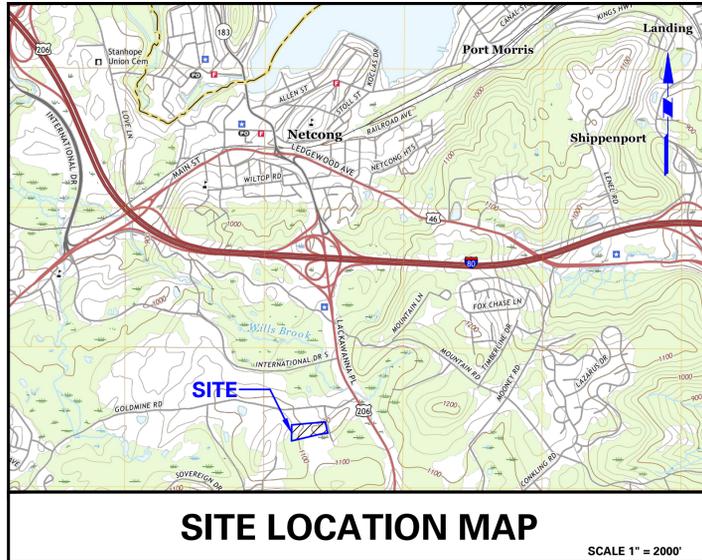


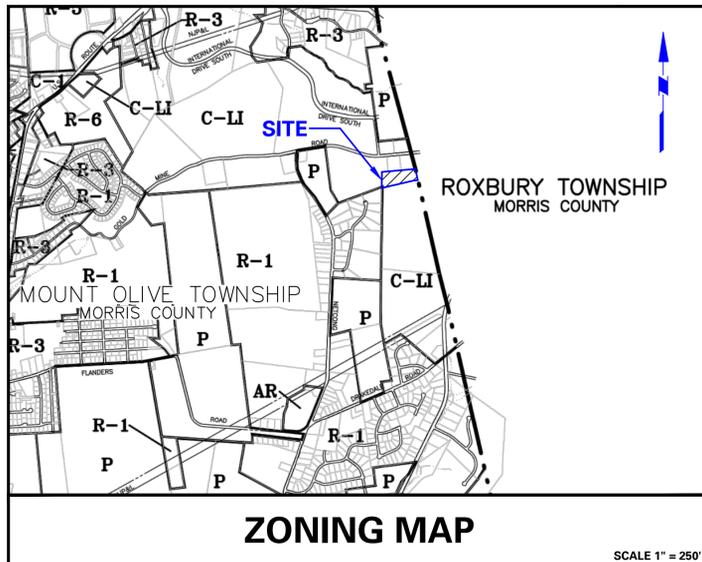
# VEOLIA NORTH AMERICA - FLANDERS FACILITY 1 EDEN LANE MOUNT OLIVE TOWNSHIP, MORRIS COUNTY, NEW JERSEY PRELIMINARY AND FINAL SITE PLANS



REFERENCE: STANHOPE USGS QUADRANGLE MAP



REFERENCE: GEOMAP, DATED 2022



REFERENCE: TOWNSHIP OF MOUNT OLIVE, MORRIS COUNTY, NJ 2016 ZONING MAP, REVISED JUNE 23, 2017

CONTACTS		
<b>TOWNSHIP PLANNING BOARD</b> MOUNT OLIVE TOWNSHIP 204 FLANDERS-DRAKESTOWN ROAD BUDD LAKE, NJ 07828 (973) 691-0900 ATTN: CHUCK MCGROARTY (DIRECTOR OF PLANNING)	<b>COUNTY ENGINEER</b> CHRISTOPHER VITZ MORRIS COUNTY ENGINEER ENGINEERING DIVISION P.O. BOX 900 MORRISTOWN, NJ 07963 (973) 285-6750	<b>GAS SERVICE</b> NJ NATURAL GAS 201 ROUNDHILL DRIVE ROUNDHILL COPORATE CENTER ROCKAWAY, NJ 07866 OUT OF STATE: (800) 221-0051 TTY/TDD USERS: (800) 223-0024
<b>TOWNSHIP WATER AND SEWER AUTHORITY</b> MOUNT OLIVE DEPT. OF PUBLIC WORKS BUDD LAKE, NJ 07828 (973) 691-0900 ATTN: MIKE LATA (WATER AND SEWER FOREMAN) (973) 584-7086	<b>COUNTY CONSERVATION SERVICE</b> MORRIS COUNTY SOIL CONSERVATION SERV. P.O. BOX 900 MORRISTOWN, NJ 07963 (973) 285-2953	<b>TELEPHONE SERVICE</b> VERIZON 1 VERIZON WAY BASKING RIDGE, NJ 07920 (800) 922-0204
<b>CONSULTING TOWNSHIP ENGINEER</b> MICHAEL VREELAND VAN CLEEF ENGINEERING MOUNT OLIVE TOWNSHIP 204 FLANDERS-DRAKESTOWN ROAD BUDD LAKE, NJ 07828 (973) 691-0900	<b>STATE DEPT. OF TRANSPORTATION</b> NJDOT REGION NORTH 200 STIERLI COURT MT. ARLINGTON, NJ 07856 (973) 601-6600	<b>ELECTRIC SERVICE</b> JERSEY CENTRAL POWER & LIGHT COMPANY 300 MADISON AVENUE MORRISTOWN, NJ 07960 (800) 682-3115
<b>COUNTY PLANNING BOARD</b> MORRIS COUNTY PLANNING BOARD P.O. BOX 900 MORRISTOWN, NJ 07963 (973) 829-8120 ATTN: JOSEPH BARILLA (DIVISION HEAD)	<b>STATE DEPT. OF ENVIR. PROT.</b> NJDEP DIVISION OF LAND USE REGULATION P.O. BOX 420 TRENTON, NJ 08625	

**GENERAL SITE NOTES:**

- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEMARK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS, AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEY WHERE NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEMARK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RISKS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEMARK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.

DRAWING LIST					
PAGE NO.	DRAWING NO.	DRAWING TITLE	SCALE	DATE REVISED	
1	GI-001	COVER SHEET	N.T.S.	5/1/2023	
2	GI-101	AERIAL MAP	1" = 50'	5/1/2023	
3	CB-100	EXISTING RESOURCES MAP	1" = 30'	5/1/2023	
4	CD-101	SITE DEMOLITION PLAN	1" = 30'	5/1/2023	
5	CS-101	SITE PLAN (RECORD PLAN)	1" = 30'	5/1/2023	
6	CS-102	HIGHLANDS EXEMPTION PLAN	1" = 30'	5/1/2023	
7-8	CS-201-202	TRUCK MOVEMENT PLAN	AS SHOWN	5/1/2023	
9	CS-501	SITE DETAILS	N.T.S.	5/1/2023	
10	CS-502	ABOVEGROUND STORAGE TANK DETAILS	N.T.S.	5/1/2023	
11	CP-101	PAVEMENT PLAN	1" = 30'	5/1/2023	
12	CG-101	GRADING, DRAINAGE & UTILITY PLAN	1" = 30'	5/1/2023	
13	CG-201	DRAINAGE PROFILES & DETAILS	1" = 30'	5/1/2023	
14	CE-101	SOIL EROSION AND SEDIMENT CONTROL PLAN	1" = 30'	5/1/2023	
15	CE-501	SOIL EROSION AND SEDIMENT CONTROL DETAILS	N.T.S.	5/1/2023	
16	LP-101	LANDSCAPE PLAN	1" = 30'	5/1/2023	
17	LP-501	LANDSCAPE DETAILS	1" = 30'	5/1/2023	
18	LL-101	LIGHTING PLAN	1" = 30'	5/1/2023	
19	LL-501	LIGHTING DETAILS	N.T.S.	5/1/2023	

SUPPLEMENTAL DRAWING: PLAN ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY: TAX LOT 37 BLOCK 4500" BY BORBAS SURVEYING & MAPPING, LLC; DATED 9-16-2003, LAST REVISED 5-24-2022.

**OWNER/APPLICANT**  
 VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.  
 1 EDEN LANE  
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**SURVEYOR**  
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 BOONTON, NJ 07005  
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 GARDEN STATE UNDERGROUND PLANT LOCATION SERVICE, INC.

Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.
Revisions		

 Langan Engineering and Environmental Services, Inc. Stone Manor Corporate Center, 2300 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501 www.langan.com NJ Certificate of Authorization No. 24GA27996400	Project <b>VEOLIA NORTH AMERICA - FLANDERS FACILITY</b> MOUNT OLIVE TOWNSHIP MORRIS COUNTY NEW JERSEY	Drawing Title <b>COVER SHEET</b>	Project No. 003580405	Drawing No. <b>GI-001</b>
			Date 9-7-2022	Drawn By MR

200' PROPERTY OWNERS LIST				
PIN	AREA (AC)	OWNER	PROPERTY ADDRESS	MAILING ADDRESS
<b>MOUNT OLIVE TOWNSHIP</b>				
1427_4500_37	6.000	AETSERVICES/WV LLC J. ARMSTRONG	1 EDEN LN FLANDERS, NJ 07836	13155 NOEL RD SUITE 100 DALLAS, TX 75240
1427_4500_1	2.520	COLLIQUID ENTERPRISES ONE LLC	194 GOLD MINE RD FLANDERS, NJ 07836	PO BOX 296 FLANDERS, NJ 07836
1427_4500_2	2.400	COLLIQUID ENTERPRISES TWO LLC	190 GOLD MINE RD FLANDERS, NJ 07836	PO BOX 296 FLANDERS, NJ 07836
1427_4500_3.01	5.030	TRADE ZONE SOUTH INDUSTRIAL PARK	180 GOLD MINE RD FLANDERS, NJ 07836	17 UPPER MOUNTAIN AVE MONTVILLE, NJ 07045
1427_2500_3.02	5.000	SENATORE MORRISON BUS PARK J LYNCH	186 GOLD MINE RD FLANDERS, NJ 07836	421 WEST MAIN ST BOONTON, NJ 07005
1427_4500_36	50.087	D&M 206, LLC	3 EDEN LN FLANDERS, NJ 07836	242 OLD NEW BRUNSWICK RD STE 115 PISCATAWAY, NJ 08855
1427_4500_7.08	2.940	BASTARRIKA, JOSE & JILLANE	18 SOUTHWIND DR FLANDERS, NJ 07836	18 SOUTHWIND DR FLANDERS, NJ 07836
<b>ROXBURY TOWNSHIP</b>				
1436_9001_1	2.679	PARKS PROPERTY MANAGEMENT LLC	3 GOLD MINE RD FLANDERS, NJ 07836	3 GOLD MINE RD FLANDERS, NJ 07836
1436_9001_14	6.771	D&M 206, LLC	3 EDEN LN FLANDERS, NJ 07836	242 OLD NEW BRUNSWICK RD STE 115 PISCATAWAY, NJ 08855

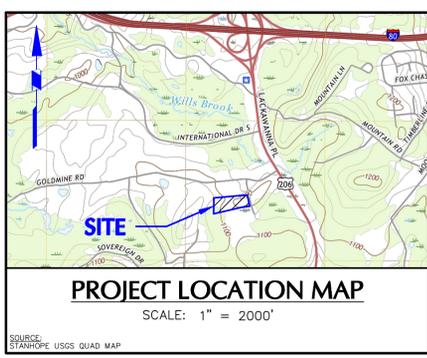
**NOTE:**  
THE 200' PROPERTY OWNERS LISTS WERE PROVIDED BY THE MOUNT OLIVE TOWNSHIP TAX ACCESSOR ON SEPTEMBER 6, 2022 AND BY ROXBURY TOWNSHIP TAX ACCESSOR ON SEPTEMBER 2, 2022.

**AERIAL MAP LEGEND**

- 200' PROPERTY OFFSET
- ADJACENT PROPERTY BOUNDARY
- SITE PROPERTY BOUNDARY & RIGHT-OF-WAY LINE



**NOTES:**  
1. AERIAL IMAGERY PROVIDED BY GEOMAP SERVICES.  
2. ADJACENT PARCEL BOUNDARY INFORMATION FROM DRAWING ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY: TAX LOT 37 BLOCK 4500", PREPARED BY BORBAS SURVEYING & MAPPING, LLC, DATED SEPTEMBER 16, 2003, LAST REVISED MAY 24, 2022 AND NEW JERSEY GEOGRAPHIC INFORMATION NETWORK DATA PORTAL.



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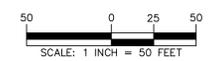
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Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.

Signature: GREGORY ELKO  
PROFESSIONAL ENGINEER  
NJ Lic. No. 240E04139500

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NJ Certificate of Authorization No. 24GA27996400

Project  
**VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
MOUNT OLIVE TOWNSHIP  
MORRIS COUNTY NEW JERSEY

Drawing Title  
**AERIAL MAP**

Project No. <b>003580405</b>	Drawing No. <b>GI-101</b>
Date <b>9-7-2022</b>	Sheet <b>2</b> of <b>19</b>
Drawn By <b>MR</b>	
Checked By <b>LT</b>	

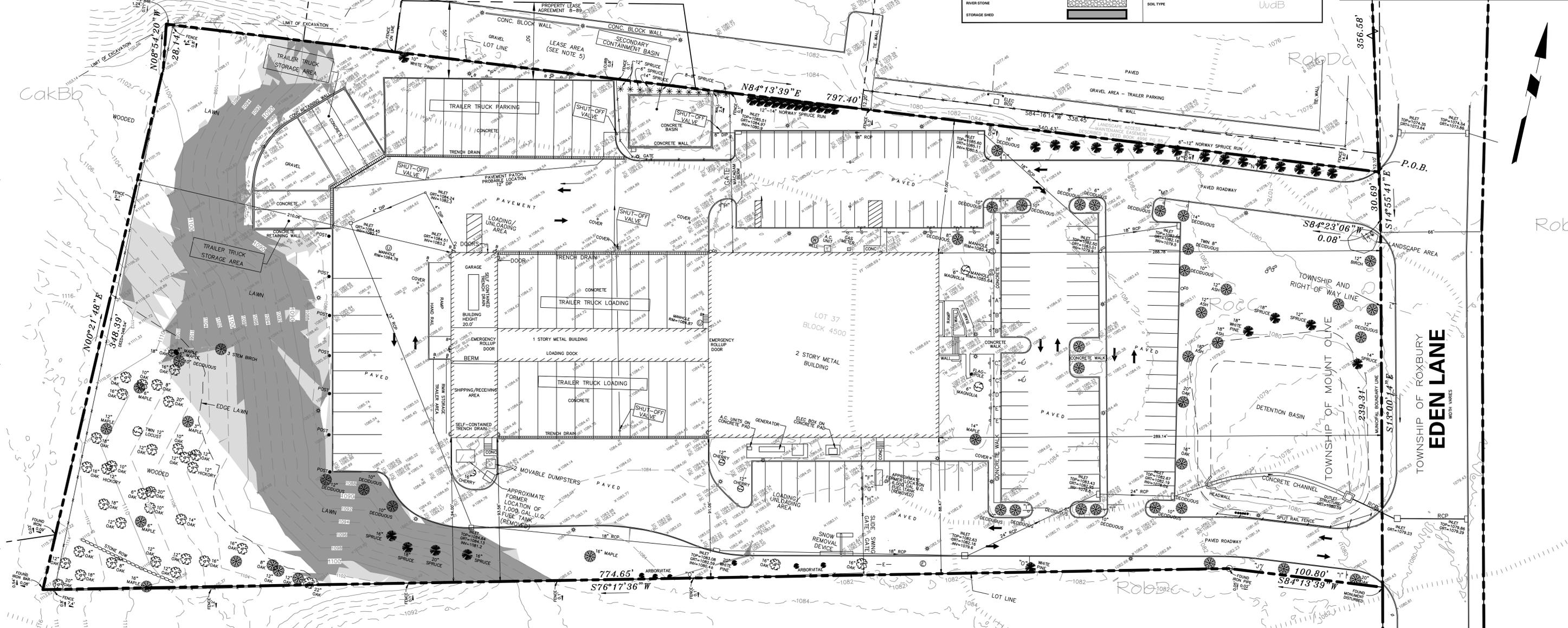
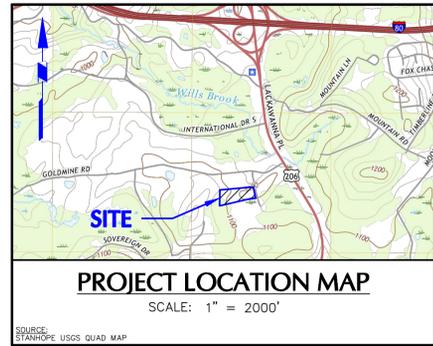
**GENERAL NOTES:**

- THIS PLAN WAS PREPARED WITH RESPECT TO THE FOLLOWING REFERENCES:  
 A. DRAWING ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, TAX LOT 37 BLOCK 4500", PREPARED BY BORBAS SURVEYING & MAPPING, LLC, DATED SEPTEMBER 16, 2003, LAST REVISED MAY 24, 2022.  
 B. SOILS LINEWORK AND INFORMATION PROVIDED BY USDA NRCS WEB SOIL SURVEY WEBSITE.
- MERIDIAN IS REFERENCED TO NEW JERSEY STATE PLANE COORDINATE SYSTEM, ZONE NAD 83.
- VERTICAL DATUM IS BASED ON NAVD 88.
- UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND LOCATIONS WHERE DATA IS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE THE SURVEYOR CANNOT AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES. ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA MAY BE SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS, UNLESS SPECIFICALLY NOTED HEREON THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON. PRIOR TO ANY DESIGN OR CONSTRUCTION THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
- LEASE INFORMATION PROVIDED BY JOHN SCHANTZ OF ONYX ENVIRONMENTAL SERVICES. FOR LEASE AGREEMENT BETWEEN ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION TO E.T.G. DATED MAY 1, 1989. AGREEMENT STATES TO BE CONTINUED ON A MONTHLY BASIS UNTIL TERMINATED BY EITHER PARTY WITH 30 DAYS NOTICE. PROVIDED HOWEVER SHOULD THE TOWNSHIP OF MT. OLIVE ISSUE ANY RESTRICTION OR ORDERS AFFECTING THE USE OF THE PROPERTY, THE TENANT WILL VACATE THE PROPERTY UPON THE REQUEST OF THE LANDLORD. SEE AGREEMENT FOR FULL CONDITIONS. STATUS OF THE AGREEMENT UNKNOWN BY SURVEYOR.

ON-SITE SOIL TYPE DESCRIPTIONS					
MAP SYMBOL	SOIL	HYDROLOGICAL SOIL GROUP	HYDRIC	DEPTH TO WATER TABLE	SOIL LIMITATIONS
CakBb	Calton loam, 0-8% slopes	C	No	6 to 30 inches	> 6.5 ft Moderately well drained; Low available water capacity (about 3.4 in); Very high surface runoff.
RobDc	Rockaway sandy loam, 15-25% slopes	C	No	24 to 36 inches	> 6.5 ft Well drained; Very low water capacity (about 2.0 in); Very high surface runoff.
RocC	Rockaway gravelly sandy loam, 8-15% slopes	C	No	24 to 36 inches	> 6.5 ft Well drained; Very low water capacity (about 2.2 in); High surface runoff.

\*Soils information obtained from USDA-NRCS Web Soil Survey for Morris County, NJ

LEGEND	
<b>SITE SYMBOLS</b>	<b>GRADING/ DRAINAGE SYMBOLS</b>
PROPERTY BOUNDARY	EXISTING CONTOUR
EXISTING ULTIMATE RIGHT-OF-WAY	EXISTING SURVEY SURFACE FLOW DIRECTION
BUILDING SETBACK	EXISTING SURVEY SPOT ELEVATION
EASEMENT	PROPOSED SPOT ELEVATION
EXISTING BUILDING LINE	EXISTING SPOT ELEVATION TO REMAIN
EXISTING CURB LINE	EXISTING SLOPE
EXISTING DEPRESSED CURB	PROPOSED TOP OF WALL ELEVATION
EXISTING CHAIN LINK FENCE	PROPOSED BOTTOM OF WALL ELEVATION
PROPOSED CHAIN LINK FENCE	
EXISTING TREELINE/VEGETATIVE BUFFER	
EXISTING GUIDE RAIL	
EXISTING LIGHT	
EXISTING LIGHT POLE	
EXISTING UTILITY POLE	
UTILITY POLE	
PARKING COURT	
EXISTING LOADING/UNLOADING AREA	
PROPOSED CONCRETE	
LIMIT OF ASPHALT TO BE REPLACED (SAW CUT LINE)	
ASPHALT TO BE REPLACED	
RIVER STONE	
STORAGE SHED	
	<b>UTILITY SYMBOLS</b>
	EXISTING STORM SEWER
	EXISTING TRENCH DRAIN
	EXISTING STORM STRUCTURE
	EXISTING SANITARY CLEANOUT
	EXISTING GAS VALVE
	EXISTING GAS MARKOUT
	EXISTING WATER MARKOUT
	EXISTING WATER VALVE
	PROPOSED STORM SEWER
	<b>SOIL SYMBOLS</b>
	SOILS BOUNDARY
	SOIL TYPE



SLOPES TABLE AND LEGEND				
NUMBER	MIN. SLOPE	MAX. SLOPE	AREA (SF)	COLOR
1	15.0%	19.9%	6,795	[Light Gray Box]
2	20.0%	MAX	23,938	[Dark Gray Box]

NOTE: THE SLOPES SHOWN ON THIS PLAN AND REPORTED IN THE SLOPES TABLE REPRESENT THE AREAS OF 5,000 SF OR MORE OF CONTIGUOUS STEEP SLOPES AS DEFINED IN SECTION 535-22.B. OF THE MOUNT OLIVE TOWNSHIP ORDINANCE.

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Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.

Signature: GREGORY ELKO  
 PROFESSIONAL ENGINEER  
 NJ Lic. No. 240E04139500

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Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
 MOUNT OLIVE TOWNSHIP  
 MORRIS COUNTY NEW JERSEY

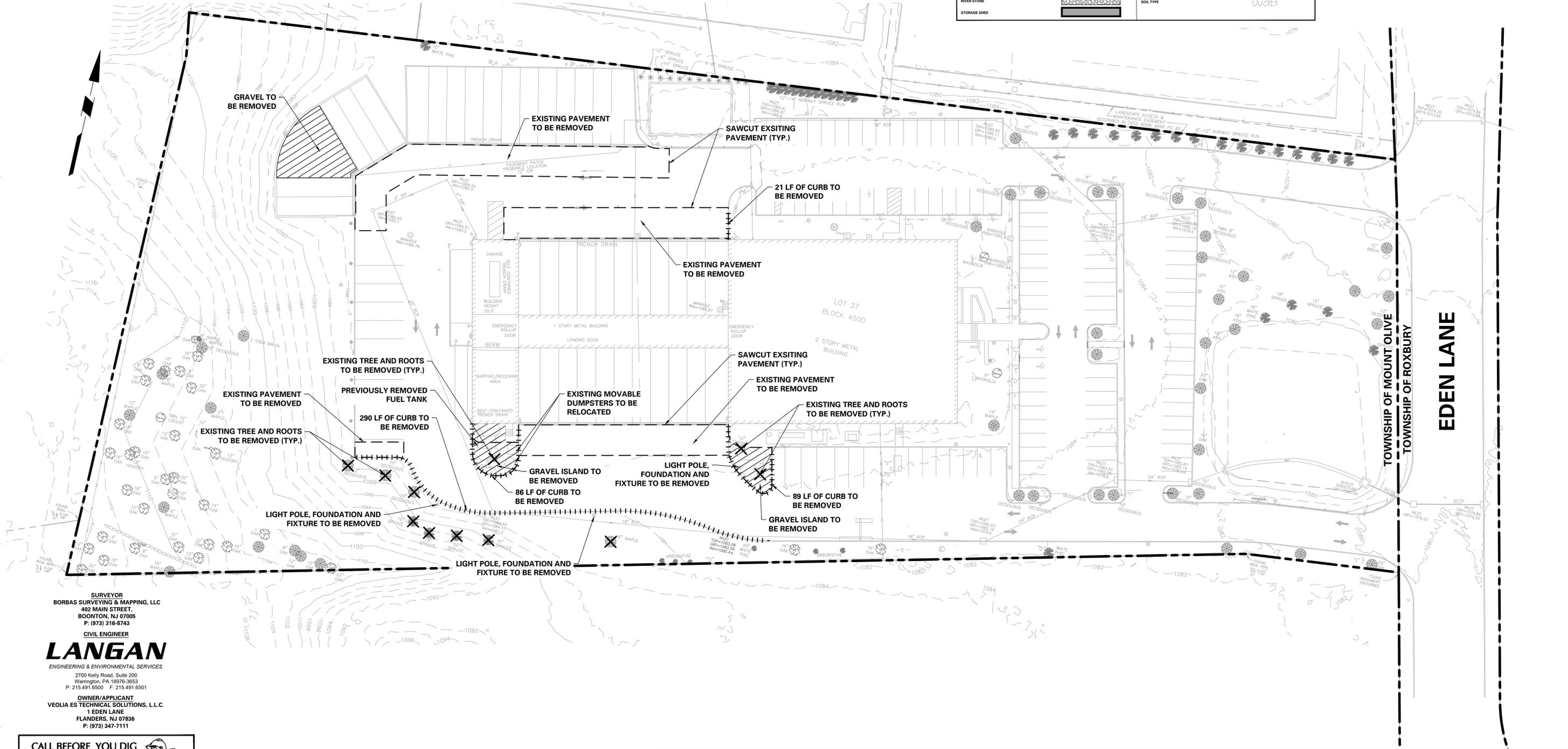
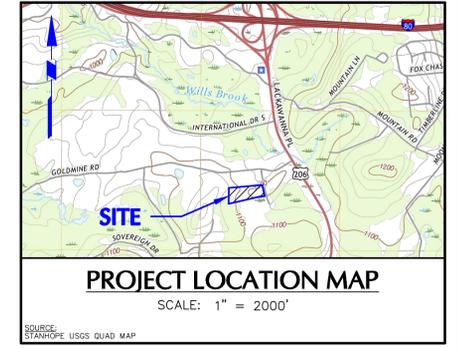
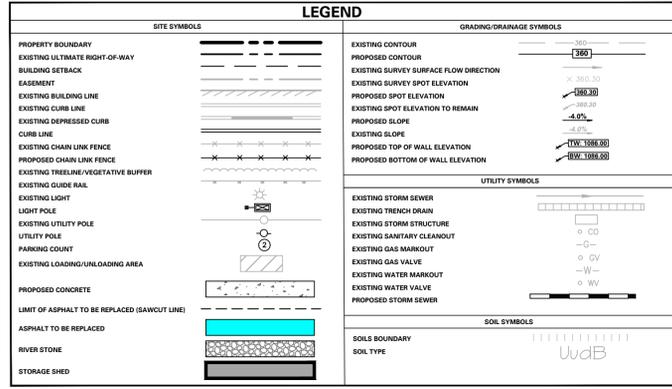
Drawing Title: **EXISTING RESOURCES MAP**

Project No. 003580405  
 Date: 9-7-2022  
 Drawn By: MR  
 Checked By: LT

Drawing No. **CB-100**  
 Sheet 3 of 19

**DEMOLITION NOTES:**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND LATERALS, UNDERGROUND ELECTRIC, TELEPHONE, VAULTS, GAS, WATER MAINS, ETC. ARE APPROXIMATE AND MUST BE FIELD VERIFIED EITHER THROUGH COORDINATION WITH THE UTILITY COMPANIES AND/OR THROUGH THE CONTRACTOR'S OWN METHODS. SUBSURFACE UTILITY INFORMATION HAS BEEN PROVIDED BY OTHERS AND NOT VERIFIED BY LANGAN ENGINEERING & ENVIRONMENTAL SERVICES. OTHER UTILITIES MAY ALSO EXIST THAT ARE NOT SHOWN ON THESE PLANS. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION SHALL CONFIRM ALL UTILITIES IN THE FIELD FOR EXACT LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS PRIOR TO DEMOLITION.
- THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL PROVISIONS OF EDISON TOWNSHIP, AND OTHER JURISDICTIONAL AGENCIES.
- THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL OFFSITE PROPERTY AND STRUCTURES FROM ANY AND ALL DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL USE ANY NECESSARY PROTECTION INCLUDING SCREENS, PLATFORMS, BRACING, UNDERPINNING, ETC. TO PROTECT OFFSITE PROPERTY. ANY OFFSITE DAMAGE CAUSED BY THE CONTRACTOR OR HIS AGENTS SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES AND ANY OTHER METHOD DETERMINED APPROPRIATE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY DEMOLITION PERMITS.
- ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN WITHIN CONSTRUCTION AREA, SHALL BE REMOVED & DISPOSED OF OFF SITE OR RECYCLED ON SITE IN A MANNER APPROVED BY THE OWNER AND/OR OWNER'S ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSING, IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL STRUCTURES, PAVES, WALLS, FOUNDATIONS, PAVEMENT, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT, WHEN REQUIRED, TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
- THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL FEES TO BE CHARGED BY THE UTILITY COMPANIES AND INCLUDE SUCH FEES AS PART OF THE SITEWORK BID. IF FEES ARE NOT ABLE TO BE DETERMINED AT THE TIME OF SITEWORK BID, THE CONTRACTOR MUST INDICATE AS SUCH IN THE BID DOCUMENTS. ANY SUCH FEES THAT ARE INCURRED DURING THE COURSE OF CONSTRUCTION THAT ARE NOT IDENTIFIED AT THE TIME OF SITEWORK BID SHALL BE PAID BY THE CONTRACTOR.
- ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
- PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
- SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FENCING, LIGHTING OR ANY OTHER STRUCTURE TO REMAIN, THEN THE CONTRACTOR SHALL PROVIDE NEW MATERIALS / STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AT THE CONTRACTOR'S OWN COST, EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.
- THIS PLAN IS INTENDED TO CONCEPTUALLY ILLUSTRATE MAJOR DEMOLITION AND RELOCATION ACTIVITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXTENTS OF DEMOLITION BASED ON THE PROPOSED IMPROVEMENTS AND SCOPE OF WORK DEPICTED ON THE PLANS CONTAINED WITHIN THIS SET OF DRAWINGS. IT IS SPECIFICALLY NOTED THAT SOME EXISTING FEATURES TO REMAIN MAY REQUIRE FIELD ADJUSTMENTS TO ACCOMMODATE PROPOSED IMPROVEMENTS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPROVED ENVIRONMENTAL WORK PLANS AND SOIL EROSION DRAWINGS.
- CONTRACTOR TO REMOVE OR RELOCATE, WHEN APPLICABLE, ALL CONNECTING IMPROVEMENTS, DRAIN PIPES, SANITARY SEWER PIPES, POWER POLES, AND GUY WIRES, WATER METERS AND WATER LINES, WELLS, SIDEWALKS, SIGN POLES, UNDERGROUND GAS, ELECTRIC LINES FOR LIGHT POLES AND ASPHALT, SHOWN AND NOT SHOWN, WITHIN CONSTRUCTION LIMITS AND WHERE NEEDED, TO ALLOW FOR NEW CONSTRUCTION AS SHOWN.
- CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE, AND FEDERAL REGULATIONS IN DISPOSING OF DEMOLISHED MATERIALS REMOVED FROM THIS SITE.
- CONTRACTOR SHALL CLEAR ALL EXISTING INLETS, UNDERGROUND STORAGE SYSTEMS AND STORM PIPES TO THE POINT OF CONNECTION WITHIN THE PROJECT SITE OF DEBRIS AND ACCUMULATED SEDIMENT PRIOR TO CONNECTION OF PROPOSED STORM PIPES.

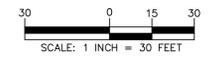


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Date	Description	No.
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Signature: GREGORY ELKO  
PROFESSIONAL ENGINEER  
NJ Lic. No. 24QE04139500

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Project: VEOLIA NORTH AMERICA - FLANDERS FACILITY  
MOUNT OLIVE TOWNSHIP  
MORRIS COUNTY NEW JERSEY

Drawing Title: SITE DEMOLITION PLAN

Project No. 003580405  
Date: 9-7-2022  
Drawn By: MR  
Checked By: LT  
Drawing No. CD-101  
Sheet 4 of 19

### LEGEND

SITE SYMBOLS		GRADING/DRAINAGE SYMBOLS	
PROPERTY BOUNDARY	---	EXISTING CONTOUR	---
EXISTING ULTIMATE RIGHT-OF-WAY	---	PROPOSED CONTOUR	---
BUILDING SETBACK	---	EXISTING SURVEY SURFACE FLOW DIRECTION	---
EASEMENT	---	EXISTING SPOT ELEVATION	---
EXISTING BUILDING LINE	---	PROPOSED SPOT ELEVATION	---
EXISTING CURB LINE	---	EXISTING SURVEY SPOT ELEVATION	---
EXISTING DEPRESSED CURB	---	PROPOSED SPOT ELEVATION TO REMAIN	---
EXISTING CHAIN LINK FENCE	---	EXISTING SLOPE	---
EXISTING TREELINE/VEGETATIVE BUFFER	---	PROPOSED SLOPE	---
EXISTING GROUND SURFACE	---	EXISTING TOP OF WALL ELEVATION	---
EXISTING UTILITY POLE	---	PROPOSED TOP OF WALL ELEVATION	---
EXISTING UTILITY POLE	---	EXISTING BOTTOM OF WALL ELEVATION	---
EXISTING GROUND SURFACE	---	EXISTING STORM SEWER	---
EXISTING CHAIN LINK FENCE	---	EXISTING TRENCH DRAIN	---
EXISTING TREELINE/VEGETATIVE BUFFER	---	EXISTING STORM STRUCTURE	---
EXISTING GROUND SURFACE	---	EXISTING SANITARY CLEANOUT	---
EXISTING CHAIN LINK FENCE	---	EXISTING GAS MARKOUT	---
EXISTING TREELINE/VEGETATIVE BUFFER	---	EXISTING GAS VALVE	---
EXISTING GROUND SURFACE	---	EXISTING WATER MARKOUT	---
EXISTING CHAIN LINK FENCE	---	EXISTING WATER VALVE	---
EXISTING TREELINE/VEGETATIVE BUFFER	---	EXISTING STORM SEWER	---
EXISTING GROUND SURFACE	---	SOIL SYMBOLS	---
EXISTING CHAIN LINK FENCE	---	SOILS BOUNDARY	---
EXISTING TREELINE/VEGETATIVE BUFFER	---	SOIL TYPE	---
EXISTING GROUND SURFACE	---	SOIL TYPE	---

### PARKING AND LOADING SUMMARY TABLE

USE	FLOOR AREA (SF)	REQUIRED PARKING RATIO	REQUIRED SPACES	PROVIDED SPACES
<b>OFFICE<sup>2,3</sup></b>	<b>8,857</b>			
Office area not required to be parked <sup>2</sup> (20% of Total Area)	6,490	4.5 spaces per 1,000 SF of floor area <sup>4</sup>	-	-
Office area required to be parked <sup>2</sup>	2,367		11	110
<b>WAREHOUSE</b>	<b>15,762</b>	1 space per 5,000 SF floor area <sup>5</sup>	4	4
<b>SHIPPING/RECEIVING</b>	<b>6,360</b>	1 space per 5,000 SF floor area <sup>5</sup>	2	2
<b>STORAGE AREA<sup>6</sup></b>	<b>1,470</b>	1 space per 5,000 SF floor area <sup>5</sup>	1	1
<b>TOTAL AREA</b>	<b>32,449</b>		<b>18</b>	<b>117</b>

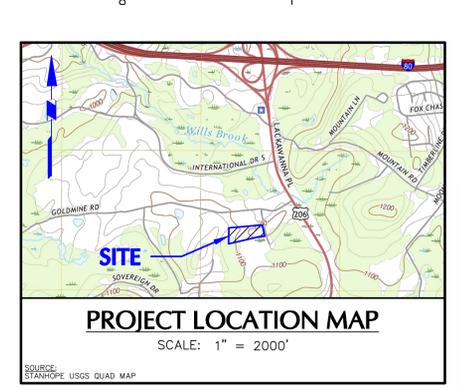
**Notes:**

- Floor areas are reported per information provided by the property owner, Veolia North America.
- Section 550-56 J, states that "A maximum of 20% of GFA can be office use without additional parking for the office use. Office use above 20% shall require parking at the appropriate rate". The total GFA of the entire building is 30,979 SF. 20% of the total building area is 6,196 SF. Therefore, 6,196 SF of the 8,857 SF categorized as office use does not need parking dedicated to it. This leaves 2,661 SF of office use to require parking (8,857 SF - 6,196 SF = 2,661 SF) at 4.5 spaces per 1,000 SF.
- As a conservative measure, the parking requirement was also calculated by dedicating parking to the total office area (8,857 SF). In this case, 40 spaces are required for the Office Use, resulting in 47 total spaces required. Provided parking of 117 spaces still meets this requirement.
- Parking requirement for office use in buildings up to 50,000 SF of floor area per Zoning Ordinance Section 550-56.J.
- Parking requirements for Warehouse, Shipping and Receiving, and Storage Areas uses per Zoning Ordinance Section 550-56.J.
- The proposed storage shed is included in the total site GFA. Per Section 550-5 which specifies that gross floor area "shall include all other areas including cellars, warehousing and storage areas, regardless of ceiling height".
- 110 of the 117 Total Parking Spaces provided are existing to remain.

### ZONING TABLE

VEOLIA NORTH AMERICA - FLANDERS FACILITY  
BLOCK No. 4500, LOT No. 37  
MOUNT OLIVE TOWNSHIP, MORRIS COUNTY, NJ  
COMMERCIAL/LIGHT INDUSTRIAL DISTRICT (C-L)

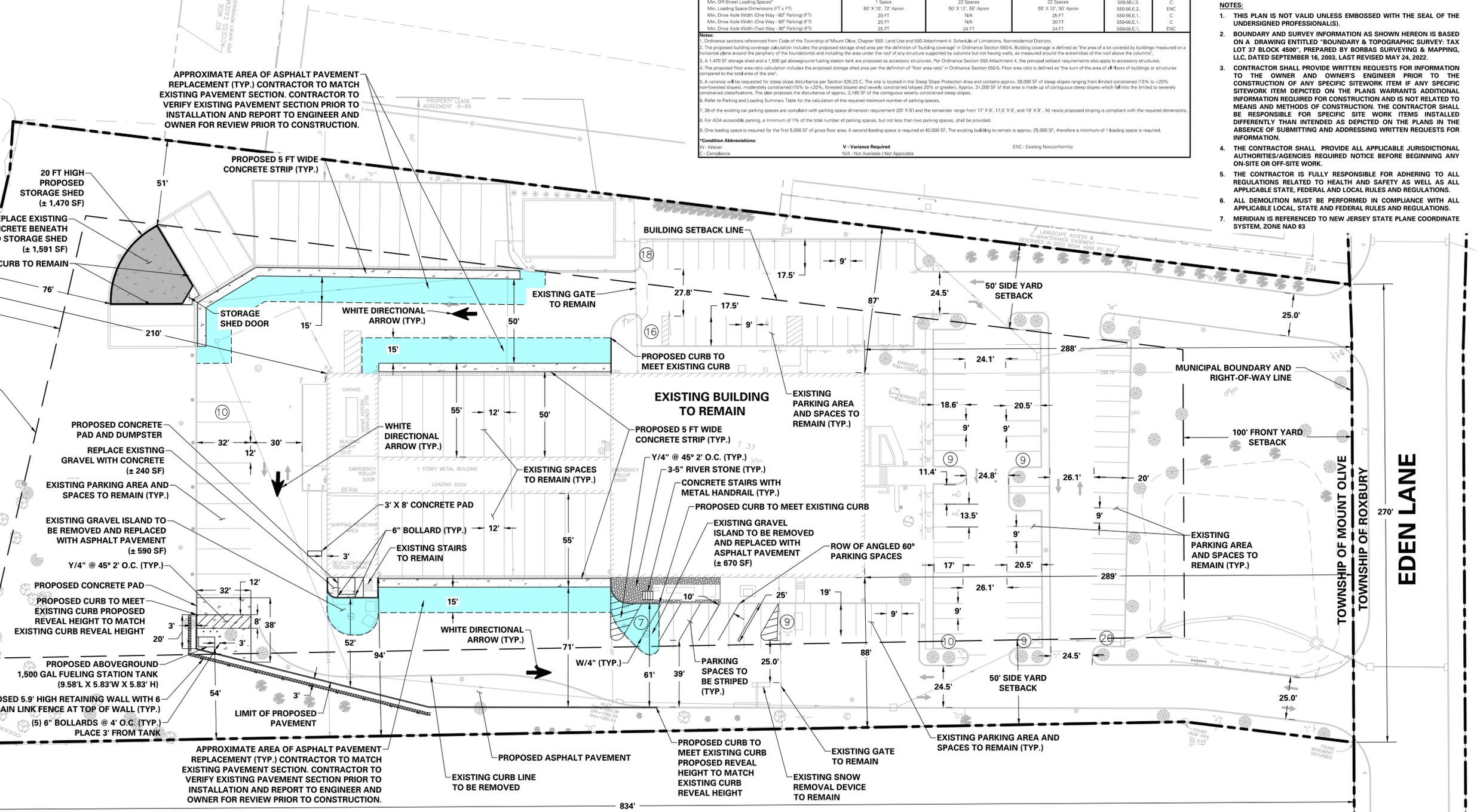
ITEM	REQUIRED/PERMITTED	EXISTING	PROPOSED	ORDINANCE SECTION	CONDITION*
<b>Land Use</b>	Warehousing, Shipping and Receiving Office	Warehousing, Shipping and Receiving Office	Warehousing, Shipping and Receiving Office	550-103.C.1.c.	C
<b>Permitted Use Requirements</b>					
<b>Lot Dimensions</b>					
Min. Lot Area (SF)	5.0 AC	6.0 AC	6.0 AC	550 Attachment 4	C
Min. Lot Width (FT)	250 FT	270 FT	270 FT	550 Attachment 4	C
Min. Lot Depth (FT)	250 FT	634 FT	834 FT	550 Attachment 4	C
Max. Lot Coverage - Buildings (ft <sup>2</sup> )	N/A	9.5%	10.0%	550 Attachment 4	C
Max. Lot Coverage - Buildings and Pavement (%)	60%	55.8%	55.8%	550 Attachment 4	C
<b>Building Setbacks</b>					
Min. Front Yard (FT)	100 FT	288 FT	288 FT	550 Attachment 4	C
Min. Side Yard (FT)	50 FT (Principal/Accessory)	87 FT	87 FT (Principal) / 76 FT (Accessory)	550 Attachment 4	C
Min. Rear Yard (FT)	50 FT (Principal/Accessory)	210 FT	210 FT	550 Attachment 4	C
<b>Building Requirements</b>					
Max. Building Height (FT)	45 FT	26.4 FT	26.4 FT	550 Attachment 4	C
Max. Floor Area Ratio <sup>2</sup>	0.4	0.12	0.12	550 Attachment 4	C
<b>Retaining Walls</b>					
Max. Retaining Wall Height (FT)	6 FT	3.8 FT	5.8 FT	550-82.A.3.	C
<b>Steep Slopes</b>					
Max. Steep Slope Disturbance	(See Note 5)	N/A	3.185 SF	535.22.C.	V
<b>Parking Requirements</b>					
Min. Number of Parking Spaces <sup>3</sup>	18 Spaces	117 Spaces	117 Spaces	550.66.J.	C
Min. Parking Space Dimensions (FT x FT) <sup>3</sup>	18' x 10' or 20' x 9'	17.5' x 9'	17.5' x 9'	550-56.E.3.	ENC
Min. Number of ADA Spaces <sup>3</sup>	2 Spaces	2 Spaces	2 Spaces	375-35.B.1.	C
Min. ADA Space Dimensions (FT)	12' Wide	11.4' Wide	11.4' Wide	375-35.B.3.	ENC
Min. Off-Street Loading Spaces <sup>3</sup>	1 Space	22 Spaces	22 Spaces	550-56.L.3.	C
Min. Loading Space Dimensions (FT x FT)	80' x 10', 72' Apron	50' x 12', 50' Apron	55' x 12', 50' Apron	550-56.E.2.	ENC
Min. Drive Aisle Width (One Way - 60' Parking) (FT)	20 FT	N/A	35 FT	550-56.E.1.	C
Min. Drive Aisle Width (One Way - 90' Parking) (FT)	25 FT	N/A	30 FT	550-56.E.1.	C
Min. Drive Aisle Width (Two Way - 80' Parking) (FT)	25 FT	24 FT	24 FT	550-56.E.1.	ENC



- NOTES:**
- THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
  - BOUNDARY AND SURVEY INFORMATION AS SHOWN HEREON IS BASED ON A DRAWING ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY: TAX LOT 37 BLOCK 4500", PREPARED BY BORBAS SURVEYING & MAPPING, LLC, DATED SEPTEMBER 16, 2003, LAST REVISED MAY 24, 2022.
  - CONTRACTOR SHALL PROVIDE WRITTEN REQUESTS FOR INFORMATION TO THE OWNER AND OWNER'S ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM IF ANY SPECIFIC SITEWORK ITEM DEPICTED ON THE PLANS WARRANTS ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION AND IS NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPECIFIC SITE WORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND ADDRESSING WRITTEN REQUESTS FOR INFORMATION.
  - THE CONTRACTOR SHALL PROVIDE ALL APPLICABLE JURISDICTIONAL AUTHORITIES/AGENCIES REQUIRED NOTICE BEFORE BEGINNING ANY ON-SITE OR OFF-SITE WORK.
  - THE CONTRACTOR IS FULLY RESPONSIBLE FOR ADHERING TO ALL REGULATIONS RELATED TO HEALTH AND SAFETY AS WELL AS ALL APPLICABLE STATE, FEDERAL AND LOCAL RULES AND REGULATIONS.
  - ALL DEMOLITION MUST BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL RULES AND REGULATIONS.
  - MERIDIAN IS REFERENCED TO NEW JERSEY STATE PLANE COORDINATE SYSTEM, ZONE NAD 83

APPROVED BY MOUNT OLIVE TOWNSHIP PLANNING BOARD

PLANNING BOARD CHAIRMAN	DATE
PLANNING BOARD SECRETARY	DATE
TOWNSHIP ENGINEER	DATE
TOWNSHIP CLERK	DATE
OWNER	DATE



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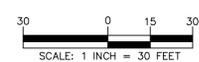
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GARDEN STATE UNDERGROUND PLANT LOCATION SERVICE, INC.



Date	Description	No.
5-1-23	REVISED PER MDCSD AND TOWNSHIP COMMENTS	1.
Revisions		

Signature: GREGORY ELKO  
PROFESSIONAL ENGINEER  
NJ Lic. No. 24QE04139500

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NJ Certificate of Authorization No. 24GA27996400

Project: VEOLIA NORTH AMERICA - FLANDERS FACILITY  
MOUNT OLIVE TOWNSHIP  
MORRIS COUNTY  
NEW JERSEY

Drawing Title: SITE PLAN (RECORD PLAN)

Project No. 003580405  
Date: 9-7-2022  
Drawn By: MR  
Checked By: LT

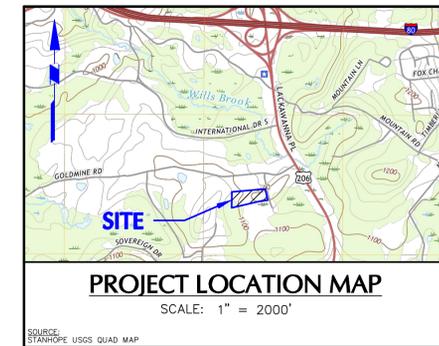
Drawing No. CS-101  
Sheet 5 of 19

**IMPERVIOUS LEGEND**

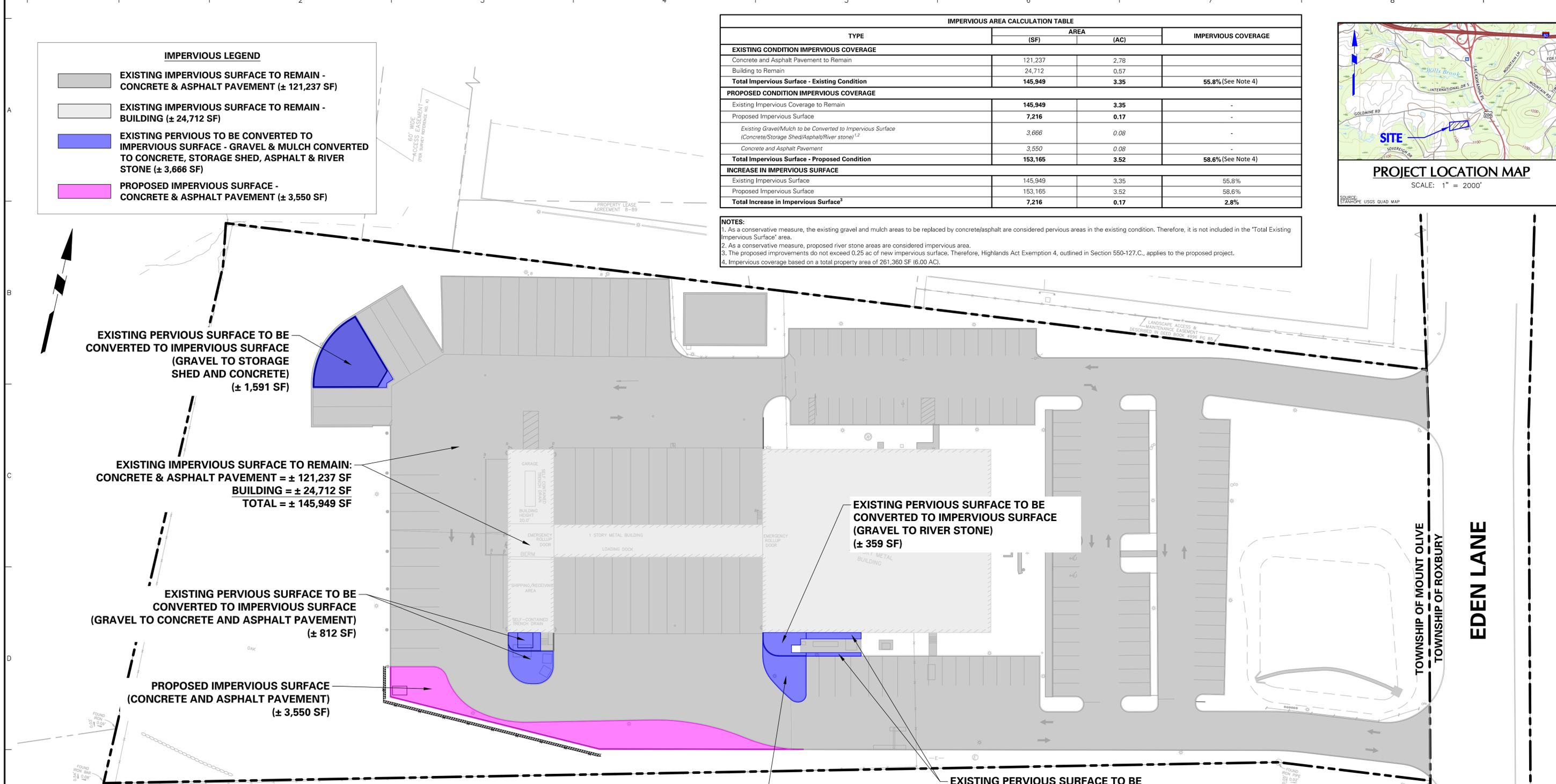
	EXISTING IMPERVIOUS SURFACE TO REMAIN - CONCRETE & ASPHALT PAVEMENT (± 121,237 SF)
	EXISTING IMPERVIOUS SURFACE TO REMAIN - BUILDING (± 24,712 SF)
	EXISTING PERVIOUS TO BE CONVERTED TO IMPERVIOUS SURFACE - GRAVEL & MULCH CONVERTED TO CONCRETE, STORAGE SHED, ASPHALT & RIVER STONE (± 3,666 SF)
	PROPOSED IMPERVIOUS SURFACE - CONCRETE & ASPHALT PAVEMENT (± 3,550 SF)

**IMPERVIOUS AREA CALCULATION TABLE**

TYPE	AREA		IMPERVIOUS COVERAGE
	(SF)	(AC)	
<b>EXISTING CONDITION IMPERVIOUS COVERAGE</b>			
Concrete and Asphalt Pavement to Remain	121,237	2.78	55.8% (See Note 4)
Building to Remain	24,712	0.57	
<b>Total Impervious Surface - Existing Condition</b>	<b>145,949</b>	<b>3.35</b>	
<b>PROPOSED CONDITION IMPERVIOUS COVERAGE</b>			
Existing Impervious Coverage to Remain	145,949	3.35	-
Proposed Impervious Surface	7,216	0.17	-
Existing Gravel/Mulch to be Converted to Impervious Surface (Concrete/Storage Shed/Asphalt/River stone) <sup>1,2</sup>	3,666	0.08	-
Concrete and Asphalt Pavement	3,550	0.08	-
<b>Total Impervious Surface - Proposed Condition</b>	<b>153,165</b>	<b>3.52</b>	<b>58.6% (See Note 4)</b>
<b>INCREASE IN IMPERVIOUS SURFACE</b>			
Existing Impervious Surface	145,949	3.35	55.8%
Proposed Impervious Surface	153,165	3.52	58.6%
<b>Total Increase in Impervious Surface<sup>3</sup></b>	<b>7,216</b>	<b>0.17</b>	<b>2.8%</b>



**NOTES:**  
 1. As a conservative measure, the existing gravel and mulch areas to be replaced by concrete/asphalt are considered pervious areas in the existing condition. Therefore, it is not included in the 'Total Existing Impervious Surface' area.  
 2. As a conservative measure, proposed river stone areas are considered pervious area.  
 3. The proposed improvements do not exceed 0.25 ac of new impervious surface. Therefore, Highlands Act Exemption 4, outlined in Section 550-127.C., applies to the proposed project.  
 4. Impervious coverage based on a total property area of 261,360 SF (6.00 AC).



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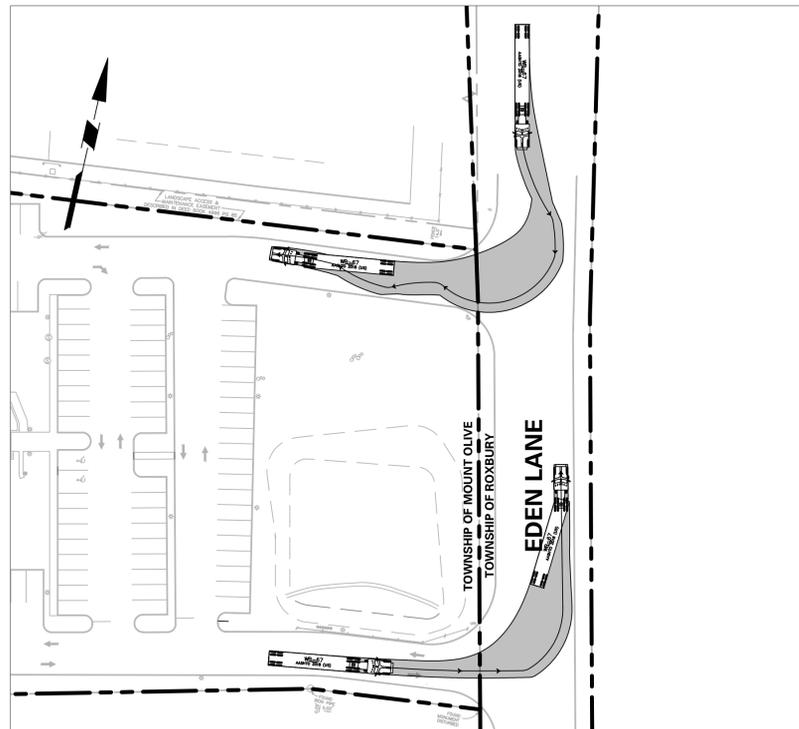
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 MOUNT OLIVE TOWNSHIP  
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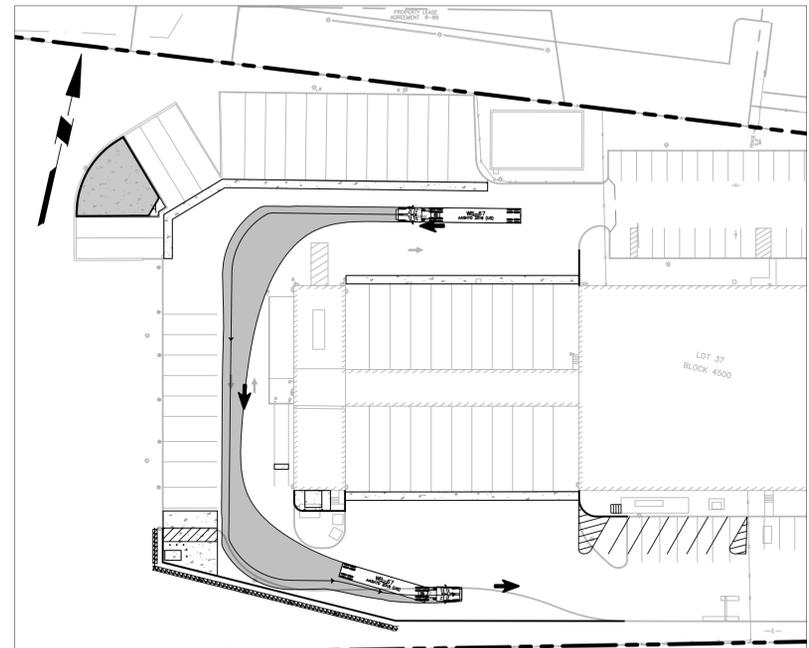
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Project No. 003580405  
 Date: 9-7-2022  
 Drawn By: MR  
 Checked By: LT

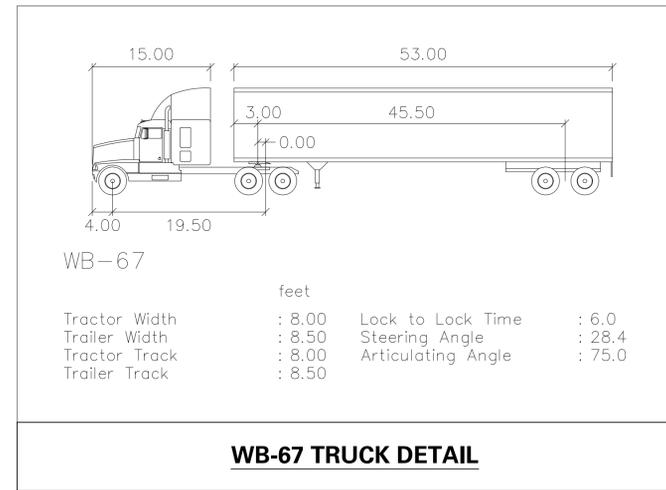
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 Sheet 6 of 19



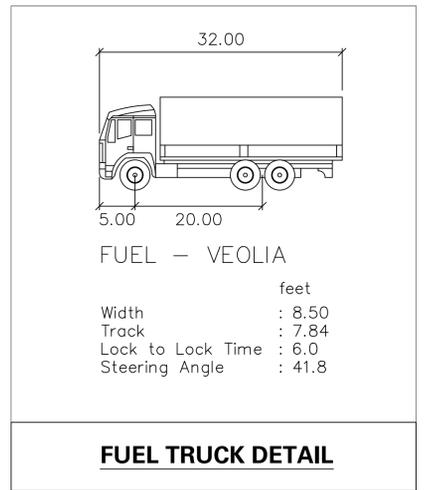
**WB-67 TRUCK RIGHT ENTRANCE INTO SITE & LEFT TURN FROM SITE**  
SCALE: 1" = 50'



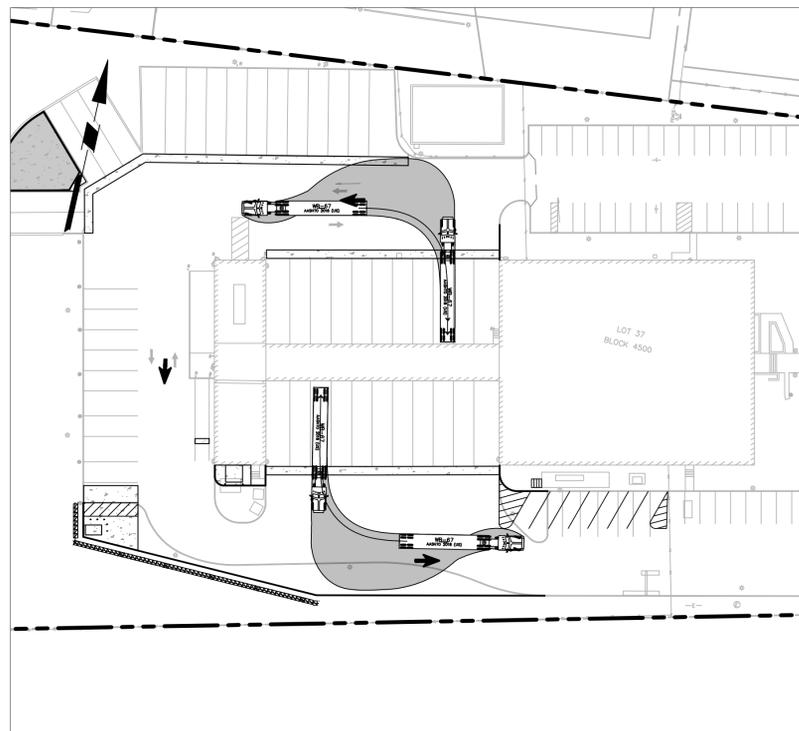
**WB-67 TRUCK COURT TURN**  
SCALE: 1" = 50'



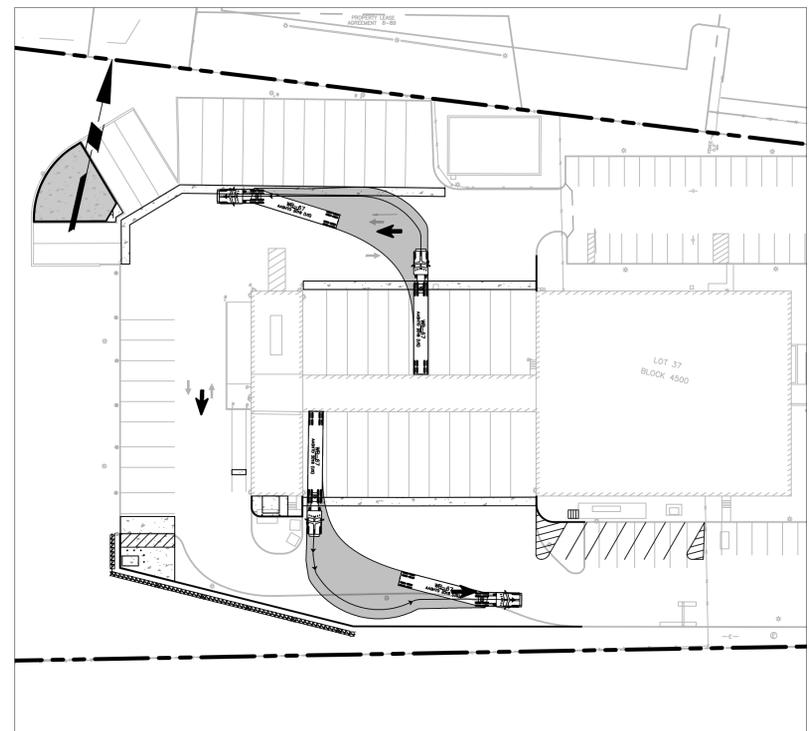
**WB-67 TRUCK DETAIL**



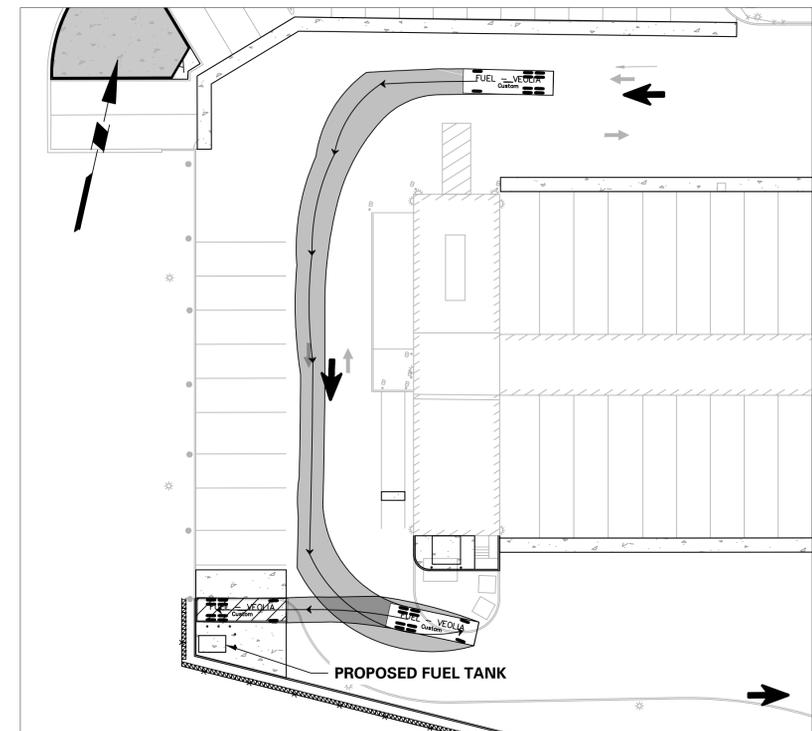
**FUEL TRUCK DETAIL**



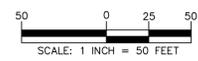
**WB-67 TRUCK TURNS INTO LOADING DOCKS**  
SCALE: 1" = 50'



**WB-67 TRUCK TURNS OUT OF LOADING DOCKS**  
SCALE: 1" = 50'



**FUEL TRUCK BACKING INTO FUEL TANK SPACE**  
SCALE: 1" = 30'



Date	Description	No.
5-1-23	REVISED PER MSCSD AND TOWNSHIP COMMENTS	1.

Signature: GREGORY ELKO  
PROFESSIONAL ENGINEER  
NJ Lic. No. 240E04139500

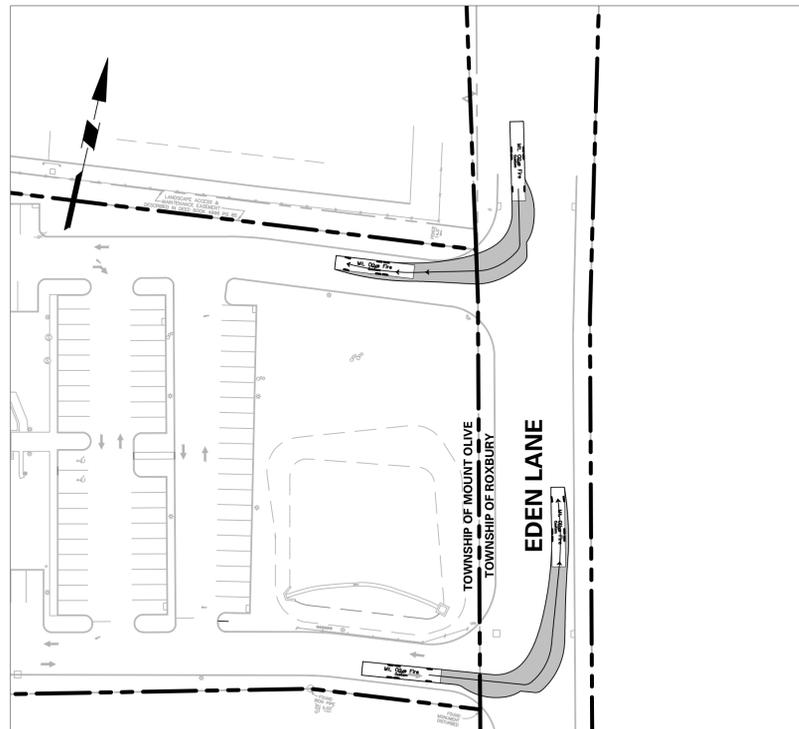
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Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
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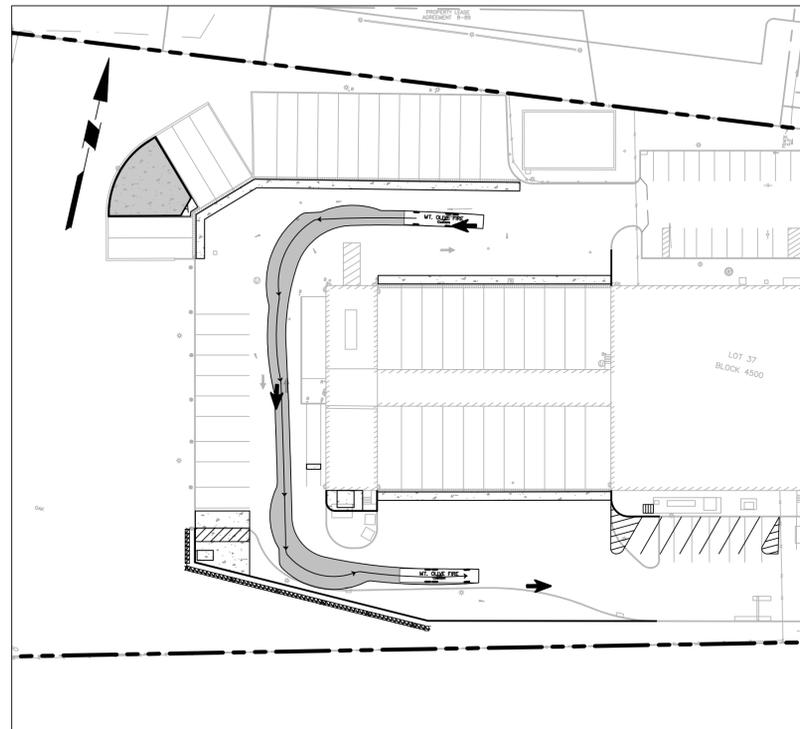
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Project No. 003580405  
Date 9-7-2022  
Drawn By MR  
Checked By LT

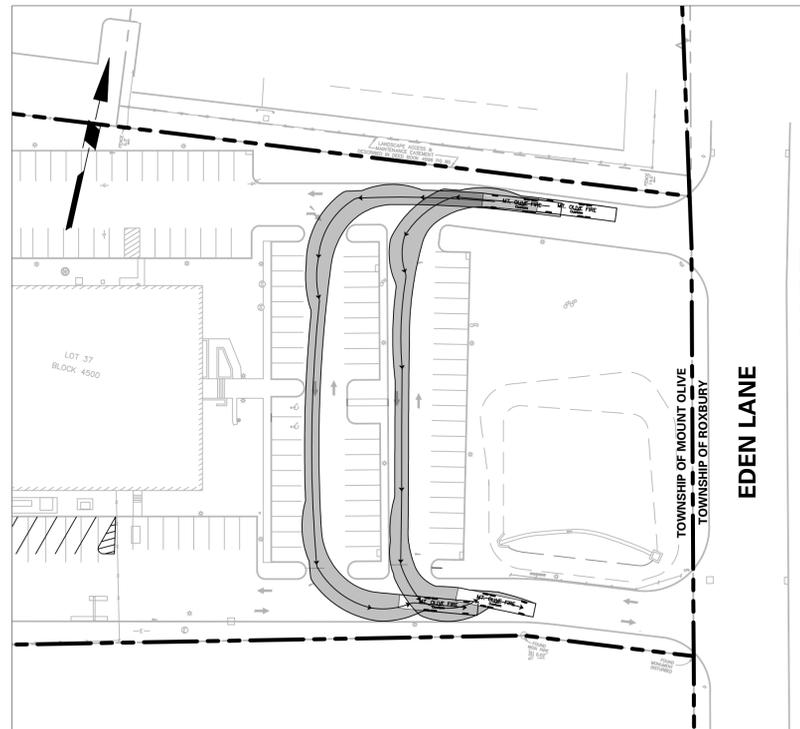
Drawing No. **CS-201**  
Sheet 7 of 19



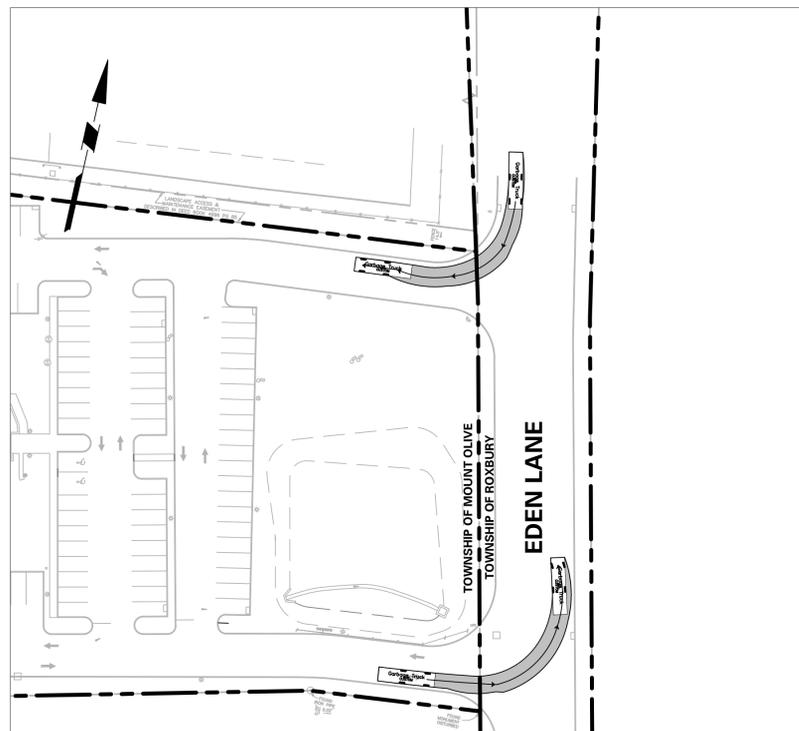
**FIRE TRUCK RIGHT ENTRANCE INTO SITE & LEFT TURN FROM SITE** SCALE: 1" = 50'



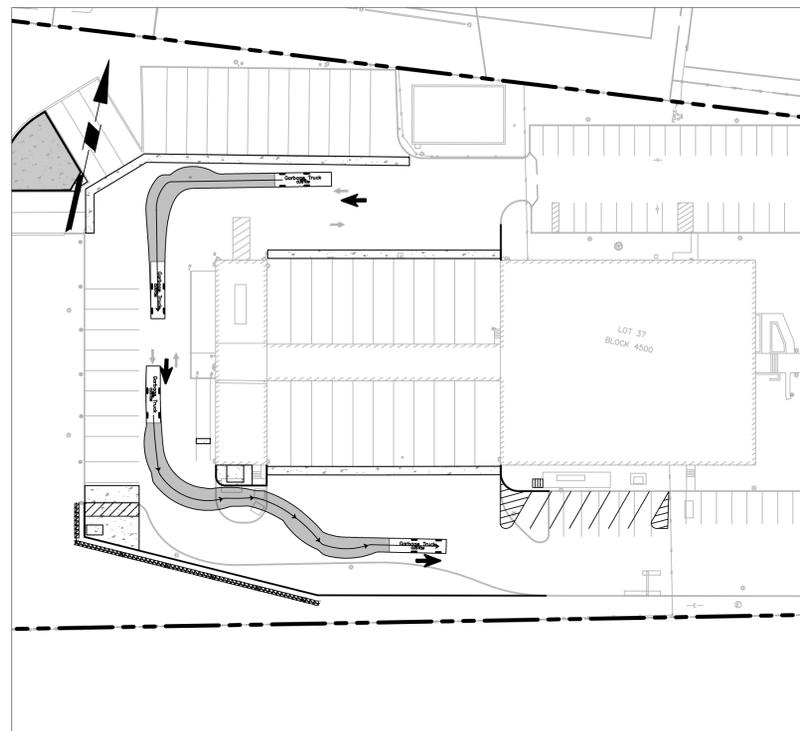
**FIRE TRUCK COURT TURN** SCALE: 1" = 50'



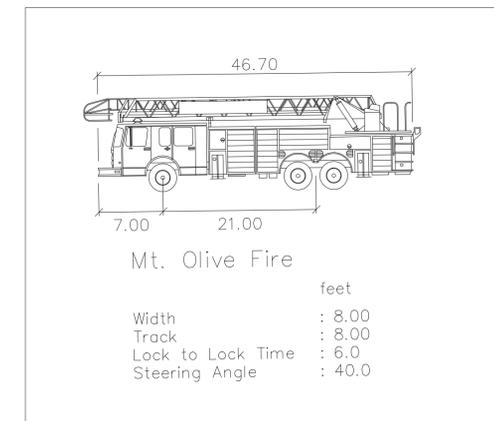
**FIRE TRUCK PARKING LOT TURNS** SCALE: 1" = 50'



**GARBAGE TRUCK RIGHT ENTRANCE INTO SITE & LEFT TURN FROM SITE** SCALE: 1" = 50'



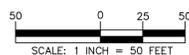
**GARBAGE TRUCK COURT TURNS** SCALE: 1" = 50'



**MT. OLIVE FIRE TRUCK DETAIL**



**GARBAGE TRUCK DETAIL**



Date	Description	No.
5-1-23	REVISED PER MSCSD AND TOWNSHIP COMMENTS	1.
Revisions		

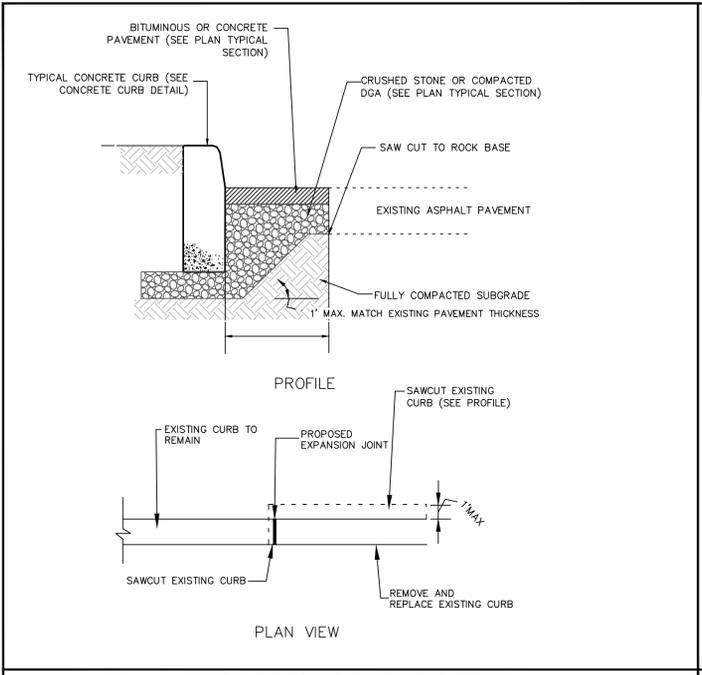
Signature: GREGORY ELKO  
 PROFESSIONAL ENGINEER  
 NJ Lic. No. 240E04139500

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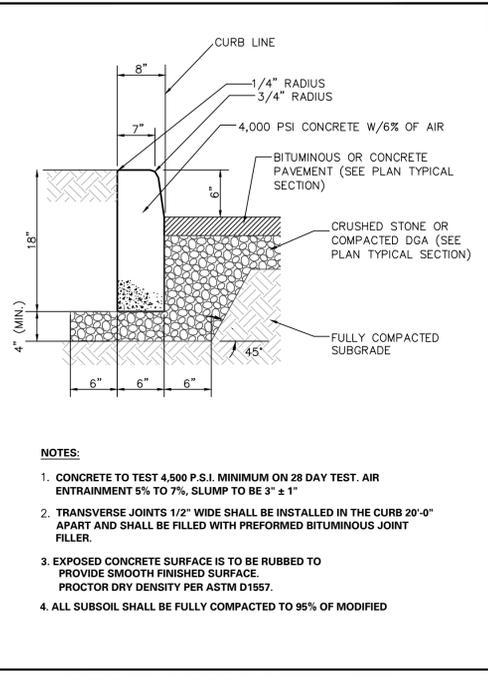
Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
 MOUNT OLIVE TOWNSHIP  
 MORRIS COUNTY NEW JERSEY

Drawing Title: **TRUCK MOVEMENT PLAN - FIRE & GARBAGE**

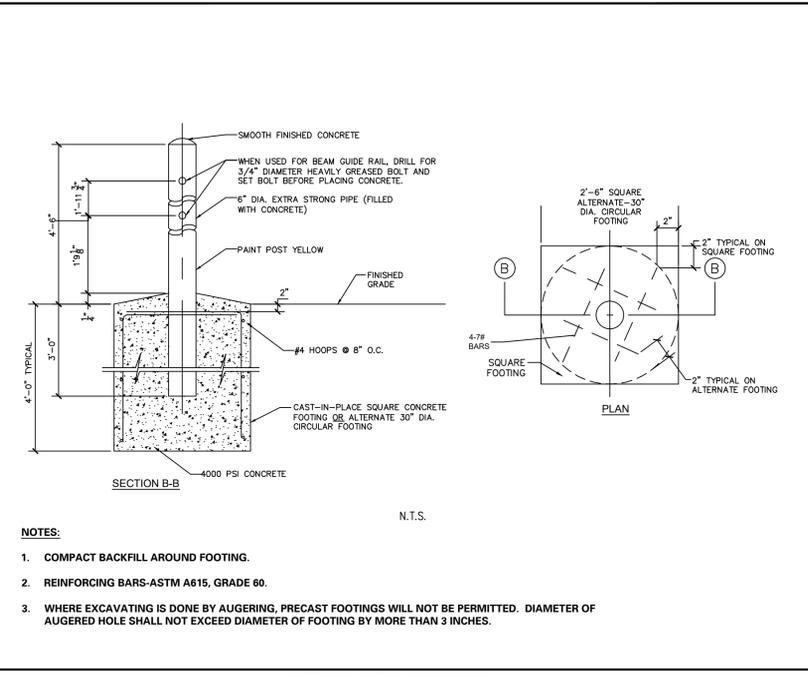
Project No.	003580405	Drawing No.	<b>CS-202</b>
Date	9-7-2022		
Drawn By	MR	Sheet 8 of 19	
Checked By	LT		



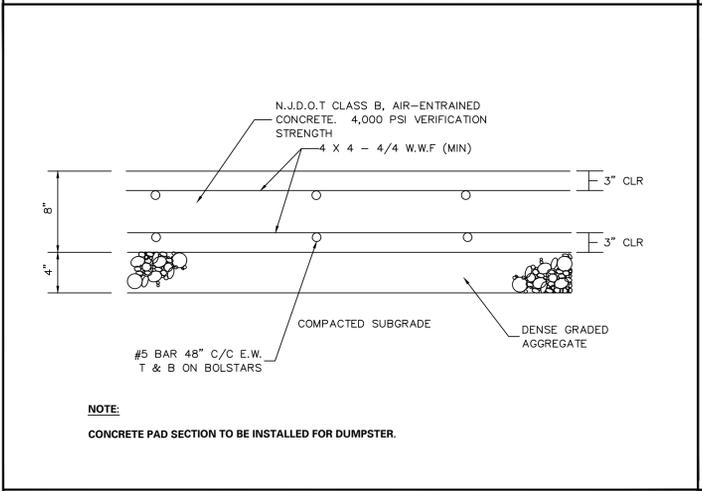
**CURB REPLACEMENT DETAIL**



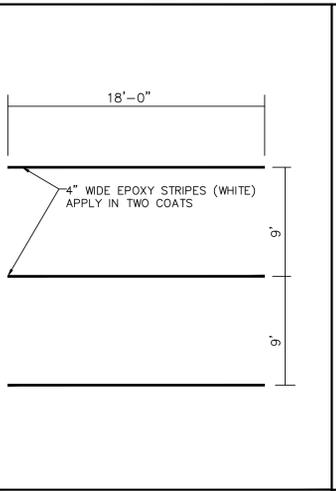
**ON-SITE 6" CONCRETE CURB**



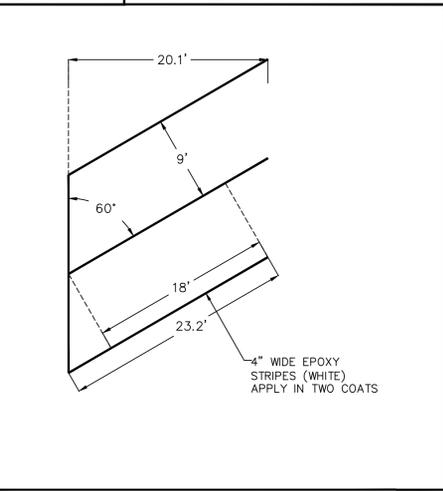
**BOLLARD DETAIL**



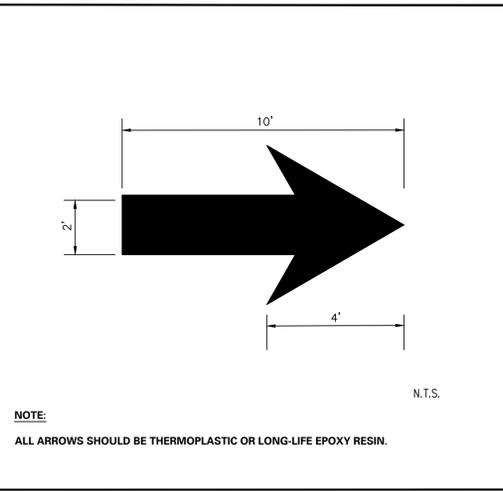
**CONCRETE PAD**



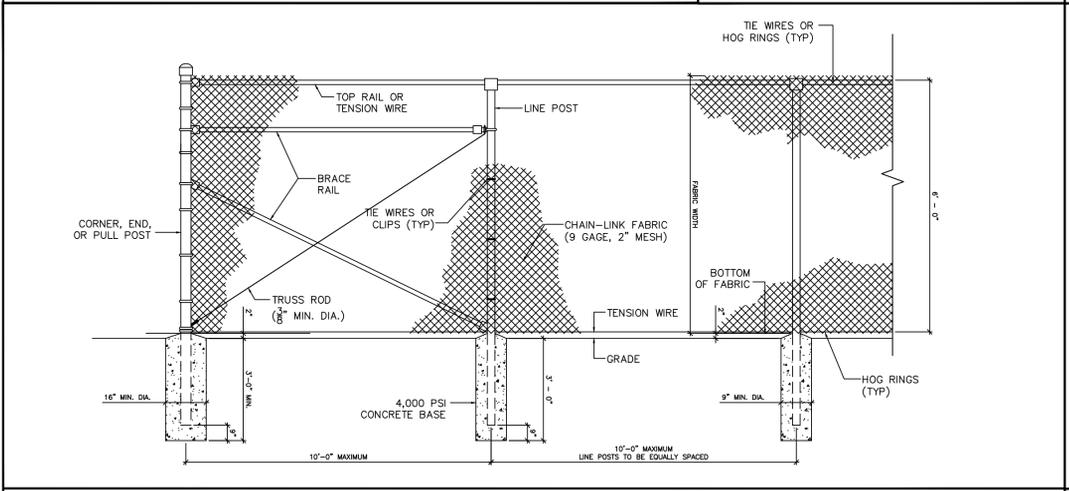
**PARKING STALL STRIPING**



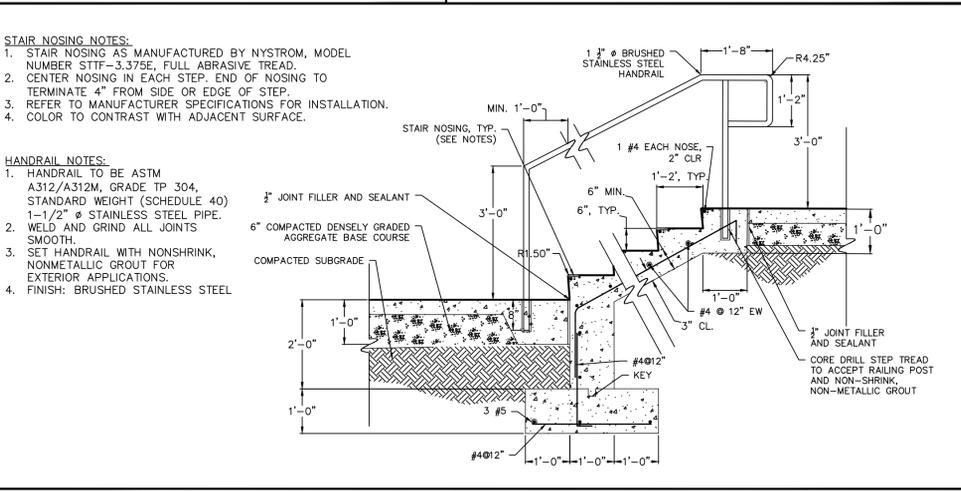
**ANGLED PARKING STALL STRIPING**



**DIRECTIONAL ARROW STRIPING**



**6' HIGH CHAIN LINK FENCE**



**CONCRETE STAIR AND HANDRAIL DETAIL**

Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.

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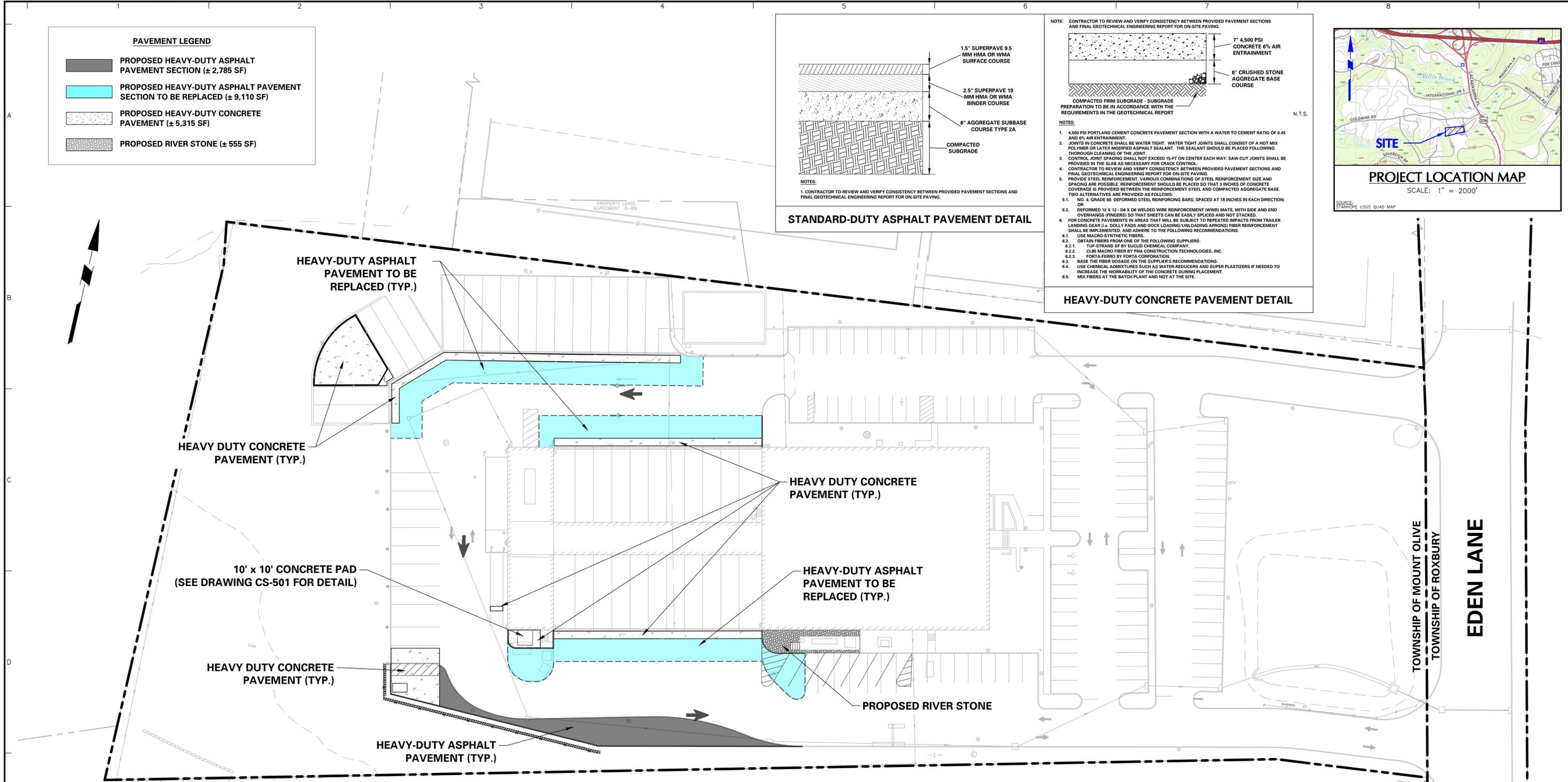
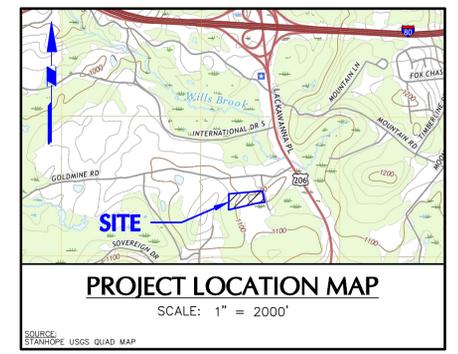
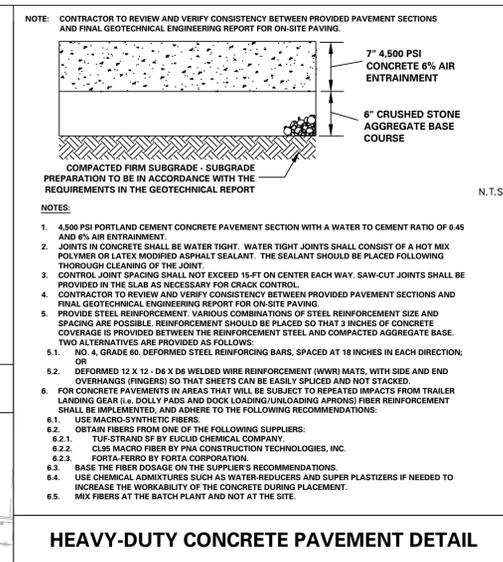
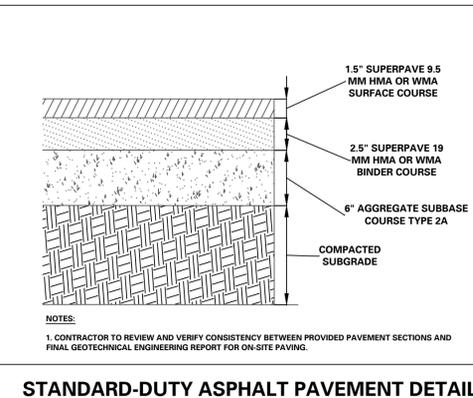
Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
 MOUNT OLIVE TOWNSHIP  
 MORRIS COUNTY NEW JERSEY

Drawing Title: **SITE DETAILS**

Project No.	003580405	Drawing No.	<b>CS-501</b>
Date	9-7-2022		
Drawn By	MR	Sheet	9 of 19
Checked By	LT		



PAVEMENT LEGEND	
	PROPOSED HEAVY-DUTY ASPHALT PAVEMENT SECTION (± 2,785 SF)
	PROPOSED HEAVY-DUTY ASPHALT PAVEMENT SECTION TO BE REPLACED (± 9,110 SF)
	PROPOSED HEAVY-DUTY CONCRETE PAVEMENT (± 5,315 SF)
	PROPOSED RIVER STONE (± 555 SF)



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Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.

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Project: VEOLIA NORTH AMERICA - FLANDERS FACILITY  
MOUNT OLIVE TOWNSHIP  
MORRIS COUNTY NEW JERSEY

Drawing Title: PAVEMENT PLAN

Project No.: 003580405  
Date: 9-7-2022  
Drawn By: MR  
Checked By: LT

Drawing No.: CP-101  
Sheet 11 of 19

**GRADING AND DRAINAGE NOTES**

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

2. COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA GIVEN ELSEWHERE:

FILL AREA	PERCENT OF MAXIMUM MODIFIED PROCTOR DRY DENSITY
PAVEMENT	95%
SIDEWALKS	95%
LANDSCAPE AREAS	93%
TRENCH BACKFILL	SAME AS SURROUNDING AREA

3. PROTECT SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION, INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.

4. REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THAN BEST SUBGRADE MATERIAL ON SITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE, AND TRUE TO GRADE AND CROSS SECTION.

5. ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE A MINIMUM OF 4,000 PSI.

6. ALL EXISTING SITE AND STORMWATER MANAGEMENT FEATURES ON THE PROPERTY'S TRACT WILL BE INSPECTED AND CLEANED/REPAIRED UNDER THE SUPERVISION OF THE TOWNSHIP ENGINEER AT THE TIME OF CONSTRUCTION.

7. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW BY THE OWNER AND OWNER'S ENGINEER FOR ALL CATCH BASINS, MANHOLES, AND OTHER STORM STRUCTURES PRIOR TO CONSTRUCTION.

8. RETAINING WALL DESIGNS AND CALCULATIONS SHALL BE SUBMITTED BY CONTRACTOR FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION.

9. THE TOTAL RUNOFF GENERATED FROM THE 0.22 ACRES OF PROPOSED IMPERVIOUS SURFACE DURING A 3 INCH, 24-HOUR PRECIPITATION EVENT IS 2,073 CF. THEREFORE, THE EXISTING STORMWATER MANAGEMENT BASIN (ADJACENT TO EDEN LANE) HAS BEEN ADJUSTED TO PROVIDE AN ADDITIONAL 2,667 CF OF STORAGE.

**UTILITY PLAN NOTES**

1. LOCATIONS OF EXISTING UTILITIES ARE BASED ON A PLAN ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY: TAX LOT 37 BLOCK 4500" BY BORBAS SURVEYING & MAPPING, LLC, DATED 9-16-2003, LAST REVISED 5-24-2022.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.

3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO CONSTRUCTION.

4. THE CONTRACTOR MUST COMPLY WITH ALL STATE AND FEDERAL CONFINED SPACE RULES.

5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING A PRE-CONSTRUCTION MEETING WITH ALL UTILITY COMPANIES PRIOR TO WORK.

6. THE CONTRACTOR SHALL PAY ALL FEES INCLUDING INSPECTION FEES, AND GIVE NOTICES NECESSARY FOR AND INCIDENTAL TO THE EXECUTION OF THE PROJECT.

7. INSPECTION OF OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY STATE, COUNTY OR TOWNSHIP OFFICIALS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES TO PERFORM THE WORK IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND LAWS.

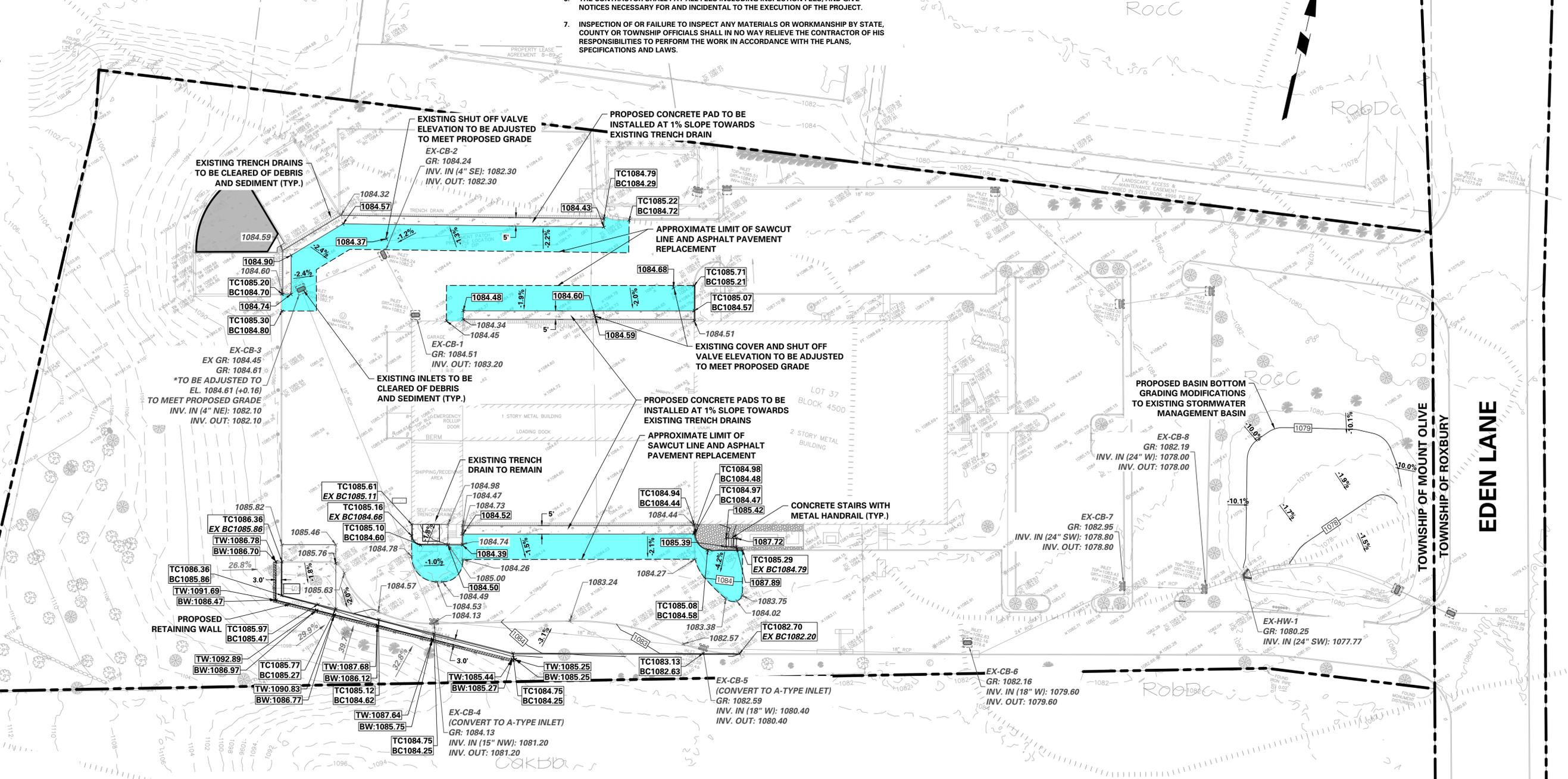
**LEGEND**

SITE SYMBOLS	GRADING/DRAINAGE SYMBOLS	UTILITY SYMBOLS
PROPERTY BOUNDARY	EXISTING CONTOUR	EXISTING STORM SEWER
EXISTING ULTIMATE RIGHT-OF-WAY	PROPOSED CONTOUR	EXISTING TRENCH DRAIN
BUILDING SETBACK	EXISTING SURVEY SURFACE FLOW DIRECTION	EXISTING STORM STRUCTURE
EASEMENT	EXISTING SURVEY SPOT ELEVATION	EXISTING SANITARY CLEANOUT
EXISTING BUILDING LINE	PROPOSED SPOT ELEVATION	EXISTING GAS VALVE
EXISTING CURB LINE	EXISTING SPOT ELEVATION TO REMAIN	EXISTING WATER VALVE
EXISTING DEPRESSION CURB	EXISTING SLOPE	PROPOSED TOP OF WALL ELEVATION
EXISTING CHAIN LINK FENCE	PROPOSED SLOPE	PROPOSED BOTTOM OF WALL ELEVATION
PROPOSED CHAIN LINK FENCE	PROPOSED TOP OF WALL ELEVATION	
EXISTING TREELINE/VEGETATIVE BUFFER		
EXISTING GUIDE RAIL		
EXISTING LIGHT		
EXISTING LIGHT POLE		
EXISTING UTILITY POLE		
UTILITY POLE		
PARKING COURT		
EXISTING LOADING/UNLOADING AREA		
PROPOSED CONCRETE		
LIMIT OF ASPHALT TO BE REPLACED (SAWCUT LINE)		
ASPHALT TO BE REPLACED		
RIVER STONE		
STORAGE SHED		



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Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.

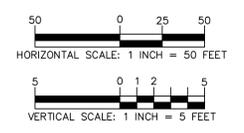
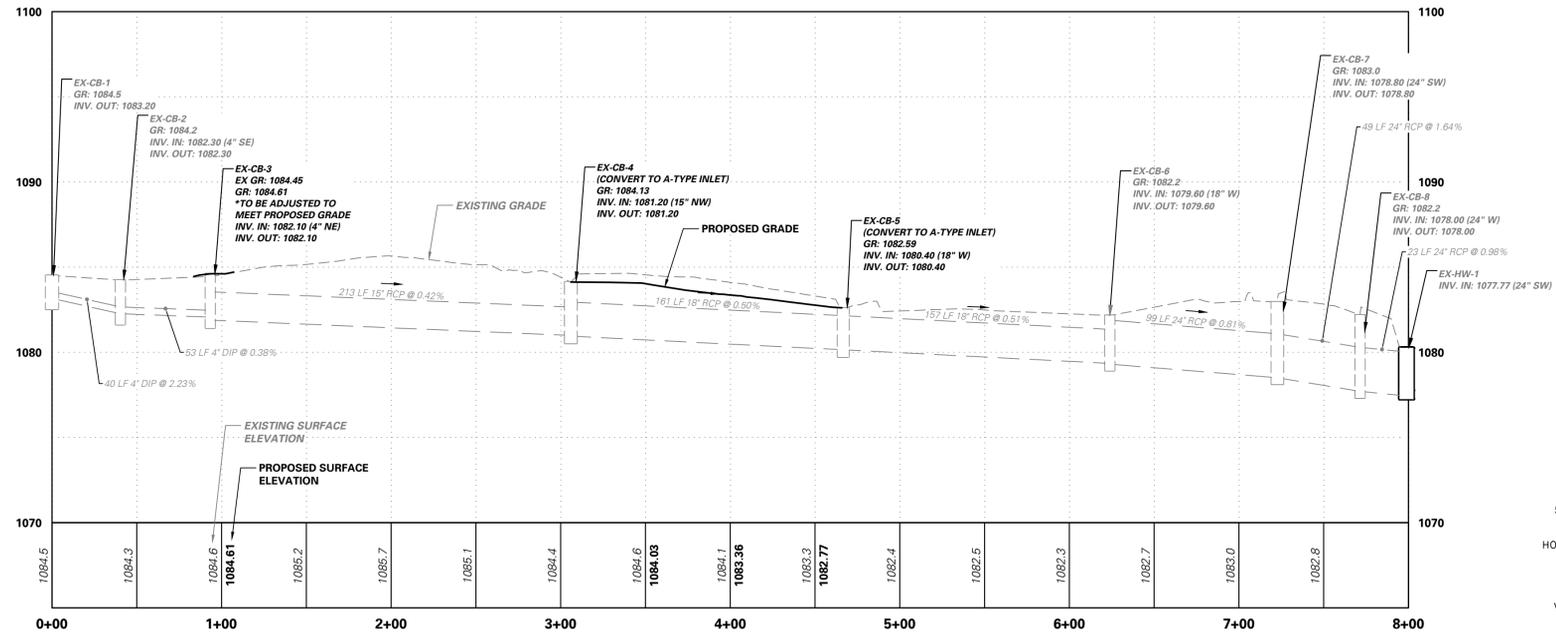
Signature: GREGORY ELKO  
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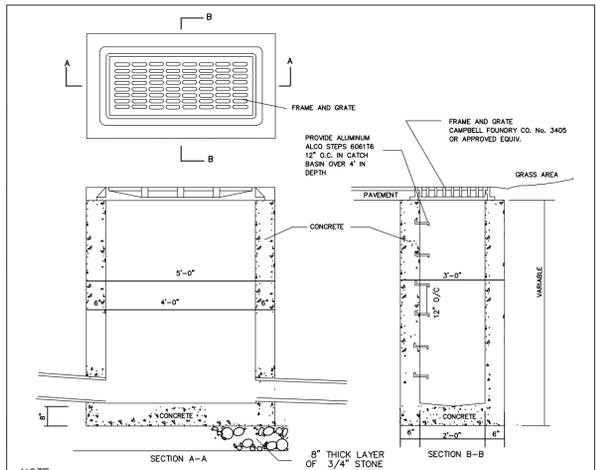
Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
MOUNT OLIVE TOWNSHIP  
MORRIS COUNTY NEW JERSEY

Drawing Title: **GRADING, DRAINAGE & UTILITY PLAN**

Project No.	003580405	Drawing No.	CG-101
Date	9-7-2022	Drawn By	MR
Checked By	MR	Sheet 12 of 19	



**EX-CB-1 TO EX-HW-11 PROFILE**



- NOTE:
- 1) INLET TO PROVIDE CASTING IN ACCORDANCE WITH NJDEP BEST MANAGEMENT PRACTICES FOR CONTROL OF FLOATABLES.
  - 2) CONCRETE SHALL BE 4000 PSI @ 28 DAYS.
  - 3) CORBELLING OF INLET WALLS WILL BE PERMITTED AT THE RATE OF 1/2" PER 8" OF HEIGHT OF WALL; MAXIMUM CORBEL 6" PER WALL.
  - 4) WHEN THE DEPTH OF AN INLET EXCEEDS 10' AS MEASURED FROM TOP OF GRATE TO INVERT OF STRUCTURE, THE WALLS BELOW A DEPTH OF 8' SHALL BE 12" THICK AND THE OVERALL DIMENSIONS OF THE FOUNDATION SHALL BE INCREASED BY 12" AND THE DEPTH INCREASED TO 12" 3
  - 5) INLET FOUNDATION EXTENDED 6" WHERE DEPTH EXCEEDS 6'-0" EXCEPT IN ROCK
  - 6) 3/4" CLEAN CRUSHED STONE, 8" MINIMUM THICKNESS UNDER ENTIRE INLET FOUNDATION.

**ON-SITE FLAT GRATE CATCH BASIN - TYPE A**

Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.
Revisions		

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Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
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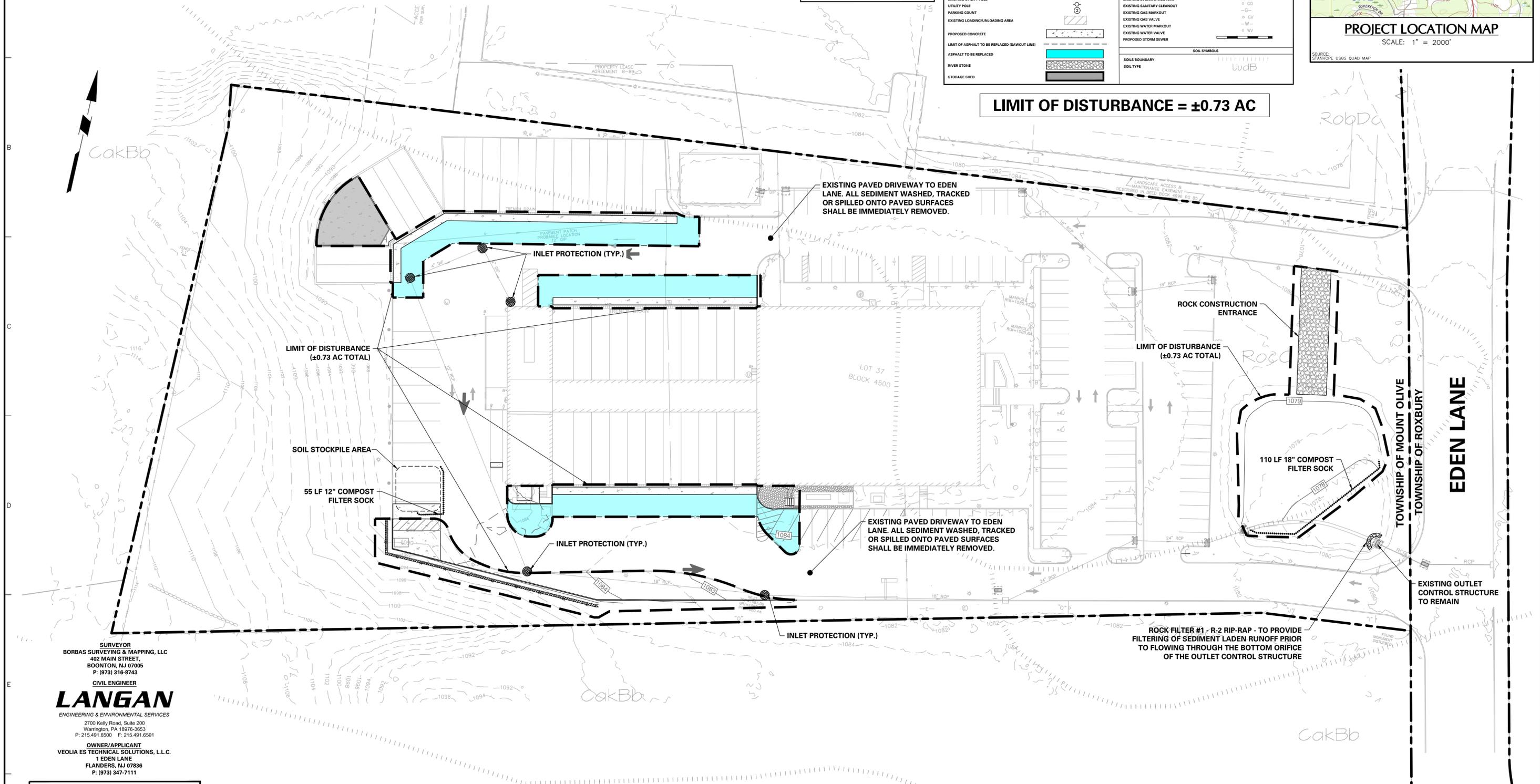
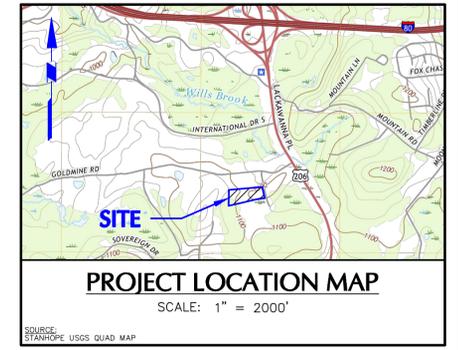
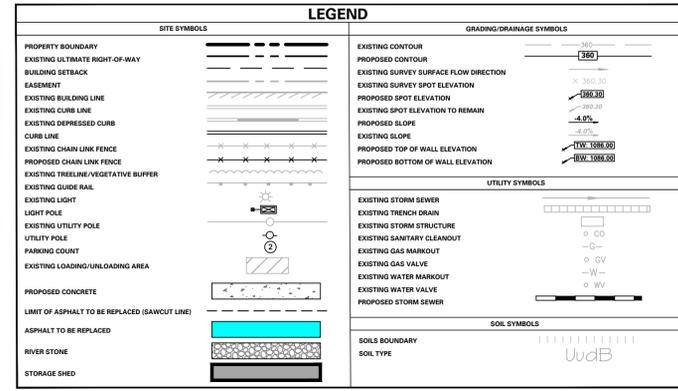
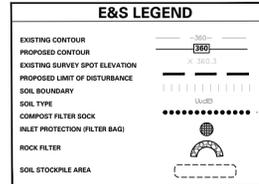
Drawing Title: **DRAINAGE PROFILES & DETAILS**

Project No. <b>003580405</b>	<b>CG-201</b>
Date <b>9-7-2022</b>	
Drawn By <b>MR</b>	
Checked By <b>LT</b>	
Sheet <b>13</b> of <b>19</b>	

NOTES:  
 1. THE SITE IS EXEMPT FROM THE SOIL COMPACTION REMEDIATION REQUIREMENTS PER THE STANDARD FOR LAND GRADING IN THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY (7TH EDITION), LAST REVISED JULY 2017. PER THE SOIL MANAGEMENT PREPARATION SECTION ON SHEET 19-2, BECAUSE THE SOILS AND GRAVEL SURFACES WILL BE REQUIRED TO SUPPORT POST-CONSTRUCTION VEHICULAR TRAFFIC LOADS, THE SITE IS EXEMPT FROM THESE REQUIREMENTS.

ON-SITE SOIL TYPE DESCRIPTIONS						
MAP SYMBOL	SOIL	HYDROLOGICAL SOIL GROUP	HYDRIC	DEPTH TO WATERTABLE	DEPTH TO BEDROCK	SOIL LIMITATIONS
CakBb	Califon loam, 0-8% slopes	C	No	6 to 30 inches	> 6.5 ft	Moderately well drained; Low available water capacity (about 3.4 in); Very high surface runoff;
RobDc	Rockaway sandy loam, 15-25% slopes	C	No	24 to 36 inches	> 6.5 ft	Well drained; Very low water capacity (about 2.0 in); Very high surface runoff;
RocC	Rockaway gravelly sandy loam, 8-15% slopes	C	No	24 to 36 inches	> 6.5 ft	Well drained; Very low water capacity (about 2.2 in); High surface runoff

\*Soils information obtained from USDA-NRCS Web Soil Survey for Morris County, NJ



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Project: VEOLIA NORTH AMERICA - FLANDERS FACILITY  
 MOUNT OLIVE TOWNSHIP  
 MORRIS COUNTY NEW JERSEY

Drawing Title: SOIL EROSION & SEDIMENT CONTROL PLAN

Project No. 003580405  
 Date: 9-7-2022  
 Drawn By: MR  
 Checked By: LT

Drawing No. CE-101  
 Sheet 14 of 19

**SEQUENCE OF CONSTRUCTION**

1. NOTIFY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AT LEAST 72 HOURS PRIOR TO ANY SITE DISTURBANCES.
2. MARK OUT THE LIMIT OF DISTURBANCE PER THE SOIL EROSION AND SEDIMENT CONTROL PLAN DRAWINGS PRIOR TO BEGINNING EARTH DISTURBANCE ACTIVITIES.
3. INSTALL ROCK CONSTRUCTION ENTRANCE AT EXISTING BASIN AS SHOWN ON DRAWING NO. CE-101.
4. INSTALL COMPOST FILTER SOCKS, INLET PROTECTION AND ALL OTHER SEDIMENT BARRIERS AS INDICATED ON DRAWING NO. CE-101. THE METHOD OF INSTALLATION AND MAINTENANCE SHALL BE IN ACCORDANCE WITH NJSP REQUIREMENTS AND AS INDICATED ON THE DETAILS SHOWN ON THIS DRAWING.
5. DELINEATE SOIL STOCKPILE AREA AS SHOWN ON DRAWING NO. CE-101.
6. CLEAR AND GRUB AREAS CONTAINING VEGETATION AS REQUIRED TO COMMENCE CONSTRUCTION. PLACE TOPSOIL AND EXCESSIVE MATERIAL IN AREA DESIGNATED ON THE PLAN.
7. BEGIN MASS GRADING AND EARTHWORK OPERATIONS WITHIN THE LIMITS OF DISTURBANCE. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TOWARDS SOIL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON DRAWING NO. CE-101.
8. PLACE CONCRETE AND PAVEMENT IN ACCORDANCE WITH THE LAND DEVELOPMENT PLAN.
9. CONSTRUCT PROPOSED RETAINING WALL AS SHOWN ON DRAWING NO. CG-101.
10. PERFORM FINAL GRADING OPERATIONS AND STABILIZE WITH PERMANENT SEEDING.
11. COMPOST FILTER SOCKS, INLET PROTECTION AND ALL OTHER SOIL EROSION DEVICES SHALL BE MAINTAINED UNTIL ALL IMPROVEMENTS TO THE SITE ARE COMPLETED. PAVEMENT IS INSTALLED AND PERMANENT VEGETATION IS ESTABLISHED.
12. ONCE ALL PERMANENT MEASURES HAVE BEEN INSTALLED, THE CONSTRUCTION ENTRANCE, COMPOST FILTER SOCKS, INLET PROTECTION AND ALL OTHER SOIL EROSION DEVICES MAY BE REMOVED. ALL DISTURBED AREAS CAUSED BY THE REMOVAL OF TEMPORARY SEDIMENT POLLUTION CONTROL DEVICES MUST BE PERMANENTLY STABILIZED.
13. NOTIFY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AT COMPLETION OF CONSTRUCTION.

**STABILIZATION NOTES**

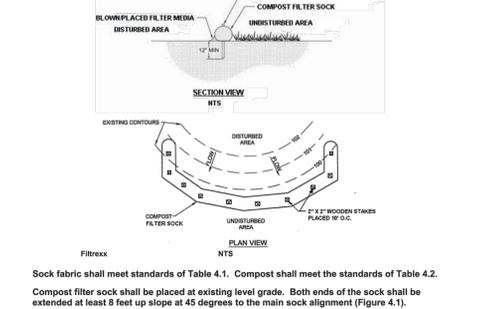
**PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION**  
 THE FOLLOWING SEEDING SCHEDULE SHOULD BE USED FOR PERMANENT SEEDING (UNLESS OTHERWISE NOTED):  
 A. LINE - LIMING RATES SHOULD BE ESTABLISHED VIA SOIL TESTING.  
 B. FERTILIZER - 11 lbs/1,000 sq. ft. OR EQUIVALENT, WITH 5% WATER INSOLUBLE NITROGEN, WORKED INTO SOIL TO A DEPTH OF 4 INCHES.  
 C. SEED - HARD FESCUE - 4.0 lbs/1,000 sq. ft. PERENNIAL RYEGRASS - 0.7 lbs/1,000 sq. ft. KENTUCKY BLUEGRASS (BLENDED) - 1.9 lbs/1,000 sq. ft.  
 PLANT BETWEEN MARCH 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND NOVEMBER 15.  
 D. MULCH - SALT HAY OR SMALL GRASS STRAW AT A RATE OF 90 TO 115 lbs/1,000 sq. ft. TO BE APPLIED ACCORDING TO NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDING).  
**TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION**  
 DISTURBED AREAS SHALL BE MAINTAINED IN A ROUGH GRADED CONDITION AND TEMPORARILY SEEDED AND HAY MULCHED (OR HYDROSEEDING) UNTIL PROPER WEATHER EXISTS FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. THE FOLLOWING SEEDING SCHEDULE SHALL BE USED FOR TEMPORARILY SEEDING:  
 A. LINE - LIMING RATES SHOULD BE ESTABLISHED VIA SOIL TESTING.  
 B. FERTILIZER - 11 lbs/1,000 sq. ft. OR EQUIVALENT, WITH 5% WATER INSOLUBLE NITROGEN, WORKED INTO SOIL TO A DEPTH OF 4 INCHES.  
 C. SEED - PERENNIAL RYEGRASS - 100 lbs/acre OR OTHER APPROVED SEEDS, PLANT BETWEEN MARCH 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND NOVEMBER 15.  
 D. MULCH - SALT HAY OR SMALL GRASS STRAW AT A RATE OF 90 TO 115 lbs/1,000 sq. ft. TO BE APPLIED ACCORDING TO NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDING).  
**STABILIZATION WITH MULCH ONLY**  
 NON-GROWING STABILIZATION MEASURES SHALL BE USED WHERE THE SEASON & OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION CAN BE APPLIED.  
 SALT HAY OR SMALL GRASS STRAW AT A RATE OF 90 TO 115 lbs/1,000 sq. ft. TO BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, LIQUID MULCH BINDER, OR MULCH NETTING).

**DUST CONTROL NOTES**

**MULCHES** - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG. 5-1  
**VEGETATIVE COVER** - SEE STANDARD FOR TEMPORARY VEGETATIVE COVER, PG. 7-1, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PG. 4-1, AND PERMANENT STABILIZATION WITH SOO, PG. 8-1  
**SPRAY ON ADHESIVES** - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.  
**TRILLAGE** - TO ROUGHEN SURFACE AND BRING CLODS TO SURFACE, THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE DESIRED EFFECT.  
**SPRINKLING** - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.  
**BARRIERS** - SOIL BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.  
**CALCIUM CHLORIDE** - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. USE ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS, OR ACCUMULATION AROUND PLANTS.  
**STONE** - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.  
**Dust Control Measures**

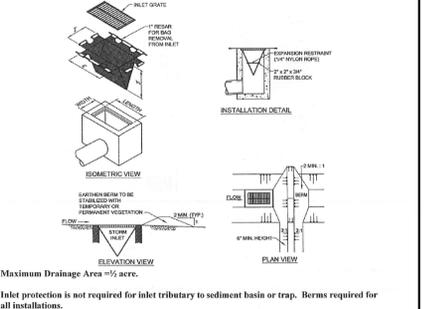
Material	Water Dilution	Type of Nozzle	Apply Gallon/Acre
Acrylic asphalt emulsion	3:1	Coarse Spray	1200
Latic emulsion	12.5:1	Fine Spray	255
Rain in water	4:1	Fine Spray	300
Polycarylamide (PAM) - spray on		Apply according to the manufacturer's instructions.	
Polycarylamide (PAM) - dry spray		May also be used as an additive to sediment basins to flocculate and precipitate suspended solids.	
Acidulated Soy Bean Soap Stick	None	Coarse Spray	1200

**STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK**



Soek fabric shall meet standards of Table 4.1. Compost shall meet the standards of Table 4.2.  
 Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment (Figure 4.1). Maximum sock length above any sock shall not exceed that shown on Figure 4.2. Stakes may be installed immediately down-slope of the sock if so specified by the manufacturer.  
 Traffic shall not be permitted to cross filter socks.  
 Accumulated sediment shall be removed when it reaches half the above-ground height of the sock and disposed in the manner described elsewhere in the plan.  
 Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.  
 Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year.  
 Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mesh spread as a soil supplement.  
 The maximum slope length above a compost filter sock shall not exceed those shown in Figure 4.2.  
 NOTE: Slope length is not addressed by use of multiple rows of compost socks. The anticipated functional life of a biodegradable filter sock shall be 6 months; for photodegradable socks it is 1 year. Some other types may last longer. Projects with disturbances anticipated to last longer than the functional life of a sock should plan to replace the socks periodically or use another type of BMP.  
 Upon stabilization of the tributary area, the filter sock may be left in place and vegetated or removed. In the latter case, the mesh is typically cut open and the mesh spread as a soil supplement. In either case, the stakes should be removed.  
 Filter socks using other filters may be approved on a case-by-case basis if sufficient supporting information (including manufacturer's specs and independent test data) is provided. However, they must not comply with ABACTs. Wherever compost socks are used, Table 4.1 should be placed on a detail sheet.

**STANDARD CONSTRUCTION DETAIL # 4-16 Filter Bag Inlet Protection - Type M Inlet**



Maximum Drainage Area = 1/2 acre.  
 Inlet protection is not required for inlet tributary to sediment basin or trap. Berms required for all installations.  
 Earthen berm in roadway shall be maintained until roadway is stoned. Road subbase berm on roadway shall be maintained until roadway is paved. Earthen berm in channel shall be maintained until permanent stabilization is completed or to remain permanently.  
 At a minimum, the fabric shall have a minimum Grab Tensile Strength of 120 lbs., a minimum Burst Strength of 200 psi, and a minimum Trapezoidal Tear Strength of 50 lbs. Filter bags shall be capable of trapping all particles not passing a No. 40 Sieve.  
 Inlet filter bags shall be inspected on a weekly basis and after each runoff event. Bags shall be emptied and rinsed or replaced when 1/2 full or when flow capacity has been reduced so as to cause flooding bypassing of the inlet. Damaged or clogged bags shall be replaced. A supply shall be maintained on site for replacement of bags. All needed repairs shall be initiated immediately after the inspection. Dispose accumulated sediment as well as all used bags according to the plan notes.  
 DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS

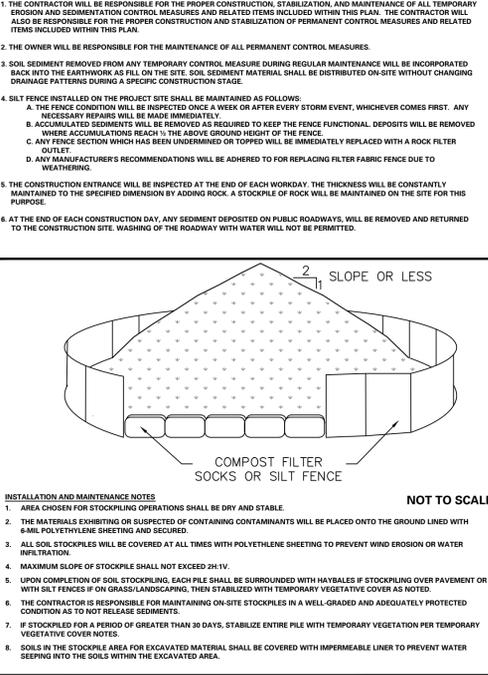
**E&S NOTES: MORRIS COUNTY SOIL CONSERVATION DISTRICT**

1. All Soil Erosion and Sediment Control Practices will be installed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey, and will be in place prior to any major soil disturbance, or in their proper sequence and maintained until permanent protection is established.
2. Any disturbed area that will be left exposed for more than thirty (30) days and not subject to construction traffic shall immediately receive a temporary seeding. If the season prohibits temporary seeding, the disturbed areas will be mulched with straw or hay and tacked in accordance with the New Jersey Standards. See Note 21 below.
3. Permanent vegetation is to be established on exposed areas within ten (10) days after final grading. Mulch is to be used for protection until vegetation is established. See Note 22 below.
4. Immediately following initial disturbance or rough grading. All critical areas (steep slopes, sandy soils, wet conditions) subject to erosion will receive a temporary seeding in accordance with Note 21 below.
5. Temporary Diversion Berms are to be installed on all cleared roadways and easement areas. See the Diversion Detail.
6. Permanent Seeding and stabilization to be in accordance with the "Standards for Permanent Vegetative Cover for Soil Stabilization Cover". Specified rates and locations shall be on the approved Soil Erosion and Sediment Control Plan.
7. The site shall at all times be graded and maintained so that all stormwater runoff is diverted to Soil Erosion and Sediment Control facilities.
8. All sedimentation structures (silt fence, inlet filters, and sediment basins) will be inspected and maintained daily.
9. Stockpiles shall not be located within 50' of a floodplain, slope, drainage facility, or roadway. All stockpiles bases shall have a silt fence properly entrenched at the toe of slope.
10. A Stabilized Construction Access will be installed, whenever an earthen road intersects with a paved road. See the Stabilized Construction Access detail and chart for dimensions.
11. All new roadways will be treated with suitable subbase upon establishment of final grade elevations.
12. Paved roadways must be kept clean at all times.
13. Before discharge points become operational, all storm drainage outlets will be stabilized as required.
14. All dewatering operations must be discharged directly into a sediment filter area. The filter should be composed of a fabric or approved material. See the Dewatering detail.
15. All sediment basins will be cleaned when the capacity has been reduced by 50%. A clean out elevation will be identified on the plan and a marker installed on the site.

**MAINTENANCE PROGRAM**

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL TEMPORARY EROSION AND SEDIMENT BARRIERS AND RELATED ITEMS INCLUDED WITHIN THIS PLAN. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR THE PROPER CONSTRUCTION AND STABILIZATION OF PERMANENT CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN.
2. THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PERMANENT CONTROL MEASURES.
3. SOIL SEDIMENT REMOVED FROM ANY TEMPORARY CONTROL MEASURE DURING REGULAR MAINTENANCE WILL BE INCORPORATED BACK INTO THE EARTHWORK AS FILL ON THE SITE. SOIL SEDIMENT SHALL BE DISTRIBUTED UNIFORMLY WITHOUT CHANGING DRAINAGE PATTERNS DURING A SPECIFIC CONSTRUCTION STAGE.
4. SILT FENCE INSTALLED ON THE PROJECT SITE SHALL BE MAINTAINED AS FOLLOWS:
  - A. THE FENCE CONSTRUCTION SHALL BE COMPLETED ONE WEEK OR AFTER EVERY STORM EVENT, WHICHEVER COMES FIRST. ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY.
  - B. ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE FENCE FUNCTIONAL. DEPOSITS WILL BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
  - C. ANY FENCE SECTION WHICH HAS BEEN UNDERMINED OR TOPPED WILL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
  - D. ANY MANUFACTURER'S RECOMMENDATIONS WILL BE ADHERED TO FOR REPLACING FILTER FABRIC FENCE DUE TO WEATHERING.
5. THE CONSTRUCTION ENTRANCE WILL BE INSPECTED AT THE END OF EACH WORKDAY. THE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE.
6. AT THE END OF EACH CONSTRUCTION DAY, ANY SEDIMENT DEPOSITED ON PUBLIC ROADWAYS, WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WITH WATER WILL NOT BE PERMITTED.

**SOIL STOCKPILE DETAIL**



**TABLE 4.1 Compost Filter Sock Minimum Specifications**

Material Type	HDPE				Multi-Filament Polypropylene (MFPFP)	Heavy Duty Multi-Filament Polypropylene (HDMFPFP)
	3 mil HDPE	5 mil HDPE	5 mil HDPE	5 mil HDPE		
<b>Material Characteristics</b>	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable	Photo-degradable
<b>Sock Diameters</b>	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
<b>Mesh Opening</b>	3/8"	3/8"	3/8"	3/8"	3/8"	1/8"
<b>Tensile Strength</b>		26 psi	26 psi	44 psi	202 psi	
<b>Ultraviolet Stability % Original Strength (ASTM G-155)</b>	23% at 1000 hr.	23% at 1000 hr.	100% at 1000 hr.	100% at 1000 hr.	100% at 1000 hr.	
<b>Minimum Functional Longevity</b>	6 months	9 months	6 months	1 year	2 years	

**Two-ply systems**

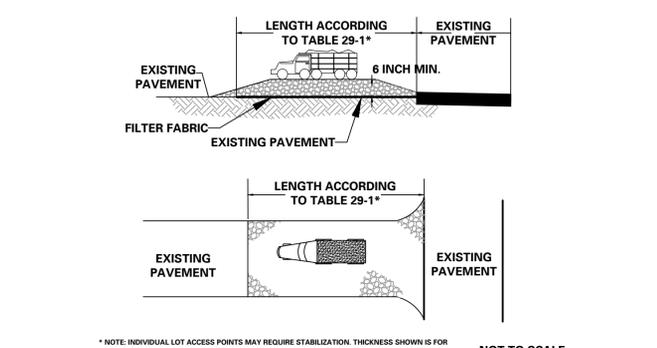
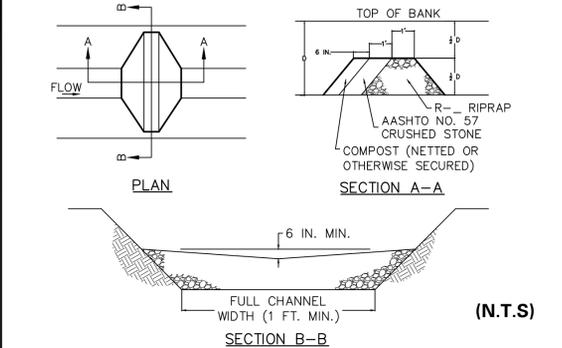
Inner Containment Netting	HDPE biaxial net
	Continuously wound Fusion-welded Joints
Outer Filtration Mesh	3/4" x 2 1/2" Max. aperture size Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)
	3/16" Max. aperture size

Sock fabrics composed of burlap may be used on projects lasting 6 months or less.  
 Filtraxx 6, JMD

Compost should be a well decomposed, weed-free organic matter derived from agriculture, food, stump grindings, and yard or wood/brush organic matter sources. The compost should be aerobically composted. The compost should possess no objectionable odors and should be reasonably free (<1% 363-2134-008 / March 31, 2012 / Page 63

**TABLE 4.2 Compost Standards**

Parameter	Standard
1. ALL SENSITIVE AREAS SHALL BE PROTECTED AS PER PLAN.	
2. ALL TREES IN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PRESERVED AND PROTECTED WITH HIGH VISIBILITY FENCE AS PER PLAN.	
3. BURN PRACTICABLE. INITIAL HIGH VISIBILITY FENCE TO BE 2 FEET OF THE GRIP LINE OF THE TREE.	
4. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.	
5. THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.	

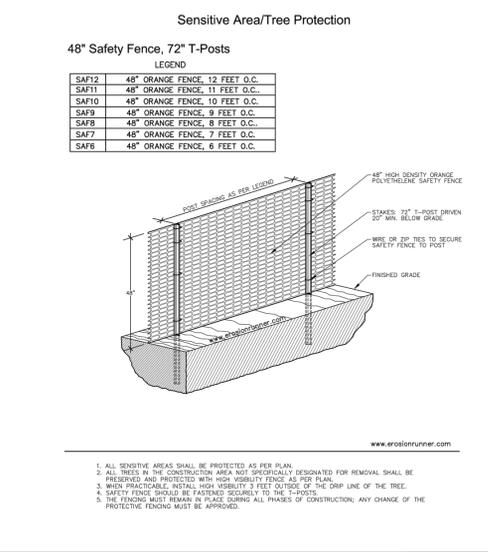


**TABLE 29-1: LENGTHS OF CONSTRUCTION EXITS ON SLOPING BEDS**

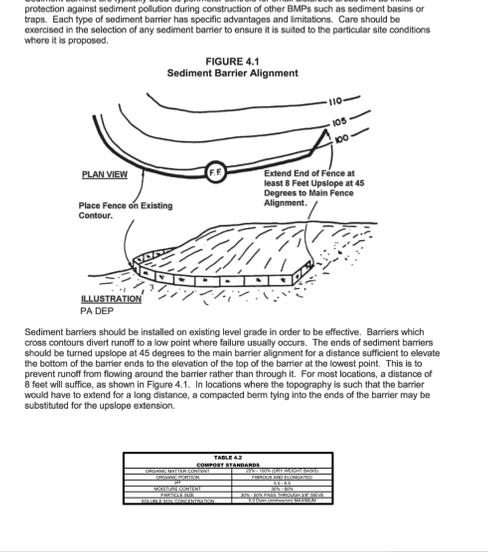
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2 TO 5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH FABRIC BASE COURSE*	

\*AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

**TEMPORARY CONSTRUCTION FENCE**



**COMPOST FILTER SOCK DETAIL**



**INLET PROTECTION**



**ROCK FILTER**

**STABILIZED CONSTRUCTION ACCESS**

**TEMPORARY CONSTRUCTION FENCE**

**COMPOST FILTER SOCK DETAIL**

<p><b>LANGAN</b>                  Langan Engineering and Environmental Services, Inc.                  Stone Manor Corporate Center, 2300 Kelly Road, Suite 200                  Warrington, PA 18976                  T: 215.491.6500 F: 215.491.6501 www.langan.com                  NJ Certificate of Authorization No. 24GA27996400</p>		<p>Project  <b>VEOLIA NORTH AMERICA - FLANDERS FACILITY</b>                  MOUNT OLIVE TOWNSHIP                  MORRIS COUNTY NEW JERSEY</p>		<p>Drawing Title  <b>SOIL EROSION AND SEDIMENT CONTROL DETAILS</b></p>		<p>Project No.  <b>003580405</b>                  Date  <b>9-7-2022</b>                  Drawn By  <b>MR</b>                  Checked By  <b>LT</b></p>		<p>Drawing No.  <b>CE-501</b>                  Sheet 15 of 19</p>	
<p>5-1-23 REVISED PER MDCSD AND TOWNSHIP COMMENTS 1.</p>		<p>Signature                  GREGORY ELKO                  PROFESSIONAL ENGINEER                  NJ Lic. No. 24QE04139500</p>		<p>Date</p>		<p>Project No.  <b>003580405</b>                  Date  <b>9-7-2022</b>                  Drawn By  <b>MR</b>                  Checked By  <b>LT</b></p>		<p>Drawing No.  <b>CE-501</b>                  Sheet 15 of 19</p>	

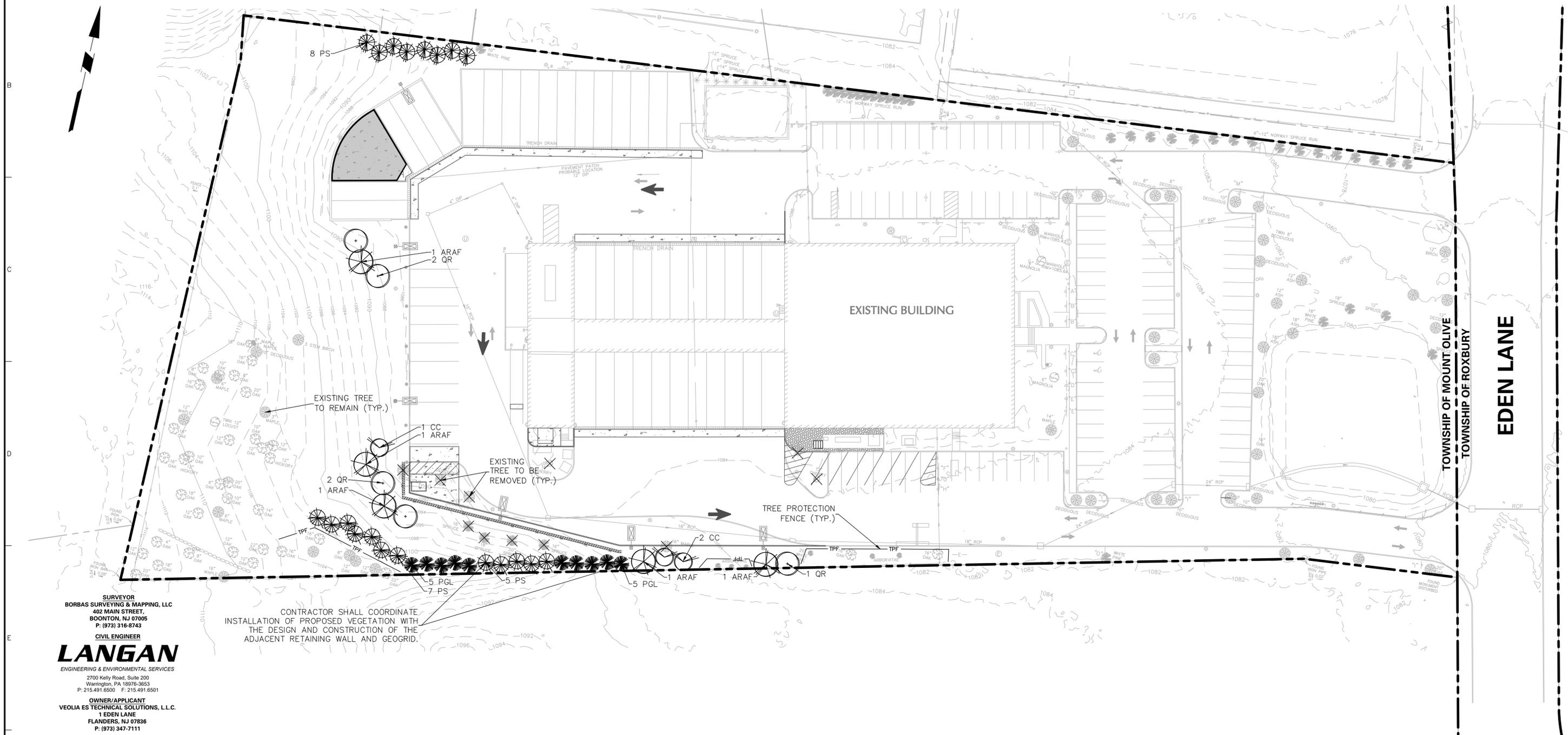
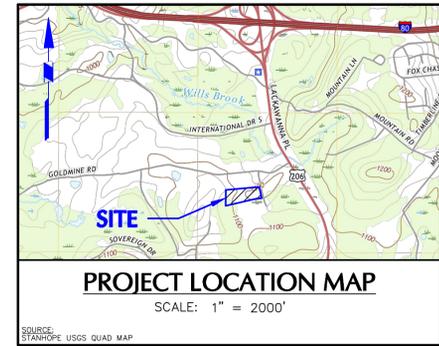
**PLANT SCHEDULE**

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
<b>SHADE TREE(S)</b>						
ARAF	5	ACER RUBRUM 'AUTUMN FLAME'	AUTUMN FLAME RED MAPLE	3 - 3 1/2" CAL.	B+B	-
QR	5	QUERCUS RUBRA	RED OAK	3 - 3 1/2" CAL.	B+B	-
<b>ORNAMENTAL TREE(S)</b>						
CC	3	CERCIS CANADENSIS	EASTERN REDBUD	3 - 3 1/2" CAL.	B+B	-
<b>EVERGREEN TREE(S)</b>						
PGL	10	PICEA GLAUCA	WHITE SPRUCE	6-7'	B+B	-
PS	20	PINUS STROBUS	EASTERN WHITE PINE	6-7'	B+B	-

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT SCHEDULE, THE PLAN SHALL DICTATE.

**TREE REPLACEMENT CALCULATIONS - SECTION 550-75 L(1)(b)(2)**

CALIPER OF EXISTING TREE TO BE REMOVED	NUMBER OF REPLACEMENT TREES (MIN. 3" CALIPER)	TOTAL NUMBER OF TREES TO BE REMOVED	NUMBER OF REPLACEMENT TREES REQUIRED, 3" CAL. MIN.
BETWEEN 6" AND <10"	3	2	6
BETWEEN 11" AND <18"	4	8	32
BETWEEN 19" AND <24"	5	1	5
BETWEEN 25" AND <30"	7	0	0
BETWEEN 31" AND <35"	10	0	0
36" AND GREATER	DBH OF REMOVED TREE DIVIDED BY 3	0	0
TOTAL			43 REPLACEMENT TREES REQUIRED



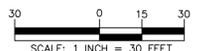
CONTRACTOR SHALL COORDINATE INSTALLATION OF PROPOSED VEGETATION WITH THE DESIGN AND CONSTRUCTION OF THE ADJACENT RETAINING WALL AND GEOGRID.

**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES  
2700 Kelly Road, Suite 200  
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OWNER/APPLICANT  
**VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.**  
1 EDEN LANE  
FLANDERS, NJ 07836  
P: (973) 347-7111

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SEE SHEET LP-501 FOR LANDSCAPE NOTES AND DETAILS

Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.
Revisions		

Signature: MICHAEL SZURA  
LANDSCAPE ARCHITECT  
NJ Lic. No. 21AS00081500

**LANGAN**  
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NJ Certificate of Authorization No. 24GA27996400

Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
MOUNT OLIVE TOWNSHIP  
MORRIS COUNTY NEW JERSEY

Drawing Title: **LANDSCAPE PLAN**

Project No.	Drawing No.
003580405	LP-101
Date: 9-7-2022	Sheet 16 of 19
Drawn By: SPW	
Checked By: RP	

## GENERAL LANDSCAPE PLANTING NOTES:

### PLANTING MATERIALS

- NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
- STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
- NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
- THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
- THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.

### PLANTING SOILS

- REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOIL, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS.
- SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.
- IF DEPTH OF PLANTING SOILS AND TOPSOIL IS NOT INDICATED IN PLANS OR DETAILS, A MINIMUM 18" DEPTH SHALL BE PROVIDED FOR ALL TREES AND LARGE SHRUBS; MINIMUM 12" DEPTH SHALL BE PROVIDED FOR GROUNDCOVERS, HERBACEOUS AND MEADOW OR ORNAMENTAL GRASS AREAS AND A MINIMUM 6" LAYER SHALL BE INSTALLED IN ALL LAWN AREAS. TOPSOIL AND PLANTING SOIL DEPTH INDICATED ON PLANS AND PLANTING DETAILS AND NARRATIVE SPECIFICATIONS SHALL GOVERN DEPTH WHEN PROVIDED.
- WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
- IF THE QUANTITY OF SOILS FROM THE SITE IS NOT ADEQUATE TO FILL PLANTING AREAS TO THE DEPTH INDICATED IN THE PLANS AND DETAILS, CONTRACTOR SHALL FURNISH PLANTING SOILS THAT ARE FREE OF BROKEN GLASS, PAINT CHIPS, PLASTIC, DELETERIOUS MATERIALS, ROOTS, WEEDS, BOULDERS, COBBLES AND GRAVEL OVER 1" IN DIAMETER AND COMPLY WITH THE FOLLOWING CRITERIA:
  - SOILS SHALL MEET ALL APPLICABLE SOIL REMEDIATION STANDARDS
  - ORGANIC CONTENT: 2-5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
  - SOLUBLE SALTS: LESS THAN 0.5 MM HOS/CM
  - SOIL PH: 4.5-7% TO BE AMENDED PER SOIL TEST RESULTS
  - PHYSICAL (SIEVE) ANALYSIS/ SOIL TEXTURE
  - SAND: 40-60% SILT: 25-60% CLAY: 5-20%
  - NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE.
- ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
- IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WITH COMPOSTED, PH RANGE OF 6-8, MOISTURE CONTENT 35-55% BY WEIGHT, 100% PASSING THROUGH 1" SIZE, SOLUBLE SALT CONTENT LESS THAN 0.5 MM HOS/CM; MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR CLEAN FILL; FREE OF BROKEN GLASS, PAINT CHIPS, PLASTIC, DELETERIOUS MATERIALS, ROOTS, WEEDS, BOULDERS, COBBLES AND GRAVEL OVER 1" IN DIAMETER
- SCARIFY AND/OR TILL ALL COMPACTED SUBSOILS PRIOR TO ADDING PLANTING SOIL OR TOPSOIL. PLANTING SOILS AND TOPSOIL SHALL BE PLACED IN 12-18" LIFTS THAT ARE LOOSELY COMPACTED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

### DELIVERY, STORAGE, AND HANDLING

- PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
- TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED, DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP OR BREAK BALLED STOCK DURING DELIVERY OR HANDLING.
- ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT BALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8" INTO THE PLANTING HOLE. WITH CONTAINER-GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
- THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

### INSTALLATION

- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE.
- THE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
- ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
- ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
- THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
- AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
- MULCH SHOULD NOT BE PILED UP AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY OWNER AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
- AFTER COMPLETION OF A PROJECT, ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A SHREDDED HARDWOOD BARK OR APPROVED EQUAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
- CONTRACTOR SHALL SUPPLY SUPPLEMENTARY IRRIGATION UNTIL ACCEPTANCE BY OWNER.
- CONTRACTOR SHALL ASSESS THE NEED FOR DEER PROTECTION ON SITE. IF DEEMED NECESSARY, SHADE AND ORNAMENTAL TREES SHALL BE PROTECTED THROUGH WINTER WITH SPIRAL WRAP TREE GUARDS, OR APPROVED EQUAL. PROTECTION LENGTH TO BE FROM BELOW THE LOWEST BRANCH AND DOWN TO WITHIN A FEW INCHES OF THE GROUND. THE GUARDS CAN BE REMOVED IN SPRING AND SAVED FOR RE-INSTALLATION DURING THE FOLLOWING WINTERS AS PART OF A MAINTENANCE PROGRAM.

### GUARANTEE

- NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

SEE SHEET LP-101 FOR LANDSCAPE PLAN, PLANT SCHEDULE AND TREE REPLACEMENT CALCULATIONS.

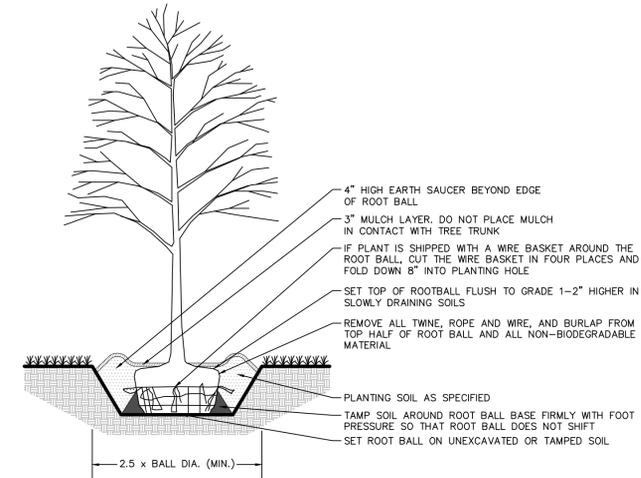
## LAWN SEED NOTES:

- PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
- THE FOLLOWING SEED MIX SHALL BE SOWN AT THE RATES AS DEPICTED:
 

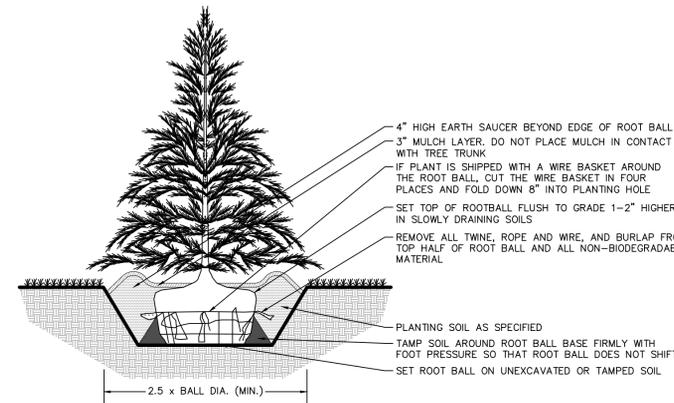
RED FESCUE	1 1/2 LBS./1,000 SF
PERENNIAL RYEGRASS	1 LBS./1,000 SF
KENTUCKY BLUEGRASS	1 1/2 LBS./1,000 SF
SPREADING FESCUE	1 LBS./1,000 SF
- SEED MIX SHALL BE MULCHED WITH SALT HAY OR UNROTTED SMALL GRAIN STRAW AT A RATE OF 2 TONS/AC OR 90 LBS./1,000 SF
- SEEDING DATES FOR THIS MIXTURE SHALL BE AS FOLLOWS:
  - SPRING: APRIL - MAY 31
  - FALL: AUGUST 16 - OCTOBER 31
- GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

## TREE PROTECTION NOTES:

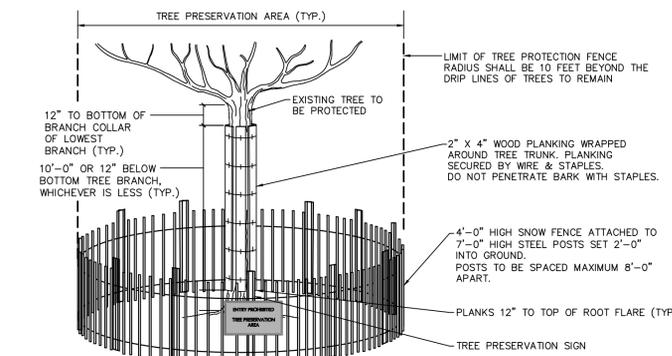
- ALL EXISTING TREES WITHIN THE LIMITS OF TREE PROTECTION FENCING SHALL BE PROTECTED THROUGHOUT THE DURATION OF WORK. THE LIMIT OF TREE PROTECTION FENCE RADIUS SHALL BE 18 TIMES THE MEASURED DIAMETER-AT-BRIST-HEIGHT (DBH), UNLESS CONDITIONS WARRANT THE FENCE TO BE LOCATED CLOSER TO THE TREE. THE PROJECT LANDSCAPE ARCHITECT TO APPROVE THE LOCATION OF ALL FENCING PRIOR TO EXCAVATION.
- TREE PROTECTION PLANKING SHALL BE INSTALLED ON ALL EXISTING TREES WHERE WORK IS TO BE DONE WITHIN THE LIMIT OF TREE PROTECTION FENCING. REFER TO DETAIL ON THIS SHEET.
- IF TREE PROTECTION FENCING NEEDS TO BE MOVED OR BREACHED DUE TO TEMPORARY CONSTRUCTION ACTIVITY WITHIN THE TREE PROTECTION ZONE, THE FENCING WILL BE RESET TO ITS ORIGINAL LOCATION IMMEDIATELY AFTER CONSTRUCTION WITHIN THE TREE PROTECTION ZONE IS COMPLETE.
- TREE PROTECTION FENCING SHALL BE MAINTAINED TO PROTECT TREES AT ALL TIMES. ANY DAMAGED FENCING SHALL BE IMMEDIATELY REPLACED WHEN DAMAGED.
- DEMOLITION WORK WITHIN THE TREE PROTECTION FENCE OF PROTECTED TREES SHALL BE PERFORMED BY NON-MECHANICAL METHODS. CONTRACTOR TO PROTECT ROOT MASS AGAINST DAMAGE DURING EXCAVATION. ANY TREE ROOTS THAT ARE DISTURBED, BROKEN, OR CUT SHALL BE PRUNED BACK WITH CLEAN SHARP TOOLS. ROOTS SHALL NOT BE OTHERWISE DAMAGED, BROKEN OR RIPPED. ANY ROOTS FOUND GREATER THAN 2 INCHES DIAMETER WITHIN THE AREA TO BE DISTURBED WILL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE PROJECT LANDSCAPE ARCHITECT FOR FURTHER CONSIDERATION PRIOR TO ROOT PRUNING. ROOT PRUNED TREES SHALL BE MAINTAINED BY WATERING, WEEDING, MOWING, SPRAYING, FERTILIZING, AND OTHER HORTICULTURE PRACTICES THROUGHOUT THE DURATION OF CONSTRUCTION. IMMEDIATELY AFTER ROOT PRUNING, BACKFILL WITH GOOD ROOTING MEDIUM AND FERTILIZE WITH ORGANIC FERTILIZER TO PROMOTE ROOT GROWTH. PER MANUFACTURER'S RECOMMENDATIONS, FEED WITH A DILUTED SOLUTION OF N-P-K, AND MYCORRHIZAL POWDER AS NEEDED, WITH A SOIL NEEDLE TO PROVIDE WATER, AIR AND NUTRIENTS. THE SOIL AROUND EACH TREE SHALL BE THOROUGHLY SATURATED WITH WATER AND SHALL BE THOROUGHLY WATERED AS SEASONABLE CONDITIONS REQUIRE THROUGHOUT THE ENTIRE BOND PERIOD.
- ALL TEMPORARILY EXPOSED TREE ROOTS SHALL BE COVERED WITH 2 INCHES OF SHREDDED HARDWOOD MULCH TO REDUCE WEEDS, DISCOURAGE FOOT TRAFFIC, CONSERVE MOISTURE, AND MINIMIZE TEMPERATURE FLUCTUATION UNTIL PERMANENT SOIL EROSION CONTROL IS IMPLEMENTED. EXPOSED TREE ROOTS SHALL BE THOROUGHLY IRRIGATED ON A DAILY BASIS AS DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.
- ANY TREE SHOWN TO BE PROTECTED WHICH IS OBSERVED TO HAVE 25% OR MORE OF ITS BRANCHING OR LEAVES DEAD OR DYING WITHIN THREE YEARS OF COMPLETED CONSTRUCTION, AND WHICH CANNOT BE REASONABLY PRUNED TO MAINTAIN THE HABIT KNOWN FOR THE SPECIES, SHALL BE REPLACED WITH A QUANTITY OF TREES OF THE SAME SPECIES AND AT A SIZE THAT, WHEN PUT TOGETHER, EQUALS THE TOTAL CANOPY SIZE OF THE TREE TO BE REPLACED.
- CHANGES OF GRADE PROPOSED (CUT/FILL) WITHIN TREE PROTECTION FENCING SHALL BE PERFORMED AS FOLLOWS:
  - RAISING GRADES:
    - WHERE FILL NOT EXCEEDING 16 INCHES IS REQUIRED, CLEAN, WASHED GRAVEL GRADED FROM 1 INCH TO 2 INCHES IN SIZE SHALL BE PLACED DIRECTLY AROUND TREE TRUNK. EXTEND GRAVEL OUT FROM TRUNK ON ALL SIDES MINIMUM OF 18 INCHES AND FINISH APPROXIMATELY 2 INCHES ABOVE FINISHED GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH TRUNKS OF TREES REQUIRING FILL.
    - WHERE FILL EXCEEDING 16 INCHES IS REQUIRED, CONSTRUCT DRY-LAID TREE WELL AROUND TRUNK OF TREE. TREE WELL SHALL EXTEND OUT FROM TRUNK ON ALL SIDES MINIMUM OF 3 FEET AND TO 3 INCHES ABOVE FINISH GRADE. PLACE COARSE-GRADED ROCK DIRECTLY AROUND TREE WELL EXTENDING OUT TO DRIP LINE OF TREE. PLACE CLEAN, WASHED GRAVEL GRADED FROM 1 INCH TO 2 INCHES IN SIZE DIRECTLY OVER COARSE ROCK TO DEPTH OF 3 INCHES. PLACE APPROVED BACKFILL MATERIAL DIRECTLY OVER WASHED GRAVEL TO DESIRED FINISH GRADE.
  - LOWERING GRADES: EXISTING TREES IN AREAS WHERE NEW FINISH GRADE IS TO BE LOWERED SHALL HAVE REGRADING WORK DONE BY HAND TO ELEVATION INDICATED ON THE DRAWINGS. ROOTS AS REQUIRED SHALL BE CUT AND MAINTAINED PER THE NOTES ABOVE IN #2.
  - TREES MARKED FOR PRESERVATION THAT ARE MORE THAN 6 INCHES ABOVE PROPOSED GRADES SHALL STAND ON BROAD ROUNDED MOUNDS AND GRADED SMOOTHLY INTO LOWER LEVEL. TREES LOCATED MORE THAN 16 INCHES ABOVE PROPOSED GRADES SHALL HAVE DRY-LAID STONE WALL OR OTHER RETAINING STRUCTURE AS DETAILED ON THE DRAWINGS CONSTRUCTED MINIMUM OF 5 FEET FROM TRUNK. EXPOSED OR BROKEN ROOTS SHALL BE CUT CLEAN AND COVERED WITH TOPSOIL.
- ALL WORK TO BE PERFORMED UNDER THE DIRECT SUPERVISION OF EITHER THE OWNER'S REPRESENTATIVE, CERTIFIED ARBORIST, OR THE PROJECT LANDSCAPE ARCHITECT.



2 DECIDUOUS TREE DETAIL  
NTS



3 EVERGREEN TREE DETAIL  
NTS



1 TREE PROTECTION FENCE DETAIL  
NTS

Date	Description	No.
5-1-23	REVISED PER MDCSD AND TOWNSHIP COMMENTS	1.
Revisions		

Signature: MICHAEL SZURA  
LANDSCAPE ARCHITECT  
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NJ Certificate of Authorization No. 24GA27996400

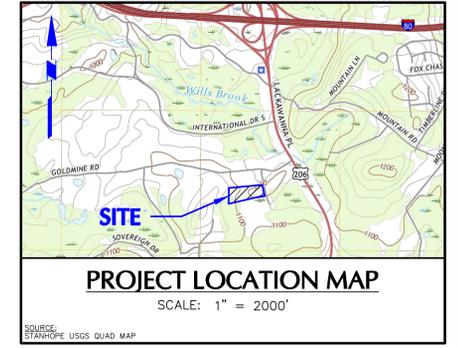
Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
MOUNT OLIVE TOWNSHIP  
MORRIS COUNTY NEW JERSEY

Drawing Title: **LANDSCAPE NOTES AND DETAILS**

Project No.	003580405	Drawing No. <b>LP-501</b>
Date	9-7-2022	
Drawn By	SW	
Checked By	RP	
Sheet 17 of 19		

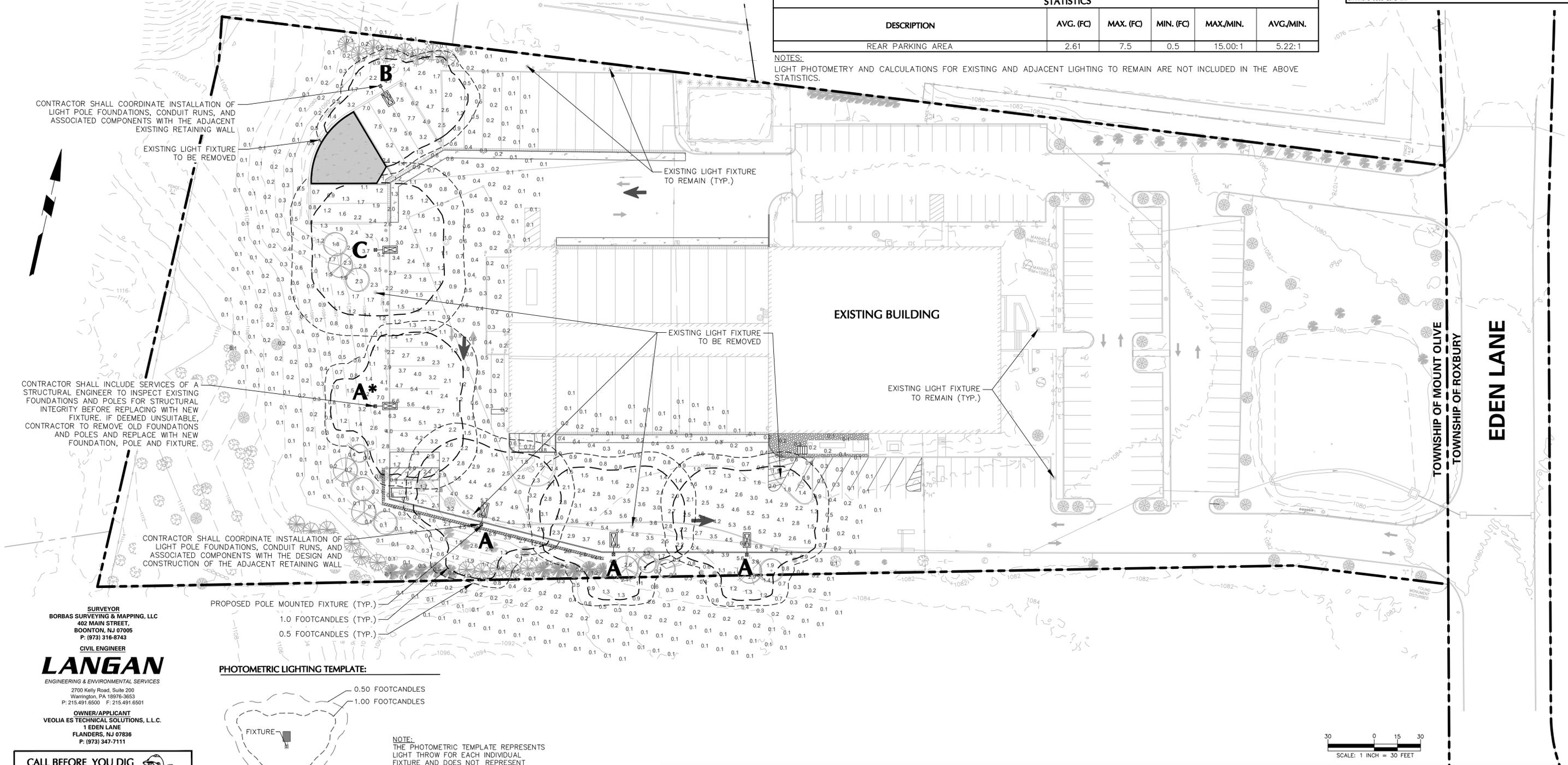
SITE LIGHTING SCHEDULE																
SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	WATTS	LUMENS	LIGHT LOSS FACTOR	OPTICS	COLOR TEMPERATURE	FIXTURE CATALOGUE NO.	POLE MANUFACTURER	POLE DESCRIPTION	POLE LENGTH	POLE CATALOGUE NO.
-	A	3	LITHONIA	DSX2	POLE MOUNTED AREA LIGHT	18'-0"	185	22,236	0.90	TYPE FORWARD THROW	3000 K	DSX2-LED-P2-30K-TFTM-MVOLT-SPA-DDBXD	LITHONIA	SQUARE STRAIGHT ALUMINUM POLE	18'-0"	SSA-18-5G-DM19AS-DDBXD
-	A*	1	LITHONIA	DSX2	POLE MOUNTED AREA LIGHT	18'-0"	185	22,236	0.90	TYPE FORWARD THROW	3000 K	DSX2-LED-P2-30K-TFTM-MVOLT-SPA-DDBXD	LITHONIA	SQUARE STRAIGHT ALUMINUM POLE	18'-0"	SSA-18-5G-DM19AS-DDBXD
-	B	1	LITHONIA	DSX2	POLE MOUNTED AREA LIGHT	18'-0"	270	24,199	0.90	TYPE FORWARD THROW WITH HOUSE-SIDE SHIELD	3000 K	DSX2-LED-P4-30K-TFTM-HS-MVOLT-SPA-DDBXD	LITHONIA	SQUARE STRAIGHT ALUMINUM POLE	18'-0"	SSA-18-5G-DM19AS-DDBXD
-	C	1	LITHONIA	DSX2	POLE MOUNTED AREA LIGHT	18'-0"	185	23,026	0.90	TYPE V	3000 K	DSX2-LED-P2-30K-T5W-MVOLT-SPA-DDBXD	LITHONIA	SQUARE STRAIGHT ALUMINUM POLE	18'-0"	SSA-18-5G-DM19AS-DDBXD

NOTES:  
 \* STRUCTURAL ENGINEER TO INSPECT EXISTING FOUNDATIONS AND POLES FOR STRUCTURAL INTEGRITY BEFORE REPLACING WITH NEW FIXTURE. IF DEEMED UNSUITABLE, CONTRACTOR TO REMOVE OLD FOUNDATIONS AND POLES AND REPLACE WITH NEW FOUNDATION, POLE AND FIXTURE.  
 1. POLES SHALL BE FACTORY CUT TO SPECIFIED LENGTH BY MANUFACTURER.  
 2. CONTRACTOR TO CONFIRM AND COORDINATE FINAL LINE VOLTAGE WITH MEP PLANS PRIOR TO PURCHASING FIXTURES.



STATISTICS					
DESCRIPTION	AVG. (FC)	MAX. (FC)	MIN. (FC)	MAX./MIN.	AVG./MIN.
REAR PARKING AREA	2.61	7.5	0.5	15.00:1	5.22:1

NOTES:  
 LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



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 1 EDEN LANE  
 FLANDERS, NJ 07836  
 P: (973) 347-7111



NOTE:  
 THE PHOTOMETRIC TEMPLATE REPRESENTS LIGHT THROW FOR EACH INDIVIDUAL FIXTURE AND DOES NOT REPRESENT LIGHT COMING FROM OTHER SOURCES.

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**"IT'S THE LAW"**  
 GARDEN STATE UNDERGROUND PLANT LOCATION SERVICE, INC.

**SEE SHEET LL-501 FOR LIGHTING NOTES AND DETAILS**

Date	Description	No.
5-1-23	REVISED PER MCSGD AND TOWNSHIP COMMENTS	1.

Signature: MICHAEL SZURA  
 LANDSCAPE ARCHITECT  
 NJ Lic. No. 21AS00081500

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Project: **VEOLIA NORTH AMERICA - FLANDERS FACILITY**  
 MOUNT OLIVE TOWNSHIP  
 MORRIS COUNTY NEW JERSEY

Drawing Title: **LIGHTING PLAN**

Project No.: 003580405  
 Date: 9-7-2022  
 Drawn By: SPW  
 Checked By: RP

Drawing No.: **LL-101**  
 Sheet 18 of 19

