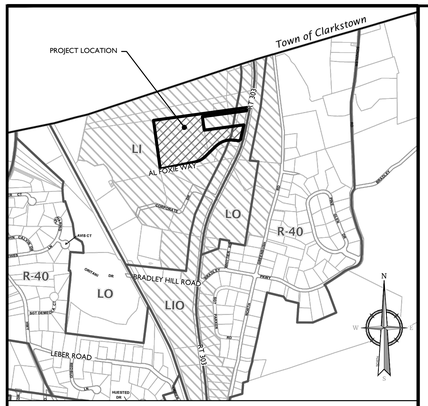


TOWN OF ORANGETOWN ZONING MAP

SCALE: 1" = 1,000'

SOURCE: TOWN OF ORANGETOWN ZONING MAPS

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

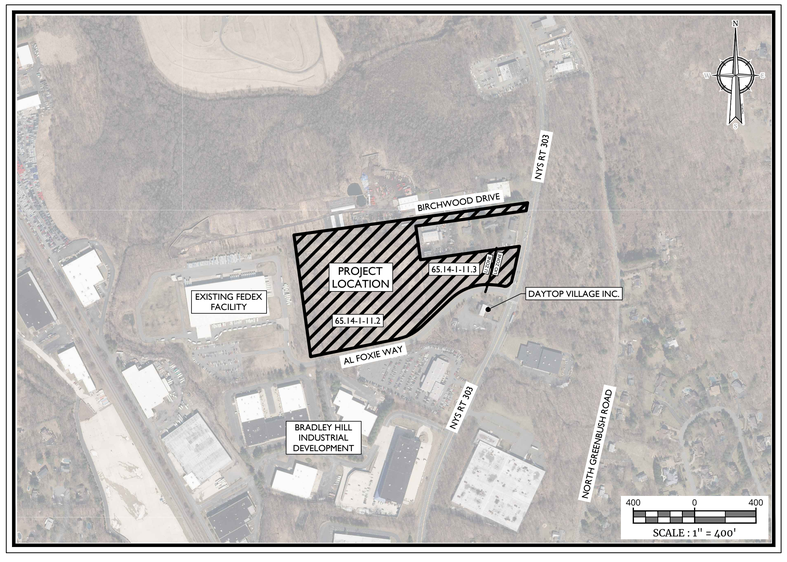
622 ROUTE 303 COMMERCIAL DEVELOPMENT

SECTION 65.14, BLOCK 1, LOTS 11.2 & 11.3

TOWN OF ORANGETOWN

ROCKLAND COUNTY

NEW YORK STATE



PROJECT LOCATION AND AERIAL MAP

SOURCE: NYS CLEARING HOUSE

INDEX OF SHEETS

SHT. No.	DESCRIPTION	LATEST REVISION
1	COVER SHEET	8/30/2023
2	EXISTING CONDITIONS AND DEMOLITION PLAN	8/30/2023
3	OVERALL DIMENSION PLAN	8/30/2023
4	DIMENSION PLAN WEST	8/30/2023
5	DIMENSION PLAN EAST	8/30/2023
6	GRADING AND DRAINAGE PLAN WEST	8/30/2023
7	GRADING AND DRAINAGE PLAN EAST	08/30/2023
8	UTILITIES PLAN WEST	8/30/2023
9	UTILITIES PLAN EAST	8/30/2023
10	WATERMAIN PROFILE	8/30/2023
11	SOIL EROSION AND SEDIMENT CONTROL PLAN	8/30/2023
12	SOIL EROSION AND SEDIMENT CONTROL DETAILS	8/30/2023
13	LANDSCAPE PLAN WEST	8/30/2023
14	LANDSCAPE PLAN EAST	8/30/2023
15	LIGHTING PLAN WEST	8/30/2023
16	LIGHTING PLAN EAST	8/30/2023
17-21	CONSTRUCTION DETAILS	8/30/2023

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

GENERAL INFORMATION

1. THE SUBJECT PROPERTY IS KNOWN AS SECTION 65.14, BLOCK 1, LOTS 11.2 & 11.3, IN THE TOWN OF ORANGETOWN, ROCKLAND COUNTY, NEW YORK
2. THE PROPERTY IS LOCATED IN THE LI (LIGHT INDUSTRIAL) ZONING DISTRICT AND LO (LABORATORY-OFFICE) ZONING DISTRICT, AND CONTAINS A TOTAL TRACT AREA OF ± 18.5 ACRES.

   APPLICANT: 622 ROUTE 303 LLC
   21 PHILIPS PARKWAY
   MAHWAH, NJ 07430

   OWNER: 622 ROUTE 303 LLC
   21 PHILIPS PARKWAY
   MAHWAH, NJ 07430

3. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS TAKEN FROM A PLAN ENTITLED "BOUNDARY SURVEY PREPARED FOR 622 NEW YORK 303 SECTION 65.14 BLOCK 1 LOTS 11.2 & 11.3" PREPARED BY CLEARPOINT SURVEYING, OPC., DATED 2/27/2022 REVISED 4/12/2022.
4. UNDERGROUND WATER UTILITY WITHIN AL FOXIE WAY SHOWN FOR REFERENCE ONLY PER DESIGN DRAWINGS BY MCLAREN ENGINEERING GROUP DATED 6/21/10 SHEETS C-301 AND C-302 (NOT REVIEWED AS-BUILT DRAWINGS). CONTRACTOR TO VERIFY LOCATION AND SIZE WITH TEST PITS PRIOR TO CONNECTING.
5. BUILDING INFORMATION SHOWN HEREON REFERENCES A SET OF PRELIMINARY ARCHITECTURAL FLOOR PLANS PREPARED BY ANDERSON DESIGN GROUP DATED 06/27/2023.
6. THE HORIZONTAL DATUM IS RELATIVE TO NAD83. THE VERTICAL DATUM IS RELATIVE TO NAD88. BENCHMARK ELEVATION OF 90.55 REFERENCED FROM SURVEY MAP CITED IN NOTE #3 ABOVE.
7. THE LIMITS OF FRESHWATER WETLANDS SHOWN HEREON WERE FIELD DELINEATED BY ECOLOGICAL SOLUTIONS, LLC. ON FEBRUARY 8, 2022.
8. NO 100 YEAR FLOOD PLAINS ARE KNOWN TO EXIST ON THE SITE PER THE FLOOD INSURANCE RATE MAPS 36087C1796 DATED 3/03/2014 PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
9. THIS SET OF PLANS IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. COLLIERS ENGINEERING & DESIGN 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 AND REGULATIONS.
10. THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HEREON, IS NOT A SURVEY.
11. DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.
12. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED, ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED "ISSUED FOR CONSTRUCTION". THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROJECT OWNER AND/OR MUNICIPAL ENGINEER.
13. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.
14. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL 811 TO REQUEST A UTILITY MARKOUT.
15. INFORMATION HEREON INCORPORATES THE CONTENT IN THE FOLLOWING REPORTS:
    - "STORMWATER POLLUTION PREVENTION PLAN (SWPPP)" PREPARED BY COLLIERS ENGINEERING & DESIGN LAST REVISED, AUGUST 2023.
    - GEOTECHNICAL DATA REPORT (IN-SITU INFILTRATION TESTING) PREPARED BY COLLIERS ENGINEERING & DESIGN DATED DECEMBER 21, 2022.
    - TRAFFIC IMPACT STUDY PREPARED BY COLLIERS ENGINEERING & DESIGN LAST REVISED AUGUST 14, 2023.

SITE NOTES

1. BUILDING FOOTPRINT DIMENSIONS SHOWN HEREON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR THE BUILDING SHALL BE FURNISHED ON THE INDIVIDUAL ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS.
2. CURBS SHALL BE DEPRESSED FLUSH WITH PAVEMENT, AND HANDICAP ACCESSIBLE RAMPS INSTALLED WHERE SIDEWALKS AND CROSSWALKS INTERSECT SAME. DETECTABLE WARNINGS SHALL BE INCLUDED ON HANDICAP ACCESSIBLE RAMPS.
3. TRAFFIC SIGNAGE AND STRIPING SHALL CORRESPOND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. REFUSE AND RECYCLABLES SHALL BE STORED WITHIN OUTDOOR ROLL-OFF CONTAINERS AND PICKED UP BY PRIVATE WASTE DISPOSAL HAULER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL WASTE MATERIALS IN ACCORDANCE WITH GOVERNING REGULATIONS AND AGENCIES.
6. THERE SHALL BE NO ON-SITE BURIAL OF CONSTRUCTION MATERIALS, TREE BRANCHES, STUMPS, OR OTHER DELETERIOUS MATERIALS.
7. MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:
   A. NEW YORK STATE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", 2018; AS SUPPLEMENTED.
   B. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, AND REQUIREMENTS.
   C. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
   D. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.

UTILITY NOTES

1. 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 TO BE 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 UNDER SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.
2. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.
3. STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLOX SUPERSEAL OR EQUIVALENT, ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPE), AS NOTED ON THE PLAN, OR APPROVED EQUAL. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4. WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE WITHIN THE 20' UTILITY EASEMENT, OWNED AND OPERATED BY VEOLIA WATER. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL. PIPE MATERIALS SHALL BE CEMENT LINED DUCTILE IRON PIPE, CLASS 52, WITH ASPHALTIC EPOXY TYPE COATING. POTABLE WATER SERVICE PIPES TO BE TYPE K SEAMLESS COPPER. AS NOTED ON THE PLANS. WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4' OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
5. SANITARY SEWER SERVICE SHALL BE PROVIDED BY MUNICIPAL SEWER WITHIN AL FOXIE WAY, OWNED AND OPERATED BY THE TOWN OF ORANGETOWN SEWER DEPARTMENT. PROPOSED SEWER SERVICE CONNECTION IS SUBJECT TO MUNICIPAL REVIEW AND APPROVAL. PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.
6. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY AND STORM SEWER AND INDUSTRIAL DISCHARGE LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE DEPARTMENT OF HEALTH.
7. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED UNDERGROUND PER ORDINANCE OR LOCAL UTILITY COMPANIES REQUIREMENTS. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/20/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

Digitally signed by Cory Daniel Robinson
Date: 2023.08.30 13:57:50-04'00'

Cory Daniel Robinson

NEW YORK LICENSED PROFESSIONAL ENGINEER

LICENSE NUMBER: 103788

COLLIERS ENGINEERING & DESIGN CT, P.C.

N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design

NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495

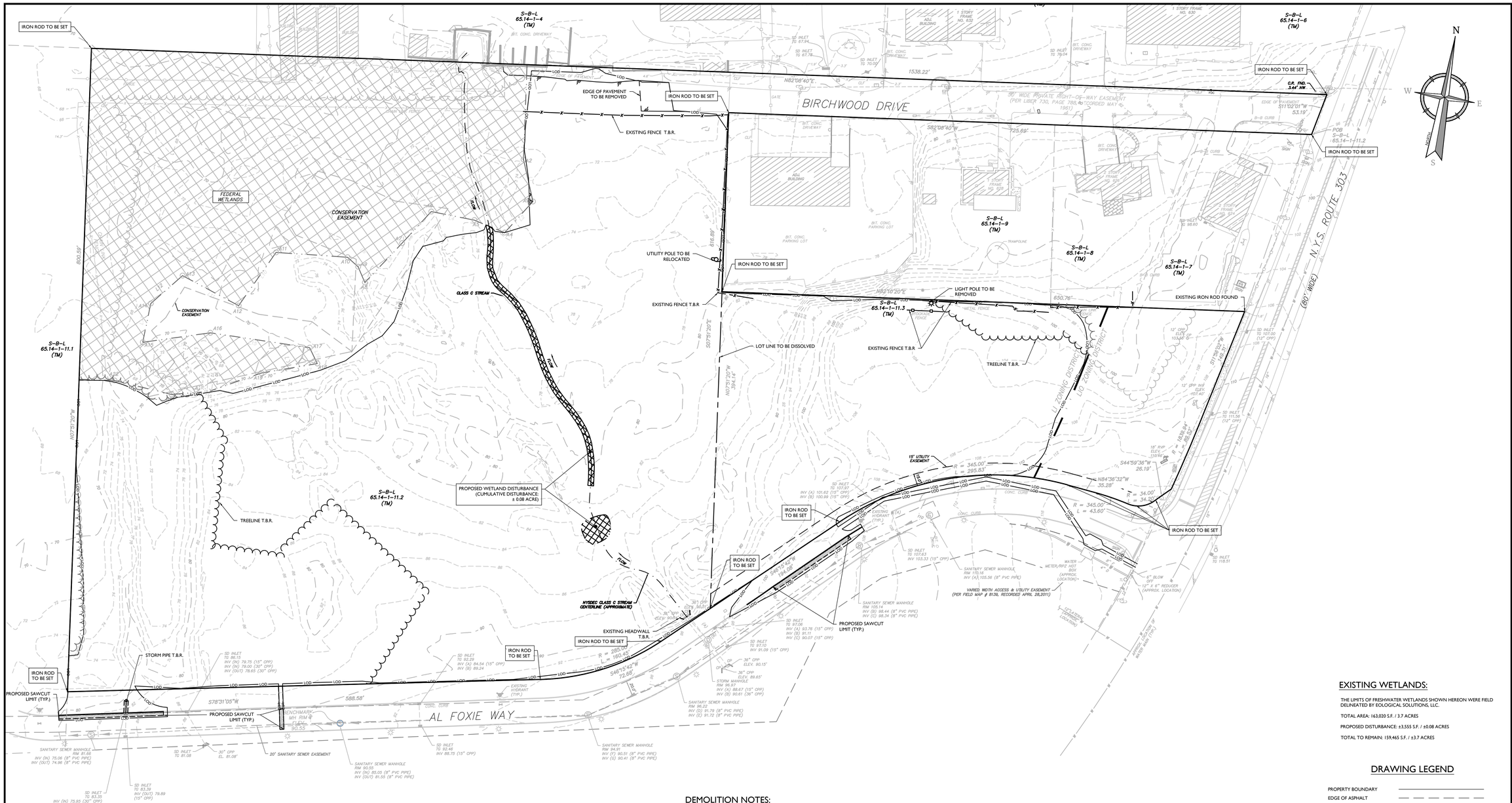
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A	DRAWING NAME: C-COVER		

SHEET TITLE: COVER SHEET

SHEET NUMBER: 01 of 21

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



EXISTING WETLANDS:

THE LIMITS OF FRESHWATER WETLANDS SHOWN HEREON WERE FIELD DELINEATED BY EOLOGICAL SOLUTIONS, LLC.

TOTAL AREA: 163,020 S.F. / 3.7 ACRES

PROPOSED DISTURBANCE: ±3,555 S.F. / ±0.08 ACRES

TOTAL TO REMAIN: 159,465 S.F. / ±3.7 ACRES

DRAWING LEGEND

PROPERTY BOUNDARY
EDGE OF ASPHALT
EXISTING CURB
DEPRESSED CURB
PAVEMENT STRIPING
OVERHEAD WIRES — OHW —
WATERLINE MARKOUT — W —
EASEMENTS
MAJOR CONTOUR
MINOR CONTOUR
SANITARY PIPES
STORMWATER PIPES
TREEROW / HEDGE
TREELINE
BOUNDARY EVIDENCE
SIGN
POST / BOLLARD
UTILITY POLE
GUY WIRE
LIGHT POLE
SANITARY MANHOLE
SANITARY CLEANOUT
DRAINAGE MANHOLE
CATCH BASIN

TBR = TO BE REMOVED
UTP = UTILITY POLE
DI = DRAIN INLET
CB = CATCH BASIN
GR. = GRATE
CO = CLEANOUT

WETLANDS
SAW CUT LINE

DEMOLITION NOTES:

1. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION. DIG SAFELY, NEW YORK, 1-800-962-7962 OR 811. A PRE-DEMOLITION CONFERENCE WILL NEED TO BE ARRANGED WITH DIG SAFELY, NEW YORK AND MUST BE HELD A MINIMUM OF 7 DAYS BEFORE THE START OF ANY DEMOLITION.
2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
3. ALL DEMOLITION DEBRIS TO BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
4. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS, AS WELL AS ALL FEDERAL, STATE AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO COLLIERS ENGINEERING & DESIGN IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.
5. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:
6. ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW (SEE "EROSION AND SEDIMENT CONTROL PLAN," THIS DRAWING SET).
7. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
8. ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
9. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
10. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
11. CLEAN THE EXISTING UTILITY STRUCTURES ON-SITE PRIOR TO CONSTRUCTION AND VERIFY THE INVERTS FOR CONNECTION.
9. COLLIERS ENGINEERING & DESIGN IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE O.S.H.A. REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
10. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
11. ROCK EXCAVATIONS (AS APPLICABLE) WILL BE PERFORMED BY MECHANICAL MEANS ONLY. IF USE OF BLASTING IS REQUIRED FOR ROCK EXCAVATION, THE CONTRACTOR SHALL SECURE ALL THE REQUIRED PERMITS AND CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS (INCLUDING TOWN CODE CHAPTER 58A - EXPLOSIVES) SHALL BE IN PLACE PRIOR TO STARTING. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES, AS APPLICABLE.
12. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL", AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHTS-OF-WAY.
13. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY (AS APPLICABLE).
14. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
15. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL O.S.H.A. AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
16. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.
17. DEMOLITION SHALL NOT PROCEED UNTIL THE APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE MARKED IN THE FIELD AND ALL UTILITY CONNECTIONS ARE SUITABLY SHUT OFF AND DISCONNECTED AND PROPER DEMOLITION PERMITS ARE IN PLACE WITH THE APPROPRIATE JURISDICTION.
18. CONTRACTOR IS RESPONSIBLE TO RESTORE ALL DISTURBED SITE AREAS TO ORIGINAL CONDITION AS DIRECTED BY THE OWNER.
19. PROTECT ALL EXISTING UTILITIES TO REMAIN (INCLUDING DRAINAGE STRUCTURES, HYDRANTS, VALVES, SEWER MANHOLES, ETC.) DURING DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIMSELF OR SUB-CONTRACTORS.
20. THIS SET OF PLANS IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. COLLIERS ENGINEERING & DESIGN CONSULTING HAS PERFORMED NO EXPLORATORY OR TESTING SERVICE, INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF POTENTIAL FOR CHEMICAL, TOXIC, OR 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 LAW AND REGULATIONS.
21. PRIOR TO CONSTRUCTION COMMENCING A NYS LICENSED SURVEYOR SHALL ESTABLISH PROPERTY BOUNDARIES, SET IRON RODS AT ALL CORNERS IF NOT ESTABLISHED, DELINEATE LIMITS OF DISTURBANCE, AND ESTABLISH WETLAND BOUNDARY.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023-2200634A\Drawings\Site Plans\Phase C-DEMO.dwg\C-02 DEMOLITION By: MICHAEL.GAA

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	05/08/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

Digitally signed by Cory Daniel Robinson
Date: 2023.05.30 13:57:56-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR

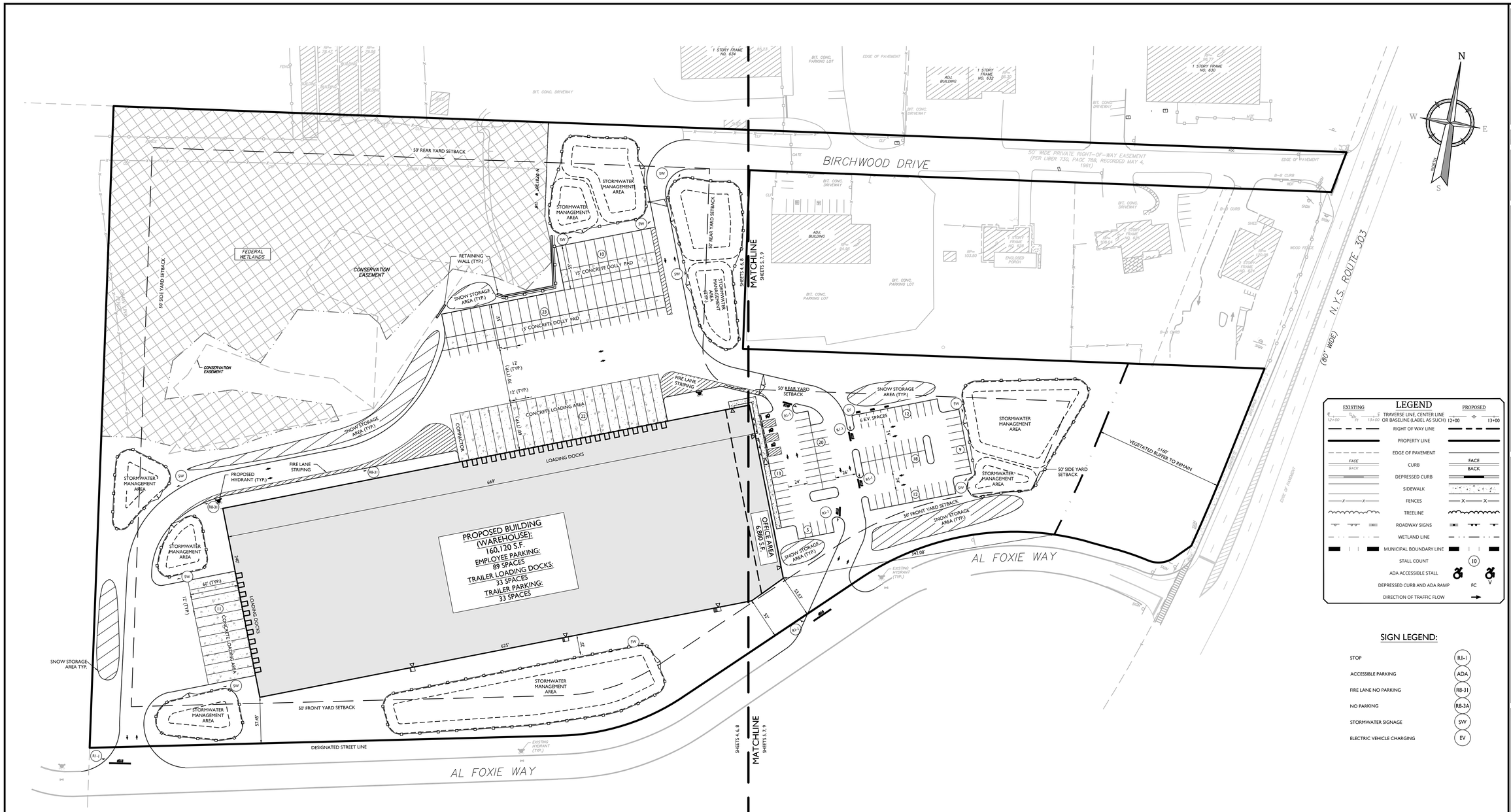
PROJECT NUMBER:	DRAWING NAME:
2200634A	C-DEMO

SHEET TITLE:
EXISTING CONDITIONS & DEMOLITION PLAN

SHEET NUMBER:
02 of 21

50 0 50 100
SCALE : 1" = 50'

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



LEGEND

EXISTING		PROPOSED
12+00 / 13+00	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	12+00 / 13+00
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	STALL COUNT	10
	ADA ACCESSIBLE STALL	
	DEPRESSED CURB AND ADA RAMP	FC
	DIRECTION OF TRAFFIC FLOW	

SIGN LEGEND:

STOP	R1-1
ACCESSIBLE PARKING	ADA
FIRE LANE NO PARKING	R8-3I
NO PARKING	R8-3A
STORMWATER SIGNAGE	SW
ELECTRIC VEHICLE CHARGING	EV

BULK TABLE

ZONING DISTRICT: L1; (LIGHT INDUSTRIAL)
USE PERMITTED BY RIGHT: WHOLESALES OR STORAGE; WAREHOUSES; BUSINESS; & PROFESSIONAL OFFICES.

TABLE OF BULK REQUIREMENTS

MINIMUM	REQUIRED	PROVIDED	REMARKS
LOT AREA	2 ACRES	± 805,725 S.F. / 18.5 ACRES	OK
FRONT YARD SETBACK	50 FEET	52.0 FEET	OK
REAR YARD SETBACK	50 FEET	69.8 FEET	OK
SIDE YARD SETBACK	50 FEET	154.8 FEET	OK
TOTAL SIDE YARD	100 FEET	496.7 FEET	OK
STREET FRONTAGE(1)	150 FEET	±1,269 FEET	OK
LOT WIDTH(1)	150 FEET	±1,290 FEET	OK
OPEN AREA	20%	58.1% (46.7%)	OK
MAXIMUM			
BUILDING HEIGHT(2)	6" PER FOOT OF DISTANCE FROM LOT LINE(3) (26 FEET)	50 FEET	VARIANCE REQUIRED
LAND COVERAGE	80%	41.9 (44.4%)	OK
F.A.R. (FLOOR AREA RATIO)	0.50	0.20 (0.19)	OK

(1) MEASURED ALONG AL FOXIE WAY

(2) BUILDING HEIGHT: THE VERTICAL DISTANCE MEASURED FROM THE AVERAGE ELEVATION OF THE PROPOSED FINISHED GRADE ALONG THE WALL OF A BUILDING, OR ADJACENT TO THE SIDE OF A NON-BUILDING USE, TO THE HIGHEST POINT OF THE ROOF PARAPET FOR FLAT ROOFS OR SHED ROOFS, TO THE DECK LINE FOR MANSARD ROOFS, AND TO THE MEAN BETWEEN EAVES AND RIDGE FOR GABLE, HIP AND GAMBREL ROOFS OF SUCH BUILDING OR NON BUILDING USE, EXCEPT AS SPECIFICALLY EXEMPT IN SECTION 5.23.

(3) PER CHAPTER 43 ATTACHMENT 1B, NOTE #7 STATES THAT REQUIRED FRONT YARD AND MAXIMUM BUILDING HEIGHT ARE SUBJECT TO SECTION 5.11 WHERE THE DESIGNATED STREET LINE CAN BE USED AS A LOT LINE. IN THIS INSTANCE THE DESIGNATED STREET LINE IS THE LOT LINE BORDERING AL FOXIE WAY(52) FROM THE PROPOSED BUILDING

PARKING & LOADING REQUIREMENTS:

REQUIRED PARKING:

WAREHOUSE (160,120 S.F.):
1 PER 2 EMPLOYEES; 102 EMPLOYEES = 51 SPACES

OFFICE (6,880 S.F.):
1 PER 200 S.F. OF FLOOR AREA
6,880 / 200 = 35 SPACES REQUIRED

TOTAL REQUIRED PARKING: 86 SPACES
TOTAL PROVIDED PARKING: 89 SPACES

LOADING BERTHS:

WAREHOUSE:
1 PER 10,000 S.F. OF FLOOR AREA AND ONE ADDITIONAL BERTH FOR EACH ADDITIONAL 20,000 S.F. ; (160,120-10,000) / 20,000 = 9 REQUIRED

OFFICE:
NOT REQUIRED

TOTAL PROVIDED LOADING BERTHS:
33 LOADING BERTHS PROVIDED

TAX LOT:

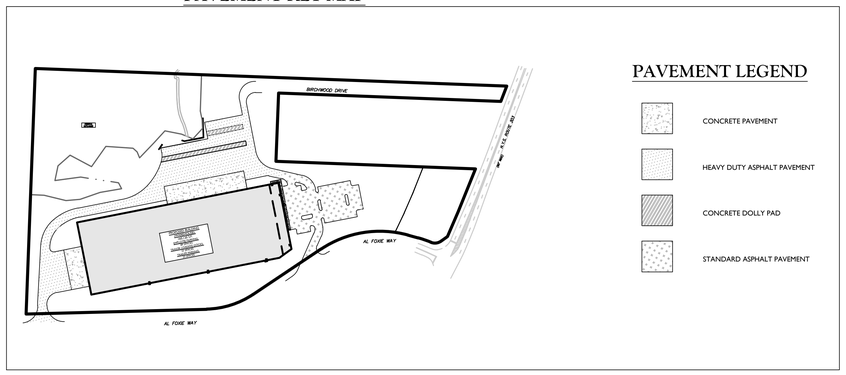
EXISTING TAX LOTS:

SBL: 65.14-1-11.2
± 157,932 S.F. / ± 3.6 ACRES

SBL: 65.14-1-11.3
± 647,793 S.F. / ±14.9 ACRES

PROPOSED COMBINED TAX LOT:
± 805,725 S.F. / ±18.5 ACRES

PAVEMENT KEY MAP



PAVEMENT LEGEND

- CONCRETE PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE DOLLY PAD
- STANDARD ASPHALT PAVEMENT

50 0 50 100
SCALE : 1" = 50'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/20/23	TPS	REVISED PER REMOVAL OF SUBSURFACE EMPLOYEE CHAMBERS

Digitally signed by Cory Daniel Robinson
Date: 2023.09.30 13:57:57-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

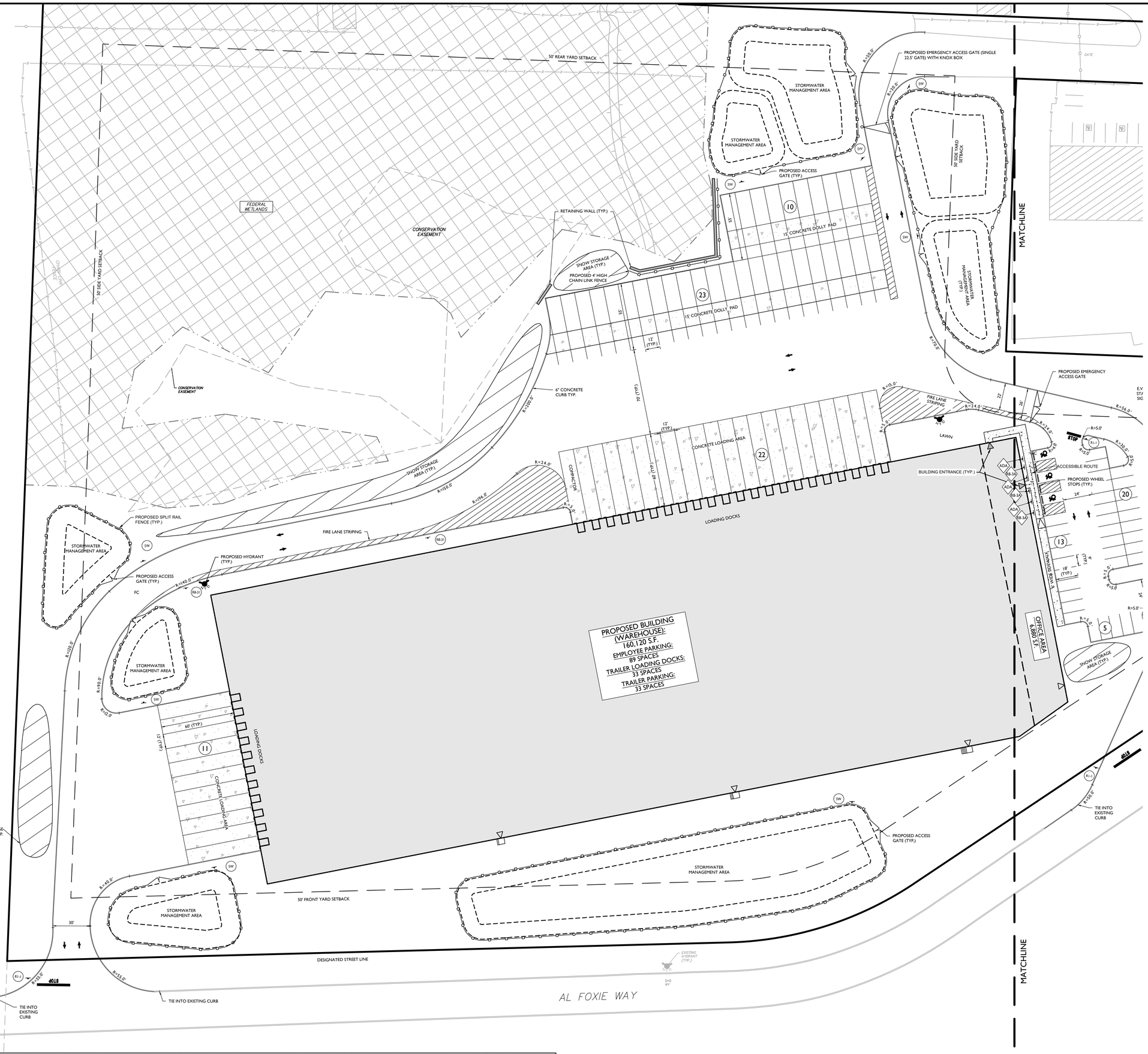
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A	DRAWING NAME: C-LAYT		

SHEET TITLE:
OVERALL DIMENSION PLAN

SHEET NUMBER:
03 of 21

2023\22002634A\Engineering\Site Plan\C-LAYT.dwg\C-03-LAYOUT By: MATCHAS, SARA



SIGN LEGEND:

STOP	R1-1
ACCESSIBLE PARKING	ADA
FIRE LANE NO PARKING	RB-31
NO PARKING	RB-3A
STORMWATER SIGNAGE	SW
ELECTRIC VEHICLE CHARGING	EV

LEGEND

EXISTING		PROPOSED
12+00 13+00	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	12+00 13+00
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	STALL COUNT	10
	ADA ACCESSIBLE STALL	V
	DEPRESSED CURB AND ADA RAMP	FC
	DIRECTION OF TRAFFIC FLOW	

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023-2200263A-MAS-Unsigned-Site-Plans-C-LAYT.dwg C-SALA1.CTB-CT By: MICHAEL SABA

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

REV	DATE	DRAWN BY	DESCRIPTION
1	08/08/23	TPS	REVISED PER REMOVAL OF SUBSURFACE EMPLOYEE CHAMBERS

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

Digitally signed by Cory Daniel Robinson
Date: 2023.08.30 13:57:56-04'00'

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A	DRAWING NAME: C-LAYT		

SHEET TITLE:
DIMENSION PLAN
WEST

SHEET NUMBER:
04 of 21

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

SIGN LEGEND:

STOP	R1-1
ACCESSIBLE PARKING	ADA
FIRE LANE NO PARKING	R8-3I
NO PARKING	R8-3A
STORMWATER SIGNAGE	SW
ELECTRIC VEHICLE CHARGING	EV

LEGEND

EXISTING		PROPOSED
12+00 PI 13+00	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	12+00 13+00
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	STALL COUNT	10
	ADA ACCESSIBLE STALL	V
	DEPRESSED CURB AND ADA RAMP	FC
	DIRECTION OF TRAFFIC FLOW	

30 0 30 60

SCALE : 1" = 30'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\22002634A\Engineering\Site Plans\C-LAYT.dwg\C-LAYOUT By:MICHAEL.SAAS

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

REV	DATE	DRAWN BY	DESCRIPTION
1	08.30.23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

Digitally signed by Cory Daniel Robinson
Date: 2023.09.30 13:57:58-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

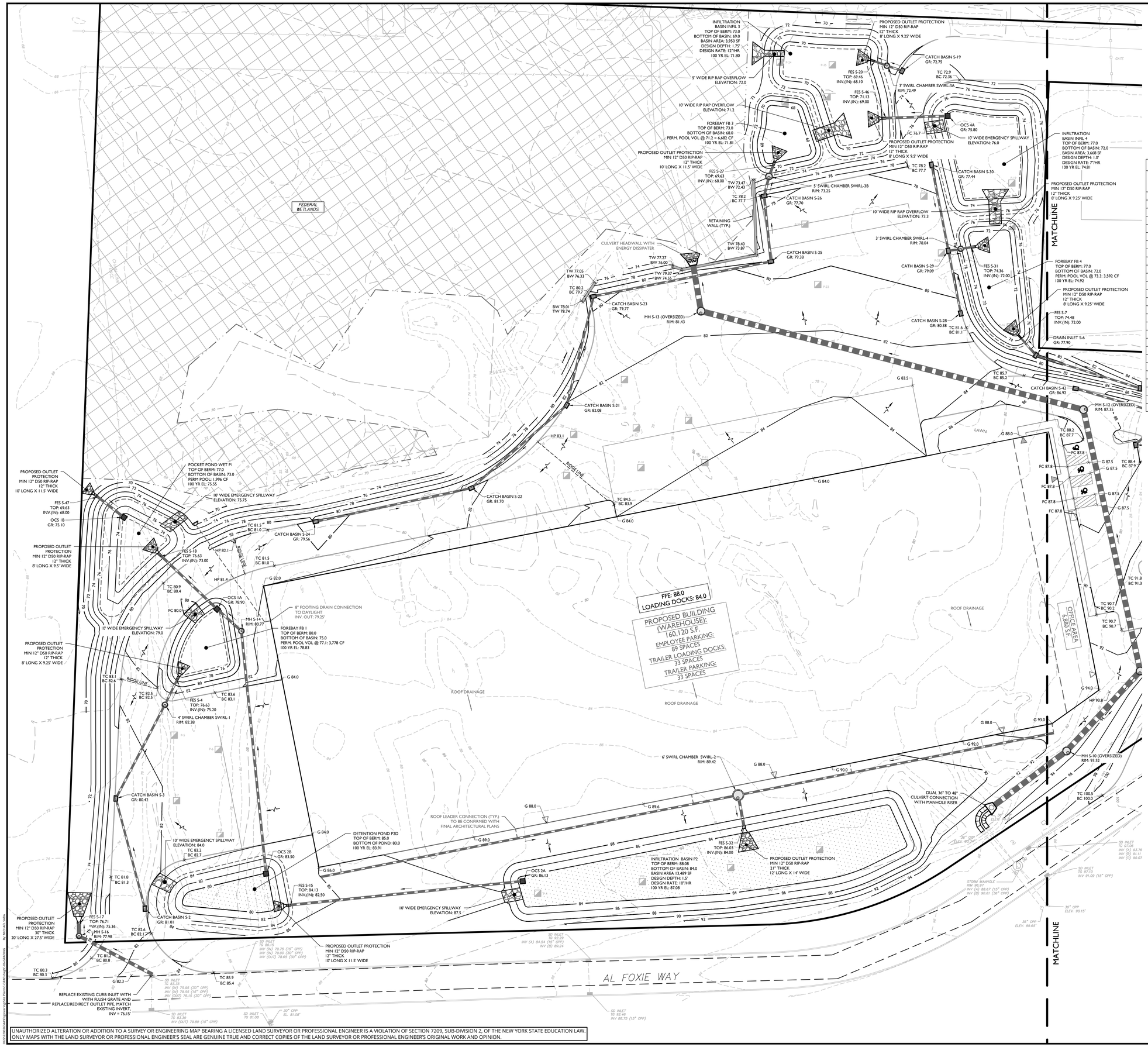
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR

PROJECT NUMBER:	DRAWING NAME:
22002634A	C-LAYT

SHEET TITLE:
DIMENSION PLAN
EAST

SHEET NUMBER:
05 of 21



INFILTRATION TESTS

TEST #	EXPLORED DEPTH (FT)	TEST DEPTH (FT)	RATE (IN/HR)	DEPTH TO ROCK/WATER (FT)
P-1	9	8	24.0	N/A
P-2	9	8	24.0	N/A
P-3	10	9	24.0	N/A
P-4	9	8	24.0	N/A
P-5	6	4	12.5	N/A
P-6	6	4	23.0	N/A
P-7	6	4	13.0	N/A
P-8	6	4	24.0	N/A
P-9	5	3	24.0	N/A
P-10	5	3	24.0	N/A
P-11	7	5	24.0	N/A
P-12	6	4	24.0	N/A
P-13	6	4	24.0	N/A
P-14	6	4	24.0	N/A
P-15	5	4	24.0	N/A
P-16	9	7	14.5	N/A
P-17	8	6	15.5	N/A
P-18	6	4	24.0	N/A
P-19	4	2	24.0	N/A
P-20	5	3	21.5	N/A
P-21	5	3	20.5	N/A
P-22	7	5	24.0	N/A
P-23	7	5	24.0	N/A
P-24	3	2	24.0	N/A
P-25	3	3	24.0	N/A
P-26	3	2	24.0	N/A
P-27	3	2	24.0	N/A

ADA INSTRUCTIONS TO CONTRACTOR:

1. CONTRACTOR SHALL EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA ACCESSIBLE COMPONENTS FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE LATEST ADA STANDARDS FOR ACCESSIBLE DESIGN. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EGRESS, SHALL COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
(NOTE: THIS LIST IS NOT INTENDED TO CAPTURE EVERY APPLICABLE FEDERAL, STATE AND LOCAL RULE AND REGULATION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE LAW, WHETHER OR NOT STATED SPECIFICALLY HEREIN):

A. PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

B. CURB RAMPS- SLOPES SHALL NOT EXCEED 1:12 (8.3%).

C. LANDINGS -SHALL BE PROVIDED AT EACH END OF RAMPS. SHALL PROVIDE POSITIVE DRAINAGE, AND SHALL
NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

D. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - SHALL PROVIDE A 36 INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. (CAR OVERHANGS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE SHALL BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE.

E. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), AN ADA RAMP WITH A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM DISTANCE OF 30 FEET, SHALL BE PROVIDED. THE RAMP SHALL HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.

F. DOORWAYS - SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA SHALL BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHER WISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS (SEE APPLICABLE CODE SECTIONS).

2. IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE OFFICIAL PRIOR TO COMMENCING WORK.

LEGEND

EXISTING		PROPOSED
12+00 PI 13+00	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	12+00 13+00
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	'B' INLET	
	'E' INLET	
D	STORM MANHOLE	D
S	SANITARY MANHOLE	S
	FLARED END SECTION	
	HEADWALL	
	HYDRANT	
	POLE MOUNTED LIGHT	
75 / 74	CONTOURS	75 / 74
× G 29.0	SPOT ELEVATION	× G 29.0
	DIRECTION OF OVERLAND FLOW	
× TC 29.0	TOP OF CURB ELEVATION	× TC 29.0
× BC 29.0	BOTTOM OF CURB ELEVATION	× BC 29.0
	TOP OF DEPRESSED CURB ELEVATION	× TDC 29.0
	FLUSH CURB ELEVATION	× FC 29.0
	INFILTRATION TEST LOCATION	TP-29

30 0 30 60
SCALE : 1" = 30'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.
Doing Business as MASER CONSULTING

811 Call before you dig. PROTECT YOURSELF ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REV	DATE	DRAWN BY	DESCRIPTION
1	06/20/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Digitally signed by Cory Daniel Robinson
Date: 2023.08.30 13:57:58-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A		DRAWING NAME: C-GRAD	

SHEET TITLE:
GRADING & DRAINAGE PLAN - WEST

SHEET NUMBER:
06 of 21

LEGEND

EXISTING		PROPOSED
12+00 PI 13+00	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	12+00 13+00
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
	FENCES	
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	'B' INLET	
	'E' INLET	
	STORM MANHOLE	
	SANITARY MANHOLE	
	FLARED END SECTION	
	HEADWALL	
	HYDRANT	
	POLE MOUNTED LIGHT	
75 / 74	CONTOURS	75 / 74
× G 29.0	SPOT ELEVATION	× G 29.0
	DIRECTION OF OVERLAND FLOW	
× TC 29.0	TOP OF CURB ELEVATION	× TC 29.0
× BC 29.0	BOTTOM OF CURB ELEVATION	× BC 29.0
	TOP OF DEPRESSED CURB ELEVATION	× TDC 29.0
	FLUSH CURB ELEVATION	× FC 29.0
	INFILTRATION TEST LOCATION	TP-29

SCALE : 1" = 30'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
-	-	-	-

REV	DATE	DRAWN BY	DESCRIPTION
1	06/05/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

Digitally signed by Cory Daniel Robinson
Date: 2023.06.05 13:57:50-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR

PROJECT NUMBER:	DRAWING NAME:
22002634A	C-GRAD

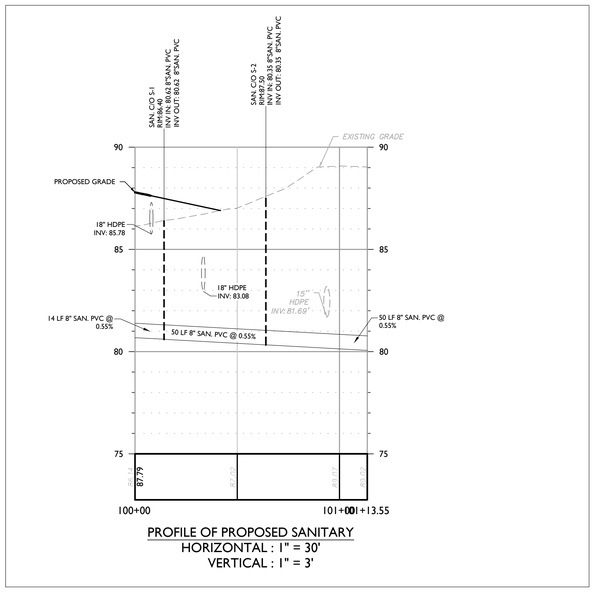
SHEET TITLE:

GRADING & DRAINAGE PLAN - EAST

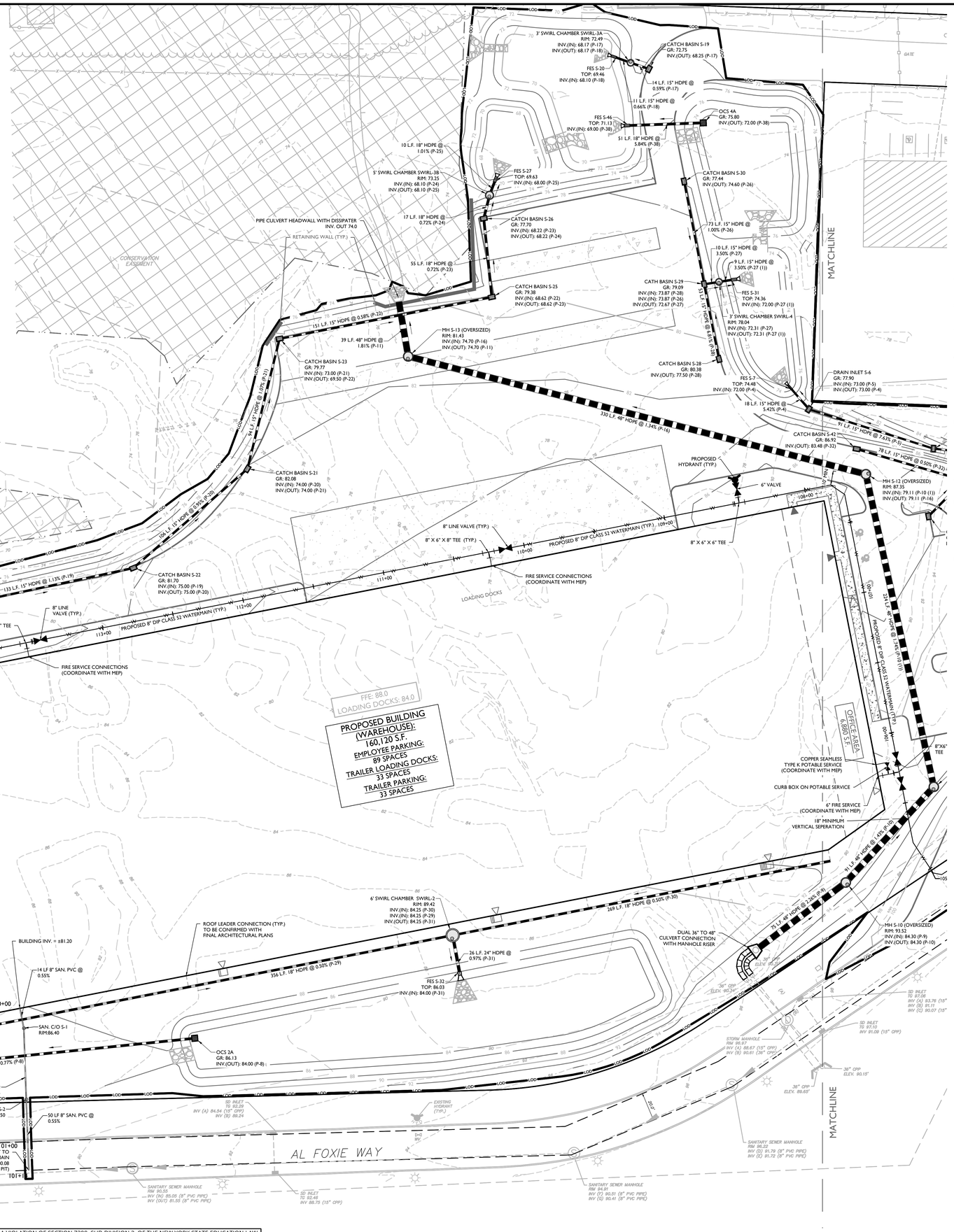
SHEET NUMBER:

07 of 21

2023-2300-MAS Engineering\Civil\Plans\C-GRAD.dwg\C-07-GRADING By: MICHAEL SABA



PROFILE OF PROPOSED SANITARY
HORIZONTAL : 1" = 30'
VERTICAL : 1" = 3'



UTILITY NOTES

1. LOCATION OF ALL EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL CONNECTION POINTS SHALL BE VERIFIED IN FIELD BY GC AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY REGARDING ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT LOWEST INVERT AND PROGRESS UP GRADIENT. PROPOSED CROSSING OF EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICES THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE TO REMAIN DURING SITE CONSTRUCTION.
3. THE CONTRACTOR TO INSTALL ALL STORM/SANITARY SEWERS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
4. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED UNDERGROUND. ALL TO BE INSTALLED IN ACCORDANCE WITH THE LOCAL UTILITY/SERVICE PROVIDER SPECIFICATIONS AND STANDARDS.
5. WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE ON AL FOXIE WAY , OWNED AND OPERATED BY VEOLIA NORTH AMERICA. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL ACCORDING TO THE AMERICAN WATERWORKS ASSOCIATION STANDARDS. PIPE MATERIALS SHALL BE CEMENT LINED DUCTILE IRON PIPE, CLASS 52, WITH ASPHALTIC EPOXY TYPE COATING. ALL WATER SERVICE PIPES TO BE 1" DIAMETER TYPE K SEAMLESS COPPER. WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
6. SANITARY SEWER SERVICE SHALL BE PROVIDED BY GRAVITY CONNECTION TO EXISTING SEWER MAIN ON AL FOXIE WAY, OWNED AND OPERATED BY ORANGETOWN SEWER DISTRICT. PROPOSED SEWER MAIN EXTENSIONS AND MANHOLE LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL. PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.
7. ALL MATERIALS USED FOR SANITARY SEWER SYSTEMS SHALL BE MANUFACTURED IN THE UNITED STATES, WHEREVER AVAILABLE, AS GOVERNED BY P.L. 1982, c. 107, EFFECTIVE DATE OCTOBER 3, 1982.
8. SANITARY SEWERS SHALL BE SEPARATED FROM WATER MAINS BY AT LEAST 10 FEET HORIZONTALLY. IF SUCH SEPARATION IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SANITARY SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. ANY WATER SERVICE LOCATED IN THE SAME TRENCH AS A SEWER LINE MUST BE LOCATED ABOVE AND TO ONE SIDE OF THE SEWER LINE AT LEAST ONE FOOT AWAY FROM THE SEWER LINE. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS ARE AS FAR AWAY AS POSSIBLE FROM THE WATER LINE.
9. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
10. TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
11. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.
12. STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLOX SUPERSEAL OR EQUIVALENT). ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPE), HANCOR SURE-LOK HIGH DENSITY POLYETHYLENE PIPE (HDPEP) OR APPROVED EQUAL AS NOTED. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
13. A COPY OF THE ENGINEER'S CERTIFICATION, SANITARY SEWER TEST REBULTS AND AS-BUILTS ARE TO BE SENT TO THE ROCKLAND COUNTY HEALTH DEPARTMENT.
14. THE TOWN OF ORANGETOWN WILL NOT RELEASE CERTIFICATES OF OCCUPANCY UNTIL A CERTIFICATE OF APPROVAL HAS BEEN RELEASED BY THE ROCKLAND COUNTY HEALTH DEPARTMENT.
15. THE TOWN OF ORANGETOWN SEWER INSPECTOR SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY AND ALL CONSTRUCTION ON OR NEAR EXISTING AND PROPOSED SANITARY SEWER FACILITIES.

LEGEND

EXISTING		PROPOSED
124+00 PI 13+00	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	12+00 13+00
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	'B' INLET	
	'E' INLET	
D	STORM MANHOLE	D
S	SANITARY MANHOLE	S
	FLARED END SECTION	
	HEADWALL	
	HYDRANT	
	POLE MOUNTED LIGHT	
CATV	CABLE TV CONDUIT	CATV
W	WATER MAIN	W
G	GAS MAIN	G
T	TELEPHONE CONDUIT	T
E	ELECTRIC CONDUIT	E
	SANITARY PIPE	S
	STORM PIPE	

30 0 30 60
SCALE : 1" = 30'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/08/23	TPS	REVISED FOR REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS.

Digitally signed by Cory Daniel Robinson
Date: 2023.08.28 13:58:00-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A		DRAWING NAME: C-UTIL	

SHEET TITLE:
UTILITIES WEST PLAN

SHEET NUMBER:
08 of 21

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

LEGEND

EXISTING		PROPOSED
124+00 PI 13+00	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	12+00 13+00
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	'B' INLET	
	'E' INLET	
D	STORM MANHOLE	D
S	SANITARY MANHOLE	S
	FLARED END SECTION	
	HEADWALL	
	HYDRANT	
	POLE MOUNTED LIGHT	
CATV	CABLE TV CONDUIT	CATV
W	WATER MAIN	W
G	GAS MAIN	G
T	TELEPHONE CONDUIT	T
E	ELECTRIC CONDUIT	E
	SANITARY PIPE	S
	STORM PIPE	

30 0 30 60

SCALE : 1" = 30'

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

REV	DATE	DRAWN BY	DESCRIPTION
A	06/09/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

Digitally signed by Cory Daniel Robinson
Date: 2023.09.20 13:58:01 -04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

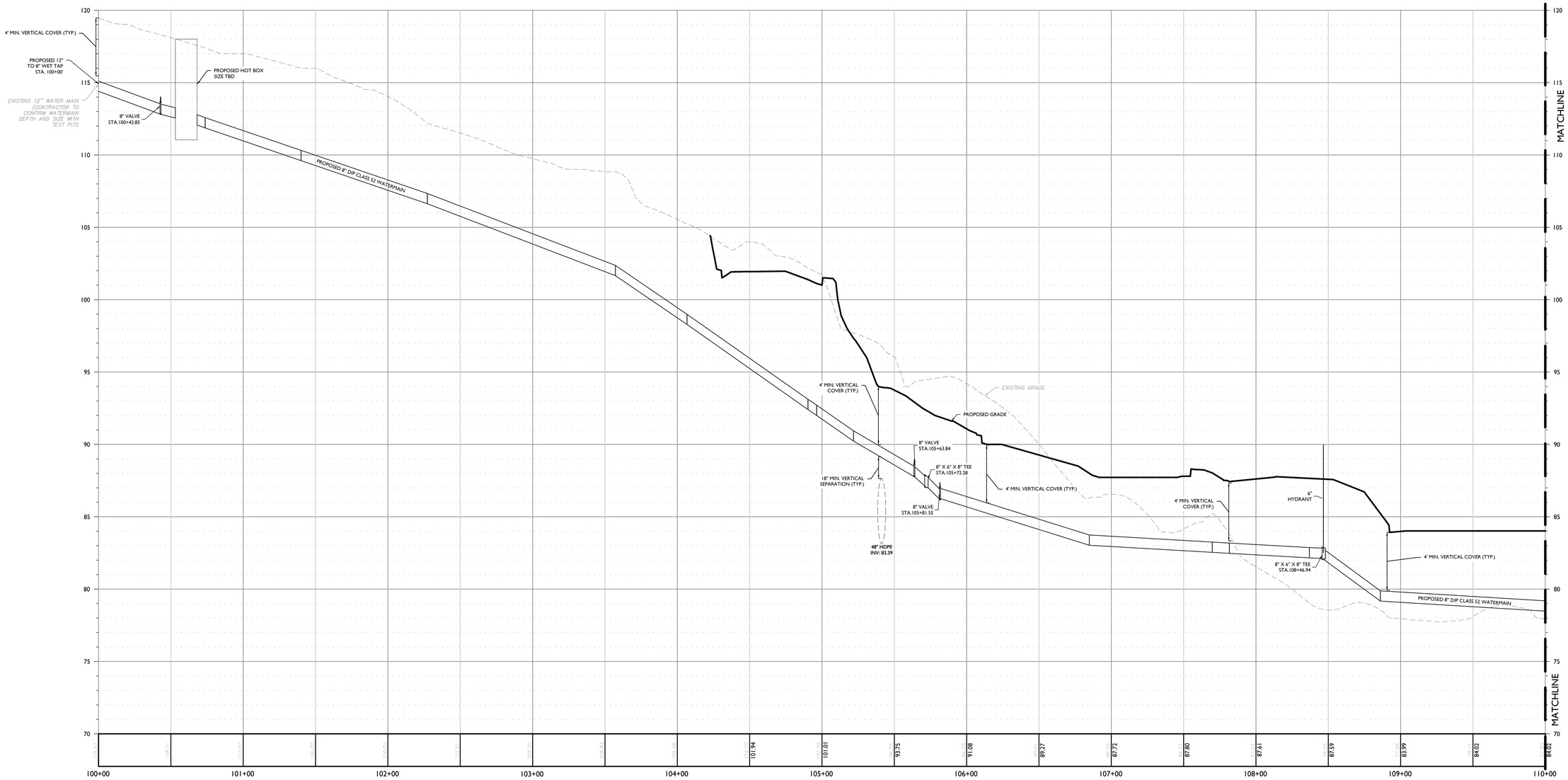
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	07/03/2023	MAS	CDR

PROJECT NUMBER: 22002634A
DRAWING NAME: C-UTIL

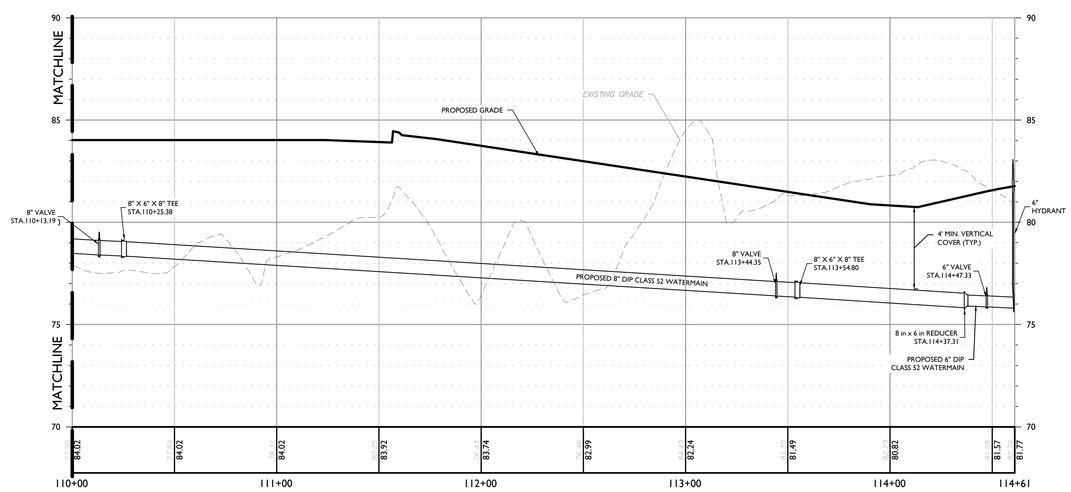
SHEET TITLE:
UTILITIES EAST PLAN

SHEET NUMBER:
09 of 21

LAYOUT: 09-UTIL By: MICHAEL.SABA



PROFILE OF WATER MAIN
HORIZONTAL : 1" = 30'
VERTICAL : 1" = 3'



PROFILE OF WATER MAIN
HORIZONTAL : 1" = 30'
VERTICAL : 1" = 3'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

REV	DATE	DRAWN BY	DESCRIPTION
1	03/08/23	TPS	REVISED PER REMOVAL OF SUBSURFACE EMPLOYMENT CHAMBERS.

Digitally signed by Cory Daniel Robinson
Date: 2023.08.30 13:50:15 -04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR

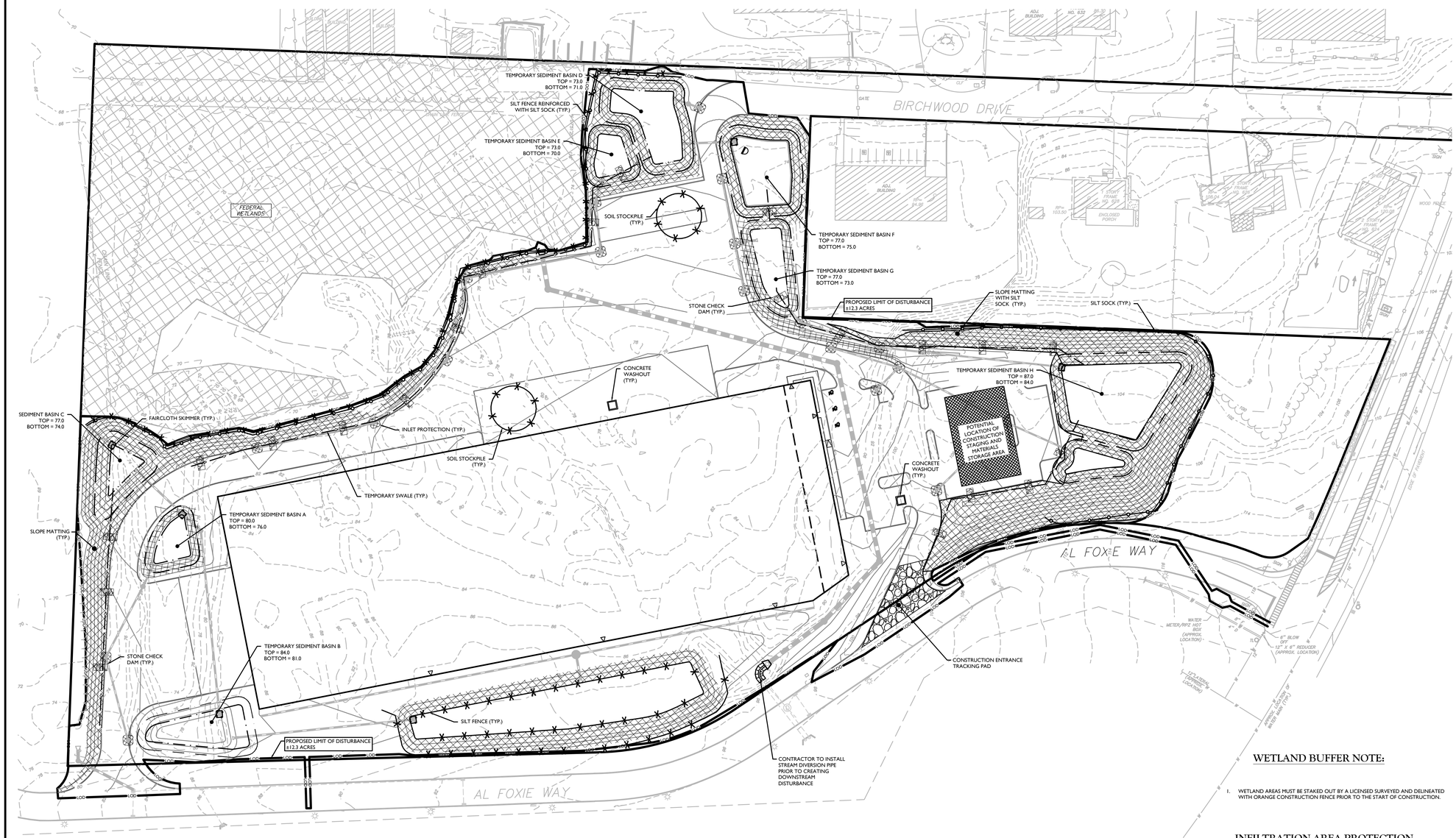
PROJECT NUMBER:	DRAWING NAME:
22002634A	C-UTIL

SHEET TITLE:
WATERMAIN PROFILE

SHEET NUMBER:

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2022\22002634A\Engineering\Plans\C-UTIL.dwg\C-UTIL.PNG\ By: MICHAEL.SASA



CONSTRUCTION SEQUENCING NOTES:

1. PRIOR TO BREAKING GROUND, THE CONTRACTOR, OWNER, AND ENGINEER MUST ATTEND A PRECONSTRUCTION MEETING WITH THE TOWN REPRESENTATIVES. THE MEETING IS THE RESPONSIBILITY OF THE CONTRACTOR.
2. END ALL APPLICABLE EROSION CONTROL MEASURES AS SHOWN ON THE PLAN, INCLUDING SILT FENCING AND TEMPORARY SWALES. ESTABLISH STAGING AREAS.
3. THE CONTRACTOR SHALL INSTALL THE TEMPORARY SWALES AND SEDIMENT PONDS AS INDICATED ON THE SITE PLAN AND/OR AS REQUIRED TO CONSTRUCT THE PROJECT WHILE MAINTAINING THE FUNCTIONALITY OF THE NECESSARY STORAGE. LOCATIONS AND SIZES OF THE EROSIONS AND SEDIMENT CONTROL PRACTICES ARE NOTED ON THE PLAN. THESE MAY VARY DEPENDING ON THE CONTRACTOR'S SCHEDULE AND APPROACH BUT 3,600 CF OF STORAGE MUST BE PROVIDED AT A MINIMUM PER ACRE OF UPSTREAM DISTURBANCE. SEDIMENT TRAPS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND DETAILS. SEDIMENT TRAPS AND BASINS SHALL BE SIZED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL MANUAL. SEDIMENT PONDS SHOULD HAVE NON-EROSIVE INLETS AND THE EMBANKMENTS SHOULD BE STABILIZED WITH VEGETATION OR MECHANICAL CONTROL MEASURES TO MINIMIZE TURBIDITY OF THE STORED WATER TO THE MAXIMUM EXTENT PRACTICAL.
4. DISTURBED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICAL. MATERIALS STORED IN STOCKPILES SHALL BE CORDONED OFF WITH SILT FENCE PER THE APPROPRIATE SPECIFICATIONS AND DETAILS. THE OPERATOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
5. TEMPORARY STABILIZATION - MEANS THAT EXPOSED SOIL HAS BEEN COVERED WITH MATERIAL(S) AS SET FORTH IN THE TECHNICAL STANDARD, NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, TO PREVENT THE EXPOSED SOIL FROM ERODING. THE MATERIALS CAN INCLUDE BUT ARE NOT LIMITED TO, MULCH, SEED AND MULCH, AND EROSION CONTROL MATS (E.G. JUTE TWISTED YARN, EXCELSIOR WOOD FIBER MATS). STABILIZATION SHALL BE MAINTAINED PER SPDES GENERAL PERMIT FOR STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITY, GP-0-20-001, OR AS AMENDED.
6. THE CONTRACTOR SHALL GRADE THE SITE SYSTEMATICALLY, INSTALL STONE ROADWAYS IN HEAVILY TRAFFICKED AREAS, AND INSTALL PAVEMENT SUBBASE MATERIALS AS SOON AS PRACTICAL TO MINIMIZE THE AMOUNT OF ACTIVELY OPEN SOIL AREA. REMOVE SOIL/ROCK/STOCKPILE EXCESS MATERIAL AS NECESSARY. THE CONTRACTOR WILL THEN INSTALL THE SITE UTILITIES. TEMPORARY SWALES MUST BE USED THROUGHOUT THE GRADING PROCESS TO ENSURE RUNOFF IS ALWAYS DIRECTED TOWARDS A SEDIMENT POND PRIOR TO DISCHARGING THE SITE.
7. THE SUBBASE AND CURBING SHALL BE INSTALLED AS SOON AS PRACTICABLE TO PROVIDE A STABILIZED SURFACE.
8. GRADE AND SPREAD TOPSOIL ON ALL LAWN AREAS AND SEED, INSTALL SIDEWALKS. MAINTAIN ALL SEEDED AND PLANTED AREAS TO INSURE A VIABLE STABILIZED VEGETATIVE COVER.
9. THE PROJECT SITE MUST MEET FINAL STABILIZATION CRITERIA PRIOR TO REMOVING ALL EROSION AND SEDIMENT CONTROL DEVICES AND CLOSING OUT THE PROJECT. LITTER AND CONSTRUCTION DEBRIS SHALL BE REMOVED AS PRACTICAL THROUGHOUT THE LIFE OF THE PROJECT.
10. FINAL STABILIZATION MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIPRAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.
11. UPON FINAL STABILIZATION BEING MET, CONTRACTOR SHALL CLEAR THE DRAINAGE SYSTEM, DRAINAGE PIPE, AND ALL EXISTING AND NEW STRUCTURES ON SITE OF ANY SEDIMENT WHICH MAY HAVE ACCUMULATED DURING CONSTRUCTION.
12. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AS MAY BE NECESSARY, REQUIRED AND/OR REQUESTED BY AUTHORITIES, TO PREVENT THE INCIDENTAL DISCHARGE OF SILT LADEN RUNOFF FROM ENTERING A WATER COURSE OR A DRAINAGE SYSTEM. THE GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES STATES THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS FOR DISTURBANCES LESS THAN FIVE (5) ACRES AND SEVEN (7) DAYS FOR DISTURBANCES GREATER THAN FIVE (5) ACRES, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
3. PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCHING IS REQUIRED ON ALL SEEDING. WHEN HYDROSEEDING, MULCH SHALL NOT BE INCLUDED IN THE TANK WITH THE SEED.
4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2016 NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL OR AS AMENDED.
5. A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE SHALL BE INSTALLED WITHIN FIVE (5) DAYS OF THE PRELIMINARY GRADING.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION CONTINUES (I.E. SLOPES GREATER THAN 3:1).
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
9. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY-FOUR (24) INCHES OF SOIL HAVING A PH OF 5 OR MORE.
10. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
11. CONDUIT OUTLET PROTECTION MUST BE REVIEWED & SUPPLEMENTED AT ALL OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
12. UNFILTERED DEWATERING IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STATE STANDARDS.
13. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
14. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY WILL BE REMOVED IMMEDIATELY.
15. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION AND SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
16. STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD, SHALL BE PLACED WITHIN THE LIMITS OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN.
17. CONCRETE WASHOUT, DUMPSTER, & STAGING AREA LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED AT THE PRE-CONSTRUCITON MEETING. THEY SHALL BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE AND STAGING AREAS AND SHALL BE USED PRIOR TO EXITING THE PROJECT SITE. THE LOCATION SHALL BE IN A PRACTICAL, CLEARLY DELINEATED, AREA AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
18. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
19. ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE PROPERTY OWNER, AND SHALL BECOME THEIR RESPONSIBILITY.
20. PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
21. DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE MUNICIPAL ENGINEER.
22. ALL TEMPORARY, STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED, WHEN ALL CONSTRUCTION ACTIVITY IDENTIFIED IN THE SWPPP HAS BEEN COMPLETED, ALL AREAS OF DISTURBANCE HAVE ACHIEVED FINAL STABILIZATION** AND ALL POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE SWPPP AND ARE OPERATIONAL.
23. BOTTOM AND BERM ELEVATIONS OF TEMPORARY SEDIMENT BASINS TO BE REVIEWED WITH THE CONTRACTOR BASED ON THEIR PROPOSED CONSTRUCTION SEQUENCE FOR THE PROJECT.
24. WASHOUTS, STOCKPILES, AND STAGING AREAS SHOWN FOR SCHEMATIC REFERENCE ONLY. CONTRACTOR TO LOCATE AS NECESSARY TO FACILITATE WORK.

**FINAL STABILIZATION - MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.

MAINTENANCE PLAN DURING CONSTRUCTION:

INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH GP-0-20-001 OR AS AMENDED. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED AND INSTALLED FOR THE PROJECT. THE SEDIMENT TRAPS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 25% OF ITS' CAPACITY. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES APPROXIMATELY 6" DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE LANDSCAPE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

MAINTENANCE AGREEMENT NOTE:

THE OWNER/APPLICANT SHALL ENTER INTO AN ENFORCEABLE MAINTENANCE AGREEMENT WITH THE MUNICIPALITY (IF AN MS4 COMPUNITY) RELATED TO MAINTENANCE OF STORMWATER FACILITIES. THE OWNER/APPLICANT IS RESPONSIBLE TO PERFORM ALL REQUIRED MAINTENANCE BOTH DURING CONSTRUCTION AND LONG-TERM. THE NATURE OF THE AGREEMENT IS TO ALLOW THE MUNICIPALITY TO PERFORM MAINTENANCE AT THEIR OPTION SHOULD THE OWNER/APPLICANT FAIL TO ADEQUATELY MAINTAIN THE SYSTEM AS DETERMINED BY THE MUNICIPAL ENGINEER. MAINTENANCE OF THE STORMWATER SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED SWPPP AND DETAIL SHEETS.

WETLAND BUFFER NOTE:

1. WETLAND AREAS MUST BE STAKED OUT BY A LICENSED SURVEYED AND DELINEATED WITH ORANGE CONSTRUCTION FENCE PRIOR TO THE START OF CONSTRUCTION.

INFILTRATION AREA PROTECTION DURING CONSTRUCTION

1. STORMWATER INFILTRATION AREAS MUST BE PROTECTED FROM SEDIMENTATION AND SURCHARGE LOADING FROM EQUIPMENT AT ALL TIMES DURING CONSTRUCTION.

LEGEND FOR EROSION CONTROL DURING CONSTRUCTION

- PROPERTY LINE
- LOD — CONSTRUCTION LIMIT LINE
- SILT FENCE
- SILT SOCK
- ORANGE CONSTRUCTION FENCE
- STORM INLET SEDIMENT TRAP
- STABILIZED CONSTRUCTION ENTRANCE
- SEDIMENT TRAP OUTLET
- TEMPORARY SWALE
- TEMPORARY SEDIMENT BASIN
- S.P — MATERIAL STOCKPILE
- CHECK DAM
- SLOPE MATTING
- FAIRCLOTH SKIMMER

50 0 50 100

SCALE : 1" = 50'

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/30/23	TPS	REVISED PER REMOVAL OF SUBDIVISION CLAIMERS

Digitally signed by Cory Daniel Robinson
Date: 2023.08.30 13:58:02-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design

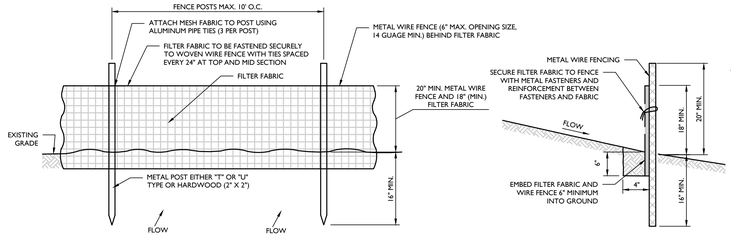
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A		DRAWING NAME: C-SESC	

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:
11 of 21

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

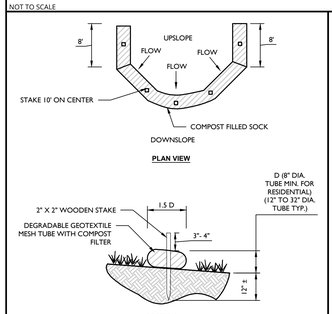


NOTES:

1. GEOTEXTILE TO BE FASTENED SECURELY TO FENCE POST BY USING WIRE TIES OR HOG RINGS. USE 3 FASTENERS PER POST.
2. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
3. ALL SILT FENCE TO BE INSPECTED AND REMEDIAL MAINTENANCE PERFORMED BY THE CONTRACTOR AS REQUIRED. MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
4. WHEN TWO SECTIONS OF FILTER FABRIC ARE JOINED, THEY SHALL BE OVER-WRAPPED BY SIX INCHES AND FOLDED.
5. FILTER FABRIC TO BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
6. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
7. IF SPACE PERMITTED, LOCATE SILT FENCE 10' AWAY FROM TOE OF SLOPE IF THE SLOPE IS STEEPER THAN 1:1.

REINFORCED SILT FENCE (WITH WIRE FENCE) DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-1101 — 07/01/19



DIA. (in.)	SLOPE%						
	2	5	10	20	25	33	50
8	225*	200	100	50	20	-	-
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50

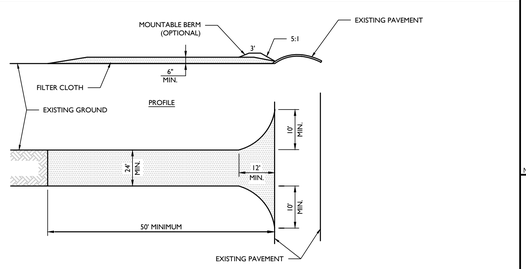
*Length in feet

NOTES:

1. ALL MATERIAL TO MEET **FILTREXX SILTSOX** SPECIFICATIONS OR APPROVED EQUAL.
2. COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST FILTER SOCK DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-1200 — 05/01/17

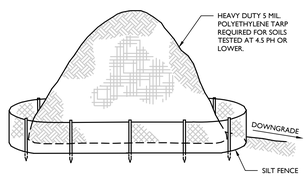


NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. LENGTH: NOT LESS THAN 50 FEET. THICKNESS: NOT LESS THAN (6) INCHES.
2. WIDTH - 24'
3. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTING BERM WITH 5:1 SLOPES WILL BE PERMITTED.
5. 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.
6. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-1000 — 07/01/19

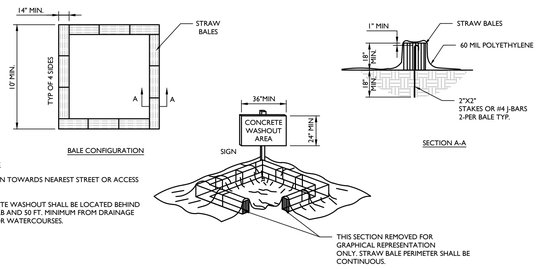


NOTES:

1. ALL STOCKPILES SHALL NOT TO BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY.

TOPSOIL STOCKPILE DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-2500 — 07/01/19



DETAIL NOTES:

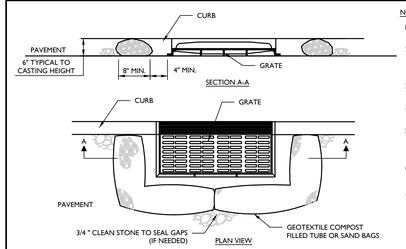
1. FACE SIGN TOWARDS NEAREST STREET OR ACCESS POINT.
2. CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FT. MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.

NOTES:

1. CONCRETE WASHOUTS ARE REQUIRED ON ALL CONSTRUCTION SITES INVOLVING CONCRETE AND STUCCO USE.
2. THE CONTRACTOR SHALL REQUIRE ALL CONCRETE DRIVERS TO UTILIZE THE CONCRETE WASHOUTS ONSITE.
3. WASHOUT FACILITIES SHALL BE LOCATED AT LEAST 50 FEET AWAY FROM STORM SEWER DRAIN INLETS, GUTTERS, OPEN DITCHES, AND WATER COURSES.
4. APPROPRIATE STONE SHOULD COVER PATHS TO CONCRETE WASHOUT.
5. THE NUMBER OF CONCRETE WASHOUTS DEPENDS ON THE EXPECTED DEMAND FOR STORAGE CAPACITY. LARGE SITES WITH EXTENSIVE CONCRETE WORK SHALL BE PLACED AT MULTIPLE LOCATIONS FOR USE BY CONCRETE TRUCK DRIVERS.
6. CONCRETE WASHOUT AREAS SHALL BE IDENTIFIED BY POSTING SIGNS ONSITE.
7. CONCRETE WASHOUTS ARE TO BE INSPECTED DAILY BY THE CONTRACTOR FOR LEAKS OR TEARS IN PLASTIC LINER.
8. REMOVE AND DISPOSE OF ALL MATERIAL WHEN THE WASHOUT HAS BEEN FILLED TO 75% CAPACITY.
9. PRIOR TO ANY RAINFALL, ALL CONCRETE WASHOUTS ARE TO BE CLEANED OUT OR COVERED.
10. ONCE THE MATERIAL HAS BEEN CLEANED OUT OF THE CONCRETE WASHOUT FACILITY, THE FACILITY MUST BE INSPECTED FOR REPAIR, RECONSTRUCTION OR REPLACEMENT. ALL PLASTIC LINING SHALL BE REMOVED AND REPLACED.
11. PRE-FABRICATED OR ONSITE FABRICATED CONCRETE WASHOUTS MAY BE USED.
12. OPTIONS FOR ONSITE CONCRETE WASHOUTS:
    A. DIG A PIT AND LINE WITH 10 MIL PLASTIC SHEETING.
    B. CREATE AN ABOVE-GROUND STRUCTURE FROM STRAW BALES OR SANDBAGS WITH 10 MIL PLASTIC LINING.

CONCRETE WASHOUT DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-1700 — 07/01/19

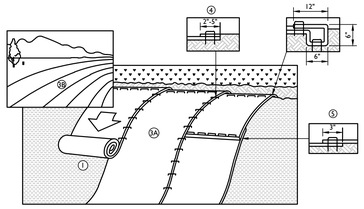


NOTES:

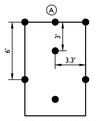
1. GEOTEXTILE TO BE WOVEN POLYPROPYLENE PRODUCT, OR APPROVED EQUAL.
2. FILLER CORE MAY BE SAND, COMPOST, OR PEA GRAVEL COMPLETELY CONTAINED WITHIN GEOTEXTILE. SEAMS, CLOSED BY SUITABLE MECHANICAL MEANS TO PREVENT LEAKAGE OF FILLER.
3. WHERE NO CURB IS PRESENT, BARRIER SHALL COMPLETELY ENCIRCLE THE DRAIN INLET.
4. INLET GRATE OPENING IS TO BE KEPT CLEAR OF OBSTRUCTIONS AT ALL TIMES.
5. THE PROTECTION DEVICE WILL BE DESIGNED TO CAPTURE OR FILTER RUNOFF FROM THE 1 YEAR/ 24 HOUR STORM EVENT AND SHALL SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO THE STORM SEWER SYSTEM.
6. OTHER METHODS THAT ACCOMPLISH THE PURPOSE OF STORM SEWER INLET PROTECTION MAY BE USED IF APPROVED BY THE PROJECT ENGINEER.
7. INSPECTIONS SHALL BE FREQUENT. MAINTENANCE, REPAIR, AND REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. THE BARRIER SHALL BE REMOVED WHEN THE AREA DRAINING TOWARDS THE INLET HAS REACHED FINAL STABILIZATION.

INLET PROTECTION (FILTER BARRIER) DETAIL

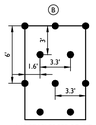
NOT TO SCALE — MCNY-SOIL-EROS-1500 — 07/01/19



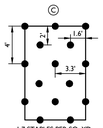
STAPLES PATTERN GUIDE
6.6.7' WIDE ROLLS



0.7 STAPLES PER SQ. YD.



1.15 STAPLES PER SQ. YD.



1.7 STAPLES PER SQ. YD.

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.

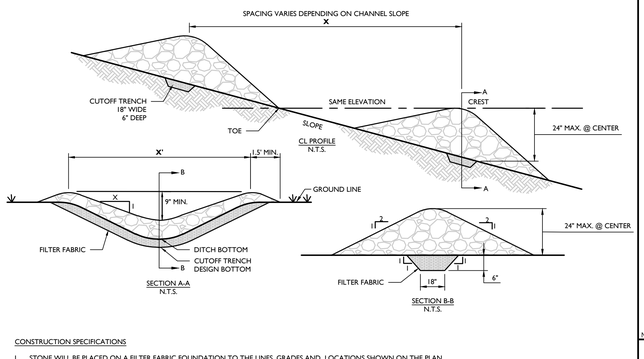
   * WHEN USING MATTING WITH SEED, DO NOT SEED THE AREA. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP x 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY STEP BY STEP ACROSS THE SLOPE TAMPERING IT DOWN ALONG THE WAY. RECP'S SHALL UNROLL WITH APPROPRIATE SIDE TIGHTLY AGAINST THE SOIL SURFACE. RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKESSHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAKED WITH APPROXIMATELY 2" TO 5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.

   * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

EROSION MATTING (CURLEX ENFORCER I) DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-2200 — 07/01/19



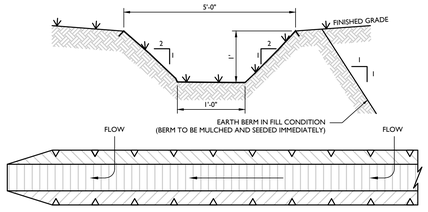
CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN ON THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 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 CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA: 2 ACRES

STONE CHECK DAM DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-2301 — 07/01/19



PLAN

TO BE INSTALLED ABOVE DISTURBED AREAS, TO DIVERT RUNOFF OFF-SITE WITHOUT INCREASING EROSION; INTERMITTENTLY ACROSS DISTURBED AREAS, TO SHORTEN OVERLAND FLOW DISTANCES; BELOW DISTURBED AREAS, TO DIVERT SEDIMENT-LADEN WATER TO A SEDIMENT TRAPPING DEVICE; AND TO SAFELY TRANSPORT RUNOFF ALONG ROADWAYS.

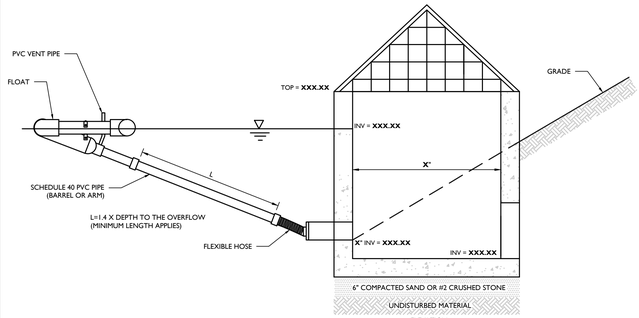
† WHERE SWALE TRAVERSES CONSTRUCTION VEHICLE PATH, DEPTH TO BE 6". SEE PLAN FOR LOCATION

INSTALLATION NOTES:

1. ALL SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE 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.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. INSPECTION AND MAINTENANCE MUST BE PROVIDED BY THE CONTRACTOR AS REQUIRED
9. STABILIZATION SHALL BE SEED AND STRAW MULCH.

TEMPORARY SWALE & EARTH BERM DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-2302 — 07/01/19

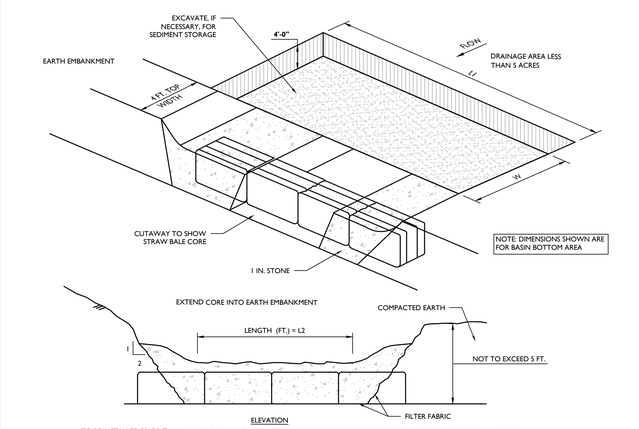


GENERAL NOTES:

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS PROVIDED BY MANUFACTURER FOR EACH SIZE.

FAIRCLOTH SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-2700 — 07/01/19



TO BE INSTALLED PRIOR TO GRADING OR FILLING IN THE DRAINAGE AREA THEY ARE TO PROTECT. TRAPS THAT ARE TO FUNCTION DURING BUILDING CONSTRUCTION MUST NOT BE LOCATED WITHIN 20 FEET OF A PROPOSED BUILDING FOUNDATION. WHILE TRAPS SHOULD BE SITED TO MAXIMIZE STORAGE BENEFIT, THEY SHOULD NOT BE LOCATED IN WETLANDS OR WETLAND BUFFER AREAS, OR IN EXISTING WATERCOURSES.

SEE EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS.

INSTALLATION NOTES:

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED AS WELL.
   THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER SIZED STONES, ROCKS, ORGANIC MATERIAL AND OTHER QUESTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
2. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
3. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
4. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
5. ALL CUT AND FILL SLOPES SHALL BE 1 : 2 OR FLATTER.
6. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1" THICKNESS OF 2" AGGREGATE PLACED ON THE UP GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.

SIZING CALCULATIONS

NOTE:

1. 3,600 CUBIC FEET OF STORAGE REQUIRED PER ACRE OF DISTURBANCE.

*THIS IS THE MINIMUM AMOUNT OF SEDIMENT TRAPS, ADDITIONAL MAY BE REQUIRED BASED UPON OTHER ON-SITE CONDITIONS AND CONTRACTOR SCHEDULE AND PHASING ACTIVITIES.

STONE OUTLET SEDIMENT TRAP TABLE

SEDIMENT TRAP	DRAINAGE AREA	AREA (FT²)	DEPTH (FT.)	VOLUME REQ'D (C.F.)	VOLUME PROVIDED (C.F.)	WEIR LENGTH (L2)
A	±1.5 AC.	1,410	4.0 FT.	5,400 C.F.	5,640 C.F.	4.0 FT.
B	±2.7 AC.	3,760	3.0 FT.	9,720 C.F.	11,280 C.F.	4.0 FT.
C	±1.1 AC.	1,125	3.0 FT.	3,960 C.F.	4,500 C.F.	4.0 FT.
D E	±2.2 AC.	3,950 1,500	2.0 FT. 3.0 FT	7,920 C.F.	12,400 C.F.	4.0 FT.
F G	±2.5 AC.	4,415 2,430	2.0 FT. 4.0 FT.	9,000 C.F.	18,550 C.F.	4.0 FT.
H	±2.2 AC.	8,040	3.0 FT.	7,920 C.F.	24,120 C.F.	4.0 FT.

STONE OUTLET SEDIMENT TRAP DETAIL

NOT TO SCALE — MCNY-SOIL-EROS-1601 — 07/01/19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

811 Call before you dig.
PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/09/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

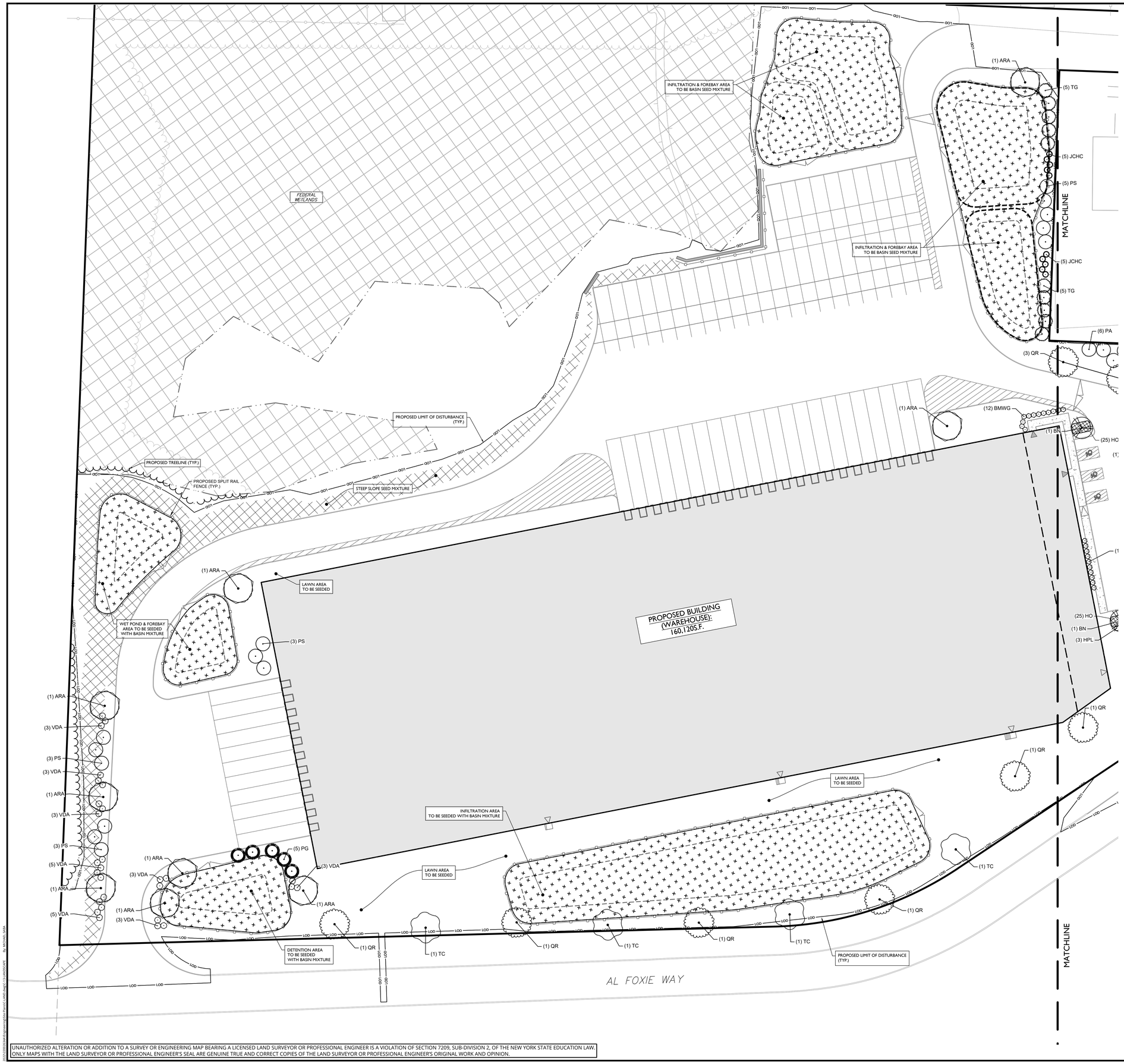
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	07/03/2023	MAS	CDR

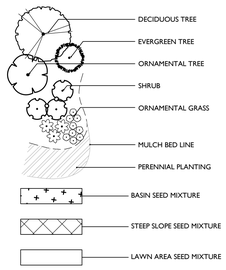
PROJECT NUMBER: 22002636A
DRAWING NAME: C-SESC

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL DETAILS

SHEET NUMBER:
12 of 21



LANDSCAPE LEGEND



PLAN NOTE

1. THIS PLAN IS TO BE USED FOR LANDSCAPE PURPOSES ONLY. REFER TO DETAIL SHEETS FOR GENERAL NOTES AND LANDSCAPE DETAILS.

LANDSCAPE NOTES

1. LOCATIONS OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES IS APPROXIMATE AND MAY VARY DUE TO THE LOCATIONS OF SITE IMPROVEMENTS AND/OR BUILDING.
2. FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT AND A TOWN REPRESENTATIVE.
3. ALL AREAS WITHIN THE PLANTING BED LIMITS SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD BARK MULCH.
4. PROPOSED LAWN AREAS AROUND BUILDINGS SHALL BE STABILIZED WITH SEED. SEE SHEET 16 (LAWN AREAS MIXTURE).
5. ANY PROPOSED IRRIGATION DESIGN AND/OR SYSTEM WILL BE DETERMINED IN THE FIELD BY THE IRRIGATION CONTRACTOR.
6. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK.
7. NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE MADE WITHOUT WRITTEN CONSENT FROM THE TOWN OF ORANGETOWN LANDSCAPE CONSULTANT.
8. ALL VEGETATION SHOWN ON THIS PLAN WILL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE.
9. ONLY NATURAL HERBICIDES AND PESTICIDES WILL BE USED IF NECESSARY IN THE MANAGEMENT OF THE SITE LANDSCAPING.

30 0 30 60

SCALE : 1" = 30'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023-22002634A/Engineering/Site Plan/C-LAND.dwg/C-L1-LANDSCAPE By: MICHAEL SABA

Colliers
Engineering & Design
www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

811 Know what's below. Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/06/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

REGISTERED LANDSCAPE ARCHITECT JUSTIN E. DATES 001964 STATE OF NEW YORK

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

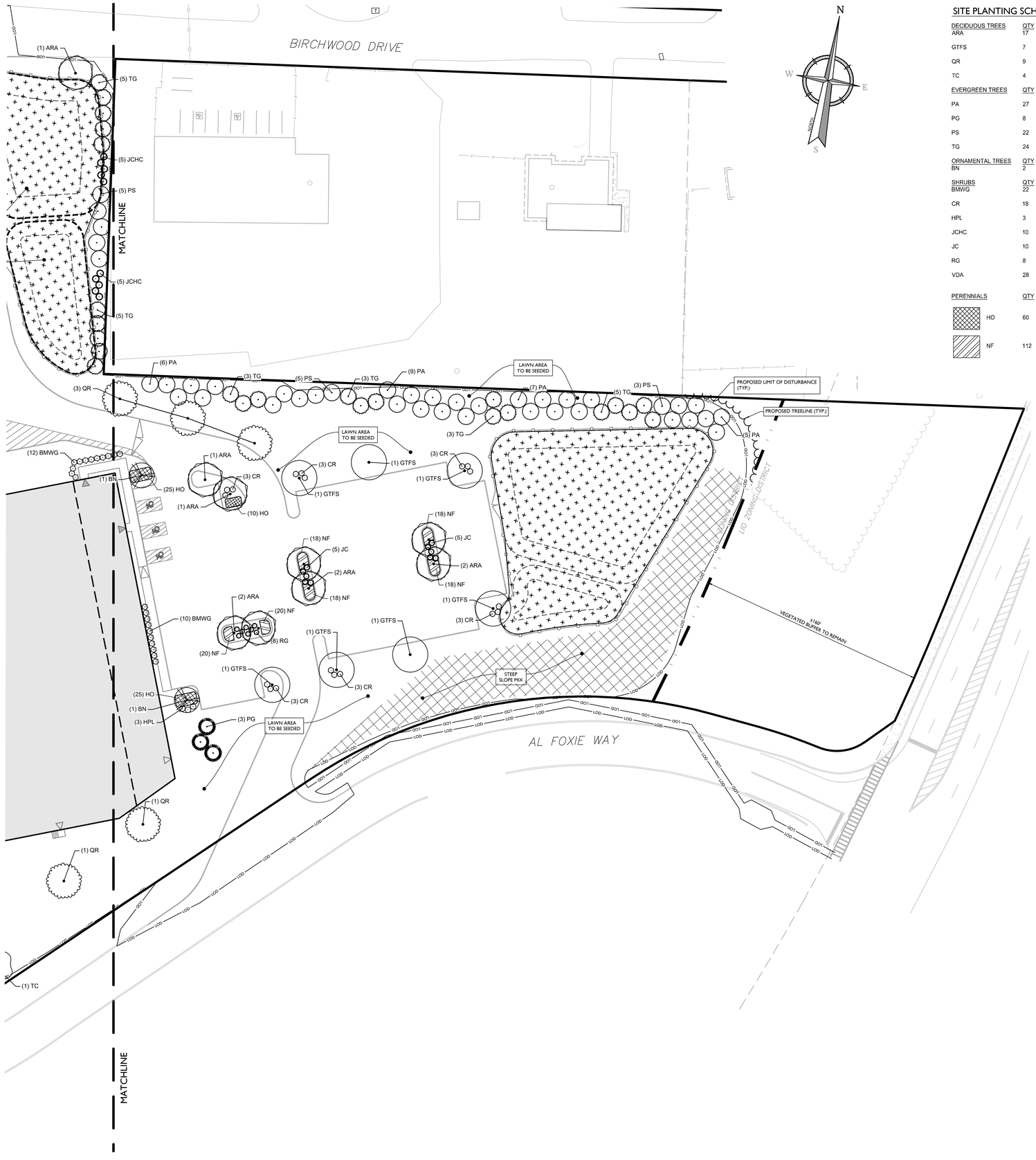
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A		DRAWING NAME: C-LAND	

SHEET TITLE:
LANDSCAPE PLAN
WEST

SHEET NUMBER:
13 of 21

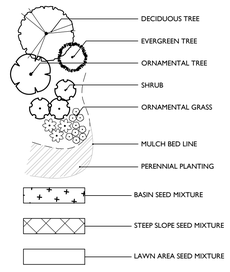
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



SITE PLANTING SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME	ROOT	CAL	SIZE	REMARKS
ARA	17	ACER RUBRUM 'AUTUMN FLAME' / AUTUMN FLAME RED MAPLE	B & B	2-2 1/2"		STRAIGHT LEADER/SYM. BRANCHING
GTFS	7	GLEDITSIA TRIACANTHOS 'SKYLINE' / SKYLINE HONEY LOCUST	B & B	2-2 1/2"		STRAIGHT LEADER/SYM. BRANCHING
QR	9	QUERCUS RUBRA / RED OAK	B & B	2-2 1/2"		STRAIGHT LEADER/SYM. BRANCHING
TC	4	TILIA CORDATA / LITTLELEAF LINDEN	B & B	2-2 1/2"		STRAIGHT LEADER/SYM. BRANCHING
EVERGREEN TREES	**QTY**	**BOTANICAL / COMMON NAME**	**ROOT**	**CAL**	**SIZE**	**REMARKS**
PA	27	PICEA ABIES/ NORWAY SPRUCE	B & B	6-8' HT.		DENSE/TYP. SPECIES HABIT
PG	8	PICEA GLAUCA / WHITE SPRUCE	B & B	6-8' HT.		DENSE / TYP. SPECIES HABIT
PS	22	PINUS STROBUS / WHITE PINE	B & B	6-8' HT.		DENSE / TYP. SPECIES HABIT
TG	24	THUJA OCCIDENTALIS `GREEN GIANT` / GREEN GIANT ARBORVITAE	B & B	6-8' HT.		DENSE / TYP. SPECIES HABIT
ORNAMENTAL TREES	**QTY**	**BOTANICAL / COMMON NAME**	**ROOT**	**CAL**	**SIZE**	**REMARKS**
BN	2	BETULA NIGRA / RIVER BIRCH	B & B	6` - 7`		MULTISTEM / TYP. SPECIES HABIT
SHRUBS	**QTY**	**BOTANICAL / COMMON NAME**	**ROOT**	**HEIGHT**	**SIZE**	**REMARKS**
BMWG	22	BUXUS MICROPHYLLA JAPONICA 'WINTER GEM' / WINTER GEM JAPANESE BOXWOOD	CONT	24"-30"		TYPICAL SPECIES HABIT
CR	18	CORNUS SERICEA / RED TWIG DOGWOOD	CONT	24"-30"		TYPICAL SPECIES HABIT
HPL	3	HYDRANGEA PANICULATA 'LIMELIGHT' / LIMELIGHT PANICLE HYDRANGEA	CONT		24"-30"	TYPICAL SPECIES HABIT
JCHC	10	JUNIPERUS CHINENSIS 'HETZII COLUMNARIS' / HETZI COLUMN JUNIPER	CONT		6`-7`	TYPICAL SPECIES HABIT
JC	10	JUNIPERUS COMMUNIS DEPRESSA / COMMON JUNIPER	CONT		24"-30"	TYPICAL SPECIES HABIT
RG	8	RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC	CONT	18-24"		TYPICAL SPECIES HABIT
VDA	28	VIBURNUM DENTATUM `ARROWWOOD` / ARROWWOOD VIBURNUM	CONT	30-36"		TYPICAL SPECIES HABIT
PERENNIALS	**QTY**	**BOTANICAL / COMMON NAME**	**CONT.**			**REMARKS**
HO	60	HEMEROCALLIS X `STELLA DE ORO` / STELLA DE ORO DAYLILY	1 GAL			CLUMPS, 18" O.C.
NF	112	NEPETA X FAASSENII / CATMINT	1 GAL			CLUMPS, 24" O.C.

LANDSCAPE LEGEND



PLAN NOTE

1. THIS PLAN IS TO BE USED FOR LANDSCAPE PURPOSES ONLY. REFER TO DETAIL SHEETS FOR GENERAL NOTES AND LANDSCAPE DETAILS.

LANDSCAPE NOTES

1. LOCATIONS OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES IS APPROXIMATE AND MAY VARY DUE TO THE LOCATIONS OF SITE IMPROVEMENTS AND/OR BUILDING.
2. FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT AND A TOWN REPRESENTATIVE.
3. ALL AREAS WITHIN THE PLANTING BED LIMITS SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD BARK MULCH.
4. PROPOSED LAWN AREAS AROUND BUILDINGS SHALL BE STABILIZED WITH SEED. SEE SHEET 16 (LAWN AREAS MIXTURE).
5. ANY PROPOSED IRRIGATION DESIGN AND/OR SYSTEM WILL BE DETERMINED IN THE FIELD BY THE IRRIGATION CONTRACTOR.
6. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK.
7. NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE MADE WITHOUT WRITTEN CONSENT FROM THE TOWN OF ORANGETOWN LANDSCAPE CONSULTANT.
8. ALL VEGETATION SHOWN ON THIS PLAN WILL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE.
9. ONLY NATURAL HERBICIDES AND PESTICIDES WILL BE USED IF NECESSARY IN THE MANAGEMENT OF THE SITE LANDSCAPING.

30 0 30 60

SCALE : 1" = 30'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2022-0000634A/Engineering/Site Plans/C-LAND.dwg/C-14-LANDCARE By: MICHAEL SAMA

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08.08.23	TPS	REVISED PER REMOVAL OF SUBSURFACE EMPLOYEE CHAMBERS

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

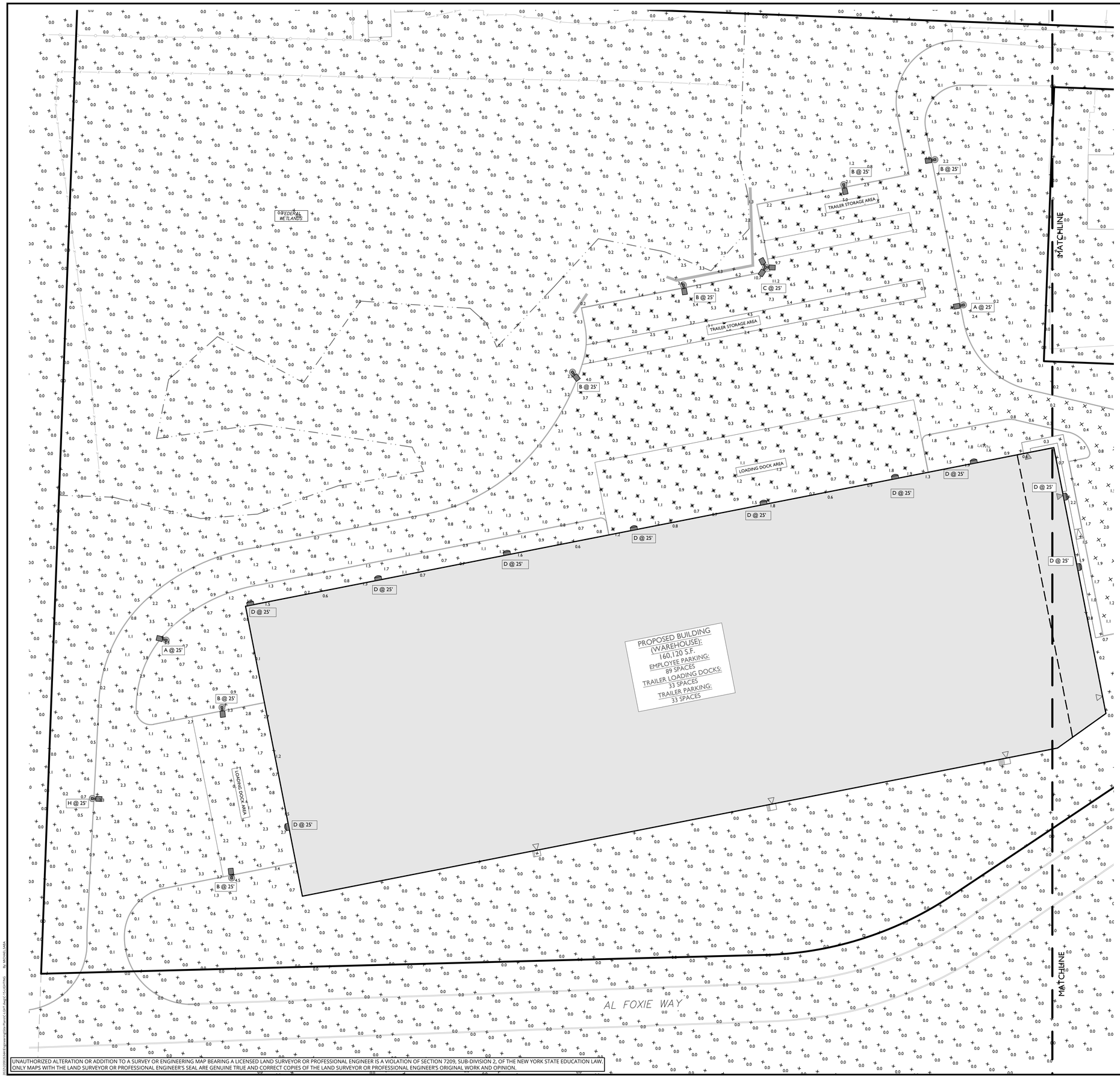
TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A	DRAWING NAME: C-LAND		

SHEET TITLE:
LANDSCAPE PLAN
EAST

SHEET NUMBER:
14 of 21



UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\22002634\Engineering\Site Plans\C-LIGHT.dwg C-LIGHTING By: MICHAEL SAKA

N
W E
S
NORTH

LIGHTING LEGEND:

- SINGLE FIXTURE POLE LIGHT
- TRIPLE FIXTURE POLE LIGHT
- WALLPACK
- 0.0 LIGHT LEVEL AT GRADE (IN FOOTCANDLES)

LIGHTING NOTES:

1. THIS PLAN IS TO BE USED FOR LIGHTING PURPOSES ONLY.
2. POLES AND FIXTURES AS SUPPLIED BY:
   POLES & WALL FIXTURES - HOLOPHANE
   POLE FIXTURES - AMERICAN ELECTRIC LIGHTING
3. LAMPS ARE TO BE LEDs. A LIGHT LOSS FACTOR (LLF) WAS USED AS SHOWN IN THE LUMINARIES SCHEDULE.
4. FIXTURES AND POLES ARE TO BE BLACK.
5. POLE MOUNTED FIXTURES SHALL BE PLACED A MINIMUM OF TWO (2) FEET BEHIND CURBS, EDGE OF PAVEMENT OR RETAINING WALLS IN CAR PARKING AREAS.
6. PROPOSED LIGHT FIXTURE LOCATIONS ARE CRITICAL TO PROVIDE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. THE LIGHTING CONTRACTOR SHALL FIELD VERIFY FIXTURE LOCATIONS PRIOR TO INSTALLATION. IF ADJUSTMENT TO ANY LIGHT FIXTURE LOCATION IS REQUIRED DUE TO FINAL CONSTRUCTION OF UTILITIES AND SITE IMPROVEMENTS, THE LIGHTING CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO INSTALLATION.
7. LIGHTING SHOWN ON PLAN DEPICTS AVERAGE MAINTAINED FOOTCANDLE LEVELS AT GRADE.
8. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
9. ELECTRICAL PLANS FOR WIRING LAYOUT BY OTHERS.
10. POLE BASE INSTALLATION SHALL INCLUDE A SUPPLEMENTARY GROUND ROD AND WIRE LEAD TO BASE FOR POWER CONNECTION. DETAILS PER PROJECT ELECTRICAL ENGINEER.
11. ALL LIGHTING FIXTURES WILL BE DARK SKY COMPLIANT.

30 0 30 60
SCALE : 1" = 30'

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers
Engineering & Design

www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

811 Know what's below. Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS
VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/08/23	TPS	REVISED PER REMOVAL OF SUBSURFACE EXFILTRATION CHAMBERS

REGISTERED LANDSCAPE ARCHITECT JUSTIN E. DATES 001964 STATE OF NEW YORK

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

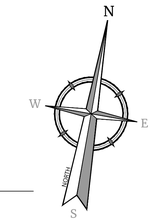
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

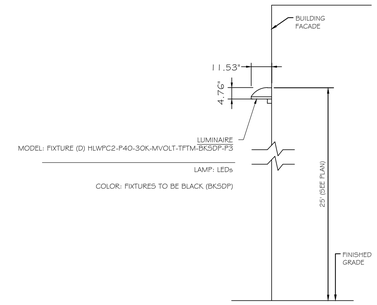
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR

PROJECT NUMBER:	DRAWING NAME:
22002634A	C-LIGHT

SHEET TITLE:
LIGHTING PLAN
WEST

SHEET NUMBER:
15 of 21



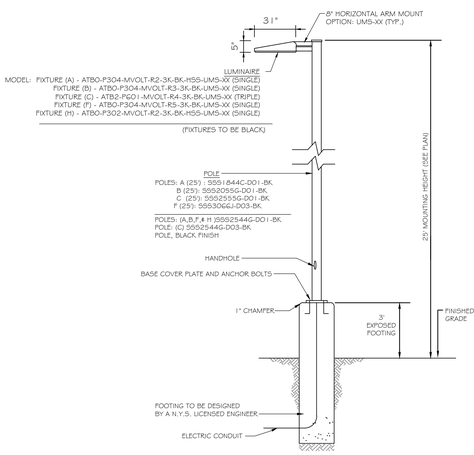


WALL MOUNTED FIXTURE DETAIL

NOT TO SCALE

NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY HOLOPHANE LIGHTING OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. *VOLTAGE TO BE CONFIRMED BY ELECTRICIAN CONTRACTOR.



POLE MOUNTED FIXTURE DETAIL

NOT TO SCALE

NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY AMERICAN ELECTRIC LIGHTING AND POLES BY HOLOPHANE (MANUFACTURER TO CONFIRM POLE SIZE) OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. FOOTING TO BE DESIGNED, SIGNED, AND SEALED BY A N.Y.S. LICENSED ENGINEER.
4. *VOLTAGE TO BE CONFIRMED BY ELECTRICIAN CONTRACTOR.
5. PROPOSED POLES HEIGHT TO BE MODIFIED IN FIELD (AS NEEDED) TO MEET DESIGN.

LIGHTING LEGEND:

- SINGLE FIXTURE POLE LIGHT
- TRIPLE FIXTURE POLE LIGHT
- WALLPACK
- 0.0 LIGHT LEVEL AT GRADE (IN FOOTCANDLES)

LUMINAIRE SCHEDULE

KEY	QTY.	DESCRIPTION	ARRANGEMENT	MTG. HT.	LUMENS/LAMP	LLF	CATALOG #
A	5	AMERICAN ELECTRIC LIGHTING ATB0 SERIES LED	SINGLE	25'	14,351	0.92	ATB0-P304-MVOLT-R2-3K-BK-HSS-UMS-XX-P7
B	6	AMERICAN ELECTRIC LIGHTING ATB0 SERIES LED	SINGLE	25'	17,889	0.92	ATB0-P304-MVOLT-R3-3K-BK-UMS-XX-P7
C	1	AMERICAN ELECTRIC LIGHTING ATB0 SERIES LED	TRIPLE	25'	23,759	0.92	ATB2-P601-MVOLT-R4-3K-BK-UMS-XX-P7
D	10	HOLOPHANE WALL PACK FULL CUTOFF LED	SINGLE(WALL)	25'	9,561	0.92	HLWPC2-P40-30K-MVOLT-TFTM-BKSDP-P3
F	2	AMERICAN ELECTRIC LIGHTING ATB0 SERIES LED	SINGLE	25'	17,669	0.92	ATB0-P304-MVOLT-R5-3K-BK-UMS-XX-P7
H	1	AMERICAN ELECTRIC LIGHTING ATB0 SERIES LED	SINGLE	25'	9,848	0.92	ATB0-P302-MVOLT-R2-3K-BK-HSS-UMS-XX-P7

1. LIGHT FIXTURE VOLTAGE REQUIREMENTS TO BE CONFIRMED BY CONTRACTOR PRIOR TO ORDERING.

CALCULATION SUMMARY

DESCRIPTION	CALC. TYPE	UNITS	AVG.	MAX.	MIN.	AVG. / MIN.
CAR PARKING AREA	ILLUMINANCE	FC	1.8	6.6	0.2	9.0 : 1
LOADING DOCK / TRAILER STORAGE AREA	ILLUMINANCE	FC	1.7	11.2	0.2	8.5 : 1

30 0 30 60

SCALE : 1" = 30'

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/06/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS

REGISTERED LANDSCAPE ARCHITECT JUSTIN E. DATES 001964 STATE OF NEW YORK

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

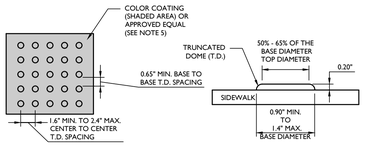
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER: 22002634A	DRAWING NAME: C-LGHT		

SHEET TITLE:
LIGHTING PLAN
EAST

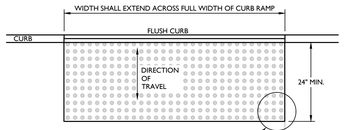
SHEET NUMBER:
16 of 21

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



TRUNCATED DOME PLAN VIEW ENLARGEMENT

TRUNCATED DOME ELEVATION



PLAN VIEW

DETECTABLE WARNING SURFACE DETAIL

NOT TO SCALE MCNY-SITE-HADA-2100 07/01/19

NOTES:

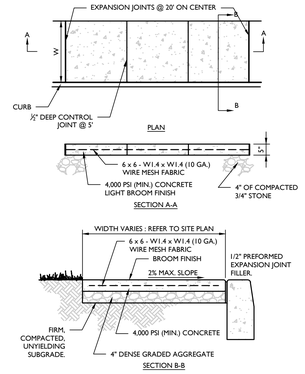
1. THE DETECTABLE WARNING SURFACE SHALL BE MANUFACTURED MATS THAT ARE EMBEDDED AND CAST-IN-PLACE IN THE CONCRETE.
2. IN LIEU OF A CAST IN PLACE DETECTABLE WARNING SURFACE, THE CONTRACTOR MAY UTILIZE A SURFACE APPLIED DETECTABLE WARNING SURFACE WITH PRIOR APPROVAL OF THE UNDERSIGNED ENGINEER AND PRIOR TO POURING OF THE CONCRETE RAMP.
3. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SHOP DRAWING OF THE DETECTABLE WARNING SURFACE PRIOR TO CONSTRUCTION FOR APPROVAL.
4. THE CONTRACTOR SHALL PROVIDE A MANUFACTURER CERTIFICATION THAT THE DETECTABLE WARNING SURFACE COMPLIES WITH THE CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN AS PUBLISHED BY THE DEPARTMENT OF JUSTICE AND THE ADA STANDARDS AS SUPPORTED BY THE UNITED STATES ACCESS BOARD, AND THE STATE AND/OR LOCAL ADA STANDARDS.
5. **SAFETY RED** SHALL BE APPROVED BY THE LOCAL JURISDICTION PRIOR TO INSTALLATION. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. ALTERNATIVE COLOR MAY BE USED PROVIDED SUCH COLOR COMPLIES WITH CURRENT ADA STANDARDS.
6. DETECTABLE WARNINGS SHALL CONSIST OF A SURFACE OF TRUNCATED DOMES.
7. TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A BASE DIAMETER OF 0.9 INCH (23 mm) MINIMUM AND 1.4 INCHES (36 mm) MAXIMUM, A TOP DIAMETER OF 50 PERCENT OF THE BASE DIAMETER MINIMUM TO 65 PERCENT OF THE BASE DIAMETER MAXIMUM, AND A HEIGHT OF 0.2 INCH (5.1 mm).
8. TRUNCATED DOMES IN DETECTABLE WARNING SURFACE SHALL HAVE A CENTER-TO-CENTER SPACING OF 1.6 INCHES (41 mm) MINIMUM AND 2.4 INCHES (61 mm) MAXIMUM, AND A BASE-TO-BASE SPACING OF 0.65 INCH (17 mm) MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID.
9. SOME DETECTABLE WARNING PRODUCTS REQUIRE A CONCRETE BORDER FOR PROPER INSTALLATION. WHERE REQUIRED BY THE MANUFACTURER, THE CONCRETE BORDER SHALL NOT EXCEED 2 INCHES (51 mm).
10. DETECTABLE WARNING SURFACES SHOULD NOT BE PLACED ON PAVING OR EXPANSION JOINTS AT CURB RAMPS. THE ROWS OF TRUNCATED DOMES IN DETECTABLE WARNING SURFACES SHOULD BE ALIGNED PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP RUN AND THE STREET SO PEDESTRIANS WHO USE WHEELCHAIRS CAN "TRACK" BETWEEN THE DOMES.
11. ON PERPENDICULAR CURB RAMPS, DETECTABLE WARNING SURFACES SHALL BE PLACED AS FOLLOWS:
    a. WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE IN FRONT OF THE BACK OF CURB, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BACK OF CURB.
    b. WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5.0 FT OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK.
    c. WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS MORE THAN 5.0 FT, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE LOWER LANDING AT THE BACK OF CURB.
12. ON PARALLEL CURB RAMPS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE TURNING SPACE AT THE FLUSH TRANSITION BETWEEN THE STREET AND SIDEWALKS.
13. ON BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BACK OF CURB.

NOTES:

1. CONTRACTOR SHALL PREPARE SHOP DRAWINGS OF EACH CURB RAMP FOR SUBMISSION AND APPROVAL OF THE UNDERSIGNED PROFESSIONAL AND THE MUNICIPAL, COUNTY, STATE OR OTHER AGENCY'S ENGINEER HAVING JURISDICTION.
2. LANDING AREA, APPROACH SIDEWALK TRANSITIONS AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
3. CURB AT RAMP OPENING (FLUSH CURB) TO BE FLUSH WITH ROADWAY PAVEMENT.
4. CROSSWALKS AND PAVEMENT MARKINGS TO BE INSTALLED AS DENOTED ON SITE PLAN.
5. MAXIMUM RAMP SLOPE MAY BE 12H:1V UPON APPROVAL OF ENGINEER. RAMP SLOPES SHOWN ARE THE PREFERRED SLOPE. SIDE FLARE SLOPES MAY BE 10H:1V UPON APPROVAL OF THE ENGINEER.
6. MINIMUM RAMP CROSS-SLOPE SHALL BE 0.50%. THE MAXIMUM RAMP CROSS-SLOPE MAY BE 2.00% UPON APPROVAL OF THE ENGINEER. CROSS-SLOPES SHOWN IN THE DETAILS ARE THE PREFERRED SLOPES TO MAINTAIN A LEVEL OF CONSTRUCTION TOLERANCE.
7. ACCESSIBLE RAMPS SHALL BE INSTALLED PURSUANT WITH THE CURRENT UNITED STATES ACCESS BOARD ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES AND THE ADA STANDARDS FOR ACCESSIBLE DESIGN AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE AND OTHER APPLICABLE LOCAL AND STATE STANDARDS IN EFFECT AT THE DATE OF CONSTRUCTION.
8. DEVIATIONS FROM THE CURB RAMP DETAILS REQUIRE WRITTEN APPROVAL OF THE UNDERSIGNED PROFESSIONAL AND THE MUNICIPAL, COUNTY, STATE OR OTHER AGENCY'S ENGINEER HAVING JURISDICTION.
9. THE RAMP SURFACE SHALL HAVE A NON-SLIP, HAND BROOMED FINISH.
10. CONCRETE EXPANSION JOINTS SHALL HAVE A FIRM SURFACE WITH 1/4" BEVELED CONCRETE EDGES. THE JOINT SURFACE SHALL NOT BE MORE THAN 1/4" BELOW THE ADJOINING CONCRETE SURFACE.
11. CURB RAMP MUST BE WHOLLY CONTAINED WITHIN THE CROSSWALK CROSSING.
12. THE CLEAR SPACE SHALL BE INCREASED TO 5 FEET WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK.
13. THE MAXIMUM SEPARATION BETWEEN THE BACK OF CURB AND DETECTABLE WARNING SURFACE SHALL NOT EXCEED 5 FEET. THE MAXIMUM SEPARATION AREA MAY BE WITHIN THE 4' X 4' CLEAR SPACE.
14. SEE SEPARATE DETAILS FOR "DETECTABLE WARNING SURFACE" AND "CURB RAMP SECTIONS".
15. WHERE SIDE FLARES ARE NOT REQUIRED, PROVIDE AN 18" CURB TAPER TO THE FLUSH CURB.
16. ALL CURB RAMP FLUSH CURB SHALL BE MADE WITH CONCRETE CURB CRADLE, REGARDLESS OF THE CURB MATERIAL USED THROUGHOUT THE SITE.

CURB RAMP NOTES

NOT TO SCALE MCNY-SITE-HADA-2500 07/01/19

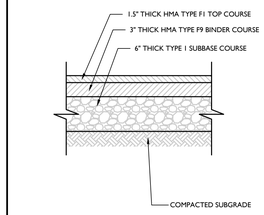


NOTES:

1. A PREFORMED, BITUMINOUS EXPANSION JOINT 1/2" THICK, 4" WIDE AND EXTENDING THE FULL WIDTH OF THE SIDEWALK (UNBROKEN) SHALL BE INSTALLED.
2. ½" DEEP CONTROL JOINTS INSTALLED AT AN INTERVAL OF EVERY 5'.
3. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A 1/4" RADIUS.
4. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

REINFORCED CONCRETE SIDEWALK (NEXT TO CURB) DETAIL

NOT TO SCALE MCNY-SITE-PVMT-1800 07/01/19

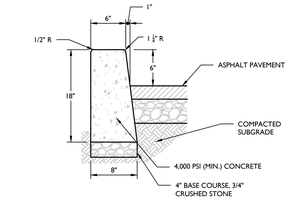


NOTES:

1. PAVEMENT TYPES TO BE IN ACCORDANCE WITH CURRENT NYSDOT STANDARDS AND SPECIFICATIONS.

STANDARD ASPHALT PAVEMENT DETAIL

NOT TO SCALE MCNY-SITE-PVMT-1000 07/01/19

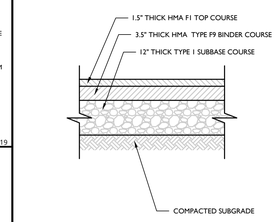


NOTES:

1. PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 20' MAX. INTERVALS ALONG THE CURB. PROVIDE CONTROL JOINTS @ 10 FEET MAX. BETWEEN EXPANSION JOINTS.

CONCRETE CURB (ASPHALT PAVEMENT) DETAIL

NOT TO SCALE MCNY-SITE-CURB-1000 07/01/19

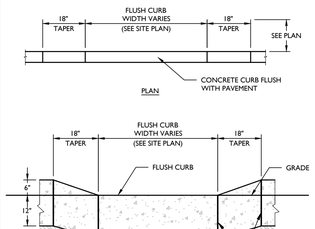


NOTES:

1. PAVEMENT TYPES TO BE IN ACCORDANCE WITH CURRENT NYSDOT STANDARDS AND SPECIFICATIONS.

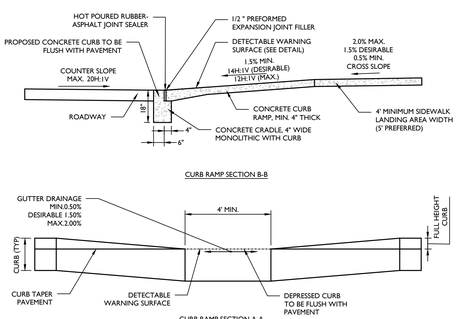
HEAVY-DUTY ASPHALT PAVEMENT DETAIL

NOT TO SCALE MCNY-SITE-PVMT-1100 07/01/19



CONCRETE FLUSH CURB DETAIL

NOT TO SCALE MCNY-SITE-CURB-1300 07/01/19



NOTES:

1. DEPRESSED CURB AT DETECTABLE WARNING SHALL BE A SMOOTH LEVEL SURFACE THAT IS FLUSH WITH THE ADJOINING PAVEMENT. NO BUMPS OR ROUGH SURFACE ARE ALLOWED. SUCH UNEVENNESS SHALL BE MILLED OR GRINDED SMOOTH.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT RAMP. RAMP SHALL SLOPE TOWARDS PAVEMENT NO PONDING OF WATER IS PERMITTED AT CURB RAMP. PAVEMENT GRADES TO BE ADJUSTED AS NECESSARY TO PROVIDE POSITIVE GUTTER DRAINAGE.
3. CURB (DROPPED CURB) GUTTER-LINE TO BE FLUSH WITH ROADWAY PAVEMENT.
4. MAXIMUM GUTTER DRAINAGE GRADE MAY BE INCREASED TO 2.00% UPON THE WRITTEN APPROVAL OF THE UNDERSIGNED PROFESSIONAL.
5. DEVIATION FROM THIS DETAIL REQUIRES THE WRITTEN APPROVAL OF THE UNDERSIGNED PROFESSIONAL.

CURB RAMP SECTIONS DETAIL

NOT TO SCALE MCNY-SITE-HADA-2000 07/01/19

30" x 30"

COLORS:
LEGEND = WHITE (RETROREFLECTIVE)
BACKGROUND = RED (RETROREFLECTIVE)

R1-1 SIGN DETAIL

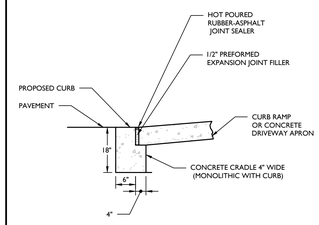
NOT TO SCALE MCCM-SIGN-REGU-R1-1 12/01/20

24" x 30"

COLORS:
LEGEND = RED (RETROREFLECTIVE)
BACKGROUND = WHITE (RETROREFLECTIVE)

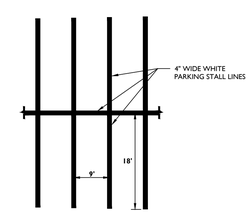
R8-3a SIGN DETAIL

NOT TO SCALE MCCM-SIGN-REGU-R8-3A 12/01/20



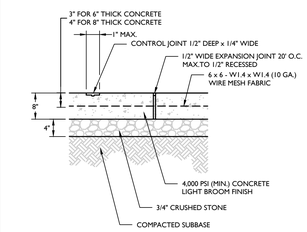
FLUSH CURB AND CRADLE DETAIL

NOT TO SCALE MCNY-SITE-HADA-2300 07/01/19



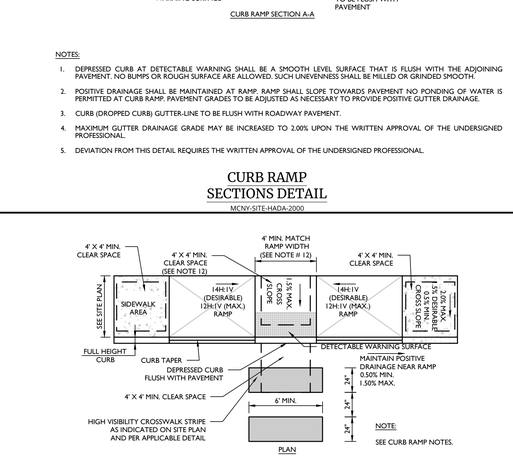
TYPICAL PARKING STALL STRIPING DETAIL

NOT TO SCALE MCNY-SITE-MRKG-1000 07/01/19



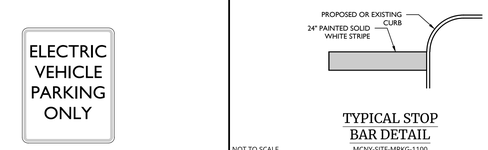
CONCRETE PAVEMENT DETAIL

NOT TO SCALE MCNY-SITE-PVMT-1500 07/01/19



CURB RAMP TYPE 7 DETAIL

NOT TO SCALE MCNY-SITE-HADA-1600 07/01/19



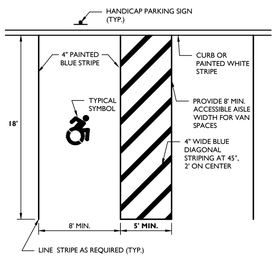
24" x 30"

COLORS:
LEGEND = GREEN (RETROREFLECTIVE)
BACKGROUND = WHITE (RETROREFLECTIVE)

R8-3a SIGN DETAIL

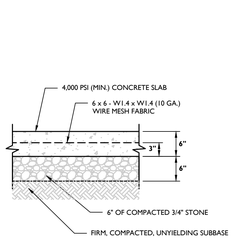
TYPICAL STOP BAR DETAIL

NOT TO SCALE MCNY-SITE-MRKG-1100 07/01/19



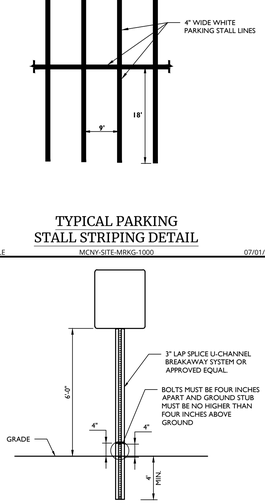
ACCESSIBLE PARKING LINE STRIPE STALL DETAIL

NOT TO SCALE MCNY-SITE-MRKG-1801 07/01/19



TRASH ENCLOSURE CONCRETE PAD DETAIL

NOT TO SCALE MCNY-SITE-PVMT-2100 07/01/19

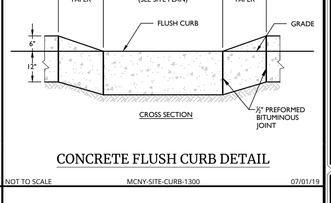


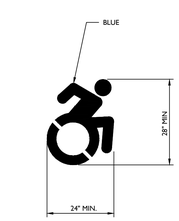
NOTE:

1. ALL SIGNS SHALL CONFORM TO THE CURRENT MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS AND CURRENT MUNICIPAL SPECIFICATIONS FOR COLOR, DESIGN AND EXACT WORDING.
2. ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION AS STATED IN THE CURRENT MANUAL IN "UNIFORM TRAFFIC CENTRAL DEVICES" FOR STREET & HIGHWAYS.
3. ALL POSTS SHALL BE EMBEDDED 4' MINIMUM.
4. ALL POSTS TO BE BREAKAWAY STEEL U-POSTS IN CONFORMANCE WITH CURRENT NYSDOT STANDARDS.
5. IN AREAS WITHOUT CURBING, THE OUTER EDGE OF SIGN TO BE 2'-0" MINIMUM TO 12'-0" MAXIMUM FROM EDGE OF CURB AS DIRECTED.

BREAKAWAY SIGN POST DETAIL

NOT TO SCALE MCCM-SIGN-GENL-6102 07/01/19





STROKE WIDTH: MINIMUM/STANDARD = 3"

ACCESSIBLE SYMBOL DETAIL

NOT TO SCALE MCNY-SITE-MRKG-2000 07/01/19

NOTES:

1. SIGN COLORS TO BE IN ACCORDANCE WITH CURRENT ADA STANDARDS.
2. ONE VAN ACCESSIBLE SIGN TO BE INCLUDED AT EACH ADA PARKING AREA.

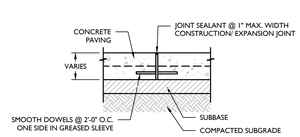
SIGN FOR ACCESSIBLE PARKING SPACE DETAIL

NOT TO SCALE MCNY-SITE-HADA-2400 07/01/19

12" x 18"

R8-31 SIGN DETAIL

NOT TO SCALE MCCM-SIGN-GENL-1700 07/01/19



CONCRETE PAVING JOINTS DETAIL

NOT TO SCALE MCNY-SITE-PVMT-1700 07/01/19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2022\22002634\dwg\Layout\Plan\C-DTLS.dwg; C-17-19; DEVIAS By: MOHAN, SAM

Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS
VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
-	08/08/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS.

Originally signed by Cory Daniel Robinson
Date: 2023.08.30 13:58:03-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

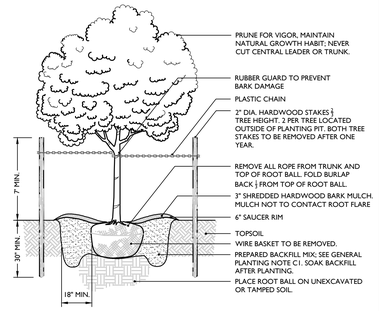
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR

PROJECT NUMBER: 22002634A
DRAWING NAME: C-DTLS

SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
17 of 21

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

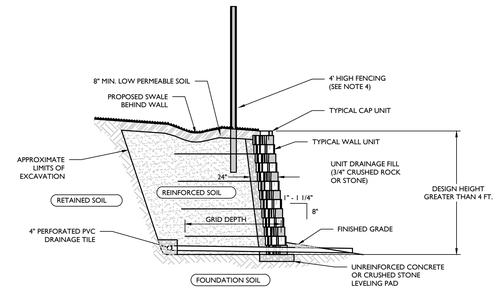


NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

TREE PLANTING DETAIL

NOT TO SCALE 07/01/19

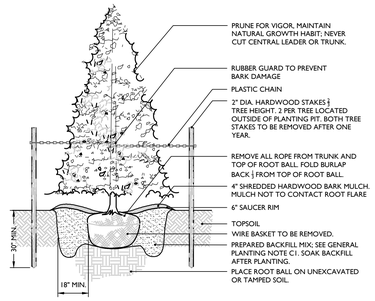


NOTES:

1. THIS DETAIL IS A SCHEMATIC REPRESENTATION FOR MUNICIPAL AND/OR AGENCY APPROVALS AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.
2. CONTRACTOR TO PROVIDE SITE-SPECIFIC SHOP DRAWINGS AND STRUCTURAL DESIGN CALCULATIONS FOR EACH RETAINING WALL PREPARED BY A STATE LICENSED PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
3. MODULAR CONCRETE BLOCK WALL TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
4. A SAFETY BARRIER (FENCING) IS REQUIRED ON ALL WALLS WHERE THE WALL HEIGHT EXCEEDS 30". PLACEMENT AND INSTALLATION METHOD OF THE PROPOSED FENCING TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

TYPICAL REINFORCED WALL SECTION (1" TO 1-1/4" SETBACK) DETAIL

NOT TO SCALE MCCM-SITE-WALL-1101 10/01/19

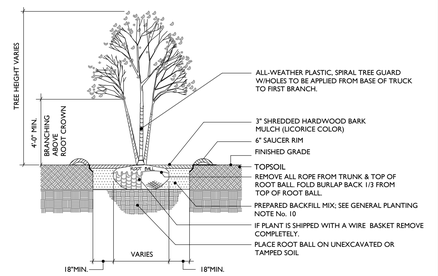


NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

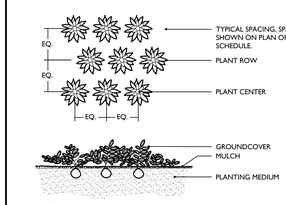
EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE 07/01/19



MULTI-STEM TREE PLANTING DETAIL

NOT TO SCALE 07/01/19

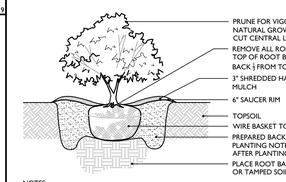


NOTES:

1. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

PERENNIAL PLANTING DETAIL

NOT TO SCALE



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

SHRUB PLANTING DETAIL

NOT TO SCALE

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. MULCH SHALL NOT TOUCH THE TREE TRUNK.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
3. WIRE BASKETS AND NON-JUTE BURLAP MUST BE ENTIRELY REMOVED FROM THE ROOT BALL. JUTE BURLAP MUST BE REMOVED FROM THE TOP 1/3 OF THE ROOT BALL.
4. DEPTH OF PLANT PIT SHALL BE INCREASED BY 12" WHEREVER POOR SOIL CONDITIONS OCCUR, WITH THE ADDITION OF LOOSE AGGREGATE.
5. CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO PLANTING TO DETERMINE IF THERE IS ADEQUATE PERCOLATION. IF PIT DOESNT PERCOLATE, MEASURES MUST BE TAKEN TO ASSURE PROPER DRAINAGE BEFORE PLANTING.
6. PLANTING MUST BE GUARANTEED FOR TWO FULL GROWING SEASONS FROM THE TIME OF FINAL ACCEPTANCE BY THE LANDSCAPE CONSULTANT. CONTRACTOR SHALL REMOVE ALL WRAPPING AT THE END OF GUARANTEE PERIOD OR SOONER PER PROJECT LANDSCAPE ARCHITECT.
7. BACKFILL MIXTURE TO BE SPECIFIED BASED UPON SOIL TEST AND CULTURAL REQUIREMENTS OF PLANT.
8. PRUNE DAMAGED AND CONFLICTING BRANCHES MAINTAINING NORMAL TREE SHAPE, NEVER CUT CENTRAL TRUNK OR LEADER.

PLANT DETAIL NOTES

GENERAL PLANTING NOTES

1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.
3. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION OF THE LANDSCAPE CONSULTANT. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.
5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.
6. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT HAVE BRANCHES BELOW 10'-0".
7. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
8. ALL PLANT MATERIAL SHALL BE PROPERLY INSTALLED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. CUT AND REMOVE JUTE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL. WIRE BASKETS AND NOT JUTE BURLAP SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING THE PLANT PIT.
9. BRANCHES OF DECIDUOUS TREES SHALL BE PRUNED BACK BY NO MORE THAN ONE QUARTER (1/4) TO BALANCE THE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR CHARACTER AND SHAPE. THE CENTRAL LEADER OF TREE SHALL NOT BE PRUNED.
10. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE OR UNTIL FREE DRAINING.
11. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT NURSERY.
12. OPTIMUM PLANTING TIME:
    DECIDUOUS - APRIL 1 TO JUNE 1 & OCTOBER 15 TO NOVEMBER 30.
    CONIFEROUS - APRIL 1 TO JUNE 1 & SEPTEMBER 1 TO NOVEMBER 1.

    PLANTING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL FROM THE LANDSCAPE CONSULTANT.
13. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS. WATERING AMOUNTS SHOULD BE ADJUSTED AS RAIN EVENTS OCCUR. WATERING AFTER THE INITIAL 4 WEEKS SHALL BE ADJUSTED BASED ON SEASONAL CONDITIONS. WATERING SHALL NOT TAKE PLACE DURING THE HOTTEST POINT OF THE DAY.
14. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR TWO YEARS AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT NO EXPENSE TO THE OWNER.
15. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS SHALL BE CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED. SOIL PH SHOULD BE 5.5-6.5.
16. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH SEED AS INDICATED ON THE LANDSCAPE PLANS. TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH THE GENERAL SEEDING NOTES ON THIS SHEET. ALL DISTURBED LAWN AREAS SHALL BE TOPSOILED, LIMED, FERTILIZED AND FINE GRADED PRIOR TO LAWN INSTALLATION.
17. ALL PLANTING BEDS SHALL RECEIVE 3" OF SHREDDED HARDWOOD BARK MULCH.
18. ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
19. ALL PLANTING DEBRIS (WIRE, TWINE, RUBBER HOSE, BACKFILL ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. PROPERTY IS TO BE LEFT IN A NEAT ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.

GENERAL SEEDING NOTES

1. TEMPORARY SEEDING SHALL CONSIST OF PERENNIAL RYEGRASS IN LAWN AREAS AND ANNUAL RYEGRASS IN AREAS TO BE SEEDED WITH A MEADOW MIX. APPLIED AT A RATE OF 1.0 LBS. PER 1000 SF OR SPRING OATS APPLIED AT A RATE OF 2.0 LBS. PER 1000 SF. TEMPORARY SEEDING SHALL BE MULCHED AND MAINTAINED UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDING.
2. PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL. - OPTIMUM SEEDING DATES ARE BETWEEN APRIL 1 AND MAY 31: AND AUGUST 16 AND OCTOBER 15.

    1) LAWN AREAS MIXTURE -

HARD FESCUE	120 LBS/ACRE
PERENNIAL RYE GRASS	30 LBS/ACRE
KENTUCKY BLUE GRASS (BLEND)	40 LBS/ACRE

    2) BASIN MIX - (2-3 LBS./1,000 S.F. MINIMUM)
    CREEPING RED FESCUE (30%)
    TALL FESCUE (30%)
    PERENNIAL RYE GRASS (10%)
    BIRDSFOOT TREFOIL (30%)

3. PERMANENT SEEDING TO BE APPLIED BY RAKING OR DRILLING INTO THE SOILS AT A RATE OF 150H PER ACRE, SLOPED AREA TO BE COVERED WITH MULCH AS INDICATED IN NOTE 5.
4. FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE IN COMPLIANCE WITH THE LATEST NYSDEC REGULATIONS. A SOIL TEST PRIOR TO FERTILIZER APPLICATION IS RECOMMENDED.
5. IF SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 6.
6. MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A WOOD AND FIBER MULCH BINDER OR AN APPROVED EQUAL. MULCH WILL BE SPREAD AT RATES OF 90 TO 115 LBS. PER 1000 SF AND ANCHORED WITH A MULCH ANCHORING TOOL OR LIQUID MULCH BINDER, AND SHALL BE PROVIDED ON ALL SEEDINGS. HYDROMULCH SHALL ONLY BE USED DURING OPTIMUM GROWING SEASONS.
7. WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
8. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
9. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.
Doing Business as MASER CONSULTING
PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/20/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS.

Digitally signed by Cory Daniel Robinson
Date: 2023.08.30 13:58:03-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR

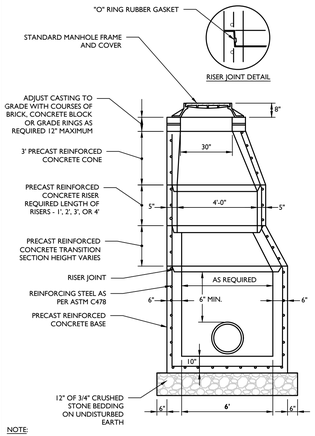
PROJECT NUMBER:	DRAWING NAME:
22002634A	C-DTLS

SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
18 of 21

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

\\2023\2002634A\Engineering\Site Plans\C-DTLS.dwg\C-18 DTT DETAILS By: MICHAEL SAIA

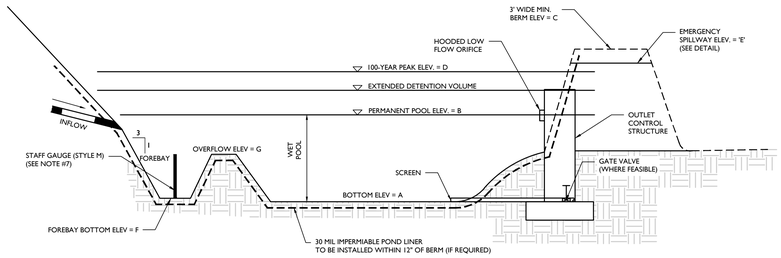


NOTE:

1. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
2. ALL CONCRETE TO BE 4,000 PSI.

PRECAST CONCRETE STORM MANHOLE (OVERSIZED) DETAIL

NOT TO SCALE MCNY-UTIL-STRM-1601 07/01/19



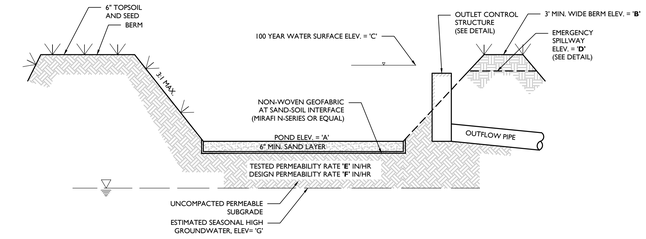
BASIN ID	POND EL [A]	PERM. POOL EL [B]	POND BERM EL [C]	POND 100-YR EL [D]	EMGCY SPILLWAY EL [E]	FOREBAY EL [F]	OVERFLOW EL [G]	LINER REQUIRED
P1	73.00	74.30	77.00	75.55	75.75	75.00	78.90	YES
P5	83.00	83.50	88.00	85.73	87.50	82.00	85.10	NO
P2D	80.00	N/A	85.00	83.91	84.00	N/A	N/A	NO

BASIN NOTES:

1. ALL EARTHWORK OPERATIONS, INCLUDING EXCAVATION, PROOFROLLING, GRADING AND BACKFILL OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF A NEW YORK LICENSED PROFESSIONAL ENGINEER.
2. FILL MATERIAL AND LINER INSTALLATION SHALL BE INSPECTED, APPROVED BY, AND INSTALLED UNDER THE SUPERVISION OF A NEW YORK LICENSED PROFESSIONAL ENGINEER.
3. THE FILL MATERIAL TO BE UTILIZED FOR THE BERM/EMBANKMENT AT THE WET POND SHALL BE AS FOLLOWS: THE BERMS SHALL BE CONSTRUCTED WITH SOIL FILL THAT HAS AN IN-SITU PERMEABILITY NO GREATER THAN 0.4 IN/HR. THE BERM/EMBANKMENT FILL SHALL BE PLACED IN 12 INCH LAYERS AND COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR DENSITY (ASTM D-1557). EACH LIFT SHALL BE INSPECTED, TESTED, AND APPROVED BY A NEW YORK LICENSED PROFESSIONAL ENGINEER PRIOR TO THE PLACEMENT OF SUBSEQUENT LIFTS.
4. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF SOIL CONDITIONS ENCOUNTERED IN THE FIELD DIFFER FROM WHAT IS SHOWN HEREON. SUCH CONDITIONS COULD RENDER THE DESIGN HEREON INAPPROPRIATE OR INEFFECTIVE.
5. ALL SUBMERGED PIPES INTO OR OUT OF A WET POND SHALL BE CONSTRUCTED USING WATERTIGHT JOINTS. REINFORCED CONCRETE PIPE JOINTS SHALL MEET ASTM C361 OR C443, PLASTIC PIPE JOINTS SHALL MEET ASTM D3212 AND DUCTILE IRON PIPE JOINTS SHALL CONFORM TO ANSI/AWWA C111/A21.11, ALL LATEST EDITIONS. HDPE PIPE SHALL NOT BE UTILIZED IN SUBMERGED CONDITIONS.
6. GROUNDWATER SHALL BE CONTROLLED BY THE CONTRACTOR AT ALL TIMES.
7. STAFF GAUGE SHALL BE 2.5" WIDE, DIVIDED INTO INCHES WITH EACH FOOT NUMBERED. GAUGES FOR ANY ELEVATION MAY BE ASSEMBLED BY USING SEPARATE FIGURE PLATES.

WET POND AND DETENTION POND NYSDEC ID #P-5 SECTION DETAIL

NOT TO SCALE MCNY-UTIL-STMW-1200 MOD: 12/16/22 07/01/19



BASIN ID	POND EL [A]	BERM EL [B]	100-YR EL [C]	EMGCY SPILLWAY EL [D]	TESTED RATE [E]	DESIGN RATE [F]	GROUNDWATER OR ROCK EL [G]	FOREBAY LINER REQUIRED
P2	84.00	88.00	87.05	87.50	24.00	10.00	N/A	NO
P3	69.00	73.00	71.80	72.00	24.00	12.00	N/A	YES
P4	72.00	77.00	74.81	76.00	15.50	7.00	N/A	YES

ABOVE GROUND INFILTRATION BASIN CONSTRUCTION NOTES:

A. PRE-CONSTRUCTION:
1. CONTRACTOR SHALL PROCURE THE SERVICES OF A NEW YORK LICENSED PROFESSIONAL ENGINEER TO PERFORM REGULAR OVERSIGHT OF THE CONSTRUCTION OF THE INFILTRATION BASIN TO ENSURE ITS EFFECTIVENESS. THE FOLLOWING REQUIRED OVERSIGHT ACTIVITIES INCLUDING, BUT NOT LIMITED TO:
   a. PARTICIPATION BY THE ENGINEER AND CONTRACTOR AT A PRE-CONSTRUCTION MEETING TO REVIEW THE CONTRACTOR'S FAMILIARITY WITH CONSTRUCTION OF THE BASIN.
   b. THE CONTRACTOR SHALL IDENTIFY THE CONSTRUCTION EQUIPMENT TO BE USED FOR THE BASIN CONSTRUCTION AND THE CONSTRUCTION TECHNIQUES THAT WILL BE USED TO MINIMIZE COMPACTION OF THE INFILTRATION AREA.
   c. ENSURING THAT EARTHWORK DOES NOT OCCUR WITHIN THE LIMITS OF THE BASIN WHEN THE SOIL MOISTURE CONTENT IS ABOVE THE LOWER PLASTIC LIMIT AND THAT THE SPECIFICATIONS OF THE REPLACEMENT SOIL ARE MET.
   d. TEST EACH SOIL LAYER WHERE THE PERMEABILITY RATE IS CRITICAL PRIOR TO THE PLACEMENT OF A NEW LAYER TO ENSURE THAT THE PERMEABILITY RATE HAS BEEN RETAINED.
   e. THE CONTRACTOR SHALL ENSURE THAT PROPER PRECAUTIONS ARE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE INFILTRATION AREA DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF SOIL CONDITIONS ENCOUNTERED IN THE FIELD DIFFER FROM WHAT IS SHOWN HEREON. SUCH CONDITIONS COULD RENDER THE DESIGN HEREON INAPPROPRIATE OR INEFFECTIVE.

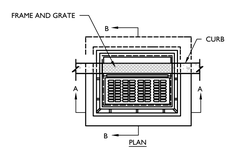
B. DURING CONSTRUCTION:
1. DURING CLEARING AND GRADING OF THE SITE, MEASURES MUST BE TAKEN TO ELIMINATE SOIL COMPACTION AT THE LOCATION OF THE PROPOSED INFILTRATION BASIN.
2. THE LOCATION OF THE PROPOSED INFILTRATION BASIN MUST BE CORDONED OFF DURING CONSTRUCTION TO PREVENT COMPACTION OF THE SUBSOIL BY CONSTRUCTION EQUIPMENT OR STOCKPILES. EXCAVATION AND CONSTRUCTION OF THE INFILTRATION BASIN MUST BE PERFORMED USING EQUIPMENT PLACED OUTSIDE THE LIMITS OF THE BASIN. IF THE SIZE THE BASIN PRECLUDES THIS APPROACH, EXCAVATION SHALL BE PERFORMED FROM THE INSIDE OUT SUCH THAT ALL EQUIPMENT UTILIZED WITHIN THE BASIN IS AT LEAST 2 FEET ABOVE THE FINAL EXCAVATION DEPTH.
3. EXCAVATION FOR THE INFILTRATION BASIN MUST BE AT LEAST 6 INCHES ABOVE THE FINAL EXCAVATION DEPTH IF IMPORTED SAND IS TO BE UTILIZED FOR THE ENGINEERED SAND LAYER. EXCAVATION MAY BE TO THE DESIGN ELEVATION OF THE INFILTRATION BASIN BOTTOM IF IN-SITU SAND MEETS THE SPECIFICATIONS AND IS TO BE UTILIZED FOR THE ENGINEERED SAND LAYER. THE USE OF THE LOCATION PROPOSED FOR AN INFILTRATION BASIN AS A SEDIMENT BASIN DURING CONSTRUCTION IS PROHIBITED.
4. THE BASIN BOTTOM SHALL BE CLEARED OF SEDIMENT AND UNSUITABLE MATERIALS SHALL BE REMOVED PERIODICALLY AS NECESSARY AND PRIOR TO FINAL EXCAVATION. THE EXCAVATION TO FINAL SUBSOIL DEPTH AND INSTALLATION OF THE ENGINEERED SAND LAYER OR IF APPLICABLE TO THE FINAL DESIGN ELEVATION OF THE INFILTRATION BASIN BOTTOM MAY ONLY OCCUR AFTER ALL SITE CONSTRUCTION WITHIN ITS DRAINAGE AREA IS COMPLETED AND THE DRAINAGE AREA, INCLUDING THE BASIN SIDE SLOPES, IS COMPLETELY STABILIZED.
5. IF CONSTRUCTION OF THE INFILTRATION BASIN CANNOT BE DELAYED BY INSTALLING TEMPORARY STORMWATER MANAGEMENT MEASURES, SEDIMENT BARRIERS MUST BE PLACED AROUND THE ENTIRE PERIMETER OF THE BASIN BOTTOM DURING ALL PHASES OF CONSTRUCTION TO DIVERT ALL FLOWS AWAY FROM THE BASIN. INLET FOREBAYS (CONSTRUCTED USING SEDIMENT BARRIERS) MUST BE PLACED AROUND ALL BASIN INLET PIPES CONDUIT OUTLET PROTECTION. THE SEDIMENT BARRIERS REQUIRED HEREIN MAY NOT BE REMOVED UNTIL ALL SITE CONSTRUCTION WITHIN THE BASIN DRAINAGE AREA IS COMPLETED, AND THE DRAINAGE AREA, INCLUDING THE BASIN SIDE SLOPES, IS COMPLETELY STABILIZED.
6. ALL EARTHWORK OPERATIONS, INCLUDING EXCAVATION, GRADING AND BACKFILL OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF A NEW YORK LICENSED PROFESSIONAL ENGINEER AND CERTIFIED TO INSTALLATION OF SUCH PROVIDED. IF APPLICABLE, EXCAVATIONS TO REMOVE HYDRAULICALLY RESTRICTIVE MATERIAL SHALL EXTEND A MINIMUM OF 1' BELOW THE IMPERMEABLE LAYER AND REMOVAL OF THE MATERIAL SHALL BE WITNESSED AND CERTIFIED BY A PROFESSIONAL ENGINEER.
7. THE REPLACEMENT MATERIAL MUST MEET ALL SPECIFICATIONS FOR CLEAN, COARSE SAND IN ACCORDANCE WITH AASHTO M-6 OR ASTM C-33 MEETING AGGREGRATE SIZE GRADATION SIZE NO. 10 (AASHTO M-43), AND THE MINIMUM TESTED PERMEABILITY RATE IS 8 INCHES PER HOUR, AS CERTIFIED BY A NY LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A SUBMITTAL CONFIRMING THE REQUIREMENTS ARE MET.
8. PRIOR TO INSTALLATION OF THE ENGINEERED SAND LAYER THE PERMEABILITY RATE OF THE IN-SITU UNDERLYING OR REPLACEMENT SOILS SHALL BE CONFIRMED BY A NEW YORK LICENSED PROFESSIONAL ENGINEER TO MEET THE MINIMUM DESIGN PERMEABILITY RATE. THE BASIN INFILTRATION RATE SHALL BE CERTIFIED BY A NEW YORK LICENSED PROFESSIONAL ENGINEER, THAT IT MEETS THE MINIMUM DESIGN PERMEABILITY RATE. RESULTS OF THE PERMEABILITY TESTS SHALL BE PROVIDED TO THE DESIGN ENGINEER IN WRITING PRIOR TO THE PLACEMENT OF THE SAND LAYER. SEE PERMEABILITY TESTING REQUIREMENTS BELOW.
9. ONCE THE FINAL GRADING PHASE OF A SURFACE INFILTRATION BASIN IS REACHED, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT. THESE PROCEDURES SHOULD PREFERABLY BE PERFORMED WITH EQUIPMENT LOCATED OUTSIDE THE BASIN BOTTOM. IF THIS IS NOT POSSIBLE, IT SHOULD BE PERFORMED WITH LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT. TILLING OPERATIONS SHALL BE WITNESSED AND CERTIFIED BY A NEW YORK LICENSED PROFESSIONAL ENGINEER.
10. THE BOTTOM ENGINEERED SAND LAYER MUST MEET ALL SPECIFICATIONS FOR CLEAN, COARSE SAND IN ACCORDANCE WITH AASHTO M-6 OR ASTM C-33 MEETING AGGREGRATE SIZE GRADATION SIZE NO. 9 (AASHTO M-43). THE MAXIMUM PERCENTAGE OF FINES IS 15% FINES AND THE MINIMUM TESTED PERMEABILITY RATE IS 20 INCHES PER HOUR. THE ABOVE MATERIAL MUST BE CERTIFIED BY A NJ LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A SUBMITTAL CONFIRMING THE REQUIREMENTS ARE MET.
11. THE GATE VALVE WITHIN THE OUTLET STRUCTURE SHALL REMAIN CLOSED AT ALL TIMES, EXCEPT FOR PERIODS OF MAINTENANCE.

C. PERMEABILITY TESTING REQUIREMENTS:
1. PERMEABILITY TESTING MUST BE PERFORMED ON THE AS-BUILT INFILTRATION BASIN IN ACCORDANCE WITH THE CONSTRUCTION AND POST-CONSTRUCTION OVERSIGHT AND SOIL PERMEABILITY TESTING SECTION IN THE "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX D: INFILTRATION TESTING REQUIREMENTS".
2. AS REQUIRED BY "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX D: INFILTRATION TESTING REQUIREMENTS", A MINIMUM OF XX PERMEABILITY TESTS SHALL BE PERFORMED WITHIN THE BASIN BOTTOM. THE MINIMUM PERMEABILITY RATE OF EACH TEST PIT SHALL BE **20** INCHES PER HOUR.
3. IF THE FIELD-TESTED PERMEABILITY RATES CONFIRM THE BASIN'S ABILITY TO TOTALLY DRAIN WITHIN 72 HOURS AFTER THE CESSATION OF THE DESIGN STORM, THE DESIGN ENGINEER, IN CONSULTATION WITH THE OWNER AND ANY AGENCY HAVING JURISDICTION, MAY ACCEPT THE BASIN DESIGN. THE CONTRACTOR HAS THE OPTION TO DEMONSTRATE THAT THE INFILTRATION BMP, WHEN FLOODED WITH WATER, EITHER ARTIFICIALLY OR NATURALLY BY RAIN EVENT, PERFORMS AS DESIGNED FOR INFILTRATION.
4. IF NEITHER THE TESTING NOR FLOODING OF THE BASIN WORKS, WHERE THE PERMEABILITY RATES DO NOT MEET THE REQUIRED DESIGN RATE NOTED ABOVE BY SHOWING A LONGER DRAIN TIME THAN DESIGNED, REMEDIAL/CORRECTIVE ACTION MUST BE TAKEN BY THE CONTRACTOR. THE SOILS BELOW THE INFILTRATION BMP MUST BE REMEDIATED OR REPLACED AND THEN RE-TESTED UNTIL THE REQUIRED DRAIN TIME IS ACHIEVED. ALL POST-CONSTRUCTION SOIL PERMEABILITY TEST RESULTS SHALL BE CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.

D. POST-CONSTRUCTION:
1. UPON COMPLETION OF THE BASIN, THE CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A TOPOGRAPHIC SURVEY OF THE BASIN PREPARED BY A NEW YORK LICENSED PROFESSIONAL SURVEYOR. THE SURVEY SHALL INCLUDE 1 FOOT CONTOURS OF THE ENTIRE BASIN, TOP OF BERM ELEVATIONS, BOTTOM OF BASIN ELEVATIONS AND ALL INFORMATION PERTAINING TO THE OUTLET CONTROL STRUCTURE INCLUDING ORIFICE AND WEIR SIZES AND ELEVATIONS. THE OUTLET PIPE AND NEXT DOWN-STREAM DRAINAGE STRUCTURE SHALL BE SURVEYED.
2. THE PROFESSIONAL ENGINEER THAT WITNESSES THE BASIN CONSTRUCTION AND PERFORMED THE SOIL PERMEABILITY TESTS SHALL PROVIDE A SIGNED AND SEALED LETTER TO THE DESIGN ENGINEER WITH THE RESULTS OF THE PERMEABILITY TESTS AND CONSTRUCTION CONFORMANCE WITH THE APPROVED SWPPP AND THIS DETAIL.

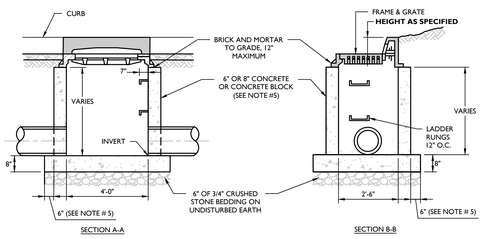
INFILTRATION NYSDEC ID #I-2 CROSS-SECTION DETAIL

NOT TO SCALE A5C6ED61543 07/01/19



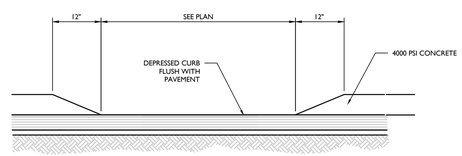
NOTES:

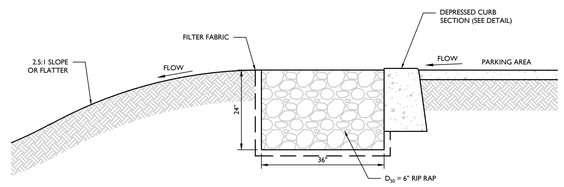
1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. MINIMUM DIFFERENCE IN INVERTS TO BE 0.1 FEET.
2. THIS INLET SHALL BE CONSTRUCTED OF PRECAST CONCRETE OR SOLID CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF 1:2 CEMENT SAND MORTAR. THE INSIDE WALL JOINTS SHALL BE STRUCK AND POINTED.
3. PROVIDE 7/8" DIA. X 7" X 12", 12" O.C. COPOLYMER POLYPROPYLENE PLASTIC STEPS WITH 1/2" DIA. GRADE 60 STEEL REINFORCEMENT BY M.A. INDUSTRIES, PS2-PF OR PS2-B WITH PRECAST PRESS FIT INSERTS, 12" O.C. OR APPROVED EQUIVALENT.
4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY **# 2617**, OR APPROVED EQUAL.
5. WHEN DEPTH IS GREATER THAN 12' THE WALLS SHOULD BE 8" THICK CONCRETE OR SOLID CONCRETE BLOCK AND THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
6. ALL CONCRETE TO BE 4,000 PSI.
7. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
8. INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH H-20 LOADING REQUIREMENTS.



SINGLE CATCH BASIN DETAIL

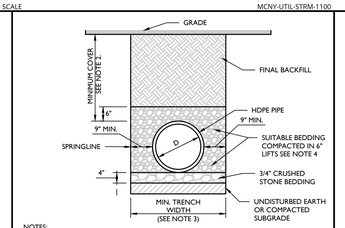
NOT TO SCALE MCNY-UTIL-STRM-1100 07/01/19





DEPRESSED CURB FOR DRAINAGE (W/PEA GRAVEL DIAPHRAGM) DETAIL

NOT TO SCALE MCNY-UTIL-STRM-2402 07/01/19

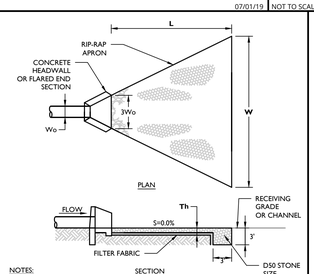


NOTES:

1. ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
2. MINIMUM COVER FOR HDPE PIPES IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR UP TO 60" DIAMETER PIPE. PIPE COVER IS MEASURED FROM TOP OF PIPE TO THE BOTTOM OF FLEXIBLE PAVEMENT, OR TO THE TOP OF RIGID PAVEMENT, OR TO THE GROUND SURFACE.
3. MINIMUM TRENCH WIDTH PER MANUFACTURER'S RECOMMENDATIONS.
4. SUITABLE BEDDING MATERIAL SHALL BE SAND, WELL GRADED GRAVEL < 2", OR 3/4" CRUSHED STONE.
5. SUITABLE FINAL BACKFILL MATERIAL SHALL BE SITE SOILS, CLEAN FILL, OR ITEM 4 STONE COMPACTED IN MAX. 9" LIFTS.
6. STONES LARGER THAN 2" FOUND IN THE TRENCH SHALL BE REMOVED FOR A DEPTH OF AT LEAST 4" BELOW THE PIPE.
7. FOR INSTALLATION IN PAVEMENT, REFER TO THE APPLICABLE PAVEMENT DETAIL TO ESTABLISH FINAL GRADE. BACKFILL REQUIREMENTS BEYOND THE DEPTH OF THE PAVEMENT DETAIL SHALL BE IN ACCORDANCE WITH THIS DETAIL.

HDPE STORM PIPE BEDDING DETAIL

NOT TO SCALE HDPE 07/01/19

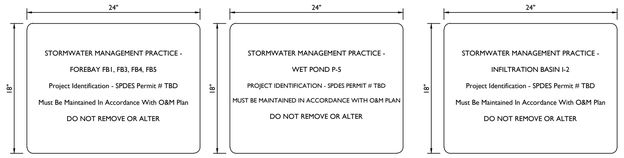


NOTES:

1. SEE PLAN FOR APRON DIMENSIONS.
2. SIDE SLOPE SHALL BE 2:1 OR FLATTER. THE BOTTOM GRADE SHALL BE LEVEL (0% SLOPE). THERE SHALL BE NO FALL AT THE END OF APRON TO THE RECEIVING SURFACE.

CONDUIT OUTLET PROTECTION DETAIL

NOT TO SCALE MCNY-SOIL-EROS-1600 07/01/19



NOTE: IN ACCORDANCE WITH SECTION 3.5 OF THE NYSSMDM, A CONSPICUOUS AND LEGIBLE SIGN SHALL BE ERECTED OR POSTED IN THE IMMEDIATE VICINITY OF EACH STORMWATER MANAGEMENT PRACTICE (AS SHOWN ON THE LAYOUT PLAN)

STORMWATER MANAGEMENT PRACTICE IDENTIFICATION SIGNS

NOT TO SCALE N.T.S. MOD: 12/16/22 07/01/19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/20/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INFILTRATION CHAMBERS.

Digitally signed by Cory Daniel Robinson
Date: 2023.09.30 13:58:03-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

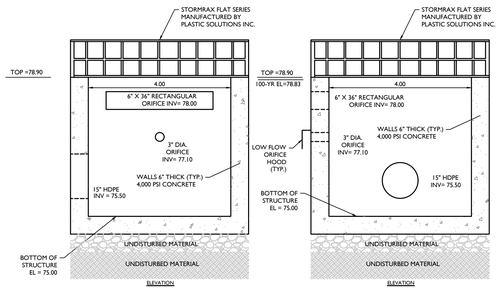
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	01/03/2023	MAS	CDR
PROJECT NUMBER:		DRAWING NAME:	
22002634A		C-DTLS	

SHEET TITLE:
STORMWATER DETAILS

SHEET NUMBER:
19 of 21

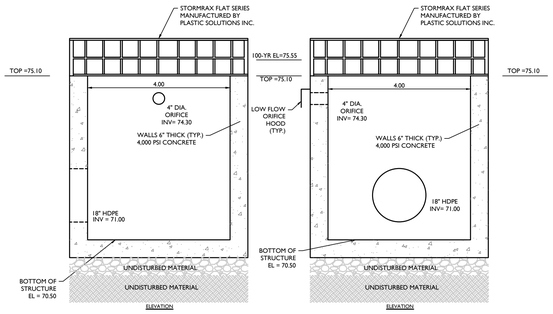
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



FOREBAY-FB1 OUTLET CONTROL STRUCTURE (OCS 1A) DETAIL

NOT TO SCALE

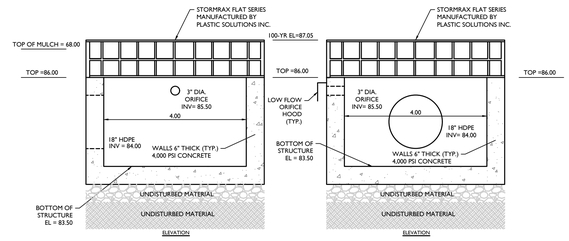
MOD: 08/17/23
07/01/19



WET POND-P1 OUTLET CONTROL STRUCTURE (OCS 1B) DETAIL

NOT TO SCALE

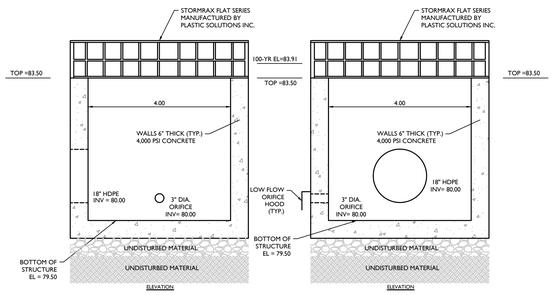
MOD: 08/17/23
07/01/19



INFILTRATION BASIN-P2 OUTLET CONTROL STRUCTURE (OCS 2A) DETAIL

NOT TO SCALE

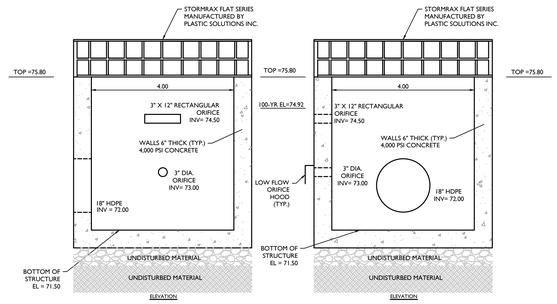
MOD: 08/17/23
07/01/19



DETENTION BASIN POND-P2D OUTLET CONTROL STRUCTURE (OCS-2B) DETAIL

NOT TO SCALE

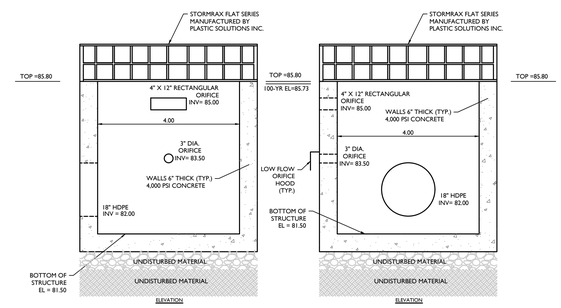
MOD: 08/17/23
07/01/19



INFILTRATION BASIN-P4 OUTLET CONTROL STRUCTURE (OCS-4A) DETAIL

NOT TO SCALE

MOD: 08/17/23
07/01/19



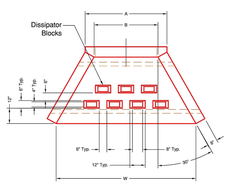
WET POND-P5 OUTLET CONTROL STRUCTURE (OCS-5A) DETAIL

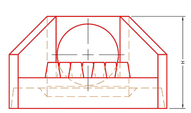
NOT TO SCALE

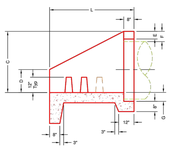
MOD: 08/17/23
07/01/19

Pipe Size	Hole Size	"W"	"L"	"H"	"A"	"B"	"C"	"D"	"E"	"F"	"G"	Qty Of Dissipators	Weight
30" RCP	40"	110"	60"	72"	64"	50"	48"	18"	13" 6"	145" 8"	5" 6"	7 (2 Rows)	9,979 Lbs.
36" RCP	48"												
42" RCP	54"	146"	74"	87"	80"	70"	63"	27"	16" 8"	165" 8"	6" 7"	11 (2 Rows)	15,637 Lbs.
48" RCP	62"												
54" RCP	70"	172"	88"	98"	89"	80"	74"	33"	6"	9"	8"	24 (3 Rows)	21,676 Lbs.
60" RCP	76"												

Hole Size For All Other Pipe Types Will Be Pipe O.D.+ 2"–4"

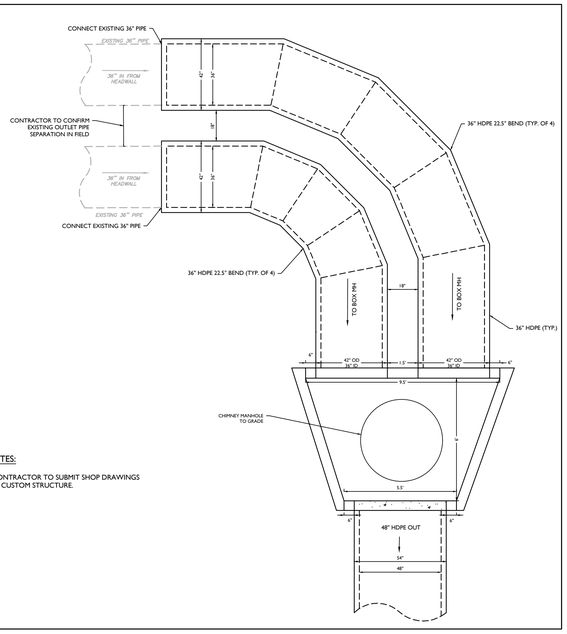






PIPE CULVERT HEADWALL WITH DISSIPATERS DETAIL

NOT TO SCALE



NOTES:

1. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR CUSTOM STRUCTURE.

DUAL 36" TO 48" CULVERT CONNECTION DETAIL

MOD: 08/08/23

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023-2300\SAM\Engineering\Site Plans\C-DTLS.dwg\C-DTLS\2023-07-06 By: MICHAEL.LARA

Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
-	06/08/23	TPS	REVISED PER REMOVAL OF SUBSURFACE EXFILTRATION CHAMBERS.

Digitally signed by Cory Daniel Robinson
Date: 2023.08.30 13:58:04-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

FOR

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

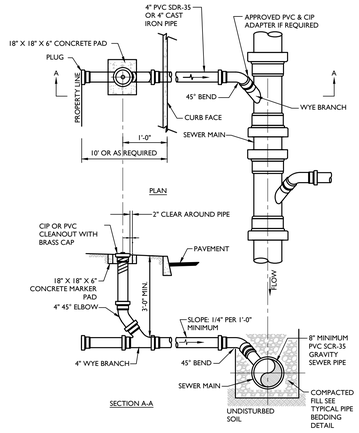
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	07/03/2023	MAS	CDR

PROJECT NUMBER: 22002634A
DRAWING NAME: C-DTLS

SHEET TITLE:
STORMWATER DETAILS

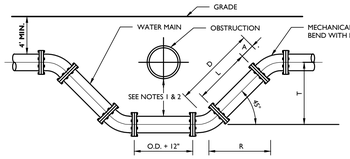
SHEET NUMBER:

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



SANITARY SEWER LATERAL & CLEANOUT DETAIL

NOT TO SCALE MCNY-UTIL-SSWR-1601 07/01/19



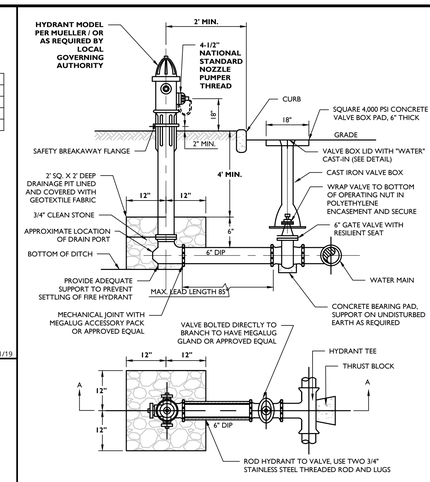
MECHANICAL JOINTS			
ANGLE	D =	R =	L =
45°	T x 1.414	T x 1.000	D-2A
22.5°	T x 2.613	T x 2.414	D-2A
11.25°	T x 5.126	T x 5.027	D-2A

NOTES:

1. WATER MAIN MAY CROSS ABOVE OBSTRUCTION IF **4'** MINIMUM COVER IS MAINTAINED ABOVE THE WATER MAIN AND FINISH GRADE.
2. MINIMUM VERTICAL SEPARATION BETWEEN SANITARY OR STORM SEWER TO WATER MAIN SHALL BE 18" IF THE HORIZONTAL SEPARATION IS LESS THAN 10'. BETWEEN WATER MAIN AND OTHER UTILITIES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12".
3. WATER MAIN SHALL BE SIZE AND MATERIAL SPECIFIED ON THE PLAN, WITH MECHANICAL JOINT OR PUSH-ON AND ALL FITTINGS BE CAST IRON MECHANICALLY JOINT.
4. OFFSETS MAY BE SUBSTITUTED FOR A "T" OF UP TO 24" IF APPROVED BY THE ENGINEER.
5. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
6. TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS IF THRUST BLOCK IS NOT USED. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RESTRAIN THE THRUST DEVELOPED AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF TIE RODS.

WATER CROSSING UNDER UTILITY DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1300 07/01/19



NOTES:

1. HYDRANT SHALL BE **T.W.W. STANDARD U.S. PIPE METROPOLITAN 250 DRY-BARREL** TRAFFIC MODEL DESIGN WITH THE FOLLOWING SPECIFICATION.
   A. SAFETY COUPLED STANDPIPE.
   B. 6" MECHANICAL JOINT INLET CONNECTION
   C. TWO 2-1/2" NATIONAL STANDARD THREAD HOSE NOZZLES.
   D. ONE 4-1/2" NATIONAL STANDARD THREAD STEAMER NOZZLE, FACING THE ROAD.
   E. HYDRANT OPERATORS AND HYDRANT NOZZLE CAP NUTS SHALL BE IN ACCORDANCE WITH AWWA/ANSI STANDARD C502.
   F. HYDRANT HOSE CAPS SHALL BE ATTACHED BY MEANS OF CHAINS.
   G. HYDRANT BARRELS SHALL BE PAINTED - **RED**, BONNETS - **YELLOW**, AND NOZZLE CAPS - **BLACK** TO INDICATE THE AVAILABLE FIRE FLOW OR AS IN ACCORDANCE WITH THE LOCAL REQUIREMENTS.
   H. HYDRANTS SHALL OPEN COUNTER CLOCKWISE.
2. STANDPIPE (BREAK-AWAY) COUPLING SHALL NOT EXCEED A MAXIMUM OF 5 INCHES FROM THE TOP OF THE CURB TO THE BOTTOM OF COUPLING.
3. THE DRAIN VALVE SHALL BE CLEAR OF ANY OBSTRUCTIONS, AND 3/4" CLEAN GRAVEL BE PLACED FROM THE BOTTOM OF THE HYDRANT TO A POINT 6" ABOVE THE HYDRANT LATERAL PIPE.
4. THRUST BLOCKS SHALL BE MADE OF 4,000 PSI CONCRETE, PROVIDED BEHIND THE HYDRANT SHOE.
5. BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE LOCAL JURISDICTION.
6. GATE VALVE SHALL BE **T.W.W. 6" U.S. PIPE METROSEAL 250 R/S** (RESILIENT SEALED) MECHANICAL JOINT END (RIGHT HAND).
7. WATER LATERAL SHALL BE 6" DUCTILE IRON CEMENT LINED CLASS 52 PIPE.
8. TIE ROD SHALL BE 3/4" DIAMETER TIE ROD WITH EYE BOLTS - TWO REQUIRED (SIDE VIEW SHOWN). RESTRAIN ALL JOINTS ON HYDRANT TEE, VALVE, AND HYDRANT LEAD.
9. HYDRANT TEE SHALL BE U.S. PIPE CATALOG #U-592 TRIM-TYTE DUCTILE IRON, MECHANICAL JOINT OR AN T.W.W. APPROVED SUBSTITUTE.

FIRE HYDRANT (VALVE IN PAVEMENT) DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1001 07/01/19

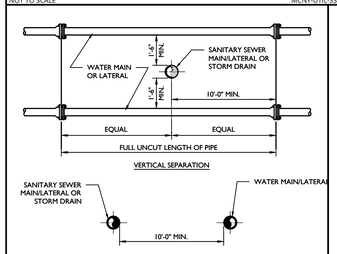
WATER NOTES:

1. ALL METHODS, MATERIALS, FITTINGS, DEVICES, DIMENSIONAL REQUIREMENTS AND PROCEDURES NECESSARY TO COMPLETE THE WORK SHOWN HEREON SHALL MEET THE APPROPRIATE CURRENT AWWA SPECIFICATIONS IN EFFECT AS WELL AS ALL REQUIREMENTS DEEMED APPLICABLE BY THE MUNICIPALITY OR ANY OTHER GOVERNMENTAL BODY HAVING JURISDICTION OVER SAID WORK.
2. ALL WATER MAIN PIPE SHALL BE AWWA C151/A21.51-02 THICKNESS CLASS FIFTY-TWO (52) CEMENT LINED DUCTILE IRON PUSH-ON (RUBBER GASKET) TYPE; AND INSTALLED WITH THREE (3) BRONZE WEDGES PER JOINT. JOINT INSTALLATION SHALL BE "TYPE 2" AS PRESCRIBED IN THE LATEST REVISION OF AWWA C600. MECHANICAL JOINTS SHALL HAVE RETAINER GLANDS.
3. ALL PIPE FITTINGS SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE AWWA SPECIFICATION C153/A21.53-00.
4. ALL GATE VALVES SHALL BE "MUELLER" OR APPROVED EQUAL. RESILIANT-SEATED GATE VALVES WITH MECHANICAL JOINT CONNECTIONS. OPENING SHALL BE LEFT (CCW) AND OPERATION SHALL BE BY 2" SQUARE WRENCH NUT. MINIMUM WORKING PRESSURE SHALL BE 250 PSI. GATE VALVES ARE TO BE IN ACCORDANCE WITH LATEST REVISION OF AWWA SPECIFICATION C509.
5. ALL VALVE BOXES SHALL BE EXTENSION TYPE BY MUELLER SET ON BRICKS AND POSITIONED PERPENDICULAR TO THE PIPE AND ON COMPACTED BACKFILL.
6. ALL CHANGES IN PIPE LINE DIRECTION, BOTH HORIZONTAL AND VERTICAL SHALL BE TIE-RODDED AND MECHANICALLY RESTRAINED AS DIRECTED BY THE ENGINEER.
7. FLUSH OUT ALL WATER MAINS AND APPURTENANCES AS DIRECTED BY THE MUNICIPALITY UNTIL THE WATER RUNS CLEAN AND FREE OF RUST AND DIRT. PRESSURIZE ALL LINES AND APPURTENANCES FOR FORTY-EIGHT (48) HOURS, OR AS DIRECTED BY THE MUNICIPALITY, TO REVEAL ANY LEAKS OR BROKEN PIPE. THIS SHALL ALL BE DONE EITHER AS A TOTAL PROJECT OR BETWEEN VALVED SECTIONS AS DIRECTED BY THE TOWN. IF PRESSURE TESTING REVEALS ANY LEAKS OR DIFFICULTIES THE CONTRACTOR SHALL PROMPTLY UNCOVER THE LEAK OR BROKEN PIPE AND IMMEDIATELY REPAIR AND RETEST SAME. THIS SHALL BE REPEATED AS MANY TIMES AS MAY BE REQUIRED TO DEMONSTRATE A TIGHT LINE TO THE SATISFACTION OF THE TOWN & PROJECT ENGINEER. THE NEW WATER MAIN AND APPURTENANCES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C-600. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY & PROJECT ENGINEER.
8. THE MUNICIPAL ENGINEER MUST BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO PRESSURE TESTING.
9. ALL WATER LINES AND APPURTENANCES SHALL BE DISINFECTED TO THE SATISFACTION OF THE MUNICIPALITY, PROJECT ENGINEER, AND IN ACCORDANCE WITH THE STANDARDS OF THE DEPT. OF HEALTH. THIS SHALL ALSO BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C651. A MINIMUM OF TWO (2) BACTERIAL TESTS TAKEN TWENTY-FOUR (24) HOURS APART ARE REQUIRED. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY & PROJECT ENGINEER. DISINFECTION PROCEDURE, FEED LOCATIONS, AND SAMPLE LOCATIONS MUST BE REVIEWED AND APPROVED BY THE MUNICIPALITY & PROJECT ENGINEER PRIOR TO TESTING.
   AS PER AWWA C651, LATEST REVISION, WATER MAIN DISINFECTION PROCEDURE SHALL, GENERALLY, BE AS FOLLOWS:
   A. INSPECTING MATERIALS TO BE USED TO ENSURE THEIR INTEGRITY.
   B. PREVENTING CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR AND NOTING POTENTIAL CONTAMINATION AT THE CONSTRUCTION SITE.
   C. REMOVING, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAIN.
   D. CHLORINATING ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSHING THE CHLORINATED WATER FROM THE MAIN.
   E. PROTECTING THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW CAUSED BY HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.
   F. DOCUMENTING THAT AN ADEQUATE LEVEL OF CHLORINE CONTACTED EACH PIPE TO PROVIDE DISINFECTION.
   G. DETERMINING THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
   H. FINAL CONNECTION OF THE APPROVED NEW WATER SERVICE TO THE ACTIVE DISTRIBUTION SYSTEM.

   THE CONTINUOUS-FEED METHOD SHALL BE IMPLEMENTED FOR CHLORINATION, AS DESCRIBED IN AWWA C651, LATEST REVISION. AFTER CHLORINATION, THE CONTRACTOR SHALL FLUSH THE MAINS AS PER FINAL FLUSHING REQUIREMENTS OF AWWA C651, LATEST REVISION. WHEN CUTTING INTO OR REPAIRING AN EXISTING MAIN, DISINFECTION PROCEDURES SHALL BE OBSERVED AS DETAILED IN DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS OF AWWA C651, LATEST REVISION. THE TABLET METHOD FOR INTRODUCING CHLORINE TO THE SYSTEM SHALL NOT BE PERMITTED.

   VERIFICATION SHALL BE ACCOMPLISHED VIA BACTERIOLOGICAL TESTS. AFTER FINAL FLUSHING AND BEFORE THE NEW WATER MAIN IS CONNECTED TO THE DISTRIBUTION SYSTEM, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HR APART, SHALL BE COLLECTED FROM THE NEW MAIN. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FT OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. SAMPLES SHALL BE TESTED FOR BACTERIOLOGICAL (CHEMICAL AND PHYSICAL) QUALITY IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, AND SHALL SHOW THE ABSENCE OF COLIFORM ORGANISMS AND THE PRESENCE OF A CHLORINE RESIDUAL. SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED IN STERILE BOTTLES TREATED WITH SODIUM THIOSULFATE, AS REQUIRED BY STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. NO HOSE OR FIRE HYDRANT SHALL BE USED IN THE COLLECTION OF SAMPLES. THERE SHOULD BE NO WATER IN THE TRENCH UP TO THE CONNECTION FOR SAMPLING. THE SAMPLING PIPE MUST BE DEDICATED AND CLEAN AND DISINFECTED AND FLUSHED PRIOR TO SAMPLING. A CORPORATION COCK MAY BE INSTALLED IN THE MAIN WITH A COPPER-TUBE GOOSENECK ASSEMBLY. AFTER SAMPLES HAVE BEEN COLLECTED, THE GOOSENECK ASSEMBLY MAY BE REMOVED AND RETAINED FOR FUTURE USE. IF SAMPLES RESULTS FROM THE LAB INDICATE A MEASURED HPC GREATER THAN 500 COLONY-FORMING UNITS (CFU) PER ML, FLUSHING SHOULD BE RESUMED AND ANOTHER COLIFORM AND HPC SET OF SAMPLES SHOULD BE TAKEN UNTIL NO COLIFORMS ARE PRESENT AND THE HPC IS LESS THAN 500 CFU/ML. THE RECORD OF COMPLIANCE SHALL BE THE BACTERIOLOGICAL TEST RESULTS CERTIFYING THAT THE WATER SAMPLED FROM THE NEW WATER MAIN IS FREE OF COLIFORM BACTERIA CONTAMINATION AND IS EQUAL TO OR BETTER THAN THE BACTERIOLOGIC WATER QUALITY IN THE DISTRIBUTION SYSTEM.

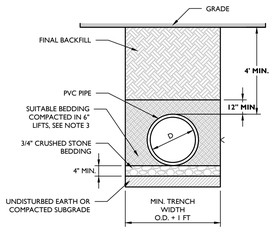
   ALL OTHER REQUIREMENTS OF AWWVA C651, LATEST REVISION, SHALL BE OBSERVED.
10. WATER SERVICE CROSSING SEWER OR STORM SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER OR STORM. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER OR STORM AS POSSIBLE. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER MAY BE REQUIRED.
11. WATER SERVICE SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER MAIN OR SERVICE.
12. WATER TIGHT PLUGS ARE TO BE INSTALLED IN THE ENDS OF PIPES WHEN WORK IS NOT IN PROGRESS.
13. LEAKAGE AND HYDROSTATIC PRESSURE TESTING SHALL BE PERFORMED AT 1.5 TIMES THE WORKING PRESSURE OR 150 PSI, WHICHEVER IS GREATER.
14. THE MAXIMUM DEFLECTION ALLOWED ALLOWED AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THAT ALLOWED BY AWWVA OR IN ACCORDANCE WITH THE MUNICIPALITY. FOR AWWA ALLOWABLE JOINT DEFLECTIONS SEE LATEST REVISION OF AWWA SPECIFICATION C600.
15. CONSTRUCTION MUST CONFORM TO ALL ORDINANCES.
16. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER AND OTHER UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
17. CONTRACTOR TO CALL UNDERGROUND MARK-OUT PRIOR TO COMMENCEMENT OF CONSTRUCTION AT 1-800-962-7962 FOR COMPLETE UTILITIES MARK-OUT.
18. CONTRACTOR TO CONTACT WATER DEPARTMENT AT LEAST 2 DAYS PRIOR TO CONSTRUCTION.
19. ALL IMPROVEMENTS SHALL BE INSPECTED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK AND CERTIFICATION SHALL BE PROVIDED TO THE MUNICIPALITY THAT THE SUBJECT IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS.
20. CONTRACTOR TO NOTIFY ENGINEER OF ANY DEVIATION FROM THE HORIZONTAL OR VERTICAL ALIGNMENTS WITH REGARDS TO EXISTING UTILITIES.
21. A CERTIFIED AS BUILT MAP OF THE WATER SYSTEM IMPROVEMENTS SHALL BE PROVIDED TO THE MUNICIPALITY'S WATER DEPARTMENT BY A LICENSED DESIGN PROFESSIONAL.



NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DEPARTMENT OF HEALTH

SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL

NOT TO SCALE MCNY-UTIL-SSWR-2400 07/01/19

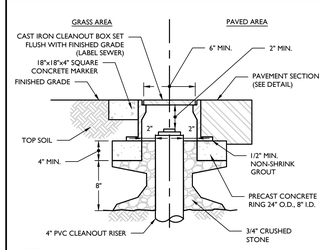


NOTES:

1. ALL PVC GRAVITY PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
2. GRAVITY SANITARY PIPE SHALL BE PVC SDR 35 PER ASTM D3034 OR AS REQUIRED BY THE GOVERNING AUTHORITY.
3. SUITABLE BEDDING MATERIAL SHALL BE COARSE SAND OR $\frac{3}{4}$" CRUSHED STONE.
4. SUITABLE FINAL BACKFILL MATERIAL SHALL BE SITE SOILS, CLEAN FILL, OR ITEM 4 STONE COMPACTED IN MAX. 9" LIFTS. BACKFILL MATERIAL WITHIN 2' OF THE PIPE MUST BE FREE AND CLEAR OF DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSUITABLE MATERIALS.
5. STONES LARGER THAN 2" FOUND IN THE TRENCH SHALL BE REMOVED FOR A DEPTH OF AT LEAST 4" BELOW THE PIPE.
6. FOR INSTALLATION IN PAVEMENT, REFER TO THE APPLICABLE PAVEMENT DETAIL TO ESTABLISH FINAL GRADE. BACKFILL REQUIREMENTS BEYOND THE DEPTH OF THE PAVEMENT DETAIL SHALL BE IN ACCORDANCE WITH THIS DETAIL.

PVC SANITARY PIPE BEDDING (GRAVITY) DETAIL

NOT TO SCALE PVC 07/01/19

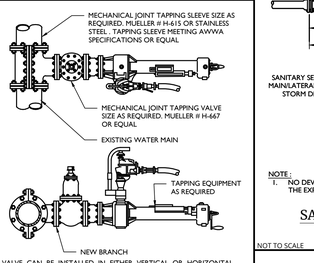


NOTES

1. ALL PVC CLEANOUTS TO HAVE CAST IRON FRAME AND COVER PROTECTION BOX. DESIGN FOR H20 LOADING.

CLEANOUT PROTECTION BOX DETAIL

NOT TO SCALE MCNY-UTIL-SSWR-1600 07/01/19



NOTES:

1. WET TAP VALVE CAN BE INSTALLED IN EITHER VERTICAL OR HORIZONTAL POSITION.
2. CONTRACTOR SHALL VERIFY DEPTH OF BURY, MATERIAL, DIAMETER (O.D.) AND OPERATING PRESSURE OF EXISTING WATER MAIN PRIOR TO ORDERING OF WET TAP UNIT.

WET TAP DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1200 07/01/19

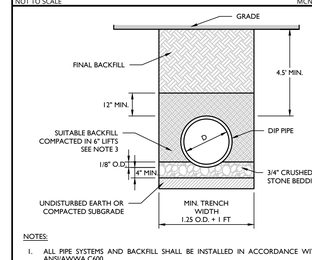
LIST OF STANDARD WATER SUPPLY MATERIALS

MCNY-UTIL-WATR-2500 MOD: 12/16/22 07/01/19

ANY EXCEPTIONS TO THE MATERIALS LISTED BELOW SHALL BE APPROVED IN WRITING BY THE DESIGN ENGINEER.

HYDRANTS	MODEL F-2640 EDDY AS MANUFACTURED BY CLOW VALVE.
VALVES	MUELLER TYPE A-2360-23 OR EQUAL
CURB STOPS	MUELLER CO. MODEL H-1502-2 FOR $\frac{3}{4}$" ND 1 INCH SIZES MUELLER CO. MODEL B-25204 FOR 1.5 AND 2 INCH SIZES
CORPORATION STOPS	MUELLER CO. MODEL H-15020 FOR $\frac{3}{4}$" AND 1 INCH SIZES MUELLER CO. MODEL H-10310 FOR 1.5 AND 2 INCH SIZES
PIPE	DUCTILE IRON PIPE SHALL BE CLASS 52 WITH MECHANICAL-JOINT OR PUSH-ON JOINT CONNECTIONS
TAPPING SLEEVES	MUELLER #H-615 OR EQUAL
VALVE BOXES	CAST IRON, TELESCOPING AND AT LEAST 5 1/4 " IN DIAMETER
CURB BOXES	MUELLER CO. MODEL H-10314 FOR $\frac{3}{4}$" INCH AND 1 INCH SIZES. MUELLER CO. MODEL H-10310 FOR 1.5 AND 2 INCH SIZES

NOTE:
ALL UTILITY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS AND DETAILS OF THE MUNICIPALITY.



NOTES:

1. ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600.
2. WATER MAIN PIPE SHALL BE CEMENT LINED DUCTILE IRON PIPE (DIP) PRESSURE CLASS 150, THICKNESS CLASS 52 WITH ASPHALTIC EPOXY TYPE COATING, INSTALLED W/ THREE (3) BRONZE WEDGES PER JOINT FOR CONDUCTIVITY.
3. SUITABLE BACKFILL MATERIAL SHALL BE SAND, WELL GRADED GRAVEL < 2", OR 3/4" CRUSHED STONE.
4. SUITABLE FINAL BACKFILL MATERIAL SHALL BE SITE SOILS, CLEAN FILL, 3/4" CRUSHED STONE, OR ITEM 4 STONE - COMPACTED IN MAX. 9" LIFTS.
5. STONES LARGER THAN 2" FOUND IN THE TRENCH SHALL BE REMOVED FOR A DEPTH OF AT LEAST 4" BELOW THE PIPE.
6. FOR INSTALLATION IN PAVEMENT, REFER TO THE APPLICABLE PAVEMENT DETAIL TO ESTABLISH FINAL GRADE. BACKFILL REQUIREMENTS BEYOND THE DEPTH OF THE PAVEMENT DETAIL SHALL BE IN ACCORDANCE WITH THIS DETAIL.
7. MAXIMUM ALLOWABLE DEFLECTION AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THE VALUES PUBLISHED IN AWWVA C600, LATEST REVISION.

DIP WATER PIPE BEDDING DETAIL

NOT TO SCALE DIP PIPE BED 07/01/19

NUMBER AND SIZE OF RODS REQUIRED AND PIPE LENGTH IN FEET TO BE RESTRAINED								
PIPE SIZE IN INCHES	90° TEE OR DEAD END PLUG			45° BEND			22.½° BEND	
	No.	SIZE	L*	No.	SIZE	L*	No.	SIZE	L*
4	2	½"	30'	2	½"	10'	2	½"	5'
6	2	½"	40'	2	½"	10'	2	½"	5'
8	4 or 2	½" or ⅞"	50'	2	½"	15'	2	½"	5'
10	4 or 2	½" or 1"	60'	2	½"	20'	2	½"	5'
12	4	⅞"	70'	2	½"	20'	2	½"	5'
14	4	1"	80'	2	½"	25'	2	½"	5'
16	4	1"	80'	2	½"	25'	2	½"	5'

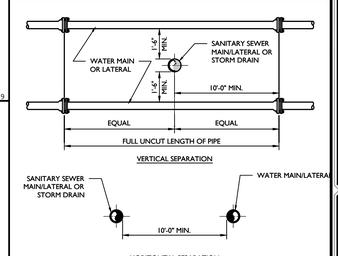
L* = LENGTH OF PIPE TO BE RESTRAINED IS FOR EACH SIDE OF BEND

NOTES:

1. USE OF MECHANICAL JOINT RETAINER GLANDS SHALL PROVIDE A THRUST RESTRAINT SYSTEM EQUIVALENT TO THAT LISTED IN THE TABLE FOR CLAMPS AND RODS.
2. LENGTHS ARE BASED ON THE FOLLOWING CRITERIA: 150 PSI MAXIMUM PRESSURE AND 3'-6" OF COVER. TABLE IS FOR USE WITH CAST IRON PIPE OR DUCTILE IRON PIPE ONLY. IF TEST CONDITIONS ARE MORE SEVERE OR LARGER PIPES ARE PROPOSED, THEN SPECIAL COMPUTATIONS MUST BE PROVIDED BY LICENSED PROFESSIONAL ENGINEER.

JOINT RESTRAINT SCHEDULE DETAIL

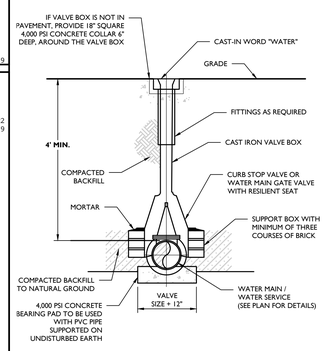
NOT TO SCALE MCNY-UTIL-WATR-1500 07/01/19



NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DEPARTMENT OF HEALTH

SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL

NOT TO SCALE MCNY-UTIL-SSWR-2400 07/01/19



NOTES:

1. VALVE BOX SHOULD HAVE EXTENSION IF WATER MAIN OR SERVICE IS PLACED DEEPER THAN 5 FEET.
2. CURB STOP VALVE BOX SHALL BE MUELLER EXTENSION TYPE WITH ARCH PATTERN BASE, OR APPROVED EQUAL.
3. WATER MAIN VALVE BOX SHALL BE SCREW TYPE ADJUSTABLE MODE. **FIGURE # 4905-22 AS MANUFACTURED BY BINGHAM & TAYLOR OR APPROVED EQUAL.**

WATER VALVE BOX DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1600 07/01/19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

Colliers Engineering & Design
www.colliersengineering.com
Copyright © 2023. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	06/09/23	TPS	REVISED PER REMOVAL OF SUBSURFACE INSTRUCTIONS

Digitally signed by Cory Daniel Robinson
Date: 2023.06.30 13:58:04-04'00'

Cory Daniel Robinson
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103788
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN
FOR
622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	07/03/2023	MAS	CDR