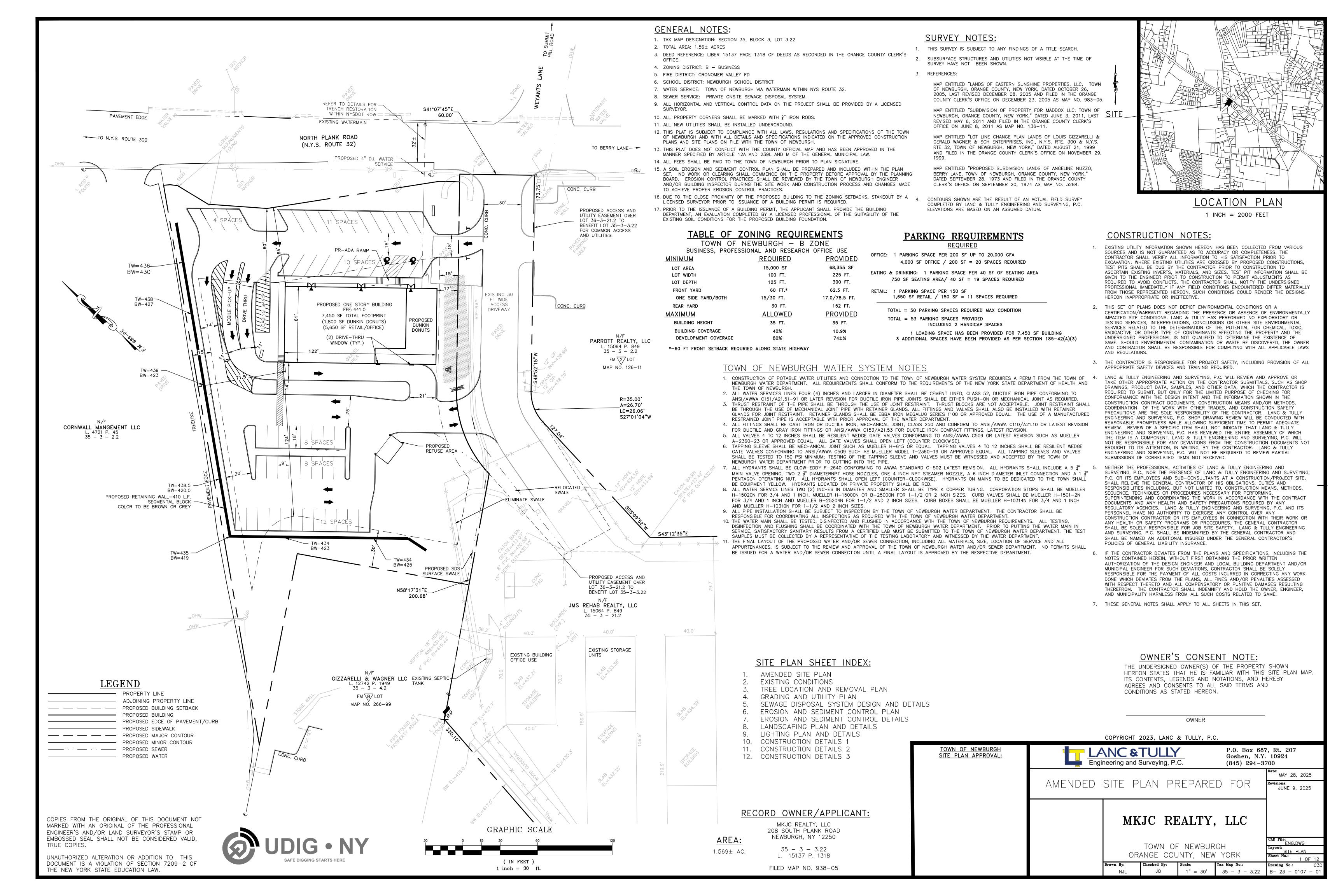
Principal

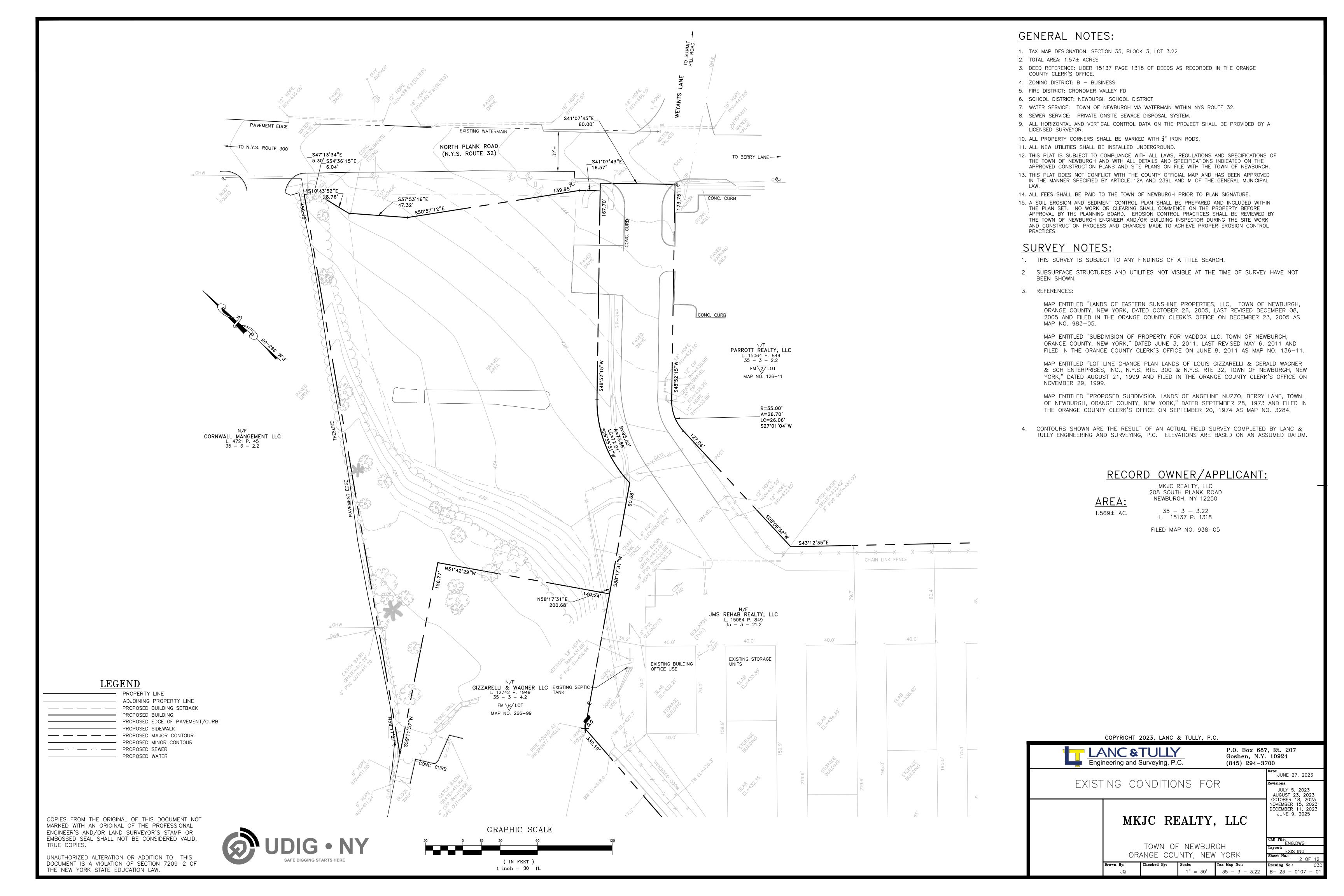
TOWN OF NEWBURGH WATER SYSTEM NOTES FOR SITE PLANS

- "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.





PROPERTY TREE SUMMARY AND REMOVAL CHART:

TAG NO.	TREE SPECIES	SIZE (IN)	TO BE REMOVED	CLASSIFICATION
001	ASH	9		
003	TWIN RED MAPLE	10	Х	Significant
006	DEAD/DYING	12	Х	Dead Tree
009	SWAMP WHITE OAK	10	Х	Significant
010	ASPEN	10	Х	Significant
012	SWAMP WHITE OAK	20		Significant
013	AMERICAN ELM	9		
014	MAPLE-DEAD	10		Significant
015	DEAD	11	Х	Dead Tree
016	BLACK LOCUST	12	Х	Significant
018	SWAMP WHITE OAK	24	Х	Specimen
019	OAK	13		Significant
020	TWIN ELM	12		Significant
021	SWAMP WHITE OAK	16		Significant
023	CEDAR	12		Significant
024	ASH-DEAD	9		
025	SWAMP WHITE OAK	15		Significant
17		214	7	

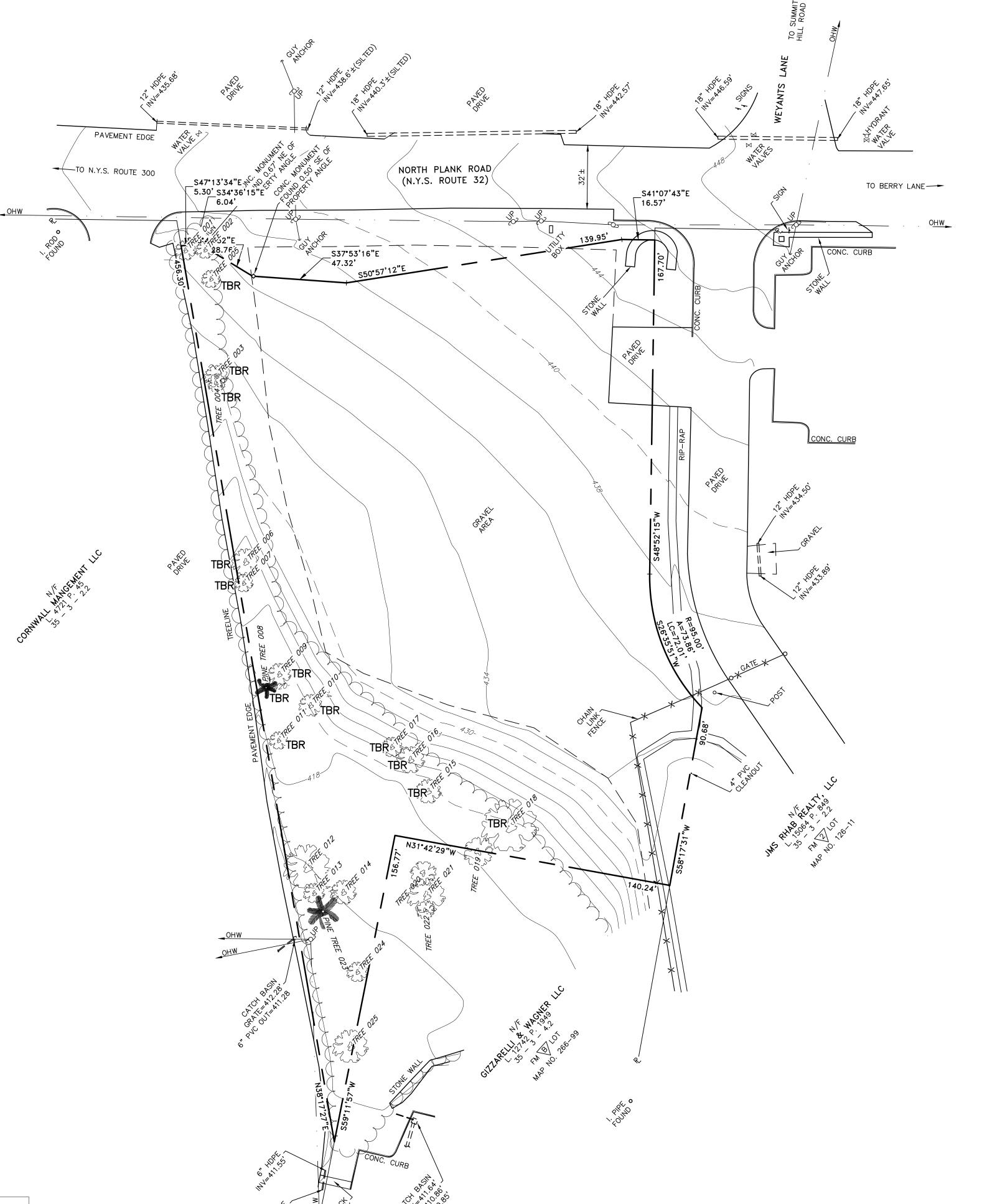
14 TOTAL TREES GREATER THAN 10" DBH

7 TREES TO BE REMOVED - TWO OF WHICH ARE DEAD

TOTAL NUMBER OF INCHES = 187 IN. (DEAD TREES NOT COUNTED)

TOTAL NUMBER OF INCHES TO BE REMOVED = 66 IN. (DEAD TREES NOT COUNTED)

35% TREE REMOVAL



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NOTES:

- 1. THIS SURVEY IS SUBJECT TO ANY FINDINGS OF A TITLE SEARCH.
- 2. SUBSURFACE STRUCTURES AND UTILITIES NOT VISIBLE AT THE TIME OF SURVEY HAVE NOT BEEN SHOWN.
- 3. REFERENCES:

MAP ENTITLED "LANDS OF EASTERN SUNSHINE PROPERTIES, LLC, TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK, DATED OCTOBER 26, 2005, LAST REVISED DECEMBER 08, 2005 AND FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON DECEMBER 23, 2005 AS MAP NO. 983-05.

MAP ENTITLED "SUBDIVISION OF PROPERTY FOR MADDOX LLC. TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK," DATED JUNE 3, 2011, LAST REVISED MAY 6, 2011 AND FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON JUNE 8, 2011 AS MAP NO. 136-11.

MAP ENTITLED "LOT LINE CHANGE PLAN LANDS OF LOUIS GIZZARELLI & GERALD WAGNER & SCH ENTERPRISES, INC., N.Y.S. RTE. 300 & N.Y.S. RTE 32, TOWN OF NEWBURGH, NEW YORK," DATED AUGUST 21, 1999 AND FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON NOVEMBER 29, 1999.

MAP ENTITLED "PROPOSED SUBDIVISION LANDS OF ANGELINE NUZZO, BERRY LANE, TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK," DATED SEPTEMBER 28, 1973 AND FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON SEPTEMBER 20, 1974 AS MAP NO. 3284.

- 4. CONTOURS SHOWN ARE THE RESULT OF AN ACTUAL FIELD SURVEY COMPLETED BY LANC & TULLY ENGINEERING AND SURVEYING, P.C. ELEVATIONS ARE BASED ON AN ASSUMED DATUM.
- 5. THE TREES SHOWN ON THIS PLAN WERE FIELD LOCATED BY LANC & TULLY, P.C. ON AUGUST 7, 2023 AND ALL TREES WERE TAGGED WITH CORRESPONDING NUMBER ON THE CHART.

RECORD OWNER/APPLICANT:

MKJC REALTY, LLC 208 SOUTH PLANK ROAD NEWBURGH, NY 12250

> 35 - 3 - 3.22 L. 15137 P. 1318

FILED MAP NO. 938-05

AREA:
1.569± AC.

GRAPHIC SCALE

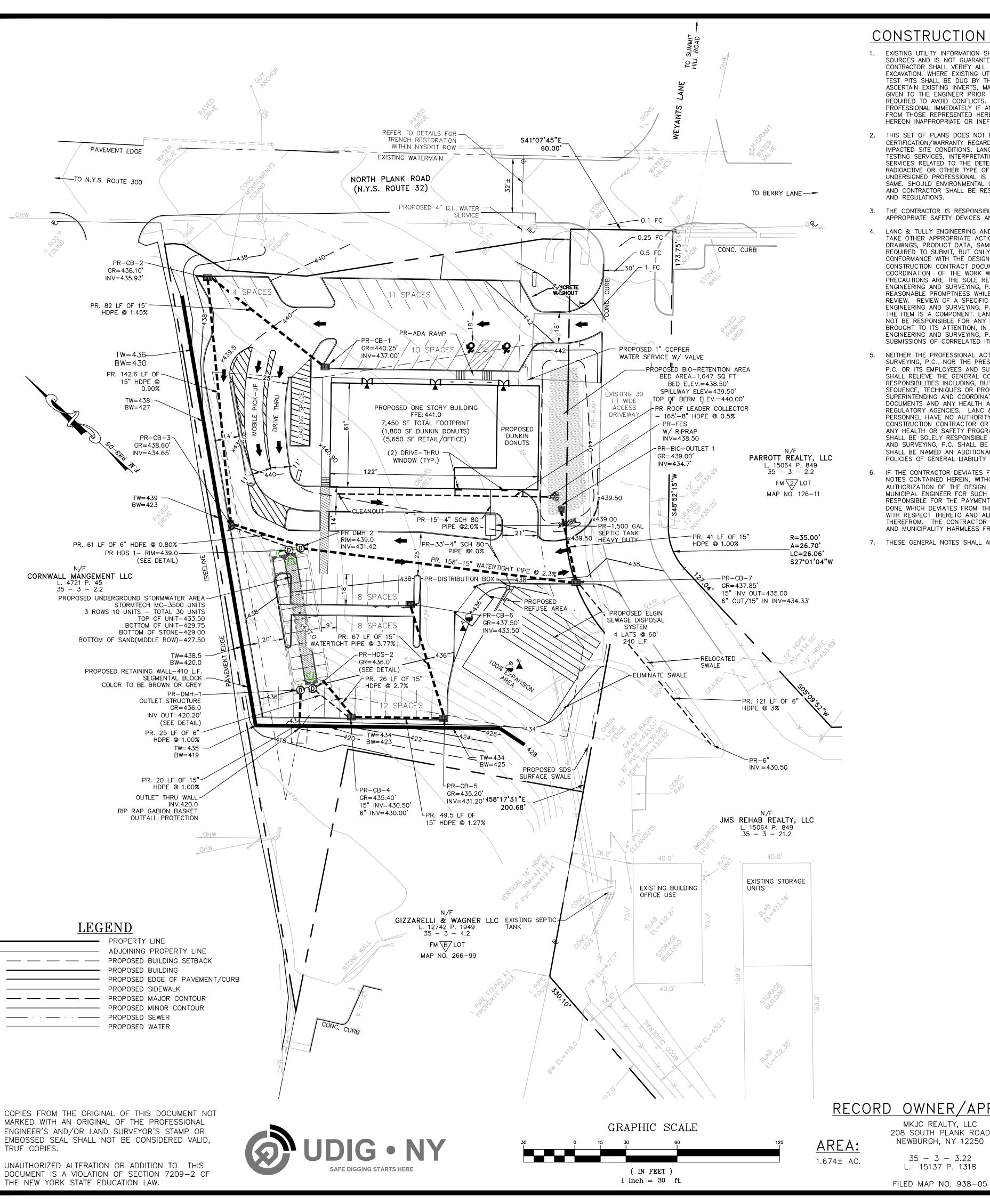
0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

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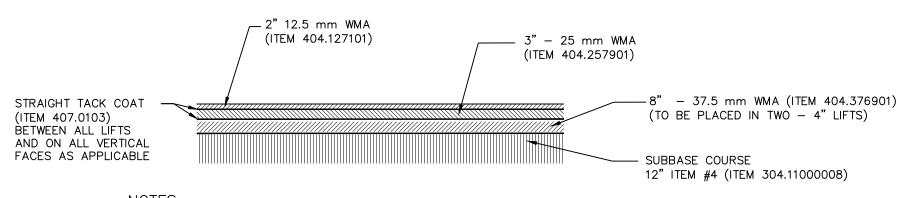


ORANGE COUNTY, NEW YORK



CONSTRUCTION NOTES:

- EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE CROSSED BY PROPOSED CONSTRUCTIONS TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS, AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.
- 2. THIS SET OF PLANS DOES NOT DEPICT ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITÉ CONDITIONS. LANC & TULLY HAS PERFORMED NO EXPLORATORY OR TESTING SERVICES, INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF THE POTENTIAL FOR CHEMICAL, TOXIC RADIOACTIVE OR OTHER TYPE OF CONTAMINANTS AFFECTING THE PROPERTY AND THE UNDERSIGNED PROFESSIONAL IS NOT QUALIFIED TO DETERMINE THE EXISTENCE OF SAME. SHOULD ENVIRONMENTAL CONTAMINATION OR WASTE BE DISCOVERED, THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS
- 3. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.
- LANC & TULLY ENGINEERING AND SURVEYING, P.C. WILL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS, CONSTRUCTION MEANS AND/OR METHODS COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. LANC & TULLY ENGINEERING AND SURVEYING, P.C. SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT LANC & TULLY ENGINEERING AND SURVEYING, P.C. HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. LANC & TULLY ENGINEERING AND SURVEYING, P.C. WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. LANC & TULLY ENGINEERING AND SURVEYING, P.C. WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OF CORRELATED ITEMS NOT RECEIVED.
- NEITHER THE PROFESSIONAL ACTIVITIES OF LANC & TULLY ENGINEERING AND SURVEYING, P.C., NOR THE PRESENCE OF LANC & TULLY ENGINEERING AND SURVEYING, P.C. OR ITS EMPLOYEES AND SUB-CONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF HIS OBLIGATIONS, DUTIÉS AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. LANC & TULLY ENGINEERING AND SURVEYING, P.C. AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY, LANC & TULLY ENGINEERING AND SURVEYING, P.C. SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
- 6. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE DESIGN ENGINEER AND LOCAL BUILDING DEPARTMENT AND/OR MUNICIPAL ENGINEER FOR SUCH DEVIATIONS, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER, ENGINEER, AND MUNICIPALITY HARMLESS FROM ALL SUCH COSTS RELATED TO SAME.
- 7. THESE GENERAL NOTES SHALL APPLY TO ALL SHEETS IN THIS SET.

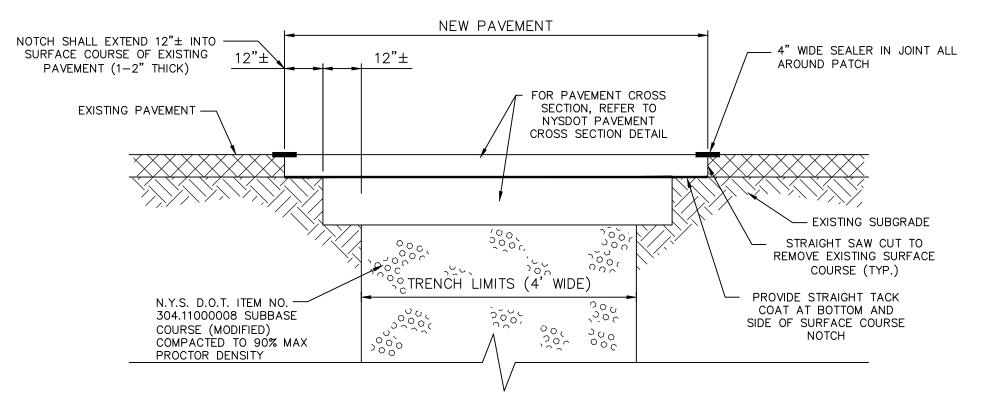


1. NYSDOT PAVEMENT SPECIFICATION SHALL BE INSTALLED TO 30' FROM TRAVEL LINE (AS

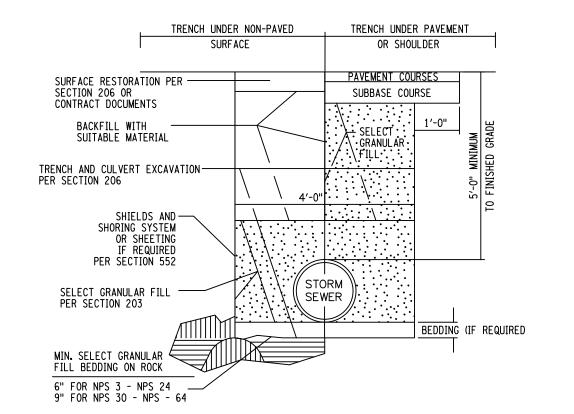
SHOWN ON PLAN). 2. REFER TO SECTION 404 FOR ALL REQUIRED WARM MIX ASPHALT (WMA) SPECIFICATIONS

NYSDOT PAVEMENT CROSS SECTION

NOT TO SCALE



NYSDOT PAVEMENT RESTORATION DETAIL



NYSDOT UTILITY TRENCH DETAIL NOT TO SCALE

THE ABOVE DETAILS ONLY APPLY TO WORK WITHIN THE NYSDOT ROW

COPYRIGHT 2023, LANC & TULLY, P.C. LANC & TULLY Engineering and Surveying, P.C. GRADING AND UTILITY PLAN PREPARED FOR MKJC REALTY, LLC

TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK

1" = 30'

P.O. Box 687, Rt. 207 Goshen, N.Y. 10924

JUNE 27, 2023

JULY 5, 2023 AUGUST 23, 2023 OCTOBER 18, 2023

DECEMBER 11, 2023

G & U PLAN

B- 23 - 0107 -

JUNE 9, 2025

CAD File: ENG.DWG

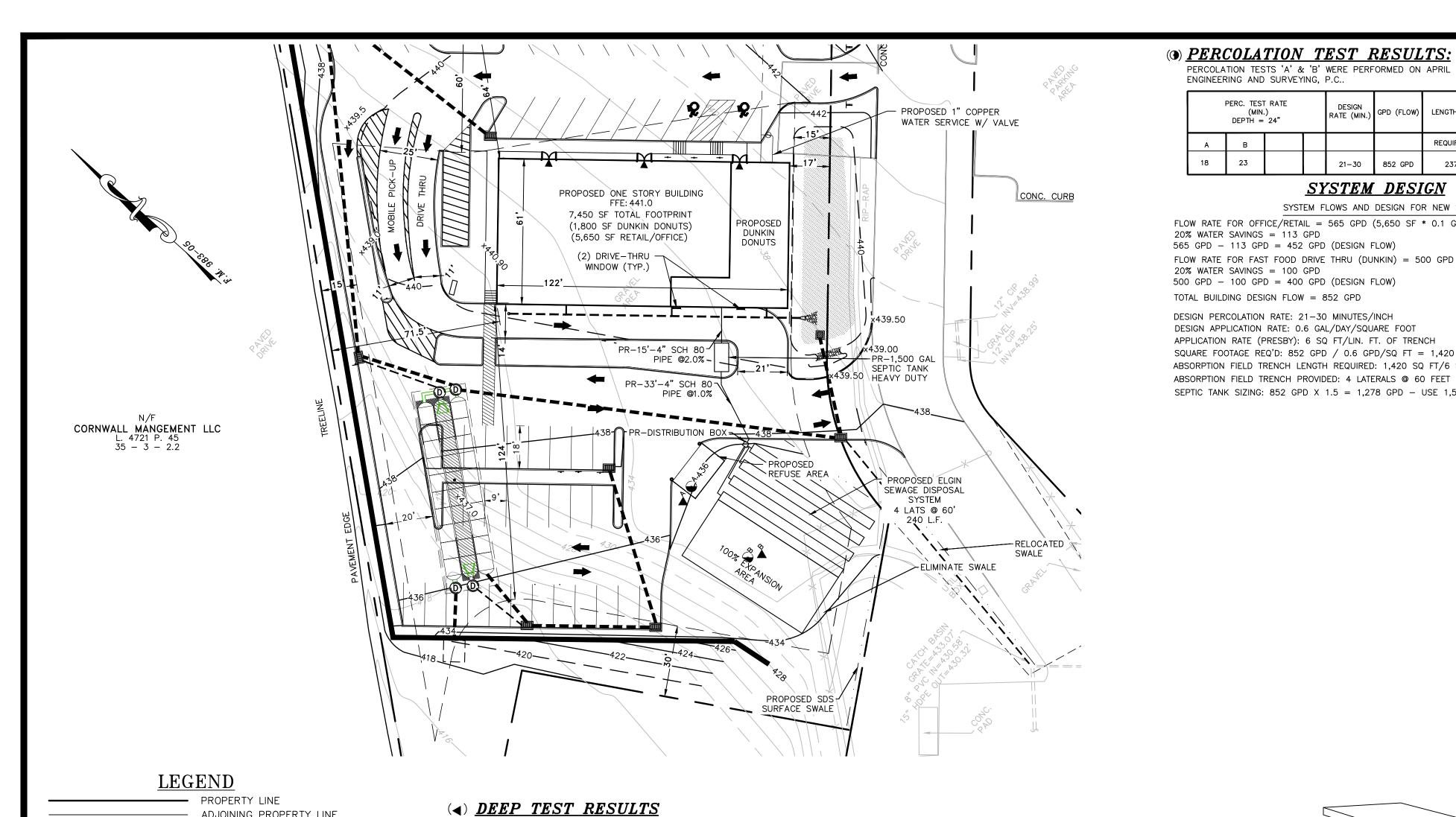
(845) 294-3700

35 - 3 - 3.22

RECORD OWNER/APPLICANT:

MKJC REALTY, LLC 208 SOUTH PLANK ROAD NEWBURGH, NY 12250

35 - 3 - 3.22L. 15137 P. 1318



A & B - SITE INSPECTION PERFORMED ON APRIL 9, 2023 BY LANC AND

LOAM/ GRAVEL

STONES

TULLY ENGINEERING, P. C.

GRAVEL 8" LEVEL

SILT

LOAM/ GRAVEL

SILT LOAM WITH

STONES

ENGINEERING AND SURVEYING, P.C..

PERCOLATION TESTS 'A' & 'B' WERE PERFORMED ON APRIL 9, 2023, BY LANC & TULLY

	PERC. TEST RATE (MIN.) DEPTH = 24"		DESIGN RATE (MIN.)	GPD (FLOW)	LENGTH OF FIELD (FEET)		TYPE OF SYSTEM	
ſ	Α	В				REQUIRED	PROPOSED	
	18	23		21-30	852 GPD	237	240	ELGIN

SYSTEM DESIGN

SYSTEM FLOWS AND DESIGN FOR NEW SDS:

FLOW RATE FOR OFFICE/RETAIL = 565 GPD (5,650 SF * 0.1 GPD/SF)

20% WATER SAVINGS = 113 GPD 565 GPD - 113 GPD = 452 GPD (DESIGN FLOW)

FLOW RATE FOR FAST FOOD DRIVE THRU (DUNKIN) = 500 GPD (25 GAL PER SEAT/DAY) (20 SEATS)

20% WATER SAVINGS = 100 GPD

500 GPD - 100 GPD = 400 GPD (DESIGN FLOW)TOTAL BUILDING DESIGN FLOW = 852 GPD

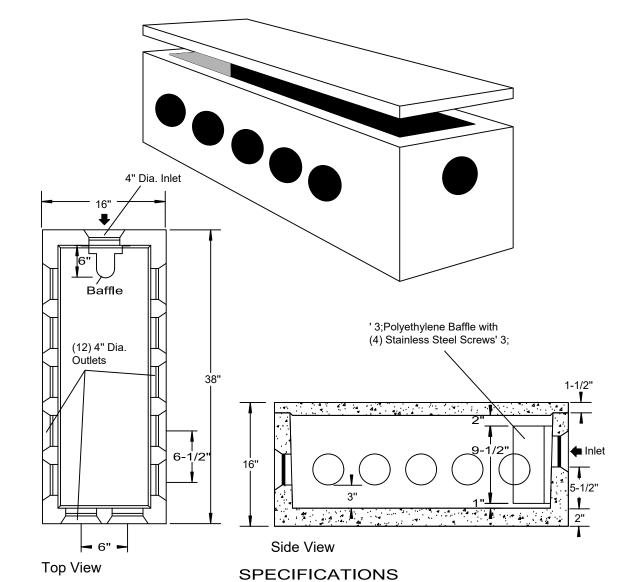
DESIGN PERCOLATION RATE: 21-30 MINUTES/INCH DESIGN APPLICATION RATE: 0.6 GAL/DAY/SQUARE FOOT

APPLICATION RATE (PRESBY): 6 SQ FT/LIN. FT. OF TRENCH SQUARE FOOTAGE REQ'D: 852 GPD / 0.6 GPD/SQ FT = 1,420 SQ FT

ABSORPTION FIELD TRENCH LENGTH REQUIRED: 1,420 SQ FT/6 SQ FT PER LIN. FT. = 237 LIN. FT. OF TRENCH

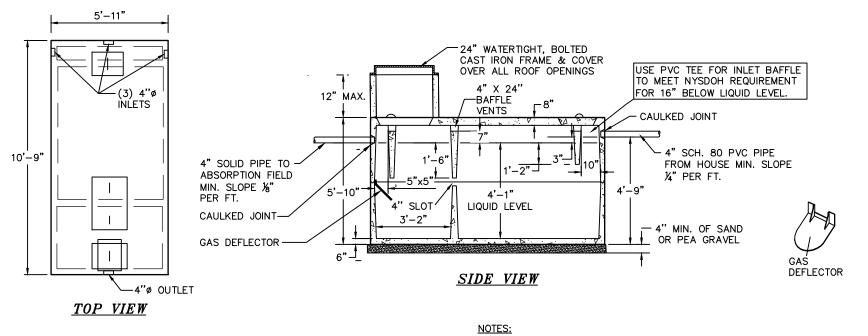
ABSORPTION FIELD TRENCH PROVIDED: 4 LATERALS @ 60 FEET = 240 LINEAR FEET

SEPTIC TANK SIZING: 852 GPD X 1.5 = 1,278 GPD - USE 1,500 GAL TANK



Concrete Min. Strength: 4,000 psi at 28 days Reinforcement: Fiber, 10ga. wire mesh Air Entrainment: 5% Pipe Connection: Polylok Seal (patented) Load Rating: 300 psf Weight = 325 lbs

12-OUTLET DISTRIBUTION BOX NOT TO SCALE



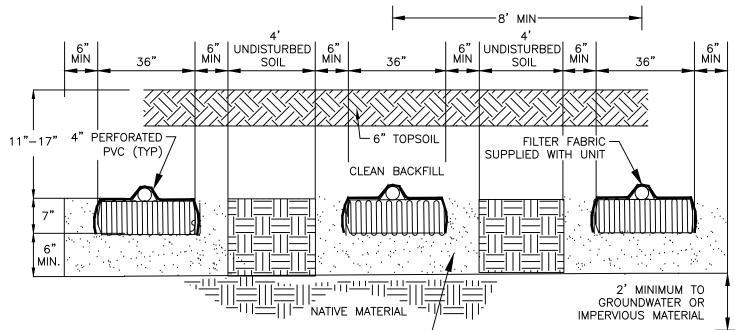
SPECIFICATIONS PRECAST TRAFFIC DUTY CONCRETE MINIMUM STRENGTH: 4,000 PSI AT 28 DAYS SEPTIC TANK 1500 GALLONS REINFORCEMENT: #4 & #5 REBAR / ASTM A615 AIR ENTRAINMENT: 6% Woodard's Concrete Products, Inc. CONSTRUCTION JOINT: BUTYL RUBBER SEALANT 629 Lybolt Road, Bullville, NY 10915 (914) 361-3471 / Fax 361-1050 PIPE CONNECTION: POLYLOK SEAL (PATENTED) LOAD RATING: HS20-44 + 30% / ASTM C857 Page 4A

1. CONCRETE SEPTIC TANK BY TO BE TRAFFIC DUTY 1500 GALLON CONCRETE SEPTIC TANK BY WOODARD'S CONCRETE PRODUCTS, INC.,

2. AN ASPHALTIC SEAL SHALL BE APPLIED BETWEEN CONTACT SURFACES OF MANHOLE COVERS, INSPECTION COVERS, AND CLEANOUT COVERS. 3. CONCRETE MIN. STRENGTH: 4,000 PSI @ 28 DAYS.

4. STEEL REINFORCEMENT: #4 & #5 REBAR 5. ALL JOINTS TO BE CAULKED.

TRAFFIC DUTY 1,500 GAL. CONCRETE SEPTIC TANK



INSTALLER SHALL INSTALL A 6" LAYER OF SAND MEETING -ASTM C33 SAND SPECIFICATION SEE ELJEN IN-DRAIN DESIGN AND INSTALLATION MANUAL FOR DETAILS

NOTES: 1. DO NOT INSTALL TRENCHES IN WET SOIL. 2. RAKE SIDES AND BOTTOM OF TRENCH PRIOR TO PLACING

GRAVEL/CONCRETE SAND. 3. END OF ALL DISTRIBUTION PIPES MUST BE PLUGGED. 4. TRENCHES TO BE INSTALLED PARALLEL WITH EXISTING CONTOURS WITH SPACING OF ABSORPTION TRENCHES TO BE A MINIMUM OF 8 FEET ON CENTER WITH A MINIMUM OF 4 FEET OF UNDISTURBED SOIL BETWEEN TRENCHES.

5. ALL TRENCHES ARE TO HAVE IDENTICAL NUMBER OF ELJEN UNITS. 6. NO SYSTEM IS TO BE CONSTRUCTED ON GROUND WITH A SLOPE

IN EXCESS OF 15%. 7. THE TRENCH BOTTOM SHALL BE FLAT. PERFORATED PIPE SLOPE SHALL BE 1/16"-1/32" FOR GRAVITY FED SYSTEMS AND SET NEARLY LEVEL FOR DOSED SYSTEMS.

8. ALL PIPE PERFORATIONS MUST FACE DOWN. 9. THE BACKFILL IN THE TRENCHES MUST BE MOUNDED FOR SETTLING.
BACKFILL SHALL BE NATIVE MATERIAL DEVOID OF LARGE ROCKS

(GREATER THAN 4") OR DEBRIS.

PERCENT PASSING SQUARE SIEVE SIZE (WET SIEVE) OPENING SIZE 9.5 mm <u>4.75 m</u>m <u>.36 mm</u> 1.18 mm 600 µm 300 µm 150 µm 75 jum

SAND SPECIFICATION

SPECIFICATION

TYPICAL ELJEN TRENCH CROSS SECTION NOT TO SCALE

P.O. Box 687, Rt. 207 Goshen, N.Y. 10924 LANC & TULLY Engineering and Surveying, P.C. (845) 294-3700 JUNE 27, 2023 SEWAGE DISPOSAL SYSTEM DESIGN PREPARED FOR JULY 5, 2023 AUGUST 23, 2023 OCTOBER 18, 2023 DECEMBER 11, 2023 JUNE 9, 2025

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MKJC REALTY, LLC

CAD File: ENG.DWG TOWN OF NEWBURGH SDS ORANGE COUNTY, NEW YORK

1" = 30'

35 - 3 - 3.22

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----- ADJOINING PROPERTY LINE

—— PROPOSED MINOR CONTOUR

— PROPOSED EDGE OF PAVEMENT/CURB

PROPOSED BUILDING

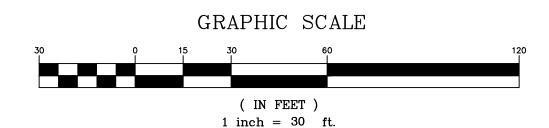
----- PROPOSED SIDEWALK

PROPOSED WATER

— — PROPOSED BUILDING SETBACK

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CLEANOUT COVER BY CAMPBELL -

FOUNDRY PATTERN # 1001 OR

EQUAL COVER LABELLED "SEWER"

— THREADED PLUG

PLASTIC ADAPTER

4" RISER

CLEANOUT DETAIL

NOT TO SCALE

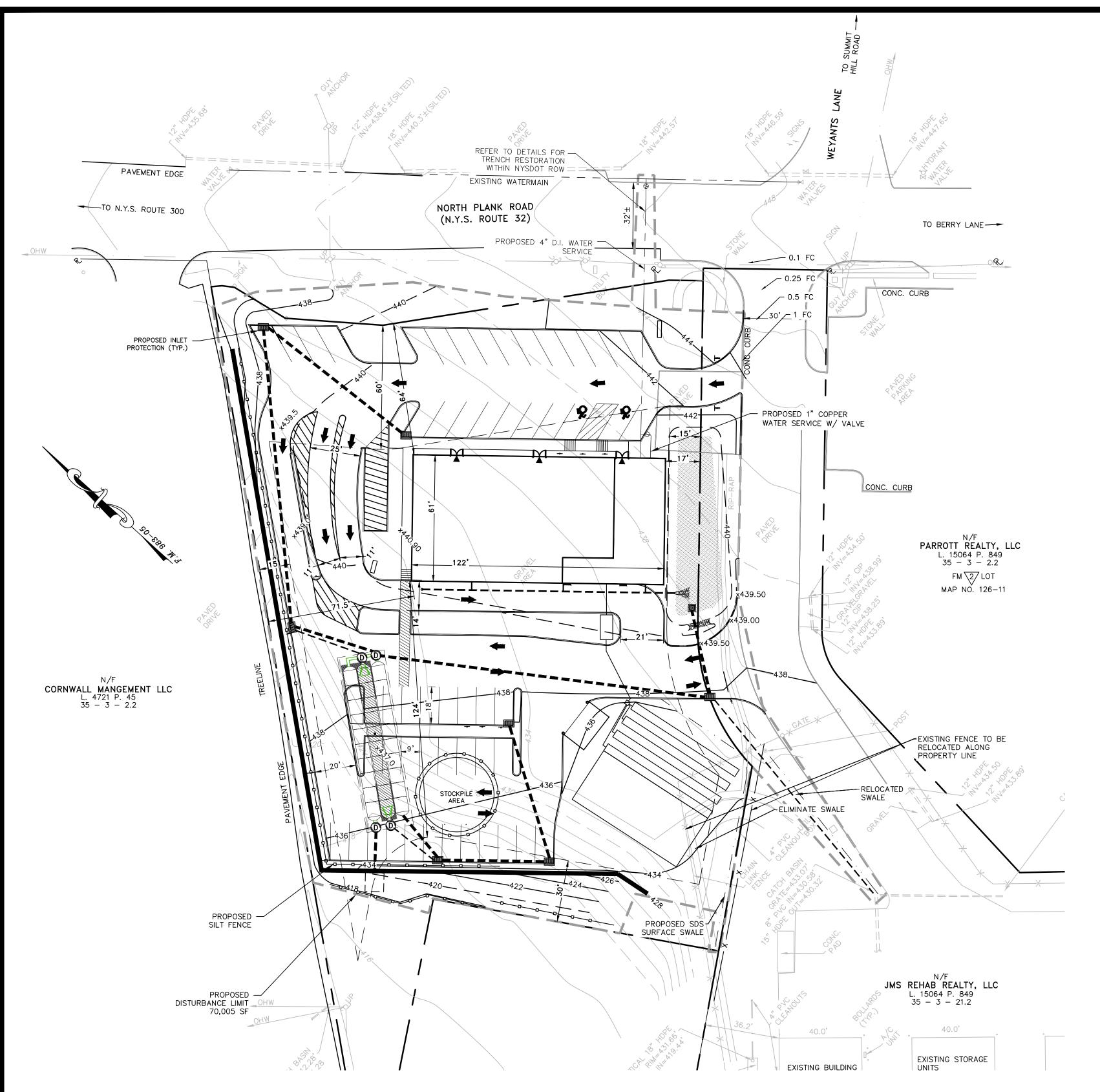
- 45° BEND

6" MIN.

_EARTH SURFACE

- 4" WIDE SPACE BETWEEN PIPE AND CONCRETE BASE, ALL AROUND PIPE FILLED WITH SAND.

—STANDARD4" – 45° BEND OR WYE 45° IS THE MAXIMUM BEND ALLOWABLE



LANDSCAPING SEEDING SCHEDULE

TEMPORARY SEEDING DISTURBED AREAS

SEASON	TYPE OF COVER & SPECIES OF MIXTURES	SEEDING RATES IN LBS. 1,000 SF	LBS. PER ACRE
SPRING/SUMMER/EARLY FALL	ANNUAL RYEGRASS	0.7	30
LATE FALL/EARLY WINTER	AROOSTOOK WINTER RYE	2.5	100

MULCH WITH HAY OR STRAW AT 2 TONS/ACRE OR 90 LBS. PER 1,000 SF

PERMANENT LAWN SEEDING RATES

PERMANENT LAWN SEEDING SHALL CONSIST OF 30% CREEPING RED FESCUE, 50% KENTUCKY BLUE GRASS, 10% ANNUAL RYEGRASS, AND 10% PERENNIAL RYEGRASS — ERNST 5311 CONSERVATION MIX (ERNST—114) OR APPROVED EQUAL — AT A RATE OF 200 POUNDS PER ACRE OR 5 POUNDS PER 1,000 SQ. FT.

- 1. TOPSOIL SURFACE SHALL BE FINELY GRADED AND LOOSENED BY MECHANICAL RAKES TO ENSURE SEED ACCEPTANCE AND SEED TO SOIL
- 2. SEEDING AREA TO BE PREPARED WITH THE APPLICATION OF LIMESTONE AT THE RATE OF 800 LBS. PER 1,000 SY AND FERTILIZED WITH 10-20-20 AT THE RATE OF 140 LBS. PER 1,000 SY AFTER SEEDING, HAY MULCH IS TO BE APPLIED AT A RATE OF 2½ TO 3 TONS PER ACRE.

PERIMETER SEEDING

A. NORTHEASTERN U.S. ROADSIDE NATIVE MIX (ERNST 105 OR APPROVED EQUAL) SHALL BE BROADCAST OVER DISTURBED AREAS AND OTHER AREAS AS NOTED ON THE PLANS AT A RATE OF 20 POUNDS PER ACRE OR 1/2 POUND PER 1,000 SQ. FT.

PLANTING SCHEDULE

TREEC AND CURING.	SPRING PLANTING	FALL PLANTING
TREES AND SHRUBS: EVERGREEN DECIDUOUS	APRIL 1 — JUNE 30 MARCH 1 — JUNE 30	SEPT. 1 — OCT. 15 OCT. 1 — DEC. 1
SEEDING:	APRIL 1 - MAY 31	SEPT. 1 - OCT. 15

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<u>LEGEND</u>

ADJOINING PROPERTY LINE
PROPOSED BUILDING SETBACK
PROPOSED BUILDING

— PROPOSED MINOR CONTOUR

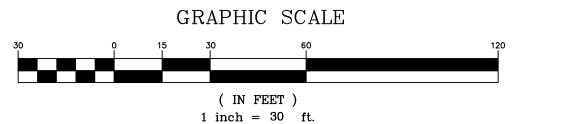
PROPOSED SIDEWALK
PROPOSED MAJOR CONTOUR

— PROPOSED WATER

PROPOSED EDGE OF PAVEMENT/CURB

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SPACING AS SHOWN ON PLAN SAME ELEVATION © CENTER N.T.S. STONE GRADED MATRIX 2" TO 9" IN SIZE CUT OFF TRENCH DESIGN **BOTTOM** 24" MAX. SECTION A-A © CENTER N.T.S. FILTER FABRIC SECTION B-B

CONSTRUCTION SPECIFICATIONS

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

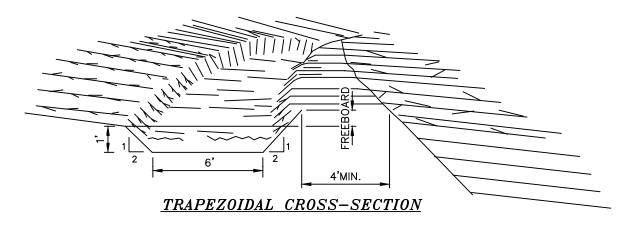
CHECK DAM DETAIL

FOR CONSTRUCTION SPECIFICATIONS REFER TO "NY GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL"

COPIES FROM THE ORIGINAL OF THIS DOCUMENT NOT MARKED WITH AN ORIGINAL OF THE PROFESSIONAL ENGINEER'S AND/OR LAND SURVEYOR'S STAMP OR EMBOSSED SEAL SHALL NOT BE CONSIDERED VALID, TRUE COPIES.

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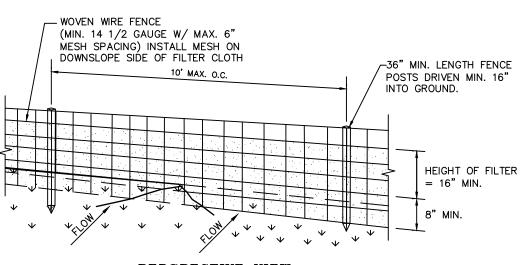




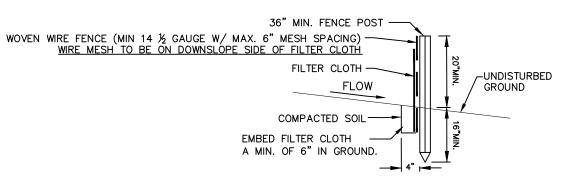
CONSTRUCTION SPECIFICATIONS

- 1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIVERSION.
- 2. THE DIVERSION SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
- 3. FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETE DIVERSION.
- 4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE STOCKPILED FOR RESTORATION OF THE AREA SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIVERSION. 5. STABILIZATION SHALL BE DONE ACCORDING TO THE APPROPRIATE STANDARD AND SPECIFICATIONS FOR VEGETATIVE PRACTICES.
- A. FOR DESIGN VELOCITIES OF MORE THAN 3.5 FT. PER. SEC., THE DIVERSION SHALL BE STABILIZED WITH SOD, WITH SEEDING PROTECTED BY JUTE OR EXCELSIOR MATTING OR WITH SEEDING AND MULCHING INCLUDING TEMPORARY DIVERSION OF THE WATER UNTIL THE VEGETATION IS ESTABLISHED.

TEMPORARY DIVERSION SWALE



PERSPECTIVE VIEW



SECTION VIEW

CONSTRUCTION SPECIFICATIONS

- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
- 2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- 4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

 SET TOP OF BLANKET IN A 6"x6" TRENCH

BACKFILL W/ SOIL

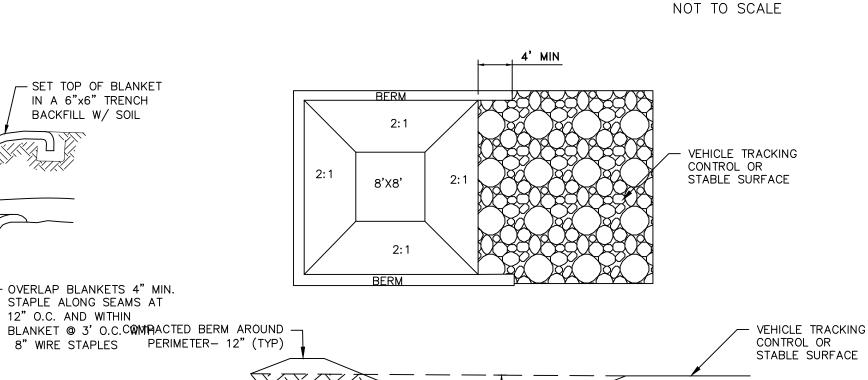
OVERLAP BLANKETS 4" MIN.

UNDISTURBED OR -COMPACTED SOIL

STAPLE ALONG SEAMS AT 12" O.C. AND WITHIN

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILTATION FENCE NOT TO SCALE



SLOPE STABILIZATION DETAIL

─ EARTH ─

SLOPE

- 1. SLOPE STABILIZATION TO BE USED ON ALL CREATED OR DISTURBED SLOPES GREATER
- THAN 25%. 2. STABILIZE PREPARED EARTHEN SLOPE WITH A BIODEGRADABLE NATURAL FIBER NETTING. APPROVED TYPES AS FOLLOWS:

NOT TO SCALE

- -S150BN NORTH AMERICAN GREEN 1-800-772-2040 -ECS-2B - EAST COAST EROSION BLANKET 1-800-582-4005 -APPROVED EQUAL
- 3. ALL SLOPE RESTORATION MUST INCLUDE 4" TOPSOIL
- PREPARE THE SOIL SURFACE INCLUDING RAKING, SEEDING AND FERTILIZING PRIOR TO INSTALLING EROSION CONTROL NETTING. 5. AFTER NETTING IS INSTALLED, PLANT ANY PROPOSED LANDSCAPING/GROUND COVER THROUGH SLITS CUT IN FABRIC.
- NOTES:
 THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- 2. THE CONCRETE WASHOUT AREA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8'X8' SLOPES LEADING OUT IF THE SUBSURFACE PIT SHALL BE 2:1 OR FLATTER. THE PIT SHALL BE AT LEAST 2' DEEP.
- 3. BERM SURROUNDING SIDES AND BACK OF THE CONCRETE WASHOUT AREA SHALL HAVE MINIMUM OF 1'.
- 4. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CONCRETE WASHOUT AREA.
- 5. USE EXCAVATED MATERIAL FOR PERIMETER CONSTRUCTION.

CONCRETE WASHOUT AREA DETAIL

NOT TO SCALE

EROSION AND SEDIMENT CONTROL NOTES AND SPECIFICATIONS

- 1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN UNTIL THEY
- 2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN AND THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- TEMPORARY SEDIMENTATION ENTRAPMENT AREAS SHALL BE PROVIDED AT KEY LOCATIONS TO INTERCEPT AND CLARIFY SILT LADEN RUNOFF FROM THE SITE. THESE MAY BE EXCAVATED OR MAY BE CREATED UTILIZING EARTHEN BERMS, RIP—RAP OR CRUSHED STONE DAMS, HAY BALES, OR OTHER SUITABLE MATERIALS. DIVERSION SWALES, BERMS, OR OTHER CHANNELIZATION SHALL BE CONSTRUCTED TO INSURE THAT ALL SILT LADEN WATERS ARE DIRECTED INTO THE ENTRAPMENT AREAS, WHICH SHALL NOT BE PERMITTED TO FILL IN, BUT SHALL BE CLEANED PERIODICALLY DURING THE COURSE OF CONSTRUCTION. THE COLLECTED SILT SHALL BE DEPOSITED IN AREAS SAFE FROM FURTHER EROSION.
- 4. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
- 5. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- 6. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.
- 7. 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
- 8. ALL FILL TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS. 9. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 10. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE
- INCORPORATED IN FILLS. 11. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 12. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
- 13. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 14. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED
- 15. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.
- 16. SEED ALL DISTURBED AREAS WHICH WILL REMAIN UNDISTURBED FOR A PERIOD OF 14 DAYS OR
- MORE WITH TEMPORARY RYEGRASS COVER, AS FOLLOWS (METHOD OF SEEDING IS OPTIONAL):
- A. LOOSEN SEEDBED BY DISCING TO A 4" DEPTH.
- B. SEED WITH SUMMER PERENNIAL OR ANNUAL RYEGRASS AT 30 LBS PER ACRE FALL/WINTER - AROOSTOOK WINTER RYE AT 100 LBS PER ACRE
- C. MULCH WITH 2 TONS PER ACRE OF BLOWN AND CHOPPED HAY.
- D. WHERE NOTED ON THE PLAN, AND ON SLOPES GREATER THAN OR EQUAL TO 3:1, PROVIDE SOIL STABILIZATION MATTING.
- 17. AFTER COMPLETION OF SITE CONSTRUCTION, FINE GRADE AND SPREAD TOPSOIL ON ALL LAWN AREAS AND SEED WITH PERMANENT LAWN MIX AS SPECIFIED ON LANDSCAPE PLAN:
- A. LIME TOPSOIL TO pH 6.0.

ENTRANCE

ROAD

ANCHORS

-6" THK. OF 1" - 1 1/2" CRUSHED STONE

-COMPACTED SUBGRADE

OR APPROVED EQUAL.

TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY.

STABILIZED CONSTRUCTION ENTRANCE

ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS.

A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET WILL BE INSTALLED WHENEVER A

CONSTRUCTION ACCESS ROAD INTERSECTS ANY PAVED ROADWAY. SAID BLANKET WILL BE COMPOSED OF 6" DEPTH OF 1"-1 1/2" CRUSHED STONE, WILL BE AT LEAST 24' X 50' AND

ALL DRIVEWAYS MUST BE STABILIZED WITH 1" - 1½" CRUSHED STONE OR SUB-BASE PRIOR

ALL CATCH BASIN INLETS WILL BE PROTECTED WITH A CRUSHED STONE OR HAYBALE FILTER

ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES MUST BE DETAILED ON THE PLAN.

6' MAXIMUM SPACING

OF 2"X4" SPACERS

SHOULD BE PLACED ON COMPACTED SUB-GRADE AND SHALL BE MAINTAINED.

ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE

TO INDIVIDUAL HOME CONSTRUCTION.

(FILTER DETAILS APPEAR ON PLAN).

DISCHARGE POINTS BECOME OPERATIONAL.

CONSTRUCTION SPECIFICATIONS:

GRADE LUMBER.

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.

2. WOODEN FRAME SHALL BE CONSTRUCTED OF 2" x 4" CONSTRUCTION

3. WIRE MESH ACROSS THROAT SHALL BE A CONTINUOUS PIECE 30 INCH

MINIMUM WIDTH WITH A LENGTH 4 FEET LONGER THAN THE THROAT. IT SHALL BE SHAPED AND SECURELY NAILED TO A 2" x 4" WEIR.

5. THE ASSEMBLY SHALL BE PLACED AGAINST THE INLET AND SECURED

INLET AND HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHTS.

6. THE STONE USED TO HOLD AND COVER THE FILTER FABRIC SHALL BE LOOSELY PLACED, 2" MIN. DIAM. ROUND STONE.

MAXIMUM DRAINAGE AREA 1 ACRE

BY 2" x 4" ANCHORS 2 FEET LONG EXTENDING ACROSS THE TOP OF THE

STORM DRAIN INLET FILTER DETAIL

4. THE WEIR SHALL BE SECURELY NAILED TO 2" x 4" SPACERS

9 INCHES LONG SPACED NO MORE THAN 6 FEET APART.

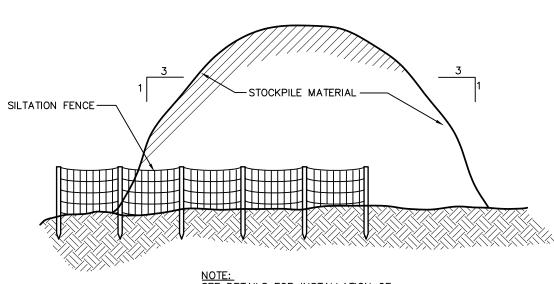
PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.

-FILTER FABRIC - GSE CE8

- B. FERTILIZE WITH 600 LBS PER ACRE OF 5-10-10.
- C. SEED REQUIREMENTS SEE LANDSCAPING PLAN.
- D. MULCH AS DESCRIBED FOR TEMPORARY SEEDING (NOTE 16 ABOVE).
- 18. DURING THE PROGRESS OF CONSTRUCTION, AND ESPECIALLY AFTER RAIN EVENTS, MAINTAIN ALL SEDIMENT TRAPS, BARRIERS, AND FILTERS AS NECESSARY TO PREVENT THEIR BEING CLOGGED WITH SEDIMENT. RE—STABILIZE ANY AREAS THAT MAY HAVE ERODED.
- 19. MAINTAIN ALL SEEDED AND PLANTED AREAS TO INSURE A VIABLE STABILIZED VEGETATIVE COVER.
- 20. MAINTAIN COPIES OF THE FOLLOWING APPLICABLE ITEMS FOR THE PROJECT: CONSTRUCTION LOGBOOK, STORMWATER POLLUTION PREVENTATION PLAN (SWPPP) NOTICE OF INTENT (NOI), PERMITS, AND SITE PLANS ON-SITE AT ALL TIMES DURING CONSTRUCTION.
- 21. ALL DISTURBED AREAS WHERE ONLY TOPSOIL STRIPPING HAS OCCURRED REQUIRE AERATION OF THE SUBGRADE BEFORE SPREADING TOPSOIL.
- 22. ALL DISTURBED AREAS WHERE CUT AND FILL OPERATIONS HAVE OCCURRED REQUIRE FULL SOIL RESTORATION AS SPECIFIED IN NYSDEC MANUAL PUBLICATION ENTITLED "DEEP RIPPING AND DE-COMPACTION".
- 23. AT THE COMPLETION OF THE PROJECT, ALL TEMPORARY SILTATION DEVICES SHALL BE REMOVED AND THE AFFECTED AREAS REGRADED, PLANTED, OR TREATED IN ACCORDANCE WITH THE APPROVED SITE PLANS.

SOIL RESTORATION REQUIREMENTS

- 1. ALL DISTURBED AREAS WHERE ONLY TOPSOIL STRIPPING HAS OCCURRED REQUIRE AERATION OF THE SUBGRADE BEFORE SPREADING TOPSOIL.
- 2. ALL DISTURBED ARES WHERE CUT AND FILL OPERATIONS OCCURRED REQUIRE FULL SOIL RESTORATION AS SPECIFIED IN NYSDEC MANUAL PUBLICATION ENTITLED "DEEP RIPPING AND DE-COMPACTION."



SEE DETAILS FOR INSTALLATION OF

TYPICAL STOCKPILE DETAIL NOT TO SCALE

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P.O. Box 687, Rt. 207 Goshen, N.Y. 10924 (845) 294-3700

EROSION AND SEDIMENT CONTROL DETAILS PREPARED FOR

AUGUST 23, 2023 OCTOBER 18, 2023 NOVEMBER 15, 2023 **DECEMBER 11, 2023** JUNE 9, 2025

MKJC REALTY, LLC

EROSION DETAILS 7 OF 1

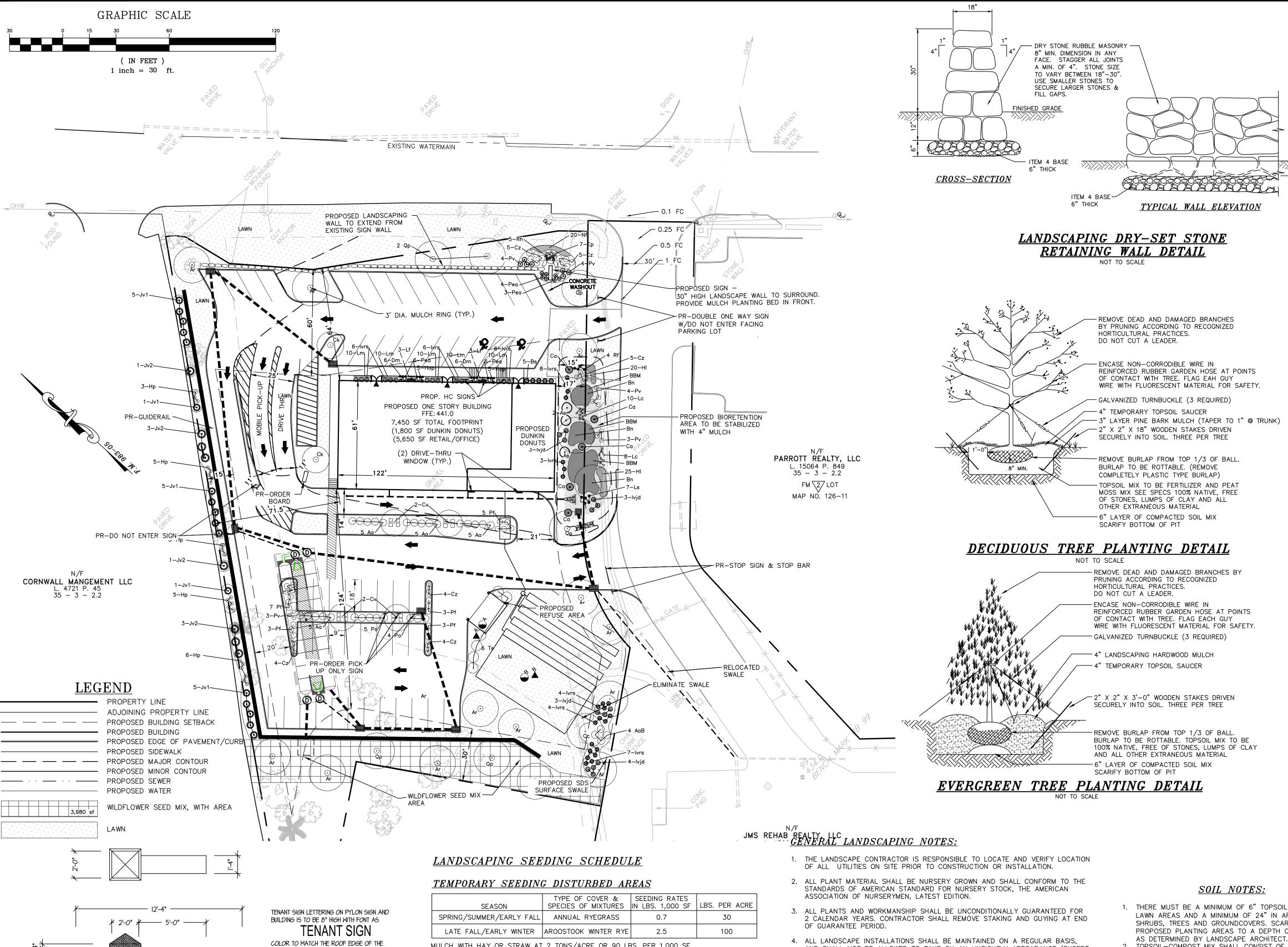
JUNE 27, 2023

JULY 5, 2023

CAD File: ENG.DWG TOWN OF NEWBURGH

ORANGE COUNTY, NEW YORK

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MULCH WITH HAY OR STRAW AT 2 TONS/ACRE OR 90 LBS. PER 1,000 SF PERMANENT LAWN SEEDING RATES

PERMANENT LAWN SEEDING SHALL CONSIST OF 30% CREEPING RED FESCUE, 50% KENTUCKY BLUE GRASS, 10% ANNUAL RYEGRASS, AND 10% PERENNIAL RYEGRASS - ERNST 5311 CONSERVATION MIX (ERNST-114) OR APPROVED EQUAL - AT A RATE OF 200 POUNDS PER ACRE OR 5 POUNDS PER 1,000

- 1. TOPSOIL SURFACE SHALL BE FINELY GRADED AND LOOSENED BY MECHANICAL RAKES TO ENSURE SEED ACCEPTANCE AND SEED TO SOIL
- 2. SEEDING AREA TO BE PREPARED WITH THE APPLICATION OF LIMESTONE AT THE RATE OF 800 LBS. PER 1,000 SY AND FERTILIZED WITH 10-20-20 AT THE RATE OF 140 LBS. PER 1,000 SY AFTER SEEDING, HAY MULCH IS TO BE APPLIED AT A RATE OF 21/2 TO 3 TONS PER ACRE.

PERIMETER SEEDING

BUILDING

INSULATION

BUILDING WALL

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GENERAL SIGN DETAIL

4" WIDE DETAIL STRIP OF EFIS OVER 2"

TENANT SIGNS, 8" HIGH LETTERS IN FONT, SIGN

LITE BY FIXTURES MOUNTED AT TOP OF STONE

PYLON SIGN TO BE DOUBLE FACED; TOTAL AREA

= 58 S.F.; SIGN TO BE CONSTRUCTED OF A WOOD

FRAMING COVERED WITH EFIS TO MATCH

36" HIGH STONE WALL AROUND SIGN

A. NORTHEASTERN U.S. ROADSIDE NATIVE MIX (ERNST 153-1 OR APPROVED EQUAL) SHALL BE BROADCAST OVER DISTURBED AREAS AND OTHER AREAS AS NOTED AT A RATE OF 20 POUNDS PER ACRE OR 1/2 POUND PER 1,000 SQ. FT. THIS SHALL BE APPLIED TO THE SOUTHERN PORTION OF THE SITE BEHIND THE RETAINING WALL.

PLANTING SCHEDULE

TREES AND SHRUBS:	SPRING PLANTING	FALL PLANTING
EVERGREEN DECIDUOUS	APRIL 1 — JUNE 30 MARCH 1 — JUNE 30	SEPT. 1 — OCT. 15 OCT. 1 — DEC. 1
SEEDING:	APRIL 1 - MAY 31	SEPT. 1 - OCT. 15

- 4. ALL LANDSCAPE INSTALLATIONS SHALL BE MAINTAINED ON A REGULAR BASIS, AND SHALL NOT BE ALLOWED TO TAKE ON AN UNSIGHTLY APPEARANCE (EXCEPT FOR NATURAL AREAS WHICH SHALL BE ALLOWED TO GROW NATURALLY WITH A MINIMUM OF MAINTENANCE).
- 5. CONTRACTOR SHALL FIELD STAKE THE LOCATIONS OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE.
- 6. ALL LANDSCAPING PLANT MATERIALS TREES, SHRUBS, GROUNDCOVERS AND PERENNIALS SHALL BE PLANTED AS SHOWN IN DETAILS. BACKFILL MIX FOR PLANTING BEDS SHALL BE A MIX OF TOPSOIL, WELL-ROTTED COMPOST AND FERTILIZER. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE.
- 7. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THAT WHICH EXISTED IN THE NURSERY.
- 8. ALL PLANTS SHALL BE ORIENTED AT THEIR PROPOSED LOCATION TO PRESENT THEIR BEST SIDE.
- 9. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL ALL PLANTS.
- 10. ALL LAWN/GRASSED AREAS ARE TO BE TOPSOILED TO A DEPTH OF 6" AND SEEDED AS PER THE PERMANENT SEEDING RATE. A MINIMUM OF 24" OF TOPSOIL SHALL BE PROVIDED IN ALL PLANTING AREAS.
- 11. MULCH ALL PLANTING BEDS AND TREES WITH A 3 INCH MINIMUM DEPTH OF HARDWOOD BARK MULCH. NO MULCH SHALL BE PLACED AGAINST THE ROOT COLLAR OF THE PLANTINGS. ALL TREES PLANTED IN LAWN AREAS SHALL RECEIVE A 3' DIAMETER MULCH RING OR TO THE LIMIT OF THE ADJACENT LAWN

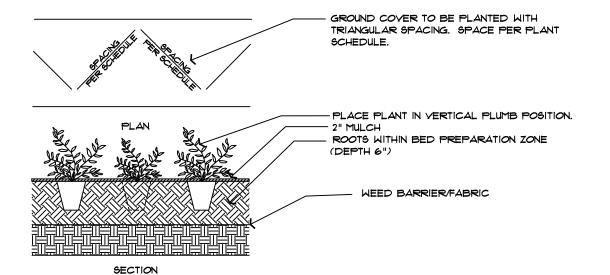
- 1. THERE MUST BE A MINIMUM OF 6" TOPSOIL COMPOST MIX IN LAWN AREAS AND A MINIMUM OF 24" IN AREAS WITH SHRUBS, TREES AND GROUNDCOVERS. SCARIFY OR DIG ALL PROPOSED PLANTING AREAS TO A DEPTH OF 12"-24"+ OR AS DETERMINED BY LANDSCAPE ARCHITECT. 2. TOPSOIL-COMPOST MIX SHALL CONSIST OF 85%-90%
- STOCKPILED TOPSOIL (IF AVAILABLE) AND 10%-15% WELL-ROTTED COMPOST. 3. TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE SOIL CHARACTERISTIC OF PRODUCTIVE SOIL IN THE VICINITY REASONABLY FREE FROM STONES, CLAY LUMPS, ROOTS AND OTHER FOREIGN MATTER, WITH AN ACIDITY LEVEL BETWEEN
- 5.5 AND 7.5 pH. 4. IF STOCKPILED TOPSOIL IS NOT AVAILABLE, USE PURCHASED TOPSOIL IN SUFFICIENT QUANTITY TO COMPLETE THE REQUIREMENTS AS SPECIFIED.
- 5. SITE SOIL SHALL MEET THE FOLLOWING PARTICLE SIZE DISTRIBUTIONS: LESS THAN OR EQUAL TO 15% OF GRAVEL (PARTICLE SIZE GREATER THAN 2.00mm), 40%-60% OF SAND (0.05-2mm), 30%-40% OF SILT (0.002-0.05mm), AND 10%-20% CLAY (<0.002mm) AND 10-15% WELL-ROTTED COMPOST WITH AN ACIDITY LEVEL BETWEEN 5.5 AND 7.0 pH. PERCENTAGES ARE BY WEIGHT.
- 6. TOPSOIL AND PURCHASED SOIL SHALL BE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT.



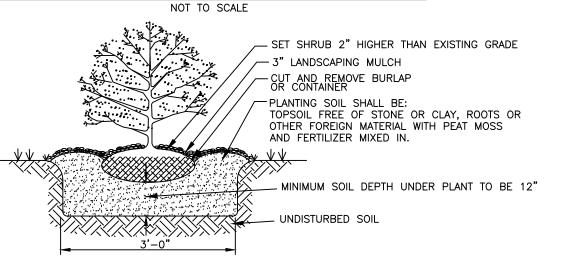
- 1. ALL DISTURBED AREAS TO BE TOPSOILED AT A DEPTH OF 6" AND SEEDED. 2. ALL PLANTS SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF
- NURSERYMEN'S STANDARD FOR NURSERY STOCK. 3. ALL PLANTS SHALL BE WARRANTED FOR A PERIOD OF TWO YEARS. REPLACE, IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, ALL PLANTS THAT ARE MISSING, MORE THAN 25% DEAD, WHICH DO NOT DEVELOP FROM PLANTING STOCK, THAT APPEAR UNHEALTHY OR UNSIGHTLY AND/OR HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES. ANY TREE THAT LOOSES THE MAIN LEADER SHALL BE REPLACED. PLANT MATERIAL SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECTURAL CONSULTANT FOR THE TOWN OF NEWBURGH UPON COMPLETION OF WORK AND DURING EVERY GROWING SEASON FOR TWO YEARS. PLANTS THAT NEED REPLACEMENT SHALL BE NOTED ON AN INSPECTION REPORT AND MUST BE
- FOLLOWING GROWING SEASON. 4. A MINIMUM OF 24" OF SOIL SHALL BE PLACED IN THE PLANTING AREA BETWEEN THE BUILDINGS AND THE PARKING AREA AND IN THE PARKING ISLAND. MIX 6" OF TOPSOIL INTO THIS 24" OF SOIL AND ADD AN ADDITIONAL 6" OF TOPSOIL ON

REPLACED WITHIN TWO MONTHS OF RECEIPT OF THE INSPECTION REPORT OR WITHIN TWO MONTHS FROM THE NEXT

5. UNDER THE CANOPY OVERHANG, IN AREAS WHERE THERE IS NO SIDEWALK PROVIDE GRAVEL SUCH AS RIVER JAX OR TIMBER LITE STONE OVER LANDSCAPE FABRIC.



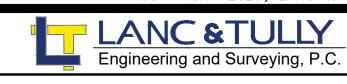
GROUNDCOVER PLANTING DETAIL



SHRUB PLANTING DETAIL

21.12.61	147.	SITE PLA	The section reaction	Waster Williams
Symbol	Qty	SCIENTIFIC NAME	COMMON NAME	INSTALLATION SIZ
TREES				15 100 100
Ar	13	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	7'-8' HGT
Cc	1	CERCIS CANADENSIS	RED BUD	7'-8' HGT
Ck	1	CORNUS KOUSA	KOUSA DOGWOOD	7'-8' HGT
Cv	2	CRAETAGUS VIRIDIS 'WINTER KING'	WINTER KING HAWTHORN	7'-8' HGT
Jv1	17	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	4-5' HGT
JV2	8	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	7'-8' HGT
Ts	6	TSUGA CANADENSIS	GREEN GIANT ARBORVITAE	7'-8' HGT
Qp	6	QUERCUS PALUSTRIS	PIN OAK	7'-8' HGT
SHRUBS	(DECIDUO	US AND EVERGREEN)		
Aa	5	ARONIA ARBUTIFOLIA	CHOKEBERRY	30"-36" HGT
Ac	5	AMELANCHIER CANADENSIS	SHADBLOW SERVICE BERRY	6-7' HGT
Pf	23	POTENTILLA FRUTICOSA	SHRUBBY CINQUEFOIL	30"-36" HGT
Po	9	PHYSOCARPUS OPULIFOLIUS	NINEBARK	30"-36" HGT
AaB	4	BRILLIANTISSIMA ARONIA	BRILLIANT RED CHOKEBERRY	30"-36" HGT
Pv	17	PANICUM VERGATUM	SWITCHGRASS	30"-36" HGT
Vp	40	VIBURNUM PLICATUM TOMENTOSUM	DOUBLEFILE VIBURNUM	30"-36" HGT
PERENNI	ALS			Telephone Telephone
Cz	22	COREOPSIS ZAGREB	ZAGREB COREOPSIS	30"-36" HGT
Dm	18	DRYOPTERIS MARGINALIS	MARGINAL WOODFERN	12"-18" HGT
Нор	15	HOSTA PLANTAGINEA	HOSTA	12"-18" HGT
Hpb	24	HYDRANGEA PANICULATA 'BOBO'	BOBO HYDRANGEA	18"-24" HGT
Нр	22	HYPERICUM PERFORATUM	ST JOHNS WORT	18"-24" HGT
Hs	24	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	18"-24" HGT
Lm	60	LIRIOPE MUSCARI	LILY TURF	12"-18" HGT
Lf	9	LEUCOTHOE FONTANESIANA	DOGHOBBLE	12"-18" HGT
Nf	20	NEPATA FAASSENII	PURRSIAN BLUE CATMINT	12"-18" HGT
Pea	25	PENNISETUM ALOPECUROIDES	DWARF FOUNTAIN GRASS	12"-18" HGT
Pj	3	PIERIS JAPONICA	ANDROMEDA	40"-48" HGT
Rf	28	RUDBECKIA FULGIDA	ORANGE CONEFLOWER	18"-24" HGT
Rh	5	RUDBECKIA HIRTA	BLACK EYED SUSAN	18"-24" HGT
Vpe	40	VERONICA PEDUNCULARIS "GEORGIA BLUE"	BLUE VERONICA	12"-18" HGT
BIORETE	NTION AR	EA		
Ar	1	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	7'-8' HGT
As	3	ALNUS SERRULATA	SMOOTH ALDER	30"-36" HGT
Bn	3	BETULA NIGRA	RIVER BIRCH	7'-8' HGT
Ca	5	CORNUS AMOMUM	SILKY DOGWOOD	40"-48" HGT
Cz	5	COREOPSIS ZAGREB	ZAGREB COREOPSIS	30"-36" HGT
Н	45	HEMEROCALLIS LILIOASPHODELUS	YELLOW DAYLILLY	18"-24" HGT
lvjd	5	ILEX VERTICILLATA 'JIM DANDY'	WINTERBERRY HOLLY JIM DANDY	30"-36" HGT
lvrs	29	ILEX VERTICILLATA 'RED SPRITE'	WINTERBERRY HOLLY RED SPRITE	30"-36" HGT
Lc	8	LOBELIA CARDINALIS	CARDINAL FLOWER	18"-24" HGT
Ls	7	LIATRIS SPICATA	BLAZING STAR	30"-36" HGT
Pv	7	PANICUM VERGATUM	SWITCHGRASS	30"-36" HGT
Rf	4	RUDBECKIA FULGIDA	BLACK EYED SUSAN	18"-24" HGT
ввм	620 sf	BASIN BOTTOM MIX	ZXMIXBASBO FROM PINELANDS NURSERY	SEED
Site Cove	r			
RNX-153-1		ERNST SEEDS SHOWY NORTHEAST NATIVE WILDFLOWER MIX		SEED

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P.O. Box 687, Rt. 207 Goshen, N.Y. 10924 (845) 294-3700

LANDSCAPING PLAN AND DETIAILS PREPARED FOR

MKJC REALTY, LLC

TOWN OF NEWBURGH ORANGE COUNTY. NEW YORK

CAD File: ENG.DWG LANDSCAPING 8 OF 1 35 - 3 - 3.22 B- 23 - 0107 -

JUNE 27, 2023

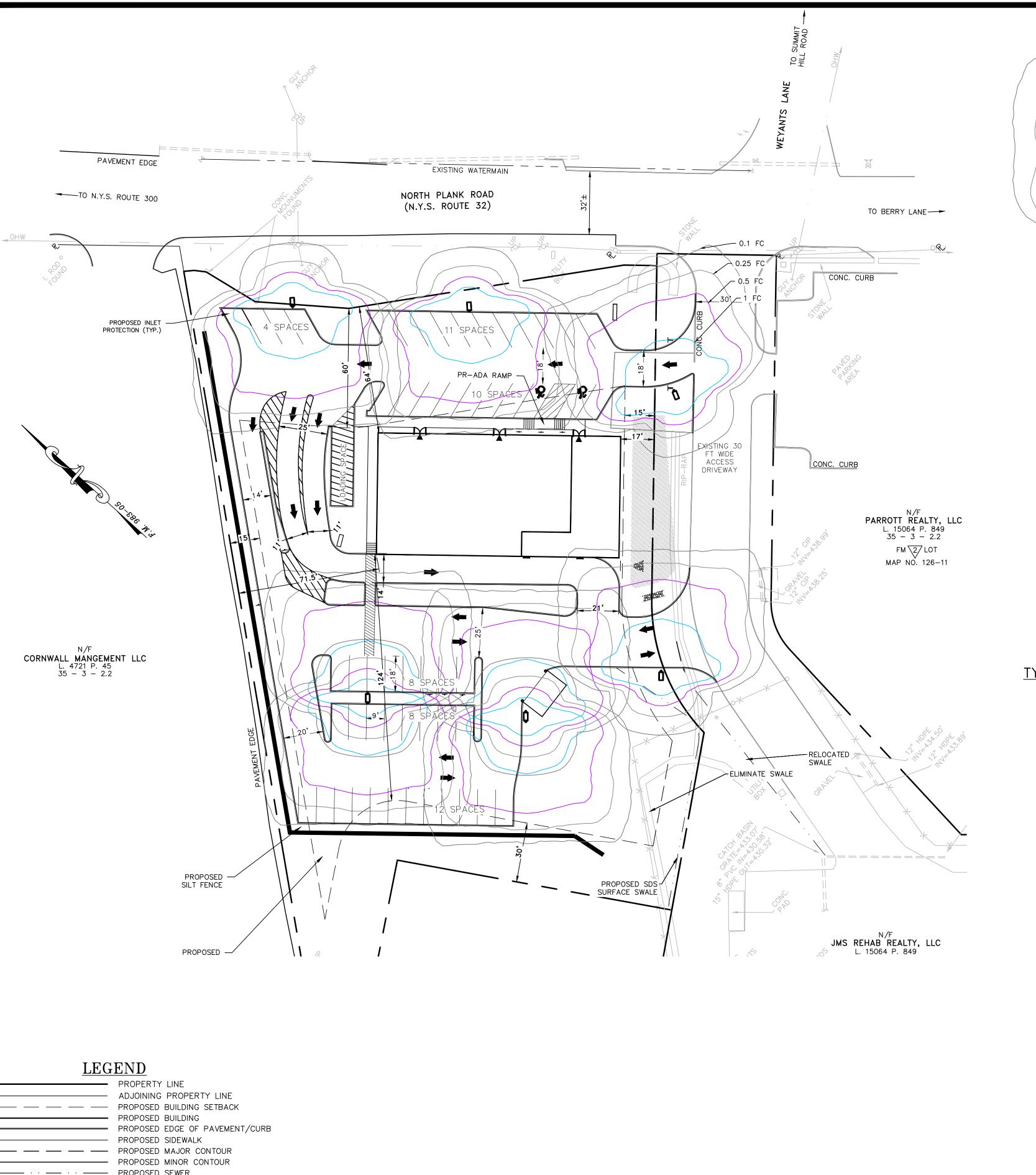
JULY 5, 2023

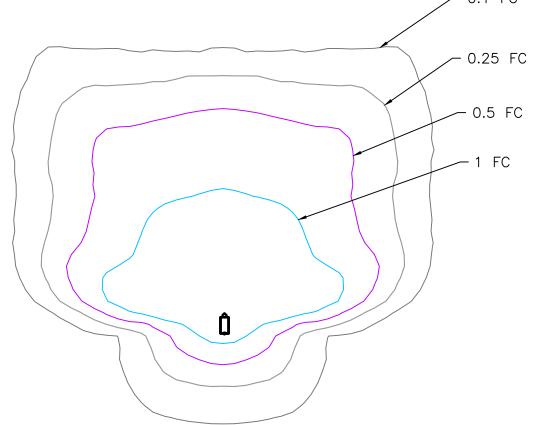
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JUNE 9, 2025





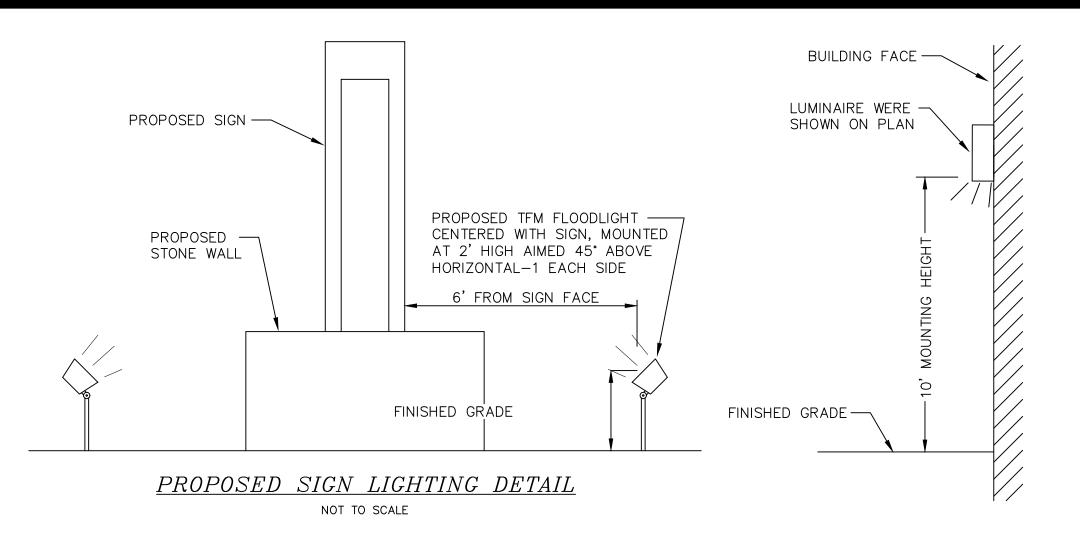
NOTE: FOOTCANDLE LINES SHOWN ARE BASED ON A 17' MOUNTING HEIGHT

> EATON "GAN GALLEON" LUMINAIRE 'C' TYPE T4FT DISTRIBUTION PHOTOMETRIC DIAGRAM

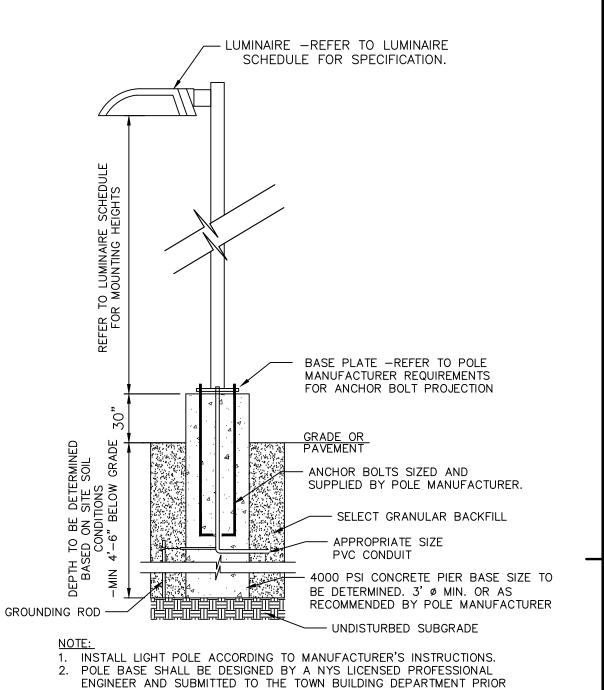


EATON "GAN GALLEON" LED AREA LUMINAIRE TYPICAL POLE MOUNT AREA LUMINAIRE

PROPOSED LIGHTING FIXTURES SHALL NOT EXCEED 3000K LIGHITNG LEVELS.



BUILDING MOUNTED LIGHTING \underline{DETAIL} NOT TO SCALE



LIGHT POLE BASE DETAIL

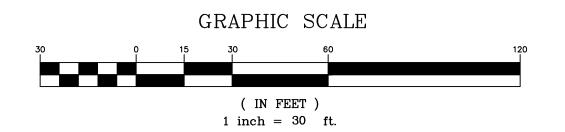
NOT TO SCALE

— PROPOSED WATER

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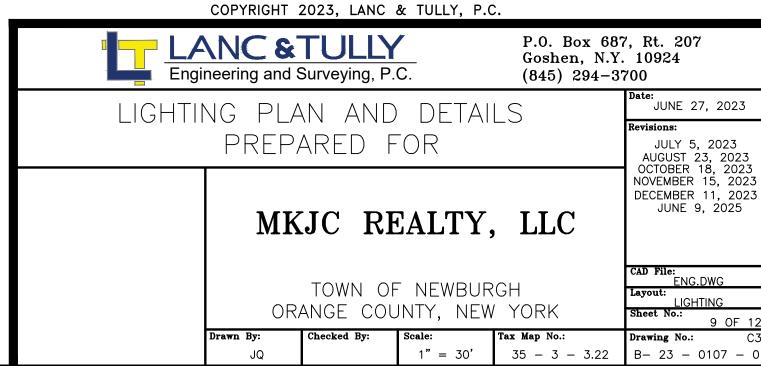


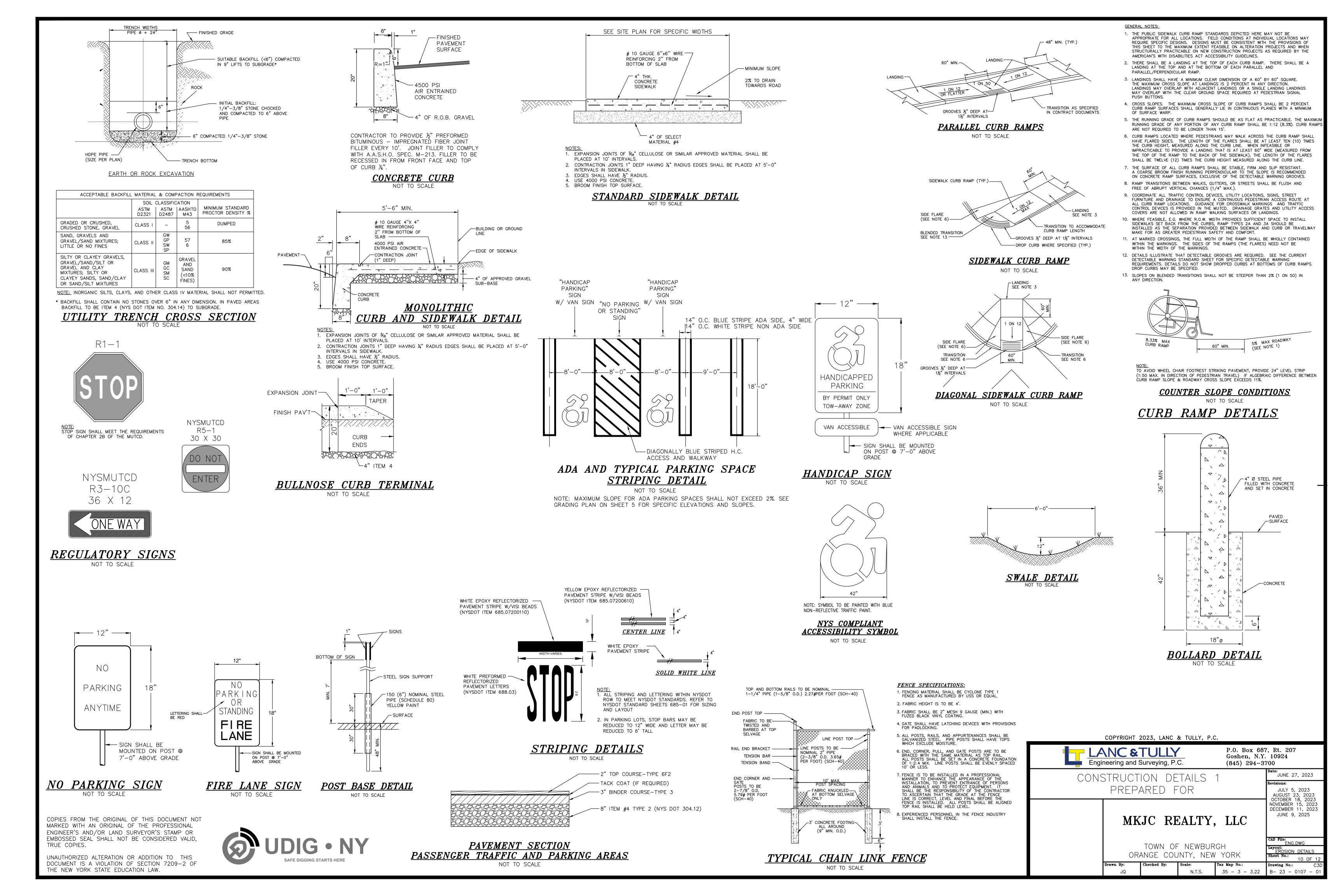
RECORD OWNER/APPLICANT:

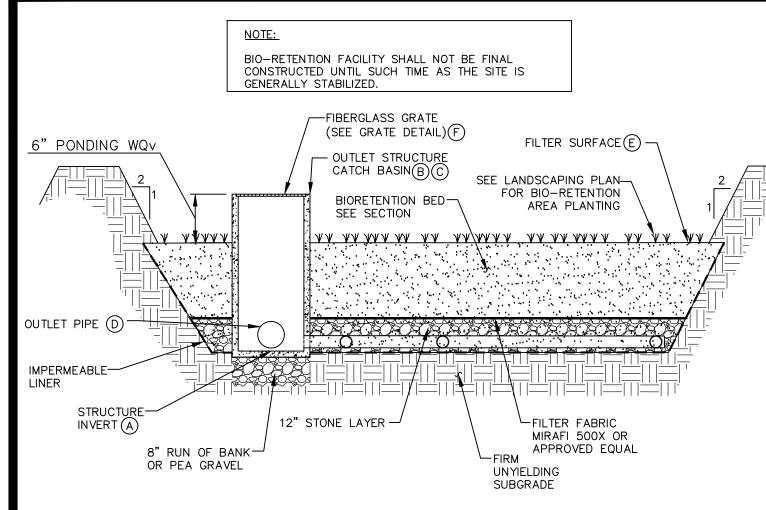
MKJC REALTY, LLC 208 SOUTH PLANK ROAD NEWBURGH, NY 12250 AREA:

1.674± AC.

35 - 3 - 3.22 L. 15137 P. 1318 FILED MAP NO. 938-05







BIO-RETENTION AREA DETAIL

BIORETENTION AREA MAINTENANCE REQUIREMENTS: INSPECTION SHALL BE MADE WEEKLY BY A LICENSED PROFESSIONAL AND AFTER EVERY 1/2" RAINFALL EVENT BY THE OWNER OR CONTRACTOR DURING CONSTRUCTION. DURING THE FIRST GROWING SEASON INSPECTIONS SHALL BE CONDUCTED MONTHLY AND BI ANNUALLY THEREAFTER. THE FOLLOWING TASKS SHALL BE PERFORMED AS NEEDED:

WHENEVER ACCUMULATED SEDIMENT REACHES A DEPTH OF 1 INCH. RESTORATION OF ANY DISTURBED PLANT MATERIAL AND ANY ERODED EMBANKMENTS. REPLACEMENT OF

PROPOSED PLANTS SHALL OCCUR IF MORE THEN 50% OF THE COVERAGE OF THE FACILITY IS NOT ACHIEVED.

REMOVAL OF ACCUMULATED SEDIMENT AND CLEANING AND/OR RESTORATION OF THE FILTER BED AREAS

- . REMOVAL OF ACCUMULATED DEBRIS WITHIN THE FILTER BED AREAS AND AT ALL INLET AND OUTFALL
- 4. ANNUAL MOWING (EARLY WINTER) OF THE BASINS. TRIMMING AND PRUNING OF BUSHES. REMOVAL OF ANY FALLEN TREES OR LIMBS.
- . WHEN THE FILTERING CAPACITY OF THE FILTER DIMINISHES SUBSTANTIALLY (I.E., WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHALL BE DISPOSED IN AN ACCEPTABLE MANNER (I.E., LANDFILL).
- 5. REFER TO LANDSCAPING PLANS FOR PLANTING REQUIREMENTS. IF FOR ANY REASON A CONFLICT OF PLANT MATERIAL OR PLANT MAINTENANCE SHOULD OCCUR, THE LANDSCAPE PLANS ARE TO TAKE PRECEDENCE.
- '. COMPACTION SHALL BE AVOIDED AT ALL TIMES OF CONSTRUCTION OF MAINTENANCE OF THE BIORETENTION AREAS IN ORDER TO MAINTAIN THE NATURAL INFILTRATION CHARACTERISTICS OF THE UNDERLYING SOILS.

I—ALUMINUM=

CONCRETE STRENGTH: 4000 P.S.I. @ 28 DAYS.

<u>SECTION</u>

FLAT GRATE-CATCH BASIN

SLOPE 2% MIN.

- HDPE DRAINAGE PIPE W/ SMOOTH BORE UNLESS OTHERWISE NOTED ON

OVERSIZED HOLES CAST

IN WALLS, PIPE TO BE CUT FLUSH WITH INSIDE WALL AND SECURELY GROUTED IN PLACE BY

CONTRACTOR IN FIELD

HEAVY DUTY FRAME CAMPBELL FOUNDRY CO.

SLOPE 2% MIN.

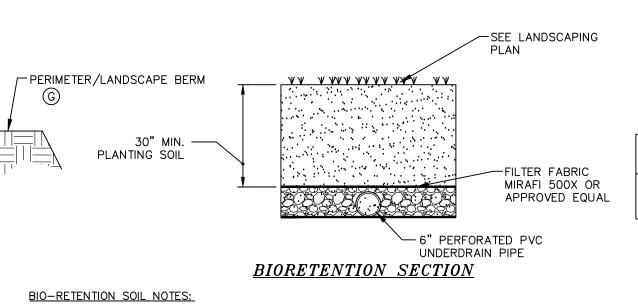
PRECAST REINF.

(H20 LIVE LOAD)

CONC. CATCH BASIN

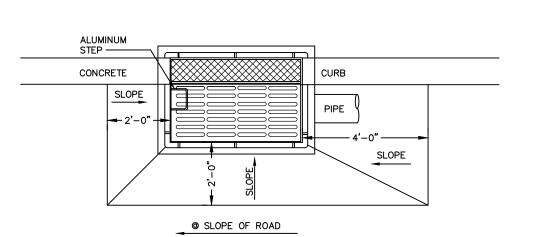
12" OF ¾" WASHED,

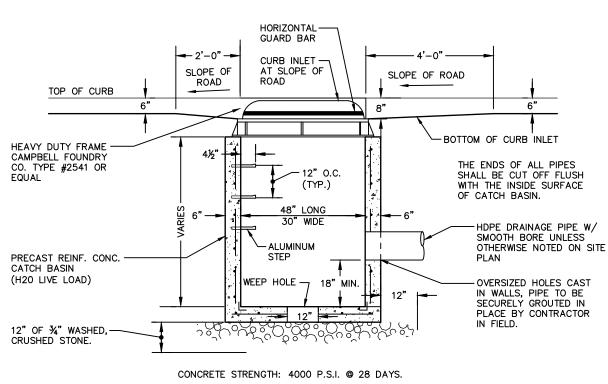
TYPE #3433 OR EQUAL ---



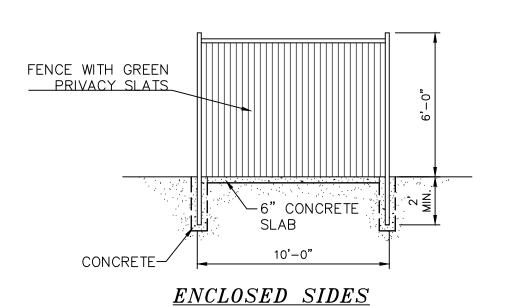
BIO-RETENTION SOILS SHALL MEET THE SPECIFICATIONS SET FORTH BY THE NYSDOT ITEM #208.01030022 (BIO-RETENTION AND DRY SWALE SOIL)

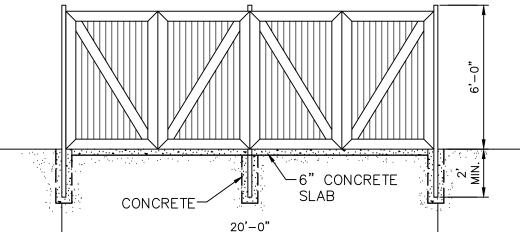
BIO-RETENTION AREA DATA					
	BIO-RETENTION AREA OUTLET STRUCTURE	BIO AREA A-1			
Α	INVERT OF OUTLET STRUCTURE	434.70'			
В	OUTLET STRUCTURE DIMENSIONS (OUTSIDE)	36"x36"			
C TOP OF STRUCTURE ELEVATION		439.00'			
D	CULVERT: DIAMETER/INVERT ELEVATION	15" HDPE @ 434.70'			
Ε	FILTER SURFACE ELEVATION	438.50'			
F	GRATE DIMENSION	30"X30"			
G	TOP OF PERIMETER BERM	440.00'			
Н	1-YEAR SURFACE ELEVATION	439.07'			
I	10-YEAR SURFACE ELEVATION	439.14'			
J	100-YEAR SURFACE ELEVATION	439.21'			

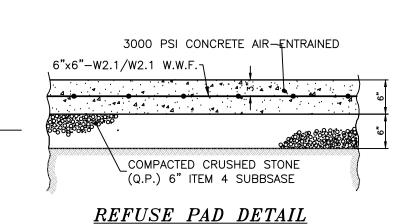


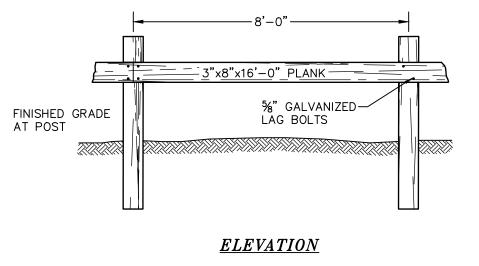


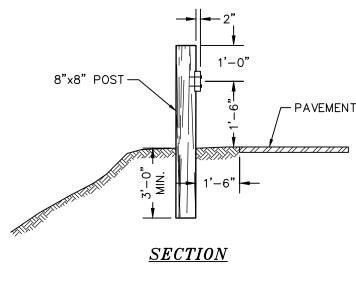
CURB INLET-CATCH BASIN NOT TO SCALE





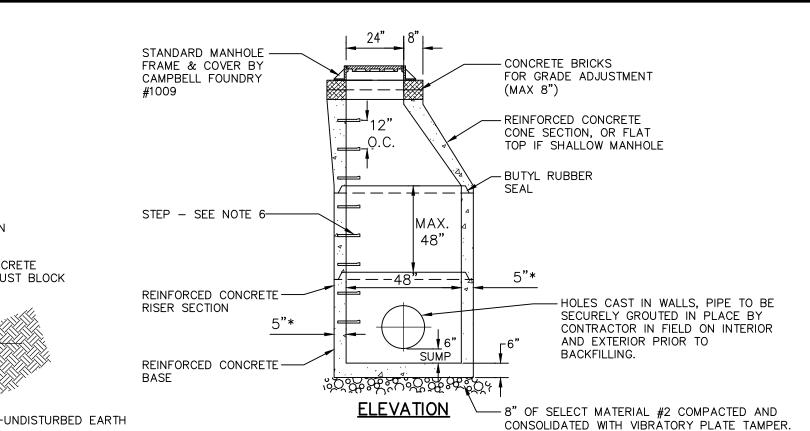






NOTE: ALL WOOD TO BE PRESSURE TREATED. WOOD GUIDE RAIL

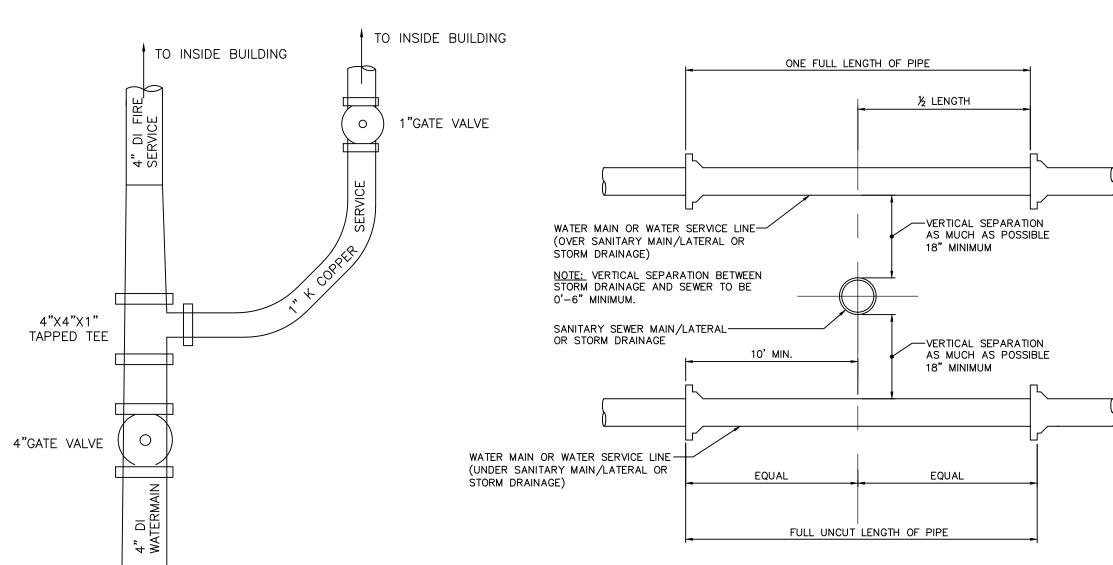
NOT TO SCALE



STONE TO EXTEND FOR A MINIMUM OF 12" PAST BASE.

- 1. PIPE TO EXTEND INTO THE MANHOLE ONLY TO A POINT WHERE OUTSIDE OF PIPE MEETS INSIDE WALL OF MANHOLE.
- 2. OPENING FOR PIPE SHALL BE PRE-CAST. 3. MANHOLE COVERS TO BE STAMPED "STORM"
- 4. PRECAST REINFORCED CONCRETE MANHOLE SHALL BE DESIGNED FOR H20 LIVE LOAD.
- 5. *WALL THICKNESS TO BE 6" IF MANHOLE HEIGHT EXCEEDS 9'. 6. STEPS SHALL BE COPOLYMER POLYPROPYLENE PLASTIC WITH 1/2" GRADE 60 STEEL REINFORCEMENT.
- 7. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE.
- 8. BACKFILL AROUND MANHOLE SHALL BE ACCEPTABLE DRY RUN OF BANK GRAVEL, FREE OF ANY STONES LARGER THAN 3" IN DIAMETER, COMPACTED IN 8" MAX. LIFTS, USING JUMPING JACK COMPACTOR, ACHIEVING

PRE-CAST DRAINAGE MANHOLE



BUILDING WATER SERVICE **CONNECTION DETAIL**

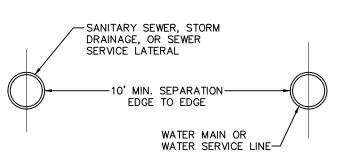
— PAVEMENT

EXISTING WATER MAIN

THRUST BLOCK

TAPPING SADDLE

1. TOWN OF NEWBURGH WATER METER TO BE LOCATED INSIDE THE BUILDING WITH REMOTE SENSORS ON THE OUTSIDE. VALVING MUST BE ARRANGED SO THAT POTABLE WATER IS TERMINATED IF FIRE PROTECTION LINE IS TURNED OFF.



WATER & SEWER CROSSING DETAIL

WATER & SEWER HORIZONTAL SEPARATION



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JUNE 9, 2025

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MKJC REALTY, LLC

TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK

CAD File: ENG.DWG DETAILS 2 11 OF 1

35 - 3 - 3.22

PICK UP ENTRANCE

HDPE FLARED END SECTION

PIPE DIAMETER

42 41 49 14.5 19 22

33 | 34 | 43

6 | 6 | 6

DIMENSION | 10/12 | 15 | 18

NOTE: ALL MEASUREMENTS IN INCHES

REFUSE STORAGE ENCLOSURE DETAIL NOT TO SCALE

TYPICAL SECTION-REINFORCED RETAINING WALL **RETAINING WALL NOTES** 1 Design for the retaining wall shown hereon shall be prepared by a NYS Licensed Professional Engineer and SMOOTH BORE UNLESS OTHERWISE NOTED ON SITE submitted to the Town Building Inspector for record prior to construction. Such design drawings (or shop drawings) shall bear the stamp and signature of such engineer, and shall be specific for the site and specific to the retaining wall system to be utilized and shall consider all appropriate and necessary possible loadings and conditions related to this project.

> 2 The aforementioned design and details shall consider / identify / include, but shall not be limited to: signed and sealed design calculations; complete and specific construction plans and details for each wall; appropriate sizing for drainage system to handle intense storm conditions; maintenance ability to clean stormwater piping systems; appropriate backfill material sufficient porosity to allow free drainage of water; evaluate potential failure by internal/external failure mechanisms, global failure or other potential failures; and seismic design considerations.

THE WORD "WATER" ----

REQUIRING ANCHORAGE

12 INCH & UP

8 INCH & UP

ALL SIZES

PAVEMENT OR GROUND SURFACE -

ANCHORAGE OF VALVES

WORKING PRESSURE

(PSI)

151-200

CAP UNIT ADHERE TO -

CONCRETE ÁDHESIVE OR APPROVED EQUAL

VERSA-LOK MODULAR

CONCRETE FACING

IMPERVIOUS FILL -

RECOMMENDATIONS.

EQUAL

UNITS OR APPROVED

TOP UNIT W/VERSA-LOK

MARKED ON COVER (C.I.)

CONCRETE BLOCK -

UNDER VALVE (TYP.)

- TURN LEFT

-IMPERVIOUS FILL

" DIA. (MIN.) DRAIN PIPE OUTLET @

END OF WALL OR @ 40' CENTERS

MAX. SLOPE TO DRAIN (1/8"/FT.)

-¾" CRUSHED STONE THICK MIN.

∼IMPERVIOUS FILL

1. WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S

2. CONTRACTOR TO PROVIDE ACTUAL WALL DESIGN SIGNED AND SEALED BY NEW

YORK STATE LICENSED ENGINEER FOR REVIEW AND APPROVAL PRIOR TO WALL

THICK. COMPACTED 95% OF

MAXIMUM STANDARD PROCTOR

GRANULAR LEVELING PAD MIN. 6"

TO OPEN VALVE

► ANCHOR RODS

GEOGRID REINFORCEMENT

WALL DESIGN ENGINEER

PROCTOR DENSITY

DETERMINED BY RETAINING

-REINFORCED BACKFILL COMPACTED

95% OF MAXIMUM STANDARD

-LENGTH TO BE

RS TAPPING GATE -VALVE (FLG X MJ)

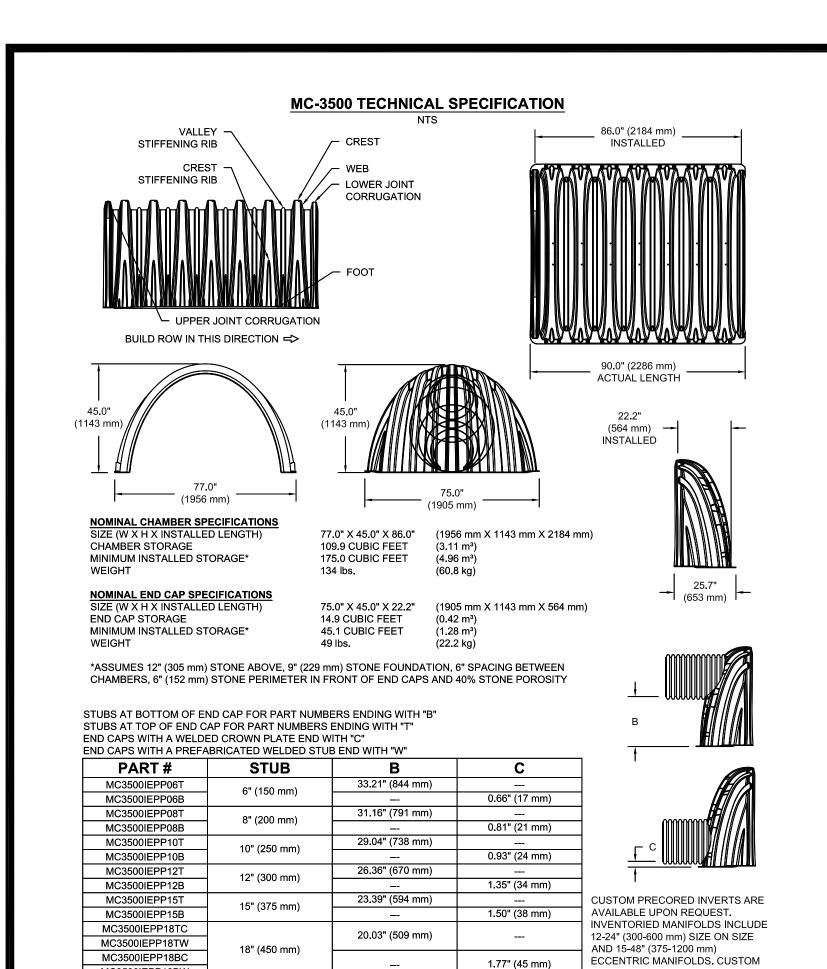
CONCRETE BLOCK

UNDER VALVE (TYP.)

3 If the wall or walls are tiered walls, the design shall include an analysis of the minimum spacing of walls to allow the individual walls to act as individual walls based on the specific site and construction conditions. If the walls are to be placed closer than the same, the specific design shall consider the loads superimposed by one wall to the other.

4 During construction, the work must be inspected by a NYS Licensed Professional Engineer who shall provide written verification to the Town Building Inspector, prior to the request for a certificate of occupancy, that he/she has personally inspected the work, and the installation is in compliance with the design drawings and manufacturer's installation recommendations.

5 If deemed necessary by the design engineer and/or the Town, third party testing will be performed regarding material compaction, fill quality, etc. A copy of all such testing records shall be provided to the Town Building Department for record.



14.48" (368 mm)

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

MC-SERIES END CAP INSERTION DETAIL

12" (300 mm)

MIN INSERTION

12" (300 mm) MIN INSERTION →

MANIFOLD STUB MANIFOLD HEADER -

MIN SEPARATION

STORMTECH END CAP

- NON-WOVEN

GEOTEXTILE

- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- 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) 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 APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

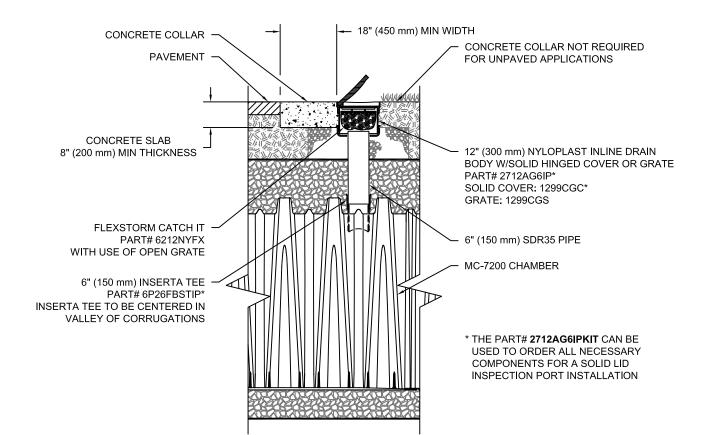
STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT A. INSPECTION PORTS (IF PRESENT)

A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN

- 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



MC-3500 6" (150 mm) INSPECTION PORT DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

THE PIPE SIZE.

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

	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.
С	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 M145¹ A-1, A-2-4, A-3 OR AASHTO M43¹ 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.
В	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	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- 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 VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGNS, CONTACT STORMTECH FOR 4. 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

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

- 1. CHAMBERS SHALL BE STORMTECH MC-3500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE
- 3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- 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.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- 7. REQUIREMENTS FOR HANDLING AND INSTALLATION:

FROM REFLECTIVE GOLD OR YELLOW COLORS.

- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
- TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER

DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED

- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER. • THE STRUCTURAL EVALUATION SHALL DEMONSTRATE 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 SECTIONS 3 AND 12.12 OF THE AASHTO
 - LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE. THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- 9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY

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

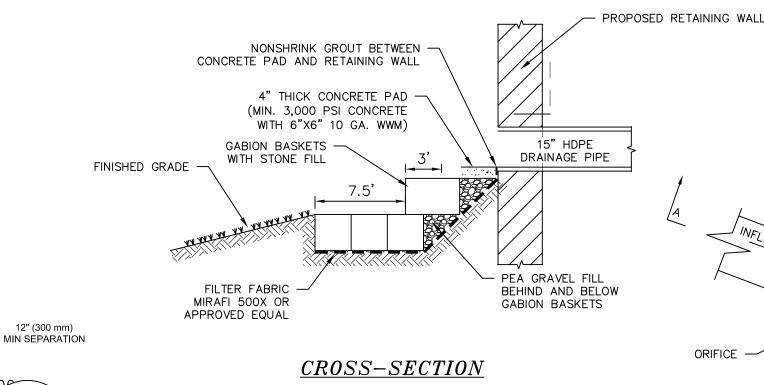
- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- 2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE 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.
- MAINTAIN MINIMUM 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3
- 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
- 11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- 1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 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

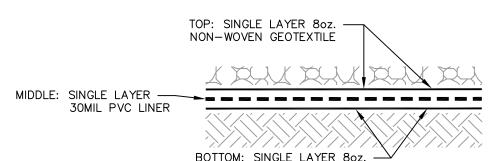
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



OUTLET PROTECTION DETAIL FOR RETAINING WALL PIPE PENETRATION

NOT TO SCALE

STONE FILL FOR GABION BASKETS SHALL BE HARD ANGULAR TO ROUND BETWEEN 4" AND 8" IN SIZE.



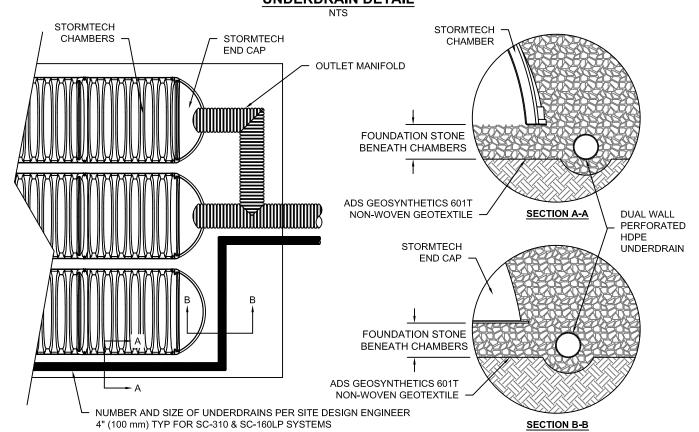
NON-WOVEN GEOTEXTILE

TYPICAL LINER SECTION

∠ MANIFOLD HEADER

- MANIFOLD STUB

- 1. PVC LINER SHALL BE 30 MIL THICKNESS MEETING THE REQUIREMENTS OF PGI 1104 (PVC GEOMEMBRANE INSTITUTE).
- 2. GEOTEXTILE SHALL BE 8 OZ./YD NON-WOVEN FABRIC SIMILAR TO MIRAFI 180N OR APPROVED EQUAL
- FOLLOW PVC LINER MANUFACTURER RECOMMENDATIONS FOR INSTALLATION.
- 4. ALL LINER SEAMS SHALL BE PROPERLY SEALED BY APPROPRIATE WELDING TECHNIQUES AS DIRECTED BY THE MANUFACTURER. THESE MAY INCLUDE CHEMICAL WELDING,
- ADHESIVE SEAMING, OR THERMAL WELDING. 5. REMOVE ALL LARGE STONES PROTRUDING FROM BASIN BOTTOM PRIOR TO PLACING
- INITIAL LAYER OF GEO-TEXTILE TO PREVENT LINER PUNCTURE.



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Engineering and Surveying, P.C.

WEIR WALL (SEE SECTION B-B)

SECTION A-A

DMH 1 OUTLET CONTROL STRUCTURE

DRAINAGE MANHOLE DETAIL

48" DIA.

INFLOW

INVERT IN = 429.75'

P.O. Box 687, Rt. 207 Goshen, N.Y. 10924 (845) 294-3700

JUNE 27, 2023

JULY 5, 2023

AUGUST 23, 2023 OCTOBER 18, 2023

DECEMBER 11, 202

WEIR INV. = 433.25

12" ORIFICE INV=431.50

ORIFICE INV.=430.25

CONSTRUCTION DETAILS 3 PREPARED FOR

FINISHED GRADE PAVEMENT

4' WEIR INV. = 433.25

- 12" ORIFICE INV = 431.50'

8" ORIFICE INV. = 430.25"

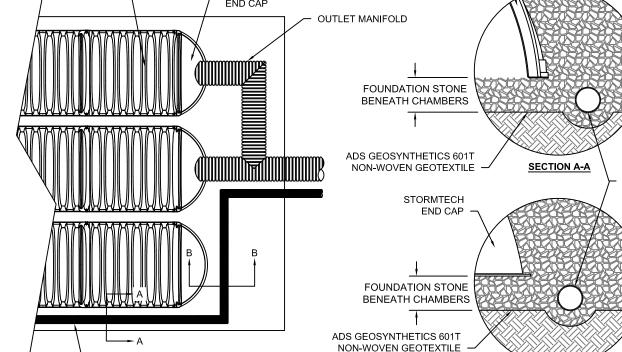
6" UNDERDRAIN INV= 427.00

15" HDPE INVERT OUT = 420.20

MKJC REALTY, LLC

TOWN OF NEWBURGH ORANGE COUNTY. NEW YORK

CAD File: ENG.DWG DETAILS 3



6" (150 mm) TYP FOR SC-740, DC-780, MC-3500 & MC-4500 SYSTEMS



SUBGRADE SOILS

(SEE NOTE 3)

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

NOTES:

- 1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION
- CHAMBERS" 2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL

MC3500IFPP24T

MC3500IEPP24TW

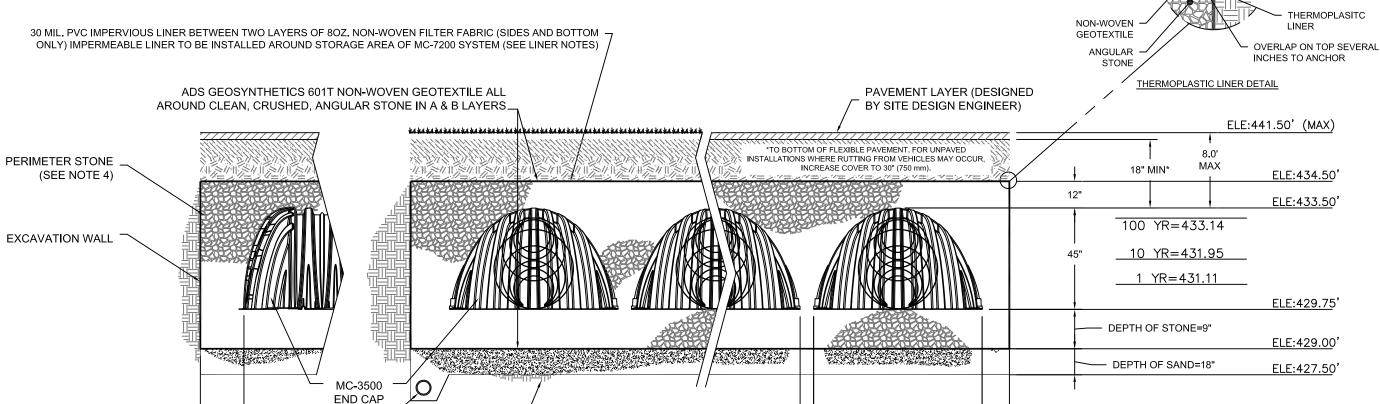
MC3500IEPP24BW

MC3500IEPP30BC

NOTE: ALL DIMENSIONS ARE NOMINAL

30" (750 mm)

- STORMWATER COLLECTION CHAMBERS". 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS DESCRIPTIONS, GRADATIONS, AND COMPACTION PERIMETER STONE 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.
- 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
- COPIES FROM THE ORIGINAL OF THIS DOCUMENT NOT MARKED WITH AN ORIGINAL OF THE PROFESSIONAL ENGINEER'S AND/OR LAND SURVEYOR'S STAMP OR EMBOSSED SEAL SHALL NOT BE CONSIDERED VALID, TRUE COPIES.
- UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209-2 OF THE NEW YORK STATE EDUCATION LAW.



MC-3500 SEPARATOR ROW WITH SAND FILTER DETAIL

PERFORATED

6" (150 mm) MIN ———