

EASTERN SHORE NATURAL GAS COMPANY

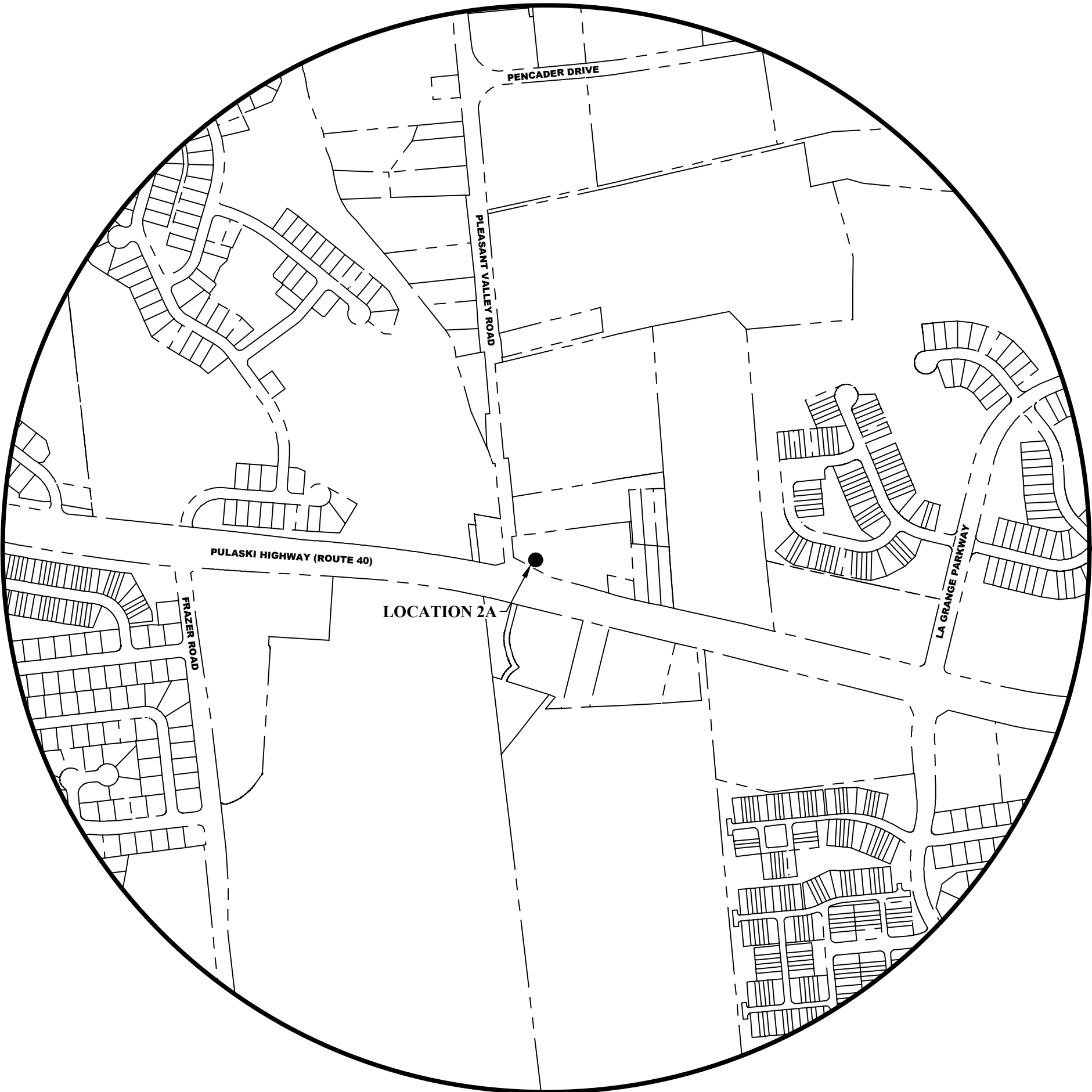
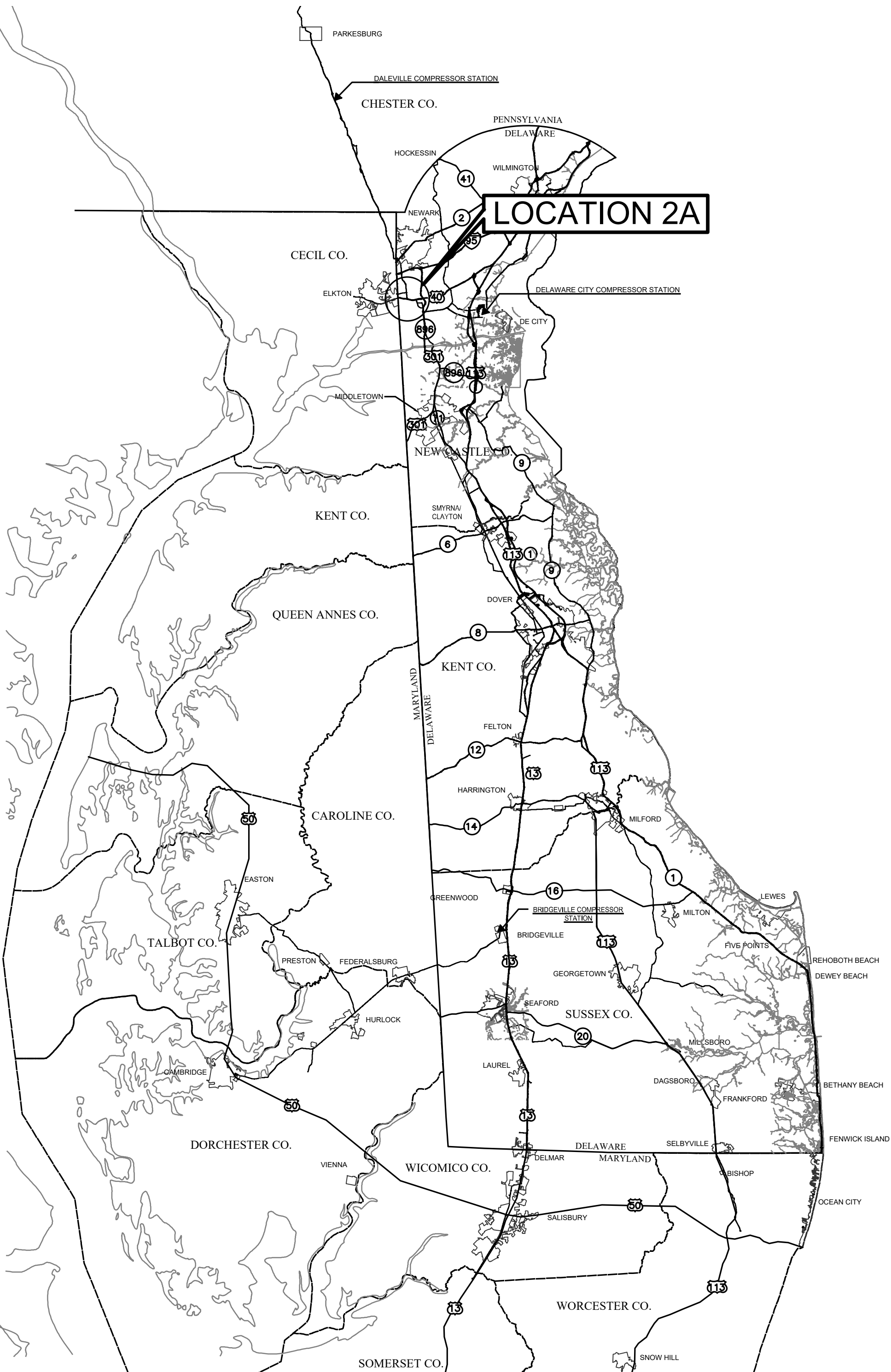
2026 ILI PROJECT - ELKTON PIPELINE

DRAWING INDEX

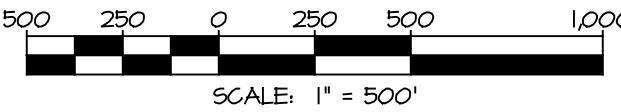
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10" NATURAL GAS PIPELINE NEW CASTLE COUNTY, DELAWARE

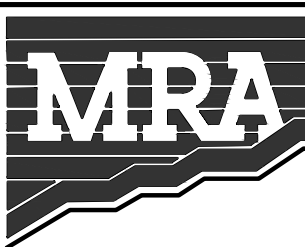


2026 ILI ELKTON
PROJECT LOCATION



By Signing Here, I approve of the Issuance of the this document for the purpose of contractor bids			
Department	Representative	Signature	Date
Regional Manager			
Measurement Manager			
Pipeline Integrity Supervisor			
Manager, Transmission Logistics			
Gas Control Supervisor			
Manager, Operations Compliance			
Lead Manager, Engineering			
Manager, Engineering & Integrity			
Construction Manager			

REVISIONS			
NO.	DATE	DESCRIPTION	BY



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND
LANDSCAPE ARCHITECTS
111 RUTHAR DRIVE
NEWARK, DE 19711
(302) 326-2200
MRAGTA.COM
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COVER SHEET			
2026 IN-LINE INSPECTIONS NEW CASTLE COUNTY, DELAWARE			
ESNG PROJECT CODE:	ES XXXX	DATE:	7/7/2026
MRA PROJECT NO:	23647	SCALE:	AS SHOWN
DESIGN/CHECK BY:	JTH/CWB	SHEET:	1 OF 8

GENERAL ENVIRONMENTAL NOTES

1.

EROSION/SEDIMENTATION CONTROL STRUCTURES TO BE INSTALLED AND MAINTAINED AS NECESSARY DURING CONSTRUCTION TO AVOID/MINIMIZE IMPACT TO WETLANDS AND WATERBODIES. THESE BARRIERS WILL REMAIN IN PLACE UNTIL REVEGETATION AND RESTORATION ARE DEEMED SUCCESSFUL.
2.

ANY TRENCH DEWATERING TO BE DIRECTED TO SEDIMENT FILTER BAG AND/OR DEWATERING STRUCTURE IN AN UPLAND AREA TO ENSURE THAT NO EROSION OR SEDIMENTATION OCCURS TO WETLANDS/WATERBODIES.
3.

PRE-CONSTRUCTION CONTOURS TO BE RE-ESTABLISHED FOR ALL DISTURBED AREAS UNLESS OTHERWISE NOTED ON THE PLANS. ALL DISTURBED AREAS TO BE RESTORED AND/OR REVEGETATED AS APPLICABLE.
4.

ALL DISTURBED AREAS TO BE RESTORED AND/OR REVEGETATED AS APPLICABLE. SEED, FERTILIZER, LIME AND MULCH TO BE APPLIED IN ACCORDANCE WITH RECOMMENDATIONS FROM LOCAL NATURAL RESOURCES CONSERVATION SERVICE (NRCS), AND LANDOWNER REQUIREMENTS (AGRICULTURAL AREAS). SEE SHEET 4 OF 8 FOR MULCH APPLICATION REQUIREMENTS.
5.

FOR NON-ROADWAY AREAS, UPLAND RE-SEEDING TO BE PERFORMED IN ACCORDANCE WITH THE VEGETATIVE STABILIZATION DETAILS (SEE SHEET 5 OF 8).
6.

CONSTRUCTION TO BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS IN FERC UPLAND EROSION CONTROL, REVEGETATION AND MAINTENANCE PLAN AND FERC WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES.
7.

THE NEW CASTLE LAND USE SEDIMENT AND STORMWATER MANAGEMENT PROGRAM MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
8.

REVIEW AND/OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
9.

IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE NEW CASTLE LAND USE.
10.

FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
11.

IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND REPAIR ALL EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT PRACTICES DURING CONSTRUCTION. THIS WILL BE MONITORED BY THE EASTERN SHORE NATURAL GAS (ESNG) ENVIRONMENTAL INSPECTOR. FOLLOWING CONSTRUCTION, ESNG WILL CONTINUE TO MONITOR THE EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT MEASURES, UNTIL REVEGETATION AND RESTORATION ARE DEEMED SUCCESSFUL. DURING THIS TIMEFRAME, ESNG WILL ARRANGE FOR ANY NECESSARY REPAIRS AND MAINTENANCE TO SUCH STRUCTURES AND MEASURES. ESNG WILL ALSO ARRANGE FOR ANY AND ALL NECESSARY ADDITIONAL REVEGETATION AND/OR RESTORATION MEASURES DURING THIS TIMEFRAME.
12.

REFER TO TYPICAL TOPSOIL SEGREGATION DETAIL FOR SUBSOIL/TOPSOIL PILE INFORMATION ON SHEET 5 OF 8.
13.

ALL STONE, WITH THE EXCEPTION OF CHECK DAMS, MUST BE UNDERLAIN WITH A GEOTEXTILE FABRIC (E.G., TEMPORARY CONSTRUCTION ENTRANCES OFF PUBLIC ROADWAYS). GEOTEXTILE FABRIC SPECIFICATIONS WILL BE PROVIDED FOR VARIOUS APPLICATIONS.
14.

EROSION CONTROL MATTING IS REQUIRED FOR RESTORATION ON SLOPES OF 3:1 OR GREATER.
15.

CONTRACTOR SHALL USE STREET SWEEPER AS REQUIRED TO MINIMIZE DUST AND SOIL ON ROADWAYS. IF DUST IN NON-ROADWAY AREAS BECOMES A PROBLEM, CONTRACTOR TO APPLY WATER TO CONSTRUCTION RIGHT-OF-WAY TO PROVIDE DUST CONTROL.
16.

TEMPORARY CONSTRUCTION ENTRANCES (ROCK AND GEOTEXTILE FABRIC) TO BE INSTALLED FOR ACCESS FROM PUBLIC ROADS TO TEMPORARY CONSTRUCTION WORK AREAS ADJACENT TO PUBLIC ROADS (SEE TEMPORARY CONSTRUCTION ENTRANCE DETAIL). CULVERT PIPES TO BE INSTALLED WHERE NECESSARY FOR ACCESS ACROSS DITCHES OR SHALES, TO MAINTAIN EXISTING DRAINAGE PATTERNS.
17.

UNLESS NOTED IN THE CONSTRUCTION LINE LIST, TOPSOIL SHALL BE STRIPPED AND SEGREGATED PRIOR TO TRENCHING IN AGRICULTURAL AREAS (MAX. DEPTH 12 INCHES). AFTER COMPLETION OF SUBSOIL BACKFILL, TOPSOIL TO BE RETURNED TO REQUIRED AREAS AND GRADED. TOPSOIL SHALL ALSO BE SEGREGATED IN ALL TEMPORARY CONSTRUCTION WORKSPACE AREAS IN AGRICULTURAL AREAS. TOPSOIL SHALL ALSO BE SEGREGATED IN ALL AREAS WHERE THE PROPOSED PIPELINE IS INSTALLED IN UNPAVED ROAD RIGHT OF WAY AREAS. IF TOPSOIL IS NOT SEGREGATED IN THESE AREAS, THEN CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING NEW TOPSOIL TO ACTUAL DEPTH OF EXISTING TOPSOIL (MIN. 6" DEPTH/MAX. 12" DEPTH).

STABILIZATION NOTES

1.

FOR ROADWAY AREAS REFER TO DELDOT NOTES ON SHEET 6 OF 8.
2.

FOR NON-ROADWAY AREAS, REFER TO NOTES AND DETAILS ON RESTORATION SEEDING AND MULCHING. RESTORATION IN NON-ROADWAY AREAS (UPLANDS AND WETLANDS) WILL BE PERFORMED WITHIN 7 DAYS OF BACKFILL. IN STREAM AREAS, RESTORATION WILL BE PERFORMED WITHIN ONE TO TWO DAYS OF PIPELINE INSTALLATION AND BACKFILL. ALL DISTURBED SOIL SHALL BE STABILIZED AS THE CONTRACTOR PROGRESSES WITHIN 5 WORKING DAYS OF DISTURBANCE.

UNDERGROUND UTILITY NOTES

1.

THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA AT 1-800-282-9555 FOR UTILITY LOCATIONS WITHIN AND SURROUNDING CONSTRUCTION AREAS NOT LESS THAN 3 DAYS BEFORE PERFORMING ANY EXCAVATION.
2.

THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE ARCHITECT/ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION SHOWN. THERE IS NO GUARANTEE EITHER EXPRESSED OR IMPLIED THAT THE LOCATIONS, SIZE AND TYPE OF MATERIALS OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH UTILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE OWNER OF THEIR OPERATIONAL PLANS. IN THE EVENT OF AN UNEXPECTED UTILITY INTERFERENCE DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER. ANY SUCH MAING AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT THEIR EXPENSE.
3.

LOCATION OF UTILITIES SHOWN ON THIS PLAN IS PROVIDED BY OTHERS AND MANY CIRCUMSTANCES REPRESENTS RELOCATED FACILITIES WHICH ARE SCHEDULED TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF EASTERN SHORE NATURAL GAS CONSTRUCTION AT THE LOCATIONS SHOWN OF THIS PLAN.
4.

PRIOR TO PERFORMING ANY EXCAVATION GREATER THAN 6 INCHES, THE CONTRACTOR SHALL COORDINATE WITH CENTRAL DISTRICT PUBLIC WORKS AND ALL PRIVATE UTILITY COMPANIES TO DETERMINE THE LOCATION OF UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL ORGANIZATIONS THAT CONTROL EXISTING UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA OR WOULD BE AFFECTED BY CONSTRUCTION WORK AROUND THE EXISTING UTILITIES.
5.

THE CONTRACTOR SHALL NOT START EXCAVATION UNTIL ALL UTILITY LINE LOCATIONS HAVE BEEN STAKED OR OTHERWISE CLEARLY MARKED AND DOCUMENTATION FURNISHED TO THE OWNER. ALL MARKINGS SHALL BE CONSIDERED APPROXIMATE, AND UTILITIES OTHER THAN THOSE SHOWN SHALL BE CONSIDERED TO EXIST.
6.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEFINITE LOCATION OF EACH UTILITY WITHIN THE WORK AREA. CARE SHOULD BE EXERCISED DURING EXCAVATION WORK TO AVOID DAMAGING OR DISRUPTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING (AT CONTRACTOR'S EXPENSE) DAMAGE TO ANY UTILITY CAUSED BY THE CONTRACTOR'S WORK.
7.

WHERE EXISTING UNDERGROUND UTILITIES OR OTHER CONSTRUCTION ARE EXPECTED TO BE IN PROXIMITY TO PROPOSED CONSTRUCTION, OR WHEN APPROACHING EXISTING UTILITIES OR STRUCTURES FOR CONNECTIONS, THE CONTRACTOR SHALL DIG TEST PITS TO DETERMINE THE EXACT LOCATION AND INVERTS OF THE EXISTING UTILITY TO ALLOW FOR POSSIBLE CHANGES TO THE PROPOSED UTILITY IN LINE AND/OR GRADE. THE CONTRACTOR SHALL ALSO DIG TEST PITS IN THE LOCATION OF THE PROPOSED CONNECTIONS TO EXISTING UTILITIES AND SHALL MAKE ALL MEASUREMENTS NECESSARY TO ENSURE PROPER CONNECTION. ANY NECESSARY CHANGES IN LINE OR GRADE OF WORK CAUSED BY FAILURE TO TAKE SUCH PRECAUTIONS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
8.

WHEN IT IS NECESSARY TO EXCAVATE NEAR OR INTERFERE WITH ANY SEWER LINE, WATER SERVICES, DRAIN PIPE, CATCH BASIN, CULVERT, OR OTHER STRUCTURES, THE CONTRACTOR SHALL MAINTAIN THE SAME IN WORKING ORDER AND SHALL REPAIR AND MAKE GOOD ANY DAMAGE DONE DURING THE PROGRESS OF THE WORK.
9.

WHERE EXISTING UTILITIES CROSS THE TRENCH EXCAVATION, THEY SHALL BE ADEQUATELY SUPPORTED AND PROTECTED FROM DAMAGE DUE TO CONSTRUCTION. ALL METHODS FOR SUPPORTING AND MAINTAINING THESE UTILITIES SHALL BE SUBJECT TO REVIEW BY OWNER. CARE SHALL BE TAKEN TO ENSURE THAT THE EXISTING UTILITY GRADES AND ALIGNMENT ARE MAINTAINED AND THE PIPE JOINTS ARE NOT DISTURBED. BACKFILL SHALL BE CAREFULLY PLACED AND TAMPED TO PREVENT DAMAGE OR FUTURE SETTLEMENT. ANY DAMAGE OR MISALIGNMENT OF THE UTILITIES DUE TO CONSTRUCTION OR SETTLEMENT SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
10.

ANY UNPROTECTED CABLE (DIRECT BURIED) ENCOUNTERED THAT IS VERIFIED AS NOT ABANDONED IN PLACE SHALL BE PROTECTED. THE UTILITY OWNER MAY DIRECT THE CABLE BE PLACED IN SPLIT DUCT OF APPROPRIATE SIZE AND CONCRETE ENCASED THROUGH THE AREA OF CONSTRUCTION. CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO AVOID HAVING TO CUT AND SPLICE DIRECT BURIED CABLE. THE CONTRACTOR SHALL NOTE SPLIT DUCT PORTIONS ON AS-BUILTS.
11.

SHORING MAY BE REQUIRED TO PROTECT THE INTEGRITY OF THE ROADWAY IF TRENCH ENCROACHES WITHIN 5' OF PAVEMENT OR IF UNDERMINING OCCURS.

OWNER'S CERTIFICATION:

"I, DAVID MILLER, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED PLAN AND THAT RESPONSIBLE PERSONNEL (I.E., BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT, AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, I GRANT THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ON-SITE REVIEWS."

CONSTRUCTION NOTES AND SEQUENCING

NOTIFICATION:
THE NEW CASTLE LAND USE SEDIMENT AND STORMWATER MANAGEMENT PROGRAM MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN. PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE SCHEDULED AND CONDUCTED WITH THE AGENCY CONSTRUCTION SITE REVIEWER. THE LANDOWNER/DEVELOPER, CONTRACTOR, AND CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND.

WORK AREAS:
CONSTRUCTION WORK AREAS TO BE CONFINED TO THE LIMITS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL USE MATTING WHEN WORKING OVER EXISTING EASTERN SHORE FACILITIES AT NO ADDITIONAL COST TO EASTERN SHORE. CONTRACTOR SHALL TEST HOLE AND VERIFY EXISTING PIPELINE DEPTH PRIOR TO WORKING OVER EXISTING FACILITIES. CONTRACTOR SHALL PROVIDE BEARING CALCULATIONS TO DETERMINE NEED FOR MATTING OR LOW PRESSURE GROUND TRACKING EQUIPMENT AND CONFIRM WITH EASTERN SHORE THE METHODOLOGY PRIOR TO WORKING IN THAT AREA. ANY DAMAGE TO EXISTING EASTERN SHORE FACILITIES WILL BE REPAIRED AND/OR REPLACED AT THE CONTRACTORS EXPENSE.

MATERIALS:
ALL PIPELINE COATING MATERIAL SHALL BE PROVIDED, STORED AND APPLIED BY CONTRACTOR PER ESNG CONSTRUCTION STANDARDS MANUAL AND APPROVED MATERIAL LIST.

EROSION AND SEDIMENTATION CONTROLS:
ALL PERIMETER CONTROLS ARE TO BE REVIEWED BY THE AGENCY CONSTRUCTION SITE REVIEWER AND APPROVED PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHOULD BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENTATION ON THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR REPAIR MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER. EROSION AND SEDIMENTATION CONTROL BARRIERS (SILT FENCE) WILL BE INSTALLED AND MAINTAINED PRIOR TO EARTH DISTURBANCE TO AVOID/MINIMIZE IMPACT TO WETLANDS AND WATERBODIES. EROSION/SEDIMENT CONTROL BARRIERS ARE SHOWN ON THE DRAWINGS. ACTUAL SILT FENCE LOCATIONS SHALL BE FIELD DETERMINED BASED ON SITE CONDITIONS, AND SHALL BE AGREED TO/APPROVED BY ESNG CONSTRUCTION INSPECTION REPRESENTATIVES. THESE BARRIERS WILL REMAIN IN PLACE UNTIL REVEGETATION AND RESTORATION ARE DEEMED SUCCESSFUL (SEE GENERAL ENVIRONMENTAL NOTES THIS SHEET). EROSION AND SEDIMENT CONTROL DEVICES SHOULD BE REMOVED ONLY AFTER WORK IN AN AREA HAS BEEN COMPLETED AND STABILIZED, WITH WRITTEN APPROVAL FROM THE AGENCY CONSTRUCTION SITE REVIEWER.

CLEARING OF VEGETATION:
TREE CLEARING WILL BE LIMITED TO THE MINIMUM NEEDED TO CONSTRUCT THE PIPELINE. ALL WOODED AREAS CLEARED FOR TEMPORARY WORK SPACE WILL BE ALLOWED TO NATURALLY REGENERATE.

PIPELINE INSTALLATIONS BENEATH ROADWAY CULVERTS:
THE 100 CROSSINGS ARE PROPOSED TO BE PERFORMED WITHIN THE ROAD R.O.W. OR PERMANENT EASEMENT AND WILL BE DESIGNED TO MEET ALL REQUIREMENTS AND SPECIFICATIONS OF DELAWARE DEPARTMENT OF TRANSPORTATION (DELDOT). THE DESIGNS WILL BE PERFORMED TO ENSURE THE COMPLETE STRUCTURAL INTEGRITY OF THE ROADWAY AND ADJACENT AREAS, WHILE ALSO MAINTAINING SUFFICIENT CLEARANCE UNDER UTILITIES, CULVERT STRUCTURES AND FOOTINGS. EROSION/SEDIMENT CONTROLS WILL BE INSTALLED AND MAINTAINED THROUGHOUT CONSTRUCTION TO ENSURE THAT NO SEDIMENTATION OCCURS TO WETLANDS OR WATERBODIES OUTSIDE THE ROADWAY. UPON COMPLETION OF CONSTRUCTION, ALL PITS AND OTHER AREAS WILL BE BACKFILLED AND COMPACTED TO ENSURE THE INTEGRITY OF THE STRUCTURES AND ROADWAY.

TRENCH EXCAVATION AND BACKFILLING:
THE TRENCH REQUIRED FOR THE PIPELINE INSTALLATION WILL BE EXCAVATED TO ENSURE THE REQUIRED DEPTH OF COVER. IN GENERAL, A MINIMUM OF 4 FEET OF COVER WILL BE PLACED OVER THE PIPELINE, BACKFILLING WITH COMPACTED MATERIAL MEETING THE REQUIREMENTS OF DELDOT. IN PAVED AREAS TRENCHLINE IS TO BE SAWCUT, AND PAVEMENT WILL BE DISPOSED OF AT AN APPROVED FACILITY. UPON COMPLETION OF THE PIPELINE INSTALLATION ACTIVITIES, THE GROUND SURFACE WILL BE GRADED TO PRE-CONSTRUCTION CONDITIONS. TRENCH WATER OR OTHER FORMS OF TURBID WATER WILL NOT BE DIRECTLY DISCHARGED ONTO EXPOSED SOIL SURFACES OR INTO ANY WETLAND OR STREAMS. GROUNDWATER SEEPAGE WILL BE PUMPED OUT OF THE TRENCH AND DIRECTED TO A PRE-MANUFACTURED FILTER BAG (OR EQUIVALENT) SIZED FOR THE EXPECTED VOLUME OF EFFLUENT, WHICH WILL BE PLACED IN AN UPLAND AREA, SURROUNDED BY A HAY BALE ENCLOSURE IF NECESSARY. SILT AND SEDIMENT WILL COLLECT IN THE FILTER BAG WHILE ALLOWING NON-TURBID WATER TO LEACH OUT AND INFILTRATE INTO THE GROUND. THE COLLECTED SILT, SEDIMENT, AND USED FILTER BAG WILL BE PROPERLY DISPOSED OFF-SITE.

HORIZONTAL DIRECTIONAL DRILLING:
CONTRACTOR SHALL UTILIZE A BENDING MACHINE PER COMPANY STANDARDS TO ACHIEVE PROPER COVER AND BREAK-OVER AT HORIZONTAL DIRECTIONAL DRILL ENTRY AND EXIT LOCATIONS. ADDITIONAL FITTINGS SHALL BE UTILIZED AT CONTRACTOR'S EXPENSE.

HYDROSTATIC TESTING OF THE PROPOSED PIPELINE:
IN COMPLIANCE WITH U.S. DEPARTMENT OF TRANSPORTATION PIPELINE SAFETY AND INTEGRITY REGULATIONS, EASTERN SHORE NATURAL GAS WILL HYDROSTATICALLY TEST THE PROPOSED NATURAL GAS PIPELINE PRIOR TO PLACING THE PROPOSED PIPELINE IN SERVICE. THE SOURCE OF WATER FOR THE HYDROSTATIC TEST WILL BE DETERMINED BEFORE THE TEST.

HYDROSTATIC PRESSURE TESTING WATER THAT IS RELEASED TO AN UPLAND SILT FENCE AND HAY BALE CONTAINMENT AREA WILL BE DONE USING WORKSPACE IN AN UPLAND AREA AT THE BEGINNING OR ENDING LOCATION OF EACH SEGMENT (NO TREE CLEARING WILL BE INVOLVED IN THE HYDROSTATIC TEST WATER DISCHARGE). A SPLASH PLATE WILL BE USED TO DIFFUSE THE IMPACT OF THE RELEASED WATER. EASTERN SHORE NATURAL GAS WILL ENSURE THAT NO EROSION OR WATERBODY/WETLAND SEDIMENTATION OCCURS FROM THE TEST WATER RELEASE ACTIVITIES. THE RELEASE RATE WILL BE 500 - 1500 GALLONS PER MINUTE, OR AT A RATE SO AS NOT TO CAUSE ANY SCOURING.

PERMIT TERMINATION:
THE TERMINATION OF THE CONSTRUCTION GENERAL PERMIT WILL REQUIRE SUBMISSION AND ACCEPTANCE OF THE POST CONSTRUCTION VERIFICATION DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE, ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN.

CONSTRUCTION SCHEDULE

CONSTRUCTION IS SCHEDULED TO BEGIN IN SUMMER 2026. CONSTRUCTION IS SCHEDULED TO BE COMPLETED BY DECEMBER 2026, IN ACCORDANCE WITH ESNG SCHEDULE. WORK WILL CONSIST OF THE FOLLOWING SEQUENTIAL OR CONCURRENT ACTIVITIES:

1.

THE NEW CASTLE LAND USE SEDIMENT AND STORMWATER MANAGEMENT PROGRAM MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2.

PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURE OR GRADING, A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED AND CONDUCTED WITH THE AGENCY CONSTRUCTION SITE REVIEWER. THE LANDOWNER / DEVELOPER, CONTRACTOR AND CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND.
3.

ALL PERIMETER CONTROLS ARE TO BE REVIEWED BY THE AGENCY CONSTRUCTION SITE REVIEWER AND APPROVED PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION.
4.

EROSION AND SEDIMENTATION CONTROL STRUCTURES WILL BE INSTALLED AND MAINTAINED AS NECESSARY (SEE ENVIRONMENTAL NOTES).
5.

TOPSOIL STRIPPING AND SEGREGATION WILL BE PERFORMED IN REQUIRED AREAS.
6.

CLEARING, GRADING AND GRUBBING WILL BE PERFORMED IN NON-ROADWAY AREAS, AS APPLICABLE.
7.

TRENCHING/DITCHING WILL BE PERFORMED TO ENSURE REQUIRED DEPTH OF COVER OVER PIPELINE PER THE DRAWINGS. (SUBSOIL WILL BE STOCKPILED WITHIN THE WORK AREA SEPARATE FROM TOPSOIL AS APPLICABLE).
8.

IN PAVED AREAS TRENCHLINE IS TO BE SAWCUT, AND PAVEMENT WILL BE DISPOSED OF AT AN APPROVED FACILITY.
9.

INSTALLATION OF PRE-FABRICATED CONTROL STATION.
10.

BENDING, WELDING, AND COATING OF THE PIPELINE ALONG THE EDGE OF THE TRENCH.
11.

LOWERING THE PIPE INTO THE DITCH, PADDING, BACKFILL AND COMPACTION (INCLUDING ROAD SUB-BASE IN PAVED ROADWAY AREAS), AS WELL AS CLEANUP AND RESTORATION.
12.

FILLING THE PIPE WITH WATER, HYDROSTATIC PRESSURE TESTING OF THE PIPE AND DEWATERING INTO THE UPLAND AREA.
13.

INSTALLATION OF ABOVE GROUND VALVE ASSEMBLIES.
14.

FINAL TIE-IN OF THE PIPELINE AT BOTH ENDS, FINAL CLEANUP AND GRADING, ROAD RESURFACING WHERE APPLICABLE, AND SEEDING AND MULCHING WHERE APPLICABLE. SEE "STABILIZATION NOTES" FOR REQUIREMENTS RELATED TO STABILIZATION OF ROADWAY AND NON-ROADWAY AREAS.
15.

PLACEMENT OF STONE WITHIN STATION LIMITS.
16.

INSTALLATION OF FENCING AND ALL GROUNDING MATERIALS.
17.

EROSION/SEDIMENT CONTROL BARRIERS SHALL REMAIN IN PLACE UNTIL FINAL REVEGETATION AND RESTORATION ARE DEEMED SUCCESSFUL AND AUTHORIZED FOR REMOVAL BY THE NEW CASTLE LAND USE SEDIMENT & STORMWATER PROGRAM.
18.

THE TERMINATION OF THE CONSTRUCTION GENERAL PERMIT WILL REQUIRE SUBMISSION AND ACCEPTANCE OF THE POST CONSTRUCTION VERIFICATION DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE, ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN.

LEGEND

PROPOSED PIPELINE	
STATION LABELS	
MILE MARKER	
PERMANENT EASEMENT	
TEMPORARY WORKSPACE (TWS)	
ADDITIONAL TEMPORARY WORKSPACE (ATWS)	
LIMITS OF DISTURBANCE	
LIMITS OF WORK	
APPROXIMATE LOCATION OF PROPOSED EROSION/SEDIMENT CONTROL STRUCTURES SILT FENCE - TO BE INSTALLED AS REQUIRED (SEE ENVIRONMENTAL NOTES AND PLAN 4 PROFILE SHEETS)	
PROPERTY LINE	
RIGHT-OF-WAY LINE	
EXISTING CONTOUR (MAJOR)	
EXISTING CONTOUR (MINOR)	
EXISTING EDGE OF PAVEMENT	
EXISTING TREELINE	
EXISTING GUIDERAIL	
EXISTING CHAINLINK FENCE	
EXISTING STORM SEWER	
EXISTING WATER LINE	
EXISTING SANITARY SEWER	
EXISTING E.S.N.G. NATURAL GAS PIPELINE	
EXISTING GAS PIPELINE (OTHERS)	
OVERHEAD ELECTRIC TRANSMISSION LINE	
WATERS OF U.S.	
WETLAND AREA	
EXISTING GAS METER	
EXISTING WATER VALVE	
EXISTING GAS VALVE	
EXISTING ELECTRIC TRANSFORMER	
EXISTING UTILITY MANHOLE	
EXISTING CABLE/TELEPHONE PEDESTAL	
EXISTING DRAINAGE STRUCTURE	
EXISTING LIGHT STANDARD	
EXISTING UTILITY POLE	
EXISTING FIRE HYDRANT	
EXISTING WELL (PRIVATE)	
EXISTING MAILBOX	
EXISTING STREET SIGN	
EXISTING BUILDING/STRUCTURE	

COORDINATE SYSTEM AND VERTICAL DATUM

HORIZONTAL COORDINATE SYSTEM:
DELAWARE STATE PLANE, NORTH AMERICAN DATUM OF 1983 (NAD 83), U.S. SURVEY FOOT

VERTICAL DATUM:
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), U.S. SURVEY FOOT



Know what's below.
Call before you dig.

PROTECT YOURSELF. GIVE THREE WORKING DAYS NOTICE.

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

EROSION & SEDIMENT CONTROL GENERAL NOTES

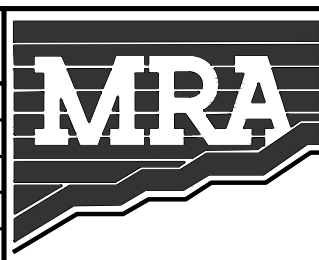
2026 IN-LINE INSPECTIONS
NEW CASTLE COUNTY, DELAWARE

ESNG PROJECT CODE:	ES XXXX	DATE:	7/7/2026
MRA PROJECT NO:	23647	SCALE:	N/A
DESIGN/CHECK BY:	JTH/CWB	SHEET:	2 OF 8

DAVID F. MILLER, ENGINEER
CHESAPEAKE UTILITIES CORPORATION
500 ENERGY LANE, SUITE 200
DOVER, DE 19901
PHONE - (410) 494-5138

DATE

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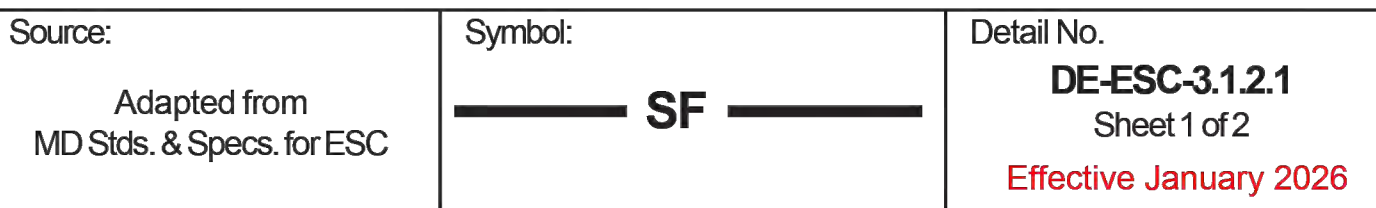
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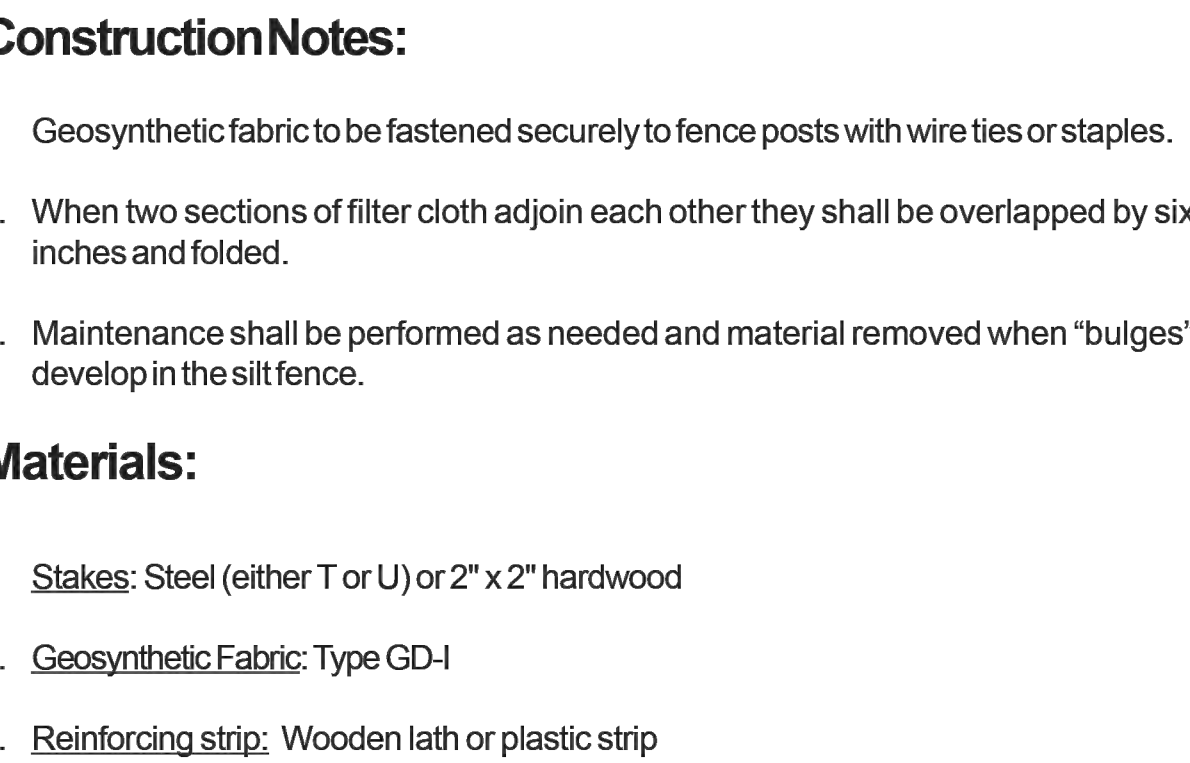


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Silt Fence

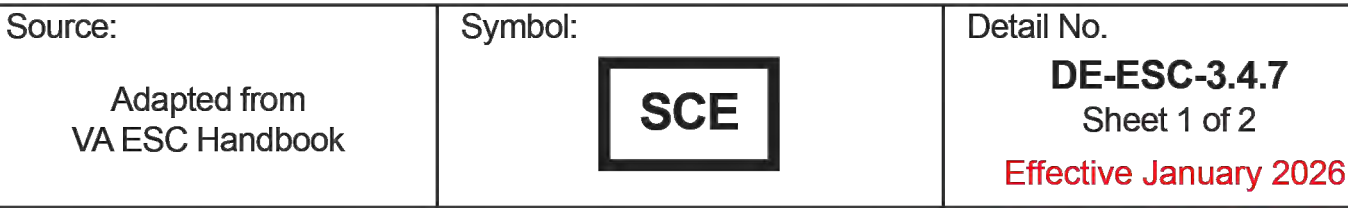


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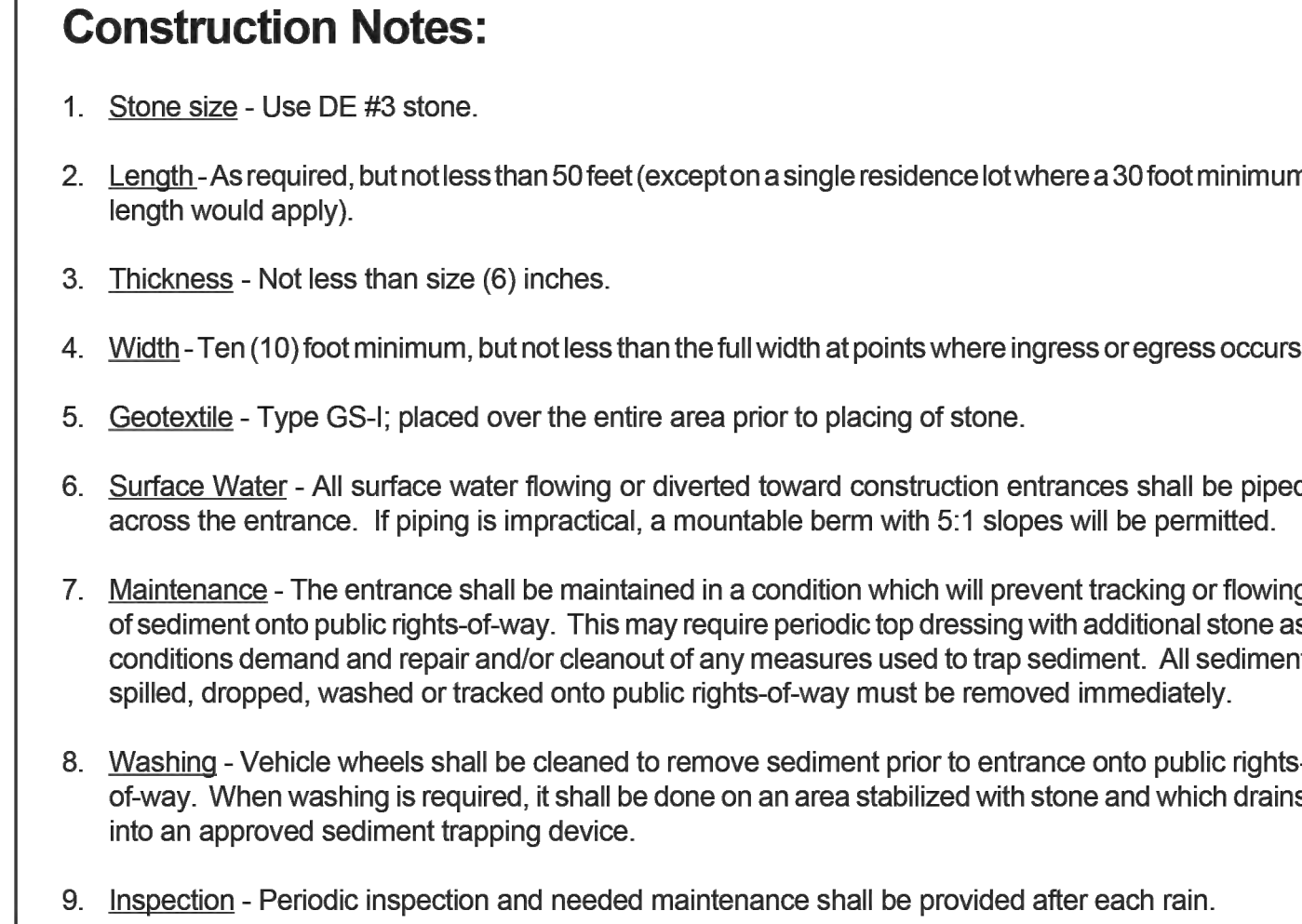


Source: Adapted from MD Stds. & Specs. for ESC	Symbol: SF	Detail No. DE-ESC-3.1.2.1 Sheet 2 of 2 Effective January 2026
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Stabilized Construction Entrance



Stabilized Construction Entrance



Source: Adapted from VA ESC Handbook	Symbol: 	Detail No. DE-ESC-3.4.7 Sheet 2 of 2 Effective January 2026
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NO.	DATE	DESCRIPTION	BY			ESNG PROJECT CODE:	ES XXXX	DATE:	7/7/2026
						MRA PROJECT NO:	23647	SCALE:	N/A
						DESIGN/CHECK BY:	JTH/CWB	SHEET:	3 OF 8

Standard Detail & Specifications

Construction Site Pollution Prevention

Delaware NPDES Discharge Permit

General Permit for Discharge of Stormwater from Construction Activities

((Project Name))

((NOI Permit Number))

((Agency Plan Approval ID))

((Contact Name & Number for Additional Site Information))

((Contact Name & Number to Obtain Copy of Approved Plan))

If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, call the DNREC Spill Notification 24 HR Hotline at

1-800-662-8802

Example Construction General Permit (CGP) Signage

NOTES:

1. Minimum sign size 2' x 2'

2. Minimum text size 1"

3. Sign must be posted at a safe, publicly accessible location close to construction site

4. Sign must be visible from the public road nearest the active construction site

5. Signs posted within a DelDOT or other public road right-of-way (ROW) must be in accordance with all local and/or State requirements in regards to safety, location, orientation, etc.

Source:

Delaware ESC Handbook

Symbol:

Detail No.

DE-ESC-3.6.1

Sheet 1 of 3

Effective January 2026

Standard Detail & Specifications

Construction Site Pollution Prevention

1) Equipment and Vehicle Fueling and Maintenance

a. Minimize spills and leaks of fuels and oils.

i. Fuel only in marked areas a minimum of 50 feet away from drains and watercourses. Use automatic shut-off nozzles and do not top off tanks. Provide lighting if fueling at night.

ii. Use berms or other barriers around fueling, maintenance, and parking areas to prevent stormwater from running through and to contain spills. Use drip pans during maintenance.

iii. Take equipment and vehicles to off-site facilities for maintenance when possible.

iv. Check vehicles and equipment daily for leaks. Repair immediately or remove from site.

v. Clean up any spills right away. Do not hose them down.

b. Keep absorbent materials and spill kits on site, especially in fueling and storage areas.

c. Dispose of or recycle used oil, fluids, lubricants, and cleanup materials according to manufacturer instructions and all local, state, and federal regulations.

2) Equipment and Vehicle Washing

a. Minimize discharge of pollutants from wash water.

i. Use off-site commercial wash facilities when possible.

ii. If washing on-site, use high-pressure water without detergents in a contained area with an impervious berm.

iii. Dispose of concrete washout water only in designated washout areas for hardening and proper disposal.

b. Do not discharge soaps, solvents, or detergents.

c. Store soaps, detergents, and solvents under cover (e.g., plastic sheeting, temporary roofs) or use another effective method to prevent contact with stormwater.

3) Storage, Handling, and Disposal of Building Products, Materials, and Waste

a. Minimize exposure of materials, products, and waste to rain, stormwater, and wind.

b. Building materials and products:

i. Cover materials (e.g., plastic sheeting, tarp, or roof) to prevent contact with rain and stormwater. Final building materials and products intended for outdoor use do not require cover.

ii. Secure materials (e.g., tarp, mesh, or lidded dumpster) to protect from wind.

Source:

Adapted from USEPA CGP 2022 (as modified)

Symbol:

Detail No.

DE-ESC-3.6.1

Sheet 2 of 3

Effective January 2026

Standard Detail & Specifications

Construction Site Pollution Prevention

c. Construction and domestic waste:

i. Provide enough containers (e.g., dumpsters, trash bins) to hold all waste.

ii. Keep container lids closed when not in use and during storms.

iii. For containers without lids, cover with a tarp or temporary roof to prevent exposure to rain and wind.

iv. Do not dump or allow liquid wastes (e.g., paint, solvents, chemicals) to enter the ground, drains, or waterways.

d. Dispose of waste in designated containers and clean up loose trash immediately.

e. Empty dumpsters when at 80% capacity by volume.

f. Waste containers are not required for final building materials and products if stored separately from other construction, domestic or other waste. If mixed, the waste must be managed as construction and domestic waste in Section 3(c).

4) Hazardous Materials, Other Chemicals and Sanitary Waste:

a. Store hazardous materials and chemicals under cover or in secondary containment, at least 50 feet from drains or waterways.

b. Keep containers labeled, sealed, watertight, and closed when not in use.

c. Store contaminated waste in sealed, labeled containers made of suitable material.

d. Dispose of hazardous materials according to Delaware laws and regulations.

e. Post spill reporting contact information clearly on site.

5) Pesticides, Herbicides, Fertilizers, and Landscape Material:

a. Keep all products labeled and covered (e.g., plastic sheeting or temporary roofs) to prevent contact with rain and stormwater.

b. Provide similarly effective protection methods, such as storing fertilizer in a weatherproof area or on a covered pallet, to minimize polluted run-off.

c. Apply all products according to state and federal regulations.

CONTACT INFORMATION

DNREC 24-Hour Toll Free Number

800-662-8802

DNREC Solid & Hazardous Waste Management Section

302-739-9403

Source:

Adapted from USEPA CGP 2022 (as modified)

Symbol:

Detail No.

DE-ESC-3.6.1

Sheet 3 of 3

Effective January 2026

Standard Detail & Specifications

Mulching

1. Materials and Amounts

a. Straw - Straw shall be unrotted small grain straw applied at the rate of 1-1/2 to 2 tons per acre, or 70 to 90 pounds (two bales) per 1,000 square feet. Mulch materials shall be relatively free of weeds and shall be free of noxious weeds such as; thistles, Johnsongrass, and quackgrass. Spread mulch uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 square feet sections and place 70-90 pounds (two bales) of mulch in each section.

b. Wood chips - Apply at the rate of approximately 6 tons per acre or 275 pounds per 1,000 square feet when available and when feasible. These are particularly well suited for utility and road rights-of-way. If wood chips are used, increase the application rate of nitrogen fertilizer by 20 pounds of N per acre (200 pounds of 10-10-10 or 66 pounds of 30-0-0 per acre).

c. Hydraulically applied mulch - The following conditions apply to hydraulically applied mulch:

i. Definitions:

a. Wood fiber mulch shall consist of specially prepared wood that has been processed to a uniform state, is packaged for sale as a hydraulic mulch for use with hydraulic seeding equipment, and consists of a minimum of 70% virgin or recycled wood fiber combined with 30% paper fiber and additives.

b. Blended fiber mulch shall consist of any hydraulic mulch that contains greater than 30% paper fiber. The paper component must consist of specially prepared paper that has been processed to a uniform fibrous state and is packaged for sale as a hydraulic mulch for use with hydraulic seeding equipment.

c. A bonded fiber matrix (BFM) consists of long strand, specially prepared wood fibers that have been processed to a uniform state held together by a water resistant bonding agent. BFMs shall contain no paper (cellulose) mulch but may contain small percentages of synthetic fibers to enhance performance.

d. Refer to Figure 3.4.5a for conditions and limitations of use for each of the above categories of hydraulic mulch.

ii. All components of the hydraulically applied mulches shall be pre-packaged by the manufacturer to assure material performance. Field mixing of the mulch components is acceptable, but must be done per manufacturers recommendations to ensure the proper results.

iii. Hydraulic mulches shall be applied with a viable seed and at manufacturer's recommended rates. Increased rates may be necessary based on site conditions.

iv. Hydraulically applied mulches and additives shall be mixed according to manufacturers recommendations.

iv. Materials within this category shall only be used when hydraulically applied mulch has been specified for use on the approved Sediment and Stormwater Plan, or supplemental approval from the plan approval authority has been obtained in writing for a specific area.

Source:

Delaware ESC Handbook & Filtrex™ International

Symbol:

Detail No.

DE-ESC-3.4.5

Sheet 1 of 3

Effective January 2026

Standard Detail & Specifications

Mulching

v. Application:

a. Apply product to geotechnically stable slopes that have been designed and constructed to divert runoff away from the face of the slope.

b. Do not apply to saturated soils, or if precipitation is anticipated within 24-48 hours.

c. During the spring (March 1 to May 31) and fall (September 1 to November 30) seasons, hydraulic mulches may be applied in a one-step process where all components are mixed together in single-tank loads. It is recommended that the product be applied from opposing directions to achieve optimum soil coverage.

d. During the summer (June 1 to August 31) and winter (December 1 to February 28) seasons, the following two-step process is required:

Step One - Mix and apply seed and soil amendments with a small amount of mulch for visual metering.

Step Two - Mix and apply mulch at manufacturers recommended rates over freshly seeded surfaces. Apply from opposing directions to achieve optimum soil coverage.

e. Minimum curing temperature is 40°F (4°C). The best results and more rapid curing are achieved at temperatures exceeding 60°F (15°C). Curing times may be accelerated in high temperature, low humidity conditions on dry soils.

vi. Recommended application rates are for informational purposes only. Conformance with this standard and specification shall be performance-based and requires 100% soil coverage. Any areas with bare soil showing shall be top dressed until full coverage is achieved.

d. Compost blanket (CB) - Loosely applied with a pneumatic blower so that a 1" compost blanket uniformly covers the soil with 100% coverage. This application can be used with seed to promote germination by applying the approved seed mix directly into the loosely blown compost. The compost blanket performs best on slopes less than 2:1 and requires no mulch anchoring.

2. Anchoring mulch - Mulch must be anchored immediately to minimize loss by wind or water. This may be done by one of the following methods, depending upon size of area, erosion hazard, and cost.

a. Crimping - A crimper is a tractor drawn implement designed to punch and anchor mulch into the top two (2) inches of soil. This practice affords maximum erosion control but is limited to flatter slopes where equipment can operate safely. On sloping land, crimping should be done on the contour whenever possible.

b. Tracking - Tracking is the process of cutting mulch (usually straw) into the soil using a bulldozer or other equipment that runs on cleated tracks. Tracking is used primarily on slopes 3:1 or steeper and should be done up and down the slope with cleat marks running across the slope.

c. Liquid mulch binders - Applications of liquid mulch binders should be heavier at edges, in valleys, and at crests of banks and other areas where the mulch will be moved by wind or water. All other areas should have a uniform application of binder. The use of synthetic binders is the preferred method of mulch binding and should be applied at the rates recommended by the manufacturer.

d. Paper fiber - The fiber binder shall be applied at a net dry weight of 750 lbs/ac. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons.

e. Nettings - Biodegradable nettings may be used to secure straw mulch. Install and secure according to the manufacturer's recommendations. Photodegradable or synthetic nettings are not acceptable.

Source:

Delaware ESC Handbook & Filtrex™ International

Symbol:

Detail No.

DE-ESC-3.4.5

Sheet 2 of 3

Effective January 2026

Source:

Delaware ESC Handbook & Filtrex™ International

Symbol:

Detail No.

DE-ESC-3.4.5

Sheet 3 of 3

Effective January 2026

MULCHING MATERIAL SELECTION GUIDE

Percent Slope	Type of Mulch / App. Rate*	Dec. 1 to Feb. 28(29)	March 1 to May 31	June 1 to Aug. 31	Sept. 1 to Nov. 30
Less than 2%	Blended Fiber @ 2000 lbs/ac. minimum Wood Fiber @ 2000 lbs/ac. min. BFM @ 3000 lbs/ac. min. Straw @ 2 Tons/ac. Min. Stabilization Mating** 1" Compost Blanket (CB)	OK OK OK OK OK OK	OK (< 1 ac.) OK OK OK OK OK	OK (< 1 ac.) OK OK OK OK OK	OK (< 1 ac.) OK OK OK OK OK
2% to 5.9%	Wood Fiber @ 2000 lbs/ac. min. BFM @ 3000-3500 lbs/ac. min Straw @ 2 Tons/ac. min. Stabilization Mating** 1" Compost Blanket (CB)	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK
6% to 10.9%	Wood Fiber @ 2000-2500 lbs/ac. min. BFM @ 3500-4000 lbs/ac. min. Straw @ 2 Tons/ac. min. Stabilization Mating** 1" Compost Blanket (CB)	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK
11% to 24.9%	Wood Fiber @ 2500-3000 lbs/ac. min. BFM @ 3500-4000 lbs/ac. min. Straw @ 2 Tons/ac. min. Stabilization Mating** 1" Compost Blanket (CB)	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK
25% to 33%	Wood Fiber @ 2500-3000 lbs/ac. min. BFM @ 4000 lbs/ac. min. Straw @ 2 Tons/ac. min. Stabilization Mating** 1" Compost Blanket (CB)	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK	OK OK OK OK OK
33% and up	BFM @ 4000-4500 lbs/ac. min. Straw @ 2 Tons/ac. min.*** Stabilization Mating** 1" Compost Blanket (CB)	OK OK OK OK	OK OK OK OK	OK OK OK OK	OK OK OK OK

* Note: Manufacturers Recommended Rates for informational purposes only. Performance standard requires 100% soil coverage.

** Note: Stabilization Mating must be applied in accordance with Section 3.4.6 of the Delaware ESC Handbook.

***Note: Straw applied on slopes greater than 33% must be netted (this does not apply to topsoil stockpiles).

OK = Acceptable to use during this time period.

xx = Not acceptable to use during this time period.

All application rates are minimums

EROSION & SEDIMENT CONTROL DETAILS

REVISIONS

NO.	DATE	DESCRIPTION	BY

MIRA

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ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
111 RUTHAR DRIVE
NEWARK, DE 19711
(302) 326-2200
MRAGTA.COM
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EASTERN SHORE

500 ENERGY LANE, SUITE 200 DOVER, DE 19901
TELEPHONE (302) 734-6710 - FAX (302) 734-6745

2026 IN-LINE INSPECTIONS

NEW CASTLE COUNTY, DELAWARE

ESNG PROJECT CODE:	ES XXXX	DATE:	7/7/2026
MRA PROJECT NO:	23647	SCALE:	N/A
DESIGN/CHECK BY:	JTH/CWB	SHEET:	4 OF 8

Standard Detail & Specifications											
Vegetative Stabilization											
TEMPORARY SEEDING BY RATES, DEPTHS AND DATES											
Mix #	Species ⁵	Seeding Rate		Optimum Seeding Dates ¹ O = Optimum Planting Period; A = Acceptable Planting Period							Planting Depth ³
	Certified Seed	lb/Ac ⁴	lb/1000 sq.ft.	Coastal Plain			Piedmont		All		
				2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-7/31	8/1-10/31	10/31-2/1	
1	Barley	125	4	O	A	O	O	A	O		1-2 inches 2-3" sandy soils
2	Oats	125	4	O	A	A	O	A	A		1-2 inches 2-3" sandy soils
3	Rye	125	4	O	A	O	O	A	O	A	1-2 inches 2-3" sandy soils
4	Perennial Ryegrass	125	4	O	A	O	O	A	O		0.5 inches 1-2" sandy soils
5	Annual Ryegrass	125	4	O	A	O	O	A	O	A	0.5 inches 1-2" sandy soils
6	Winter Wheat	125	4	O	A	O	O	A	O	A	1-2 inches 2-3" sandy soils
7	Foxtail Millet	30 PLS	0.7		O			O			0.5 inches 1-2" sandy soils
8	Pearl Millet	20 PLS	0.5		O			O			0.5 inches 1-2" sandy soils
1. Winter seeding requires 3 tons per acre of straw mulch for proper stabilization. 2. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated. 3. Applicable on slopes 3:1 or less. 4. Use varieties currently recommended for Delaware. Contact a County Extension Office for information. 5. Warm season grasses such as Millet may be used between 5/1 and 9/1 if desired. Seed at 3-5 lbs. per acre. Good on low fertility and acid areas. Seed after frost through summer at a depth of 0.5".											
NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.											
* PREFERRED SEED MIX											
Source:		Symbol:					Detail No.				
Delaware ESC Handbook							DE-ESC-3.4.3 Sheet 1 of 4 Effective January 2026				

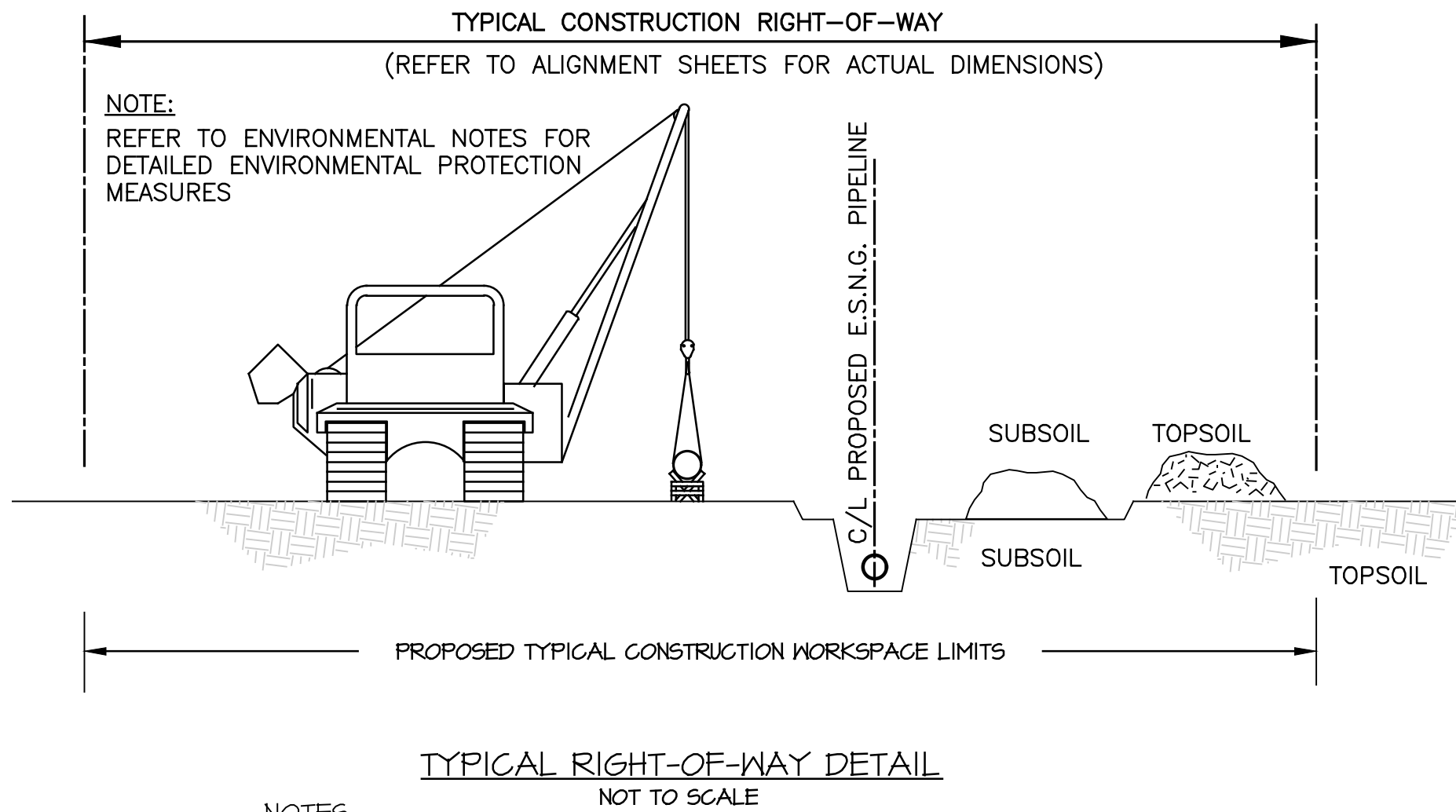
Standard Detail & Specifications									
Vegetative Stabilization									
Construction Notes:									
1. Site Preparation									
a. Prior to seeding, install needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, and sediment basins.									
b. Final grading and shaping is not necessary for temporary seedings.									
2. Seedbed Preparation									
It is important to prepare a good seedbed to ensure the success of establishing vegetation. The seedbed should be well prepared, loose, uniform, and free of large clods, rocks, and other objectionable material. The soil surface should not be compacted or crusted.									
3. Soil Amendments									
a. Lime - Apply liming materials based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply dolomitic limestone at the rate of 1 to 2 tons per acre. Apply limestone uniformly and incorporate into the top 4 to 6 inches of soil.									
b. Fertilizer - Apply fertilizer based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply a formulation of 10-10-10 at the rate of 600 pounds per acre. Apply fertilizer uniformly and incorporate into the top 4 to 6 inches of soils.									
4. Seeding									
a. For temporary stabilization , select a mixture from Sheet 1 . For a permanent stabilization , select a mixture from Sheet 2 or Sheet 3 depending on the conditions. Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.									
b. Apply seed uniformly with a broadcast seeder, drill, cultipacker seeder or hydroseeder. All seed will be applied at the recommended rate and planting depth.									
c. Seed that has been broadcast should be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be done immediately and without interruption.									
5. Mulching									
All mulching shall be done in accordance with detail DE-ESC-3.4.5.									
Source:		Symbol:		Detail No.					
Delaware ESC Handbook				DE-ESC-3.4.3 Sheet 4 of 4 Effective January 2026					

Standard Detail & Specifications									
Vegetative Stabilization									
PERMANENT SEEDING AND SEEDING DATES									
Seeding Mixtures		Seeding Rate ¹	Optimum Seeding Dates ² O = Optimum Planting Period A = Acceptable Planting Period						Remarks
Mix No.	Certified Seed ³		Coastal Plain		Piedmont		All ⁴		
	Well Drained Soils	lb/Ac	2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-7/31	8/1-10/31	
1	Tall Fescue Canada Wild Rye	140 10	3.2 0.23	A O	O A	A A	O A		Add 100 lbs./ac. Winter Rye. Good erosion control mix. Tolerant of low fertility soils. Good for droughty sites.
2	Deertongue Sheep Fescue White Clover	30 30 10	0.69 0.69 0.35	A O A	O A O	A A O	O A A		Add 100 lbs./ac. Winter Rye. Good erosion control mix. Tolerant of low fertility soils. Legume that fixes atmospheric N into soil.
3	Tall Fescue (Turf-type) or Strong Creeping Red Fescue or Perennial Ryegrass	50 50 5	1.15 1.15 0.11	O A ⁴	O O	O A ⁴	O A ⁴		Good erosion control mix. Tall Fescue for droughty conditions. Creeping Red Fescue for heavy shade. Flatpots to suppress woody vegetation.
4	Strong Creeping Red Fescue Kentucky Bluegrass Perennial Ryegrass or Redtop <i>plus</i> White Cloves ⁵	100 70 15 5 3	2.3 1.61 0.35 0.11 0.07	O A ⁴	O O	O A ⁴	O A ⁴		Add 100 lbs./ac. Winter Rye. Suitable waterway mix. Canada Bluegrass more drought tolerant. Use Redtop for increased drought tolerance.
5	Switchgrass ^{6/7} or Coastal Panicgrass Big Bluestem Little Bluestem Indian Grass	10 10 5 5	0.23 0.23 0.11 0.1		O		O		Native warm-season mixture. Tolerant of low fertility soils. Drought tolerant. Poor shade tolerance. N fertilizer discouraged - weeds.
6	Tall Fescue (turf-type) (Blend of 3 cultivars)	150	3.5	O	A ⁴	O	O	A ⁴	Managed filter strip for nutrient uptake.
7	Tall Fescue Ky. Bluegrass (Blend) Perennial Ryegrass	150 20 20	3.5 0.46 0.46	O	A ⁴	O	O	A ⁴	Three cultivars of Kentucky Bluegrass. Traffic tolerant.
8	Big Bluestem ⁷ Indian Grass ⁷ Little Bluestem ⁷ Creeping Red Fescue <i>plus one of:</i> Partridge Pea Bush Clover Wild Indigo Showy Tick-Trefoil	10 8 8 30 5 3 2	0.23 0.23 0.11 0.69 0.11 0.07 0.05	O	A ⁴	O	A ⁴		All species are native. Indian Grass and Bluestem have fully seeds. Plant with a specialized native seed drill. Creeping Red Fescue will provide erosion protection while the warm season grasses get established.
NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.									
Source:		Symbol:		Detail No.					
Delaware ESC Handbook				DE-ESC-3.4.3 Sheet 2 of 4 Effective January 2026					

Standard Detail & Specifications									
Topsoiling									
Construction Notes:									
1. Site Preparation (Where Topsoil is to be added)									
Note: When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, waterways and sediment basins.									
a. Grading - Grades on the areas to be topsoiled which have been previously established shall be maintained.									
b. Liming - Where the topsoil is either highly acid or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet). Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.									
c. Tilling - After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or by scarifying to a depth of a least 3 inches to permit bonding of the topsoil to the subsoil. Pack by passing a bulldozer up and down over the entire surface area of the slope to create horizontal erosion check slots to prevent topsoil from sliding down the slope.									
2. Topsoil Material and Application									
Note: Topsoil salvaged from the existing site may often be used but it should meet the same standards as set forth in these specifications. The depth of topsoil to be salvaged shall be no more than the depth described as a representative profile for that particular soil type as described in the soil survey published by USDA-SCS in cooperation with Delaware Agricultural Experimental Station.									
Source:		Symbol:		Detail No.					
USDA - NRCS				DE-ESC-3.4.1 Sheet 1 of 2 Effective January 2026					

Standard Detail & Specifications									
Vegetative Stabilization									
PERMANENT SEEDING AND SEEDING DATES (cont.)									
Seeding Mixtures		Seeding Rate ¹	Optimum Seeding Dates ² O = Optimum Planting Period A = Acceptable Planting Period						Remarks
Mix No.	Certified Seed ³		Coastal Plain		Piedmont		All ⁴		
	Poorly Drained Soils	lb/Ac	2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-7/31	8/1-10/31	
9	Redtop Creeping Bentgrass Sheep Fescue Rough Bluegrass	75 172 35 30	1.72 0.8 0.69 1	O A ⁴	O O	O A ⁴	O A ⁴		Add 100 lbs./ac. Winter Rye. Quick stabilization of disturbed sites and waterways.
10	Switchgrass ⁶	10	0.23	A	O	A	O		Good erosion control, wildlife cover and wetland revegetation.
Residential Lawns									
11	Tall Fescue Perennial Ryegrass Kentucky Bluegrass Blend	100 25 30	2.3 0.57 0.69	O A ⁴	O O	O A ⁴	O A ⁴		High value, high maintenance, light traffic, irrigation necessary. Well drained soils, full sun.
12	Tall Fescue Perennial Ryegrass Sheep Fescue	100 25 25	2.3 0.57 0.57	O A ⁴	O O	O A ⁴	O A ⁴		Moderate value, low maintenance, traffic tolerant.
13	Creeping Red Fescue Chewings Fescue Rough Bluegrass Kentucky Bluegrass	50 50 20 20	1.15 1.15 0.4 0.4	O A ⁴	O O	O A ⁴	O A ⁴		Shade tolerant, moderate traffic tolerance, moderate maintenance.
14	Creeping Red Fescue Rough Bluegrass or Chewings Fescue	50 80	1.15 2.1	O A ⁴	O O	O A ⁴	O A ⁴		Shade tolerant, moisture tolerant.
15	K-31 Tall Fescue	150	3.5	O	A ⁴	O	O	A ⁴	Monoculture, but performs well alone in lawns. Discouraged.
* PREFERRED SEED MIX									
NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.									
Source:		Symbol:		Detail No.					
Delaware ESC Handbook				DE-ESC-3.4.3 Sheet 3 of 4 Effective January 2026					

Standard Detail & Specifications									
Topsoiling									
Construction Notes (cont.)									
a. Materials - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by an agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, slag, coarse fragment, gravel, sticks, roots, trash or other extraneous materials larger than 1-1/2 inches in diameter. Topsoil must be free of plants or plant parts of bermudagrass, quackgrass, Johnsonsgrass, nutsedge, poison ivy, thistles, or others as specified. All topsoil shall be tested by a reputable laboratory for organic matter content, pH and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1.5 percent by weight is required. If pH value is less than 6.0 lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoil containing soluble salts greater than 500 parts per million shall not be used.									
Note: No sod or seed shall be placed on soil which has been treated with soil sterilant or chemicals used for weed control until sufficient time has elapsed to permit dissipation of toxic materials.									
b. Grading - The topsoil shall be uniformly distributed and compacted to a minimum of four (4) inches. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.									
Note: Topsoil substitutes or amendments as approved by a qualified agronomist or soil scientist, may be used in lieu of natural topsoil. Compost material used to improve the percentage of organic matter shall be provided by a certified supplier.									
Compost amendments that are intended to meet specific post-construction stormwater management goals shall further meet the requirements of Appendix 3.06.2 Post Construction Stormwater Management BMP Standards and Specifications, Section 14.0 Soil Amendments.									
Source:		Symbol:		Detail No.					
USDA - NRCS				DE-ESC-3.4.1 Sheet 2 of 2 Effective January 2026					



NOTES:

- RIGHT OF WAY CONFIGURATION VARIES, SEE PLAN AND PROFILE SHEETS
- CONFIGURATION DOES NOT INCLUDE ADDITIONAL TEMPORARY WORKSPACE FOR STAGING, CROSSINGS AND PIPE STORAGE.

NOTES:

THE CONTRACTOR SHALL PERFORM SOIL BORES AND/OR TEST PITS AS REQUIRED TO ASSURE THE FEASIBILITY OF DRILLING OPERATIONS. ONCE FEASIBILITY HAS BEEN DETERMINED, THE CONTRACTOR ASSUMES RESPONSIBILITY FOR ANY ADDITIONAL EXPENSES DUE TO UNFORESEEN SOIL OR BEDROCK CONDITIONS.

NO KETLAND OR WATERBODY SHALL BE IMPACTED BY A HORIZONTAL DIRECTIONAL DRILLING (HDD) OPERATION.

ALL DRILLING MUD IS TO BE CONTAINED DURING CONSTRUCTION WITH BERMS, MUD PITS AND EROSION AND SEDIMENTATION CONTROLS DEEMED APPROPRIATE FOR THE SITE. ALL DRILLING MUD SHALL BE PROPERLY DISPOSED OF AT AN APPROVED FACILITY.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL DEVICES FOR THE MAINTENANCE AND PROTECTION OF TRAFFIC, WHILE SEGREGATING TRAVEL LANES FROM WORK AREAS UTILIZED FOR HDD OPERATIONS.

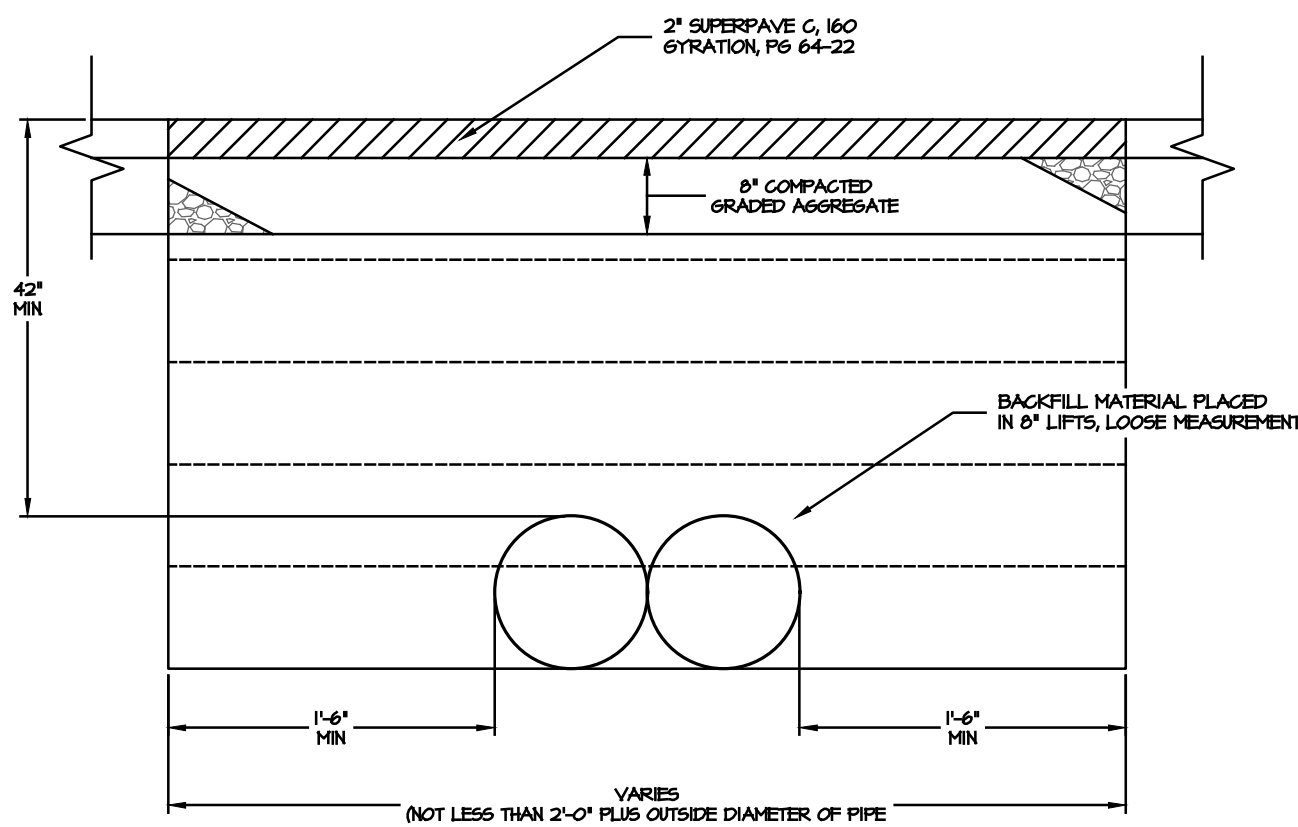
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DELDOT UTILITY PLAN GENERAL NOTES

- PLANS ARE REVIEWED FOR GENERAL CONFORMITY. DELDOT IS NOT RESPONSIBLE FOR ERRORS OR OMISSIONS WITHIN THE PLAN SET. THE UTILITY OWNER IS RESPONSIBLE TO ENSURE ACCURACY OF PLANS AND CONFORMANCE WITH DELDOT STANDARDS.
- ALL BACKFILL MATERIAL IN EXISTING/PROPOSED ROADWAY SHALL CONFORM TO TYPE "C" BORROW. ALL BORROW BACKFILL SHALL BE COMPACTED TO 95% USING AASHTO T99 STANDARD FOR TESTING.
- 6ABC PLACED SHALL BE COMPACTED TO 98%.
- COMPACTION TESTING SHALL BE PERFORMED EVERY 100' AND TESTING SHALL BE TAKEN ON EACH LIFT OF MATERIAL PLACED. (WHEN UTILITY IS IN THE ROADWAY)
- TAR CHIP/NOT MIXES ROADS: TRAVEL WAY PAVEMENT DISTURBED SHALL BE RESTORED AT THE END OF THE DAY PRIOR TO REOPENING TO TRAFFIC. HOT MIX SHALL BE PLACE PER TEMP PATCHING DETAIL 6" 6ABC AND 2" TYPE "C" HOT MIX.
- TAR CHIP/NOT MIXES SHOULDERS: SHOULDERS DISTURBED MAY BE LEFT IN 6ABC TO FINISH GRADE OVERNIGHT BUT SHALL BE CLOSED USING APPROPRIATE SIGNING AND DRUMS. TEMP PAVEMENT SHALL BE PLACED FOR SHOULDERS AT THE END OF EACH WORK WEEK.
- IF THE REMAINING PORTION OF HOTMIX BETWEEN THE PIPE TRENCH EXCAVATION AND EDGE OF PAVEMENT IS LESS THAN 3' THE REMAINING SECTION SHALL BE REMOVED AND REPAVED AS PART OF THE FULL DEPTH PAVING RESTORATION
- ALL AREAS DISTURBED OUTSIDE OF THE PAVEMENT SHALL BE GRADED EACH DAY TO ENSURE POSITIVE DRAINAGE AND SHALL BE PERMANENTLY RESTORED AT THE END OF EACH WEEK.
- ALL TEMPORARY HOT MIX SHALL BE PLACED TO PROVIDE A SMOOTH RIDABLE SURFACE TO DELDOT STANDARDS.
- A SAFETY EDGE IS REQUIRED ON ALL HOT MIX PLACED.
- ANY STRIPING DISTURBED SHALL BE PLACED AT THE END OF THE DAY PRIOR TO OPENING TO TRAFFIC.
- PROOF ROLL OF 6ABC SHALL BE PERFORMED USING A LOADED 10 WHEELER PRIOR TO PLACEMENT OF HOT MIX.
- ALL MATERIALS AND WORKMANSHIP WITHIN THE STATE R/M SHALL BE COMPLETED IN ACCORDANCE WITH CURRENT STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, SUPPLEMENTAL SPECIFICATIONS, STANDARD CONSTRUCTION DETAILS, UTILITY MANUAL, SPECIAL PROVISIONS AND DESIGN MEMORANDUMS.
- THERE IS A ONE YEAR WARRANTY ON ALL EARTH WORK AND CONCRETE. A THREE YEAR WARRANTY ON ALL HOT MIX INCLUDING SUBBASE/SUBGRADE ISSUES WITHIN THE PAVEMENT AREAS. WARRANTY DOES NOT START UNTIL ALL WORK IS COMPLETED AND A STAND OF GRASS HAS BEEN ESTABLISHED TO DELDOT STANDARDS AND A ACCEPTANCE LETTER HAS BEEN ISSUED.
- ALL DISTURBED AREAS WITHIN THE STATE RIGHT-OF-WAY, BUT NOT IN THE PAVEMENT, SHALL BE TOP-SOILED (6" MINIMUM), FERTILIZED, SEEDED AND MULCHED. IF SOD IS USED NEXT TO SIDEWALK OR SHARED-USE PATH, CONTRACTOR SHALL GRADE TOPSOIL ADJACENT TO THE SIDEWALK OR SHARED-USE PATH PRIOR TO PLACEMENT OF SOD TO ENSURE THAT SOD IS PLACED FLUSH OR JUST BELOW EDGE OF SIDEWALK OR SHARED-USE PATH TO AVOID WATER PONDING ON THE SIDEWALK OR SHARED-USE PATH.
- A 12-HOUR (MINIMUM) NOTICE SHALL BE GIVEN TO THE DELDOT DISTRICT PERMIT SUPERVISOR PRIOR TO STARTING UTILITY CONSTRUCTION.
- A 48 HOUR NOTICE IS REQUIRED TO BE GIVEN TO THE DELDOT INSPECTOR PRIOR TO MATERIAL RELEASES.
- ALL CONCRETE/HOT MIX MATERIALS SHALL BE RELEASED BY THE INSPECTOR PRIOR TO PLACEMENT.
- MISS UTILITY OF DELAWARE SHALL BE NOTIFIED THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.
- ALL SIGNING, STRIPING AND MAINTENANCE OF TRAFFIC IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL FOLLOW THE GUIDELINES SHOWN IN THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION). THE OWNER OR MAINTENANCE CORPORATION SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL SIGNS INSTALLED AS PART OF THIS PROJECT.
- A COPY OF THE UP TO DATE APPROVED CONSTRUCTION DOCUMENTS AND DELDOT APPROVAL LETTERS SHALL BE MAINTAINED ON THE PROJECT SITE AT ALL TIMES AND BE AVAILABLE FOR INSPECTION BY DELDOT PERSONNEL.
- EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48-HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELAWARE (SEE NOTE #5).
- SHOULD UTILITY RELOCATION BE REQUIRED, THE DEVELOPER MUST SUBMIT A UTILITY RELOCATION PLAN FOR DELDOT REVIEW, ALONG WITH CORRESPONDENCE FROM THE UTILITY COMPANIES STATING PRELIMINARY APPROVAL TO THE RELOCATION AND DESIGN OF THE UTILITIES PRIOR TO THE DELDOT PRE-CONSTRUCTION MEETING. NO PHYSICAL CONSTRUCTION CAN OCCUR UNTIL THE UTILITY PLANS ARE APPROVED, THE INDIVIDUAL UTILITY COMPANIES ISSUE FINAL APPROVAL, AND A DELDOT UTILITY PERMIT IS ISSUED TO THE UTILITY COMPANY.
- DESIGN AND INSTALLATION OF ALL PAVEMENT MARKINGS AND STRIPING SHALL BE AS OUTLINED IN THE LATEST VERSION OF THE DE MUTCD. FOR FINAL PERMANENT PAVEMENT MARKINGS EPOXY RESIN PAINT SHALL BE REQUIRED FOR LONG LINE STRIPING. THERMO PLASTIC (EXTRUDED OR PREFORMED MATERIAL) WILL BE REQUIRED ON ASPHALT SURFACES, FOR SHORT LINE STRIPING, I.E. SYMBOLS/LEGENDS. PERMANENT PAVEMENT MARKING TAPE (PER DELDOT APPROVED MATERIALS LIST) WILL BE REQUIRED ON CONCRETE SURFACES, FOR SHORT LINE STRIPING, I.E. SYMBOLS/LEGENDS.
- BREAKAWAY POSTS SHALL BE USED WHEN INSTALLING ALL SIGNS. REFERENCE DELDOT STANDARD CONSTRUCTION DETAIL T-15.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT PAVING WITHIN THE STATE OF DELAWARE RIGHT-OF-WAY IS INSTALLED TO THE ELEVATIONS SHOWN AND THAT NO PONDING OF WATER EXISTS AFTER PAVING IS COMPLETE.
- ALL PERSONS WORKING WITHIN THE STATE RIGHT-OF-WAY SHALL WEAR A MINIMUM OF AN ANSI CLASS II SAFETY VEST MEETING OR EXCEEDING THE ANSI 107-2004 REQUIREMENTS, AS SPECIFIED IN THE DELAWARE MUTCD.
- WITHIN THE MAINLINE WORK AREA, PERMANENT ADVANCE WARNING SIGNS WITH THE LEGENDS ROAD WORK 1500 FT, ROAD WORK 1000 FT AND ROAD WORK 500 FT SHALL BE INSTALLED IN ADVANCE OF THE WORK AREA IN BOTH DIRECTIONS. AN END ROAD WORK SIGN SHALL BE LOCATED 500 FEET DOWNSTREAM FROM THE WORK AREA. ON INTERSECTING ROADWAYS WITHIN THE PROJECT LIMITS, A ROAD WORK AHEAD SIGN SHALL BE PLACED AT A DISTANCE NOT LESS THAN 500 FEET IN ADVANCE OF THE WORK AREA AND AN END ROAD WORK SIGN SHALL BE LOCATED 500 FEET DOWNSTREAM OF THE WORK AREA. ALL PERMANENT ADVANCE WARNING SIGNS SHALL BE GROUND MOUNTED ON TWO NO.1P-350 OR MASH APPROVED BREAKAWAY POSTS AND SHALL BE MOUNTED IN COMPLIANCE WITH THE DELAWARE MUTCD. PERMANENT ADVANCE WARNING SIGNS SHALL BE MOUNTED AT A HEIGHT OF 7 FEET, MEASURED FROM THE ROADWAY TO THE BOTTOM OF THE SIGN. THE USE OF SKID MOUNTED SIGN SUPPORTS IS NOT ALLOWED UNLESS THE CONTRACTOR CAN DEMONSTRATE THAT A UTILITY CONFLICT EXISTS, WHICH SHALL BE VERIFIED BY THE ENGINEER, OR CONCRETE MEDIANS PREVENT THE INSTALLATION OF THE PERMANENT ADVANCE WARNING SIGNS IN THE APPROPRIATE LOCATION.
- CONTRACTOR TO PROVIDE CERTIFICATION OF COMPLIANCE WITH NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 FOR TRAFFIC CONTROL DEVICES OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
- LOOP DETECTORS: ADVANCE NOTICE TO BE PROVIDED TO DELDOT FOR CONSTRUCTION IN THE AREAS OF LOOP DETECTORS AT SIGNALIZED INTERSECTIONS. E.S.N.G. AND ITS CONTRACTOR WILL COORDINATE WITH DELDOT FOR LOOP DETECTOR REPAIRS (DEDOT WILL MAKE REPAIRS, AND DELDOT WILL INVOICE E.S.N.G. FOR THE REPAIRS).
- CONTRACTOR SHALL IMMEDIATELY REPAIR ANY DAMAGED EXISTING DRAINAGE TRENCHES OR UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE SHORING TO PROTECT THE ROAD FOR ANY EXCAVATION WITHIN 2 FEET OF THE EDGE OF PAVEMENT, PER DELDOT STANDARDS AND SPECIFICATIONS.
- ALL STORM DRAIN PIPES AND STRUCTURES IMPACTED BY PIPELINE INSTALLATION ARE TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL SCHEDULE WITH UTILITY COMPANY TO SHOREHOLD ALL EXISTING UTILITY POLES WITH IN 5 FEET OF PIPELINE TRENCHING AT CONTRACTORS EXPENSE.
- TEST STATIONS SHALL NOT BE SET IN DITCH LINES OR SLOPES.
- HOT MIX DRIVEWAYS SHALL BE RESTORED WITH 6" 6ABC AND 2" TYPE "C" HOT MIX OR MATCH EXISTING (WHICHEVER IS GREATER) AND SHALL TIE INTO EDGE OF SHOULDER OF ROADWAY IF PATCHING IS LESS THAN 6 FEET FROM JOINT.
- STONE DRIVEWAYS SHALL BE RESTORED WITH 6" 6ABC OR MATCH EXISTING (WHICHEVER IS GREATER).
- COMMERCIAL ENTRANCES SHALL BE DIRECTIONAL DRILLED OR AS SHOWN ON THE PLAN.

MAINTENANCE OF TRAFFIC / TEMPORARY TRAFFIC CONTROL PLAN - GENERAL NOTES

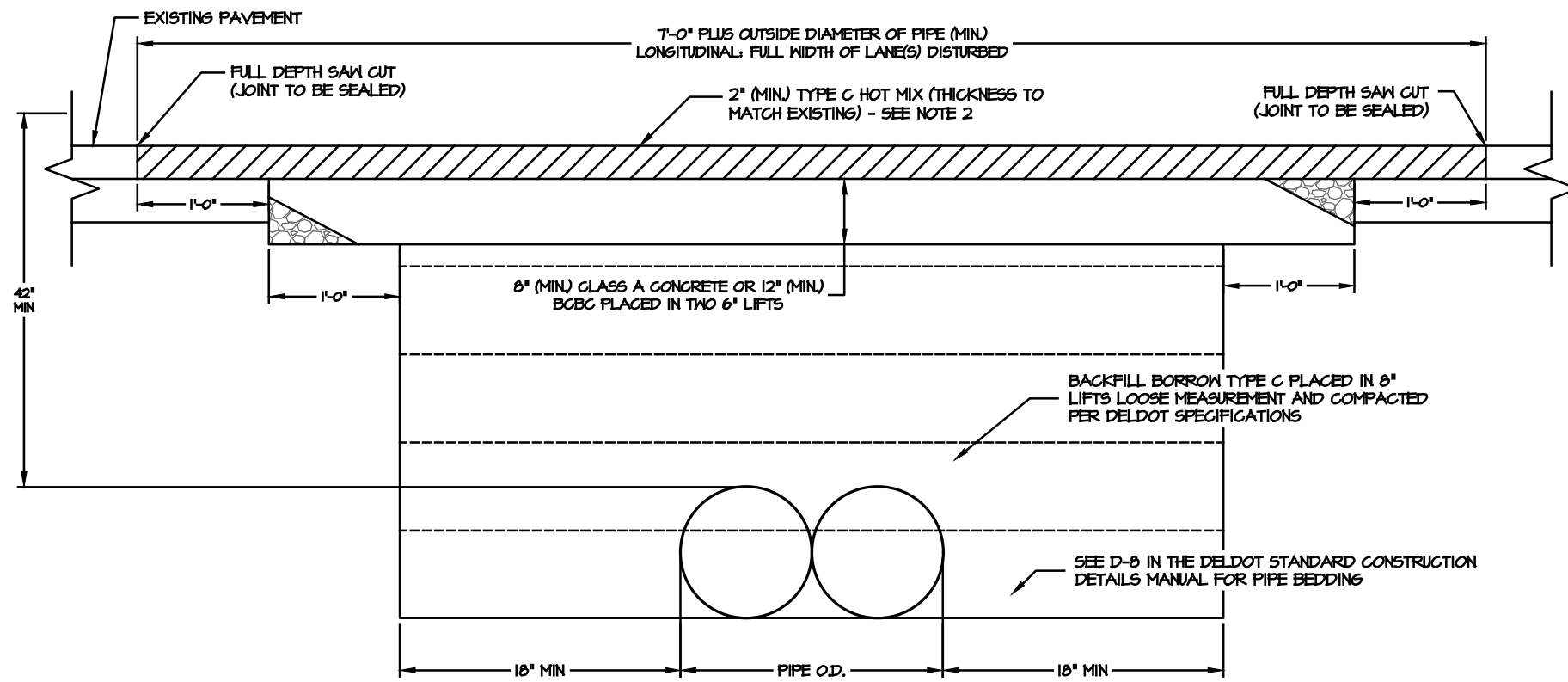
- ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL REASONABLY PROVIDE THE LEAST PRACTICABLE OBSTRUCTION TO ROAD USERS, INCLUDING VEHICULAR TRAFFIC, BICYCLE TRAFFIC AND PEDESTRIAN TRAFFIC.
- ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, THE LATEST EDITION OF THE MANUAL TITLED "STATE OF DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)" (HEREINAFTER REFERRED TO AS THE "DELAWARE MUTCD"), CURRENT STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND SUPPLEMENTAL SPECIFICATIONS, INCLUDING ALL REVISIONS AS OF THE DATE OF THE PERMIT APPROVAL.
- THE DEPARTMENT RESERVES THE RIGHT TO STOP THE CONTRACTOR'S OPERATIONS, IF, IN THE OPINION OF THE DEPARTMENT'S REPRESENTATIVE, THE CONTRACTOR'S OPERATIONS ARE NOT IN COMPLIANCE WITH THE DELAWARE MUTCD, THE SPECIFICATIONS OR THE PLANS OR IF THE CONTRACTOR'S OPERATIONS ARE DEEMED UNSAFE.
- IF THE CONTRACTOR DESIRES TO DEVIATE FROM THE TEMPORARY TRAFFIC CONTROL PLAN (TTCP) PROVIDED IN THE PLAN SET OR DESIRES CHANGES TO THE PHASING OR SCOPE OF THE TTCP, THE CONTRACTOR SHALL SUBMIT A NEW TTCP TO THE DISTRICT SAFETY OFFICER FOR APPROVAL PRIOR TO THE START OF WORK AT EACH AND EVERY LOCATION. THE TTCP SHALL BE PREPARED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF DELAWARE AND SHALL BE PREPARED IN ACCORDANCE WITH ALL APPLICABLE DELDOT STANDARDS. THE TTCP SHALL BE SUBMITTED 14 CALENDAR DAYS IN ADVANCE OF STARTING WORK.
- ALL ROADWAY CLOSURES OR LANE CLOSURES BEYOND THOSE SPECIFIED AND APPROVED IN THE PLANS SHALL BE APPROVED BY THE DISTRICT SAFETY OFFICER A MINIMUM OF TWO WEEKS IN ADVANCE OF THE PROPOSED RESTRICTION.
- TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED IN GOOD CONDITION IN ACCORDANCE WITH THE BROCHURE ENTITLED "QUALITY GUIDELINES FOR TEMPORARY TRAFFIC CONTROL DEVICES", PUBLISHED BY THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA). ANY TEMPORARY TRAFFIC CONTROL DEVICES THAT DO NOT MEET THE QUALITY GUIDELINES SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE DEVICES. FAILURE TO COMPLY WILL RESULT IN WORK STOPPAGE.
- TEMPORARY TRAFFIC CONTROL DEVICES USED ON ALL ROADWAYS OPEN TO THE PUBLIC IN DELAWARE SHALL CONFORM TO THE DELAWARE MUTCD AND SHALL BE IN NEW OR REFURBISHED CONDITION. ALL DEVICES SHALL BE CRASHWORTHY IN ACCORDANCE WITH THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 AND/OR IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO). THE CONTRACTOR SHALL SUBMIT CERTIFICATION FOR ALL TEMPORARY TRAFFIC CONTROL DEVICES USED SPECIFICALLY ON THIS PROJECT TO THE DISTRICT SAFETY OFFICER AT OR PRIOR TO THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOT BEGIN WORK OR PLACE ANY TEMPORARY TRAFFIC CONTROL DEVICES UNTIL THE CERTIFICATION OF DEVICES HAS BEEN APPROVED BY THE DISTRICT SAFETY OFFICER.
- ANY DEFICIENCIES RELATED TO TEMPORARY TRAFFIC CONTROL THAT ARE REPORTED TO THE CONTRACTOR IN WRITING SHALL BE CORRECTED WITHIN 24 HOURS OR AS DIRECTED BY THE DISTRICT SAFETY OFFICER. CORRECTIVE ACTIONS ON SEVERE DEFICIENCIES SHALL BE TAKEN IMMEDIATELY. FAILURE TO COMPLY WILL RESULT IN THE SUSPENSION OF WORK UNTIL DEVICES ARE BROUGHT BACK INTO COMPLIANCE.
- ACCESS TO ALL BUSINESSES AND RESIDENCES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THIS CONTRACT. ANY TEMPORARY CLOSURE OF A DRIVEWAY OR ENTRANCE FOR TIE-IN PURPOSES SHALL BE COORDINATED WITH THE ENGINEER AND THE PROPERTY OWNER IN ADVANCE OF THE CLOSURE.
- ACCESS TO ALL TRANSIT STOPS LOCATED WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED UNLESS OTHERWISE DIRECTED BY THE PLANS OR THE ENGINEER. MAINTAINING ACCESS TO THE TRANSIT STOP SHALL INCLUDE MAINTAINING AN AREA FOR THE TRANSIT VEHICLE TO STOP TO PICK-UP AND DISCHARGE PASSENGERS AND ALSO AN ACCESSIBLE PATH FOR PEDESTRIANS TO SAFELY ACCESS THE TRANSIT STOP.
- THE CONTRACTOR SHALL PROVIDE ALL PROPERTY OWNERS AND RESIDENTS WHO LIVE ADJACENT TO THE WORK ZONE WITH WRITTEN NOTICE, 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION WORK. THIS NOTIFICATION SHALL INCLUDE THE SCOPE OF WORK, WORKING HOURS, ANTICIPATED START AND COMPLETION DATES, A SUMMARY OF CONSTRUCTION ACTIVITIES WHICH MAY INTERFERE WITH ACCESS TO THE PROPERTY INCLUDING A SCHEDULE AND ACCESS COORDINATION PLAN, CONTRACTOR'S NAME AND ADDRESS AND A DELDOT PROJECT NUMBER. FAILURE TO GIVE PROPER NOTICE WILL RESULT IN A SUSPENSION OF THE WORK, UNTIL PROPER NOTICE IS PROVIDED. THE CONTRACTOR SHALL PROVIDE WRITTEN VERIFICATION TO THE ENGINEER THAT THE PROPERTY OWNERS AND RESIDENTS WERE NOTIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE LOCAL 911 CENTER, LOCAL SCHOOLS AND THE DELDOT PUBLIC INFORMATION CENTER OF ALL ROADS AND LANES TO BE CLOSED A MINIMUM OF SEVEN CALENDAR DAYS BEFORE THE CLOSURE.
- THE CONTRACTOR SHALL NOTIFY THE LOCAL 911 CENTER IF ACCESS TO A FIRE HYDRANT IS TEMPORARILY RESTRICTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE TRANSPORTATION MANAGEMENT CENTER IS NOTIFIED EACH AND EVERY DAY WHEN WORK IS BEING PERFORMED IN STATE RIGHT-OF-WAY. THE CONTRACTOR SHALL IDENTIFY THE TYPE OF WORK, ANY LANE(S) OR SHOULDERS CLOSED, THE LENGTH OF TIME FOR WORK, WHEN THE LANE RESTRICTIONS ARE IN PLACE AND WHEN LANE RESTRICTIONS ARE LIFTED, CONTACT PERSON/PHONE NUMBER AND STATE INSPECTOR. THE TRANSPORTATION MANAGEMENT CENTER CAN BE REACHED AT (302) 659-4600.
- AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL CORRECT ALL VERTICAL DIFFERENCES IN ACCORDANCE WITH TABLE 66-1 OF THE DELAWARE MUTCD.
- AT THE END OF EACH DAY'S OPERATION AND BEFORE TRAFFIC IS RETURNED TO UNRESTRICTED ROADWAY USE, TEMPORARY PAVEMENT MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE DELAWARE MUTCD AND DELDOT'S TEMPORARY PAVEMENT MARKINGS POLICY.
- WHEN SIDE ROADS INTERSECT THE WORK ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED INCLUDING ADVANCED WARNING SIGNS.
- ALL STORAGE OF EQUIPMENT AND MATERIAL SHALL COMPLY WITH SECTION 66.2) OF THE DELAWARE MUTCD.
- ALL FLAGGERS SHALL COMPLY WITH CHAPTER 66 OF THE DELAWARE MUTCD AND MUST BE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED IN THE STATE OF DELAWARE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS/HER WORK WITH OTHER CONTRACTORS IN THE AREA.
- ALL PAVEMENT MARKINGS THAT ARE NO LONGER IN USE AND CONFLICT WITH TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED AND COMPLETELY OBLITERATED BY A METHOD APPROVED BY THE ENGINEER. PAINTINGS OVER THE CONFLICTING PAVEMENT MARKINGS WILL NOT BE ACCEPTED AS A METHOD OF REMOVAL.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF EXISTING PAVEMENT WITHIN THE PROJECT LIMITS FOR THE DURATION OF THE CONTRACT OR AS DIRECTED BY THE ENGINEER.
- ALL ROADWAYS AND ENTRANCES NOT OPEN TO TRAFFIC SHALL BE CLOSED USING TYPE III BARRICADES AND SHALL BE INSTALLED PER THE DELAWARE MUTCD. IF THE ROADWAY OR ENTRANCE IS CLOSED FOR MORE THAN ONE MONTH, THE CONTRACTOR SHALL ERECT PERMANENT BARRICADES AS DIRECTED IN PART 3 OF THE DELAWARE MUTCD.
- ALL ROADS LEADING INTO THE WORK ZONE SHALL HAVE "UTILITY WORK AHEAD" AND "END UTILITY WORK" SIGNS.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE USED TO REDUCE OFF-SITE SEDIMENTATION BY ELIMINATING THE TRACKING OF EXCESS SOIL ONTO PAVED PUBLIC ROADWAYS. ALL ROADWAYS SHALL BE KEPT CLEAN OF SEDIMENT AND DEBRIS. THE CONTRACTOR SHALL UTILIZE A SWEET SKEEPER TO MINIMIZE DUST AND SOIL ON ROADWAYS AND ACCESS LOCATIONS SHALL BE SWEPT ONCE EACH DAY AS A MINIMUM.
- AN INDIVIDUAL CONSTRUCTION ENTRANCE LOCATIONS SHALL BE KEPT TO A MINIMUM AND DETERMINED IN THE FIELD BY THE CONTRACTOR. DELDOT SHALL BE NOTIFIED OF ALL LOCATIONS PRIOR TO INSTALLATION.
- AS AN ADVANCE WARNING, THE TRUCK SYMBOL (W-10) SIGN SHALL BE INSTALLED IN EITHER APPROACH DIRECTION FOR EACH STABILIZED CONSTRUCTION ENTRANCE AND REMAIN IN PLACE FOR THE DURATION OF THE DRIVEWAY USE. CONSTRUCTION WARNING SIGNS SHALL BE BLACK LEGEND ON ORANGE BACKGROUND AND WHEN UTILIZED FOR EXTENDED DURATIONS SHALL BE INSTALLED ON BREAKAWAY POSTS PER DELDOT STANDARD CONSTRUCTION DETAIL T-15.
- WORK WITHIN A SIGNALIZED INTERSECTION OR IMPACT TO A SIGNALIZED INTERSECTION SHALL FOLLOW THE DELDOT MUTCD, TEMPORARY TRAFFIC CONTROL INTERIM GUIDANCE "TRAFFIC CONTROL WITHIN INTERSECTIONS", AND WILL REQUIRE A UNIFORMED TRAFFIC OFFICER.
- THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT LANE/SHOULDER CLOSURES IN CASE A SPECIAL EVENT IS SCHEDULED TO CROSS OR PROCEED THROUGH A WORK ZONE. IF SUCH A RESTRICTION IS DEEMED NECESSARY, THE DEPARTMENT SHALL PROVIDE THE PERMIT HOLDER A MINIMUM 2 WEEK ADVANCE NOTIFICATION.
- ALL STABILIZED CONSTRUCTION ENTRANCE LOCATIONS SHALL BE APPROVED BY DELDOT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL UTILIZE THE FOLLOWING TRAFFIC CONTROL FROM THE DELAWARE MUTCD MOST CURRENT ADDITION.
 - TYPICAL APPLICATION 3, FIGURE 6H-3, WORK ON THE SHOULDER OF A TWO LANE ROAD
- MESSAGE BOARDS ARE REQUIRED 10 DAYS IN ADVANCE OF CONSTRUCTION.



- NOTES:
- TEMPORARY PATCHES FROM WINTER MONTHS SHALL BE PERMANENTLY RESTORED BY MAY 15.
 - IN LIEU OF 6ABC, ROTO-MILLING OR CRUSHED CONCRETE CAN BE USED IF THE FOLLOWING REQUIREMENTS ARE MET:
 - ROTO-MILLING SPECIAL PROVISION 302.24 SHOWN IN APPENDIX L.
 - CRUSHED CONCRETE SUPPLEMENTAL SPECIFICATIONS 302 AND 303.
 - THE BACKFILL MATERIAL SHALL MEET THE REQUIREMENTS FOR BORROW TYPE C AS PER SECTION 204 OF THE STANDARD SPECIFICATIONS.
 - CONPACTION SHALL MEET THE REQUIREMENTS AS PER SECTION 204 OF THE STANDARD SPECIFICATIONS.
 - FLOWABLE FILL IS ALLOWABLE AS A BACKFILL MATERIAL. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF SPECIAL PROVISION 302.20 AS SHOWN IN APPENDIX F.
 - ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE REQUIREMENTS SET FORTH IN THE CURRENT DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

TEMPORARY PATCH

NOTES:
(SOURCE: DELDOT UTILITIES MANUAL - FIGURE 2-3)
MINIMUM DESIGN REQUIREMENTS
(DISTRICT ENGINEER MAY CHANGE REQUIREMENTS IN SPECIAL CASES)



- NOTES:
- PATCH WIDTHS ARE MEASURED ALONG THE ROADWAY CENTERLINE AND SHALL BE THE FULL WIDTH OF THE LANE OR LANES DISTURBED.
 - THIS IS A MINIMUM PATCH. IF THE EXISTING ROADWAY HAS A HEAVIER CROSS SECTION THAN SHOWN HERE, IT WILL BE REPLACED WITH THAT CROSS SECTION, OR AS DIRECTED BY THE ENGINEER.

PERMANENT PATCH

NOTES:
(SOURCE: DELDOT STANDARD CONSTRUCTION DETAIL
SHEET NO. P-4)

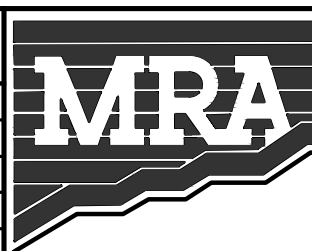
TRAFFIC CONTROL DETAILS

2026 IN-LINE
INSPECTIONS

NEW CASTLE COUNTY, DELAWARE

ESNG PROJECT CODE:	ES XXXX	DATE:	7/7/2026
MIRA PROJECT NO:	23647	SCALE:	N/A
DESIGN/CHECK BY:	JTH/CWB	SHEET:	6 OF 8

REVISIONS			
NO.	DATE	DESCRIPTION	BY



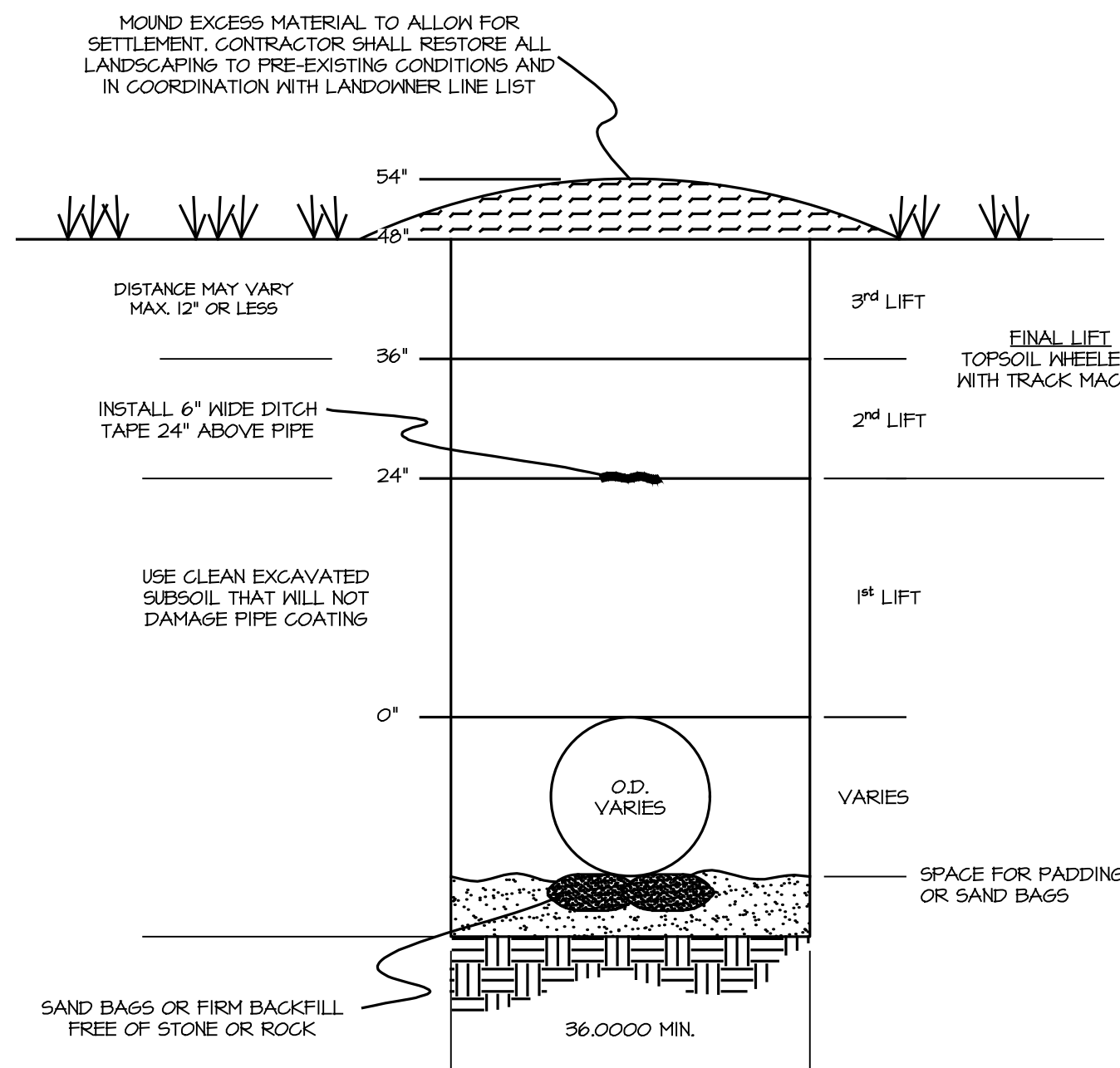
MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND
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111 RUTHAR DRIVE
NEWARK, DE 19711
(302) 326-2200

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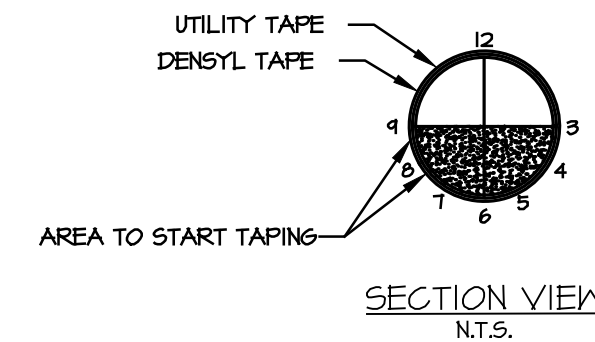
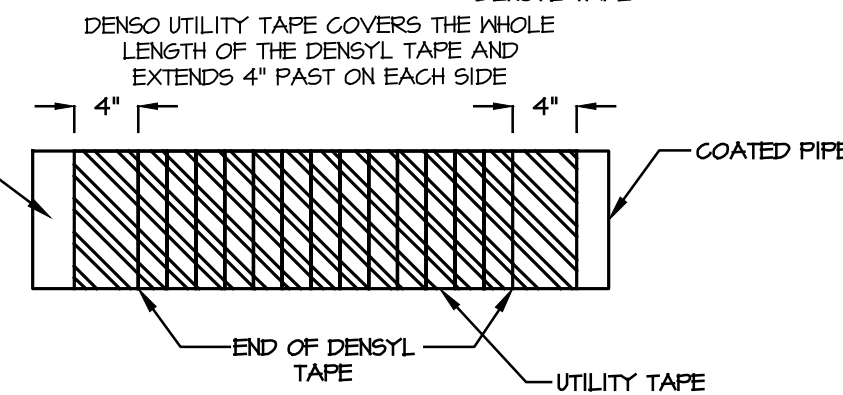
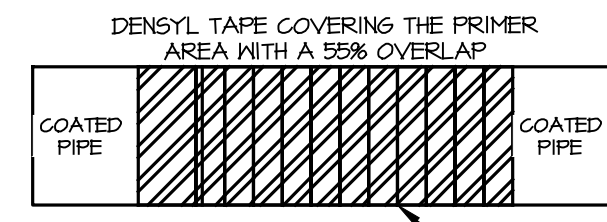
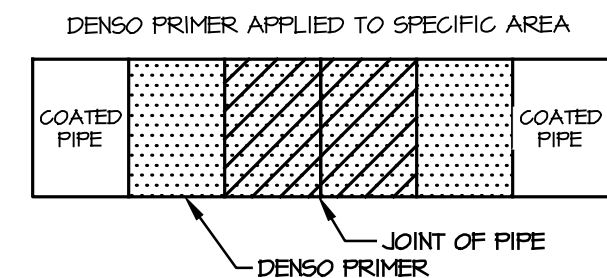
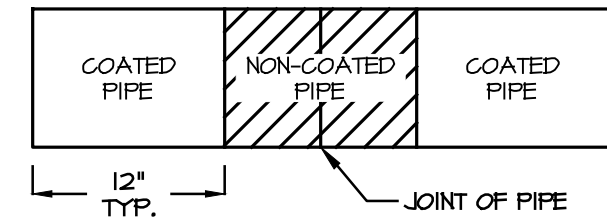
500 ENERGY LANE, SUITE 200 DOVER, DE 19901
TELEPHONE (302) 734-6710 - FAX (302) 734-6745



NOTES:
1. BELL HOLES AND BORE PITS TO BE MECHANICALLY TAMPED
ONCE 24-INCHES OF BACKFILL MATERIAL COVERS PIPE.
2. CONTRACTOR SHALL FOLLOW STATE OR LOCAL
REQUIREMENTS FOR BACKFILL WITHIN STATE OR LOCAL
RIGHT-OF-WAY OR RAILROAD PROPERTY.

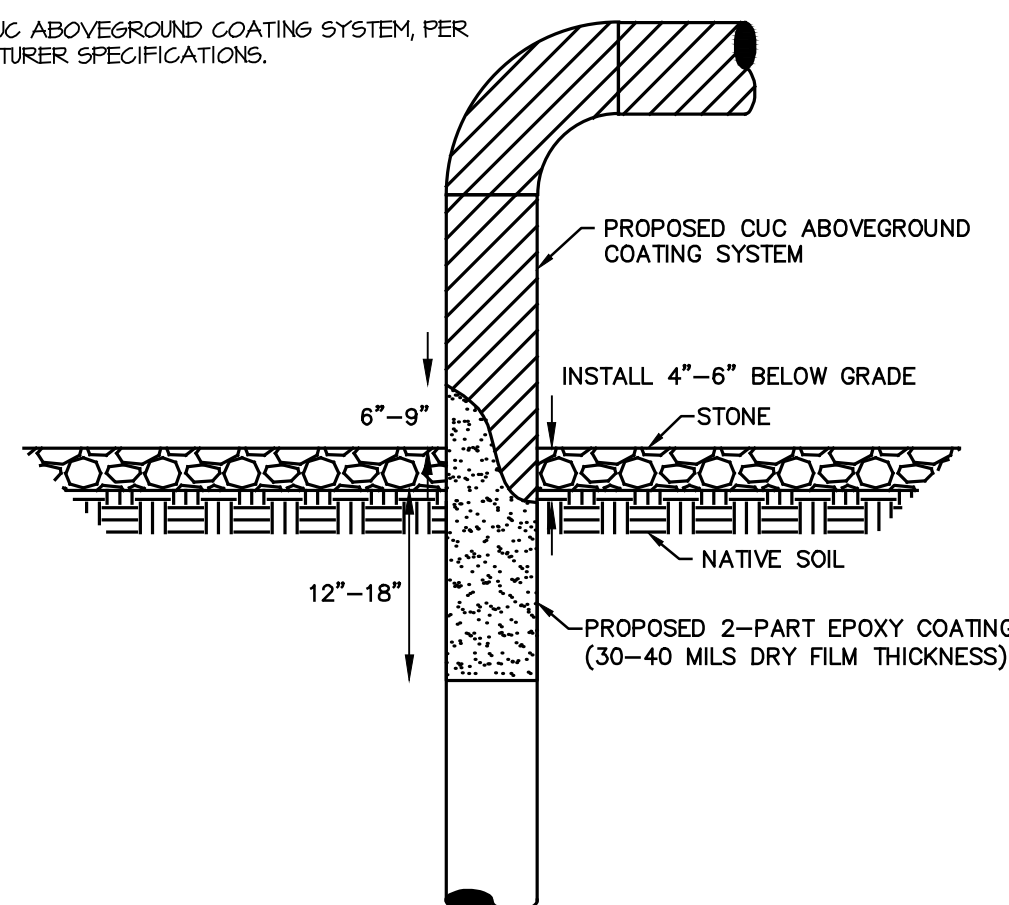
TRENCH BACK FILL DETAIL FOR
AGRICULTURAL OR RESIDENTIAL APPLICATION
N.T.S.

- BEFORE CLEANING OF PIPE MAKE SURE PIPE TEMPERATURE IS AT LEAST 5° F ABOVE THE DEN POINT. (IF APPLICABLE).
- POWER BRUSH OR SAND BLAST (NACE No.3 FINISH) PIPE UNTIL FREE OF RUST, DIRT, AND OTHER FOREIGN MATTER.
- APPLY DENSO PRIMER TO SPECIFIED AREA WHERE THE DENSO DENSYL TAPE WILL BE APPLIED.
- APPLY DENSO DENSYL TAPE UNTIL THE DENSO PRIMER IS COMPLETELY COVERED BY THE DENSYL TAPE. MAKE SURE TO APPLY THE TAPE WITH A 55% OVERLAP. ALSO MAKE SURE NO PRIMER CAN BE SEEN AFTER APPLYING THE MAX TAPE.
- APPLY DENSO UTILITY TAPE OVER THE DENSO MAX TAPE. START WRAPPING THE TAPE 4" BEFORE THE MAX TAPE STARTS AND END 4" AFTER IT ENDS.
- REFER TO DENSO PRODUCT SPECIFICATIONS GUIDE FOR SPECIFICATION & INSTALLATION DETAILS.



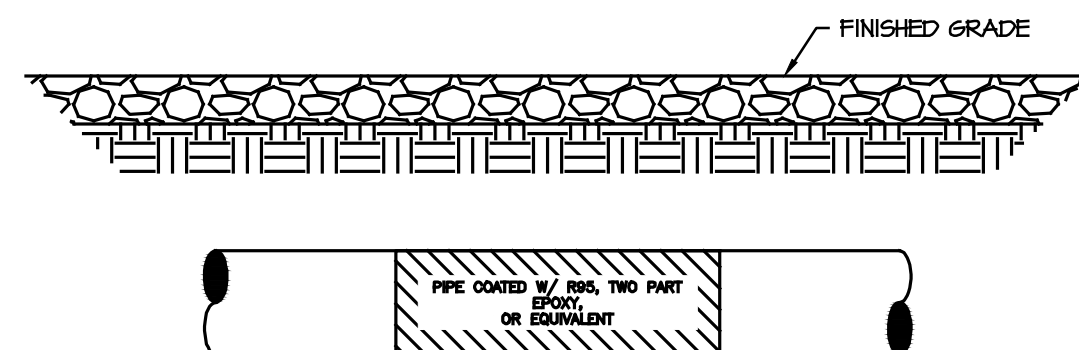
COATING APPLICATION FOR DENSO TAPE COATING
NOT TO SCALE

- VERIFY PIPE TEMPERATURE IS AT LEAST 5°F ABOVE THE DEN POINT BEFORE CLEANING OF PIPE.
- ABRASIVE BLAST PIPE UNTIL FREE OF RUST, DIRT, AND OTHER FOREIGN MATTER, PER MANUFACTURER SPECIFICATIONS.
- APPLY 2-PART EPOXY COATING, PER MANUFACTURER SPECIFICATIONS.
- ENSURE THAT 2-PART EPOXY COATING IS CLEANED PER MANUFACTURER SPECIFICATIONS, BEFORE APPLYING CUC ABOVEGROUND COATING SYSTEM.
- APPLY CUC ABOVEGROUND COATING SYSTEM, PER MANUFACTURER SPECIFICATIONS.

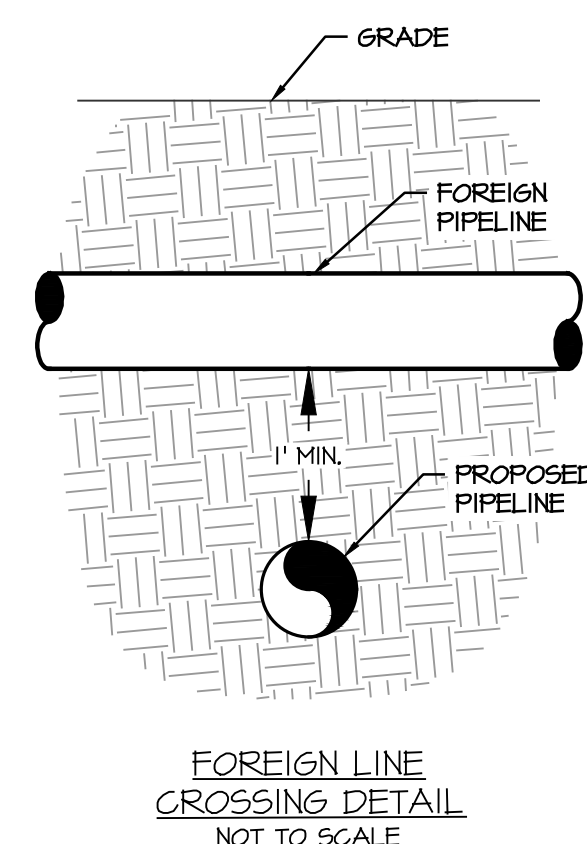


COATING APPLICATION FOR RISER
NOT TO SCALE

- VERIFY PIPE TEMPERATURE IS AT LEAST 5° F ABOVE THE DEN POINT BEFORE CLEANING OF PIPE. (IF APPLICABLE).
- POWER BRUSH OR ABRASIVE BLAST PIPE UNTIL FREE OF RUST, DIRT, AND OTHER FOREIGN MATTER (NEAR WHITE; SSPC-SP-10; NACE No.2 FINISH).
- CLEAN TOTAL OF 18" TO 21" SECTION OF PIPE.
- APPLY CANUSA-CPS HBE-45-BG COATINGS TO THE FRESHLY CLEANED AREA OF THE PIPE.



COATING APPLICATION FOR HBE-45-BG OR
ESNG APPROVED EQUIVALENT
NOT TO SCALE



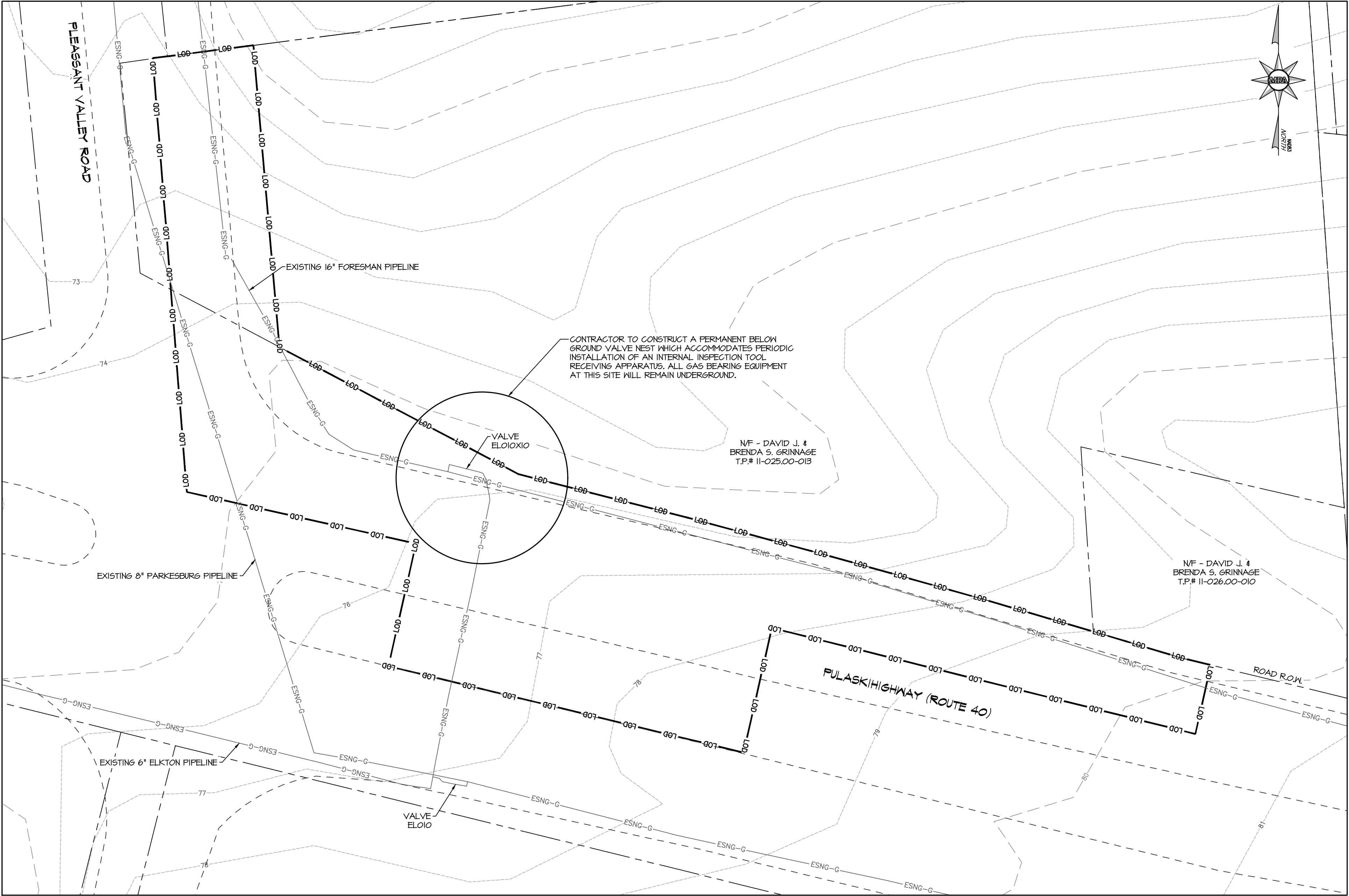
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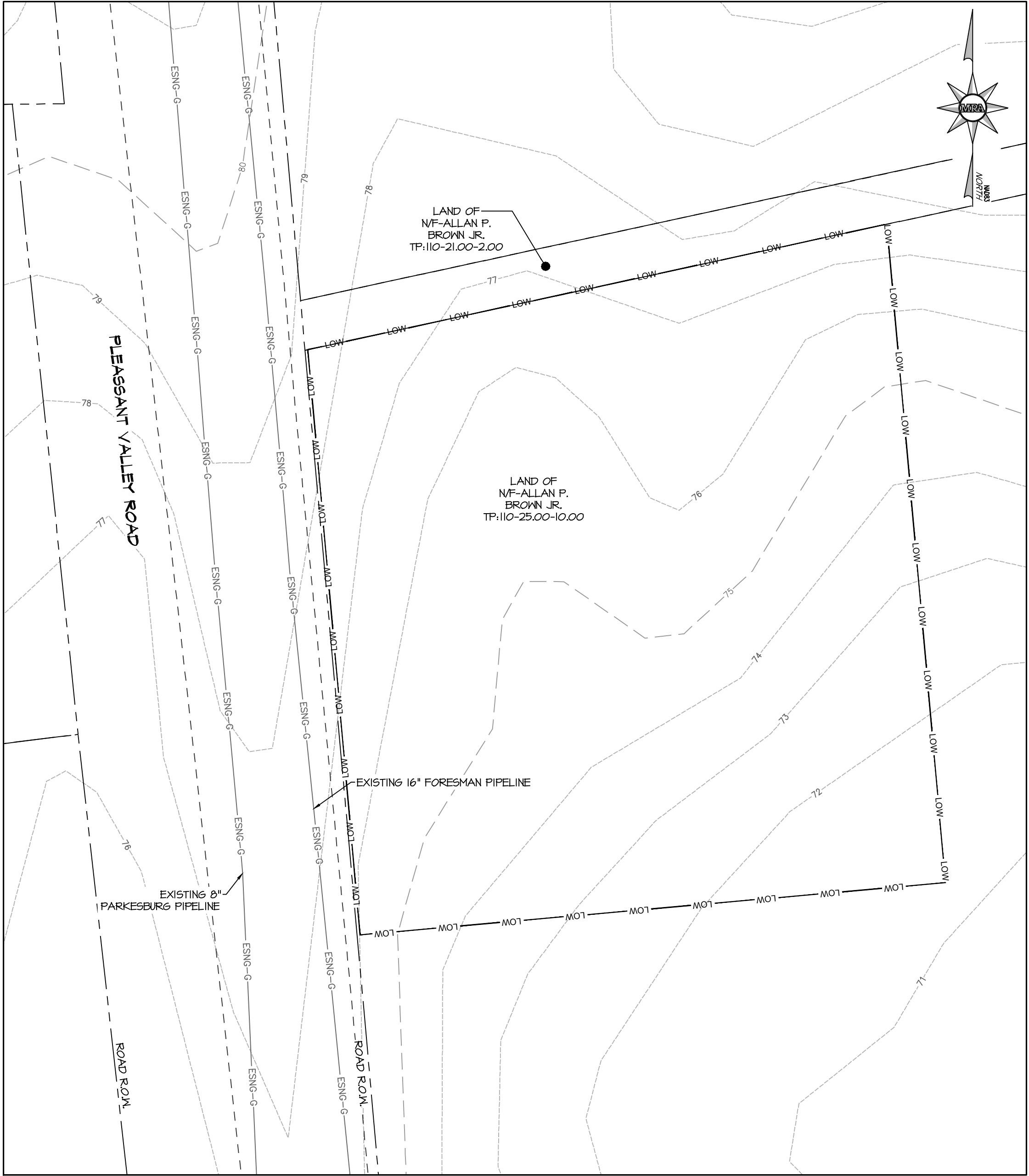
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CONSTRUCTION DETAILS			
2026 IN-LINE INSPECTIONS NEW CASTLE COUNTY, DELAWARE			
ESNG PROJECT CODE:	ES XXXX	DATE:	7/7/2026
MRA PROJECT NO:	23647	SCALE:	N/A
DESIGN/CHECK BY:	JTH/CWB	SHEET:	4 OF 8



LOCATION 2A LAYOUT
SCALE: 1" = 30'



LAYDOWN YARD
SCALE: 1" = 30'

LAYDOWN YARD NOTE:

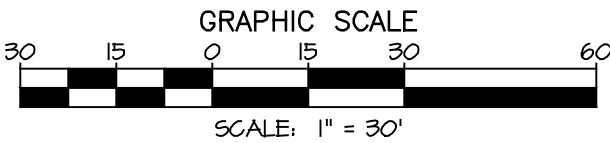
- I. LAYDOWN YARD IS FOR EQUIPMENT STORAGE ONLY. CONTRACTOR TO INSTALL MATTING THROUGHOUT ENTIRE LAYDOWN YARD LIMITS TO AVOID ANY SOIL DISTURBANCE. DUE TO NO SOIL TRACKING OR DISTURBANCE IN THIS AREA A CONSTRUCTION ENTRANCE WILL NOT BE NEEDED.

NOTES:

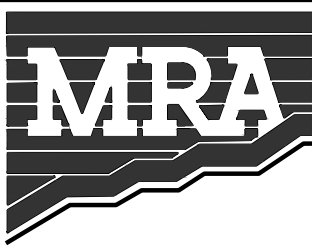
1. PROPOSED WORK CONSISTS OF BELOW GROUND PIPELINE ADJUSTMENTS AND ACTIVITIES.
2. WHEN CONSTRUCTION IS NOT ACTIVE ALL PROJECT EQUIPMENT AND MATERIALS SHALL BE STORED A MINIMUM OF 10-FEET FROM ALL TRAVEL LANES.
3. UTILITIES SHOWN ARE FOR REFERENCE ONLY. EXACT LOCATIONS ARE UNKNOWN. THE CONTRACTOR SHALL FIELD VERIFY AND ADJUST AS NECESSARY.
4. INLETS, PIPES, LIGHT STANDARDS AND OTHER STRUCTURES ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES. MRA CAN MAKE NO GUARANTEE AS TO THE ACCURACY OF THE INFORMATION.

NOTE:

- I. TOPOGRAPHICAL FEATURES AND BASE MAPPING WERE OBTAINED FROM KENT COUNTY G.I.S. DATABASE AND NOT FIELD SURVEYED BY MRA FOR THIS PLAN SET. THESE PLANS SHOULD BE CONSIDERED NOT FOR CONSTRUCTION. TOPOGRAPHICAL AND BOUNDARY FEATURES WILL BE PERFORMED BEFORE THE "ISSUED FOR CONSTRUCTION" PLAN SET.



REVISIONS			
NO.	DATE	DESCRIPTION	BY



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ESNG PROJECT CODE:	ES XXXX	DATE:	7/7/2026
MRA PROJECT NO:	23647	SCALE:	N/A
DESIGN/CHECK BY:	JTH/CWB	SHEET:	8 OF 8

LOCATION 2A PLAN