## POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

## SHEETZ - ELIZABETHTOWN, PA (VETERANS DRIVE)

#### UNDERGROUND UTILITY LINE PROTECTION ACT

IN COMPLIANCE WITH AND PURSUANT TO THE PROVISIONS OF 73 P.S. 176, AS AMENDED BY PA ACT 287 OF 1974, AS AMENDED, RGS ASSOCIATES, INC. HAS PERFORMED THE FOLLOWING REQUIREMENTS IN PREPARING THESE DRAWINGS THAT INCLUDE EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION AND/OR LAND

1. PURSUANT TO 73 P.S. 176(2), RGS ASSOCIATES, INC. HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM NOT LESS THAN TEN (10) NOR COMPLETED. IF SUCH INFORMATION WAS OBTAINED MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, RGS HAS STATED IN THE REQUEST THAT

- DRAWINGS. THE POSITION AND TYPE OF EACH FACILITY OWNER'S LINE. AS DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY 73 P.S. 176(2), THE NAME OF THE FACILITY OWNER AND THE FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND
- 3. PURSUANT TO 73 P.S. 176(5), RGS ASSOCIATES, INC. HAS CALLED THE ONE CALL SYSTEM AND SHOWN AS PROOF, THE SERIAL NUMBER OF ONE CALL NOTICE AND THE TOLL-FREE NUMBER OF THE ONE CALL SYSTEM ON THE DRAWINGS NEAR THE SERIAL
- 4. IF, PURSUANT TO THE REQUIREMENTS OF 73 P.S. 176(2), RGS ASSOCIATES, INC. HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, RGS HAS INDICATED THAT THE REQUEST IS PRELIMINARY AND THE SERIAL NUMBER OF SAID REQUEST IS SHOWN ON THE DRAWINGS HEREIN.

RGS ASSOCIATES, INC. DOES NOT REPRESENT, WARRANT, ASSURE OR GUARANTEE THA THE INFORMATION RECEIVED PURSUANT TO THE ONE CALL SYSTEM REQUEST AND AS REFLECTED ON THESE DRAWINGS IS ACCURATE OR CORRECT. FURTHERMORE, RGS ASSOCIATES, INC. INCLUDES THE INFORMATION ONLY PURSUANT TO THE REQUIREMENTS OF THE UNDERGROUND UTILITY LINE PROTECTION ACT, AS AMENDED.

PENNSYLVANIA ONE CALL SYSTEM SERIAL NO. (FINAL):

PENNSYLVANIA ONE CALL SYSTEM SERIAL NO. (PRELIMINARY):

PENNSYLVANIA ONE CALL SYSTEM SERIAL NO. (SURVEY): 20240821542 DATE: <u>3-27-2024</u> BY: <u>JAB</u>

PENNSYLVANIA LAW REQUIRES (3) WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND (10) WORKING 1-800-242-1776 DAYS IN DESIGN STAGE - STOP CALL

#### SITE / ZONING DATA

TOTAL SITE ACREAGE 2.171 AC. (GROSS) **EXISTING LAND USE:** RESTAURANT PROPOSED LAND USE: CONVENIENCE STORE/RETAIL WITH FUELING STATION PUBLIC - ELIZABETHTOWN REGIONAL SEWER AUTHORITY PLIBLIC - ELIZABETHTOWN AREA WATER ALITHORITY WATER FUELING STATION ACCESSORY TO CONVENIENCE STORE (SECTION 135-268) SPECIAL EXCEPTIONS: <u>REQUIRED</u> 0.50 AC. MIN. (PER 13-268) LOT AREA: LOT WIDTH: 125 FT. MIN. (PER 135-268) LOT DEPTH: 125 FT. MIN. (PER 135-268) FRONT YARD: STORE: 35 FT. MIN. PARKING: 15 FT. MIN. 15 FT. DUMPSTER: NOT ALLOWED N/A REAR YARD: STORE: 25 FT. MIN. PARKING: 15 FT. MIN. 15 FT. DUMPSTER: 10 FT. MIN. SIDE YARD: PARKING: 10 FT. MIN 10 FT. DUMPSTER: 10 FT. MIN. 10 FT. **BUILDING HEIGHT:** PRINCIPAL: 20 FT. MIN. < 40 FT. 40 FT. MAX. ACCESSORY: 20 FT. MAX. **BUILDING COVERAGE:** IMPERVIOUS COVERAGE 60.7% (57,372 SF) ONE PARKING SPACE PER 200 SF OF GROSS FLOOR AREA PLUS ONE SPACE FOR EACH EMPLOYEE ON LARGEST SHIFT

TOTAL SPACES REQUIRED = ±38

#### OWNER OF RECORD

GIUSEPPE & VITA FERRARELLI 624 ROCKWOOD DRIVE ELIZABETHTOWN, PA 17022

### **EQUITABLE OWNER**

5700 SIXTH AVE. ALTOONA, PA 16602

**SOURCE OF TITLE** LANCASTER COUNTY, PA

TAX MAP NO.: 460-79623-0-0000 DEED REF.: 6008865 SUBDIVISION PLAN BOOK: 2011-0142-J 2013-0128-J 50 VETERANS DRIVE

#### LANCASTER COUNTY CODE

#### **SURVEY INFORMATION**

BOUNDARY AND TOPOGRAPHY PROVIDED BY: 250 SOUTH SPRUCE STREET LITITZ, PA 17543

(717)-626-0028

DATE: 5-20-24

#### JOB NO.: 24125 WETLANDS INFORMATION

WETLANDS DELINEATION PROVIDED BY: VORTEX ENVIRONMENTAL, INC. 2819-I WILLOW STREET PINK NORTH WILLOW STREET, PA 17584 (717)-509-2789

DATE: 6-11-24

#### **GEOLOGIC INFORMATION**

GEOLOGY STUDY PROVIDED BY: ECS MID-ATLANTIC LLC 52-6 GRUMBACHER ROAD YORK, PA 17406 (717)-767-4788 DATE: 10-28-2024 JOB NO.: 18:6313-A

#### TRAFFIC INFORMATION

TRAFFIC STUDY PROVIDED BY: 2 EAST MARKET STREET, SUITE 2 YORK, PA 17401-1206 (717)-846-4660 DATE: SEPTEMBER 2024 JOB NO.: 228.032.24

#### **EROSION AND SEDIMENT CONTROL NOTES**

THE MEASURES REQUIRED IN THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN SHALL APPLY AS IF SHOWN ON THIS PLAN. THESE MEASURES SHALL BE COMPLETED AND IN SERVICE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR CONSTRUCTION, PER THE SEQUENCE OF CONSTRUCTION OUTLINED ON THE APPROVED EROSION AND SEDIMENT CONTROL

TOTAL SPACES PROVIDED = ±41

0-3%

FUELING STATION: 12 SPACES

2. SOIL TYPES PRESENT ON THE SITE, PER THE SOIL SURVEY OF LANCASTER COUNTY, PENNSYLVANIA ARE AS FOLLOWS: UNGERS EXTREMELY STONY LOAM

#### RECYCLING AND DISPOSAL SPECIFICATIONS

HOLLY SILT LOAM

UNGERS EXTREMELY STONY LOAM

1. THE RECYCLING AND DISPOSAL OF MATERIAL ASSOCIATED WITH THE INSTALLATION CONVERSION, REMOVAL AND/OR MAINTENANCE OF THE PCSM BMPs IS ANTICIPATED TO INCLUDE SEDIMENT, VEGETATION, PLASTIC CONVEYANCE PIPING, RIP-RAP, ARBITRARY DEBRIS, AND/OR ANY PACKAGING ASSOCIATED WITH MATERIALS UTILIZED IN THE CONSTRUCTION OF THE PCSM BMP. ANY SEDIMENT REMOVED FROM THE AREA OF THE PROPOSED PCSM BMP, OR FROM A PREVIOUSLY INSTALLED FACILITY BEING CONVERTED AS PART OF THE CONSTRUCTION AND INSTALLATION OF THE PCSM BMP, SHALL BE PLACED IN A LOCATION ON-SITE AND IMMEDIATELY STABILIZED TO MINIMIZE THE POTENTIAL FOR ACCELERATED EROSION. APPROPRIATE EROSION AND SEDIMENTATION CONTROL MEASURES, IMPLEMENTED IN ACCORDANCE WITH CURRENT CHAPTER 102 REGULATIONS, SHALL BE IN PLACE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE DISTURBED AREA. ANY EXISTING VEGETATION SHALL BE COMPOSTED ON-SITE WHEN PRACTICAL, OR TRANSPORTED TO AN APPROPRIATE FACILITY ABLE TO ACCEPT MATERIAL OF THIS NATURE. THE REMOVAL OF PREVIOUSLY INSTALLED CONVEYANCE PIPING OR RIP-RAP, ARBITRARY DEBRIS, AND/OR ANY PACKAGING ASSOCIATED WITH MATERIALS UTILIZED IN THE INSTALLATION OF THE PCSM BMPs, SHALL BE REMOVED OR RECYCLED IN ACCORDANCE WITH ANY AND ALL APPLICABLE STATE OR FEDERAL REGULATIONS. NO MATERIALS OR WASTES OR UNUSED MATERIALS FROM PCSM BMP INSTALLATION SHALL BE BURNED, BURIED, DUMPED, OR

2. CONSTRUCTION WASTE IS ANTICIPATED TO INCLUDE TYPICAL BUILDING MATERIALS (I.E. LUMBER, DRYWALL, MASONRY, CARDBOARD AND PAPER, INSULATION, ASPHALT ROOFING, PLASTIC AND VINYL, PAINTS, STAINS, SOLVENTS AND SEALANTS, ETC.). IT IS STRONGLY ENCOURAGED THAT SUCH RECOVERABLE WASTE MATERIALS BE SEPARATED AND APPROPRIATELY RECYCLED. NO POTENTIALLY TOXIC OR HAZARDOUS WASTE IS KNOWN TO BE PRESENT ON-SITE. IF ANY TOXIC OR HAZARDOUS WASTE IS ENCOUNTERED, THE CONTRACTOR SHALL FOLLOW ANY AND ALL APPLICABLE STATE OR FEDERAL REGULATIONS ASSOCIATED WITH THE DISPOSAL OF SUCH MATERIALS.

3. ALL MATERIALS AND WASTES ASSOCIATED WITH PCSM BMP INSTALLATION AND/OR BUILDING CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE

4. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED AND FULLY IMPLEMENTED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS.

5. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.).

6. ANY PLACEMENT OF CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

7. ENVIRONMENTAL DUE DILIGENCE MUST BE PERFORMED TO DETERMINE IF THE FILL MATERIALS

ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS. ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". FILL THAT DOES NOT OUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

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#### NPDES LEGEND

LIMIT OF DISTURBANCE

0000000000000

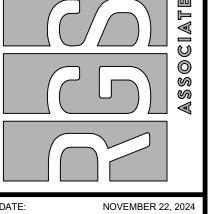
NPDES BOUNDARY

LOCATION MAP

Copyright MyTopo Terrain Navigator

#### STTE FEATURE LEGEND

EXIS	TING FEATURES	PROPOSED FEATURES	
	GRADE CONTOUR	454	GRADE CONTOUR
455	GRADE INDEX CONTOUR	455	GRADE INDEX CONTOUR
× (428.17)	SPOT ELEVATION	X 496.70	SPOT ELEVATION
<b>+</b>	BENCHMARK	X BC 496.70	SPOT ELEVATION- BOTTOM OF CURB
	IRON PIN	X TC 496.70	SPOT ELEVATION- TOP OF CURB
	BOUNDARY LINE	X BW 496.70	SPOT ELEVATION- BOTTOM OF WALL
	- —— ADJOINER	X TW 496.70	SPOT ELEVATION- TOP OF WALL
	RIGHT-OF-WAY LINE	X HP 496.70	SPOT ELEVATION- HIGH POINT
	LEGAL RIGHT-OF-WAY LINE	X LP 496.70	SPOT ELEVATION- LOW POINT
	CENTERLINE	0	IRON PIN
	EASEMENT LINE	•	MONUMENT
	ZONING BOUNDARY		SETBACK LINE
	— — BUILDING		CLEAR SIGHT TRIANGLE
	— — EDGE OF PAVEMENT		SAFE SIGHT STOPPING DISTANCE
	CURB		EASEMENT LINE
	WALL		ZONING
<del>- 0 -</del>	SIGN		BUILDING
0 0 0 0 0 0 0 0	O O GUIDERAIL	▼	DOOR LOCATION
			EDGE OF PAVEMENT
	TREELINE		CURB
🖶 TP-1	TEST PIT LOCATION	等等的语法等 医毛球状皮肤 医毛球性皮肤炎性炎	SIDEWALK - CONCRETE
	SOILS	<u> </u>	GUIDERAIL
UTVUTV	UNDERGROUND CABLE-TV-SATELLITE	<u> </u>	TREE PROTECTION FENCE
OE OE	OVERHEAD ELECTRIC	o	CHAINLINK FENCE
UE UE	UNDERGROUND ELECTRIC		BLOCK WALL
G G	GAS	<del></del>	SIGN
\$	OVERHEAD LIGHT FIXTURE	~~~~~	TREELINE
	SPOT LIGHT FIXTURE		UNDERGROUND ELECTRIC
Ø	UTILITY POLE	G G	GAS
S	GRAVITY SEWER LINE & MANHOLE	₹	OVERHEAD LIGHT FIXTURE
	SEWER LATERAL	×	UTILITY POLE
CMP C CMP	— □ STORM DRAIN PIPE, ENDWALL, MANHOLE, & INLET	ssss	SEWER LATERAL
<u> </u>	ROOF DRAIN	EW-A I I-A1	STORM DRAIN PIPE, ENDWALL
	₩ATER MAIN, VALVE & HYDRANT	STRUCTURE TYPE	MANHOLE, & INLET
	SURVEY BOUNDARY	SYSTEM ID. NUMBER W./IN SYSTEM	
	LIMIT OF DEMOLITION		STORMWATER INFILTRATION



PROJECT NO CHRIS VENARCHIO SHEET NO

SW-18 of 32

3. BENCHMARK #3 IS LOCATED: CAPPED REBAR ON THE SOUTH SIDE OF VETERANS DRIVE, ELEV. 568.39' (SEE SHEET LD-3 FOR LOCATION). DATUM IS NAVD 1988 BOUNDARY AND TOPOGRAPHICAL INFORMATION PROVIDED BY TRIMBLE SURVEYORS PROJECT NAME: 50 VETERANS DRIVE, PROJECT NO.: 24125, DATED: 05/21/24

5. THIS PROPERTY WAS SURVEYED USING THE CURRENT DEED OR DEEDS OF RECORDS AND WITH THE BENEFIT OF A "TITLE SEARCH." THE TITLE SEARCH WAS ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NO.: NCS-1204768-PITT, COMMITMENT DATE: JANUARY 11,

6. PERMANENT MONUMENTS AND LOT MARKERS SHALL BE SET UPON COMPLETION OF FINAL

GRADING AT THE LOCATIONS TO BE SHOWN ON THE FINAL PLAN. 5. HORIZONTAL DATUM IS NORTH AMERICAN DATUM 1983 (NAD83) PENNSYLVANIA STATE PLANE

6. ANY ALTERATIONS TO THIS PLAN AFTER THE DATE OF PLAN PREPARATION OR LATEST REVISION SHALL NOT BE THE RESPONSIBILITY OF RGS ASSOCIATES, INC.

#### UTILITY NOTES

MINIMUM OF 3'-6"' OF COVER IS REQUIRED OVER ALL SEWER LINES. THE SEWER LATERAL SHALL

BE CONSTRUCTED TO THE LINE AND GRADE SHOWN ON THE PLANS. 2. THE CONTRACTOR IS RESPONSIBLE FOR ALL FIELD TESTING AND "RECORD DRAWINGS" PER THE AUTHORITY REQUIREMENTS. THE CONTRACTOR SHALL MAINTAIN FIELD RECORDS OF THE LOCATION AND DEPTH OF ALL SANITARY SEWER LATERAL LOCATIONS, AND SHALL PROVIDE THIS INFORMATION TO THE DESIGN ENGINEER FOR PREPARATION OF AS-BUILT DRAWINGS.

3. A MINIMUM VERTICAL SEPARATION OF 18" SHALL BE MAINTAINED BETWEEN ALL WATER AND SEWER CROSSINGS. IF THIS CLEARANCE CANNOT BE MAINTAINED, A CONCRETE ENCASEMENT SHALL BE PROVIDED.

4. ALL SANITARY SEWER IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUNICIPAL SEWER AUTHORITY CONSTRUCTION SPECIFICATIONS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF APPLICABLE STANDARDS AND SPECIFICATIONS AS WELL AS THE REQUIRED METHODS OF CONSTRUCTION. ALL DEVIATIONS FROM THE PLANS MUST BE APPROVED PRIOR TO CONSTRUCTION.

5. 95% STANDARD PROCTOR FILL COMPACTION IS REQUIRED FOR ALL SANITARY SEWER FACILITIES LOCATED IN FILL MATERIAL. TESTING MUST BE IN ACCORDANCE WITH THE APPROPRIATE AASHTO AND ASTM STANDARDS. 6. ALL CLEANOUTS & SANITARY MANHOLES LOCATED WITHIN PAVED AREAS SHALL BE INSTALLED

WITH TRAFFIC BEARING TOPS. 7. A MINIMUM OF 0.1 FEET OF FALL SHALL BE PROVIDED THROUGH ALL SANITARY SEWER

8. ALL SANITARY SEWERS SHALL BE CONSTRUCTED FROM SDR-35 PVC UNLESS OTHERWISE NOTED ON THE PLANS. IN AREAS WHERE COVER EXCEEDS 15 FEET, SDR-21 PVC SHALL BE USED FOR BOTH MAINS AND LATERALS.

1. CONTRACTOR SHALL INSTALL A COMPLETE WATER SYSTEM TO INCLUDE THE SERVICE LATERAL (EXACT LOCATION AND SIZE TO BE DETERMINED BY MEP) IN CONFORMANCE WITH THE SPECIFICATIONS AND DETAILS OF THE MUNICIPAL AUTHORITY. 2. THE CONTRACTOR IS RESPONSIBLE FOR ALL TESTING AND "RECORD DRAWINGS" PER AUTHORITY

3. ALL WATER MAINS SHALL COMPLY WITH THE ELIZABETHTOWN AREA WATER AUTHORITY DESIGN AND CONSTRUCTION MANUAL SPECIFICATIONS UNLESS SPECIFIC WAIVERS HAVE BEEN GRANTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF APPLICABLE STANDARDS AND SPECIFICATIONS AS WELL AS THE REQUIRED METHODS OF CONSTRUCTION. ALL DEVIATIONS FROM THE PLANS MUST BE APPROVED PRIOR TO CONSTRUCTION. 4. 95% FILL COMPACTION IS REQUIRED FOR ALL WATER DISTRIBUTION FACILITIES LOCATED IN FILL

5. THE CONSTRUCTION OF WATER AND SANITARY SEWER LINES SHALL BE IN ACCORDANCE WITH PA DEP REGULATIONS RELATED TO HORIZONTAL AND VERTICAL SEPARATION.

ALL WATER APPURTENANCES SHALL BE SET TO FINISHED GRADE, UNLESS OTHERWISE NOTED. IF A FIRE DEPARTMENT CONNECTION (FDC) IS REQUIRED FOR ANY BUILDING, THE FDC SHALL BE PLACED WITHIN A DISTANCE AS DETERMINED BY LOCAL, STATE AND FEDERAL REGULATIONS, PER NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODE, AS REVISED, IN COORDINATION WITH MUNICIPAL STAFF AND THE LOCAL FIRE DEPARTMENT. THE FIRE HYDRANT LOCATION(S) DEPICTED ON THE PLANS HAVE BEEN PLACED WITH THE BEST AVAILABLE INFORMATION AVAILABLE AT THIS TIME. HOWEVER, RELOCATION OR ADDITIONS OF THE FDC MAY CAUSE THE NEED TO RELOCATE FIRE HYDRANTS.

8. CUT, OR REMOVE ANY TREE, SHRUBBERY, FENCE, STRUCTURE OR OTHER OBSTRUCTION THAT COULD REASONABLY INTERFERE WITH THE EFFICIENT, PROPER, AND SAFE ACCESS AND MAINTENANCE TO THE EASEMENT OR STRUCTURES THAT EXIST AT THE TIME OF THIS PLAN/AGREEMENT APPROVAL, AND EAWA SHALL HAVE NOT OBLIGATION TO CORRECT, REPLACE, REPLANT, RESTORE SUCH MATERIAL OR BE FINANCIALLY RESPONSIBLE FOR SAME.

THE EQUITABLE OWNER WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES TO ENSURE THEY ARE KEPT IN DESIGN CONDITION

THE STORMWATER COLLECTION AND CONVEYANCE SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH DESIGN STANDARDS AND SPECIFICATIONS IN PLACE AT THE TIME OF PLAN APPROVALS. RGS ASSUMES NO RESPONSIBILITY FOR CHANGES IN SPECIFICATIONS THAT MAY OCCUR AFTER PLAN APPROVAL THAT WOULD REQUIRE ALTERNATE MATERIALS OR INSTALLATION REQUIREMENTS. THE CONTRACTOR SHALL VERIFY ALL CURRENT STANDARDS AND NOTIFY THE OWNER/DEVELOPER AND RGS ASSOCIATES OF ANY DISCREPANCIES THAT MAY EXIST PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION OF STORMWATER MANAGEMENT AND EROSION CONTROL FACILITIES SHALL BE IN ACCORDANCE WITH THE MUNICIPALITY AND COUNTY CONSERVATION DISTRICT STANDARDS AND

4. ALL STORMWATER MANAGEMENT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE

MATERIAL SPECIFICATIONS, UNLESS OTHERWISE NOTED. 5. EASEMENT CONFLICTS PROHIBITED: NOTHING SHALL BE PLACED, PLANTED, SET, OR PUT WITHIN THE AREA OF ANY EASEMENT THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT. NO PERSON SHALL PLACE ANY STRUCTURE, FILL, OR VEGETATION INTO A STORM WATER MANAGEMENT FACILITY OR WITHIN A DRAINAGE EASEMENT WHICH WILL LIMIT OR ALTER THE FUNCTIONS OF THE FACILITY OR EASEMENT IN ANY WAY.

THE MUNICIPALITY WILL HAVE THE RIGHT TO ACCESS THROUGH EASEMENTS. WHERE ANY PART OF THE PROPOSED STORM DRAIN SYSTEM IS TO BE CONSTRUCTED WITHIN A FILL SECTION. THE CONTRACTOR SHALL COMPACT ALL SELECT FILL MATERIAL TO 95% OF ASTM D-698 (AASHTO T-99) WITH A MOISTURE CONTENT ± 3% OF OPTIMUM UP TO THE PIPE BEDDING. REFER TO THE "STORMWATER MANAGEMENT CONSTRUCTION SPECIFICATIONS" FOR A

DESCRIPTION OF SELECT FILL MATERIAL. 8. ALL EMBEDMENT MATERIALS USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL FOR SLCPP/HDPEP PIPE SHALL CONFORM TO AASHTO SECTION 30 AND ASTM D-2321 AS PER MANUFACTURER'S INSTALLATION REQUIREMENTS.

STORMDRAIN PIPES SHALL BE ADS (N-12) HDPE PIPE WITH ADS PRO-LINK ULTRA (IN-LINE BELL) PIPE JOINTS (FOR SOIL TIGHT CONNECTIONS) AND/OR ADS PRO-LINK WT (FOR WATER TIGHT CONNECTIONS). REFER TO PLAN AND PROFILES FOR MATERIALS USED.

ALL EMBEDMENT MATERIALS USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL FOR HDPE PIPE SHALL CONFORM TO AASHTO SECTION 30 AND ASTM D-2321 AS PER MANUFACTURER'S

ALL PROPOSED UTILITIES SHALL BE UNDERGROUND, UNLESS OTHERWISE NOTED

CONTRACTOR SHALL COORDINATE UNDERGROUND ELECTRICAL SERVICE. THE EXISTING UTILITIES SHOWN HAVE BEEN DETERMINED AND REFERENCED BASED UPON INFORMATION RECEIVED FROM THE UTILITY COMPANIES, SURVEYORS, VISITS TO THE SITE AND GENERAL BEST INFORMATION. TO THE BEST OF RGS ASSOCIATES' KNOWLEDGE, AT THE TIME OF DESIGN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION BY CALLING THE PENNSYLVANIA ONE CALL SYSTEM 1-800-242-1776 A MINIMUM OF 3 DAYS PRIOR TO EXCAVATING OR WITH CAREFUL EXPLORATORY WORK, AT THE CONTRACTOR'S RISK, PRIOR TO CONSTRUCTION FOR THOSE PRIVATE LINES WHICH ARE NOT ABLE TO BE LOCATED THROUGH THE ONE CALL PROCESS. IT MAY BECOME NECESSARY TO ADJUST THE PROPOSED UTILITY LOCATION IN THE FIELD TO RESOLVE ANY UTILITY CROSSING CONFLICTS WHICH MAY OCCUR. RGS ASSOCIATES SHALL BE NOTIFIED

IMMEDIATELY IF ANY SUCH CONFLICTS ARE ENCOUNTERED. 4. ALL UTILITY ELEVATIONS ARE AT THE INVERT UNLESS OTHERWISE NOTED. **MUNICIPAL SPECIFIC NOTES** 

1. LIGHTING SHALL BE PROVIDED IN CONFORMANCE WITH SECTION 135-298, OF THE MOUNT JOY TOWNSHIP ZONING ORDINANCE AND SECTION 119-52.0 OF THE MOUNT JOY TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. ALL NONRESIDENTIAL SITE LIGHT SOURCES AND RESIDENTIAL LIGHT SOURCES HIGHER THAN 12 FEET, SHALL BE DIRECTED AWAY FROM PUBLIC STREETS AND PRIVATE PROPERTIES. THE LAMPS SHALL BE SHIELDED IN AMANNER SO THAT THEY ARE NOT VISIBLE FROM THE ADJOINING PROPERTY. SENSOR-CONTROLLED LAMPS EXCEEDING 2,000 LUMENS (150-WATTS INCANDESCENT) SHALL HAVE CUTOFF-TYPE LUMINAIRES.

2. THE MUNICIPALITY IS NOT RESPONSIBLE FOR MAINTENANCE OF ANY AREA NOT DEDICATED TO AND ACCEPTED FOR PUBLIC USE, AND NO ALTERATION TO SWALES, OR BASINS, OR PLACEMENT OF STRUCTURES SHALL BE PERMITTED WITHIN EASEMENTS.

LOT PINS AND MONUMENTS SHOWN ON THIS PLAN WHICH HAVE NOT BEEN INDICATED TO BE FOUND SHALL BE SET AT THE FINAL GRADE AS INDICATED ON THIS PLAN BY A PROFESSIONAL REGISTERED SURVEYOR. LOT PINS SHALL BE IRON PINS OR STEEL REBARS AT LEAST 30 INCHES LONG AND NOT LESS THAN 5/8 OF AN INCH IN DIAMETER. MONUMENTS ALONG STREET RIGHT-OF-WAYS SHALL BE CONCRETE OR STONE WITH A FLAT TOP HAVING A MINIMUM WIDTH OR DIAMETER OF FOUR INCHES AND A MINIMUM LENGTH OF 30 INCHES. CONCRETE MONUMENTS SHALL BE MARKED WITH A THREE-FOURTHS-INCH COPPER OR BRASS DOWEL OR DRILL HOLE; STONE MONUMENTS SHALL BE MARKED ON THE TOP WITH A DRILL HOLE 4. THE ACCESS DRIVES SHOWN ON THE PLAN ARE NOT OFFERED FOR DEDICATION TO THE

TOWNSHIP.THE OWNER ASSUMES ALL RESPONSIBILITY FOR ITS MAINTENANCE AND REPAIR. NO STRUCTURES, LANDSCAPING OR GRADING MAY BE CONSTRUCTED, INSTALLED OR PERFORMED WITHIN THE AREA OF THE CLEAR SIGHT TRIANGLE WHICH WOULD OBSCURE THE VISION OF

CONTRACTOR NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS FROM THE MUNICIPALITY RELATIVE TO THE CONSTRUCTION PROPOSED ON THIS PLAN. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF DAMAGED OR DESTROYED EXISTING VEGETATION AND/OR OTHER SITE FEATURES WHICH ARE TO REMAIN. 3. PLAN LOCATION AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE

DIRECTED BY THE OWNER'S REPRESENTATIVE.

PRIOR TO BUILDING STAKEOUT, CONTRACTOR SHALL VERIFY DIMENSIONS SET FORTH ON LATEST ARCHITECTURAL PLANS. THE CONTRACTOR SHALL REVIEW ALL DOOR LOCATIONS AND POINTS-OF-ACCESS TO BUILDINGS SHOWN ON THIS PLAN AND CONFIRM THAT THE DOOR LOCATIONS MATCH THE FINAL ARCHITECTURAL DRAWINGS PRIOR TO THE INSTALLATION OF CURB, SIDEWALK AND HANDICAP RAMPS. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THE SITE PLAN AND ARCHITECTURAL DRAWINGS, RGS ASSOCIATES SHALL BE CONTACTED IMMEDIATELY.

ALL HANDICAP-ACCESSIBLE RAMPS, SIDEWALKS, AND PARKING SPACES MUST MEET ALL APPLICABLE ADA REQUIREMENTS. THE CONTRACTOR SHALL VERIFY ADA COMPLIANCE PRIOR TO PLACEMENT OF PAVING OR CONCRETE 5. ALL CONSTRUCTION TO CONFORM TO THE MUNICIPAL AND PENNDOT STANDARDS AND

SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF APPLICABLE STANDARDS AND SPECIFICATIONS AS WELL AS THE REQUIRED METHODS OF CONSTRUCTION. ALL DEVIATIONS FROM THE PLANS MUST BE APPROVED PRIOR TO CONSTRUCTION 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRENCH BARRICADING,

NEIGHBORING THE PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL MEP PLANS AND PROCEDURES SHALL BE IN ACCORDANCE WITH MUNICIPAL AND/OR PENNDOT STANDARDS. 8. THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD

BEST AVAILABLE RECORDS, AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS SATISFACTION PRIOR TO CONSTRUCTION.

10. DIMENSIONS AND GEOMETRY SHOWN ON THIS PLAN SHALL BE VERIFIED DURING STAKE-OUT CALCULATIONS AND FIELD STAKE-OUT.

11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE DRAINAGE PATTERN AS SHOWN ON ALSO A MINIMUM SLOPE ON ALL UNPAVED AREAS.

MINIMIZE SERVICE INTERRUPTIONS TO EXISTING BUILDINGS. THE CONTRACTOR SHALL NOTIFY ALL POTENTIALLY IMPACTED PROPERTIES PRIOR TO CONSTRUCTION. 13. CROSSWALKS SHALL BE APPLIED ONTO THE FINAL WEARING COURSE AND SHALL BE PAINTED

WITH TYPE I WHITE PAINT CONFORMING TO SECTION 962 OF PENNDOT PUBLICATION 408. 14. THE CONTRACTOR SHALL REFER TO PENNDOT PUBLICATION 111 FOR PAVEMENT MARKINGS AND SIGNAGE STANDARDS, UNLESS OTHERWISE REQUIRED BY THE MUNICIPALITY.

15. ANY PROPOSED SIGNS SHALL CONFORM TO THE REQUIREMENTS OF THE MOUNT JOY TOWNSHIP ZONING ORDINANCE.

ASSOCIATES, INC. MAKES NO GUARANTEE THAT THE EXISTING UTILITIES ARE EXACTLY AS 17. CONTRACTOR SHALL VERIFY THE FINAL EARTHWORK QUANTITIES TO THEIR SATISFACTION PRIOR TO THE COMMENCEMENT OF SITE WORK. RGS MAKES NO GUARANTEE THAT IN-SITU SOILS WILL

BE SUITABLE FOR STRUCTURAL FILL, OR THAT THE EARTHWORK WILL BALANCE. CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE ACTUAL EARTHWORK QUANTITIES ENCOUNTERED DURING CONSTRUCTION. 18. ALL DIMENSIONS IN AREAS OF PROPOSED CURBING ARE FROM FACE OF CURB TO FACE OF CURB

19. IN THE CASE OF DISCREPANCY BETWEEN THE SCALED AND THE FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSION SHALL GOVERN. 20. FAILURE TO SPECIFICALLY IDENTIFY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO

21. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIOUES, SEOUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS. 22. THE CONTRACTOR SHALL ADJUST ALL EXISTING UTILITY APPURTENANCES AS NECESSARY TO

MATCH PROPOSED GRADES, UNLESS OTHERWISE NOTED. 23. CURB AND PAVEMENT SHALL BE INSTALLED IN A MANNER AS TO ENSURE POSITIVE DRAINAGE IN ALL ARFAS.

HORIZONTALLY AND VERTICALLY FROM THE EXISTING TO PROPOSED PAVING SECTIONS. 25. ALL UNSUITABLE MATERIAL WITHIN STRUCTURAL FILL AREAS MUST BE REMOVED AND REPLACED WITH SUITABLE MATERIAL TO A DEPTH AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND/OR THE MUNICIPALITY.

26. GEOTECHNICAL RECOMMENDATIONS PRESENTED IN THE REPORT ENTITLED, "GEOTECHNICAL ENGINEERING REPORT FOR STORMWATER MANAGEMENT, SHEETZ ELIZABETHTOWN SWM", PREPARED BY ECS MID-ATLANTIC, LLC. SHALL BE STRICTLY FOLLOWED. ANY DEVIATION MUST BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.

27. WHERE IT IS NECESSARY TO CONNECT TO, OR EXTEND TO, EXISTING PAVING, SAW CUT THE EXISTING EDGE OF PAVEMENT AND MILL AND OVERLAY AT THE POINT OF TIE-IN TO ENSURE A SMOOTH TRANSITION AND POSITIVE DRAINAGE

ONLY. STRUCTURAL COMPUTATIONS, DESIGN, CONSTRUCTION SPECIFICATIONS, AND APPLICABLE BUILDING PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE LAYOUT AND GRADING OF THE RETAINING WALLS ASSUMES NO STORM RUNOFF OVER THE TOP OF THE WALL. IF SITE CONDITIONS ARE NOT AS ASSUMED, CONTACT THE DESIGN ENGINEER PRIOR TO CONSTRUCTION OF THE RETAINING WALL

THE CONSTRUCTION OF SLOPES EXCEEDING 3:1 FILL OR 2:1 CUT. 30. ALL ITEMS WHICH ARE REFERENCED AND NOT SPECIFICALLY DETAILED SHALL BE SELECTED BY

31. A LICENSED PROFESSIONAL GEOLOGIST/GEOTECHNICAL ENGINEER, RGS ASSOCIATES AND THE MUNICIPALITY SHALL BE CONTACTED UPON THE DISCOVERY OF ANY SINKHOLES OR CARBONATE GEOLOGY FORMATIONS DURING CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITIES. IF A SINKHOLE IS ENCOUNTERED WITHIN OR IMMEDIATELY ADJACENT TO THE PROPOSED STORMWATER MANAGEMENT FACILITIES, PRIOR TO OR DURING CONSTRUCTION, THE SINKHOLE SHOULD BE PROMPTLY REPAIRED UNDER THE DIRECTION OF A QUALIFIED GEOLOGIST OR GEOTECHNICAL ENGINEER.

THE CONTRACTOR SHALL VERIFY THAT THE SUBGRADE IS PREPARED IN ACCORDANCE WITH THE PROJECT'S GEO-TECHNICAL RECOMMENDATIONS.

PRIOR TO PLACEMENT OF PAVEMENTS.

STANDARDS. IT IS ASSUMED THAT THE SUBGRADE, MATERIALS, CONDITIONS AND CONSTRUCTION METHODS ARE IN ACCORDANCE WITH ALL MUNICIPAL AND/OR PENNDOT CONSTRUCTION STANDARDS 35. THE ASPHALT PAVEMENT SECTIONS SHOWN ON THE PLANS MAY-NOT BE DESIGNED FOR CERTAIN LEVELS OF CONSTRUCTION RELATED TRAFFIC/EQUIPMENT. ADDITIONAL DEPTH OF STONE

CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ANALYSIS, MODIFICATIONS AND/OR REPAIRS FOR SUCH CHANGES AND ACTIVITIES. 36. RGS HAS NOT PROVIDED ANY STRUCTURAL DESIGN OF THE PAVEMENT CROSS SECTION OR DETERMINATION OF THE IN-SITU MATERIAL'S SUITABILITY AS A ROAD BASE. SUCH TESTING AND ANALYSIS IS THE CONTRACTOR'S RESPONSIBILITY DURING CONSTRUCTION BEFORE THE

PLACEMENT OF THE PAVING SECTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE

ANY REQUIRED STRUCTURAL TESTING OR CERTIFICATION FOR THE INSTALLED PAVEMENT TO THE

OWNER AND/OR MUNICIPAL REPRESENTATIVE. 37. AT ALL TIMES DURING AND AFTER CONSTRUCTION, THE SUBBASE AND BASE OF THE PAVING SECTION SHALL BE FREE DRAINING. THE CONTRACTOR SHALL INSTALL UNDER DRAINS, IN ACCORDANCE WITH RC-30M, AT ALL LOCATIONS WHERE THE PAVEMENT BASE IS NOT FREE

CURRENT APPROVED PLANS ARE BEING UTILIZED 39. TOPSOIL MUST BE FREE OF LARGE DEBRIS, ROOTS, ROCKS, BRUSH, SOD, FROZEN PARTICLES, OR OTHER FOREIGN OR OBJECTIONABLE MATERIAL THAT WOULD INHIBIT VEGETATIVE SHEETZ SPECIFIC NOTES

**DEMOLITION NOTES** THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND/OR VERIFYING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK HAVE BEEN OBTAINED. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL

EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY

ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF NEW CONSTRUCTION SHALL BE

RAZED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET, ARCHITECTURAL PLANS AND/OR PROJECT SPECIFICATIONS, THIS INCLUDES FOUNDATION SLABS, WALLS, AND FOOTINGS

OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED

WITH THE APPROPRIATE UTILITY COMPANY. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.

UTILITY CONTACTS ARE LISTED ON THE SHEET LD-2, EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE

10. ASBESTOS OR HAZARDOUS MATERIALS. IF FOUND ON SITE. SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY SHEETZ IMMEDIATELY IF HAZARDOUS MATERIALS ARE

DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER 12. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL, AND OSHA REGULATIONS WHEN OPERATING

1926.652 OR COMPARABLE OSHA APPROVED STATE PLAN REQUIREMENTS FOR TRENCHING AND EXCAVATION. **GRADING NOTES** ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY RGS ASSOCIATES, INC., THE

THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS AND POLICIES GOVERNING SAFETY AND HEALTH THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE. IF DISCREPANCIES BETWEEN FIELD CONDITIONS AND DESIGN PLANS ARE

DISCOVERED, CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER IMMEDIATELY BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PA ONE CALL AT 1-800-242-1776. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.

ALL EXISTING TREES, VEGETATION, PAVEMENTS, CONCRETE FOUNDATIONS, STRUCTURES AND ORGANIC TOPSOIL SHALL BE STRIPPED AND REMOVED FROM NEW CONSTRUCTION AREAS UNLESS NOTED OTHERWISE. ALL SLOPES SHALL BE 2:1 (HORIZONTAL: VERTICAL) MAXIMUM UNLESS NOTED OTHERWISE. ALL SLOPES 3:1 OR GREATER SHALL BE PERMANENTLY STABILIZED WITH VEGETATION.

TO THE OWNER UPON COMPLETION OF THE PROJECT. API AREAS NOT PAVED SHALL BE TOP SOILED, SEEDED, SODDED, MULCHED AND/OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT PREPARED BY ECS MID-ATLANTIC, LLC PRIOR TO

INITIATION OF ANY EARTHWORK ACTIVITY. 10. ALL ELEVATIONS SHOWN ARE REFERENCED TO BENCHMARKS ON THE PROJECT SURVEY AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AT GROUNDBREAKING.

AND UTILITY CONNECTION POINTS. 13. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. 14. CONTRACTOR SHALL ALSO COMPLY WITH 29 CFR 1926.651 & 1926.652 OR COMPARABLE OSHA APPROVED

STATE PLAN REQUIREMENTS FOR TRENCHING AND EXCAVATION. LAYOUT NOTES CONTRACTOR SHALL REFER TO THE SHEETZ ARCHITECTURAL PLANS FOR THE EXACT LOCATION OF UTILITY ENTRANCES, BUILDING DIMENSIONS, ROOF LEADERS, EXIT DOORS, EXIT RAMPS AND PORCHES.

ALL DIMENSIONS ARE TO BUILDING FACE, FACE OF CURB, OR EDGE OF SIDEWALK UNLESS NOTED OTHERWISE. ALL ANSLES ARE 90 DEGREES UNLESS OTHERWISE NOTED. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS FOR THE INSTALLATION OF TRAFFIC SIGNAGE AND

CONTRACTOR SHALL COORDINATE FINAL LOCATION OF THE SHEETZ MAIN FREESTANDING SIGN WITH THE SHEETZ CONSTRUCTION MANAGER CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT

ALL DIMENSIONS SHOWN ON THIS PLAN SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY SHEETZ REPRESENTATIVE AND DESIGN ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLAN AND FIELD CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS AT THE PROJECT SITE.

SEE DETAIL SHEETS FOR ADDITIONAL CONSTRUCTION INFORMATION. ). CONTRACTOR SHALL NEATLY SAW-CUT ALL JOINTS WHERE THE PROPOSED CONSTRUCTION MEET EXISTING PAVEMENT AND CONCRETE.

ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY RGS ASSOCIATES, INC., THE CURRENT REQUIREMENTS OF MOUNT JOY TOWNSHIP. THE APPLICABLE SECTIONS OF THE PENNDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.

AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PA ONE CALL AT 1-800-242-1776. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES. CONTRACTOR SHALL COORDINATE FUEL ISLAND CANOPY DRAINS CONNECTION TO THE MAIN COLLECTOR PIPE

WITH THE SHEETZ CONSTRUCTION MANAGER AND PROVIDE ALL NECESSARY FITTINGS TO MAKE THE CONNECTION TO THE MAIN COLLECTOR PIPE. CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER PIPE, MANHOLES, AND INLETS TO THE

SHEETZ CONSTRUCTION MANAGER FOR APPROVAL AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.

ALL STORM PIPE SHALL BE AS SPECIFIED. ALL JOINTS SHALL BE WATERTIGHT. ALL STORM STRUCTURES DIRECTLY DOWN GRADIENT OF THE FUEL PUMP PAD OR UNDERGROUND STORAGE TANKS SHALL HAVE A SUMP AND BMP FEATURE (FOR EXAMPLE 'SNOUT') INSTALLED ON THE OUTFLOW PIPE. 10. CONTRACTOR SHALL ALSO COMPLY WITH 29 CFR 1926.651 & 1926.652 OR COMPARABLE OSHA APPROVED

ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY RGS ASSOCIATES, INC., THE CURRENT REQUIREMENTS OF MOUNT JOY TOWNSHIP, THE APPLICABLE SECTIONS OF THE PENNDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS,

PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE

PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES

AND UNDERGROUND STRUCTURES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF ALL PROPOSED UTILITY CONSTRUCTION UNLESS OTHERWISE

COORDINATED BEFOREHAND WITH SHEETZ. CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY ON THE ADDITION, REMOVAL AND/OR RELOCATION OF UTILITIES AND UTILITY POLES AND THE EXTENSION OF ALL PROPOSED UTILITIES TO

ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT. AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED

11. CONDUIT LOCATIONS TO FREESTANDING SIGNS AND SITE LIGHT POLES TO BE COORDINATED WITH SHEETZ CONSTRUCTION MANAGER. 12. CONTRACTOR SHALL COORDINATE AND VERIFY WITH SHEETZ CONSTRUCTION MANAGER ON LOCATION AND SIZE OF THE STORE GREASE TRAP. GREASE TRAP SHALL BE PROVIDED WITH "T" PIPE IN OUTFLOW CHAMBER.

ALL SANITARY SEWER PIPE SHALL RE SDR-35 PVC LINLESS OTHERWISE NOTED. 13. CONTRACTOR SHALL COORDINATE WITH SHEETZ CONSTRUCTION MANAGER AND SHEETZ IT DEPARTMENT ON THE CONDUIT ROUTE TO STORE FOR TELE/COMMUNICATION SERVICES. 14. CONTRACTOR SHALL ALSO COMPLY WITH 29 CFR 1926.651 & 1926.652 OR COMPARABLE OSHA APPROVED

STATE PLAN REQUIREMENTS FOR TRENCHING AND EXCAVATION. 15. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT **CONSTRUCTION SEQUENCE** 

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING

EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING

CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. ANY DEVIATION FROM THE FOLLOWING SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL COUNTY CONSERVATION DISTRICT.

AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE OF THE LOCAL COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.

ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

 ALL STAGES OF CONSTRUCTION IDENTIFIED IN BOLD TEXT DENOTE A CRITICAL STAGE OF IMPLEMENTATION OF THE POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN FOR WHICH A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON THE PROJECT SITE.

1. FIELD LOCATE THE PROPOSED LIMITS OF DISTURBANCE AND MARK THESE LIMITS WITH ORANGE CONSTRUCTION FENCE, CONSTRUCTION STAKES, OR EQUIVALENT.

2.PLACE THE ROCK CONSTRUCTION ENTRANCE AND WASH RACK AT THE LOCATION SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE DETAILS.

GRUB AND/OR STRIP TOPSOIL TO INSTALL FILTER SOCK OR SILT FENCE. 3.1 IF CONCENTRATED FLOW AREAS FORM, REPLACE THE FILTER SOCK IN THE CONCENTRATED FLOW AREA WITH A ROCK FILTER OUTLET. REMOVE SEDIMENT FROM THE FILTER SOCK

ONCE PERIMETER EROSION AND SEDIMENT CONTROLS ARE INSTALLED, THE CONTRACTOR MAY BEGIN DEMOLITION AND BUILDING, CANOPY, AND UNDERGROUND FUEL STORAGE TANKS CONSTRUCTION CONCURRENTLY OR IN PREFERRED ORDER, AS NEEDED. STEPS IN

4.BEGIN DEMOLITION EXPECT FOR STORM DRAIN ASSOCIATED WITH PERIMETER DRAINAGE.

4.1 ALL DEMOLITION SHALL FOLLOW ALL APPLICABLE STATE LAWS AND NOTES RELATED TO THE DISPOSAL AND RECYCLING OF THE CONSTRUCTION\DEMOLITION WASTE.

6.BEGIN BUILDING AND CANOPY FOOTER INSTALLATION AND VERTICAL CONSTRUCTION, ALONG WITH THE UNDERGROUND FUEL STORAGE TANKS.

7.INSTALL THE BYPASS STORM DRAIN LINE FROM INLET A-15 TO MH-A1. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED

SHOWN ON THE PLANS. 8.1 CONTRACTOR SHALL MARK THE LIMITS OF THE PROPOSED STORMWATER MANAGEMENT

PROPOSED BOTTOM ELEVATION. 9.INSTALL THE STORM DRAIN FROM MH-A4 TO OS-A5 AND CONSTRUCT THE UNDERGROUND

9.1 CONTRACTOR SHALL REFER TO THE PCSM PLANS FOR ALL CRITICAL STAGES OF CONSTRUCTION THAT REQUIRE OVERSIGHT BY A LICENSED PROFESSIONAL FOR

9.2 CONTRACTOR SHALL CONTACT THE LICENSED PROFESSIONAL (RGS) A MIN OF FIVE (5) DAYS PRIOR TO THE COMMENCEMENT OF THE CONSTRUCTION OF

9.3 CRITICAL STAGES ON CONSTRUCTION WHICH REQUIRE PROFESSIONAL

REVIEW OF MATERIAL COMPONENTS PRIOR TO CONSTRUCTION (MINIMUM 7 DAYS PRIOR TO CONSTRUCTION SUBMITTED TO RGS BY

**VERIFICATION OF LIMITING STONE** VERIFICATION OF FREE DRAINING, UNCOMPACTED, SEDIMENT FREE

PLACEMENT OF STONE BEDDING FINAL INSPECTION OF OUTLET STRUCTURE AND REMAINING APPURTENANCES

CONTRACTOR SHALL PROVIDE BLOCKING AT MH-A12 TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING BMP-001.

12.1 CONTRACTOR TO ENSURE THAT UPLAND DRAINAGE IS APPROPRIATELY CONVEYED AND THAT STORMWATER RUNOFF IS PREVENTED FROM FLOWING OVER THE RETAINING WALLS

14. PLACE BITUMINOUS BINDER COURSE ON ALL PAVED AREAS. DO NOT PLACE FINAL WEARING

15. ONCE FINAL GRADES ARE ESTABLISHED, SPREAD TOPSOIL OVER THE DISTURBED AREA AND

15.1 PRIOR TO SOWING PERMANENT SEEDING, THE AREA SHALL BE FREE OF ALL VEGETATION (INVASIVE OR NATIVE PLANT MATERIAL) THAT 1.) MAY HAVE BECOME ESTABLISHED DURING CONSTRUCTION, 2.) WAS NOT INTENDED AS PART OF THE DESIGN, AND 3.) IS NOT IDENTIFIED ON THE APPROVED PLAN. CONTRACTOR TO SCARIFYING THE AREA TO ACHIEVE A SUITABLE CONDITION TO ENSURE GERMINATION OF THE SEED.

17.1 CONTRACTOR SHALL PROVIDE A ROCK FILTER, OR SIMILAR TO PROTECT THE DOWNSTREAM

17.2 CONTRACTOR SHALL ENSURE THAT THE RIP-RAP APRONS AT ALL DISCHARGE POINTS ARE CLEAN AND FREE OF DEBRIS AND ACCUMULATED SEDIMENT. THE STONE SHALL BE

17.3 REMOVE TEMPORARY BLOCKING AT MH-A12.

18. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO THE REMOVAL/CONVERSION OF THE

19. REPAIR/STABILIZE ANY AREAS WHICH DO NOT HAVE A UNIFORM VEGETATIVE COVER AND MAY HAVE BEEN DISTURBED DURING THE FACILITY CONVERSION.

20. PLACE BITUMINOUS WEARING COURSE ON ALL PAVED AREAS.

21. ANY REMAINING E&S CONTROLS ON-SITE SHALL BE REMOVED AND ALL AREAS DISTURBED DURING SUCH ACTIVITIES SHALL BE PERMANENTLY STABILIZED.

22. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL SUBMIT A NOTICE OF TERMINATION TO THE LOCAL COUNTY CONSERVATION DISTRICT FOR THE NPDES PERMIT

**GEOTECHNICAL NOTES** 

IF REDOXIMORPHIC FEATURES (SOIL MOTTLING AND COLORATION PATTERNS FORMED BY THE REDUCTION OF IRON AND/OR MANGANESE FROM SATURATED CONDITIONS IN THE SOIL) ARE FNCOUNTERED

1.1. A QUALIFIED PROFESSIONAL SHOULD DETERMINE IF THE FEATURES OBSERVED ARE ASSOCIATED WITH A HISTORIC CONDITION (ASSOCIATED WITH FILL, PREVIOUS SITE

1.2. EVALUATE THE ELEVATION OF THE FEATURES RELATIVE TO THE PROPOSED DESIGN ELEVATION OF THE SWM FEATURE AND DETERMINE IF THE SIZE AND ELEVATION OF THE SWM FEATURE CAN BE ADJUSTED TO ALLEVIATE THE CONFLICT. 1.3. RETAIN ECS AND CIVIL ENGINEER TO EVALUATE ALTERNATE DESIGN CONCEPTS. ALTERNATE

2. IF THE FIELD VERIFIED INFILTRATION RATES ARE EXCESSIVELY HIGH (GREATER THAN 6 INCHES PER HOUR) AND CATION EXCHANGE CAPACITY IS KNOWN:

2.1. DETERMINE THE EXTENT OF THE MATERIALS EXHIBITING THE HIGH INFILTRATION RATES THROUGH A COMBINATION OF VISUAL-MANUAL CLASSIFICATION, HAND PROBING, DENSITY TESTING, OR OTHER SUITABLE METHODS AS DETERMINED BY ECS. 2.2. OVEREXCAVATE THE MATERIALS TO THE DEPTH WHERE THE MATERIAL TYPE CHANGES OR A

SURFACE SHOULD BE EXAMINED BY ECS, PRIOR TO REPLACEMENT OF SUITABLE MATERIAL. 2.4. REPLACE THE EXCAVATED MATERIAL WITH FINER GRAINED MATERIALS APPROVED BY ECS. SUITABLE SOIL MIXTURES CAN CONSIST OF A BLEND OF ON-SITE AND/OR OFF-SITE MATERIALS AVAILABLE TO THE CONTRACTOR GENERALLY CONFORMING TO THE TABLE

BELOW, WITH FIELD INFILTRATION RATES POST PLACEMENT DETERMINED AND APPROVED BY

2.5. MATERIALS SHOULD BE LIGHTLY TRACKED INTO PLACE IN NON-STRUCTURAL AREAS 2.6. IF MATERIAL REPLACEMENT IS REQUIRED IN STRUCTURAL AREAS (EX: BELOW-GRADE SWM FACILITIES IN PAVED AREAS), MATERIAL PLACEMENT SPECIFICATIONS, INCLUDING MATERIALS TYPE, MIX RATIO, COMPACTIVE EFFORT AND REQUIRED DENSITY SHOULD BE DETERMINED BY ECS. TECHNICAL RECOMMENDATIONS SHOULD BE SEALED BY ECS AND SUBMITTED TO THE TOWNSHIP FOR APPROVAL.

3. IF THE FIELD VERIFIED INFILTRATION RATES ARE EXCESSIVELY LOW (LESS THAN 0.1 IN/HR): 3.1. DETERMINE THE EXTENT OF THE MATERIALS EXHIBITING THE LOW INFILTRATION RATES THROUGH A COMBINATION OF VISUAL-MANUAL CLASSIFICATION, HAND PROBING, DENSITY TESTING, OR OTHER SUITABLE METHODS AS DETERMINED BY THE ECS.

OVEREXCAVATE THE MATERIALS TO THE DEPTH WHERE THE MATERIAL TYPE CHANGES OR A MAXIMUM DEPTH OF 2 FEET, WHICHEVER IS ENCOUNTERED FIRST FEET BELOW THE BOTTOM OF BASIN AND SHOULD BE EXAMINED BY ECS, PRIOR TO

MATERIALS AVAILABLE TO THE CONTRACTOR, AND SUBJECT TO TESTING AND APPROVAL OF 3.5. SUITABLE SOIL MIXTURES MAY CONSIST OF MATERIALS BLENDED BY VOLUME RATIOS AS

MATERIALS SHOULD BE LIGHTLY TRACKED INTO PLACE IN NON-STRUCTURAL AREAS.

DETERMINED BY ECS.

IMPORTANT THAT CONSTRUCTION EQUIPMENT DOES NOT TRAFFIC ON THE MATERIALS AT THE INFILTRATION BED ELEVATION, AND THAT HAND PROBING ON AN APPROXIMATELY 25 FOOT GRID OR ISOLATED TEST PITS BE PROVIDED TO EVALUATE PROPER OFFSET DISTANCES FROM BEDROCK WE RECOMMEND SWM FACILITIES BE LOCATED A MINIMUM OF 25 FEET FROM ADJACENT BUILDINGS,

NEGATIVELY IMPACT THE FUNCTIONALITY OF THE STORMWATER FACILITIES. BUT WATER INFILTRATION AND A REDUCED BUFFER MAY NEGATIVELY AFFECT THE BEARING CAPACITY OF

INCHES IS PROVIDED TO THE LIMITING ZONE IN ACCORDANCE WITH APPENDIX C OF THE PA DEP STORMWATER BEST MANAGEMENT PRACTICES MANUAL. CONTRACTOR SHALL REMEDIATE THE MANTLE BELOW THE FACILITY IN ACCORDANCE WITH THE

a.UNDER THE DIRECTION OF THE PROJECT GEO-TECHNICAL ENGINEER, THE CONTRACTOR SHALL OVER EXCAVATE THE BOTTOM OF THE FACILITY AN ADDITIONAL 24 INCHES. b. THE CONTRACTOR SHALL REMOVE ANY BEDROCK ENCOUNTERED WITHIN THE 24 INCHES. c. UNDER THE SUPERVISION AND DIRECTION OF THE PROJECT GEO-TECHNICAL ENGINEER, THE CONTRACTOR SHALL CONSTRUCT A SOIL MANTLE BETWEEN THE REMAINING BEDROCK AND

DEPTH OF 24 INCHES. 3. THE COMPOSITION, COMPACTION AND MATERIAL SPECIFICATIONS SHALL BE IN ACCORDANCE

**GRADING NOTES** 1. THE FINISHED FLOOR ELEVATIONS (FFE) SHOWN ON THE PLAN REPRESENT THE ELEVATION OF THE FIRST FLOOR INSIDE THE BUILDING. 2. THE CONTRACTOR AND/OR BUILDER SHALL CONFIRM ALL ELEVATION RELATIONSHIPS PRIOR TO

WITH THE RECOMMENDATIONS OF THE PROJECT GEO-TECHNICAL ENGINEER.

YEAR WATER SURFACE ELEVATION OF ANY ADJACENT STORMWATER FACILITY. WETLAND NOTES

(WETLAND 1) IN THE NORTHEASTERN CORNER OF THE PROJECT SITE.

1. A HIGHWAY OCCUPANCY PERMIT IS REQUIRED PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1945 (P.L. 1242, NO. 428), KNOWN AS THE "STATE HIGHWAY LAW", BEFORE STREET OR DRIVEWAY ACCESS TO A STATE HIGHWAY IS PERMITTED. ACCESS TO THE STATE HIGHWAY SHALL ONLY BE AS AUTHORIZED BY A HIGHWAY OCCUPANCY PERMIT, AND THE PLANNING COMMISSION'S

APPROVAL OF THIS PLAN IN NO WAY IMPLIES THAT SUCH PERMIT CAN BE ACQUIRED. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ENSURING THAT DEEDS TO LOTS WHICH CONTAIN CLEAR SIGHT TRIANGLES AND LINE OF SIGHT EASEMENTS SHALL PROVIDE THAT NO STRUCTURE. PLANTINGS, OR GRADING SHALL BE ERECTED, INSTALLED, OR PERFORMED WITHIN THE AREA OF

THE CLEAR SIGHT TRIANGLE WHICH WILL OBSCURE THE VISION OF MOTORISTS. 3. DESIGN AND PLACEMENT OF TRAFFIC SIGNS SHALL FOLLOW THE REQUIREMENTS SPECIFIED IN PADOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS, AND PADOT PUBLICATION 201, ENGINEERING AND TRAFFIC STUDIES.

PROJECT NO. CHRIS VENARCHIO SHEET NO SW-19 of 32

 AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR

3. PLACE FILTER SOCK AND INLET PROTECTION AT THE LOCATIONS SHOWN ON THE PLANS. DO NOT

WHEN ACCUMULATION REACHES THE MANUFACTURER'S SPECIFICATIONS FOR

SEQUENCE MAY VARY BASED ON CONDITIONS IN THE FIELD. CONTRACTOR SHALL MAINTAIN CURRENT DRAINAGE PATTERNS.

5.PAD GRADE THE AREA OF THE PROPOSED BUILDING, CANOPY AND UNDERGROUND FUEL STORAGE

8.MASS GRADE THE REMAINING PORTIONS OF THE SITE TO THE PROPOSED GRADES\SUB-GRADES

FACILITY AND RESTRICT HEAVY EQUIPMENT OVER THIS AREA WITHIN TWO (2) FEET OF THE

STORMWATER MANAGEMENT FACILITY BMP-001.

FIELD MEASUREMENT OF THE BOTTOM OF EXCAVATED FACILITY

10. INSTALL REMAINING UTILITIES INCLUDING STORM DRAIN. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.

10.1 INSTALL WATER QUALITY INSERTS AT THE LOCATIONS SHOWN ON THE PLANS

11. INSTALL CONCRETE CURBING AT THE LOCATIONS SHOWN ON THE PLAN. 12. INSTALL RETAINING WALLS IN THE LOCATIONS IDENTIFIED ON THE PLANS AND COMPLETE DETAILED GRADING IN THE AREA ADJACENT TO THE WALLS AND BUILDINGS.

13. PLACE STONE BASE MATERIAL IN THE AREAS OF PAVING AS SOON AS PRACTICAL TO ENSURE THAT THE SITE IS IN A STABLE CONDITION AND MINIMIZE THE POTENTIAL FOR ACCELERATED

IMMEDIATELY SEED AND MULCH WITH PERMANENT VEGETATIVE STABILIZATION.

15.2 THE SEED SHALL BE PLACED ONLY DURING SEED GERMINATION PERIODS AND IN ACCORDANCE WITH ANY AND ALL APPLICABLE MANUFACTURER SPECIFICATIONS. 16. COMPLETE ANY REMAINING LANDSCAPING AS SHOWN ON THE APPROVED PLANS.

SEDIMENT HAS BEEN REMOVED FROM THE STORMWATER CONVEYANCE SYSTEMS.

17. CONTRACTOR TO CLEAN AND FLUSH ALL STORM DRAINS LINES TO ENSURE THAT ACCUMULATED

ESTABLISHMENT AND GROWTH TO MEET THE PROJECT REQUIREMENTS. TOPSOIL MUST BE SUITABLE TO SUPPORT A DENSE AND DIVERSE VEGETATIVE COVER, AS DIRECTED BY THE OWNER

OR LANDSCAPE ARCHITECT.

COVERING, SHEETING AND SHORING, IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. MAINTENANCE AND PROTECTION OF TRAFFIC ON EXISTING ROADS

CONDITIONS SHALL BE REPORTED TO RGS ASSOCIATES, INC. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES, ROADS, DRIVEWAYS, AND STRUCTURES SHOWN ARE FROM THE

THESE PLANS, AND FOR MAINTAINING POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND 12. CONTRACTOR SHALL SEQUENCE THE RELOCATION OF TELECOMM/ELECTRIC SERVICES TO

16. CONTRACTOR SHALL TEST PIT ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. RGS

COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO PERFORM

24. FIELD ADJUSTMENTS SHALL BE MADE AS NECESSARY TO PROVIDE A SMOOTH TRANSITION BOTH

28. MODULAR BLOCK RETAINING WALLS SHOWN ON THESE PLANS ARE FOR ILLUSTRATIVE PURPOSES

29. A GEOTECHNICAL ENGINEER OR OTHER TECHNICAL PROFESSIONAL SHALL BE PRESENT DURING THE OWNER OR OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL VERIFY SUBSURFACE CONDITIONS TO HIS SATISFACTION PRIOR TO PLACEMENT OF CONCRETE OR ASPHALT, RGS ASSOCIATES MAKES NO GUARANTEE, WRITTEN OR IMPLIED, THAT THE SUBGRADE IS SUITABLE FOR DEVELOPMENT. RGS ASSOCIATES RECOMMENDS THAT ALL SUBGRADES BE INSPECTED BY A LICENSED PROFESSIONAL GEO-TECHNICAL ENGINEER 34. THE ASPHALT PAVEMENT SECTIONS SHOWN ON THE PLANS MEET OR EXCEED THE MUNICIPAL

AND/OR ASPHALT BASE MAY BE REQUIRED TO SUPPORT CONSTRUCTION ACTIVITIES. THE

DRAINING OR SUSCEPTIBLE TO FREEZE/THAW DAMAGE. WATER SHALL NOT BE IMPOUNDED ADJACENT TO PAVEMENT 38. THE CONTRACTOR MAY NOT BEGIN CONSTRUCTION UNTIL ALL REQUIRED PERMITS HAVE BEEN ISSUED BY THE CONSERVATION DISTRICT OR PA DEP. IT IS THE CONTRACTORS' RESPONSIBILITY TO VERIFY WITH RGS ASSOCIATES, PRIOR TO BEGINNING CONSTRUCTION, THAT THE MOST

INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.

ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED

INSTALLED PRIOR TO INITIATION OF DEMOLITION ACTIVITIES. REFER TO THE E&S PLAN FOR DETAILS.

L. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS, AND BENCHMARKS DEMOLITION EQUIPMENT AROUND UTILITIES. CONTRACTOR SHALL ALSO COMPLY WITH 29 CFR 1926.651 &

CURRENT REQUIREMENTS OF MOUNT JOY TOWNSHIP, THE APPLICABLE SECTIONS OF THE PENNDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.

AN AS-BUILT DRAWING OF NEW UTILITY SERVICES MUST BE PREPARED BY THE CONTRACTOR AND SUBMITTED

11. ALL SPOT ELEVATIONS ARE REFERENCED TO THE FINISHED GROUND SURFACE UNLESS NOTED OTHERWISE. 12. CONTRACTOR SHALL REFERENCE DETAILED BUILDING PLANS FOR EXACT BUILDING DIMENSIONS, ELEVATIONS,

PAVEMENT MARKINGS AS SHOWN ON THE CONSTRUCTION PLANS. ALL NON-LANDSCAPED ISLANDS SHALL BE PAINTED WITH STRIPES 4" WIDE, AT 45° AND 2 FEET O.C, ALL STRIPING SHALL BE 4" WIDE UNLESS NOTED OTHERWISE.

STORMWATER MANAGEMENT NOTES

BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER

STATE PLAN REQUIREMENTS FOR TRENCHING AND EXCAVATION. 11. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. UTILITY NOTES

BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PA ONE CALL AT 1-800-242-1776. THE LOCATION OF ALL

TO THE OWNER UPON COMPLETION OF THE PROJECT. ). UTILITY COMPANIES AND CONTACTS ARE LISTED ON SHEET LD-2.

FLUSHED OR REPLACED AS NECESSARY.

CONDITION, OR NATURAL COLORATION) OR ARE ASSOCIATED WITH CONDITIONS THAT COULD PRESENTLY OCCUR (SEASONAL VARIATIONS IN THE WATER TABLE).

DESIGNS PROPOSED BY THE PROFESSIONAL SHOULD BE SEALED AND SUBMITTED TO THE

MAXIMUM DEPTH OF 2 FEET, WHICHEVER IS ENCOUNTERED FIRST. 2.3. IF EXCESSIVE RATES ARE ASSOCIATED WITH WEATHERED OR BROKEN ROCK, THE ROCK

3.3. IF BEDROCK IS ENCOUNTERED, THE ROCK SHOULD BE REMOVED TO A MINIMUM DEPTH OF 2 REPLACEMENT OF SUITABLE MATERIAL.

REPLACE THE EXCAVATED MATERIAL WITH MORE COARSELY GRAINED MATERIALS APPROVED

BY ECS. SUITABLE SOIL MIXTURES CAN CONSIST OF A BLEND OF ON-SITE AND/OR OFF-SITE

4. CONSTRUCTION RECOMMENDATIONS IT IS RECOMMENDED THAT VERIFICATION OF THE SUBGRADE CONDITIONS AT THE TIME OF CONSTRUCTION BE CONDUCTED BY AN AUTHORIZED ECS REPRESENTATIVE. DURING EXCAVATION OF THE BASIN, THE MATERIALS AT THE BOTTOM OF BASIN SHOULD BE VERIFIED TO BE CONSISTENT WITH THOSE ENCOUNTERED IN THE EXPLORATION. PROPER PERFORMANCE OF INFILTRATION FACILITIES WILL BE INFLUENCED BY THE VARIABILITY IN THE SUBSURFACE. IT WILL BE

LIMITING ZONES. TAKEN FROM EDGE OF SWM FACILITY TO OUTSIDE OF FOOTING. THE ALLOWABLE BUFFER DISTANCE IS HIGHLY DEPENDENT ON SITE CONSTRAINTS INCLUDING BUT NOT LIMITED TO, FOUNDATION TYPE. SUBGRADE SOILS, GEOLOGY, STRUCTURAL LOADING, FOUNDATION BEARING ELEVATION, INVERT ELEVATION, AND GROUNDWATER. IF SITE CONSTRAINTS PROHIBIT THIS RECOMMENDATION, THE FACILITY MAY BE LOCATED CLOSER TO A BUILDING SUBJECT TO THE REVIEW AND APPROVAL OF ECS. IT IS IMPORTANT TO NOTE THAT THE CLOSE PROXIMITY OF BUILDINGS WILL GENERALLY NOT

3. <u>LIMITING ZONE REMEDIATION NOTES</u>
1. THE CONTRACTOR SHALL PROBE THE VIRGIN SOIL BENEATH THE EXCAVATED BOTTOM OF EACH OF THE SUB-SURFACE STORMWATER MANAGEMENT FACILITIES TO VERIFY THAT A MINIMUM OF 24 2. IF A DEPTH OF 24 INCHES TO THE EXISTING BEDROCK IS NOT NATURALLY POSSIBLE, THE

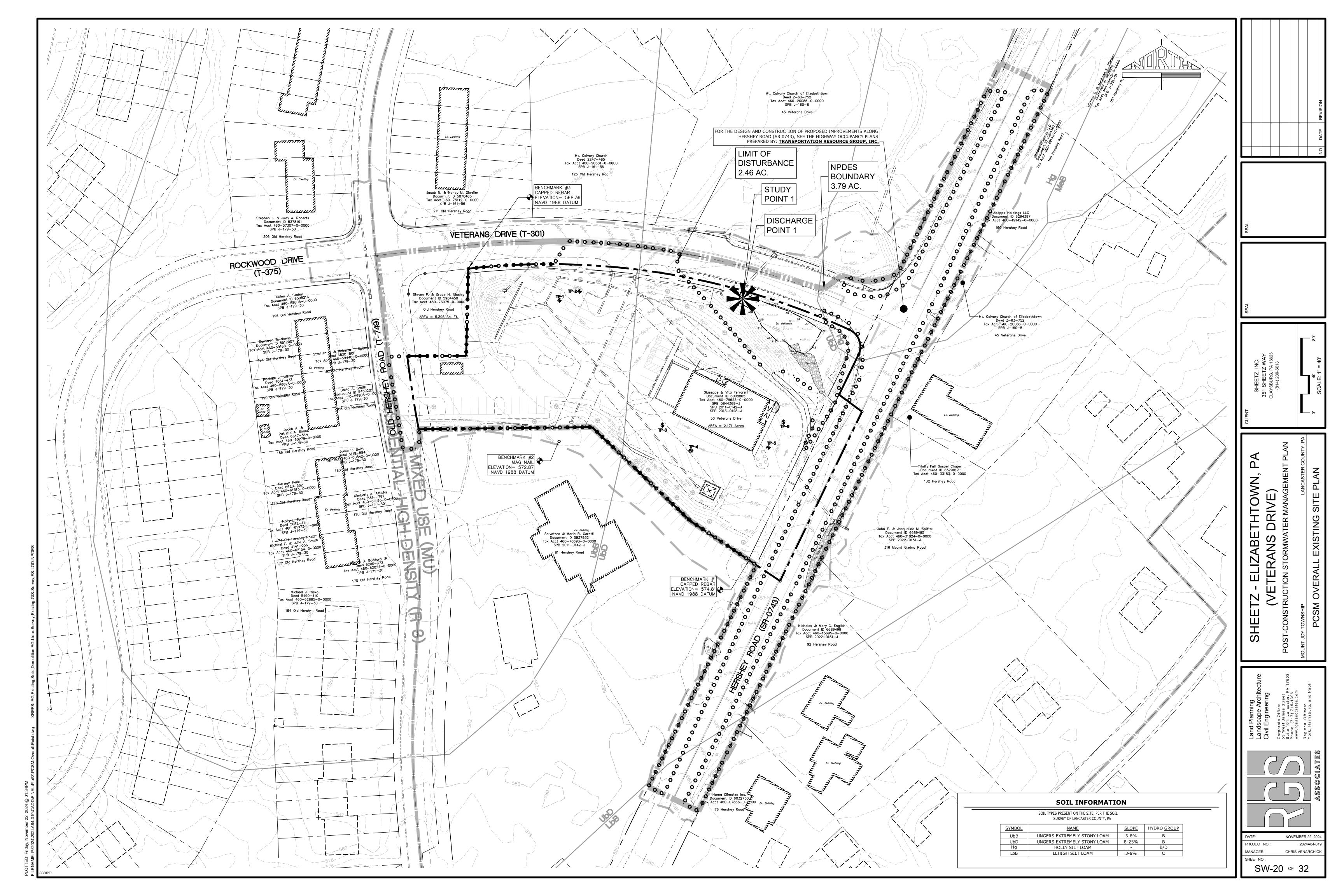
THE BOTTOM OF THE PROPOSED SUB-SURFACE STORMWATER MANAGEMENT FACILITY TO A

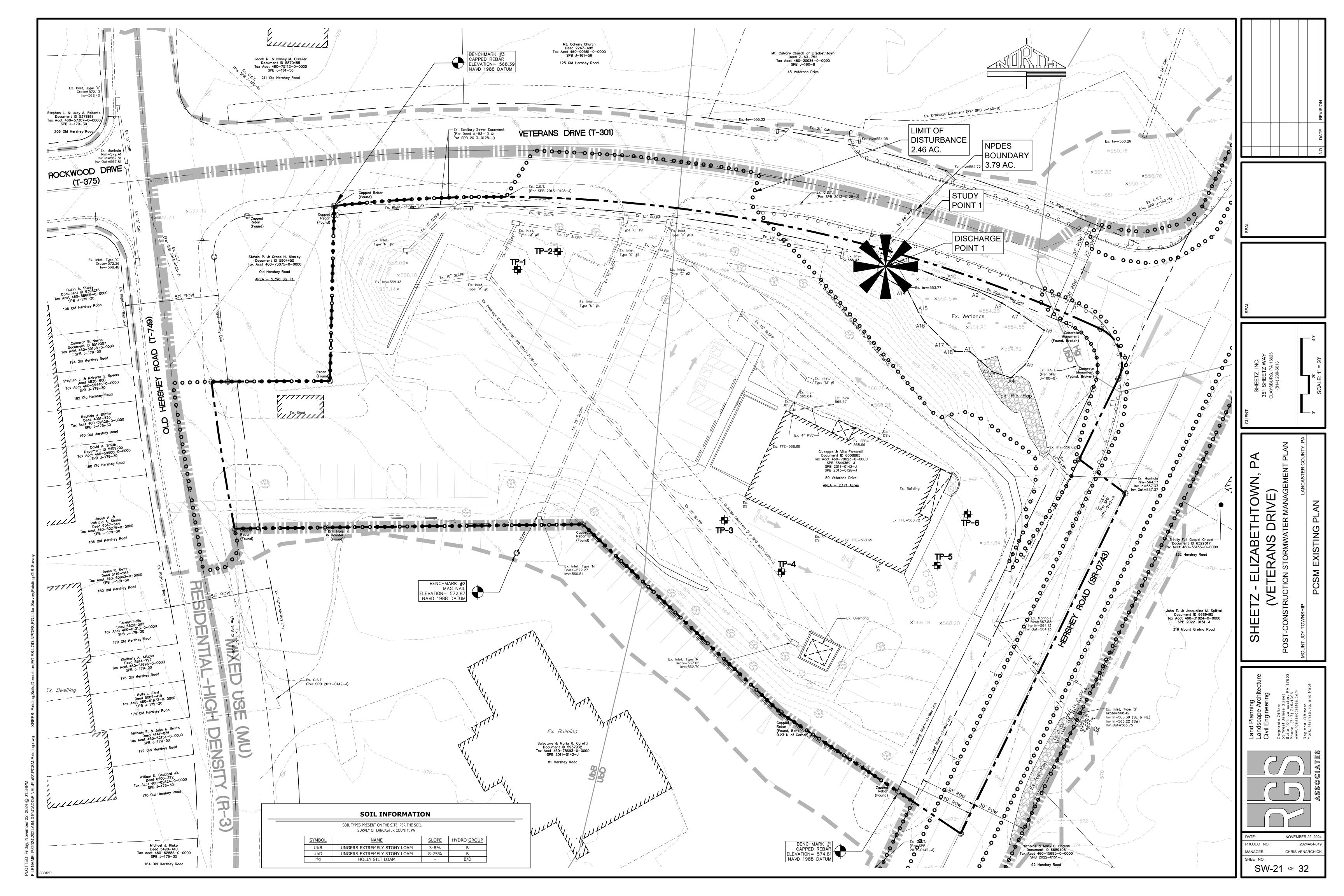
CONSTRUCTION. ANY DISCREPANCIES SHALL BE SUBMITTED TO RGS ASSOCIATES IMMEDIATELY. 3. ALL FINISHED FLOOR ELEVATIONS MUST BE SET A MINIMUM OF TWO (2) FEET ABOVE THE 100

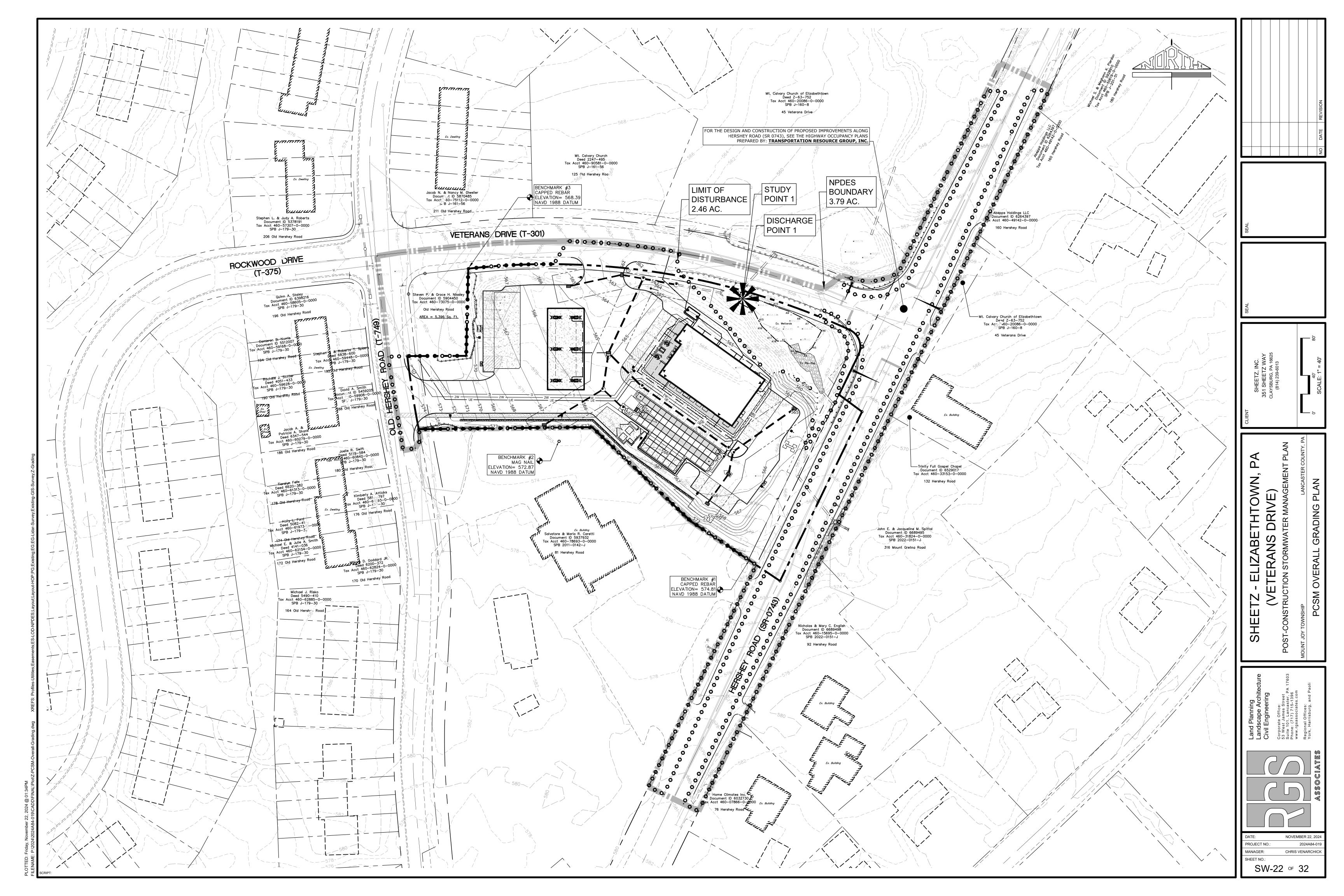
1. WETLANDS DELINEATED ON THE PLANS SHALL BE KEPT FREE OF STRUCTURES, FILL AND OTHER ENCROACHMENTS. NO DISTURBANCE SHALL OCCUR WITHIN THE BOUNDARY OF THE WETLANDS. 2. IN JUNE OF 2024 A PRELIMINARY WETLANDS INVESTIGATION WAS COMPLETED TO DETERMINE THE EXTENT OF WETLANDS PRESENT ON THE SITE WAS CONDUCTED BY VORTEX ENVIRONMENTAL, INC. THERE IS ONE (1) "WATERS OF THE UNITED STATES AND COMMONWEALTH" EXISTING WITHIN THE 2.171 ACRE PROJECT SITE, INCLUDING THE SMALL EMERGENT WETLAND AREA

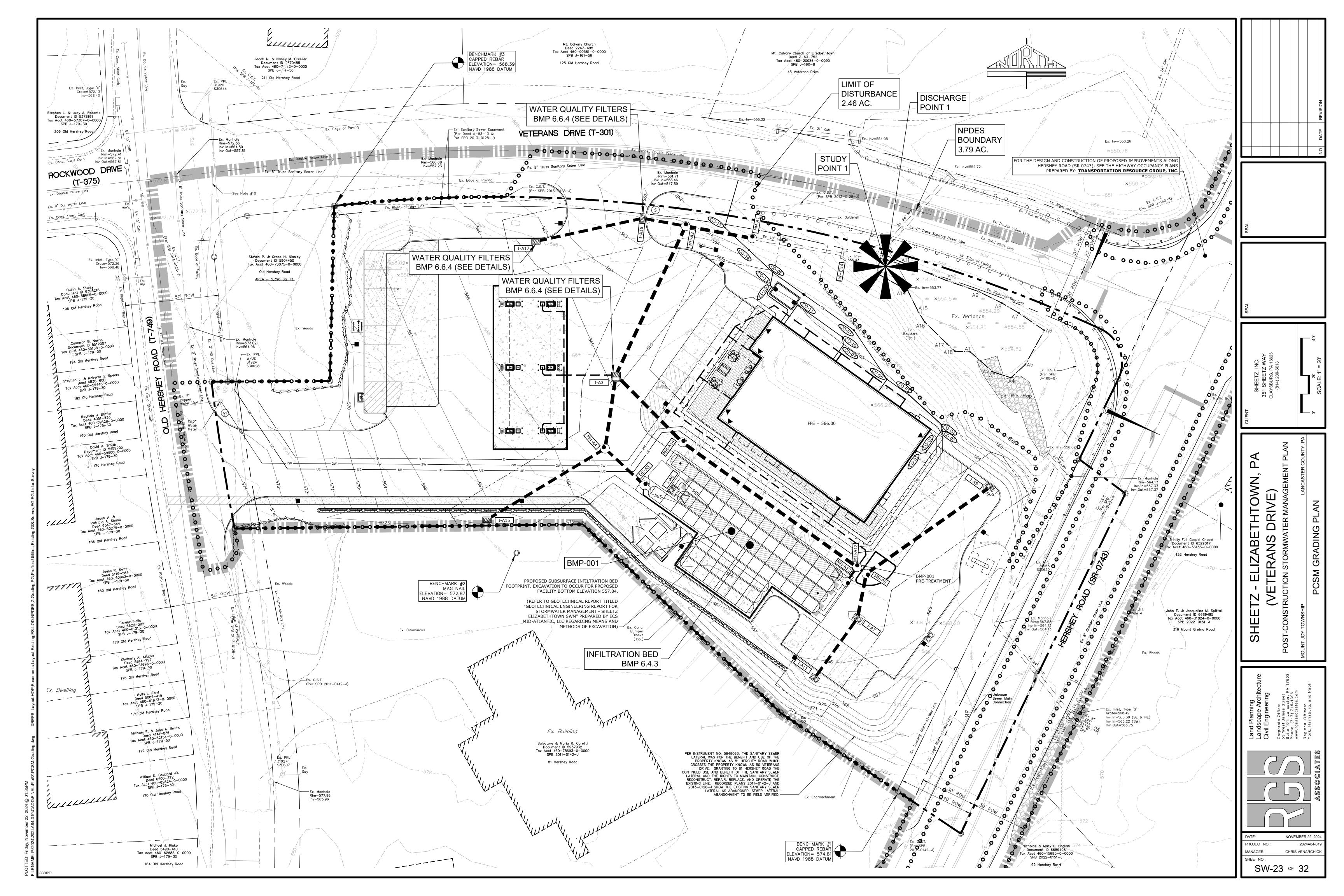
PADOT/STREET NOTES

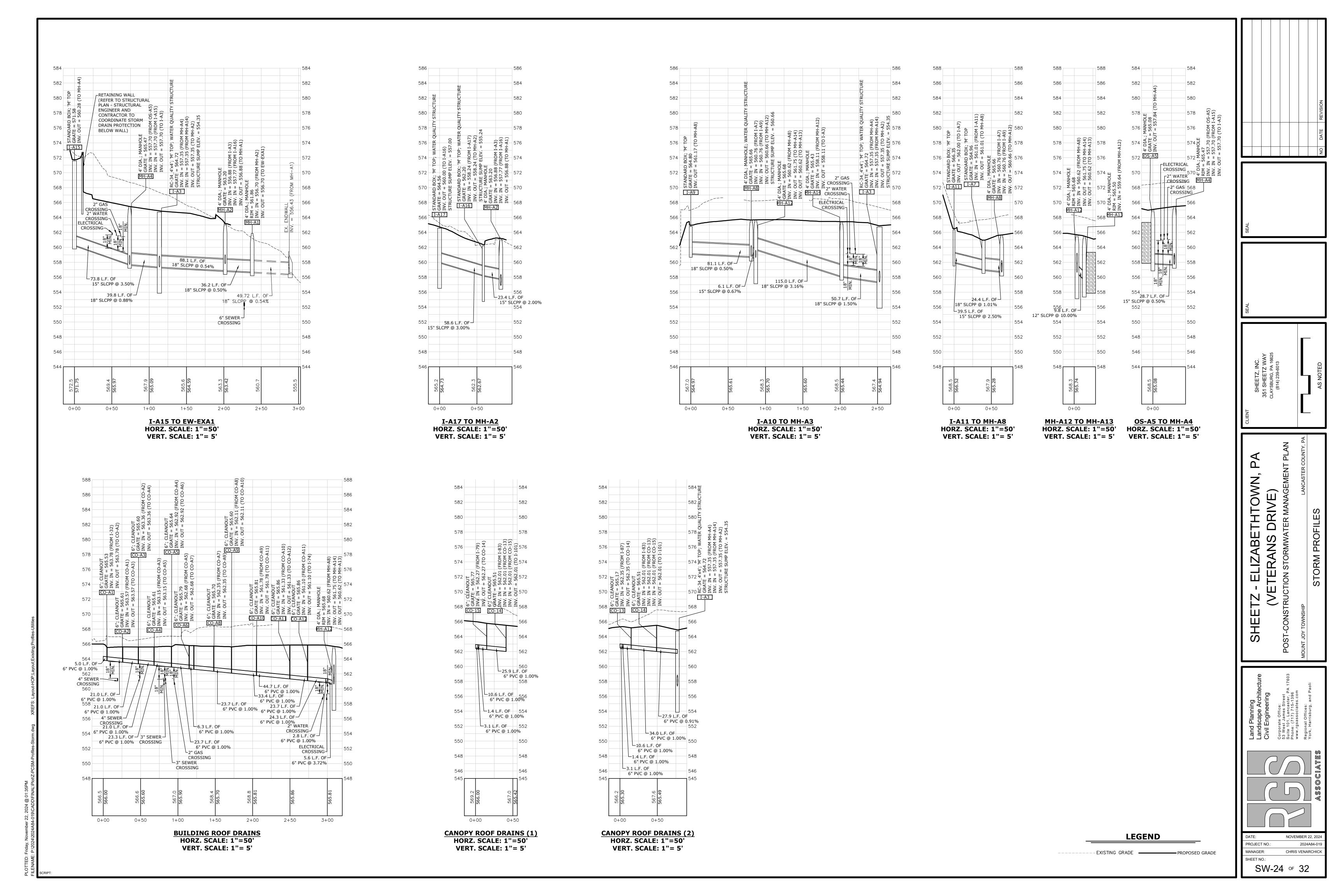
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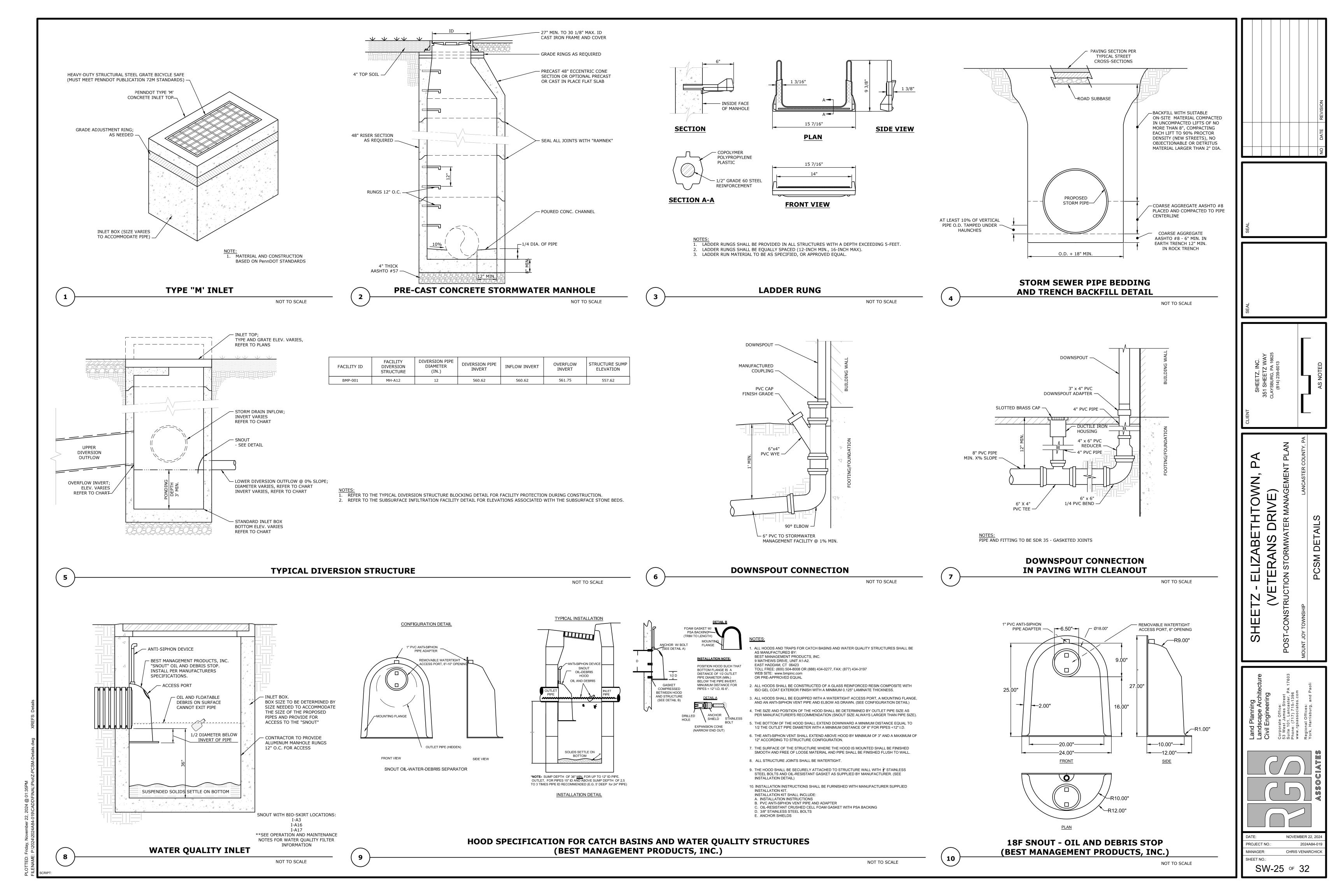


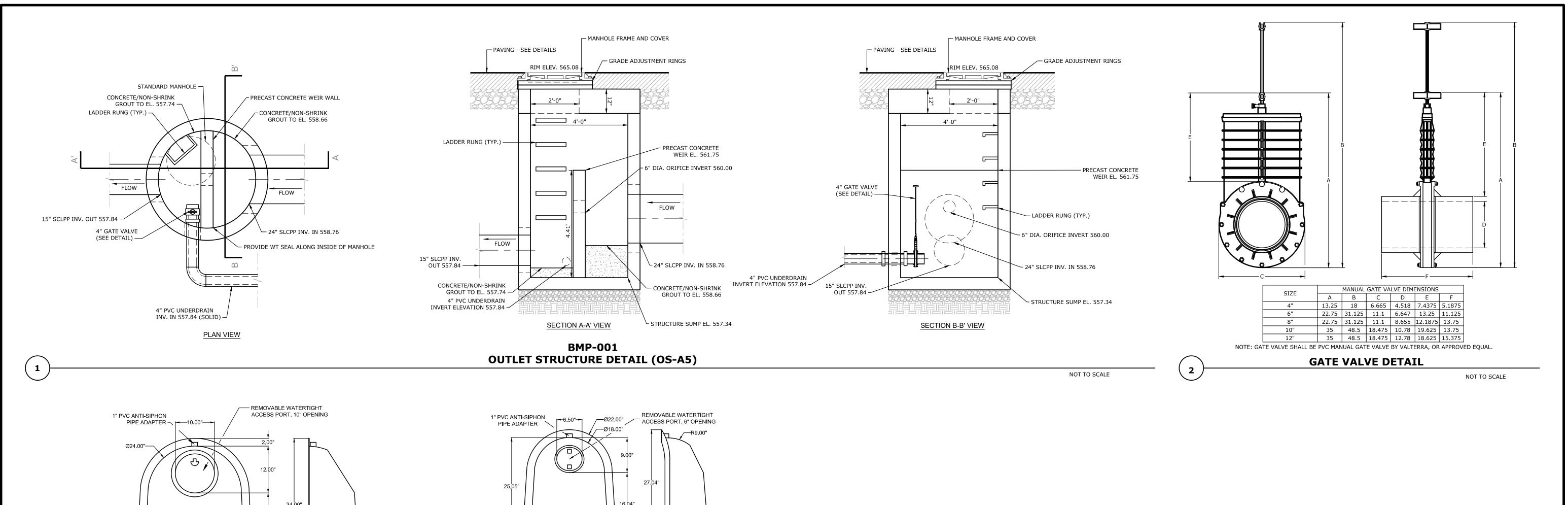










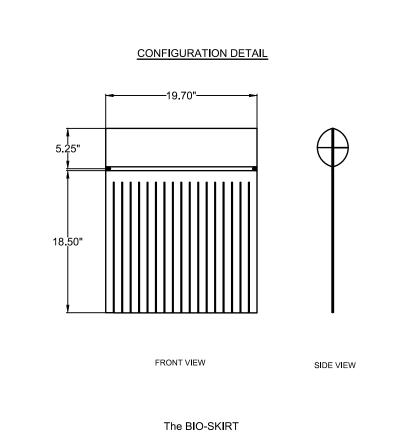






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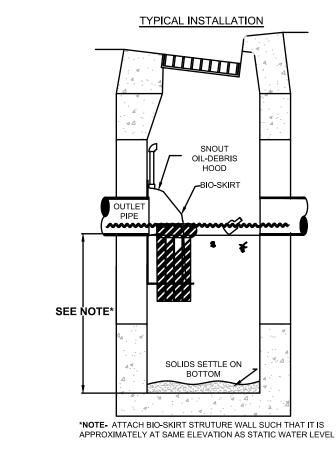
SIDE



HYDROCARBON ADSORBING SKIRTED BOOM

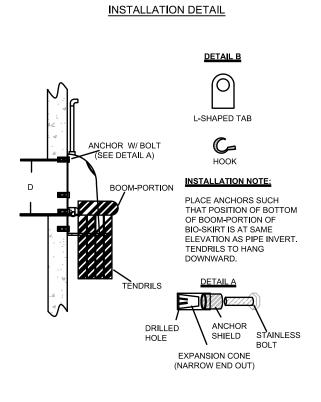
24F SNOUT - OIL AND DEBRIS STOP

(BEST MANAGEMENT PRODUCTS, INC.)



15.00"

NOT TO SCALE



#### NOTES:

<u>FRONT</u>

- All new and/or existing catch basins or water quality structures shall be outfitted with the Bio-Skirt(R) Hydrocarbon reducing skirted boom as manufactured by:
   BEST MANAGEMENT PRODUCTS, INC.
   9 MATHEWS DRIVE, UNITS A1-A2
- EAST HADDAM, CT 06423 (800) 504-8008 OR (888) 434-0277, (877)434-3197 FAX WEB SITE: www.bmpinc.com or pre-approved equal.
- The skirted boom shall be comprised of an upper boom portion that is an adsorbent fabric covered floating boom of 5" minimum diameter with an integral lower skirt portion comprised of fabric tendrils of an 18" minimum length that hang beneath the boom.
- tendrils of an 18" minimum length that hang beneath the boom.

  3. All booms shall be made from geo-textile quality needle-woven filtration fabric manufactured from 100% recycled select fibers with a .125" minimum thickness.

  4. All fabric shall be protected with a covalently surface bonded non-leaching antimicrobial agent and
- booms shall display a tag indicating "Antimicrobial" which preserves the service life of the unit.

  5. The Bio-Skirt shall be positioned in front of the exit pipe and SNOUT® Oil-Debris Separator if so equipped (the preferred application of the Bio-Skirt is to be deployed with the SNOUT).

  6. The skirted boom shall be securely attached to the structure wall on each side of the exit pipe with
- 3/8" stainless steel bolts, stainless steel tabs, plastic-composite hooks and elastomeric cord as found in manufacturer supplied in installation kit.
   7. For applications where multiple Bio-Skirts are deployed together for larger SNOUTs (e.g. on 24" and larger SNOUTs per schedule below\*), connect skirts grommet to grommet with hooks and cord as supplied in the installation kit.

Typical Deployment Schedule:
12-18" SNOUT- One Bio-Skirt
24-30" SNOUT- Two Bio-Skirts
36-52" SNOUT- Three Bio-Skirts
72" and up, Call 800-504-8008 for guidance.

### BIO-SKIRT SPECIFICATION AND INSTALLATION (BEST MANAGEMENT PRODUCTS, INC.)

# Advanced Drainage Systems, Inc. SHEETZ ELIZABETHTOWN, PA (VETERANS DRIVE)

### ELIZABETHTOWN, PA, USA MC-3500 STORMTECH CHAMBER SPECIFICATIONS

- 1. CHAMBERS SHALL BE STORMTECH MC-3500.
- 2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- 3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- 4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION
- FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.

  6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- 7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
- STACKING LUGS.

  TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3"
- TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- 8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE
- DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:

   THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.

   THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR
- DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.

  THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- 9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
- 10. MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- 11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

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

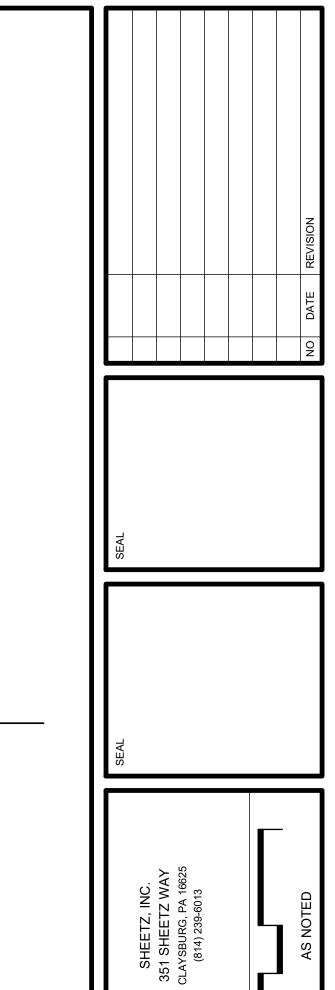
- 1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- 2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
- STONESHOOTER LOCATED OFF THE CHAMBER BED.
   BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
- BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
   THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- 7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.

  \*\* EMBEDMENT STONE SUBBOLINDING CHAMBERS MUST BE A CLEAN CRUSHED ANGLE AR STONE OR RECYCLED CO.
- 8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
- 9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- 10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- 11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.
- NOTES FOR CONSTRUCTION EQUIPMENT
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
- NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".

  3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



(VETERANS DRIVE)
TRUCTION STORMWATER MANAGEMENT PLAN

IIP

LANCASTER COUNTY, PA

Landscape Architecture
Civil Engineering
Corporate Office:
53 West James Street
Suite 101, Lancaster, PA 17603
Phone: (717) 715-1396
www.rgsassociates.com
Regional Offices:
York, Harrisburg, and Paoli

ATE: NOVEMBER 22, 2024

PROJECT NO.: 2024A84-019

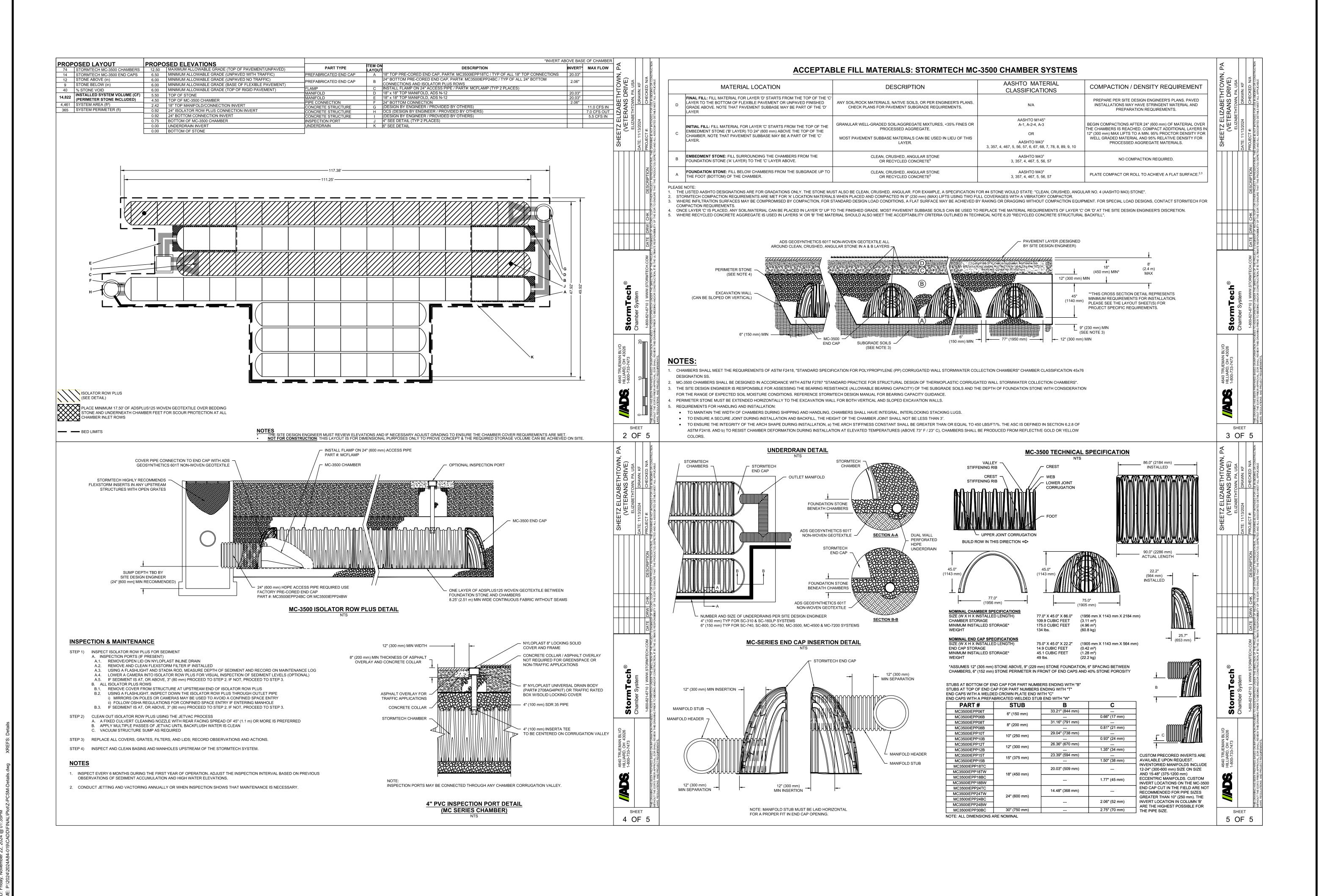
MANAGER: CHRIS VENARCHICK

SHEET NO.:

SW-26 OF 32

5

NOT TO SCALE



SEAL SEAL NO DATE REVISION

351 SHETZ WAY
CLAYSBURG, PA 16625
(814) 239-6013
LANCASTER COUNTY, PA

(VETERANS DRIVE)
STRUCTION STORMWATER MANAGEME

POST-CONSTRUCTION STOMOUNT JOY TOWNSHIP

Civil Engineering

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Lanc Corpo 53 We Suite Phone Phone Phone York,

DATE: NOVEMBER 22, 2024
PROJECT NO.: 2024A84-019
MANAGER: CHRIS VENARCHICK
SHEET NO.:

- 1. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN DRAWINGS 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. TOPSOIL STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SIDE SLOPES MUST BE 2:1 OR
- 4. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 5. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHENEVER POSSIBLE PRIOR TO
- 6. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- 7. AN EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL DISTURBED SLOPES 3:1 OR STEEPER, ALL AREAS OF CONCENTRATED FLOWS, AND DISTURBED AREAS WITHIN 50' OF A SURFACE WATER.
- 8. STRAW AND HAY MULCH SHOULD BE ANCHORED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL. THIS METHOD IS LIMITED TO SLOPES NO STEEPER THAN 3:1. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. (NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED). A WOOD CELLULOSE
- FIBER MAY BE SPREAD OVER THE STRAW MULCH AT A RATE OF 1,500 LB./ACRE. 9. TRACKING SLOPES IS REQUIRED BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR. (NOTE: IF A BULLDOZER IS USED, THE BLADE SHALL BE UP.) CARE SHOULD BE EXERCISED ON SOILS HAVING A HIGH CLAY CONTENT TO AVOID OVER-COMPACTION.

#### **TEMPORARY SEEDING SPECIFICATIONS**

1. IN ORDER TO ESTABLISH A QUICK GRASS COVER OVER DISTURBED AREAS, A TEMPORARY SEED MIXTURE SHALL BE USED AS FOLLOWS:

SPECIES: PENNDOT FORMULA E % PURF LIVE SEED: 86% APPLICATION RATE: 48 LB./ACRE FERTILIZER TYPE: 5-5-5 FERTILIZE RATE: 1,000 LB./ACRE LIMING RATE: 1 T./ACRE MULCH TYPE: STRAW MULCHING RATE: 3 T./ACRE

2. STABILIZATION EFFORTS DURING THE NON-GERMINATING PERIOD, OCT. 15 TO MARCH 15, SHOULD BE MULCHED WITH CLEAN STRAW. (EQUIVALENT TO 0.75" TO 1" DEEP). CLEAN STRAW

4. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT

- MULCH SHOULD NOT BE FINELY CHOPPED OR BROKEN DURING APPLICATION. 3. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR.
- PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. 5. ALL AREAS SHALL BE TEMPORARILY STABILIZED UPON CESSATION OF WORK FOR 4 DAYS OR MORE, OR AS SOON AS ANY DISTURBED AREA REACHES ITS FINAL GRADE.

#### PERMANENT SEEDING SPECIFICATIONS

1. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED SHALL BE COVERED WITH GRASS OR A LEGUME IN ORDER TO MINIMIZE EROSION, UNLESS OTHERWISE DIRECTED BY THE OWNER AS FOLLOWS:

> TOPSOIL PLACEMENT DEPTH: 6 IN. SPECIES: PENNDOT FORMULA B % PURE LIVE SEED: 83% APPLICATION RATE: 203 LB./ACRE FERTILIZER TYPE: 38-0-0 FERTILIZE RATE: 242 LB./ACRE LIMING RATE: 2 T./ACRE MULCH TYPE: STRAW MULCHING RATE: 3 T./ACRE ANCHOR MATERIAL: WOOD FIBER ANCHOR METHOD: HYDRAULICALLY

RATE OF ANCHOR MATERIAL APPL.: 774 LB./ACRE SEEDING SEASON DATE: MARCH 15 - JUNE 1/AUGUST 1 TO OCTOBER 15

2. ALL DISTURBED AREAS WITH STEEP SLOPES SHALL BE COVERED WITH GRASS OR A LEGUME IN ORDER TO MINIMIZE EROSION, UNLESS OTHERWISE DIRECTED BY THE OWNER AS FOLLOWS:

> TOPSOIL PLACEMENT DEPTH: 6 IN. SPECIES: PENNDOT FORMULA D % PURE LIVE SEED: 82% APPLICATION RATE: 242 LB./ACRE FERTILIZER TYPE: 38-0-0 FERTILIZE RATE: 242 LB./ACRE LIMING RATE: 2 T./ACRE MULCH TYPE: STRAW MULCHING RATE: 3 T./ACRE

ANCHOR MATERIAL: WOOD FIBER ANCHOR METHOD: HYDRAULICALLY

RATE OF ANCHOR MATERIAL APPL.: 774 LB./ACRE SEEDING SEASON DATE: MARCH 15 - JUNE 1/AUGUST 1 - OCTOBER 15

- 3. MULCHING SHALL BE USED TO PROTECT SEEDING AND HELP IN PREVENTING RUNOFF. A. CLEAN STRAW MULCH SHALL BE REQUIRED IN ALL DISTURBED AREAS (EQUIVALENT TO 0.75" TO 1" DEEP). CLEAN STRAW MULCH SHOULD NOT BE FINELY CHOPPED OR BROKEN
  - DURING APPLICATION. B. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE
- OPERATED ON THE CONTOUR. POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S
- RECOMMENDATIONS MAY BE USED TO TACK MULCH. D. SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS
- PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES. E. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- F. SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%. WOOD FIBER HYDROMULCH MAY BE APPLIED ON STEEPER SLOPES PROVIDED A TACKIFIER
- 4. FOR FURTHER INFORMATION ON SEED MIXES, SEE THE E & S WORKSHEETS IN THE CHAPTER 102
- 5. WELL IN ADVANCE OF THE NEED TO PERMANENTLY SEED ANY DISTURBED AREA, THE CONTRACTOR SHALL OBTAIN AND FORWARD A SOIL AGRONOMY TESTING REPORT FROM AN APPROVED SOILS LABORATORY SUCH AS THE PENNSYLVANIA STATE UNIVERSITY'S AGRICULTURAL ANALYTICAL SERVICES LABORATORY. THE REPORT SHALL DETERMINE THE ACTUAL LIME AND
- FERTILIZER RATES FOR THE ON-SITE TOPSOIL. THE CONTRACTOR SHALL FORWARD THE FINAL REPORT TO THE LANDSCAPE ARCHITECT OR CLIENT'S REPRESENTATIVE UPON RECEIPT. 6. ALL SOIL AMENDMENTS SHALL BE INSTALLED PER THE SOIL AGRONOMY REPORT, AND SHALL BE
- APPLY AMENDMENTS ON-SITE, AND MIX SOIL TO FULLY ADDRESS ALL EXISTING SOIL DEFICIENCIES. DO NOT APPLY AMENDMENTS NOR TILL IF EXISTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.

MATERIAL SPECIFICATIONS							
MATERIAL	PLAN DESIGNATION	SPECIFICATION / TEST METHOD	SIZE	NOTES			
		STOR	MWATER CONVEYANCE				
WATER TIGHT (WT) STORM DRAIN	SLCPP	AASHTO M252, TYPE S (4- THROUGH 10-INCH) AASHTO M294, TYPE S (12- THROUGH 60-INCH) ASTM F2306	REFER TO PROFILE				
ROOF LEADER	SDR-35 OR HDPEP	SDR-35 (PS46) - ASTM D3034 (4"-15") (PRODUCT STANDARD) - ASTM F477 (GASKET) - ASTM D3212 (INTEGRAL BELL JOINT) HDPEP - ASTM F758 (TYPE PS 28) - AASHTO M252-S, OR - AASHTO M294-S	REFER TO PROFILE				
PAVEMENT BASE DRAIN			REFER TO PENNDOT RC-30M	PROVIDE MATERIALS AND CONSTRUCT AS SPECIFIED IN PENNDOT PUBLICATION 408, SECTION 610 FOR PAVEMENT BASE DRAIN. FOR SUBSURFACE DRAIN OUTLET, PROVIDE MATERIALS MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 615.			
		STORM	¹WATER MANAGEMENT				
EROSION CONTROL BLANKET	ECB	REFER TO THE MATERIAL AND PERFORMANCE SPECIFICATIONS INCLUDED ON THE PLAN.		COCONUT MATTING, ECS-1B, NAG S75, OR EQUIVALENT			
NON-WOVEN GEOTEXTILE FABRIC		ASTM D-4632 (TENSILE STRENGTH, 100 LBS) ASTM D-4632 (ELONGATION 50% MIN.) ASTM D-6241 (PUNCTURE, 250 LBS) ASTM D-4533 (TRAPEZOID TEAR STRENGTH, 45 LBS) ASTM D-4751 (AOS SIEVE NO. 70) ASTM D-4491 (PERMITTIVITY 1.7 SEC-1 MIN.) ASTM D-4355 (ULTRAVIOLET RESISTANCE 70% @ 500 HRS) ASTM D-4491 (WATER FLOW RATE 120 GPM/SF)		MIRAFI 140N, GEOTEX 451, OR EQUIVALENT			
STONE BED		AASHTO-M-43	0.375"-0.75"	DOUBLE WASHED NO. 57 STONE (WASH LOSS OF NO MORE THAN 1.49%)			
UNDER DRAIN PIPE		ASTM F758 (TYPE PS 28), AASHTO-M-278, AASHTO M252-SP, OR AASHTO M294-SP AASHTO CLASS II (PERFORATION PATTERN)	RIGID SCHEDULE 40 PVC, SDR35, OR HDPEP	MINIMUM OF 6" OF GRAVEL OVER CROWN OF PIPES. PERFORATIONS IN UNDERDRAIN ARE ONLY FOR SECTIONS OF PIPE WITHIN STONE BED. PERFORATIONS SHALL BE LOCATED IN THE OUTSIDE VALLEYS OF THE CORRUGATIONS, BE CIRCULAR OR SLOTTED DEPENDING ON THE PIPE DIAMETER, AND EVENLY SPACED AROUND THE CIRCUMFERENCE AND LENGTH OF THE PIPE.			
		CON	 				
INLETS, MANHOLES, PIPES, AND CULVERTS		REFER TO PENNDOT'S PUBLICATION 72M, STANDARDS FOR ROADWAY CONSTRUCTION (RC), LATEST EDITION.	REFER TO PLAN	CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN PENNDOT'S PUBLICATION 408, LATEST EDITION. LADDER RUNGS SHALL BE PROVIDED WITHIN ALL STORMWATER STRUCTURES WHICH EXCEED 5-FOOT IN HEIGHT. INLETS MUST BE SIZED TO ACCEPT THE SPECIFIED PIPE SIZES WITHOUT KNOCKING OUT ANY OF THE INLET CORNERS. ALL PIPES ENTERING OR EXITING INLETS SHALL BE CUT FLUSH WITH THE INLET WALL. INLETS SHALL NOT HAVE A SUMP CONDITION IN THE BOTTOM, UNLESS DESIGNED AS A WATER QUALITY INLET. OUTLET PIPES SHALL BE FLUSH WITH THE BOTTOM OF THE BOX OR CONCRETE CHANNELS SHALL BE POURED.			
REINFORCED CONCRETE HEADWALLS AND END SECTIONS		REFER TO PENNDOT'S PUBLICATION 72M, STANDARDS FOR ROADWAY CONSTRUCTION (RC), LATEST EDITION.	REFER TO PLAN	CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN PENNDOT'S PUBLICATION 408, LATEST EDITION.			
GRATES		REFER TO PENNDOT'S PUBLICATION 72M, STANDARDS FOR ROADWAY CONSTRUCTION (RC), LATEST EDITION.	REFER TO PLAN	ALL INLETS IN PAVED AREAS SHALL HAVE HEAVY-DUTY BICYCLE-SAFE GRATES.			
FRAMES / TOP UNITS / GRADE ADJUSTMENT RINGS		REFER TO PENNDOT'S PUBLICATION 72M, STANDARDS FOR ROADWAY CONSTRUCTION (RC), LATEST EDITION.	REFER TO PLAN	ALL FRAMES, CONCRETE TOP UNITS, AND GRADE ADJUSTMENT RINGS SHALL BE SET IN A BED OF FULL MORTAR ACCORDING TO PUBLICATION 408.			
CONCRETE				CONCRETE SHALL MEET THE REQUIREMENTS OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, SECTIONS 605, 606 AND 714.			
REINFORCEMENT				REINFORCEMENT SHALL MEET THE MINIMUM REQUIREMENTS OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, SECTION 709.			

#### MATERIAL SPECIFICATIONS

FACILITY AND THE LIMITING ZONE IN ACCORDANCE WITH APPENDIX C OF THE PA DEP BMP MANUAL.

IF A MINIMUM OF 2 FT CANNOT BE PROVIDED TO BED ROCK THE CONTRACTOR SHALL PROVIDE AN

ADDITIONAL 2' SOIL MANTLE BETWEEN THE FACILITY AND THE BED ROCK IN ACCORDANCE WITH

THE RECOMMENDATION AND UNDER THE DIRECTION OF THE PROJECT GEO-TECHNICAL ENGINEER.

1. ALL GEOTEXTILES SHALL BE INSTALLED WITH A MINIMUM 12 INCH OVERLAP, OR AS SPECIFIED BY

). ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

MANUFACTURER, WHICHEVER IS GREATER.

				NOT TO SCALE
BMP TYPE	FACILITY NOS.	CONSTRUCTION NOTES	CRITICAL STAGES OF PROFESSIONAL OVERSIGHT	OPERATION AND MAINTENANCE
CONVEYANCE FACILITIES (NOT A PCSM BMP)		1. ALL STORM DRAIN AND CONVEYANCE SWALES SHALL BE INSTALLED AT THE LOCATION AND IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS INCLUDED ON THIS PLAN, UNLESS OTHERWISE REQUIRED BY THE MUNICIPALITY.	VERIFICATION OF INLET STRUCTURE LOCATION, SIZE, DEPTH, AND CONNECTING PIPE INVERTS OR CHANNEL GEOMETRY  NOTE: MINIMUM 5 DAYS NOTICE FROM CONTRACTOR TO RGS FOR PROFESSIONAL OBSERVATIONS  PROFESSIONAL OBSERVATIONS	ENERAL REQUIREMENTS:     THE FACILITY SHALL ALSO BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES (BUT NOT LIMITED TO THE PA DEP AND THE TOWNSHIP) IN THE EVENT OF A SPILL AND CLEANUP OPERATION.     CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES.  REGULAR MAINTENANCE (AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR):     REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY.     CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES.  DOCUMENTATION REQUIREMENTS:     PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT.     PREPARE ANNUAL INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE NPDES PERMIT.
WATER QUALITY FILTER (NOT A PCSM BMP)  BEST MANAGEMENT PRODUCTS, INC. SNOUT WITH BIO-SKIRT  INLETS (F) MANHOLES (R)	I-A3 (24F) I-A16 (18F) I-A17 (18F) MH-A12 (18R)	<ol> <li>THE FACILITY MAY NOT RECEIVE RUNOFF UNTIL THE ENTIRE         CONTRIBUTING DRAINAGE AREA TO THE FACILITY HAS         RECEIVED FINAL STABILIZATION.</li> <li>SNOUT HOOD INSTALLATION SHALL BE COMPLETED IN         ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.</li> </ol>	1. VERIFICATION OF MATERIAL OR WRITTEN CERTIFICATION BY THE MANUFACTURER 2. INSPECTION OF INSTALLATION PER THE PLAN DETAIL.  NOTE: MINIMUM 5 DAYS NOTICE FROM CONTRACTOR TO RGS FOR PROFESSIONAL OBSERVATIONS	THE FACILITY SHALL ALSO BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES (BUT NOT LIMITED TO THE PA DEP AND THE TOWNSHIP) IN THE EVENT OF A SPILL AND CLEANUP OPERATION.     CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES.  ALL MAINTENANCE, REPAIR AND REPLACEMENT SHALL BE IN ACCORDANCE WITH THE MOST CURRENT (AS OF THE DATE OF INSPECTION) SPECIFICATIONS OUTLINED BY THE MANUFACTURER  REGULAR MAINTENANCE (AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR):  REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY  CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES.  DOCUMENTATION REQUIREMENTS:  PREPARE ANNUAL INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE PROPES PERMIT.
SUBSURFACE INFILTRATION BED PA DEP BMP 6.4.3	BMP NO. 1	<ol> <li>AT ALL TIMES DURING CONSTRUCTION THE FACILITY SHALL BE PROTECTED FROM COMPACTION (WITHIN TWO FEET OF THE SUBGRADE OF THE FACILITY).</li> <li>THE FACILITY MAY NOT RECEIVE RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO FACILITY HAS RECEIVED FINAL STABILIZATION.</li> <li>UPLAND TRIBUTARY CONVEYANCE FACILITIES SHALL BE FLUSHED AND SEDIMENT REMOVED.</li> <li>CONTRACTOR SHALL PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE FACILITY.</li> <li>CONTRACTOR SHALL USE LOW-PRESSURE EQUIPMENT AND UTILIZE NON-INFILTRATION AREAS FOR EQUIPMENT STAGING TO PERFORM EXCAVATION AND INSTALLATION.</li> <li>SEDIMENT LADEN OVERBURDEN AND DEPOSITION SHALL BE REMOVED FROM THE FACILITY TO PROVIDE A FREE DRAINING SUBGRADE.</li> <li>CONTRACTOR TO TEST PIT FACILITY PRIOR TO INSTALLATION TO DETERMINE DEPTH TO LIMITING ZONE (BED ROCK OR WATER TABLE).</li> <li>THE CONTRACTOR SHALL PROVIDE A MIN. OF 2 FEET OF SEPARATION BETWEEN THE BOTTOM OF THE FACILITY AND THE LIMITING ZONE IN ACCORDANCE WITH APPENDIX C OF THE DADED RMD MANUAL</li> </ol>	1. REVIEW MATERIAL COMPONENTS OF THE FACILITY (SEE MATERIAL SPECIFICATIONS AND ADS DESIGN SHEETS): A. STONE BED B. GEOTEXTILE C. OUTFALL BARREL PIPE D. PIPING  2. FIELD MEASURE EXCAVATED BOTTOM FOR GENERAL CONFORMANCE WITH THE REQUIRED SURFACE AREA OF BED.  3. PROBE THE BOTTOM OF FACILITY WITH A SOIL PROBE TO VERIFY DEPTH TO LIMITING ZONE.  4. REVIEW OF FACILITY BOTTOM TO CONFIRM A FREE-DRAINING (UN-COMPACTED), SEDIMENT FREE SUBGRADE.  5. PLACEMENT OF STONE BEDDING.	GENERAL REQUIREMENTS:  THE FACILITY SHALL ALSO BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES (BUT NOT LIMITED TO THE PA DEP AND THE TOWNSHIP) IN THE EVENT OF A SPILL AND CLEANUP OPERATION.  CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES.  ALL MAINTENANCE, REPAIR AND REPLACEMENT SHALL BE IN ACCORDANCE WITH THE MOST CURRENT (AS OF THE DATE OF INSPECTION) SPECIFICATIONS OUTLINED BY THE MANUFACTURER  REGULAR MAINTENANCE:  (AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR):  REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE PRETENTMENT AND INFLOW AREAS OF THE FACILITY

MINIMUM 5 DAYS NOTICE FROM CONTRACTOR TO RGS FOR

6. VISUAL INSPECTION OF OUTLET STRUCTURE AND REMAINING

PROFESSIONAL OBSERVATIONS

THE NPDES PERMIT.

• IF 72 HOURS AFTER A RAINFALL EVENT, PONDING WATER IS FOUND WITHIN THE OUTLET STRUCTURE THE FACILITY, THE FACILITY IS NOT OPERATING PROPERLY.

PREPARE AND MAINTAIN INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF

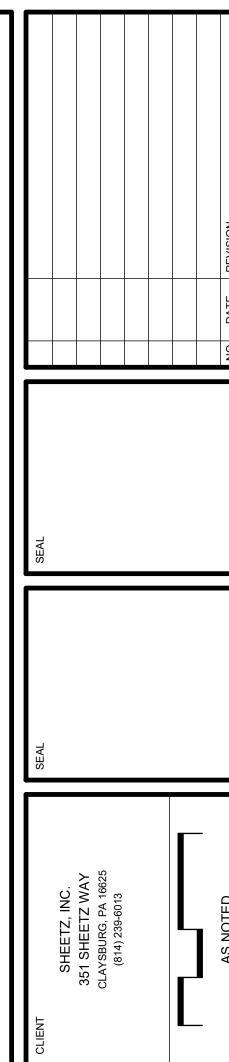
REMOVE ACCUMULATED TRASH, DEBRIS, AND SEDIMENT FROM THE UNDERGROUND FACILITY UTILIZING A VACUUM TRUCK, SPRAY HOSE, OR SIMILAR.

IF THE FACILITY IS NOT DRAINING PROPERLY, UTILIZE THE UNDERDRAIN SYSTEM (IF APPLICABLE) OR PUMP FOR DEWATERING.

PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT.

INSPECTION PRINCIPAL SPILLWAY OUTLET STRUCTURE, OUTFALL BARREL, AND REMAINING APPURTENANCES.

• CONTACT PROJECT ENGINEER FOR REPAIR SOLUTIONS IF THESE COMPONENTS ARE DAMAGED.



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