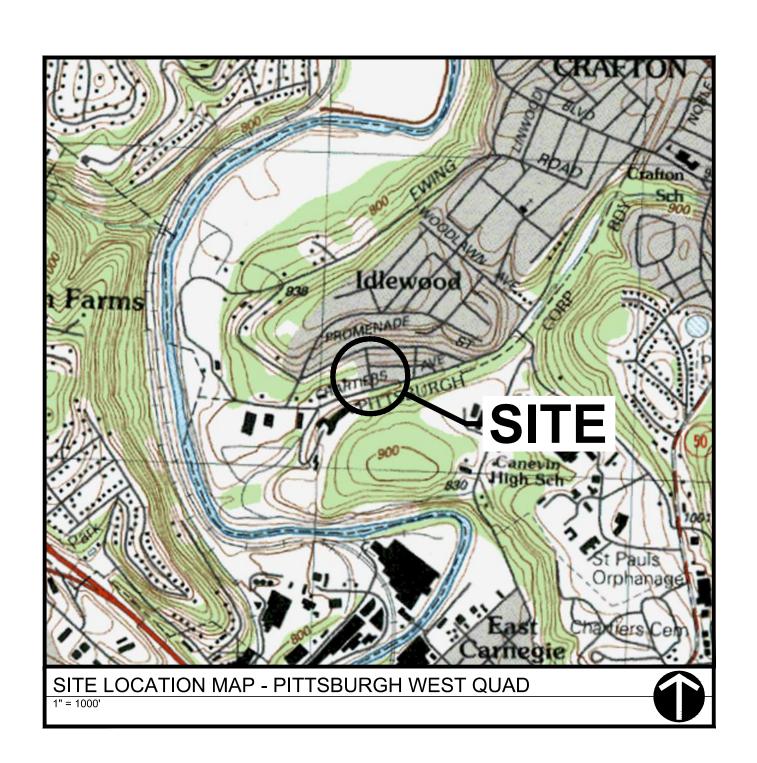
# FOUNTAIN SYCAMORE STORM SEWER SEPARATION CONSTRUCTION PLANS

CHARTIERS AVENUE & SYCAMORE STREET CRAFTON BOROUGH & CITY OF PITTSBURGH, ALLEGHENY COUNTY, PA

PREPARED FOR:

CRAFTON BOROUGH 100 STOTZ AVENUE CRAFTON, PA 15205





	SHEET INDEX		
NO.	TITLE		
C000	COVER SHEET		
C100	CONSTRUCTION PLANS		
C101	CONSTRUCTION DETAILS		
C102	CONSTRUCTION DETAILS		

REVISION RECORD	01 REVISED PER ACCD COMMENTS	02 REVISED PER PWSA COMMENTS				-	-	
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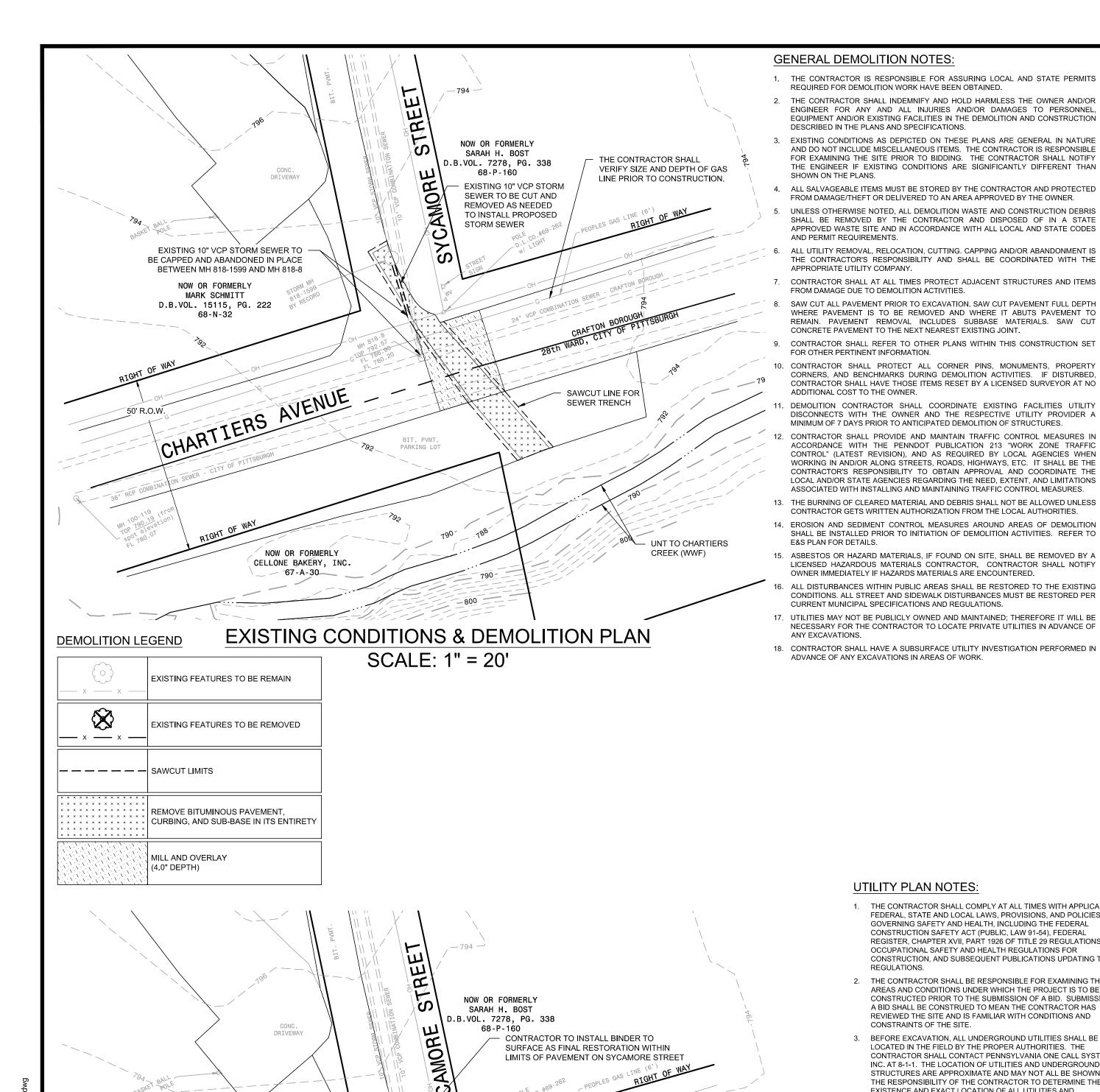
FOUNTAIN SYCAMORE STORM SEWER SEPARATION CHARTIERS AVENUE & SYCAMORE STREET CRAFTON BOROUGH & CITY OF PITTSBURGH, ALLEGHENY COUNTY, PA

CRAFTON BOROUGH
100 STOTZ AVENUE
CRAFTON, PA 15205

**COVER SHEET** 

Project Number: C-5709-1801 Drawing Scale: N.T.S.
Date Issued: FEB. 2019 Drawn By: JTD
Checked By: ACJ
Project Manager: ACJ

C000



TOP 793.32

ENCASEMENT

PROPOSED STANDARD DUTY

C101 BITUMINOUS PAVEMENT

NOW OR FORMERLY

CELLONE BAKÉRY, INC

L OUT 787.85 (18" SDR-26)

FULL LANE MILL AND OVERLAY

NOW OR FORMERLY

MARK SCHMITT

D.B.VOL. 15115, PG. 222

68-N-32

UTILITY LEGEND

STM STORM

SAN MH

**UTILITY ABBREVIATIONS** 

SANITARY

MANHOLE

**ENDWALL** 

PROPOSED STORM LINE

# **UTILITY PLAN NOTES:**

**UNDERGROUND STRUCTURES** 

ROPOSED PAVEMENT PATCH

TOP 792.30

SDR-26 @ 1.2%

UNT TO CHARTIERS

SITE LEGEND

CREEK (WWF)

ROPOSED 48" STORM MANHOLE

PROPOSED HEADWALL/ ENDWALL

TOP 789.24

SITE / GRADING / UTILITY PLAN

SCALE: 1" = 20'

IN 787.10 (18" SDR-26)

FL IN 787.15 (18" SDR-26)

FL OUT 787.15 (18" SDR-26)

(WITH 2' SUMP AND SNOUT

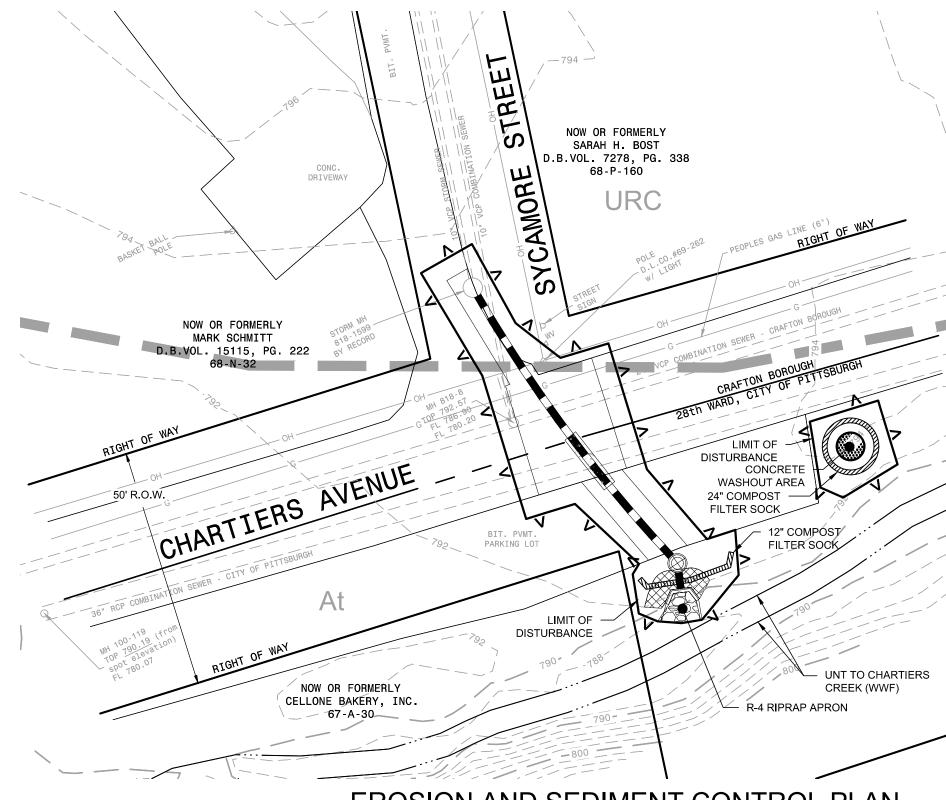
- 1. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC, LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS. OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE
- 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.
- BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL CONTACT PENNSYLVANIA ONE CALL SYSTEMS INC. AT 8-1-1. THE LOCATION OF 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
- 4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO APPLICABLE LOCAL
- AND STATE CODES AND REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF PROPOSED UTILITIES CONSTRUCTION.
- UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
- ALL CABLE, ELECTRIC, GAS, STORM AND SANITARY SEWER, TELEPHONE AND WATER SERVICE LINE TRENCHES LOCATED UNDER PROPOSED PAVEMENT AREAS, AND WITHIN 8' OF A PAVED AREA, SHALL BE BACKFILLED WITH 100% STONE MATERIAL TO THE PROPOSED PAVING SECTION IN ACCORDANCE WITH THE DETAIL SHOWN ON THE CONSTRUCTION DETAIL SHEETS.
- 8. CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER MANHOLES AND INLETS.
- AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
- 10. ALL STORM PIPE SHALL BE HDPE, SMOOTH INTERIOR, CORRUGATED POLYETHYLENE PIPE UNLESS OTHERWISE NOTED. ALL STORM SEWER CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH PENNDOT SPECIFICATIONS. ALL JOINTS SHALL BE
- 11. THE CONTRACTOR SHALL ASSURE THAT THERE IS POSITIVE DRAINAGE TO THE EXISTING INLETS UPON PLACEMENT OF NEW
- 12. THE ALLEGHENY COUNTY HEALTH DEPARTMENT SHALL BE CONTACTED FOR INSPECTION OF ALL PRIVATE SANITARY SEWERS. WATER LINES, AND STORM SEWER LINES WHERE THEY CONNECT TO A PUBLIC SEWER SYSTEM, ALL WATER AND SEWER LINES MUST BE INSTALLED BY A REGISTERED PLUMBER.

FULL LANE MILL AND OVERLAY

PROPOSED PAVEMENT PATCH

3 PROPOSED STANDARD DUTY

C101 BITUMINOUS PAVEMENT



# EROSION AND SEDIMENT CONTROL PLAN SCALE: 1" = 20'

# **EROSION AND SEDIMENT CONTROL LEGEND**

	1 C102	ROCK RIP RAP APRON
5 C102		EROSION CONTROL BLANKET
	7 C102	CONCRETE WASHOUT AREA
&aaaaaaaaaaaaaaaaaaaaaaaaa ka ka ka ka ka	10 C102	COMPOST FILTER SOCK
_ ^ _ ^		LIMITS OF DISTURBANCE
		SOIL BOUNDARIES

# PROJECT AREAS

PROJECT AREA = 1,950 SF DISTURBED AREA = 1,950 SF

#### ADDITIONAL EROSION AND SEDIMENT CONTROL NOTES:

- CURRENTLY (AND OVER THE PAST 50 YEARS) THE SITE CONSISTS OF PAVED ROADS AND PARKING LOT WITH UNDERGROUND UTILITY SERVICES. THE PROPOSED PROJECT INCLUDES SEPARATION OF
- STORM SEWER FROM THE EXISTING COMBINED SEWER SYSTEM. THERE ARE NO KNOWN NATURALLY OCCURRING GEOLOGIC FORMATIONS OR SOIL CONDITIONS ON
- SITE THAT HAVE THE POTENTIAL TO CAUSE POLLUTION DURING CONSTRUCTION. THERE ARE ADDITIONAL IMPERVIOUS SURFACES PROPOSED AS PART OF THIS PROJECT
- PERMANENT VEGETATION WILL BE ESTABLISHED ON ALL NON IMPERVIOUS AREAS DISTURBED

# • THE PROPOSED PROJECT IS OUTSIDE OF ANY RIPARIAN FOREST BUFFERS.

#### CONSTRUCTION SEQUENCE

- NOTE FOR ALL DISTURBED AREAS: AS SOON AS SLOPES, AND OTHER DISTURBED AREAS REACH FINAL GRADE THEY MUST BE STABILIZED. UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA SHALL REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS. ALL CONSTRUCTION SHALL TAKE PLACE WITHIN THE LIMITS OF DISTURBANCE AS NOTED ON THE DRAWING
- VEGETATED AREAS MUST ACHIEVE A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OVER THE ENTIRE DISTURBED AREA AND ROADWAYS AND PARKING AREAS SHOULD AT LEAST HAVE A CLEAN SUB-BASE IN PLACE O REMOVAL OF ANY F&S BMPS
- WHEN CLEANING EXCESS SEDIMENT FROM THE E&S CONTROL FACILITIES, PLACE SEDIMENTS IN GRASS AREAS WHICH DO NOT RECEIVE CONCENTRATED STORM FLOWS AND ARE CONTROLLED BY BMP'S (WITHIN LIMITS OF DISTURBANCE). THEN SEED OVER AREA USING SEEDING SPECIFICATIONS.
- 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 SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION • EXCESS TOPSOIL THAT WILL NOT BE RE-SPREAD ON SITE SHALL BE DISPOSED OF AT A PA DEP APPROVED WASTE
- ALL DISTURBED AREAS WHICH ARE AT FINAL GRADE AND WILL NOT BE FURTHER DISTURBED SHALL BE SEEDED PER THE PERMANENT SEEDING SPECIFICATIONS. · ALL OTHER DISTURBED AREAS THAT WILL NOT RECEIVE ADDITIONAL WORK FOR A PERIOD OF MORE THAN 4 DAYS SHALL BE SEEDED PER THE TEMPORARY SEEDING SPECIFICATIONS

#### **CONSTRUCTION SEQUENCE**

- BEGIN PROJECT ON A CLEAR DRY DAY INSTALL ALL SEGMENTS OF COMPOST FILTER SOCK SEDIMENT BARRIERS IN THE LOCATIONS SHOWN ON PLAN AND ACCORDING TO THE CONSTRUCTION DETAILS. ONCE ALL CONTROLS ARE INSTALLED AS OUTLINED ABOVE, DEMOLITION OF THE EXISTING PAVING AND UTILITIES MAY
- ALL CONSTRUCTION DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF AT A PA DEP APPROVED VASTE SITE IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. PRIOR TO COMMENCING ANY EARTHWORK ACTIVITIES, THE CONTRACTOR SHALL VERIFY THAT ALL SEGMENTS OF COMPOST FILTER SOCK ARE STILL FUNCTIONING PROPERLY UPON COMPLETION OF THE ABOVE CONTROL MEASURES, CUT AND FILL OPERATIONS MAY BEGIN BY THE FOLLOWING SEQUENCE:
- a. BEGIN MASS EXCAVATION TO BRING AREAS TO PROPOSED SUBGRADE. NOTE: INSTALL EROSION CONTROL BLANKETING ON ALL SLOPES GREATER OR EQUAL TO THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), IF NEEDED. b. EXCAVATED MATERIAL IS NOT ANTICIPATED TO BE STOCKPILED ON-SITE (REFER TO PROPER DISPOSAL OF WASTE BACKFILL ALL UTILITY TRENCHES BY THE END OF EACH DAY. TRENCHES BELOW EXISTING OR PROPOSED PAVED
- SURFACES SHALL BE BACKFILLED WITH 100% CRUSHED LIMESTONE. BEGIN FINE GRADING OPERATIONS IN PREPARATION OF SITE PAVING. BEGIN PAVING OPERATIONS, SITE FURNISHINGS AND LANDSCAPING, AND INSTALL IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS. ALL TEMPORARY EROSION CONTROL DEVICES SHALL REMAIN INTACT UNTIL FINAL STABILIZATION OF THE SITE IS ACHIEVED. FINAL STABILIZATION OF THE SITE SHALL BE ACHIEVED WHEN ALL PERMANENT CONTROL MEASURES AND FACILITIES HAVE BEEN COMPLETED AND ARE OPERATIONAL AND UNIFORM PERENNIAL VEGETATION IS ESTABLISHED TO THE POINT WHERE THE SURFACE SOIL IS CAPABLE OF RESISTING FROSION DURING RUNOFF EVENTS. THE STANDARD
- FOR THIS VEGETATIVE COVER WILL BE A UNIVERSAL COVERAGE, OR DENSITY, OF SEVENTY PERCENT (70%) ACROSS ALL COMPOST FILTER SOCK MAY BE REMOVED WHEN A MINIMUM UNIFORM 70% VEGETATIVE COVER IS ESTABLISHED WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION FOR AREAS TRIBUTARY TO THE
- COMPOST FILTER SOCK. REFER TO THE SECTION ENTITLED "AFTER COMPLETION OF PROJECT" FOR A DETAILED SEQUENCE FOR REMOVING SAID

#### **UTILITY LINE INSTALLATION REQUIREMENTS**

a. EXPOSED TRENCH EXCAVATIONS HAVE HIGH POTENTIAL FOR ACCELERATED EROSION AND SEDIMENT POLLUTION SINCE THESE EXCAVATIONS ARE USUALLY LOCATED AT LOWER ELEVATIONS ALONG OR ACROSS EARTH ISTURBANCE SITES, OPEN TRENCHES SERVE TO CONCENTRATE SEDIMENT-LADEN RUNOFF AND CONVEY IT TO SITE BOUNDARIES OR WATERWAYS. THE MOST IMPORTANT EROSION AND SEDIMENT POLLUTION CONTROL CONSIDERATION FOR TRENCH CONSTRUCTION IS THE LIMITING AND SPECIFIC SCHEDULING OR WORK ACTIVITIES. CONSTRUCTION REQUIREMENTS

a. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. NO MORE THAN 50 LINEAR FEET OF OPEN TRENCH SHOULD EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORK DAY. b. WATER THAT HAS ACCUMULATED IN THE OPEN TRENCH SHALL BE COMPLETELY REMOVED BY USING A PUMPED WATER FILTER BAG AS SHOWN IN THE CONSTRUCTION DETAIL BEFORE PIPE PLACEMENT AND/OR BACKFILLING

- c. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES/FACILITIES SHALL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE AT THE END OF EACH WEEK.
- a.IN CERTAIN CASES, TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IS HYDROSTATICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED. IN THESE CASES, ALL OF THE REQUIREMENTS LISTED UNDER ITEM B WILL REMAIN IN EFFECT WITH THE FOLLOWING AMENDMENTS: b.DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY. c. IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS, APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S WILL BE INSTALLED, AND THE AREAS SEEDED AND

#### **AFTER COMPLETION OF PROJECT:**

MULCHED WITHIN THE NEXT TWO CALENDAR DAYS.

SEED OVER AREA USING SEEDING SPECIFICATIONS.

EXCEPTIONS

- ALL COMPOST FILTER SOCK AND INLET PROTECTION MAY BE REMOVED WHEN A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ESTABLISHED, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION FOR AREAS TRIBUTARY TO THE SOCK.
- IF A BMP FAILS DURING A RUNOFF EVENT, THE CONTRACTOR SHALL REPLACE/FIX THE DAMAGED BMP WITHIN 24 HOURS FOLLOWING THE FAILURE OCCURRENCE WHEN CLEANING EXCESS SEDIMENT FROM THE E&S CONTROL FACILITIES, PLACE SEDIMENTS IN GRASS AREAS WHICH DO NOT RECEIVE CONCENTRATED STORM FLOWS AND ARE CONTROLLED BY BMP'S (WITHIN LIMITS OF DISTURBANCE). THEN

# **GRADING PLAN NOTES**

- ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY THE GATEWAY ENGINEERS, INC., THE CURRENT REQUIREMENTS OF THE
- MUNICIPALITY 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, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT. (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
- 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.
- BEFORE EXCAVATIONS, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PENNSYLVANIA ONE CALL SYSTEMS. INC. AT 8-1-1. 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 SLOPES SHALL BE 2:1 (HORIZONTAL: VERTICAL) MAXIMUM UNLESS NOTED
- UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS. SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER. THE CONTRACTOR SHALL REMOVE ANY EXCESS SOIL AND TOPSOIL OFFSITE TO A PA DEP APPROVED WASTE SITE, OR SPREAD UNIFORMLY ON SITE. THE ACQUISITION OF

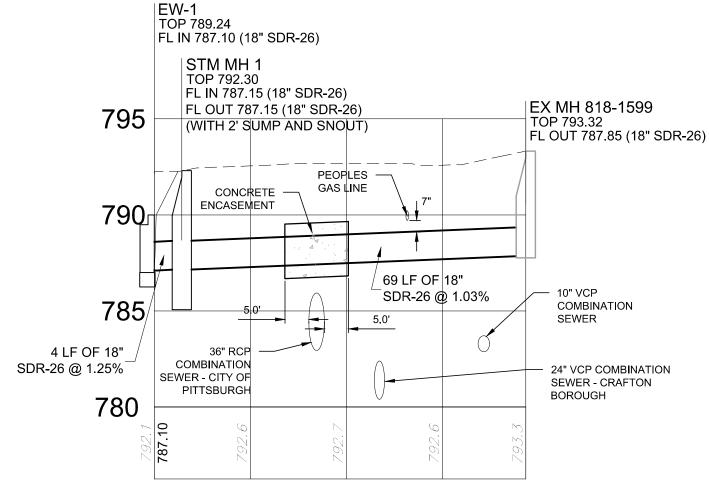
ALL AREAS NOT PAVED SHALL BE TOP SOILED, SEEDED, MULCHED OR LANDSCAPED

- AN APPROVED WASTE SITE IS THE CONTRACTOR'S RESPONSIBILITY THE CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS, AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT
- AN AS-BUILT DRAWING OF THE STORMWATER DETENTION FACILITY PREPARED AND SEALED BY A PROFESSIONAL LAND SURVEYOR IS REQUIRED TO BE SUBMITTED TO THE PROJECT ENGINEER.

# SITE PLAN NOTES:

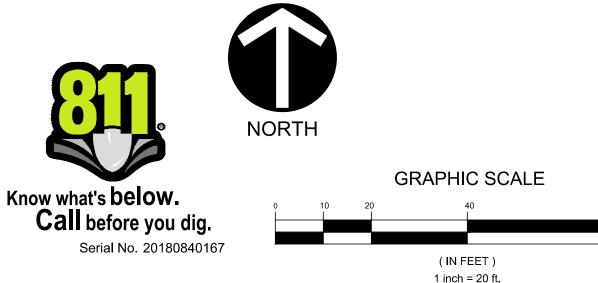
NO ADDITIONAL COST TO THE OWNER.

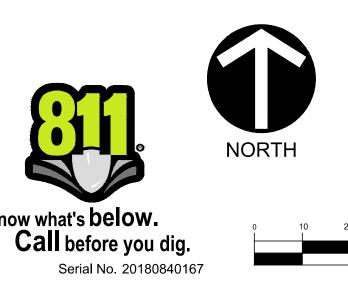
- CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS FOR THE INSTALLATION OF SIGNAGE AND PAVEMENT MARKINGS AS SHOWN ON THE CONSTRUCTION PLANS. 2. LABELED DIMENSIONS OVERRIDE SCALED DIMENSIONS
- 3. ALL NEW MATERIALS AND CONSTRUCTION METHODS MUST MEET PADOT PUBLICATION
- 4. CONTRACTOR TO WORK AROUND EXISTING UTILITIES, IF ADJUSTMENTS ARE
- NECESSARY, WORK WILL BE CONSIDERED INCIDENTAL THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE NECESSARY SAFETY MEASURES TO SECURE THE SITE DURING CONSTRUCTION ACTIVITIES.
- THE GATEWAY ENGINEERS, INC. IS NOT RESPONSIBLE TO INSPECT PROJECT SITES TO
- ENSURE COMPLIANCE WITH OCCUPATIONAL SAFETY HEALTH ADMINISTRATION (OSHA)
- 7. TACK COAT SHALL BE REQUIRED IF PAVING LIFTS ARE NOT COMPLETED WITHIN 3 DAYS OF EACH OTHER. TACK COAT VERTICAL SURFACES ALONG SAW CUT LIMITS.
- 8. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH PA DOT PUBLICATION 213 "WORK ZONE TRAFFIC CONTROL" (LATEST REVISION). AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT, AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.

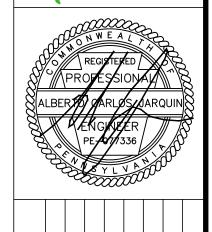


0+20 0+40 0+60 0+77.40

EX MH 818-1599 to EW-1 PROFILE HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 5'







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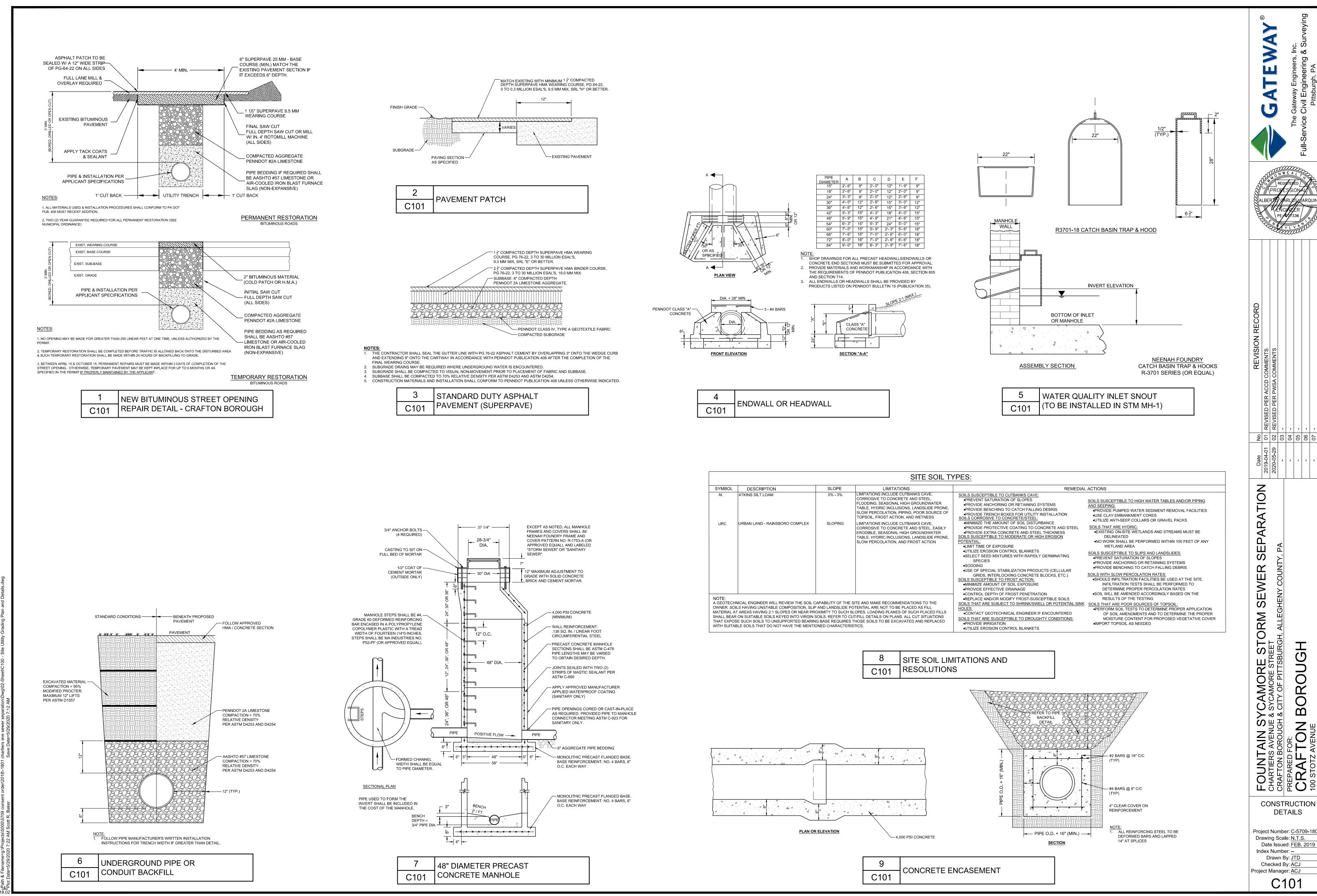
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CONSTRUCTION PLANS

Project Number: C-5709-1801 Drawing Scale: 1" = 20' Date Issued: FEB. 2019 Index Number: --Drawn By: JTD Checked By: ACJ

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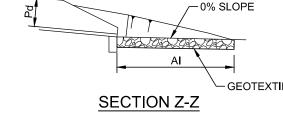


CONSTRUCTION DETAILS

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Project Number: C-5709-1801 Drawing Scale: N.T.S. Date Issued: FEB. 2019 Index Number: --Drawn By: JTD Checked By: ACJ

Project Manager: ACJ



	PIPE	RIPRAP		APRON		
OUTLET NO.	DIA Pd (IN)	SIZE R	THICK. Rt (IN)	LENGTH Al (FT)	INITIAL WIDTH Aiw (FT)	TERMINA WIDTH Atw (FT)
ENDWALL-1	18	4	18	8.0	4.5	12.5

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS

• ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY

1	RIPRAP APRON AT PIPE OUTLET
C102	- N.T.S.

#### TEMPORARY SEEDING SPECIFICATIONS

RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST Ph LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 1 TON/AC (40 LB/1000 SF).

# PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING

MULCH CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 3 TONS/AC (140 LBS/1000 SF). PRECAUTION SHALL BE TAKEN TO

#### SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE FOLLOWING VARIETIES AND MIXED IN THE PROPORTIONS SPECIFIED.

STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

TEMPORARY LAWN	PROPORTION	MINIMUN
SEED MIXTURE	BY WEIGHT	PURITY
LOLIUM PERENNE	100%	95%

THREE PERCENT REDTOP MAY BE ADDED TO THE LAWN MIXTURE ON SLOPE AREAS OR FOR LATE SPRING OR LATE FALL SEEDING

# TEMPORARY SEEDING TEMPORARY SEEDING SHALL BE APPLIED AT THE RATE OF FOUR (4) POUNDS PER ONE THOUSAND

ALL AREAS TO BE SEEDED SHALL BE LOOSENED TO A DEPTH OF AT LEAST TWO INCHES BY

MECHANICAL MEANS AS APPROVED BY THE LANDSCAPE ARCHITECT. MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

PLACE LIME AT RATE OF 6 TON/AC AND 5-10-10 FERTILIZER AT 300 LS/AC

SEEDING SEED ALL DISTURBED AREAS WITH THE TEMPORARY SEED MIXTURE EXCEPT THOSE AREAS SHOWN TO BE SEEDED WITH STEEP SLOPE SEED MIX, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

# PERMANENT SEEDING SPECIFICATIONS

TOPSOIL 6" (MINIMUM) TOPSOIL SHALL BE REQUIRED ON ALL LAWN AREAS.

#### LIMESTONE RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES ADJUST Ph LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 6 TON/AC (240 LB/ 1,000 SF).

COMMERCIAL FERTILIZER IN THE ABSENCE OF A SOIL TEST, USE 1000 LB/AC OF 10-20-20 (25 LB/1000 SF) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

INOCULANT INOCULANT FOR TREATING LEGUMINOUS SEEDS SHALL BE A STANDARD COMMERCIAL PRODUCT CONSISTING OF A SUITABLE CARRIER CONTAINING A CULTURE OF NITROGEN FIXING BACTERIA SPECIFIC FOR SEEDS TO BE INOCULATED. INOCULANT SHALL NOT BE USED LATER THAN DATE INDICATED ON THE CONTAINER.

#### MULCH CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 140 POUNDS 1,000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE MULCH UNTIL THE VEGETATIVE

#### SEED MIXTURE SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE FOLLOWING VARIETIES AND MIXED IN PROPORTIONS SPECIFIED.

PERMANENT SEED MIXTURE	PROPORTION BY WEIGHT	MINIMUM PURITY
POA PRATENSIS	50%	85%
KENTUCKY BLUEGRASS		
(COLUMBIA OR EQUAL)		
LOLIUM PERENNE	25%	98%
TURF-TYPE PERENNIAL RYEGRASS		
PENN-FINE PERENNIAL RYEGRASS		
CITATION II PERENNIAL RYEGRASS	25%	98%

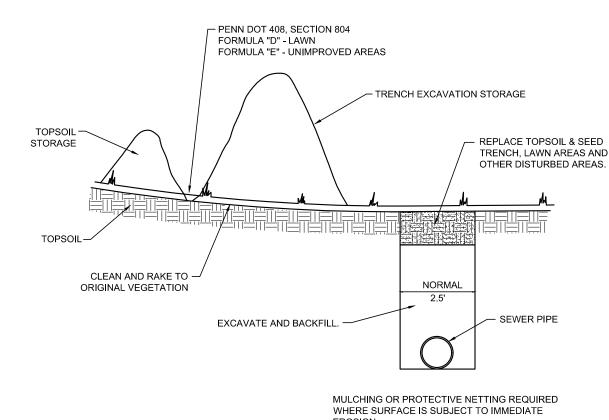
# PERMANENT SEEDING PERMANENT SEEDING SHALL BE APPLIED AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1,000)

THE SOIL, MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

GRADE AS NECESSARY TO BRING SUBGRADE TO A TRUE, SMOOTH SLOPE PARALLEL TO AND FOUR INCHES PREPARATION OF SEEDING BELOW FINISH GRADE. PLACE TOPSOIL OVER SPECIFIED AREAS TO A DEPTH SUFFICIENTLY GREATER THAN SIX (6) INCHES SO THAT AFTER SETTLEMENT AND LIGHT ROOLING THE COMPLETE WORK WILL CONFORM TO

LINES, GRADES AND ELEVATIONS SHOWN. FERTILIZER AND AGRICULTURAL LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL BY ROTOTILLING OR OTHER METHOD TO A MINIMUM DEPTH OF FOUR (4) INCHES. THE ENTIRE SURFACE SHALL THEN BE REGRADED AND ROLLED. AREAS TO BE SEEDED SHALL THEN BE LOOSENED TO A DEPTH OF TWO (2). INCHES. SEEDING SHALL BE DONE IN TWO SEPARATE OPERATIONS. THE SECOND SEEDING SHALL BE DONE IMMEDIATELY AFTER THE FIRST AND AT RIGHT ANGLES TO THE FIRST SEEDING AND LIGHTLY RAKED INTO

8	SEEDING SPECIFICATIONS
C102	SEEDING SPECIFICATIONS



2	EROSION CONTROL FOR SEWER
C102	TRENCHES

#### **RECYCLING/DISPOSAL OF WASTE**

LIPON COMPLETION OF THE PROJECT RECYCLING OR DISPOSAL OF ALL WASTE MATERIALS SHALL BE THE RESPONSIBILITY OF THE EARTHMOVING CONTRACTOR. CONSTRUCTION WASTE INCLUDES, BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, SILT REMOVED FROM EROSION CONTROL FACILITIES, EXCESS BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, AND OBSOLETE EROSION CONTROL MATERIALS (SILT FENCE, SILT SACKS, ETC.).

SILT REMOVED FROM SEDIMENT CONTROL FACILITIES SHALL BE SPREAD ON THE TOPSOIL STOCKPILE. OR IN LAWN OR LANDSCAPE AREAS. OBSOLETE EROSION CONTROL MATERIALS AND EXCESS BUILDING MATERIALS MUST BE DISPOSED OF AT A DEP APPROVED SITE.

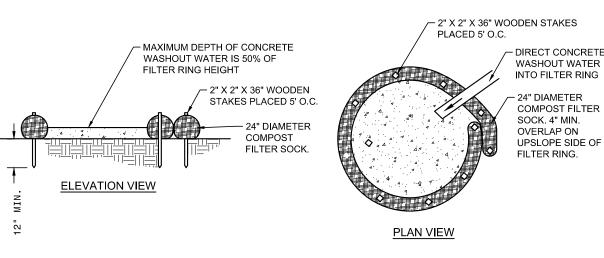
3	RECYCLING / DISPOSALS OF
C102	WASTE

#### MAINTENANCE AND INSPECTION SCHEDULE

CONTROL MEASURE	INSPECT	PROBLEMS TO LOOK FOR	POSSIBLE REMEDIES
VEGETATION	WEEKLY AND AFTER EVERY RUNOFF EVENT	SEDIMENT AT TOE OF SLOPE	CHECK FOR TOP-OF-SLOPE DIVERSION AND INSTALL IF NEEDED.
		RILLS AND GULLIES FORMING	FILL RILLS AND REGRADE GULLIED SLOPES.
		BARE SOIL PATCHES	RESEED, FERTILIZE, AND MULCH BARE AREAS.
COMPOST FILTER SOCK	WEEKLY AND AFTER EVERY RUNOFF EVENT	SEDIMENT ACCUMULATION ON UPSTREAM SIDE	REMOVE SEDIMENT WHEN LEVEL REACHES HALF OF THE EFFECTIVE HEIGHT
		PONDING WATER	REMOVE SEDIMENT OR ADD ADDITIONAL SILTSOXX TO REDUCE SLOPE LENGTH
		TEARING OR RIPPING OF FABRIC	REPLACE RIPPED SECTION WITH NEW SILTSOXX
CONCRETE WASHOUT FACILITY	DAILY	DAMAGED OR LEAKING WASHOUT ACCUMULATION OF MATERIALS (50% CAPACITY)	DEACTIVATED AND REPAIRED OR REPLACED AS NECESSARY.  PLASTIC LINERS SHOULD BE REPLACED WITH EACH
			CLEANING.

- ALL MAINTENANCE INSPECTIONS SHALL BE LOGGED ONTO DEP FORM # 3150-FM-BWEW0083, DATED 2/2012, AND KEPT ON THE SITE AT ALL TIMES. ALL REPAIRS TO BE COMPLETED WITHIN 24 HOURS OF DISCOVERY
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL TEMPORARY CONTROL MEASURES DURING CONSTRUCTION
- ALL DEVICES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. IF DURING THESE INSPECTIONS, ANY DEVICE IS FOUND TO BE CLOGGED, DAMAGED, HALF-FULL OF SILT OR NOT FULLY OPERATIONAL, THE DEVICE(S) SHALL BE CLEANED OF ALL DEBRIS. UPON COMPLETION OF THE PROJECT, RECYCLING OR DISPOSAL OF ALL TEMPORARY EROSION CONTROL MATERIALS SHALL BE THE RESPONSIBILITY OF THE EARTHMOVING CONTRACTOR
- CONSTRUCTION WASTE INCLUDES, BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, SILT REMOVED FROM EROSION CONTROL FACILITIES. EXCESS BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, AND OBSOLETE EROSION CONTROL MATERIALS (SILT FENCE, SILT SACKS, ETC.). OBSOLETE EROSION CONTROL MATERIALS AND EXCESS BUILDING MATERIALS MUST BE DISPOSED OF AT A DEP APPROVED SITE. • SILT REMOVED FROM SEDIMENT CONTROL FACILITIES SHALL BE SPREAD ON THE TOPSOIL STOCKPILE, OR IN LAWN OR LANDSCAPE AREAS.

6	MAINTENANCE AND INSPECTION
C102	SCHEDULE



# INSTALL ON FLAT GRADE FOR OPTIMAL PERFORMANCE

RESPONSIBLE FOR EARTHMOVING OPERATIONS.

2. 16" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT. 3. A SUITABLE IMPERVIOUS GEOMEMBRANE LINER SHALL BE PLACED AT THE LOCATION PRIOR TO THE INSTALLING THE SOCKS.

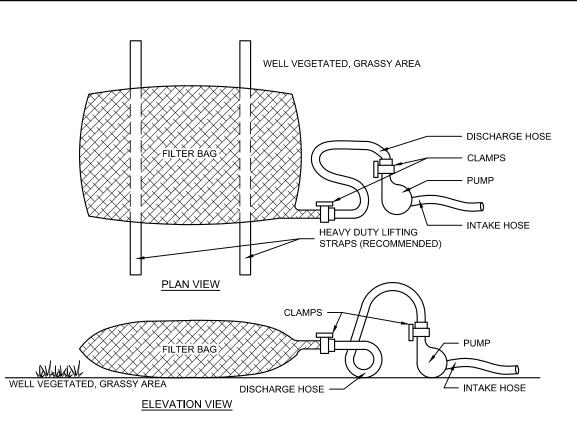
MPERVIOUS GEOME	IMBRANE LINER SHALL BE PLACED AT THE LOCATION PRIOR TO THE INSTALLING TH	7E
7	CONCRETE WASHOUT AREA	
C102	CONCRETE WASHOUT AREA	

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE: IF THE SITE WILL NEED TO HAVE FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE CONTRACTOR

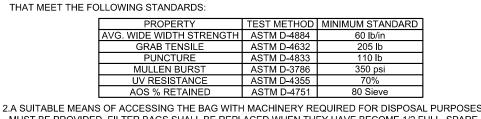
ENVIRONMENTAL DUE DILIGENCE MEANS PERFORMING INVESTIGATIVE TECHNIQUES FOR THE IMPORTED MATERIAL. THIS INCLUDES, BUT IS NOT LIMITED TO: VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, AND 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 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 OF ENVIRONMENTAL PROTECTION (DEP) POLICY 'MANAGEMENT OF FILL'. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL, REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEP MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE. CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

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.)

9	CLEAN FILL AND ENVIRONMENTAL
C102	DUE DILIGENCE



NOTES: 1.LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS, THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS MAY BE MADE FROM WOVEN GEOTEXTILES



MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY HAVE BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. IT IS RECOMMENDED THAT BAGS BE PLACED ON STRAPS TO FACILITATE REMOVAL.

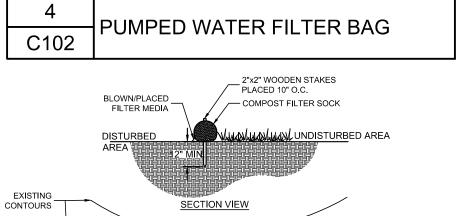
3.BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE. EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE. A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

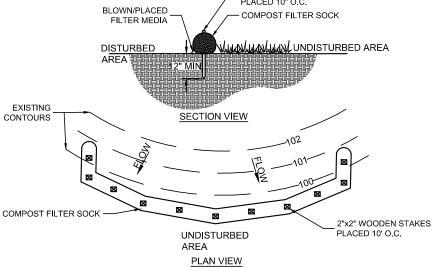
4.NO DOWN SLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHOULD BE INSTALLED BELOW BAGS LOCATED WITHIN 50' OF RECEIVING STREAM OR WHERE GRASSY AREA IS NOT AVAILABLE. A COMPOST BERM OR COMPOST FILTER SOCK SHALL BE PLACED BELOW ANY BAG DISCHARGING TO A SPECIAL PROTECTION SURFACE WATER

5.THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

6.THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

7.FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED





COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8' UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2. SEE TABLE BELOW. 2 TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

3 ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. 4.SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

5 BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. 6.UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE

SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT 7.SILT SOCK FABRIC MATERIAL SHALL BE MULTI-FILAMENT POLYPROPYLENE (MFPP), MINIMUM FUNCTIONAL LONGEVITY 1 YEAR.

8.SLOPE LENGTH TABLE FROM FIGURE 4.2. PADEP BMP MANUAL

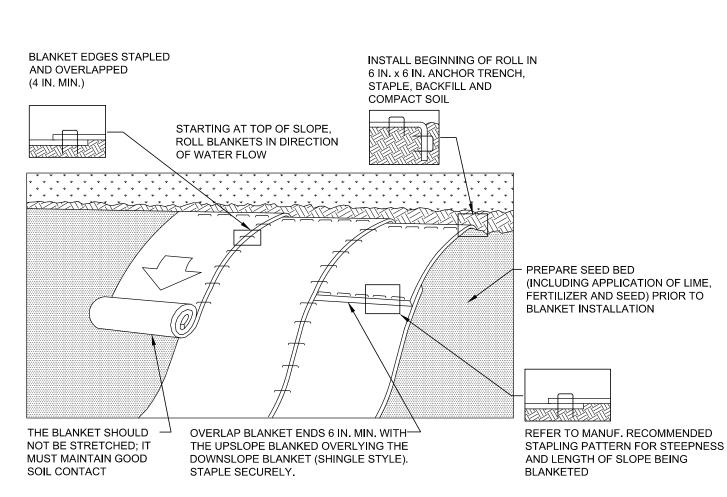
	COMPO	ST SOCK FABRIC I	MINIMUM SPECIFIC	CATIONS	
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	3/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIG. STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMAL FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
		TWO-PLY	SYSTEMS	•	
			HDPE BIAXIAL NET		
			CONTINUOUSLY WOUND		

011021111						
TWO-PLY SYSTEMS						
INNER CONTAINMENT NETTING			HDPE BIAXIAL NET			
			CONTINUOUSLY WOUND			
			FUSION-WELDED JUNCTURES			
			3/4" x 3/4" MAX. APERTURE SIZE			
			COMPOSITE POLYPROPYLENE FABRIC			
OUTER FILTRATION MESH	еп	(WOVEN LAYER AND NON-WOVEN FLEECE		EN FLEECE		
OUTER FILTRATION MESH			MECHANICALLY FUSED VIA NEEDLE PUNCH)			
			3/16" MAX. APERTURE SIZE			
SOCK FARRICS COMPOSED OF RURI AD MAY BE USED ON DROJECTS LASTING 6 MONTHS OR LESS					DR LESS	

<u>TABLE 4.2</u>				
COMPOST S	TANDARDS			
ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)			
ORGANIC PORTION	FIBROUS AND ELONGATED			
Ph	5.5 - 8.5			
MOISTURE CONTENT	30% - 60%			
PARTICLE SIZE	30%-50% PASS THRU 3/8" SIEVE			
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM			
COMPOST FILTER SOCK SUMMARY TABLE				

FILTER SOCK # | DIAMETER (IN) | SLOPE ABOVE (%) | SLOPE LENGTH (FT)

	1		12	12.5	8
	2		24	20.0	5
	10		MDOST EII	TER SOCK D	
	102	$1^{\circ\circ}$	LIAIL		



#### NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

EROSION CONTROL BLANKET

STANDARD EROSION AND SEDIMENT CONTROL PLAN 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 2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL

STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING. 3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

4. 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. 5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

6. 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 BEE INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.

7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.

8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) 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 2H:1V OR FLATTER.

9. 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 REGIONAL OFFICE OF THE DEPARTMENT

10. ALL BUILDING MATERIALS AND WASTES 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

11. 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

12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING 13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.

15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS 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 16. 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. 17. 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 SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.

18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS 19. 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 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.

20. 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. REFER TO GEOTECHNICAL REPORT AND CROSS SECTIONS. 21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

22. 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.

23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS. 24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

PLAN MAPS AND/OR DETAIL SHEETS.

14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROJECT SITE ONTO PUBLIC ROADS.

25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED 26. 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. 27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING 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.

28. 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. 29. 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 30. 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. 31. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO

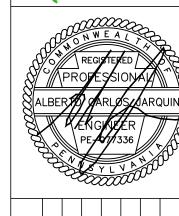
\$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION. 32. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER

33. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND 34. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE

35. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 10" LAYERED LIFTS AT 90% DENSITY

STANDARD EROSION AND





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CONSTRUCTION DETAILS

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Drawn By: JTD Checked By: ACJ Project Manager: ACJ