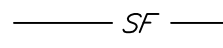

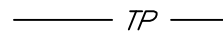



EROSION CONTROL LEGEND

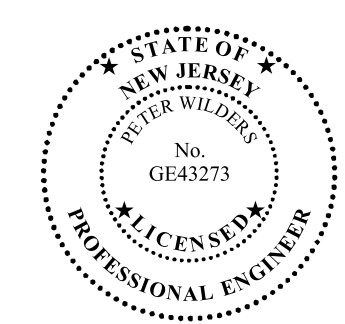
 SF	SILT FENCE SEE DETAIL 3 SHT 5		CONSTRUCTION ENTRANCE SEE DETAIL 2 SHT 5
 TP	TREE PROTECTION SEE DETAIL 4 SHT 5		EROSION CONTROL BLANKET SEE DETAIL 1 SHT 6 ALSO DENOTES COMPACTION AREA

NOTE:
ALL AREAS DENOTED TO RECEIVE EROSION CONTROL BLANKETS SHALL ALSO CORRESPOND TO THE COMPACTION LOCATIONS. SEE SOIL DECOMPACTION REQUIREMENTS ON SHEET C-5.



No.	Revision	Approve	Date
1	STORMWATER BASIN REVISIONS FOR FUTURE RUNOFF	PW	10/23/23
2	ADDRESS NJDEP STORMWATER COMMENTS	PW	12/27/23
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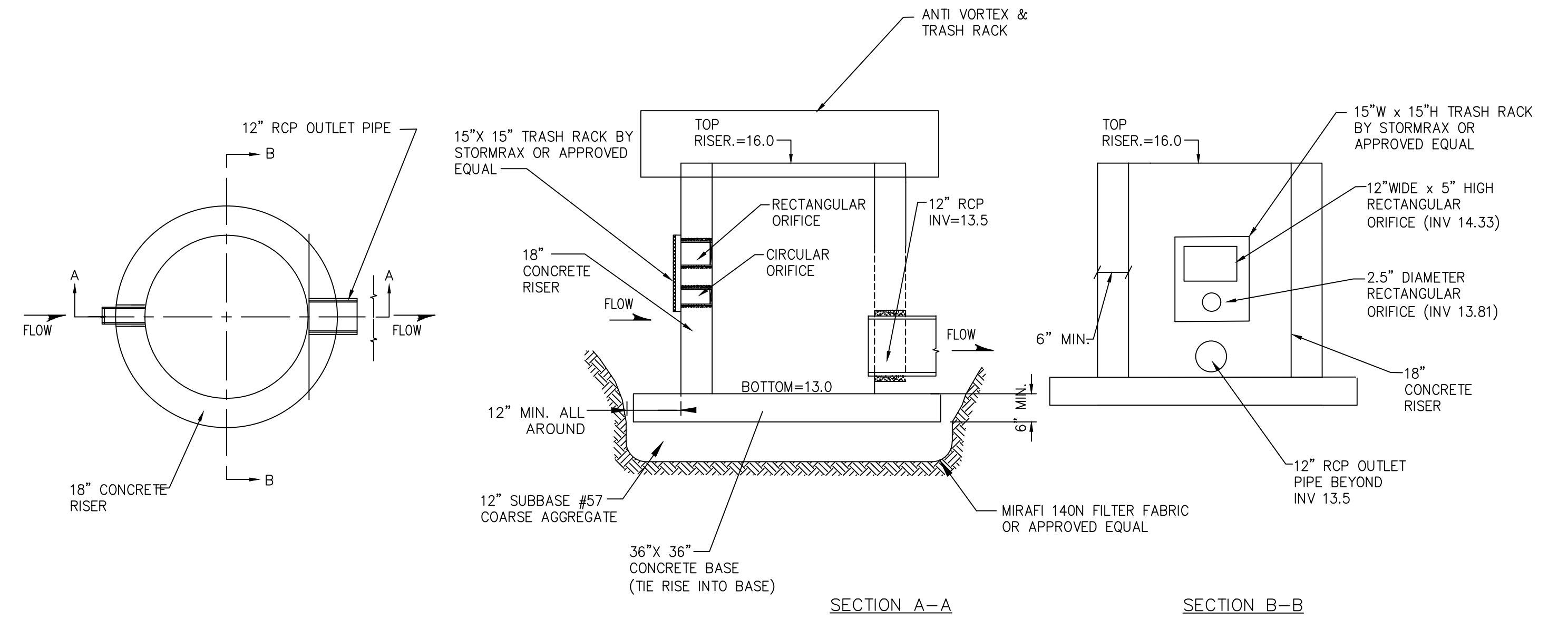
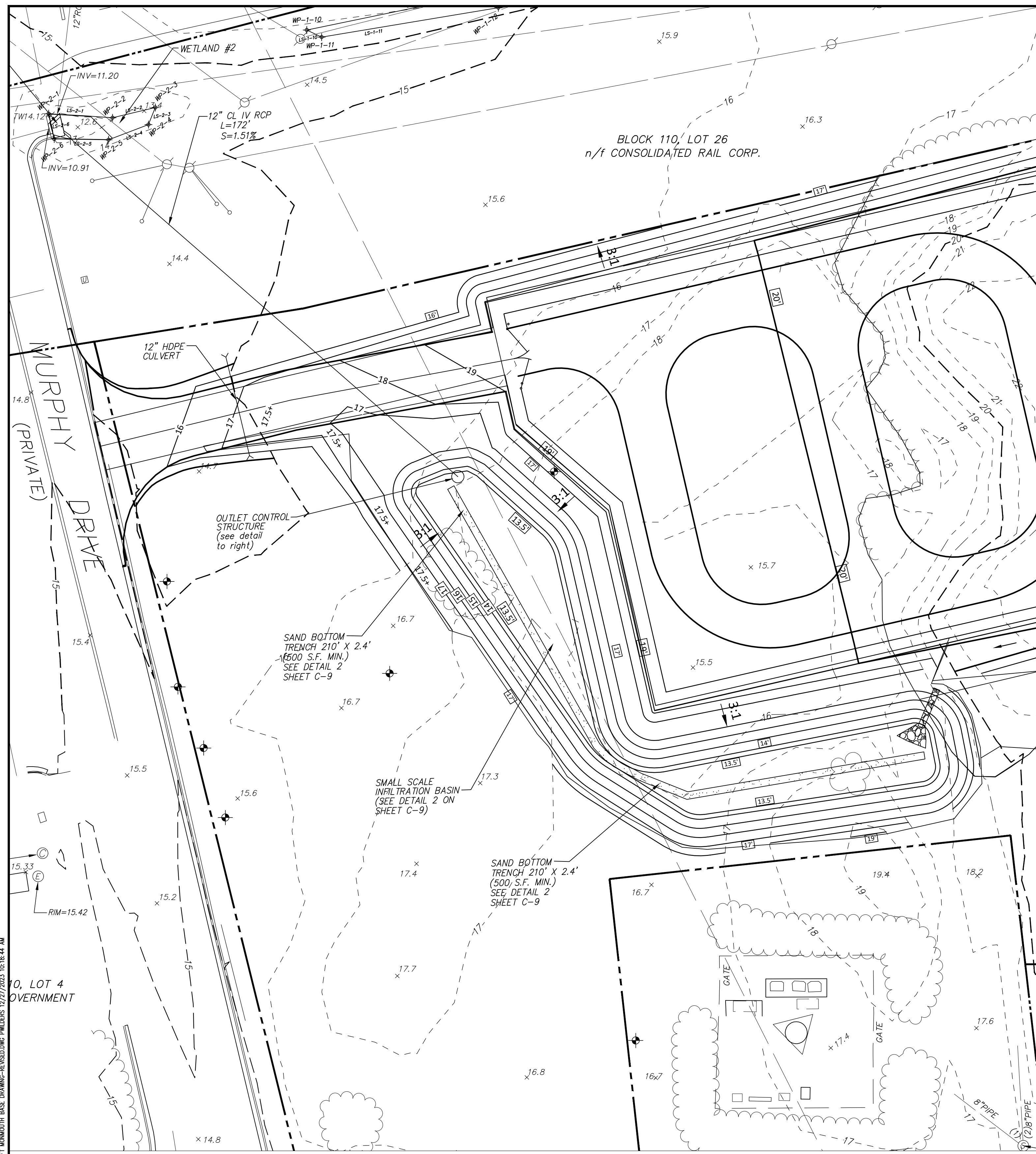
450 DAVIS DRIVE, PLYMOUTH MEETING, PA 19462
OFFICE NUMBER: 484-344-2161

PROJECT#:
55003885

JCP&L - FORT MONMOUTH MOD SUBSTATION
EROSION & SEDIMENT CONTROL PLAN

DRAWN BY: CP	SCALE: 1"=20'	DATE: 5/31/23	REV.
DESIGN BY: PW	DWG NO.:		
CHECKED BY: DF	C-3		
APPROVED BY:			

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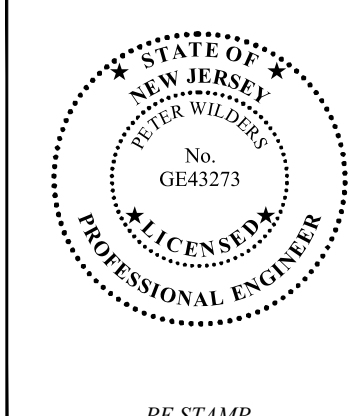
1 SWM BASIN OUTLET CONTROL STRUCTURE
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No.	Revision	Approve	Date
1	STORMWATER BASIN REVISIONS FOR FUTURE RUNOFF	PW	10/23/23
2	ADDRESS NJDEP STORMWATER REVIEW COMMENTS	PW	12/27/23
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MasTec
Professional Services
450 DAVIS DRIVE, PLYMOUTH MEETING, PA 19462
OFFICE NUMBER: 484-344-2161

PROJECT#: 55003885

JCP&L – FORT MONMOUTH MOD SUBSTATION
STORMWATER MANAGEMENT PLAN

DRAWN BY: CP SCALE: NTS DATE: 5/31/23
DESIGN BY: PW DWG NO.: REV.
CHECKED BY: DF C-4
APPROVED BY:

METHODS AND MATERIALS FOR ACID PRODUCING SOILS:

- LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID-PRODUCING SOILS ARE ENCOUNTERED.
- TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOILS.
- STOCKPILES OF HIGH ACID-PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
- TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOIL MATERIAL TO BE STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF THE SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID-PRODUCING SOIL.
- HIGH ACID-PRODUCING SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS OR DREGGED SEDIMENT) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS PER ACRE (OR 450 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 UNLESS OTHERWISE SPECIFIED.
- AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OF 5 OR MORE.
- DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES, AND OTHERS, TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
- EQUIPMENT USED FOR MOVEMENT OF HIGH ACID-PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID-PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES, AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
- NON-VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SEDIMENT BARRIER, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID-PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
- FOLLOWING BURIAL OR REMOVAL OF HIGH ACID-PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND TOPSOILING), MONITORING MUST CONTINUE FOR A MINIMUM OF 6 MONTHS TO ENSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

DUST CONTROL METHODS:
(SECTION 16 - STDS FOR E&SC IN NJ)

THE FOLLOWING METHODS SHOULD BE USED FOR CONTROLLING DUST:

MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES

VEGETATIVE COVER - SEE TEMPORARY AND PERMANENT VEGETATIVE COVER STANDARDS

SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
Anionic asphalt emulsion	7:1	Coarse Spray	1200
Latex emulsion	12.5:1	Fine Spray	235
Resin in water	4:1	Fine Spray	300
Polyacrylamide (PAM) - spray on Polyacrylamide (PAM) - dry spread	Apply according to manufacturer's instructions. May also be used as an additive to sediment basins to flocculate and precipitate suspended colloids. See Sediment Basin standard, p. 26-1		
Acidulated Soy Bean Soap Stick	None	Coarse Spray	1200

TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE 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 THE DESIRED EFFECT.

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET

BARRIERS - SOLID BOARD FENCE, SNOW FENCES, BURLAP FENCES, GRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING

CALCIUM CHLORIDE - SHALL BE UN 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. IF USED 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.

SEEDING NOTES:

- CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDER OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.
- HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.
- AFTER SEEDING, FIRING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE. THIS IS THE PREFERRED METHOD, WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.
- SEEDBED PREPARATION. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE APPLIED AS THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 DAYS.
- 5 WEEK AFTER SEEDING. WORK LINE AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPREONG-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
- SEEDING DATES FOR MONMOUTH COUNTY - 02/15 - 04/30; 08/15 - 10/5.

STANDARD FOR STABILIZATION WITH MULCH ONLY:
(SECTION 5 - STDS FOR E&SC IN NJ)

STABILIZATION WITH MULCH ONLY IS REQUIRED WHEN STABILIZING EXPOSED SOILS WITH NON-VEGETATIVE MATERIALS EXPOSED FOR PERIODS LONGER THAN 14 DAYS TO PROTECT EXPOSED SOIL SURFACES FROM EROSION DAMAGE AND TO REDUCE OFFSITE ENVIRONMENTAL DAMAGE. STABILIZING WITH MULCH PROVIDES TEMPORARY MECHANICAL PROTECTION AGAINST WIND OR RAINFALL INDUCED SOIL EROSION UNTIL PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED.

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO EROSION WHERE THE SEASON AND 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.

METHODS AND MATERIALS

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED, PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

2. PROTECTIVE MATERIALS

A. UNROTTED SMALL-GRAIN STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING THE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL

CONSERVATION DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

B. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

C. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE (ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN THE SPRING/FALL.

D. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

E. WOODCHIPS APPLIED TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

F. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ.FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.

3. MULCH ANCHORING - SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES:

A. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

B. MULCH NETTINGS - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

C. CRIMPER MULCH ANCHORING COULTER TOOL - A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PINCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES, ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

D. LIQUID MULCH-BINDERS

1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CREST OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.

2. USE ONE OF THE FOLLOWING:

A. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANE NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE

PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTO-TOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.

B. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

E. PELLETIZED MULCH COMPRESSED AND EXTRUDED PAPER AND OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEEED SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FILL 0.2 TO 0.4 INCHES OF WATER AFER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

VEGETATION:
(SECTION 4 - STDS FOR E&SC IN NJ)

SEED SELECTIONS	SEEDING RATE		OPTIMUM SEEDING DATE			OPTIMUM SEED DEPTH ⁴ (inches)
	(pounds)		Based on Plant Hardiness Zone ²			
	Per Acre	Per 1000 Sq. Ft.	ZONE 5b, 6s	ZONE 6b	ZONE 7a, b	
COOL SEASON GRASSES						
1. Perennial ryegrass	100	1.0	3/15-6/1 8/1-9/15	3/1-5/15 8/15-10/1	2/15-5/1 8/15-10/15	0.5
2. Spring oats	86	2.0	3/15-8/1-9/15	3/1-5/15 8/15-10/1	2/15-5/1 8/15-10/15	1.0
3. Winter Barley	96	2.2	8/1-9/15	8/15-10/1	8/15-10/15	1.0
4. Annual ryegrass	100	1.0	3/15-6/1 8/1-9/15	3/15-5/15 8/15-9/15	2/15-5/1 8/15-10/15	0.5
5. Winter Cereal Rye	112	2.8	8/1-11/1	8/1-11/15	8/1-12/15	1.0
WARM SEASON GRASSES						
6. Pearl millet	20	0.5	6/1-8/1	5/15-8/15	5/1-9/1	1.0

SEED MIXTURE ¹	PLANTING RATE ³	PLANTING DATES:												REMARKS	
		O = Optimal Planting period A = Acceptable Planting period													
		PLANT HARDINESS ZONES (see Figure 4-1)													
		Zone 5b, 6s			Zone 6b			Zone 7a, b			MAINTENANCE LEVEL ⁴				
June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr		May			
WARM SEASON SEED MIXTURES															
4. Switchgrass Big bluestem Little bluestem Sand lovegrass Coastal panicgrass	10 5 2 4 10	25 10 10 10 25	O											C-D	Native warm-season mixture.
COOL SEASON SEED MIXTURES															
7. Strong Creeping red fescue Kentucky bluegrass Perennial ryegrass or Ryegrass plus White clover	150 50 20 10 5	3 1 5 25 10	A	A ⁵	O	A	A ⁵	O	A	A ⁵	O	B-D		Suitable waterway mix. Canada bluegrass over-seed drought tolerant. Use Ryegrass for increased drought-tolerance.	

Soil De-compaction and Testing Requirements

Soil Compaction Testing Requirements

- Subgrade soils **prior to the application of topsoil** (see permanent seeding and stabilization notes for topsoil requirements) shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent vegetative cover.
- Areas of the site which are subject to compaction testing and/or mitigation are **graphically denoted** on the certified soil erosion control plan.
- Compaction testing locations** are denoted on the plan. A copy of the plan or portion of the plan shall be used to mark locations of tests, and attached to the compaction remediation form, available from the local soil conservation district. This form must be filled out and submitted prior to receiving a certificate of compliance from the district.
- In the event that testing indicates compaction in excess of the maximum thresholds indicated for the simplified testing methods (see details below), the contractor/owner shall have the option to perform either (1) compaction mitigation over the entire mitigation area denoted on the plan (excluding exempt areas), or (2) perform additional, more detailed testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation. Additional detailed testing shall be performed by a trained, licensed professional.

Compaction Testing Methods

- Probing Wire Test (see detail)
- Hand-held Penetrometer Test (see detail)
- Tube Bulk Density Test (licensed professional engineer required)
- Nuclear Density Test (licensed professional engineer required)

Note: Additional testing methods which conform to ASTM standards and specifications, and which produce a dry weight, soil bulk density measurement may be allowed subject to District approval.

Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.

Procedures for Soil Compaction Mitigation

Procedures shall be used to mitigate excessive soil compaction **prior to placement of topsoil** and establishment of permanent vegetative cover.

Restoration of compacted soils shall be through deep scarification/tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.). In the alternative, another method as specified by a New Jersey Licensed Professional Engineer maybe substituted subject to District Approval.

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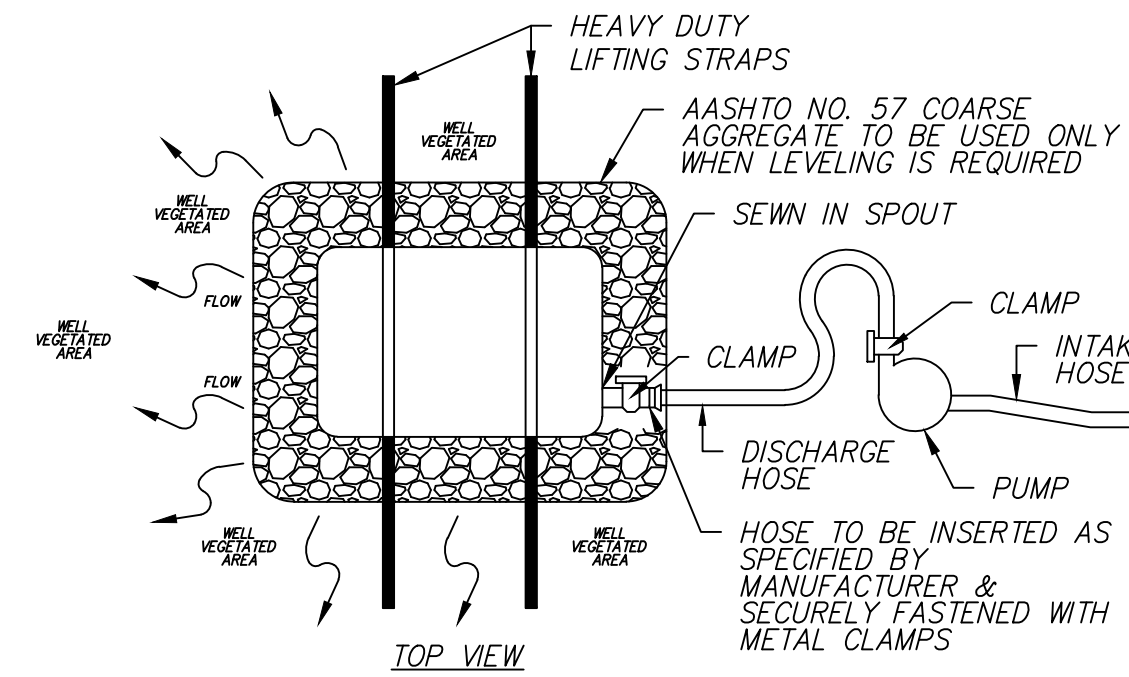
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MasTec
Professional Services
450 DAVIS DRIVE, PLYMOUTH MEETING, PA 19462
OFFICE NUMBER: 484-344-2161

PROJECT#: 55003885

JCP&L - FORT MONMOUTH MOD SUBSTATION
EROSION CONTROL NOTES & DETAILS

DRAWN BY: CP	SCALE: NTS	DATE: 5/31/23
DESIGN BY: PW	DWG NO.:	REV.
CHECKED BY: DF	C-5	
APPROVED BY:		



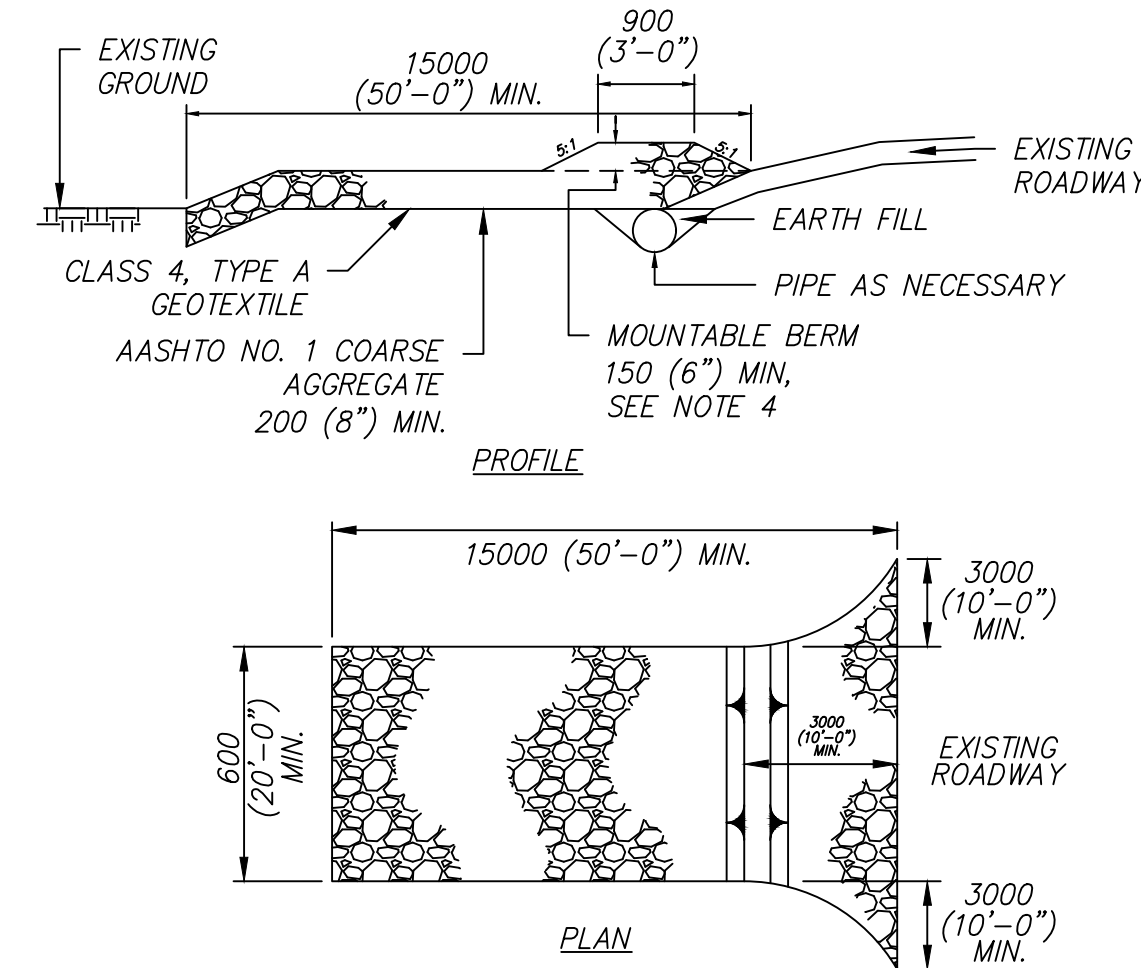
PUMPED WATER FILTER BAG

NOTES:

- LOCATE BAG IN LEVEL AREAS (LESS THAN 5% GRADE). WHEN LEVEL AREAS ARE NOT AVAILABLE, PLACE AASHTO NO. 57 COARSE AGGREGATE TO LEVEL THE BAG.
- LOCATE BAG IN A WELL VEGETATED AREA. DISCHARGE ONTO A STABLE, EROSION RESISTANT AREA. WHEN VEGETATED AREA IS NOT AVAILABLE, PROVIDE A GEOTEXTILE (CLASS 4, TYPE A) LINED FLOW PATH TO A STABLE EROSION RESISTANT RECEIVING WATER COURSE OR A WELL VEGETATED AREA.
- LOCATE BAG IN AN AREA ACCESSIBLE BY EQUIPMENT FOR MAINTENANCE AND REMOVAL PURPOSES.
- DO NOT INSERT MORE THAN ONE HOSE INTO A BAG.
- REPLACE THE BAG WHEN 50% OF THE SEDIMENT CAPACITY HAS BEEN FILLED AND/OR WHEN THERE IS A FAILURE. THE ADDITIONAL BAGS WILL BE PAID AS EACH.
- REMOVE AND PROPERLY DISPOSE OF THE PUMPED WATER FILTER BAGS. RESTORE THE AREA IN ACCORDANCE WITH THE SPECIFICATIONS IN PUBLICATION 408. DO NOT CUT FILTER BAG OR DISTRIBUTE AND SEED SEDIMENT.
- DO NOT PERMIT DISCHARGE FROM THE BAG TO DRAIN BACK INTO WORK OR ACCESS AREAS OF THE PROJECT.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. U.S. CUSTOMARY UNITS IN () PARENTHESES.

1 SEDIMENT CONTROL BAG FOR DEWATERING - DETAIL

SCALE: N.T.S.



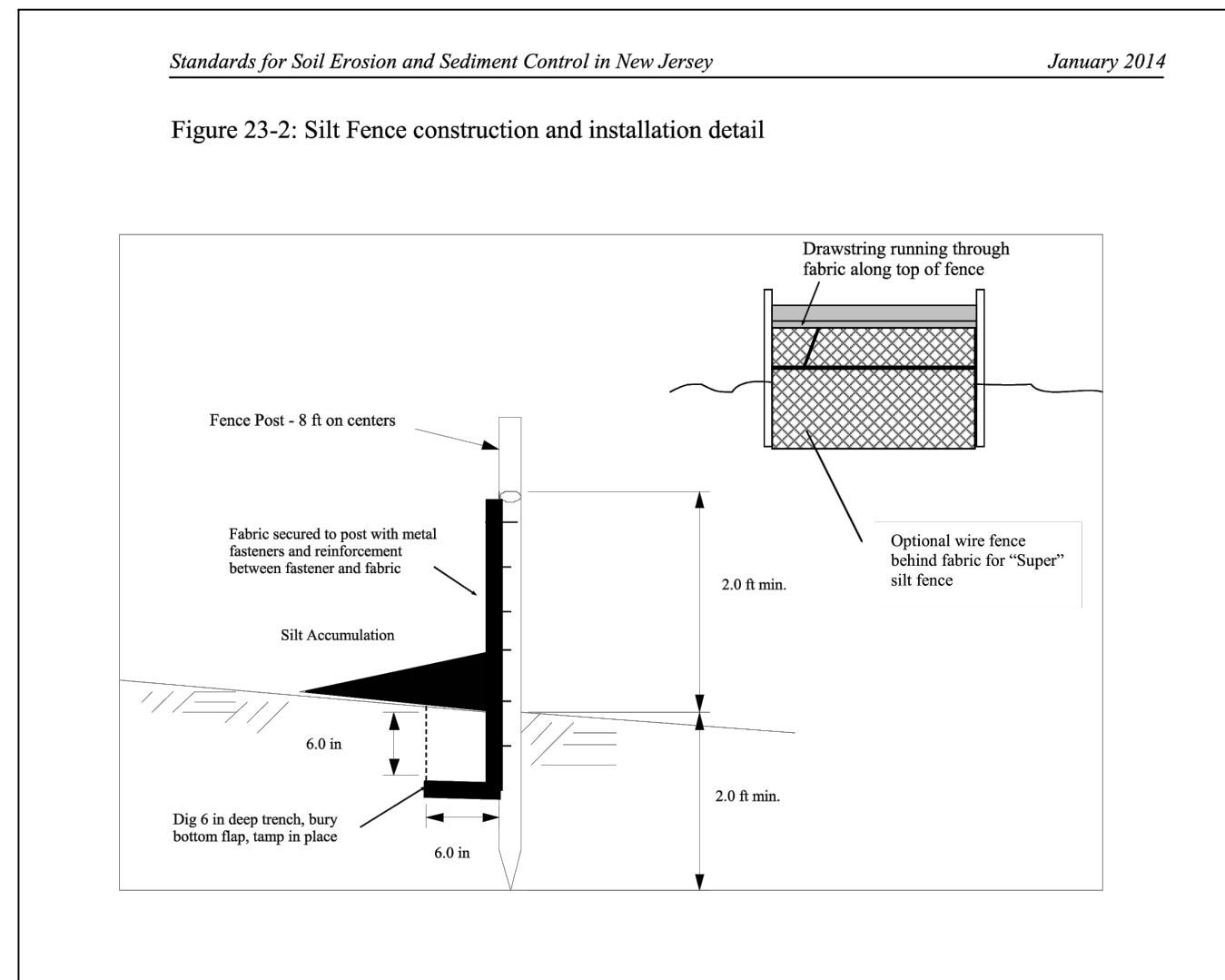
ROCK CONSTRUCTION ENTRANCE

NOTES:

- INSPECT THE ENTRANCE DAILY. REMOVE ALL SEDIMENT DEPOSITED ON THE PUBLIC ROADWAYS AND RETURN TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WILL NOT BE PERMITTED.
- MAINTAIN THE SPECIFIED ROCK CONSTRUCTION ENTRANCE THICKNESS. PLACE ADDITIONAL ROCK WHENEVER ROCK BECOMES CLOGGED WITH SEDIMENT.
- MAINTAIN STOCKPILE OF AASHTO NO. 1 COARSE AGGREGATE.
- CONSTRUCT A MOUNTABLE BERM ONLY WHEN 150 (6") MIN COVER CANNOT BE PROVIDED OVER THE PIPE.
- SATISFACTORILY REMOVE MATERIALS AS PER SPECIFICATION IN PUBLICATION 408, SECTION 849 WHEN ROCK CONSTRUCTION ENTRANCE IS NO LONGER NEEDED.
- PROVIDE GEOTEXTILE MATERIAL MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 735. FURNISH AND INSTALL IN ACCORDANCE WITH PUBLICATION 408, SECTION 212. PROVIDE GEOTEXTILE ALONG ALL INTERFACE AREAS WITH GROUND CONTACT.
- CONSTRUCT ROCK CONSTRUCTION ENTRANCE WITHIN THE RIGHT-OF-WAY OR EASEMENT AREAS. ENTRANCE MAY BE CONSTRUCTED ON A SKEW IF ADEQUATE PULL OUT SIGHT DISTANCE IS AVAILABLE.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. U.S. CUSTOMARY UNITS IN () PARENTHESES.
- SEE SECTION 27 - STDS FOR E&SC IN NJ

2 CONSTRUCTION ENTRANCE DETAIL

SCALE: N.T.S.

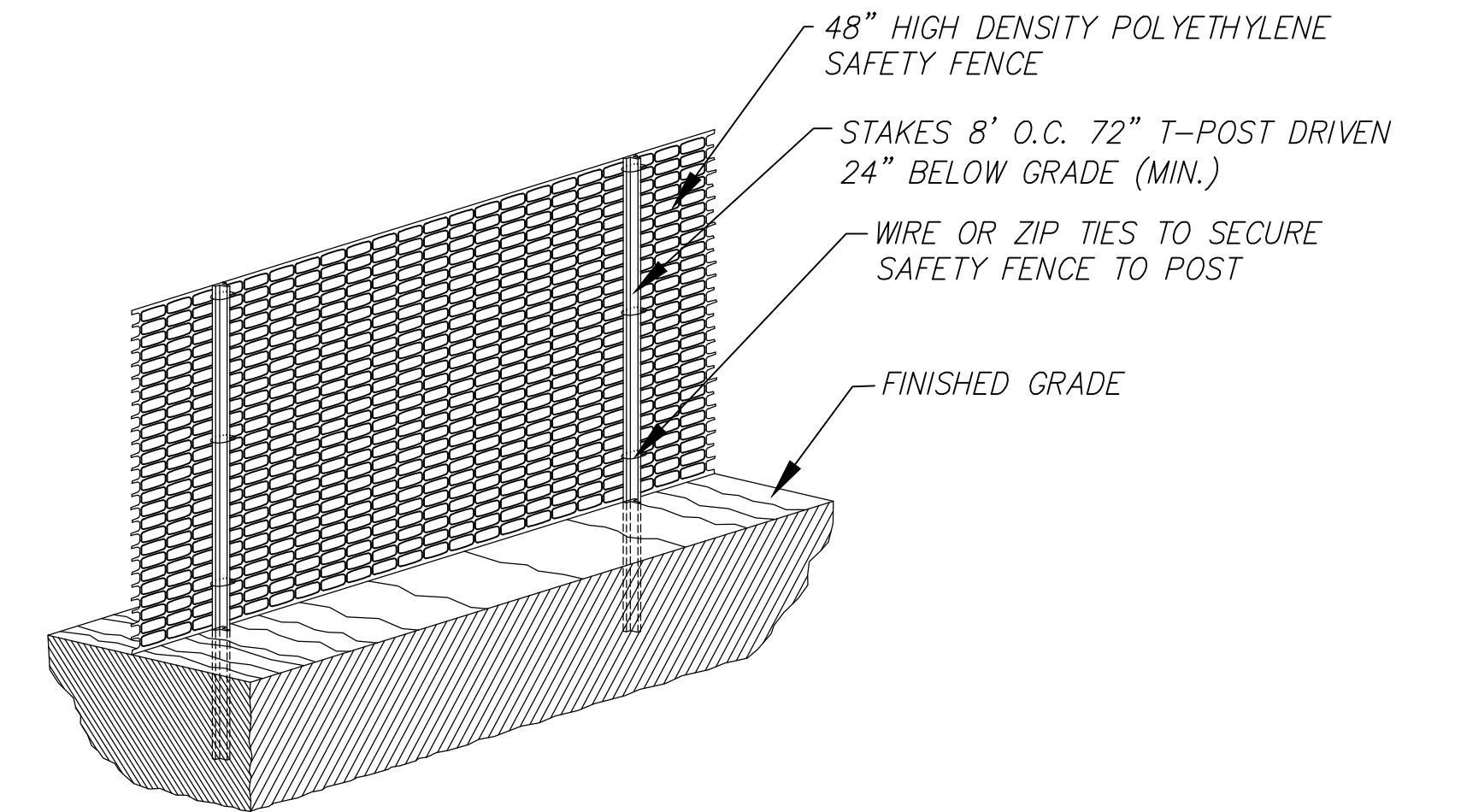


NOTES:

- FENCE POSTS SHALL BE SPACED 8' ON CENTER TO CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2' INTO THE GROUND AND EXTEND AT LEAST 2' ABOVE GRADE. POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1-1/2".
- A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY A MANUFACTURER, SHALL BE BURIED AT LEAST 6" DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2' ABOVE GRADE. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

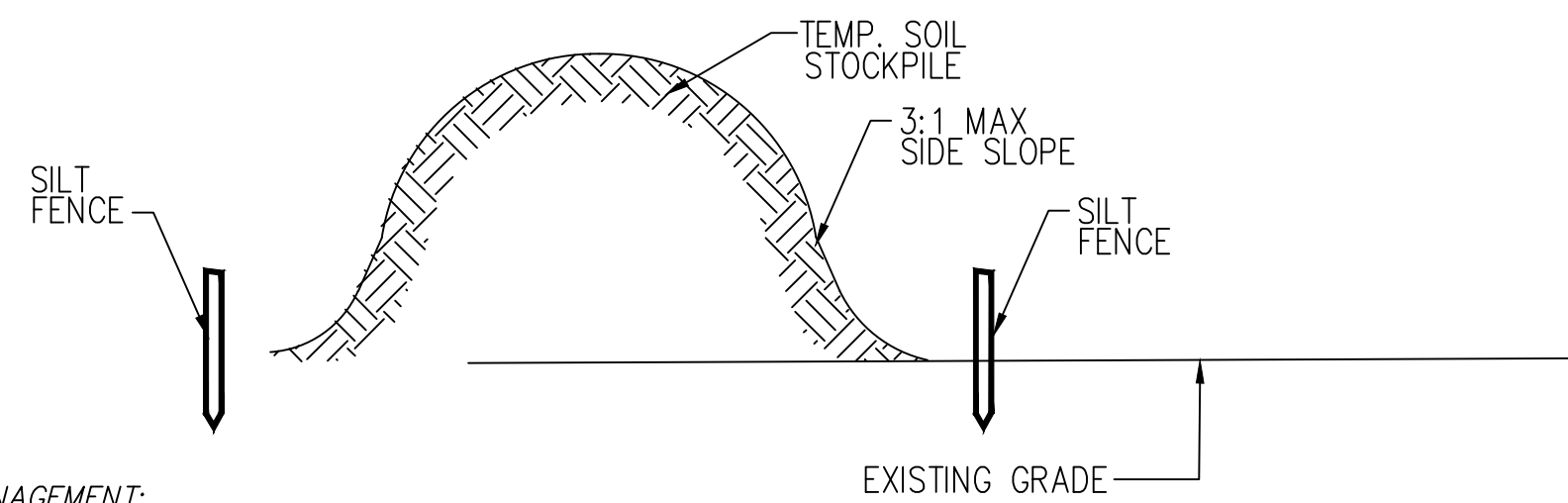
3 SILT FENCE DETAIL

SCALE: N.T.S.



4 ORANGE TREE PROTECTION FENCE DETAIL

SCALE: N.T.S.



5 SOIL STOCKPILE DETAIL

SCALE: N.T.S.

STOCKPILE MANAGEMENT:

STOCKPILE MANAGEMENT PROCEDURES AND PRACTICES ARE DESIGNED TO REDUCE OR ELIMINATE AIR AND STORM-WATER POLLUTION FROM SOIL STOCKPILES. IMPLEMENT THE FOLLOWING IN ALL PROJECTS THAT STOCKPILE SOIL AND OTHER MATERIALS.

GENERAL:

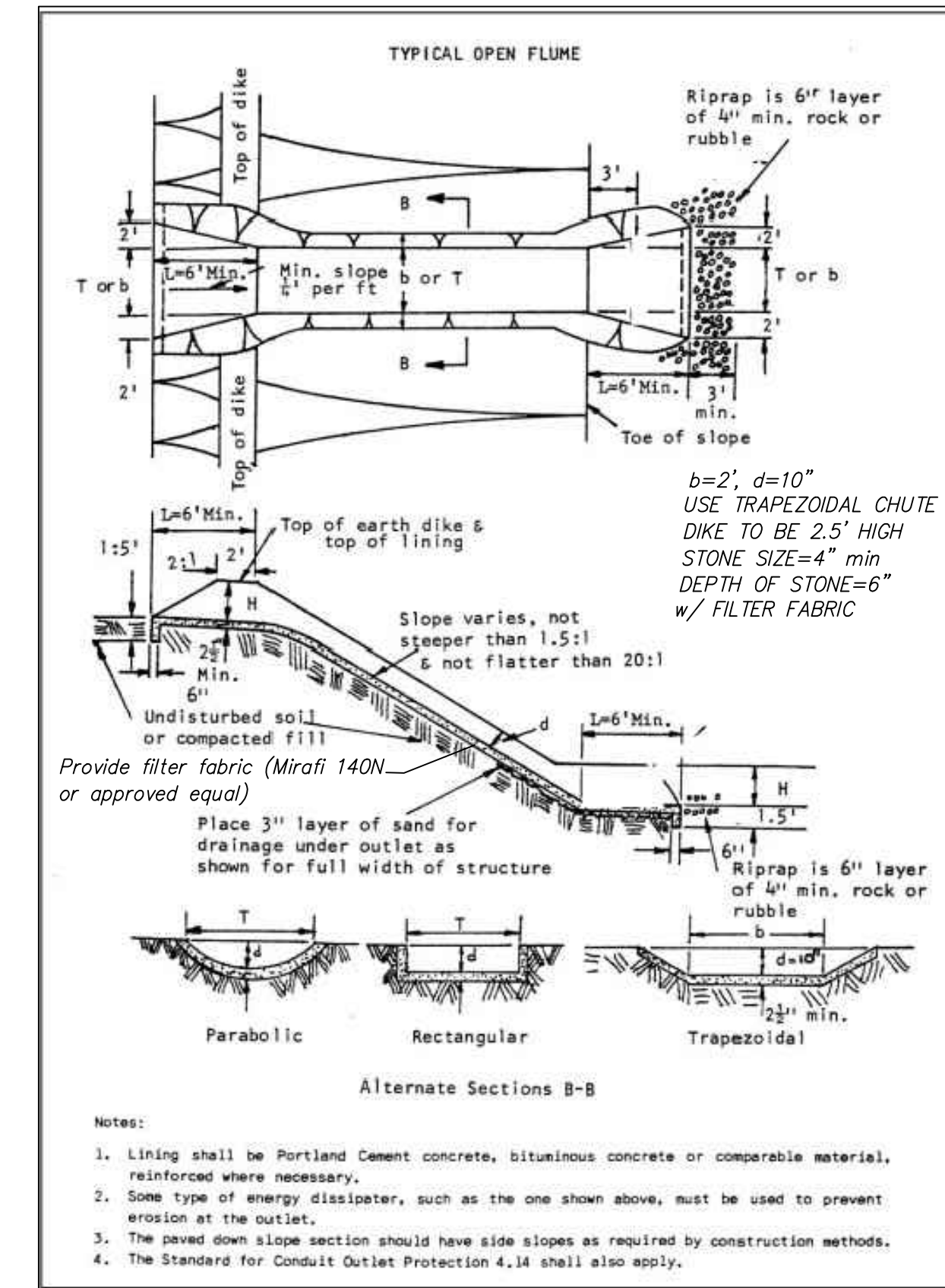
- LOCATE STOCKPILES A MINIMUM OF 50 FT AWAY FROM CONCENTRATED FLOWS OF STORM-WATER, DRAINAGE COURSES, AND INLETS.
- PROTECT ALL STOCKPILES FROM STORM-WATER RUN-ON USING A TEMPORARY PERIMETER SEDIMENT BARRIER.

PROTECTION OF STOCKPILES:

- ALL STOCKPILES CAN BE PROTECTED WITH A TARPULIN COVER.
- PROVIDE BOTTOM PLASTIC LINER ON ALL STOCKPILES IF REQUIRED.

MAINTENANCE:

- INSPECT AND VERIFY THAT BMP'S (BEST MANAGEMENT PRACTICES) ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHILE ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDERWAY, INSPECT WEEKLY TO VERIFY CONTINUED BMP IMPLEMENTATION.
- REPAIR AND/OR REPLACE PERIMETER CONTROLS AND COVERS AS NEEDED TO KEEP THEM FUNCTIONING PROPERLY.



6 OPEN FLUME DETAIL

SCALE: N.T.S.

- Notes:**
- Lining shall be Portland Cement concrete, bituminous concrete or comparable material, reinforced where necessary.
 - Some type of energy dissipater, such as the one shown above, must be used to prevent erosion at the outlet.
 - The paved down slope section should have side slopes as required by construction methods.
 - The Standard for Conduit Outlet Protection 4.14 shall also apply.

ONE CALL
CALL BEFORE YOU DIG
1-800-272-1000
TO LOCATE UNDERGROUND UTILITIES
IF YOU'RE GOING TO DIG, BLAST OR DRILL
THREE (3) WORKING DAYS NOTICE
REMEMBER
IT'S THE LAW!
Dig Safely.

No.	Revision	Approve	Date
1	STORMWATER BASIN REVISIONS FOR FUTURE RUNOFF	PW	10/23/23
2	ADDRESS NJDEP STORMWATER REVIEW COMMENTS	PW	12/27/23
3			
4			
5			
6			
7			
8			
9			



NJDEP APPROVAL

PE STAMP

Jersey Central
Power & Light
A FirstEnergy Company

MasTec
Professional Services

450 DAVIS DRIVE, PLYMOUTH MEETING, PA 19462
OFFICE NUMBER: 484-344-2161

PROJECT#: 55003885

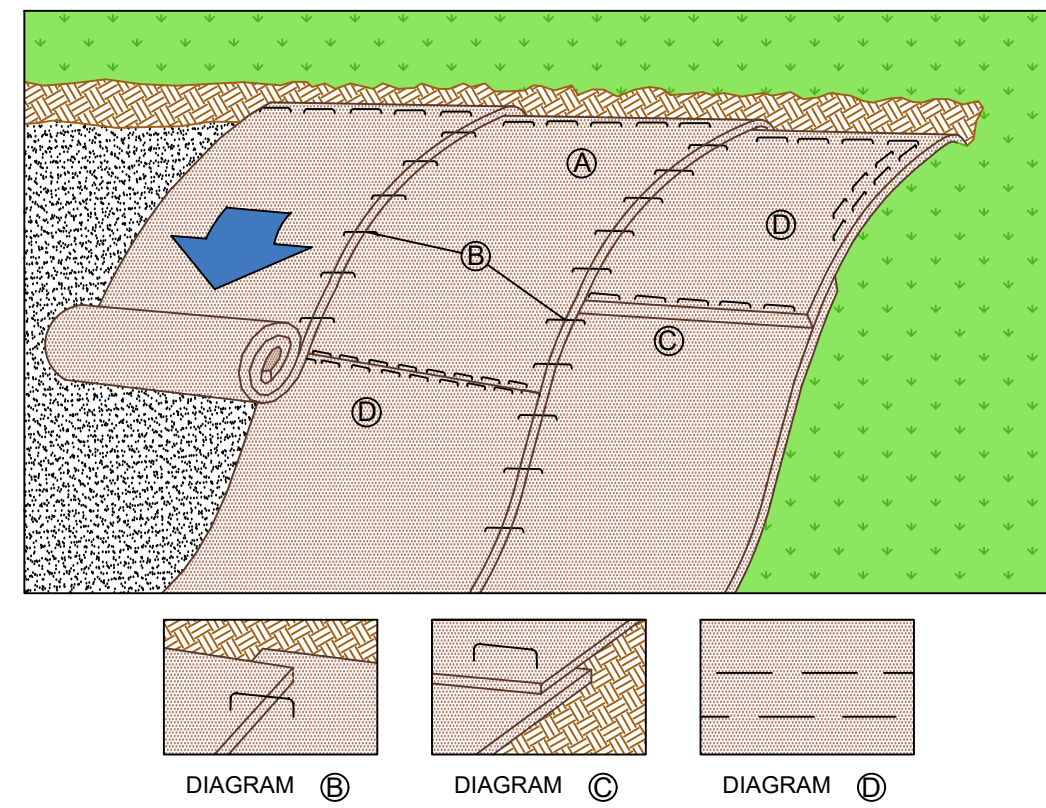
JCP&L - FORT MONMOUTH MOD SUBSTATION
EROSION CONTROL DETAILS

DRAWN BY: CP	SCALE: NTS	DATE: 5/31/23	REV.
DESIGN BY: PW	DWG NO.:		
CHECKED BY: DF	C-6		
APPROVED BY:			

Freehold Soil Conservation District Erosion & Sediment Control Notes

- The Freehold Soil Conservation District shall be notified forty-eight (48) hours in advance of any soil disturbing activity.
- All Soil Erosion and Sediment Control practices are to be installed prior to soil disturbance, or in their proper sequence, and maintained until permanent protection is established.
- Any changes to the Certified Soil Erosion and Sediment Control Plans will require the submission of revised Soil Erosion and Sediment Control Plans to the District for re-certification. The revised plans must meet all current State Soil Erosion and Sediment Control Standards.
- N.J.S.A 4:24-39 et. Seq. requires that no Certificates of Occupancy be issued before the District determines that a project or portion thereof is in full compliance with the Certified Plan and Standards for Soil Erosion and Sediment Control in New Jersey and a Report of Compliance has been issued. Upon written request from the applicant, the District may issue a Report of Compliance with conditions on a lot-by-lot or section-by-section basis, provided that the project or portion thereof is in satisfactory compliance with the sequence of development and temporary measures for soil erosion and sediment control have been implemented, including provisions for stabilization and site work.
- Any disturbed areas that will be left exposed more than sixty (60) days, and not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of temporary cover, the disturbed areas will be mulched with straw, or equivalent material, at a rate of 2 to 2 1/2 tons per acre, according to the Standard for Stabilization with Mulch Only.
- Immediately following initial disturbance or rough grading, all critical areas subject to erosion (i.e. soil stockpiles, steep slopes and roadway embankments) will receive temporary seeding in combination with straw mulch or a suitable equivalent, and a mulch anchor, in accordance with State Standards.
- A sub-base course will be applied immediately following rough grading and installation of improvements to stabilize streets, roads, driveways, and parking areas. In areas where no utilities are present, the sub-base shall be installed within fifteen (15) days of the preliminary grading.
- The Standard for Stabilized Construction Access requires the installation of a pad of clean crushed stone at points where traffic will be accessing the construction site. After interior roadways are paved, individual lots require a stabilized construction access consisting of one inch to two inch (1" - 2") stone for a minimum length of ten feet (10') equal to the lot entrance width. All other access points shall be blocked off.
- All soil washed, dropped, spilled, or tracked outside the limit of disturbance or onto public right-of-ways will be removed immediately.
- Permanent vegetation is to be seeded or sodded on all exposed areas within ten (10) days after final grading.
- At the time that site preparation for permanent vegetative stabilization is going to be accomplished, any soil that will not provide a suitable environment to support adequate vegetative ground cover shall be removed or treated in such a way that it will permanently adjust the soil conditions and render it suitable for vegetative ground cover. If the removal or treatment of the soil will not provide suitable conditions, non-vegetative means of permanent ground stabilization will have to be employed.
- In accordance with the Standard for Management of High Acid Producing Soils, any soil having a pH of 4 or less or containing iron sulfides shall be ultimately placed or buried with limestone applied at the rate of 10 tons/acre, (or 450 lbs/1,000 sq ft of surface area) and covered with a minimum of 12" of settled soil with a pH of 5 or more, or 24" where trees or shrubs are to be planted.
- Conduit Outlet Protection must be installed at all required outfalls prior to the drainage system becoming operational.
- Unfiltered dewatering is not permitted. Necessary precautions must be taken during all dewatering operations to minimize sediment transfer. Any dewatering methods used must be in accordance with the Standard for Dewatering.
- Should the control of dust at the site be necessary, the site will be sprinkled until the surface is wet, temporary vegetative cover shall be established or mulch shall be applied as required by the Standard for Dust Control.
- Stockpile and staging locations established in the field shall be placed within the limit of disturbance according to the certified plan. Staging and stockpiles not located within the limit of disturbance will require certification of a revised Soil Erosion and Sediment Control Plan. Certification of a new Soil Erosion and Sediment Control Plan may be required for these activities if an area greater than 5,000 square feet is disturbed.
- All soil stockpiles are to be temporarily stabilized in accordance with Soil Erosion and Sediment Control note #6.
- The property owner shall be responsible for any erosion or sedimentation that may occur below stormwater outfalls or offsite as a result of construction of the project.

Slope Installation Detail

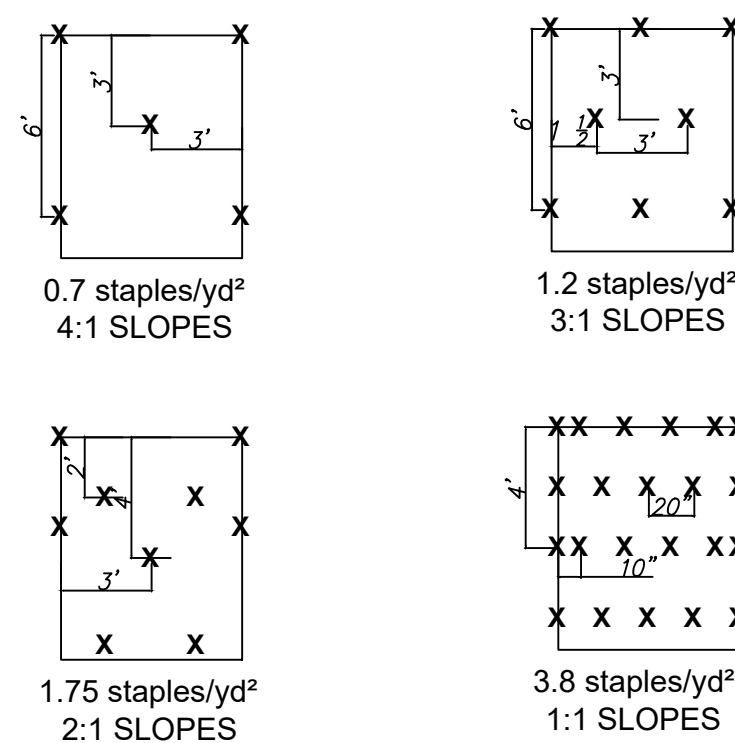


Slope Installation Guidelines:

These guidelines are recommendations only. Any questions with the installation should be confirmed with your local distributor.

- Dig a 6" by 6" trench both up-slope and down-slope of the area the matting is to be applied. Prepare the slope soil surface (raking, seeding and fertilizing).
- Begin by placing the blanket a minimum of 12" down-slope of the up-slope trench. Secure the blanket at the bottom of the trench with staples placed 12" apart. Backfill and compact the trench. Apply seed, and fold the blanket over soil. Secure with a row of staples placed 12" apart across the width of the blanket. (See Diagram A)
- Roll the blanket vertically down the slope. Secure using the appropriate staple pattern below, specified by slope. (See Staple Patterns)
- Parallel blankets must be overlapped by a minimum of 4", and secured with a row of staples placed approximately 3'-0" apart. (See Diagram B)
- Additional vertical blankets can be joined using a minimum 4" overlapping or single style (See Diagrams C) in the direction of water flow. Connect the blankets by placing staples approximately 12" apart across the width of the blankets.
- For maximum performance a check slot should be placed at 25'-40' intervals. Place a row of staples 4" apart along the entire width of the slope. A second row should be placed 4" below in a staggered pattern. Then continue with general installation. (See Diagrams D)
- The end of blanket must be secured in a 6" x 6" trench with a row of staples placed at 12" intervals. (Diagram E)

Staple Patterns:



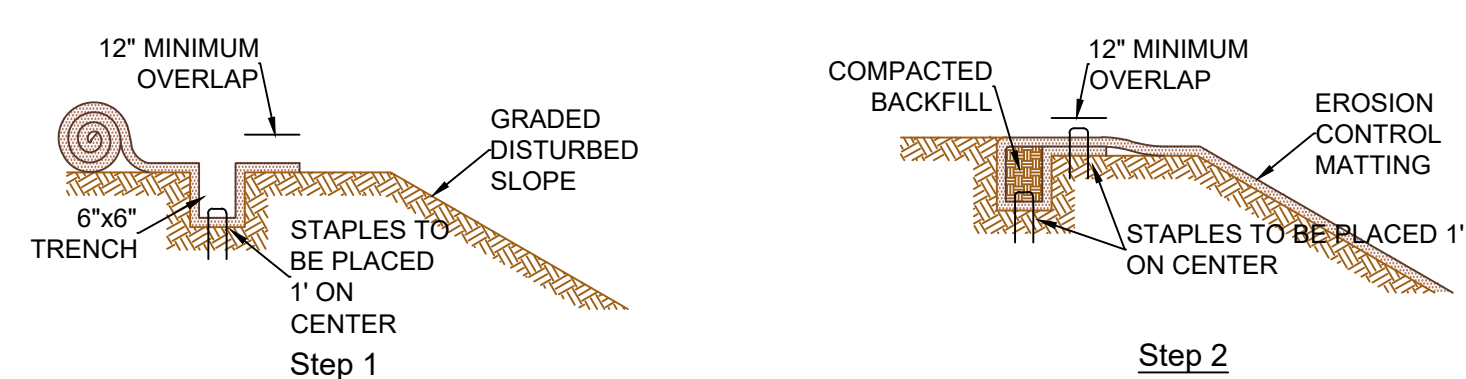
Specifications and Equivalency:

All product material and performance specifications are available from East Coast Erosion Blankets via the product specification sheet. Utilization of a 11 gauge staple, a minimum 6" long by 1" crown, is recommended. The tightly compressed blankets are wrapped and include a product label, code and installation guide.

In addition to meeting all data available on the specification sheet, equivalent products shall meet the following requirements:

- The product must be listed with the NTPPEP database.
- The product must meet the Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC).
- The product must meet the Federal Highway Administration's (FHWA) FP-03 Section 713.17 specification.

Up-slope Trench Installation Detail (Diagram A)

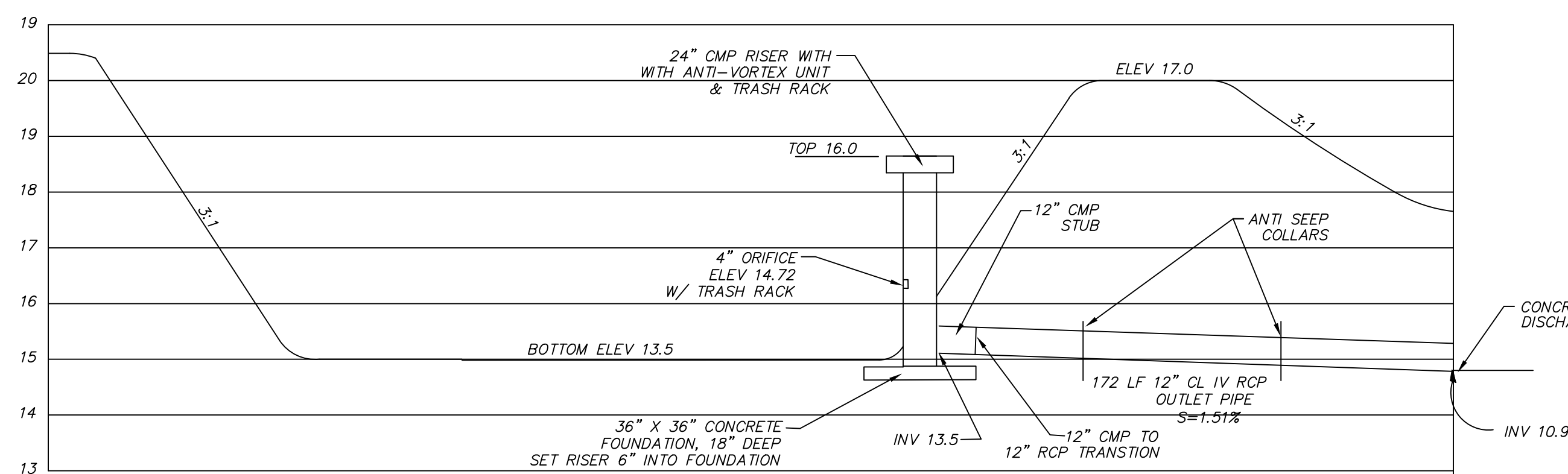


Down-slope Trench Installation Detail (Diagram E)



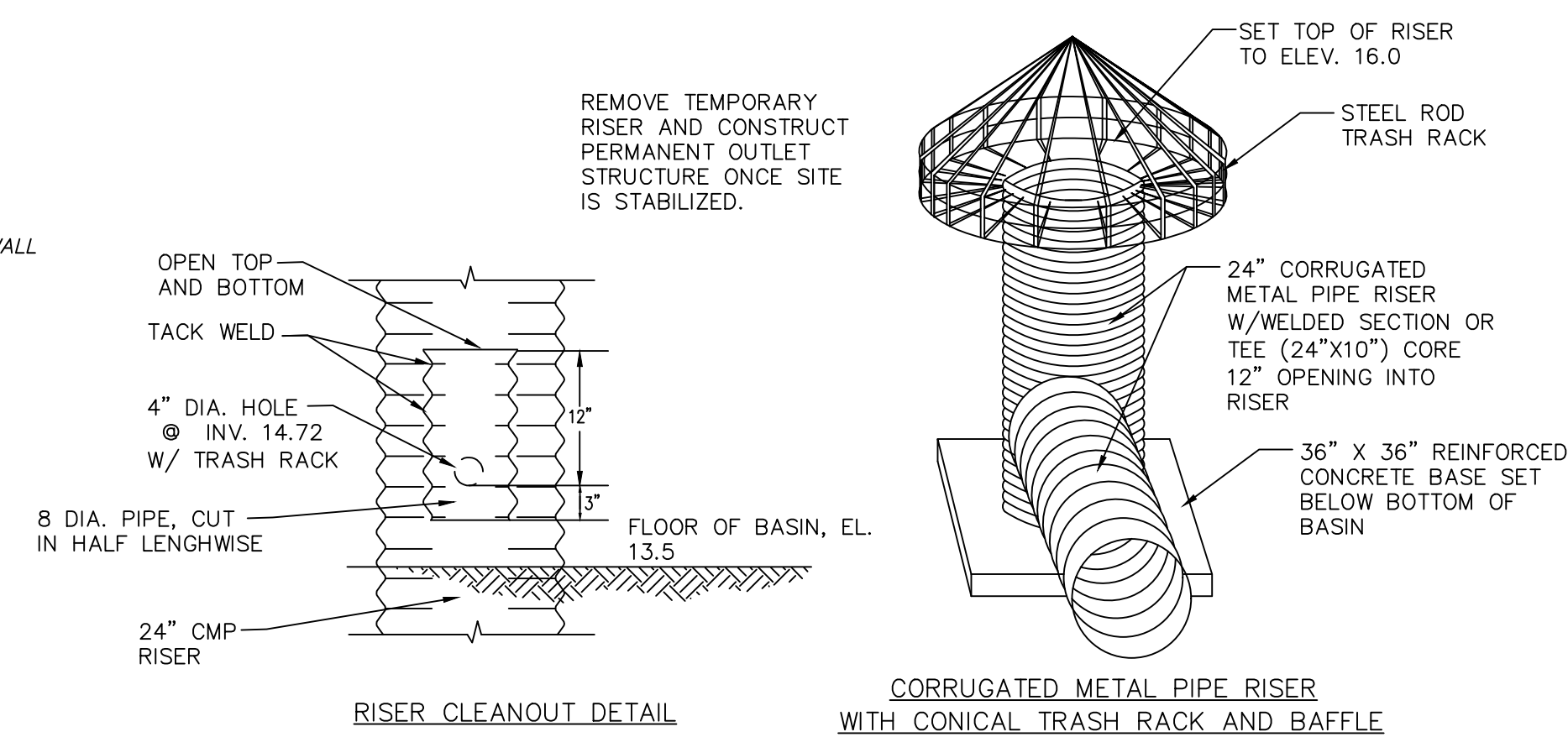
1 EROSION CONTROL BLANKET - DETAIL

SCALE: N.T.S.



NOTES:

- CMP RISER AND 12" CMP STUB PIPE TO BE REMOVED AND REPLACED ONCE SEDIMENT BASIN IS CONVERTED TO A PERMANENT STORMWATER BASIN. SEE STORMWATER BASIN DETAIL FOR PERMANENT ORIFICE SIZES.
- TRASH RACK TO BE CONTECH STORMRAX OR APPROVED EQUAL (7"x7" FLAT)



2 TEMPORARY SEDIMENT BASIN

NO SCALE

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TO LOCATE UNDERGROUND UTILITIES
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NJDEP APPROVAL



PE STAMP

Jersey Central
Power & Light
A FirstEnergy Company

MasTec
Professional Services

450 DAVIS DRIVE, PLYMOUTH MEETING, PA 19462
OFFICE NUMBER: 484-344-2161

PROJECT#: 55003885

JCP&L - FORT MONMOUTH MOD SUBSTATION
EROSION CONTROL NOTES & DETAILS

DRAWN BY: CP	SCALE: NTS	DATE: 5/31/23	REV.
DESIGN BY: PW	DWG NO.:		
CHECKED BY: DF	C-7		
APPROVED BY:			

EROSION & SEDIMENTATION CONTROL GENERAL NOTES:

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE NEW JERSEY ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 811 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN 42613185. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 3H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE NJ DEP.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL.
- ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED UPLAND VEGETATED AREAS.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTION OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3-5 INCHES, 6-12 INCHES ON COMPACTED SOILS, PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OF SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- A REPORT OF COMPLIANCE MUST BE OBTAINED FROM THE DISTRICT PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY FROM THE MUNICIPALITY. A REQUEST FOR A DISTRICT INSPECTION FOR THE RELEASE OF A REPORT OF COMPLIANCE MUST BE MADE 5 WORKING DAYS IN ADVANCE. THIS APPLIES TO BOTH COMPLETE (FINAL) AND CONDITIONAL (TEMPORARY) CERTIFICATES. ALL STREETS AND UNITS MUST BE PROPERLY IDENTIFIED. A REPORT OF COMPLIANCE WILL NOT BE RELEASED FOR A UNIT IF IT CAN NOT BE IDENTIFIED. IDENTIFY ALL UNITS AT THE SITE BY BLOCK, LOT, AND STREET ADDRESS.
- REMOVE ANY SEDIMENT THAT MAY BE SPILLED, DROPPED, OR TRACKED OFF THE PROJECT SITE. ALL PAVED RIGHT-OF-WAYS ADJACENT TO THE PROJECT SITE MUST BE MAINTAINED IN A CLEAN, SWEEP CONDITION THROUGHOUT CONSTRUCTION. INSTALL CRUSHED STONE PAD(S) TO HELP REDUCE OFF-SITE TRACKING OF SEDIMENT.
- THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN AN AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATION MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.

CONSTRUCTION SEQUENCE:

- PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITY, INCLUDING CLEARING AND GRUBBING, THE CONTRACTOR SHALL CLEARLY DELINEATE SENSITIVE AREAS, LIMITS OF CLEARING, AND TREES THAT ARE TO BE CONSERVED WITHIN THE PROJECT SITE. THE CONTRACTOR SHALL INSTALL APPROPRIATE BARRIERS WHERE EQUIPMENT MAY NOT BE PARKED, STAGED, OPERATED, OR LOCATED FOR ANY PURPOSE.
- SOIL COMPACTION SHALL BE LIMITED TO THE MINIMUM AMOUNT REQUIRED TO CONSTRUCT THE PROJECT. EXCESSIVE, ARBITRARY, AND UNNECESSARY VEHICULAR MOVEMENT ABOUT THE PROJECT RIGHT OF WAY SHALL BE MINIMIZED. THE EXTENT AND DURATION OF EARTH DISTURBANCE SHALL BE LIMITED TO THE MINIMUM AMOUNT REQUIRED TO CONSTRUCT THE PROJECT.
- ROCK CONSTRUCTION ENTRANCE/SITE ACCESS - THIS IS THE FIRST LAND-DISTURBANCE ACTIVITY TO TAKE PLACE AT THE SITE. THE CONTRACTOR SHOULD PROVIDE THE ROCK CONSTRUCTION ENTRANCE PER THE LOCATION AND DIMENSIONS SHOWN ON THE PLANS AND DETAIL SHEET, THE DEPTH OF ROCK SHALL BE MAINTAINED AT ALL TIMES. A STOCKPILE OF ROCK SHALL BE KEPT ON SITE IN ORDER TO REPLENISH THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE. SHOULD ANY TRACKING OF SEDIMENT OCCUR ONTO PAVED ROADWAYS OR ELSEWHERE, THE CONTRACTOR SHALL IMMEDIATELY CLEAN THE STREET BY SWEEPING THE SEDIMENT BACK INTO THE SITE OR CLEANED VIA A STREET CLEANER.
- SEDIMENT BARRIERS - INSTALL PERIMETER BMPs AFTER THE CONSTRUCTION SITE IS ACCESSED. THE CONTRACTOR SHALL KEEP THE ASSOCIATED CLEARING AND GRUBBING LIMITED TO ONLY THAT AMOUNT REQUIRED FOR INSTALLING PERIMETER BMPs. ADDITIONAL SEDIMENT BARRIER(S) SHALL BE ADDED AS REQUIRED TO PREVENT SEDIMENT-LADEN STORMWATER FROM LEAVING THE SITE.
- MODIFY EXISTING HEADWALL AND ADD CONCRETE APRON AT EXISTING HEADWALL.
- INSTALL TEMPORARY SEDIMENT BASIN & RISER. PROVIDE DECOMPACTION EFFORTS PRIOR TO PLACING PLACING TOPSOIL AND EROSION CONTROL BLANKETS.
- INSTALL TEMPORARY SLOPE DRAIN.
- LAND CLEARING AND GRADING - BEGIN CLEARING AND GRADING ONLY AFTER ALL DOWNSLOPE EROSION AND SEDIMENTATION BMPs HAVE BEEN CONSTRUCTED AND STABILIZED. TEMPORARILY STABILIZE DISTURBED AREAS WHERE NO WORK WILL BE OCCURRING FOR 14 DAYS.
- INSTALL CULVERT BELOW ACCESS DRIVE INTO SITE.
- CONSTRUCT ACCESS ROAD INTO SITE.
- SUBSTATION BELOW GRADE CONSTRUCTION - THE AMOUNT OF WORK AREA DISTURBED AT ANY ONE TIME WILL BE KEPT TO THE MINIMUM REQUIRED TO CONDUCT THE WORK SAFELY. INSTALL THE UNDERGROUND CONDUIT/CABLES AFTER OPENING THE MINIMUM WIDTH TRENCH NEEDED TO COMPLETE THE WORK. DAILY TRENCH EXCAVATION LENGTH SHALL BE LIMITED TO THE LENGTH OF CONDUIT/CABLE THAT IS EXPECTED TO BE ABLE TO BE INSTALLED, BACKFILLED AND STABILIZED IN THE SAME DAY. FOUNDATION EXCAVATION SHALL ONLY BE THAT NECESSARY TO INSTALL/POUR THE FOUNDATION PADS. ANY DE-WATERING OF THE TRENCHES OR FOUNDATION EXCAVATIONS SHALL OCCUR WITH THE USE OF A WATER FILTER BAG IN ACCORDANCE WITH THE STANDARD DETAILS. THE WATER FILTER BAG SHALL BE PLACED IN A WELL VEGETATED UPLAND AREAS.

- ROUGH GRADE SITE INCLUDING SWALES AROUND SOUTHERN AND EASTERN PERIMETERS. PERFORM SOIL DECOMPACTION ON AREAS RECEIVING EROSION CONTROL BLANKETS. INSTALL EROSION CONTROL BLANKETS ON AREAS DENOTED.
- SURFACE STABILIZATION - APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY TO ANY DISTURBED AREAS WHERE WORK HAS REACHED FINAL GRADE, HAS BEEN DELAYED, OR HAS OTHERWISE BEEN TEMPORARILY SUSPENDED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON.
- SUBSTATION ABOVE GRADE CONSTRUCTION - ONCE ALL FOUNDATIONS AND UNDERGROUND CONDUIT/CABLES IS COMPLETE, SITE SURFACE CAN BE STABILIZED. DURING INSTALLATION OF SUBSTATION EQUIPMENT, INSTALL AND MAINTAIN ANY ADDITIONAL LOCAL EROSION AND SEDIMENT CONTROL BMPs. NECESSARY TO MINIMIZE EROSION FROM THE SITE. DUST SHALL BE CONTROLLED VIA SPRAYING WATER OR UTILIZING SURFACE BMPs UNTIL SITE IS FULLY STABILIZED.
- CONVERSION OF TEMPORARY SEDIMENT BASIN TO A PERMANENT SWM BASIN. REMOVE EXISTING CMP RISER AND REPLACE WITH PERMANENT CONCRETE RISER. REMOVE EXISTING 12" CMP STUB AND CONNECT EXISTING CONCRETE OUTFALL PIPE TO PERMANENT CONCRETE RISER. INSTALL SAND TRENCH AND SAND SUBBASE BELOW TRENCH.
- FINAL STABILIZATION/SITE RESTORATION - TEMPORARY DISTURBED AREAS SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITIONS IN TERMS OF GRADE AND VEGETATIVE STABILIZATION TO RESTORE EXISTING DRAINAGE PATTERNS. AFTER CONSTRUCTION IS COMPLETED, INSTALL STABILIZATION BMPs INCLUDING: PLACING TOPSOIL, PERMANENT SEEDING, AND MULCHING.
- AFTER 70% UNIFORM, VEGETATIVE COVER HAS BEEN ACHIEVED ACROSS THE ENTIRE DISTURBED AREAS AND THE SITE HAS BEEN STABILIZED, REMOVE ALL EROSION AND SEDIMENTATION BMPs AND STABILIZE ANY DISTURBANCES ASSOCIATED WITH THE REMOVAL OF THE BMPs. REMOVED BMPs SHALL INCLUDE ALL INLET PROTECTION BAGS, SILT FENCE AND/OR SOCK, AND CONSTRUCTION ENTRANCE/EXITS AS APPLICABLE.

BMP MAINTENANCE SCHEDULE:

- ROCK CONSTRUCTION ENTRANCE/EXIT
 - INSPECTION: ROCK CONSTRUCTION ENTRANCES SHALL BE INSPECTED DAILY AND AFTER EACH RUNOFF EVENT.
 - MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.
- SILT FENCE
 - INSPECTION: SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
 - MAINTENANCE: DAMAGED FENCE SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SILT FENCE. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE FENCE, THE FENCE AND STAKES SHALL BE REMOVED.
 - SILT FENCE MAY NOT BE APPLICABLE FOR THE EXISTING RESOURCES IN THE AREA, PLEASE CONSULT WITH THE PROJECT ENGINEER OR ENVIRONMENTAL DEPARTMENT PRIOR TO INSTALLING SILT FENCE.
 - UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SILT FENCE, THE STAKES AND FENCE SHALL BE REMOVED AND DISPOSED OF.
- DEWATERING WATER FILTER BAG
 - INSPECTION: WATER FILTER BAGS SHALL BE INSPECTED DAILY AND PRIOR TO EACH USE.
 - MAINTENANCE: A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME HALF FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND SHALL NOT RESUME UNTIL THE PROBLEM IS CORRECTED. SEDIMENT REMOVED FROM THE FILTER BAG SHALL BE SPREAD ONSITE UPSTREAM FROM ESTABLISHED SEDIMENT CONTROLS AND ALLOWED TO DRY. ONCE DRY, THE SEDIMENT MAY BE INCORPORATED ONSITE AS PART OF THE FILL.
- TEMPORARY VEGETATIVE STABILIZATION
 - INSPECTION: SEEDED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL UNIFORM 70% INITIAL VEGETATION IS ESTABLISHED.
 - MAINTENANCE: RE-APPLY TOPSOIL, SOIL AMENDMENTS, SEED, AND MULCH TO AREAS WHERE VEGETATION HAS NOT BEEN ADEQUATELY ESTABLISHED.
- PERMANENT VEGETATIVE STABILIZATION
 - INSPECTION: SEEDED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL UNIFORM 70% INITIAL VEGETATION IS ESTABLISHED.
 - MAINTENANCE: CONTRACTOR SHALL INSPECT THE SITE TWICE A WEEK UNTIL A UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ESTABLISHED. THE CONTRACTOR IS TO PLACE SEED ON ALL BARE SPOTS AND DISTURBED AREAS NOT ESTABLISHING GROUND COVER.
- EARTH DISTURBANCE AREAS WILL BE REPAIRED WHERE SIGNS OF ACCELERATED EROSION ARE DETECTED.
- SEEDING AND MULCHING SHALL BE REPEATED IN THOSE AREAS THAT APPEAR TO BE FAILING OR HAVE FAILED.

TOPSOIL:

- MATERIALS
 - TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER, MORE THAN 0.5 MILLIMHOS MAY DESICCATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). IMPORTED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.
 - TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.
- STRIPPING AND STOCKPILING
 - FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
 - STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
 - WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5.
 - A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
 - STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
 - STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN; SEE STANDARDS FOR PERMANENT (PG. 4-1) OR TEMPORARY (PG.7-1) VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES
- SITE PREPARATION
 - GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE.
 - GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. SEE THE STANDARD FOR LAND GRADING, PG. 19-1.
 - AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
 - PRIOR TO TOPSOILING, THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND GRADING, PG. 19-1.
 - EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
- APPLYING TOPSOIL
 - TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY (SEE GLOSSARY).
 - A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5.0 INCHES, MINIMUM OF 4 INCHES, FIRMED IN PLACE IS REQUIRED. ALTERNATIVE DEPTHS MAY BE CONSIDERED WHERE SPECIAL REGULATORY AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE SUCH AS ON GOLF COURSES, SPORTS FIELDS, LANDFILL CAPPING, ETC. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE, IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL (PG. 1-1).
 - PURSUANT TO THE REQUIREMENTS IN SECTION 7 OF THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT PERMANENT VEGETATIVE COVER BECOMES ESTABLISHED ON AT LEAST 80% OF THE SOILS TO BE STABILIZED WITH VEGETATION. FAILURE TO ACHIEVE THE MINIMUM COVERAGE MAY REQUIRE ADDITIONAL WORK TO BE PERFORMED BY THE CONTRACTOR TO INCLUDE SOME OR ALL OF THE FOLLOWING: SUPPLEMENTAL SEEDING, RE-APPLICATION OF LIME AND FERTILIZERS, AND/OR THE ADDITION OF ORGANIC MATTER (I.E. COMPOST) AS A TOP DRESSING. SUCH ADDITIONAL MEASURES SHALL BE BASED ON SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS COOPERATIVE EXTENSION SERVICE OR OTHER APPROVED LABORATORY FACILITIES QUALIFIED TO TEST SOIL SAMPLES FOR AGRONOMIC PROPERTIES.
 - IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED TO A MINIMUM OF 6" (SEE SECTION 19 OF THE STANDARDS) WHERE THERE HAS BEEN SOIL COMPACTION.

TRAFFIC CONTROL:

- SEE SECTION 31 IN STDS FOR E&S IN NJ.
- TRAFFIC CONTROL TO BE INSTALLED AT INITIATION OF LAND DISTURBANCE ACTIVITIES.
- TRAFFIC CONTROL BARRICADES MUST BE INSTALLED TO LIMIT INGRESS / EGRESS TO CONSTRUCTION ENTRANCE.

SEEDING PREPARATION:

IT IS RECOMMENDED TO PERFORM SOIL TESTING IN ORDER TO APPLY THE CORRECT SEEDING AND PREPARATION OF SOILS TO ALLOW FOR A RAPID STABILIZATION OF THE SITE. TESTING KITS AND RESULTS CAN BE COORDINATED WITH THE RUTGERS CO-OP RESEARCH AND EXTENSION OFFICES FOR RECOMMENDATIONS.

APPLY GROUND LIMESTONE AND FERTILIZER AS REQUIRED BASED ON SOIL CONDITIONS. CONTRACTOR CAN REFER TO THE RUTGERS CO-OP RESEARCH AND EXTENSION PUBLICATIONS FS104 AND FS584. FERTILIZER SHALL BE APPLIED AT A RATE OF 500 LBS/ACRE OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS SOIL TEST DICTATES OTHERWISE. LIMESTONE SHALL BE APPLIED AT A RATE OF 2 TONS/ACRE UNLESS SOIL TESTING DICTATES OTHERWISE.

LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL TO A MINIMUM DEPTH OF 4" WITH SUITABLE EQUIPMENT. TILLAGE SHALL BE CONTINUED UNTIL A UNIFORM SEEDBED IS ACHIEVED.

PRIOR TO APPLYING SEED, INSPECT SEEDBED TO MAKE SURE COMPACTION HAS NOT TAKEN PLACE IN AREAS THAT HAVE BEEN TILLED.

SOILS WITH HIGH SULFIDES SHALL BE DEALT WITH ACCORDING TO THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS.



No.	Revision	Approve	Date
1	STORMWATER BASIN REVISIONS FOR FUTURE RUNOFF	PW	10/23/23
2	ADDRESS NJDEP STORMWATER REVIEW COMMENTS	PW	12/27/23
3			
4			
5			
6			
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NJDEP APPROVAL



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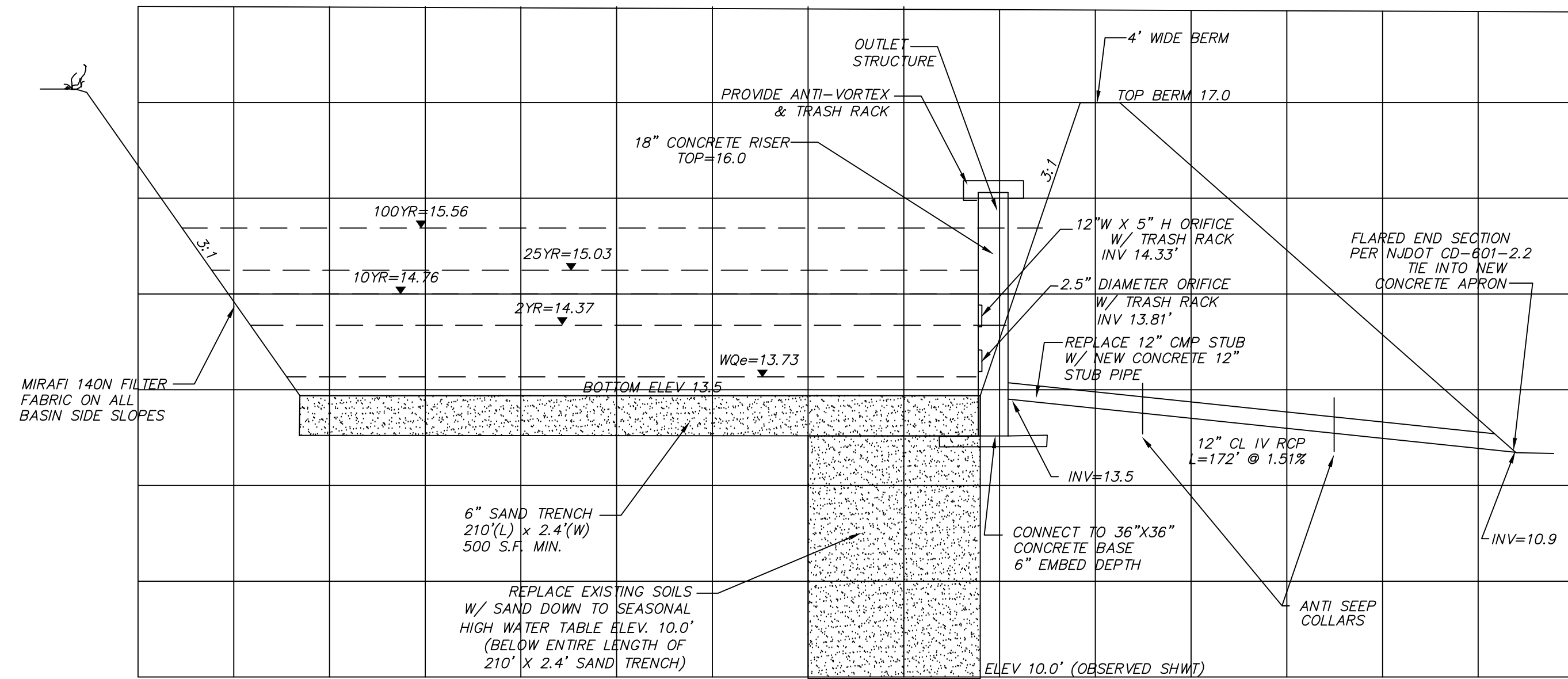


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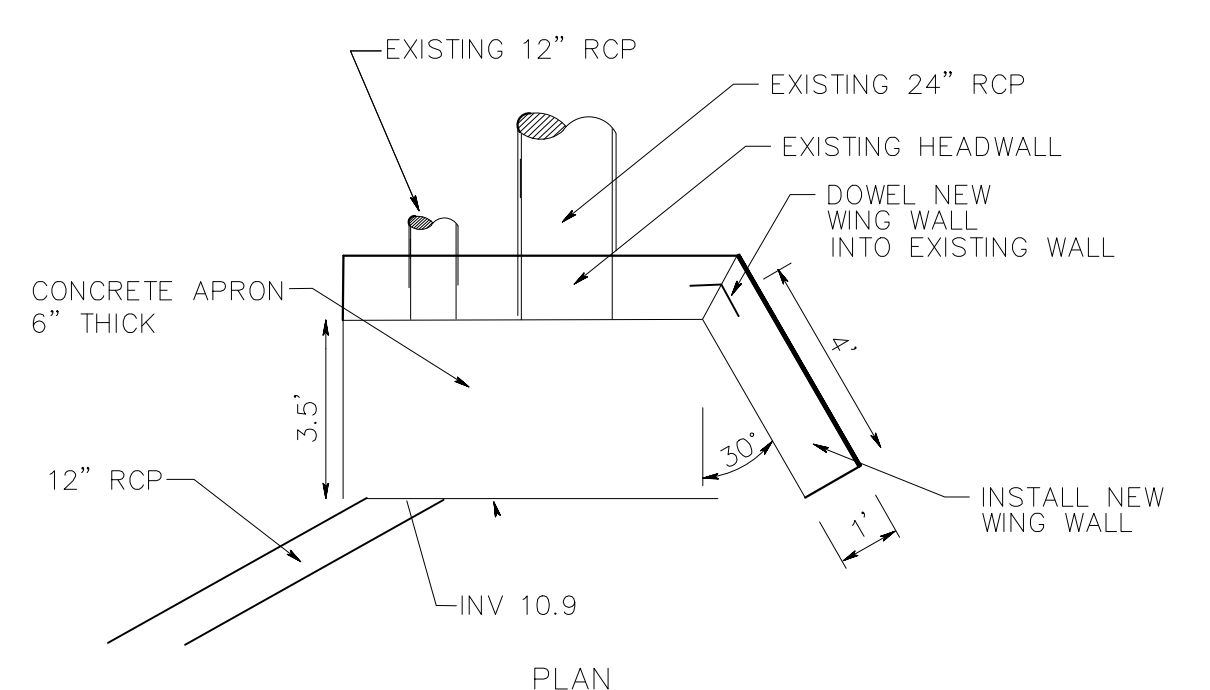
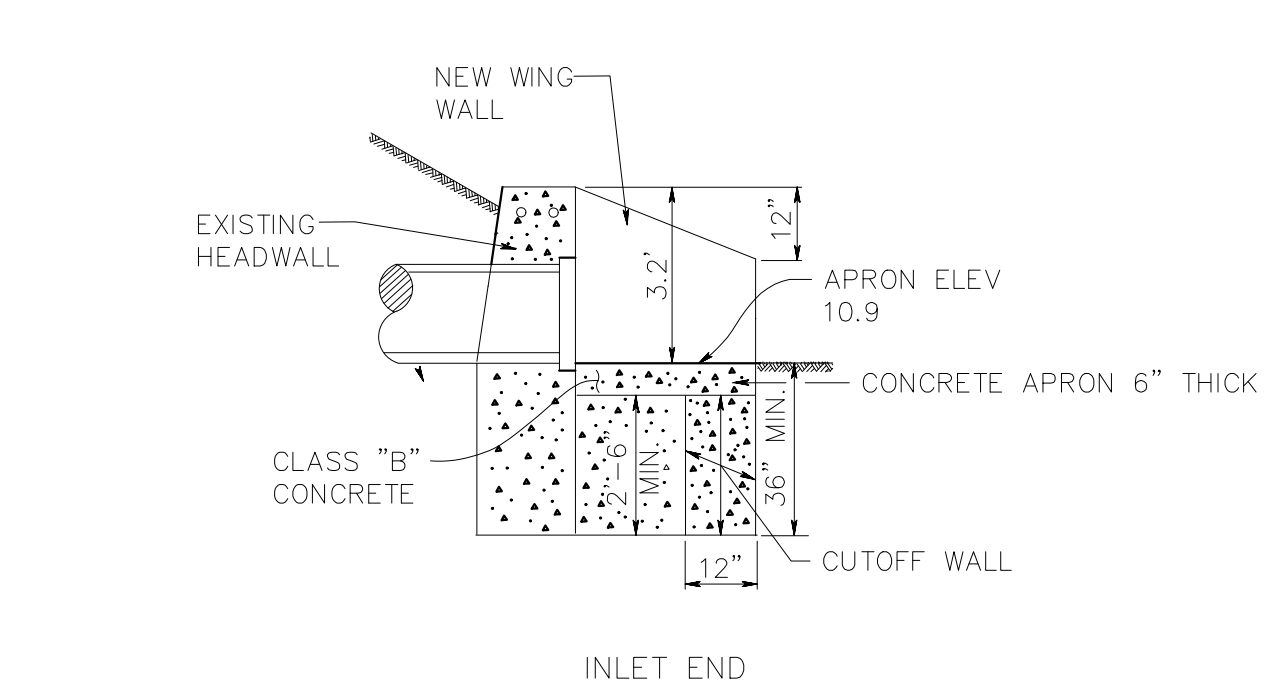
JCP&L - FORT MONMOUTH MOD SUBSTATION
EROSION CONTROL NOTES

DRAWN BY: CP	SCALE: NTS	DATE: 5/31/23	
DESIGN BY: PW	DWG NO.:		REV.
CHECKED BY: DF	C-8		
APPROVED BY:			

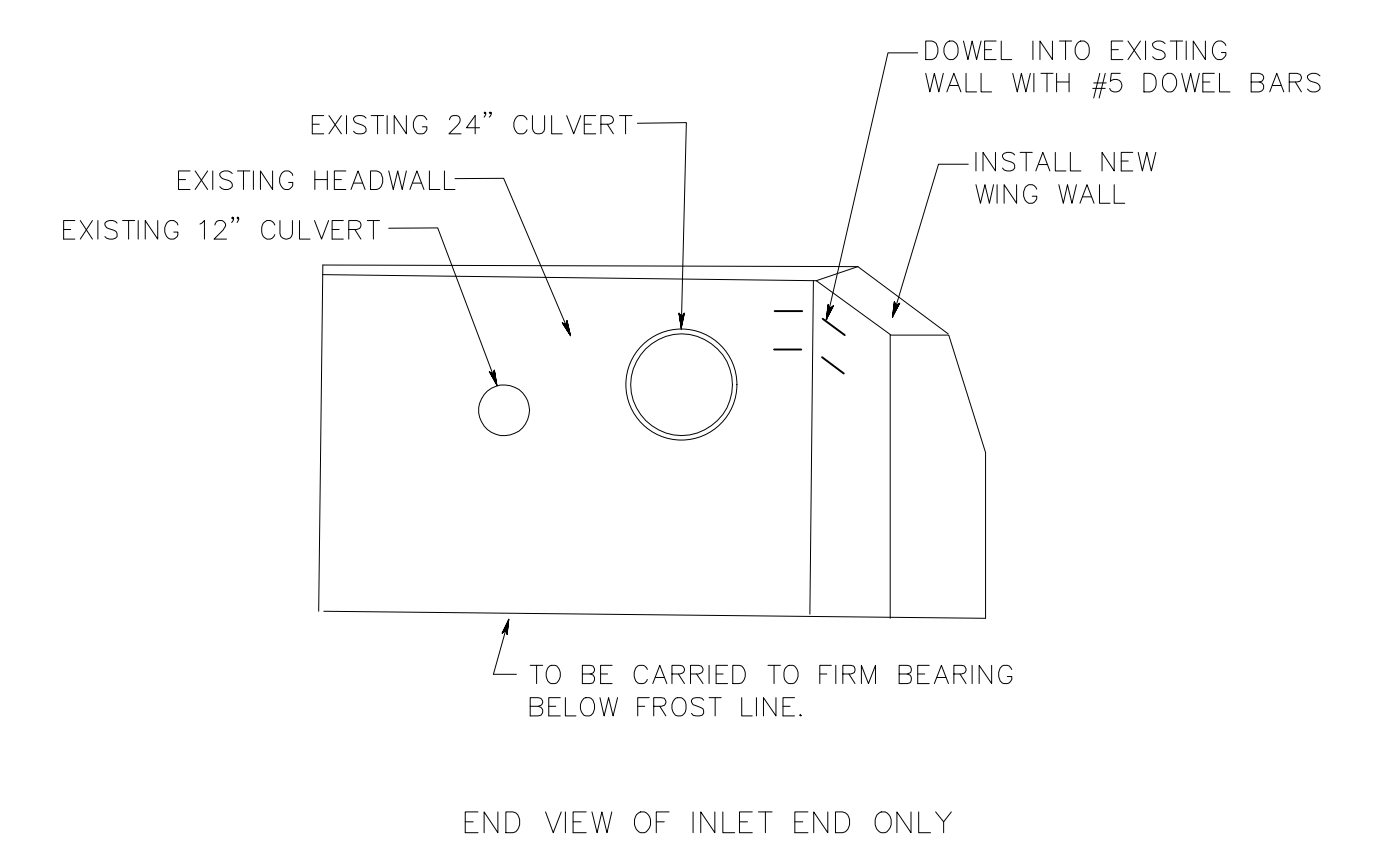
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1A SMALL SCALE INFILTRATION BASIN (ELEVATIONS BASED ON CURRENT PRECIPITATION)
SCALE: N.T.S.

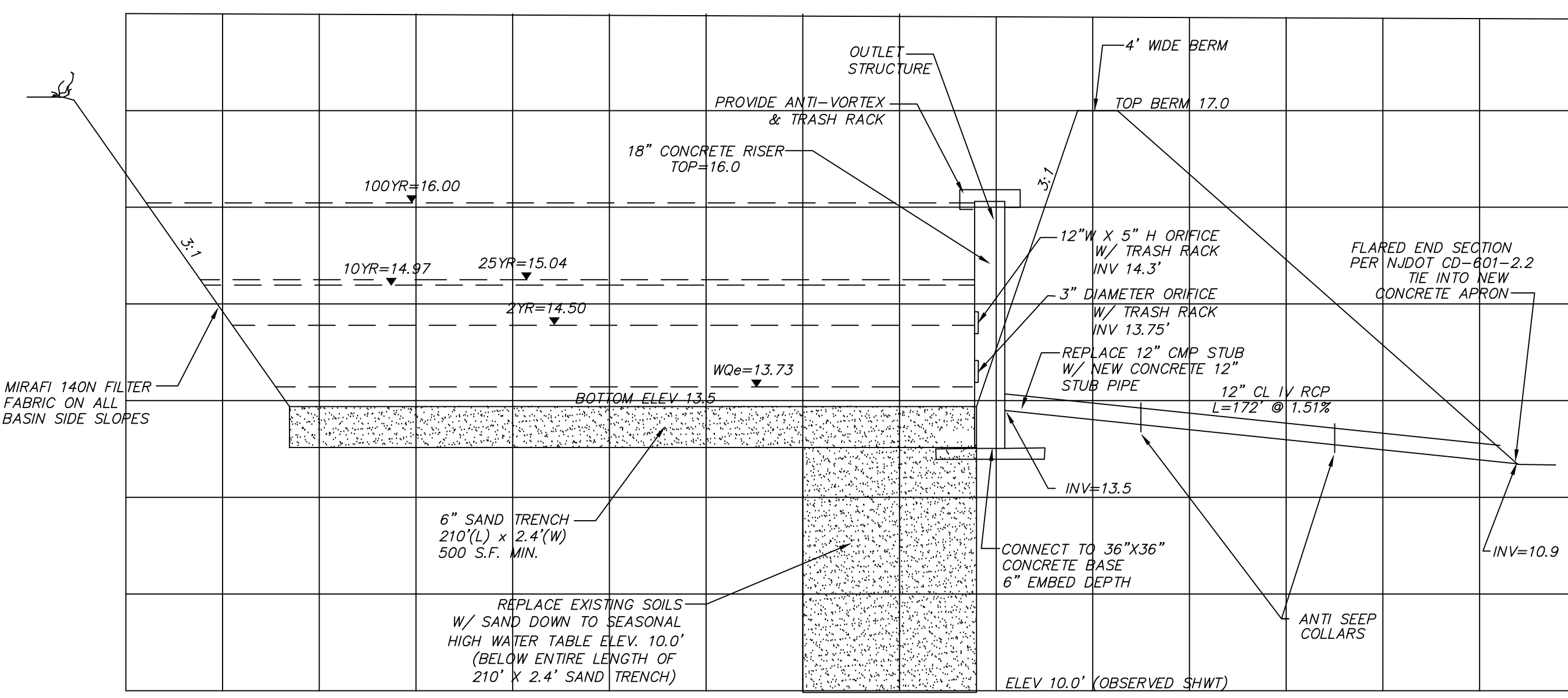


CONCRETE HEADWALL WITH APRON

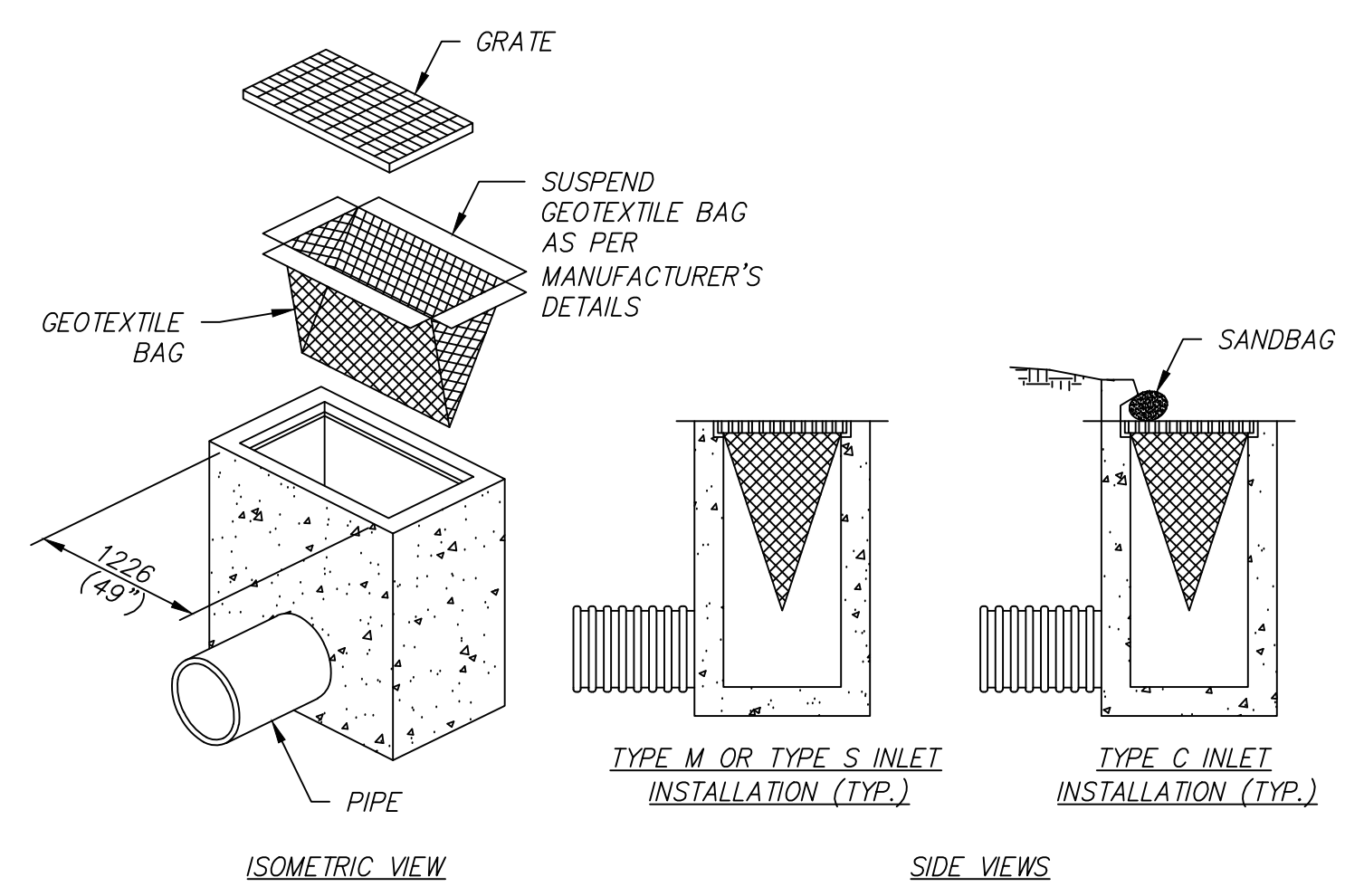


GENERAL NOTES:
 1. ALL EDGES TO BE CHAMFERED 1 INCH.
 2. THE FINISHING OF CONCRETE HEADWALLS WILL NOT BE REQUIRED FOR HEADWALLS AT THE BOTTOM OF EMBANKMENTS IN RURAL AREAS.

3 STORMSEWER OUTFALL DETAIL
SCALE: N.T.S.



1B SMALL SCALE INFILTRATION BASIN (ELEVATIONS BASED ON FUTURE PRECIPITATION)
SCALE: N.T.S.



INLET FILTER BAG

NOTES:
 1. INSPECT INLET FILTER BAG AFTER EACH RUNOFF EVENT. MAINTAIN AS REQUIRED TO ENSURE PROPER FUNCTIONING OF THE BAG.
 2. REMOVE ACCUMULATED SEDIMENT/DEBRIS WHEN THE INLET FILTER REACHES 1/2 MAXIMUM CAPACITY.
 3. REPLACE FILTER BAG IF RIPPED OR TORN, DO NOT USE IN SAG/SUMP CONDITIONS.
 4. USE SANDBAGS AT TYPC C INLET CURB OPENINGS TO PREVENT BYPASS FLOW.
 5. REMOVE AND PROPERLY DISPOSE OF INLET FILTER BAG WHEN NO LONGER NEEDED.
 6. SEE SECTION 28 - STD FOR E&SC IN NJ

2 INLET FILTER BAG DETAIL
SCALE: N.T.S.

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No.	Revision	Approve	Date
1	STORMWATER BASIN REVISIONS FOR FUTURE RUNOFF	PW	10/23/23
2	ADDRESSING NJDEP SWM REVIEW COMMENTS	PW	12/27/23
3			
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PROJECT#: 55003885

JCP&L - FORT MONMOUTH MOD SUBSTATION
 STORMWATER POND DETAILS

DRAWN BY: CP SCALE: NTS DATE: 5/31/23
 DESIGN BY: PW DWG NO.:
 CHECKED BY: DF C-9
 APPROVED BY: