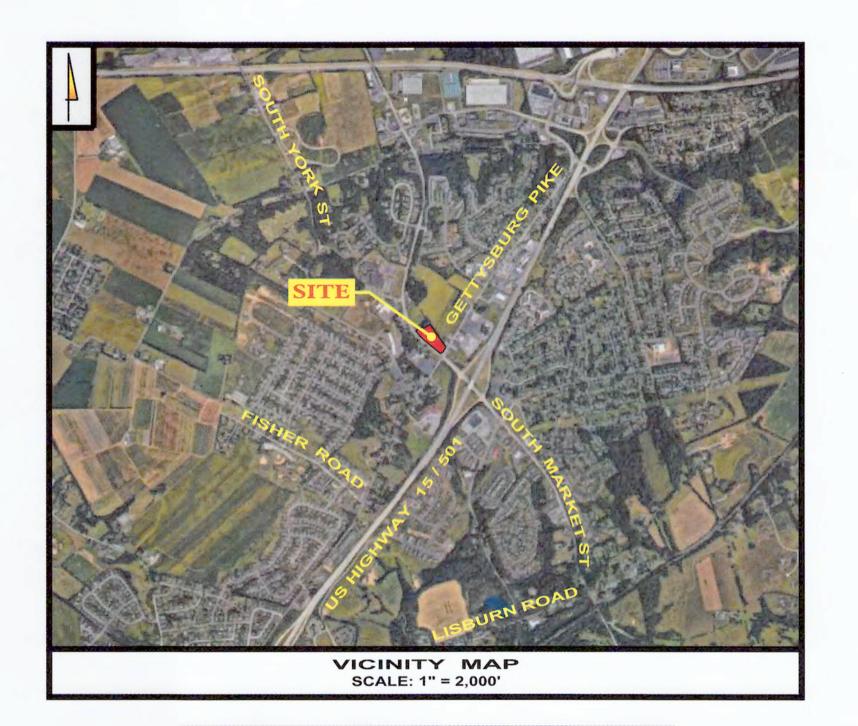
FINAL LAND DEVELOPMENT PLANS LOT #4 - GETTYSBURG PIKE & SOUTH MARKET STREET PROPOSED OFFICE BUILDINGS Cumberland County, PA Upper Allen Township

SHEET INDEX:

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LOT / OWNER INFORMATION:

OWNER: G Pike Associates, LLC SOURCE OF TITLE: Instrument Number 201924550 PLAN REFERENCE: Plan Book 72 - 113, Lot 4 TAX REFERENCE: Map 42 - 28 - 2419, Parcel 138

APPLICANT / OWNER:

G PIKE ASSOCIATES, LLC

2325 PAXTON CHURCH ROAD HARRISBURG, PA 17110 Telephone: 717 - 540 - 3902

APPROVED WAIVERS:

COMMISSIONERS AT THEIR MEETING HELD ON JULY 17, 2019 SUBDIVISION & LAND DEVELOPMENT

- 1. SECTION 220-11.F(2)(b) TO REOUIRE TRAFFIC IMPACT REPORTS TO INCLUDE PROPOSED NEARBY USES
- 2. SECTION 220-11.F(2)(c)[2] TO REQUIRE TRAFFIC IMPACT REPORTS TO CONSIDER A TEN-YEAR GROWTH PERIOD BEYOND CONSTRUCTION OF THE PROPOSED LAND DEVELOPMENT PLAN

COMMISSIONERS AT THEIR MEETING HELD ON MARCH 6, 2019) SUBDIVISION & LAND DEVELOPMENT:

- 1. SECTION 220-26.B SCREENING
- (ALTERNATIVE LOCATIONS) 2. SECTION 220-26.D - LOCATION OF REQUIRED STREET TREES (ALTERNATIVE LOCATIONS)
- 3. SECTION 220-9.C(2)(ff) PRELIMINARY PLAN SPECIFICATIONS (FACADE, ELEVATIONS AND FLOOR PLANS)
- 4. SECTION 220-16.C(3) VEHICULAR PARKING FACILITIES (MINIMUM CURB RADII WITHIN VEHICULAR PARKING AREAS)

APPROVED DEFERRALS:

(APPROVED BY THE UPPER ALLEN TOWNSHIP BOARD OF COMMISSIONERS AT THEIR MEETING HELD ON MARCH 6, 2019) SUBDIVISION & LAND DEVELOPMENT:

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this 16th day of October , 2019

PARKING FACILITIES (GETTYSBURG PIKE CURB) 3. SECTION 220-16.B(3) - CURBS, SIDEWALKS AND VEHICULAR PARKING FACILITIES (GETTYSBURG PIKE SIDEWALK)

(APPROVED BY THE UPPER ALLEN TOWNSHIP BOARD OF COMMISSIONERS AT THEIR MEETING HELD ON NOVEMBER 20, 2019) SUBDIVISION & LAND DEVELOPMENT:

1. SECTION 220-16.B(3) - CURBS, SIDEWALKS AND VEHICULAR PARKING FACILITIES (SOUTH MARKET STREET SIDEWALK NORTH OF RIGHT-OUT DRIVEWAY).

LOT AREA: 3.780 Acres

Tills plan we	is "recorded" in the office of the Re	ecorder O
Deeds in and	d for Cumberland County this	day
of	, 20	

SURVEYOR'S CERTIFICATION

I, James C. Hockenberry, hereby certify that I am a registered

Land Surveyor, or registered Engineer in compliance with the

that all the monuments shown thereon actually exist; and their

laws of the Commonwealth of Pennsylvania; that this plan

correctly represents a survey completed by me in July, 2018;

location, size, type and material are accurately shown.

Instrument Number

G Pike Associates, LLC hereby acknowledges that the stormwater management facilities and BMP's are to be permanent fixtures that

SUBSURFACE GEOLOGY CERTIFICATION

observations performed on November 8, 2018, I hereby certify no

evidence of limestone geology within the property development

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BLAIR C. KITLINSKI

Through monitoring of an on-site test pit program and field

STORMWATER ACKNOWLEDGEMENT

can be altered or removed only after approval of a revised plan by Jpper Allen Township.

Andrew S. Williams, Member

areas has been identified.

Director of Planning

CUMBERLAND COUNTY PLANNING

Reviewed by the Cumberland County Planning Department

BOARD OF COMMISSIONERS

Approved by the Board of Commissioners of Upper Allen Township this 20th day of November , 2019. The conditions of approval

PLANNING COMMISSION

Reviewed by the Planning Commission of Upper Allen Township,

Secretary Chairman

OWNER CERTIFICATION

OWNER: Commonwealth of Pennsylvania County of Cumberland May Andrew S. Williams, the undersigned officer, personally appeared known to me, or satisfactorily proven to be the person whose name is subscribed to the within instrument, and acknowledged executed the same for the purposes therein contained.

IN WITNESS THEREOF, I have hereunto set my hand and official seal.

Bobbie Lynn Van Buskirk, Notary Public Susquehanna Twp., Dauphin County My Commission Expires Sept. 22, 2021 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

NOTARY PUBLIC

It is hereby certified that the undersigned is the owner of the property shown on these drawings.

Andrew S. Williams, Member

WSC PROJECT NUMBER: GPIKE-UA-OFFICE-FINAL

ALL PLANS, DOCUMENTS AND COMPUTER FILES RELATED TO THIS PROJECT ARE THE PROPERTY OF WILLIAMS SITE CIVIL, LLC. WILLIAMS SITE CIVIL, LLC RETAINS ALL COMMON LAW, STATUTE AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.

REPRODUCTION OF THE MATERIAL HEREON OR SUBSTANTIAL USE WITHOUT WRITTEN PERMISSION OF WILLIAMS SITE CIVIL, LLC VIOLATES THE COPYRIGHT LAWS OF THE UNITED STATES AND WILL BE SUBJECT TO LEGAL PROSECUTION.

2020 WILLIAMS SITE CIVIL, LLC

SHEET

DATE: SEPTEMBER 27, 2019

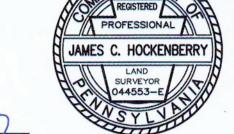
A) 1. ADDED APPROVED WAIVERS INFORMATION. SIGNATURE BLOCK. 3. ADDED LOT/OWNER INFORMATION. (B.E.R.) B) 1. ADDED DATE TO BOARD OF COMMISSIONERS 2. ADDED DATE TO CUMBERLAND COUNTY PLANNING COMMISSION SIGNATURE BLOCK.
3. ADDED DATE TO BOARD OF COMMISSIONERS SIGNATURE BLOCK.
4. MODIFIED DATE FOR APPROVED WAIVERS,

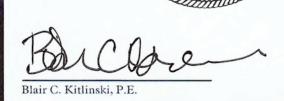
MODIFICATIONS & DEFERRALS. (B.E.R.)

I, Douglas S. Gosik, P.E., on this date December 3, 2018, have reviewed and hereby certify that the Stormwater Management Site Plan meets all design standards and criteria of the Upper Allen Township Stormwater Management Ordinance."

STORMWATER CERTIFICATION



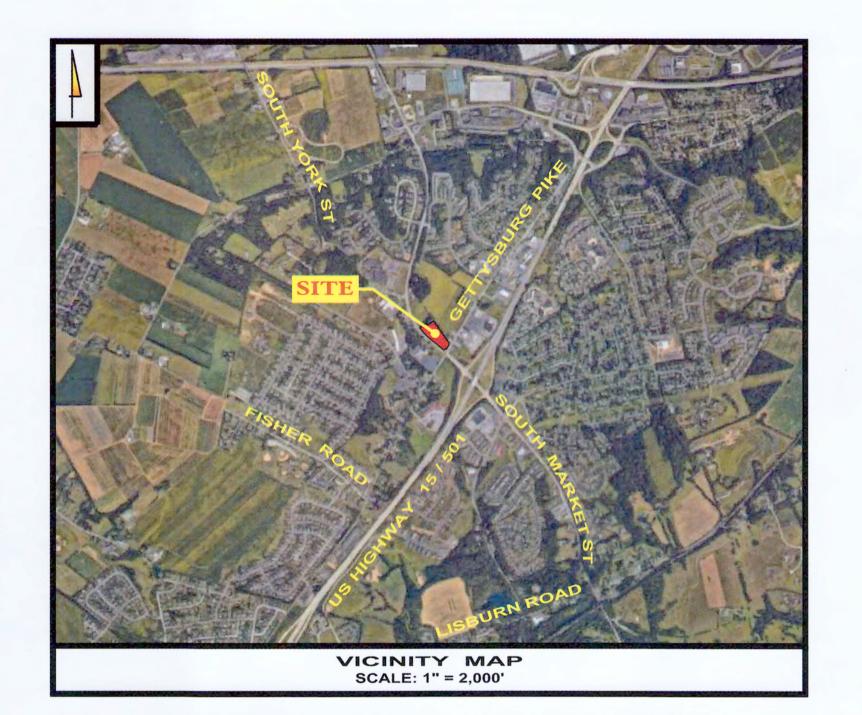




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APPLICANT / OWNER:

G PIKE ASSOCIATES, LLC 2325 PAXTON CHURCH ROAD HARRISBURG, PA 17110 Telephone: 717 - 540 - 3902

APPROVED WAIVERS:

SUBDIVISION & LAND DEVELOPMENT:

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	ALC: NAME OF	200	76

This plan was "recorded" in the office of the Recorder Of Deeds in and for Cumberland County this _____ day

SURVEYOR'S CERTIFICATION

I, James C. Hockenberry, hereby certify that I am a registered

Land Surveyor, or registered Engineer in compliance with the

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location, size, type and material are accurately shown.

RECORDING BLOCK

Instrument Number

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G Pike Associates, LLC hereby acknowledges that the stormwater management facilities and BMP's are to be permanent fixtures that can be altered or removed only after approval of a revised plan by

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observations performed on November 8, 2018, I hereby certify no

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PROFESSIONAL

BLAIR C. KITLINSKI

Through monitoring of an on-site test pit program and field

G-Pike Associates, LLC Andrew S. Williams, Member

Upper Allen Township.

areas has been identified.

CUMBERLAND COUNTY PLANNING

Approved by the Board of Commissioners of Upper Allen Township, this 20th day of November , 2019. The conditions of approval

OWNER CERTIFICATION

OWNER: Commonwealth of Pennsylvania County of Cumberland

May , 2020 before me, Andrew S. Williams, the undersigned officer, personally appeared known to me, or satisfactorily proven to be the person whose name is subscribed to the within instrument, and acknowledged executed the same for the purposes therein contained.

IN WITNESS THEREOF, I have hereunto set my hand and official seal.

Bobbie Lynn Van Buskirk, Notary Public Susquehanna Twp., Dauphin County My Commission Expires Sept. 22, 2021 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Andrew S. Williams, Member

It is hereby certified that the undersigned is the owner of the property

ATE: SEPTEMBER 27, 2019 SHEET

A) 1. ADDED APPROVED WAIVERS INFORMATION. 2. MODIFIED BOARD OF COMMISSIONERS SIGNATURE BLOCK.
3. ADDED LOT/OWNER INFORMATION. (B.E.R.)

B) 1. ADDED DATE TO BOARD OF COMMISSIONERS

SIGNATURE BLOCK.
2. ADDED DATE TO CUMBERLAND COUNTY PLANNING COMMISSION SIGNATURE BLOCK.

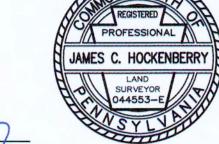
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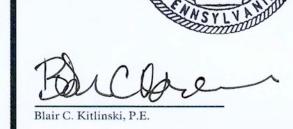
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Reviewed by the Cumberland County Planning Department

Director of Planning

BOARD OF COMMISSIONERS

PLANNING COMMISSION

Reviewed by the Planning Commission of Upper Allen Township, this 28th day of October , 2019

Chairman

ILLIAMS SITE CIVIL, LLC VIOLATES HE COPYRIGHT LAWS OF THE INITED STATES AND WILL BE

© 2020 WILLIAMS SITE CIVIL, LLC

GPIKE-UA-OFFICE-FINAL

1 OF 15

FINAL LAND DEVELOPMENT PLANS LOT #4 - GETTYSBURG PIKE & SOUTH MARKET STREET PROPOSED OFFICE BUILDINGS Upper Allen Township Cumberland County, PA

REVISIONS:

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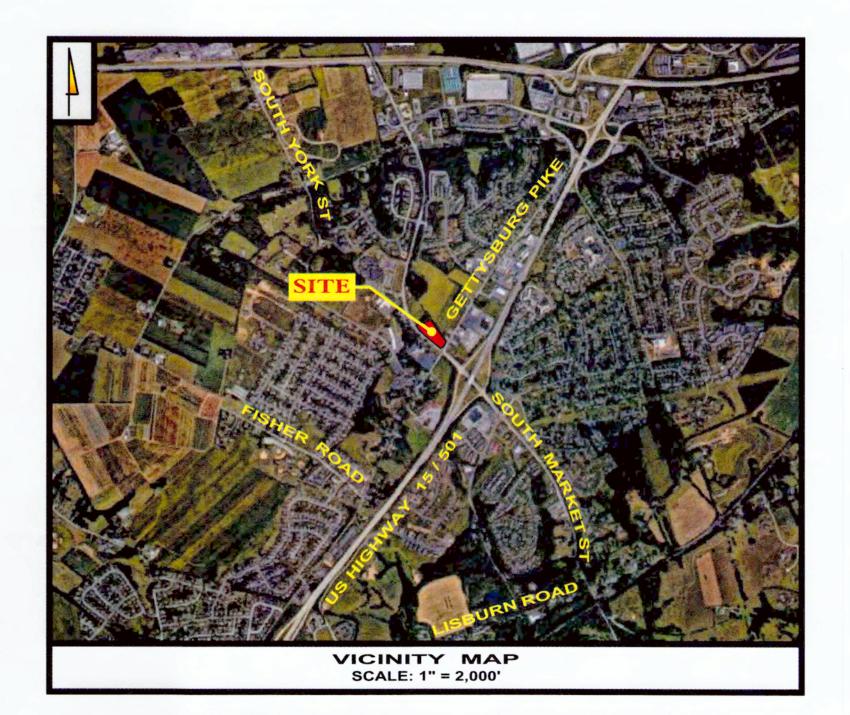
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Instrument Number

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G-Pike Associates, LLC Andrew S. Williams, Member

Upper Allen Township.

Reviewed by the Cumberland County Planning Department

CUMBERLAND COUNTY PLANNING

Director of Planning

BOARD OF COMMISSIONERS

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PLANNING COMMISSION

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Chairman

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Bobbie Lynn Van Buskirk. Notary Public Susquehanna Twp., Dauphin County My Commission Expires Sept. 22, 2021 JEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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Andrew S. Williams, Membe

WSC PROJECT NUMBERS GPIKE-UA-OFFICE-FINAL

DATE: SEPTEMBER 27, 2019

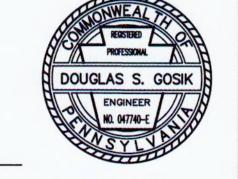
SHEET 1 OF 15

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2020 WILLIAMS SITE CIVIL, LLC

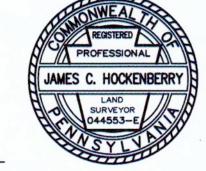
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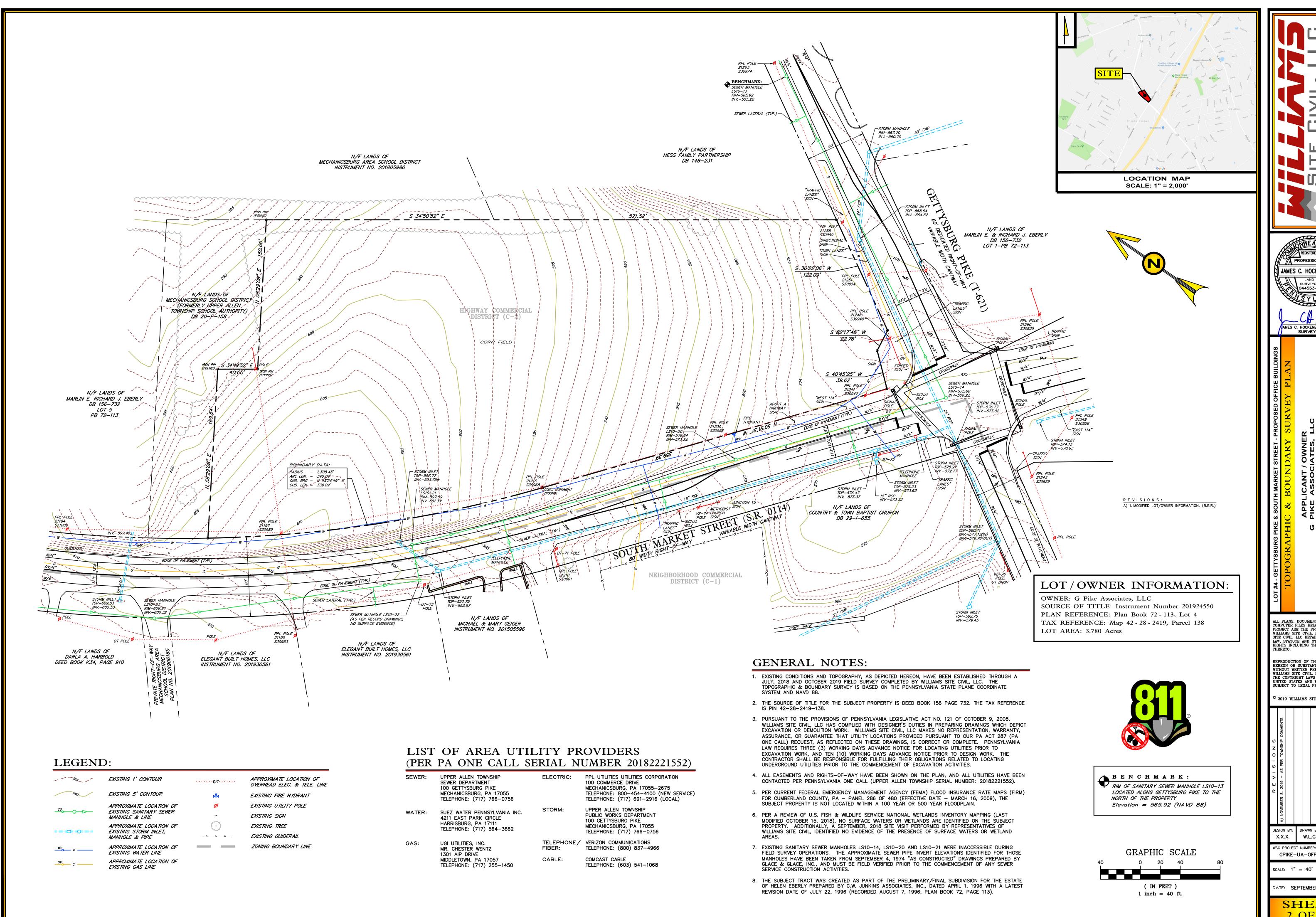
SURVEYOR'S CERTIFICATION

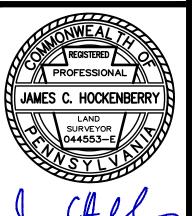


Blair C. Kitlinski, P.E.

Through monitoring of an on-site test pit program and field observations performed on November 8, 2018, I hereby certify no evidence of limestone geology within the property development areas has been identified.

BLAIR C. KITLINSKI



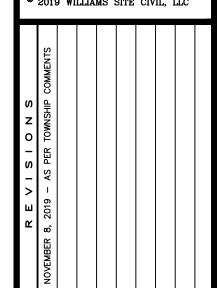


AMES C. HOCKENBERRY, P.L.S. SURVEYOR

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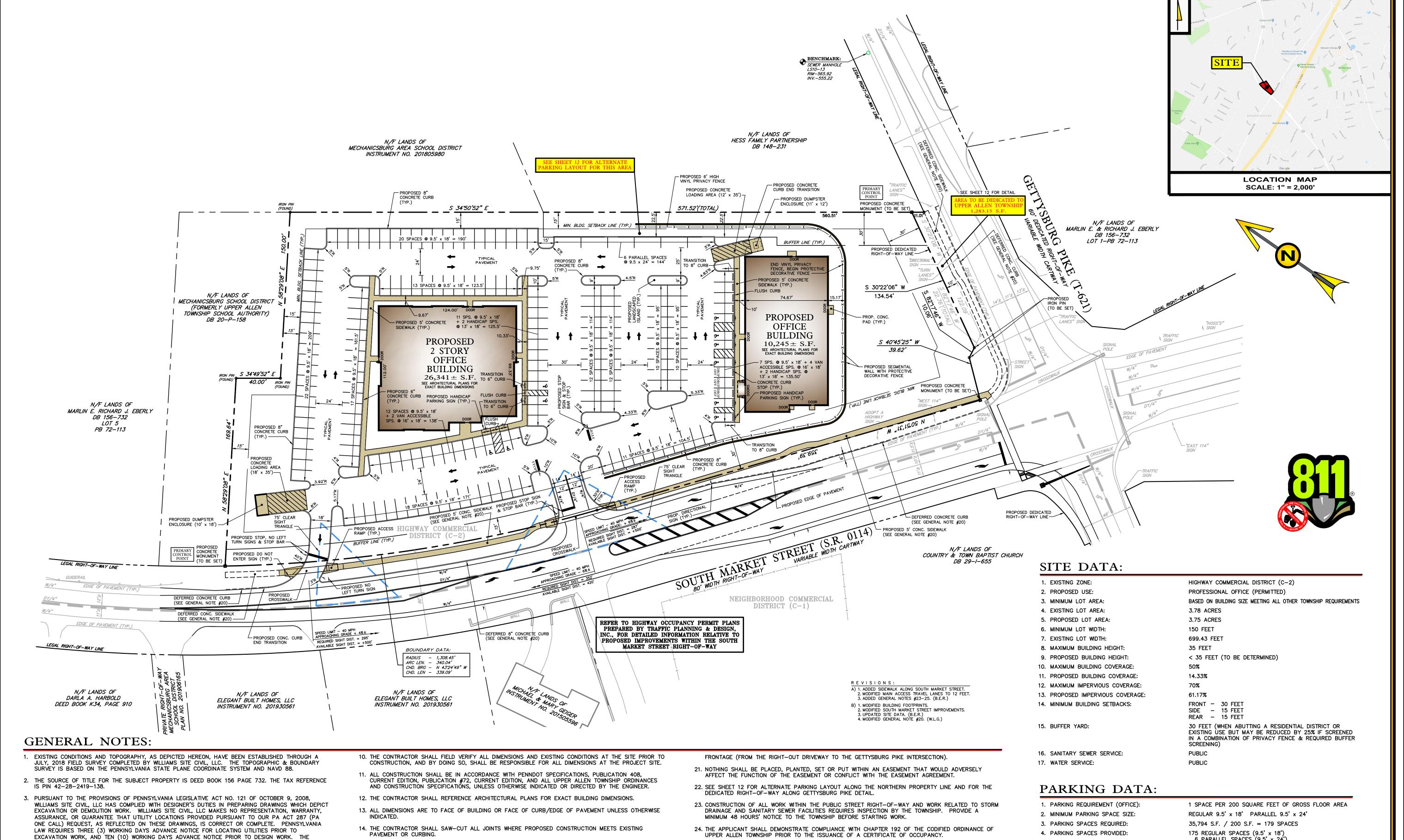


DRAWN BY: X.X.X. W.L.G.

SC PROJECT NUMBER: GPIKE-UA-OFFICE-FINAL

DATE: SEPTEMBER 27, 2019

SHEET



- CONTRACTOR SHALL BE RESPONSIBLE FOR FULFILLING THEIR OBLIGATIONS RELATED TO LOCATING UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION ACTIVITIES.
- 4. ALL EASEMENTS AND RIGHTS-OF-WAY HAVE BEEN SHOWN ON THE PLAN, AND ALL UTILITIES HAVE BEEN CONTACTED PER PENNSYLVANIA ONE CALL (UPPER ALLEN TOWNSHIP SERIAL NUMBER: 20182221552).
- 5. PER CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR CUMBERLAND COUNTY, PA - PANEL 286 OF 480 (EFFECTIVE DATE - MARCH 16, 2009), THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A 100 YEAR OR 500 YEAR FLOODPLAIN.
- SPECIAL NOTICE: 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", OR ANY AMENDMENTS THEREOF, 36 P.S. 670.101 ET SEQ., BÉFORE DRIVEWAY ACCESS TO OR NEW UTILITY CONSTRUCTION WITHIN A STATE HIGHWAY RIGHTS-OF-WAY IS PERMITTED.
- NO CONSTRUCTION SHALL BEGIN UNTIL AFTER A PRE-CONSTRUCTION MEETING BETWEEN THE DEVELOPER, THE CONTRACTOR, THE MUNICIPAL ENGINEER/INSPECTOR, AND OTHERS AS MAY BE REQUESTED TO
- ALL ELEVATIONS ARE REFERENCED TO THE BENCHMARK SHOWN AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO GROUNDBREAKING. ALL PROPOSED ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE FINISH GROUND SURFACE UNLESS OTHERWISE INDICATED.
- 9. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN TEMPORARY BENCHMARKS WITHIN THE PROJECT AREA, AND SHALL BE RESPONSIBLE FOR THE TRANSFER OF THE BENCHMARK IDENTIFIED HEREON.

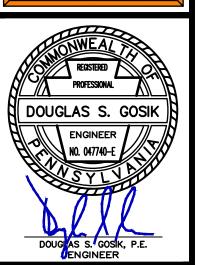
- 15. ALL LINE STRIPING WITHIN THE SITE SHALL BE A 4 INCH WIDE WHITE STANDARD TRAFFIC PAINT, UNLESS INDICATED OTHERWISE.
- 16. ALL AREAS THAT DO NOT RECEIVE PAVEMENT OR LANDSCAPING SHALL RECEIVE A MINIMUM OF FOUR INCHES (4") OF TOPSOIL (SEE SOIL EROSION & SEDIMENTATION CONTROL PLAN FOR RECOMMENDED SEED MIXTURE).
- 17. ALL SITE ACCESSIBILITY FEATURES SHALL COMPLY WITH "ICC/ANSI A 117.1-2009" AND "2012 INTERNATIONAL BUILDING CODE" OR MOST CURRENT.
- 18. A BUILDING AND/OR ZONING PERMIT IS REQUIRED PURSUANT TO SECTION 245-19.3 OF THE UPPER ALLEN TOWNSHIP ZONING ORDINANCE PRIOR TO THE ERECTION OF ANY BUILDING.
- 19. PRIOR TO ANY SIGN INSTALLATION A SEPARATE SIGN APPLICATION SHALL BE SUBMITTED TO UPPER ALLEN TOWNSHIP FOR REVIEW AND APPROVAL. THE SIGN VENDOR SHALL COMPLY WITH ALL PERTINENT REQUIREMENTS OF THE UPPER ALLEN TOWNSHIP ZONING ORDINANCE, ARTICLE XVIII, OR SECURE APPROPRIATE ZONING RELIEF.
- 20. ON JULY 17, 2019 A DEFERRAL WAS GRANTED BY THE UPPER ALLEN TOWNSHIP BOARD OF COMMISSIONERS FOR THE INSTALLATION OF CONCRETE CURB AND SIDEWALK ALONG THE PROPERTY'S GETTYSBURG PIKE FRONTAGE, AND CONCRETE CURB ALONG THE PROPERTY'S SOUTH MARKET STREET FRONTAGE. ADDITIONALLY, A PARTIAL DEFERRAL WAS GRANTED FOR THE INSTALLATION OF SIDEWALK ALONG THE PROPERTY'S SOUTH MARKET STREET FRONTAGE, NORTH OF THE RIGHT-OUT DRIVEWAY. SIDEWALK WILL BE INSTALLED ALONG THE REMAINDER OF THE PROPERTY'S SOUTH MARKET STREET.
- 25. AS-BUILT MYLAR PLANS AND ELECTRONIC DATA FILES SHALL BE PROVIDED TO THE TOWNSHIP. ALL DRAWINGS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR LAND SURVEYOR ATTESTING TO THE CORRECTNESS OF THE FACILITY INFORMATION SHOWN, IN ACCORDANCE WITH SECTION 220-13.C(2) OF THE CODIFIED ORDINANCE OF UPPER ALLEN TOWNSHIP.

6 PARALLEL SPACES (9.5' x 24') 6 VAN ACCESSIBLE SPACES (16' x 18') 4 HANDICAP SPACES (13' x 18')

191 TOTAL SPACES

BENCHMARK: ➡ RIM OF SANITARY SEWER MANHOLE LS10—13 LOCATED ALONG GETTYSBURG PIKE TO THE NORTH OF THE PROPERTY Elevation = 565.92 (NAVD 88)

GRAPHIC SCALE (IN FEET) 1 inch = 40 ft.



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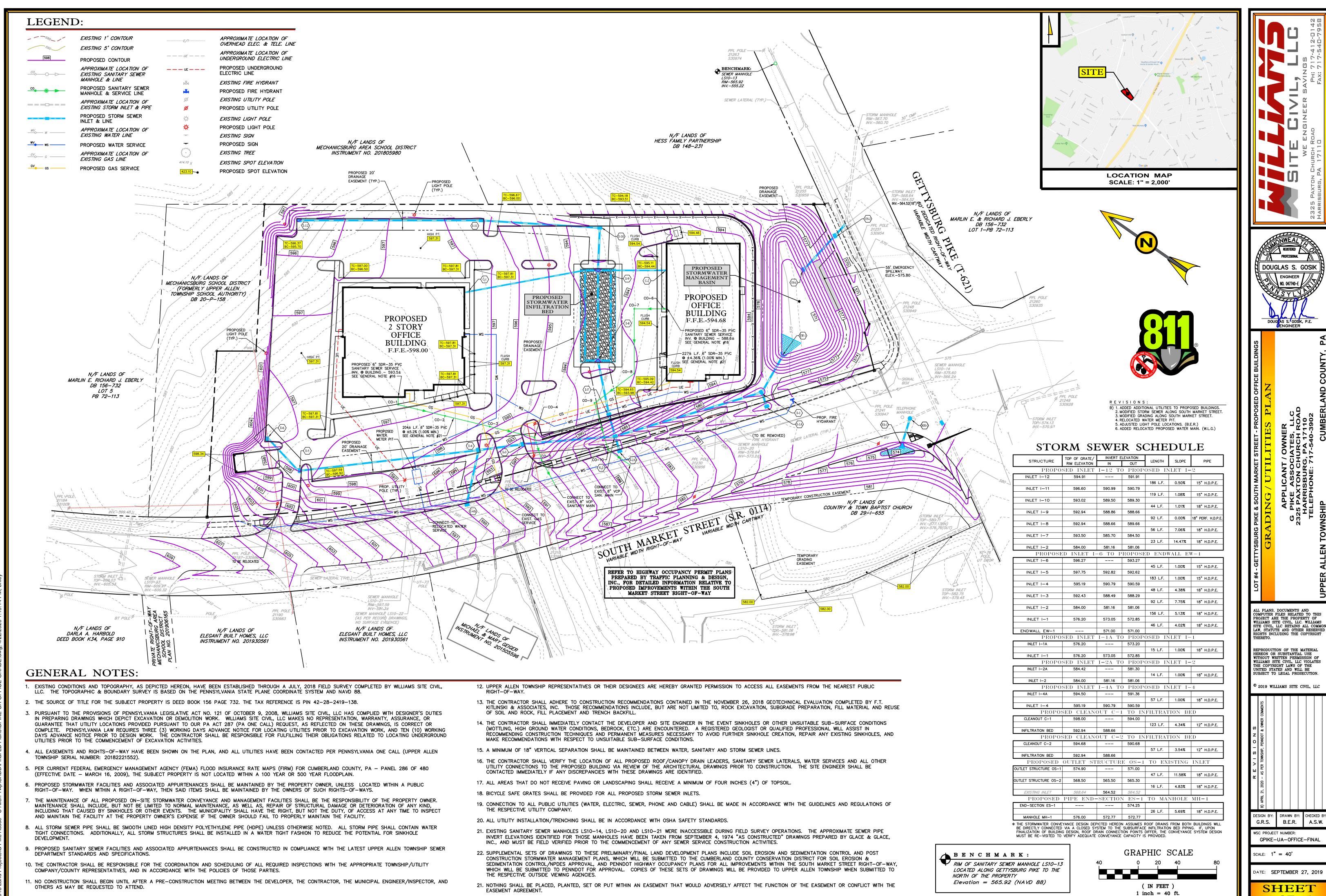
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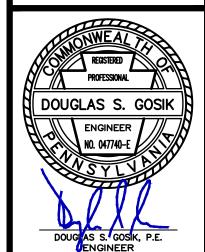
DESIGN BY: DRAWN BY: CHECKED B B.E.R. D.S.G. SC PROJECT NUMBER:

GPIKE-UA-OFFICE-FINAL

DATE: SEPTEMBER 27, 2019

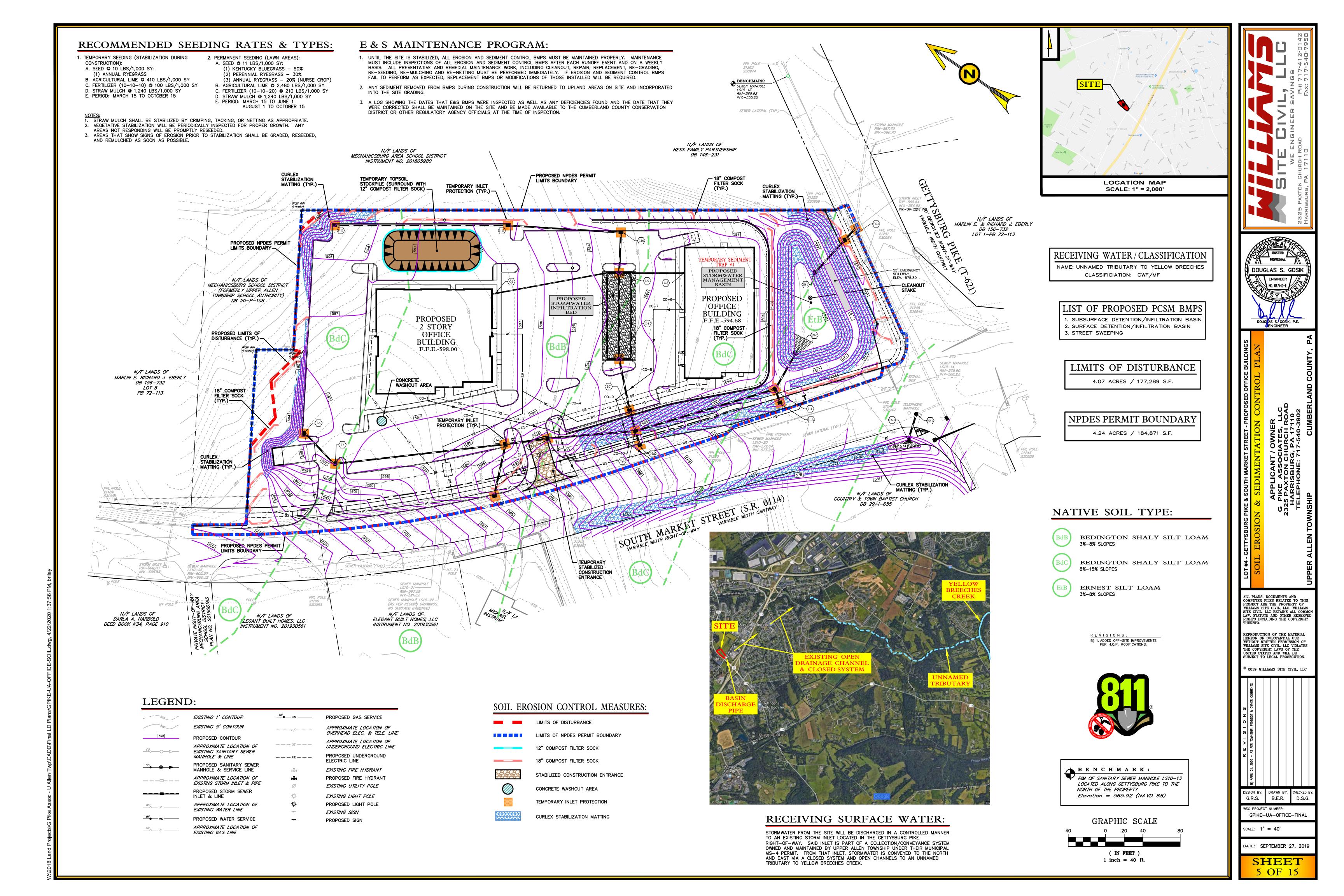
SCALE: 1" = 40'





GPIKE-UA-OFFICE-FINAL

DATE: SEPTEMBER 27, 2019



E & S CONTROL MEASURES:

THROUGH IMPLEMENTATION OF E&S BMPS AND OTHER MEASURES CONTAINED HEREIN, THIS SOIL EROSION AND SEDIMENTATION CONTROL PLAN INTENDS TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE, MAXIMIZE PROTECTION OF EXISTIN DRAINAGE FEATURES AND VEGETATION, MINIMIZE SOIL COMPACTION, AND PREVENT OR MINIMIZE GENERATION OF INCREASED

THE PROPOSED SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SELECTED FOR THIS PROJECT WILL PRIMARILY CONSIST OF THE CONSTRUCTION OF STABILIZED CONSTRUCTION ENTRANCES, FILTER SOCK, INLET PROTECTION, EROSION CONTROL MATTING, PUMPED WATER FILTER BAGS, A SEDIMENT TRAP, AND TEMPORARY SEEDING AND MULCHING.

A STABILIZED CONSTRUCTION ENTRANCE SHOULD BE INSTALLED WHEREVER IT IS ANTICIPATED THAT CONSTRUCTION TRAFFIC WILL EXIT ONTO ANY ROADWAY. ACCESS TO THE SITE SHOULD BE LIMITED TO THE STABILIZED CONSTRUCTION ENTRANCE.

COMPOST FILTER SOCKS ARE A TYPE OF CONTAINED COMPOST FILTER BERM. THEY CONSIST OF A BIODEGRADABLE OR PHOTODEGRADABLE MESH TUBE FILLED, TYPICALLY USING A PNEUMATIC BLOWER, WITH A COARSE COMPOST FILTER MEDIA THAT MEETS CERTAIN PERFORMANCE CRITERIA (E.G. HYDRAULIC FLOW THROUGH RATE, TOTAL SOLIDS REMOVAL EFFICIENCY, TOTAL SUSPENDED SOLIDS REMOVAL EFFICIENCY, TURBIDITY REDUCTION, NUTRIENT REMOVAL EFFICIENCY, METALS REMOVAL EFFICIENCY, AND MOTOR OIL REMOVAL EFFICIENCY).

INLET PROTECTION IS PROPOSED TO PROTECT STORM SEWER LINES AND TRAP SEDIMENT AS CLOSE TO THE SOURCE AS POSSIBLE TO PREVENT RISKS ASSOCIATED WITH ACCUMULATION. INLET PROTECTION SHOULD BE MAINTAINED (I.E. KEPT IN GOOD REPAIR AND FREE FROM STRAW, GRASS CLIPPINGS, SEDIMENT, CONSTRUCTION DEBRIS, LITTER, SNOW AND ICE) UNTIL ALL EARTHWORK WITHIN THE TRIBUTARY DRAINAGE AREA HAS BEEN COMPLETED AND STABILIZED. PER THE E&S BMP MANUAL, ALL THE INLET PROTECTION TRIBUTARY DRAINAGE AREAS ARE UNDER 1 ACRE.

A TEMPORARY SEDIMENT TRAP IS A TEMPORARY FACILITY THAT IS UTILIZED DURING CONSTRUCTION AS A STORMWATER STORAGE AREA THAT ALSO COLLECTS AND STORES SEDIMENT FOR REMOVAL TO PREVENT DISCHARGE OF SEDIMENT FROM CHANNELS AND STREAMS. THE SEDIMENT TRAP WILL CAPTURE THE 'FIRST FLUSH' OF RUNOFF FROM THE SITE WHERE IT WILL BE RETAINED OR INFILTRATED. THE 'FIRST FLUSH' OR INITIAL RUNOFF IS MOST AFFECTED BY THERMAL IMPACTS. PREVENTING DIRECT RELEASE OF THE 'FIRST FLUSH' WILL PROVIDE SIGNIFICANT PROTECTION TO DOWNSTREAM SURFACE WATERS BY MINIMIZING AND MITIGATING THOSE POTENTIAL THERMAL IMPACTS DURING CONSTRUCTION. IMPLEMENTATION OF THE MEASURES CONTAINED HEREIN SHOULD PROVIDE EFFECTIVE EROSION AND SEDIMENTATION CONTROL DURING AND AFTER

IN ADDITION TO PERIMETER CONTROL. COMPOST FILTER SOCKS ARE ALSO UTILIZED FOR PRETREATMENT OF THE SEDIMENT TRAPS. THE FILTER SOCKS ARE PLACED AROUND BOTH SEDIMENT TRAPS REDUCE THE SEDIMENT LOAD. INLET PROTECTION IS ALSO PROPOSED FOR THE TRIBUTARY AREAS TO THE SEDIMENT TRAPS, WHICH IS NORMALLY NOT REQUIRED, TO FURTHER REDUCE THE SEDIMENT LOADING. THESE EXTRA MEASURES WILL INCREASE EFFICIENCY OF THE SEDIMENT TRAPS AS AN ALTERNATIVE TO PROVIDING 5,300 SQ. FT. OF SURFACE AREA BY REDUCING THE AMOUNT OF SEDIMENT THAT IS DISTRIBUTED THROUGHOUT THE ENTIRE TRAP AREA.

EROSION CONTROL MATTING IS MATTING THAT IS PLACED OVER SOIL TO PREVENT EROSION. EROSION CONTROL BLANKETS SHOULD BE USED ON ALL SLOPES THAT ARE 3H:1V OR STEEPER AND WHERE POTENTIAL EXISTS FOR SEDIMENT POLLUTION TO RECEIVING SURFACE WATERS. SINCE ROCK SLOPES POSE LITTLE. IF ANY, POTENTIAL FOR EROSION, CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILL SLOPES NEED NOT BE BLANKETED. EROSION CONTROL BLANKETS SHOULD BE USED FOR ALL SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER -- 100 FEET OF A SPECIAL PROTECTION WATER --REGARDLESS OF SLOPE. EROSION CONTROL BLANKETS SHOULD ALSO BE CONSIDERED WHERE SOIL CONDITIONS (E.G. LOW FERTILITY, DROUGHTY CONDITIONS, ERODIBILITY, ETC.) MAKE REVEGETATION DIFFICULT. WHEN PROPERLY INSTALLED, FROSION CONTROL BLANKETS CAN HELP HOLD SOIL PARTICLES IN PLACE AND RETAIN SOIL MOISTURE PROMOTING SEED GERMINATION. THE BLANKET ALSO PROVIDES THE SEEDLINGS PROTECTION FROM INTENSE SUNLIGHT DURING EARLY STAGES OF GROWTH. A TEMPORARY BLANKET IS NECESSARY WHERE VEGETATION IS PROPOSED AS THE PROTECTIVE LINING FOR WATERWAYS. EROSION CONTROL BLANKETS ARE NOT EFFECTIVE IN PREVENTING SLOPE FAILURES. WHEREVER SLOPE STABILITY PROBLEMS ARE ANTICIPATED OR ENCOUNTERED. APPROPRIATE MEASURES SUCH AS REDUCING STEEPNESS OF SLOPE, DIVERTING UPSLOPE RUNOFF, REDUCING SOIL MOISTURE, LOADING THE TOE, OR BUTTRESSING THE SLOPE SHOULD BE CONSIDERED. WHEREVER EROSION CONTROL BLANKETS ARE SPECIFIED. THEY SHOULD BE INSTALLED OR APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. FOR ROLLED BLANKETS, THE AREAS TO BE BLANKETED SHOULD BE SMOOTH AND UNIFORM TO ENSURE CONTINUOUS CONTACT BETWEEN THE BLANKET AND THE UNDERLYING SOIL. SMOOTHING THE SURFACE IS NOT REQUIRED FOR SPRAY-ON BLANKETS. HOWEVER, EXTRA CARE IS NECESSARY FOR EXTREMELY ROUGH SURFACES TO ENSURE CONTINUOUS COVERAGE.

WHEREVER WATER IS PUMPED FROM A DISTURBED AREA, IT MUST BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGING TO A SURFACE WATER UNLESS IT CAN BE SHOWN THAT THE QUALITY OF THE WATER BEING PUMPED ALREADY MEETS DISCHARGE STANDARDS. IF A PROPERLY FUNCTIONING SEDIMENT TRAP IS AVAILABLE, THE PUMP DISCHARGE MAY BE ROUTED THROUGH THE TRAP OR BASIN. WHILE PUMPING, THE MAXIMUM WATER LEVEL IN THE TRAP SHOULD NOT EXCEED THE CLEANOUT ELEVATION.

SEEDING INVOLVES THE PLANTING OF GRASS SEED TO STABILIZE THE SURFACE OF AREAS THAT WILL BE TEMPORARILY AND/OR PERMANENTLY DISTURBED TO PREVENT SOIL EROSION. MULCHING INVOLVES APPLYING A LAYER OF STRAW HELP KEEP THE SEED AND LOOSE SOIL FROM WASHING OR BLOWING AWAY.

TEMPORARY CONTROL MEASURES:

- REVIEW AND AUTHORIZATION BY THE CUMBERLAND COUNTY CONSERVATION DISTRICT SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITIES.
- TEMPORARY VEGETATION SHALL BE ESTABLISHED ON ALL SLOPES, ON STOCKPILED TOPSOIL AND ON ALL DISTURBED AREAS LEFT UNSTABILIZED FOR PERIODS LONGER THAN 3 DAYS. AREAS OF DISCONTINUED EARTHMOVING ACTIVITY SHALL ALSO BE IMMEDIATELY STABILIZED.
- 3. DURING CONSTRUCTION, THE AMOUNT OF DISTURBED SOILS SHALL BE KEPT TO A MINIMUM AND, WHENEVER POSSIBLE, A SUITABLE VEGETATIVE BUFFER WILL BE MAINTAINED AROUND ALL CONSTRUCTION AREAS.
- I. ALL EARTHMOVING ACTIVITIES SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE THE AMOUNT OF
- RESPONSIBILITY FOR IMPLEMENTING EROSION AND SEDIMENTATION CONTROL SHALL BE DESIGNATED TO A MINIMUM OF ONE INDIVIDUAL WHO WILL BE PRESENT AT THE PROJECT SITE DAILY.
- 6. ALL SOIL STOCKPILES ARE TO BE IMMEDIATELY SEEDED WITH A TEMPORARY GRASS COVER.
- 7. WHENEVER POSSIBLE, PLACE ALL EXCAVATED MATERIAL UPSLOPE FROM DISTURBED AREAS. STOCKPILES SHALL BE SET PARALLEL TO GRADE TO REDUCE RUNOFF.
- 8. UPON GENERAL COMPLETION OF THE FINAL GRADING, TOPSOIL SHALL BE PLACED AND FINAL—GRADING PASSES SHALL BE MADE PERPENDICULAR TO THE DIRECTION OF RUNOFF.
- 9. RE-SEED AND REESTABLISH ANY BARREN AND DISTURBED AREAS NOT HAVING ESTABLISHED GROUND COVER.
- 10. FILTER SOCK SHALL BE PLACED AT CRITICAL EROSION AREAS. AS SHOWN ON THE PLAN. IN ORDER TO PREVENT SEDIMENT FROM ENTERING INTO ADJACENT PROPERTIES, ROADWAY AND WATERWAYS.
- 11. FILTER SOCK SHALL BE PLACED END TO END, SECURELY STAKED IN PLACE, AND MAINTAINED UNTIL THE AREA IS
- 12. WHERE DUST OR WIND EROSION IS A PROBLEM, THE UNSTABLE SURFACE(S) SHALL BE SPRINKLED WITH WATER OR OTHER SUITABLE DUST SUPPRESSOR; HOWEVER, WASHING OF ROADWAYS IS NOT PERMITTED.
- 13. ANY WATER PUMPED FROM ANY EXCAVATION, FOR ANY REASON, SHALL BE DIRECTED THROUGH A SEDIMENT FILTER
- BAG (DIRT BAG) CONFORMING TO PENNSYLVANIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- A SPILL OCCURS, IT SHALL BE CONTROLLED IMMEDIATELY TO PREVENT ITS ENTRY INTO NEARBY WATERWAYS.

CONSEQUENCES OF THE EROSION AND THE PERMITTEE SHALL IMMEDIATELY COMPLY WITH SAID DIRECTIVES.

- 15. WHEN THE ENGINEER, TOWNSHIP OFFICIAL, OR COUNTY CONSERVATION DISTRICT OFFICIAL DETERMINES THAT EROSION CONTROL MEASURES ARE NECESSARY, THAT WERE NOT FORESEEN IN THE DESIGN STAGE, SAID OFFICIAL SHALL ESTIMATE THE EROSION POTENTIAL AND SELECT MEASURES ON THE BASIS OF BOTH COST EFFECTIVENESS AND THE
- 16. ANY TEMPORARY EROSION CONTROL MEASURE APPLIED TO EXPOSED SOIL SURFACES SHALL REMAIN FUNCTIONAL UNTIL VEGETATED COVER IS SUFFICIENTLY ESTABLISHED.
- 17. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE SUBJECT TO APPLICABLE REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 102 RULES AND REGULATIONS.
- 18. SHOULD ANY ADDITIONAL EROSION OR SEDIMENTATION OCCUR DURING CONSTRUCTION, OR QUESTIONS REGARDING THE MAINTENANCE CONTROL PRACTICES ARISE, CONTACT THE CUMBERLAND COUNTY CONSERVATION DISTRICT AT (717)
- 19. PERMANENT SEEDING AND MULCHING WILL BE INCORPORATED INTO THE CONSTRUCTION PHASES DURING THE APPROVED PLANTING SEASON.
- 20. ALL AREAS DISTURBED BY CONSTRUCTION, OTHER THAN THOSE RECEIVING CONCRETE OR BITUMINOUS PAVING OR OTHER TYPE OF IMPERVIOUS COVER, SHALL BE STABILIZED BY APPLYING A SEED MIXTURE TO ESTABLISH AN EROSION RESISTANT STAND OF VEGETATION. TEMPORARY SEEDING SPECIFICATIONS ARE CONTAINED IN THIS REPORT.

PERMANENT CONTROL MEASURES:

- PERMANENT SOIL PROTECTION WILL BE COMPLETED AS EARLY AS PRACTICAL.
- 2. ALL EXISTING STORM WATER DEVICES ARE TO BE INSPECTED DAILY AND CLEANED OUT AS NECESSARY.
- 3. ALL SEDIMENT CONTROL DEVICES ARE TO REMAIN UNTIL ALL DISTURBED AREAS ARE FULLY STABILIZED.
- 4. TEMPORARY AND PERMANENT SEEDING SHALL ADHERE TO THE SPECIFICATIONS PROVIDED IN THIS REPORT.
- 5. EACH STAGE OF EARTHMOVING ACTIVITIES MUST BE COMPLETED PRIOR TO INITIATING SUBSEQUENT STAGES.
- 6. ALL EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED WEEKLY AND AFTER ALL MEASURABLE PRECIPITATION EVENTS.
- 7. THE PERMITTEE AND ANY CO-PERMITTEE SHALL TAKE ALL REASONABLE STEPS TO MINIMIZE OR PREVENT ANY DISCHARGE IN VIOLATION OF THIS PERMIT THAT HAS A REASONABLE LIKELIHOOD OF ADVERSELY AFFECTING HUMAN HEALTH OR THE ENVIRONMENT.
- 8. APPROVED SOIL EROSION AND SEDIMENTATION CONTROL PLANS AND NARRATIVE REPORTS MUST BE AVAILABLE AT THE SITE OF THE CONSTRUCTION ACTIVITY AT ALL TIMES.
- 9. IF FUEL OR OTHER DANGEROUS CHEMICALS ARE STORED ON SITE, THEN A PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN MUST BE DEVELOPED AND KEPT ON SITE.

STAGING OF MAJOR CONSTRUCTION ACTIVITIES:

- THE FOLLOWING IS THE RECOMMENDED STAGING OF MAJOR CONSTRUCTION ACTIVITIES FOR THE PROJECT.
- 1. 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.
- 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.
- 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 BY THE LOCAL CONSERVATION DISTRICT AT AN ON-SITE PRECONSTRUCTION MEETING.
- THE LIMITS OF DISTURBANCE (LOD) SHOULD BE MARKED PRIOR TO DISTURBANCE ACTIVITIES (I.E. SURVEY STAKES, POSTS & ROPE, CONSTRUCTION FENCE, ETC.).
- INITIAL EROSION AND SEDIMENTATION CONTROL MEASURES AND BMPS MUST BE CONSTRUCTED. STABILIZED, AND OPERATIONAL BEFORE ANY EARTH DISTURBANCE WHICH IS TRIBUTARY TO THOSE MEASURES BEGINS.
- CLEAR AND GRUB, REMOVE TOPSOIL, PERFORM NECESSARY INITIAL GRADING AND INSTALL THE ROCK CONSTRUCTION ENTRANCE AT THE POINT OF ENTRANCE INTO THE SITE. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROJECT SITE ONTO ADJACENT ROADWAYS.
- INSTALL ALL FILTER SOCK BARRIERS ALONG THE SITE PERIMETER AS SHOWN ON THE PLAN.
- PER NEW NPDES REQUIREMENTS "UPON THE INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT."
- 9. CONDUCT SITE DEMOLITION ACTIVITIES AND REMOVE ALL WASTE FROM THE SITE IN ACCORDANCE WITH THE DEP REGULATIONS.
- CLEAR AND GRUB, REMOVE TOPSOIL, AND PERFORM NECESSARY INITIAL GRADING ONLY WITH THE AREA DESIGNATED SURFACE INFILTRATION/DETENTION BASIN 2 (POND 2) AND CONSTRUCT THE FACILITY AS TEMPORARY SEDIMENT TRAP 1 IN ACCORDANCE WITH THE DESIGN DETAILS PRESENT ON THE PLAN. ANY EXCESS MATERIAL FROM THE BASIN EXCAVATION SHALL BE STOCKPILED IMMEDIATELY UPSLOPE OF THE TEMPORARY SEDIMENT TRAP UNTIL IT IS EITHER NEEDED FOR CONSTRUCTING OTHER INITIAL EROSION CONTROL BMPS OR MASS EARTHWORK ACTIVITIES HAVE COMMENCED ON THE SITE.
- a. INSTALL THE OUTLET AND SPILLWAY SEDIMENT TRAP 1 DESIGN ELEVATIONS. INSTALL THE SPILLWAY AND CLEANOUT MARKER AS SHOWN ON THE PLAN AND DETAILS.
- b. IMMEDIATELY STABILIZE BOTH OF THE FACILITY'S EMBANKMENTS, INTERNAL AND EXTERNAL SLOPES, WITH THE PRESCRIBED TEMPORARY SEED MIX, MULCH, MATTING, AND SLOPE PROTECTION (WHERE APPLICABLE).
- CLEAR AND GRUB THE ENTIRE SITE. STRIP TOPSOIL AND STOCKPILE IN THE DESIGNATED TEMPORARY AREAS AS SHOWN ON THE PLAN. PLACE FILTER SOCK AROUND THE STOCKPILE. APPLY TEMPORARY SEEDING TO THE STOCKPILE.
- PROCEED WITH BULK SITE EXCAVATION AND ROUGH GRADING ACTIVITIES ON THE ENTIRE SITE AND BRING THE SITE AREAS TO SUBGRADE ELEVATIONS WHILE MAINTAINING PERIMETER E&S BMPS. RETAINING WALL SHALL BE CONSTRUCTED AND BACKFILLED IN LIFTS WHILE INSTALLING GEOTECHNICAL TIEBACKS AND MAINTAINING SURROUNDING ELEVATIONS. APPLY EROSION CONTROL MATTING TO THE INDICATED AREAS ON THE PLAN. AS AREAS OF THE SITE REACH SUBGRADE ELEVATION, APPROPRIATE STABILIZATION SHALL BE APPLIED TO FILL SLOPES, LAWN AREAS, ETC. TO MINIMIZE ACCELERATED EROSION.
- 13. AS THE SITE IS BEING BROUGHT TO SUBGRADE ELEVATIONS, INSTALL STORM SEWER CONVEYANCE SYSTEMS AND ROOF DRAIN COLLECTION SYSTEMS BEGINNING AT THE DOWNSTREAM ENDS AND PROCEEDING UPSTREAM. INSTALL EW-1 AND ASSOCIATED RIPRAP APRON AT FINAL ELEVATION OF 571.00, CREATING A 1.8' DEEP FOREBAY WITHIN THE SEDIMENT TRAP (BOTTOM ELEVATION 572.80). INSTALL TEMPORARY NON-PERFORATED PIPE ACROSS AREA DESIGNATED FOR SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) TO PROTECT AREA FROM SEDIMENT. AFTER EACH INLET IS INSTALLED, IMMEDIATELY INSTALL INLET PROTECTION AROUND THE INLET AND PROP THE INLET TOP UP WITH BRICKS TO ALLOW RUNOFF TO ENTER THE STORM SEWER CONVEYANCE SYSTEM PRIOR TO CURB INSTALLATION AND PAVING OCCURRING. ANY WATER PUMPED FROM STORM SEWER TRENCHES SHALL BE DIRECTED TO A SEDIMENT REMOVAL FACILITY SUCH AS A FILTER BAG OR APPROVED EQUAL. ALL STORM SEWER PIPING AND SEDIMENT TRAP 1 SHALL BE PERIODICALLY FLUSHED TO PREVENT EXCESSIVE SEDIMENT AND DEBRIS ACCUMULATIONS FROM BUILDING UP WITHIN PIPES, CHAMBER, AND STRUCTURES.
- 14. ONCE THE SITE IS BROUGHT TO SUBGRADE ELEVATIONS, CONSTRUCT THE SANITARY SEWER SYSTEMS. ALSO, INSTALL ALL OTHER UTILITY SERVICE LINES AND OTHER RELATED UNDERGROUND WORK AT THIS TIME. ANY WATER PUMPED FROM UTILITY TRENCHES SHALL BE DIRECTED TO A SEDIMENT REMOVAL FACILITY SUCH AS A FILTER BAG OR APPROVED EQUAL.
- 15. ONCE THE BUILDING PAD IS BROUGHT TO SUBGRADE ELEVATION AND THE RETAINING WALL CONSTRUCTION IS COMPLETED, BUILDING CONSTRUCTION MAY COMMENCE AT ANY TIME.
- 16. PLACE SUBBASE MATERIAL TO STABILIZE THE SITE DRIVEWAYS AND PARKING AREAS AS SOON AS PRACTICAL. THIS WILL ELIMINATE THE ROCK CONSTRUCTION ENTRANCE.
- 17. CONTINUE WITH GENERAL BUILDING CONSTRUCTION AND CONSTRUCTION OF OTHER LOCALIZED SITE ITEMS SUCH AS SITE CURBING, SITE LIGHTING, SIDEWALK SYSTEMS, FENCING, UTILITY CONNECTIONS, ETC.
- 18. INSTALL STONE FOR STABILIZATION ON THE SITE DRIVEWAYS AND PARKING AREAS ONCE MAJOR EXTERIOR

BUILDING CONSTRUCTION AND ALL UTILITY CONSTRUCTION ARE SUBSTANTIALLY COMPLETED.

- 19. CONDUCT FINE GRADING ACTIVITIES AND PLACE TOPSOIL ON ALL REMAINING AREAS. APPLY PERMANENT SEEDING, SOIL SUPPLEMENTS, MULCHING, AND MATTING WHERE APPLICABLE IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS PRESENTED ON THE PLAN. INSTALL FINAL LANDSCAPING AND PLANTING PER PROJECT REQUIREMENTS AND PROCEDURES PRESENTED ON THE APPROVED PCSM PLAN. IN ORDER TO ENSURE RAPID VEGETATION GROWTH, PLANTING AND SEEDING SHOULD BE DONE ONLY DURING THE GERMINATING SEASON.
- 14. THE CONTRACTOR SHALL EMPLOY MEASURES DURING CONSTRUCTION TO PREVENT SPILLS OF FUELS OR LUBRICANTS. IF 20. CRITICAL STAGE OF BMP IMPLEMENTATION INSTALL SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) AS SHOWN ON THE PLAN AND IN THE DETAILS. REMOVE TEMPORARY PIPE ACROSS BED. EXCAVATE TO FINAL BOTTOM ELEVATION, WHILE CAREFULLY PROTECTING THE BOTTOM FROM COMPACTION. INSTALL STONE UP TO PIPE INVERT, AND INSTALL PERFORATED PIPE ACROSS FACILITY. BACKFILL FACILITY TO TOP
 - 21. INSTALL BITUMINOUS BINDER COURSE ON THE SITE DRIVEWAYS AND PARKING AREAS ONCE MAJOR EXTERIOR BUILDING CONSTRUCTION, ALL UTILITY CONSTRUCTION, AND INSTALLATION OF SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) ARE SUBSTANTIALLY COMPLETED.
 - 22. CRITICAL STAGE OF BMP IMPLEMENTATION CONVERT THE TEMPORARY SEDIMENT TRAP INTO PERMANENT SURFACE INFILTRATION/DETENTION BASIN (POND 2), AS PER THE DETAILS PROVIDED ON THE PCSM PLAN, WHEN THE ENTIRE WATERSHED IS COMPLETELY STABILIZED. ALL SEDIMENT MUST FIRST BE REMOVED FROM THE FACILITY AND DISPOSED OF IN ACCORDANCE WITH DEP REGULATIONS. PERFORM NECESSARY FINAL GRADING AND RE-SHAPE THE BOTTOM OF SURFACE INFILTRATION/DETENTION BASIN (POND 2) TO MATCH PROPOSED ULTIMATE CONTOURS AS SHOWN ON THE GRADING PLAN. EXCAVATE THE BOTTOM FROM THE TEMPORARY ELEVATION OF 572.80 TO THE PERMANENT ELEVATION OF 571.00. ONCE PERMANENT FINISHED GRADE IS ACHIEVED, DO NOT COMPACT THE BOTTOM OR ALLOW SEDIMENT TO ENTER THE BASIN AND DEGRADE THE INFILTRATION CAPACITY OF THE SOILS. ALL DISTURBED SOIL ASSOCIATED WITH FACILITY CONVERSION WORK MUST BE SEEDED, MULCHED, AND MATTED IMMEDIATELY IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS PRESENTED ON THE PLAN. INSTALL PROPOSED TOPSOIL MIXTURE, PLANTINGS, AND GRASS SEEDING MIXTURES PER THE PROJECT SPECIFICATIONS.
 - 23. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS. THE OWNER AND/OR OPERATORS SHALL CONTACT THE CUMBERLAND COUNTY CONSERVATION DISTRICT FOR ANY INSPECTION PRIOR TO REMOVAL OF THE E&S BMPS.
 - 24. ONCE APPROVED BY THE COUNTY CONSERVATION DISTRICT, REMOVE ALL EROSION AND SEDIMENTATION CONTROL MEASURES. PERMANENTLY RE-SEED, MULCH, AND MAT WHERE APPLICABLE ANY REMAINING AREAS WHICH REMAIN DISTURBED OR HAVE NOT BEEN ESTABLISHED FROM PREVIOUS SEEDING APPLICATIONS IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS PRESENTED ON THE PLAN.
 - 25. INSTALL SITE SIGNAGE, FINAL WEARING COURSE, PAVEMENT MARKINGS, AND OTHER INCIDENTAL CONSTRUCTION ITEMS AS NECESSARY.
 - 26. CONTACT THE CONSERVATION DISTRICT IN ORDER TO REQUEST A FINAL SITE INSPECTION AS NECESSARY.
 - 27. PER NEW NPDES REQUIREMENTS, "WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE N.O.T. IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSE PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS. COMPLETION CERTIFICATES ARE NEEDED TO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE PERMIT AND THE APPROVED E&S AND PCSM PLANS."

MAINTENANCE OF E&S CONTROL DEVICES:

THE SOIL EROSION AND SEDIMENTATION CONTROLS UTILIZED IN THE DEVELOPMENT OF THIS PLAN SHALL BE ROUTINELY MAINTAINED IN ORDER TO KEEP THEM FUNCTIONING PROPERLY UNTIL SITE STABILIZATION OCCURS. THE CONTRACTOR SHALL PERFORM CERTAIN PERIODIC DUTIES IN ORDER TO ASSURE PROPER CONTROL. MAINTENANCE OF THE VARIOUS EROSION AND SEDIMENTATION CONTROLS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING GENERAL MAINTENANCE PROCEDURES OUTLINED BELOW.

MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION MEASURES AFTER EACH SIGNIFICANT RUNOFF EVENT AND ON A WEEKLY BASIS BY A QUALIFIED PERSON TRAINED AND EXPERIENCED IN EROSION AND SEDIMENTATION CONTROL AND WHO HAS SITE SUPERVISION RESPONSIBILITIES. TO ASCERTAIN THAT THE EROSION CONTROL MEASURES ARE OPERATIONAL AND EFFECTIVE IN PREVENTING SEDIMENT FROM LEAVING THE SITE, A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE: A SUMMARY OF SITE CONDITIONS. BMPS AND COMPLIANCE, AND THE DATE, TIME, AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INCLUDING THE COMPLIANCE ACTIONS, DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION, THE INSPECTION LOG SHALL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE CONSERVATION DISTRICT UPON REQUEST.

MISCELLANEOUS ADJUSTMENTS AND CORRECTIONS SHALL BE MADE TO ANY EROSION CONTROL STRUCTURE AS DEEMED NECESSARY BY THE ENGINEER, TOWNSHIP OFFICIAL, OR CUMBERLAND COUNTY CONSERVATION DISTRICT REPRESENTATIVE IN ORDER TO CORRECT UNFORESEEN PROBLEMS.

SEDIMENT TRAP:

- 1. A "CLEAN-OUT" ELEVATION WILL BE CLEARLY INDICATED ON THE PLAN DRAWINGS. THIS ELEVATION WILL BE IDENTIFIED BY AN APPROPRIATE STRUCTURE OR DEVICE WITHIN THE SEDIMENT TRAP TO INDICATE WHEN SEDIMENT REMOVAL OR DISPOSAL OPERATIONS ARE NECESSARY.
- 2. WATER IMPOUNDED IN SEDIMENT TRAP SHALL BE USED FOR DUST CONTROL WHENEVER POSSIBLE.
- 3. DIVERSION SWALES TRIBUTARY TO THE SEDIMENT BASIN/TRAP SHALL BE REGULARLY CLEANED AND RE-SHAPED TO MAINTAIN THE DESIGN DIMENSION AND CAPACITY.
- 4. SEDIMENT WILL NOT BE ALLOWED TO ENTER THE WATERS OF THE COMMONWEALTH DURING EITHER SEDIMEN' REMOVAL OR DISPOSAL OPERATIONS.
- 5. SEDIMENT TRAP MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
- 6. RIPRAP APRONS SHALL BE MAINTAINED IN THE POSITION AND TO THE DIMENSION AS SHOWN ON THE DETAIL ANY SLIDING OR DISPLACEMENT OF ROCKS SHALL BE IMMEDIATELY CORRECTED. THE FILTER SOCK SHALL BE MAINTAINED IN ITS DESIGNED POSITION AND SEDIMENT SHALL BE REMOVED WHEN IT REACHED 1 THE HEIGHT OF THE FILTER SOCK.
- 7. THE SEDIMENT TRAP SHALL BE MONITORED AND SEDIMENT SHALL BE REMOVED FROM THE TRAP AND PROPERLY DISPOSED OF WHEN IT REACHES THE SPECIFIED CLEAN-OUT ELEVATION.
- 8. ALL EMBANKMENT CONSTRUCTION SHALL REMAIN WATERTIGHT AND FREE FROM EROSION OR PIPING OF SOILS.
- 9. CLEAN-OUT MARKERS SHALL BE LOCATED AT HALFWAY POINTS WHERE RUNOFF ENTERS AND LEAVES THE CONTROL FACILITY.

FILTER SOCK:

- 1. THE FILTER SOCK SHALL BE INSPECTED AFTER EVERY PRECIPITATION EVENT. ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY
- ACCUMULATED SEDIMENT SHALL BE REMOVED AS REQUIRED TO KEEP THE DEVICES FUNCTIONAL. IN ALL CASES, REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/2 ABOVE THE GROUND HEIGHT OF THE DEVICE.
- ALL UNDERCUTTING OR EROSION OF THE TOE ANCHOR OR BASE SHALL BE REPAIRED IMMEDIATELY WITH COMPACTED BACKFILL MATERIAL.
- 4. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING FILTER SOCK.
- 5. ANY DEBRIS ACCUMULATED AT SILT SOCK BARRIERS SHALL BE REMOVED AND PROPERLY DISPOSED IN A RESPONSIBLE MANNER. BARRIERS SHALL BE CHECKED AND REALIGNED OR RESET AS REQUIRED. ANY DEBRIS OR SOLID WASTE MATERIAL ACCUMULATED FROM CONSTRUCTION ACTIVITIES SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED LANDFILL. CONSTRUCTION WASTE SHALL NOT BE BURIED ON THE SUBJECT

ROCK CONSTRUCTION ENTRANCE:

- 1. AT A MINIMUM, ROCK CONSTRUCTION ENTRANCES SHOULD BE CONSTRUCTED TO THE LENGTH, WIDTH, AND THICKNESS DIMENSIONS SHOWN ON THE CONSTRUCTION DETAILS.
- 2. ROCK CONSTRUCTION ENTRANCES WITH WASH RACKS SHALL BE MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK WHEN NECESSARY AT THE END OF EACH WORKDAY. A STOCKPILE OF THE APPROPRIATE ROCK MATERIAL SHOULD BE MAINTAINED ON SITE FOR THIS PURPOSE.
- AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS WILL BE REMOVED AND RETURNED TO THE SITE. WASHING OF THE ROADWAY IS NOT PERMITTED. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT
- 4. DAMAGED CONSTRUCTION ENTRANCES RACKS SHOULD BE REPAIRED AS NECESSARY TO MAINTAIN THEIR EFFECTIVENESS.
- 5. ROCK CONSTRUCTION ENTRANCES SHALL BE CLEANED AND REDRESSED WHEN VOIDS BECOME CHOKED WITH
- 6. GEOTEXTILE FABRIC SHALL BE INSTALLED UNDER ALL ROCK CONSTRUCTION ENTRANCES TO KEEP SOIL FROM PUMPING AND PENETRATING INTO THE STRUCTURE.

MUD AND SEDIMENT.

ACCEPTABLE.

- STANDARD TYPE C AND TYPE M INLETS SHALL USE A WIRE MESH AND STONE INLET PROTECTION DEVICE AS PER THE STANDARD CONSTRUCTION DETAILS SHOWN ON THE APPROVED SOIL EROSION AND SEDIMENTATION
- 2. INLET PROTECTION DEVICES SHALL BE INSPECTED REGULARLY AND AFTER EACH MEASURABLE PRECIPITATION
- 3. SEDIMENT SHALL BE REMOVED FROM THE DEVICE WHEN THE DEPTH OF SEDIMENT IS 1/3 OF THE TOTAL
- 4. STONE WHICH BECOMES CHOKED WITH SEDIMENT AND IS NOT FUNCTIONAL SHALL BE REMOVED AND REPLACED WITH CLEAN STONE.

CONCRETE WASHOUT FACILITY:

- 1. REMOVE MATERIAL AND CLEAN WASHOUT FACILITY WHEN THE DEPTH OF THE CONCRETE WASHOUT WATER REACHES 50% OF THE FILTER RING HEIGHT.
- REPLACE THE GEOMEMBRANE LINER WITH EACH CLEANING. FOLLOW INSTALLATION NOTES IN THE COMPOST SOCK WASHOUT FACILITY CONSTRUCTION DETAIL.

PUMPED WATER FILTER BAG:

- 1. FILTER BAGS SHALL BE INSPECTED DAILY. IMMEDIATELY DISPOSE OF BAGS WHICH ARE SPLIT OR TORN.
- 2. DO NOT USE BAGS WHICH ARE GREATER THAN 1/2 FULL. WHEN BAGS REACH THAT CAPACITY, THEY SHALL BE REPLACED AND THE SEDIMENT SHALL BE PROPERLY DISPOSED.
- REGULARLY INSPECT THE OPERATION OF FILTER BAGS TO ENSURE THAT THEY ARE LOCATED ON RELATIVELY FLAT, WELL VEGETATED AREAS AND THAT THE OUTFLOW IS BEING DISCHARGED TO A STABLE, EROSION RESISTANT AREA.

- 1. EROSION CONTROL MATTING SHOULD BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. FOR ROLLED BLANKETS, THE AREA SHOULD BE SMOOTH AND UNIFORM TO ENSURE CONTINUOUS CONTACT BETWEEN THE BLANKET AND UNDERLYING SOIL.
- 2. A COPY OF THE INSTALLATION PROCEDURE IS INCLUDED IN THE CONSTRUCTION DETAILS. THE MINIMUM STANDARDS ARE BASED ON THE PRODUCT SPECIFIED.

1. AT ANY TIME DURING CONSTRUCTION WHEN SOIL IS TRACKED ONTO THE ROADWAY, PARKING LOT PAVEMENT, OR DRIVEWAY PAVEMENT, THE SURFACE SHALL BE SWEPT IMMEDIATELY TO PREVENT CONVEYANCE OF SOIL FROM PROJECT AREA TO STORM SEWER OR SURFACE WATERS OF THE COMMONWEALTH OF PA.

POTENTIAL THERMAL IMPACTS:

- POTENTIAL THERMAL IMPACTS FROM PROPOSED IMPROVEMENTS WILL BE AVOIDED, MINIMIZED OR MITIGATED THROUGH THE FOLLOWING: HEATED STORMWATER RUNOFF FROM PROPOSED PAVED AREAS AND FROM THE BUILDING ROOF AREAS WILL BE COLLECTED AND CONVEYED TO THE PERVIOUS SEDIMENT TRAP DURING CONSTRUCTION AND TO PERVIOUS INFILTRATION/DETENTION BASINS POST CONSTRUCTION. THIS WILL PROMOTE INFILTRATION OF THE INITIAL RUNOFF OR "FIRST FLUSH" WHICH IS MOST AFFECTED BY THERMAL IMPACTS, AND PREVENT THE AFFECTED RUNOFF FROM ENTERING SURFACE WATERS.
- RUNOFF FROM THE BUILDING ROOFTOP WILL BE COLLECTED, CONVEYED DIRECTLY TO A SUBSURFACE INFILTRATION/DETENTION BASIN WITHOUT EXPOSURE TO ELEVATED TEMPERATURES ASSOCIATED WITH PAVEMENT RUNOFF.

RECYCLING & DISPOSAL OF WASTES:

- ANTICIPATED CONSTRUCTION WASTES FROM THE PROJECT MAY INCLUDE TYPICAL BUILDING MATERIALS (LUMBER, DRYWALL, INSULATION, VINYL, MASONRY, ROOFING, ASPHALT, CONCRETE, PAINTS, SOLVENTS, ETC.), PLASTIC, CARDBOARD, WASH WATER AND SANITARY WASTES.
- THE CONTRACTOR SHALL INSPECT THE PROJECT AREA DAILY AND PROPERLY DISPOSE OF ALL CONSTRUCTION WASTES IN ACCORDANCE WITH PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 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
- LITTERING BY CONSTRUCTION CREWS WILL BE DISCOURAGED/POLICED, AND HOUSEKEEPING OF ALL PROJECT AREAS WILL BE ENCOURAGED.
- WHENEVER POSSIBLE, REUSABLE WASTES WILL BE SEPARATED FOR RECYCLING

POLLUTION CONCERNS RELATED TO GEOLOGIC FORMATIONS HAVE BEEN IDENTIFIED.

- ALL RECYCLING AND DISPOSAL OF CONSTRUCTION WASTE, INCLUDING MATERIALS WITH AND FROM THE BMPS SHALL BE IN ACCORDANCE WITH LOCAL AND STATE RULES AND REGULATIONS FOR WASTE MANAGEMENT
- 6. MATERIALS WITH AND FROM THE BMPS, EXCESS SOIL AND ROCK, BUILDING MATERIALS, CONCRETE AND CONCRETE WASH WATER, SANITARY WASTE AND ANY OTHER MATERIALS THAT COULD ADVERSELY IMPACT SURFACE OR GROUND WATER QUALITY.

GEOLOGIC FORMATIONS - POLLUTION CONCERNS: BASED ON AVAILABLE INFORMATION, PROPOSED IMPROVEMENTS ARE NOT LOCATED ON CARBONATE GEOLOGY. NO POTENTIAL

- IMPLICATIONS & RESOLUTIONS OF SOIL TYPES: 1. IN GENERAL, THERE ARE NO KNOWN UNUSUAL SITE CHARACTERISTICS THAT ARE UNLIKE THOSE FOUND ELSEWHERE IN THE REGION
- WHERE SIMILAR SOILS ARE PRESENT. ANY ROCK ENCOUNTERED WILL BE RIPPED OR BLASTED AS NECESSARY, AND USED FOR COMPACTED FILL IN OTHER AREAS OR
- REMOVED FROM THE SITE 3. SLOPE WILL NOT BE AN ADVERSE FACTOR TO CONSTRUCTION. SLOPES WILL BE RE-SHAPED PER THE PROPOSED GRADING PLAN AND TYPICALLY WILL BE 3:1 OR FLATTER. ANY ACCELERATED RUNOFF OR EROSION FROM SLOPES WILL BE HANDLED BY EROSION
- DRAINAGE WITHIN THE PROJECT AREA WILL BE ACCOMMODATED BY PROPOSED GRADING, STORM PIPING AND SWALES. THE GROUND SURFACE WILL BE RESHAPED, COMPACTED AND STABILIZED CONSISTENT WITH THE PROPOSED GRADING PLAN CONTAINED HEREIN.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
- 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.
- 7. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 9. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

CONTROL MATTING AND SILT SOCK ON THE SITE.

SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND

12. SEE SOIL EROSION AND SEDIMENTATION CONTROL PLAN, SHEET ES-1 OF 4, FOR ADDITIONAL INFORMATION.

STABILIZATION SPECIFICATIONS:

- 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 ACTIVITIES.
- 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 FLATTER.
- 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.

TOPSOIL SHALL 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 SEEDING. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE THE DISTURBED AREAS. 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. AN EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL DISTURBED SLOPES 3:1 OR STEEPER, ALL AREAS OF CONCENTRATED

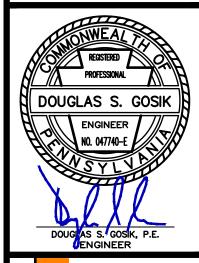
FLOWS, AND DISTURBED AREAS WITHIN 50' OF A SURFACE WATER. GENERAL E & S NOTES:

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. TH CUMBERLAND COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE DISTRICT MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

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 ACCELERATED EROSION AND/OR SEDIMENT POLLUTION AND NOTIFY THE CUMBERLAND COUNTY CONSERVATION DISTRICT. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG
- OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE EARTH DISTURBANCE ACTIVITY, 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. 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 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 SITE.
- 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 POLLUTION CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS.
- 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.).
- 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.
- 9. 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 CLEAN FILL".





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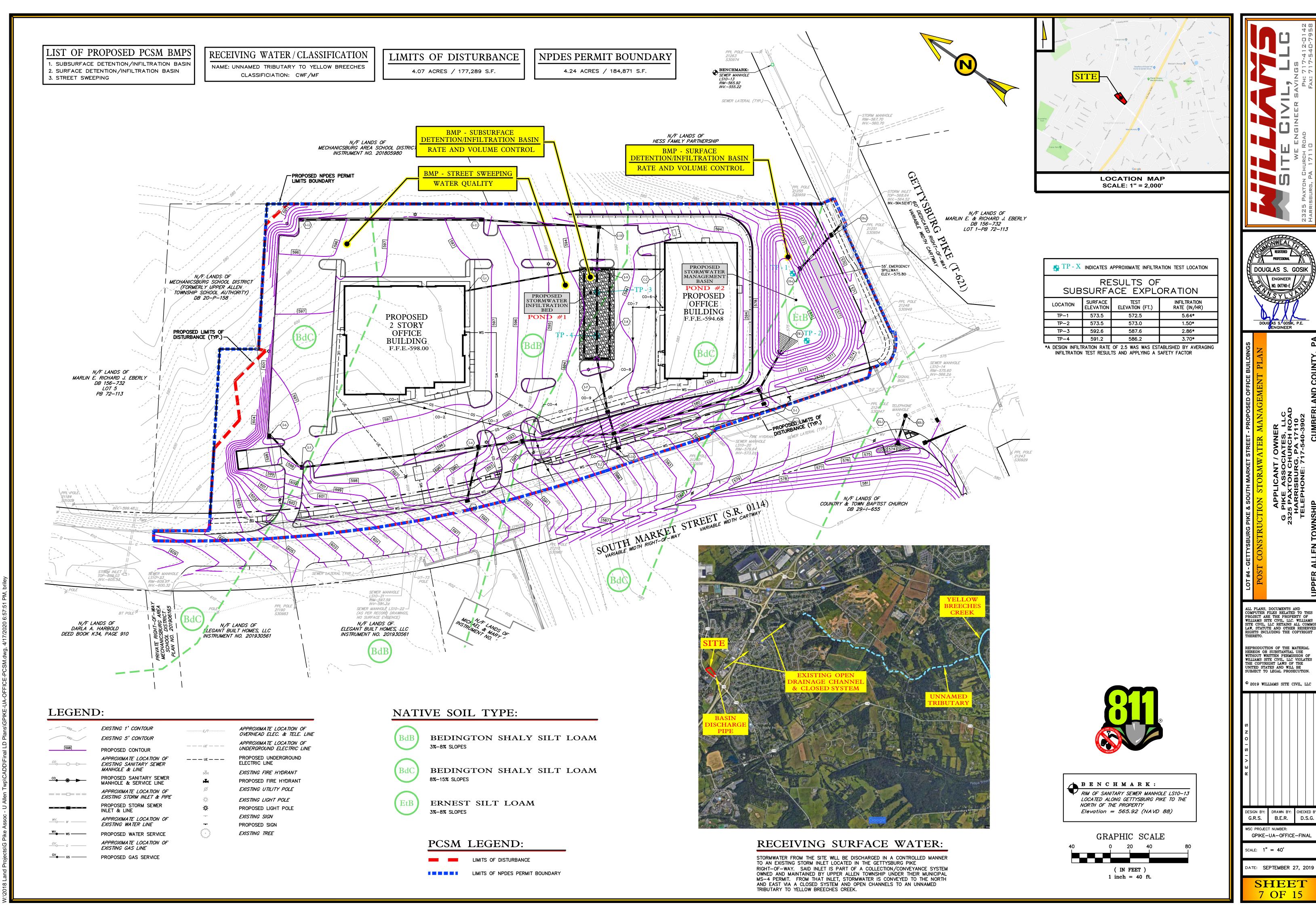
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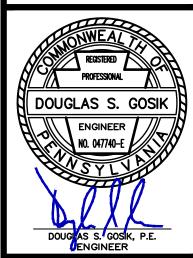
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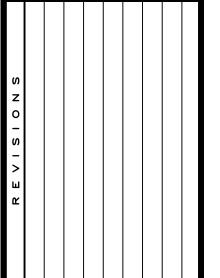
GPIKE-UA-OFFICE-FINAL

DATE: SEPTEMBER 27, 2019

SCALE: NONE







THROUGH RESTRICTION OF THE DEVELOPMENT FOOTPRINT AREA AND USE OF EXISTING SITE INFRASTRUCTURE, AND IMPLEMENTATION OF PCSM BMPS AND OTHER MEASURES CONTAINED HEREIN, THIS POST CONSTRUCTION STORMWATER MANAGEMENT PLAN:

- PREVENTS AN INCREASE IN RATE OF STORMWATER RUNOFF, MINIMIZES ANY INCREASE IN STORMWATER RUNOFF VOLUME, AND OTHERWISE PREVENTS/MINIMIZES CHANGES IN STORMWATER RUNOFF.
- PRESERVES THE INTEGRITY OF STREAM CHANNELS AND MAINTAINS AND PROTECTS THE PHYSICAL, BIOLOGICAL AND CHEMICAL QUALITIES OF WILLIS RUN.
- MAXIMIZES THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.
- MINIMIZES IMPERVIOUS AREAS, SOIL COMPACTION AND AREAS OF LAND CLEARING AND GRADING.

CONSTRUCTION, OWNERSHIP & MAINTENANCE OF STORMWATER / BMP FACILITIES:

OWNERSHIP AND MAINTENANCE OF ALL STORMWATER MANAGEMENT AND OTHER ON-SITE BMPS SHALL BE THE RESPONSIBILITY OF THE APPLICANT. ANY SUBSEQUENT PROPERTY OWNERS SHALL ALSO PRIVATELY OWN AND MAINTAIN SAID BMPS THEREAFTER TO ASSURE THAT THE CONDITION AND FUNCTIONALITY OF THE FACILITIES REMAINS AS DESIGNED AND INTENDED. THE APPLICANT SHALL ALSO BE RESPONSIBLE FOR INSPECTING AND MONITORING ALL SYSTEMS AND DOCUMENTING SAID ACTIVITY ON A REGULAR BASIS IN ACCORDANCE WITH THE FOLLOWING **GENERAL PRACTICES:**

SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1)

SEQUENCE OF CONSTRUCTION

- A. INSTALL TEMPORARY SEDIMENT CONTROL BMPS TO PREVENT CONTAMINATION OF INFILTRATION AREAS BY SILT AND SEDIMENT UNTIL COMPLETELY
- B. EXCAVATE THE INFILTRATION BMP TO PROPOSED SUBGRADE INVERT DEPTH AND SCARIFY THE EXISTING SOIL SURFACES. DO NOT COMPACT IN-SITU SOIL. DURING INITIAL EXCAVATION, CONSTRUCTION EQUIPMENT AND VEHICLES SHALL BE LIMITED TO RUBBER-TIRED VEHICLES TO THE EXTENT
- C. PLACE CLEAN, OPEN STONE THROUGHOUT THE ENTIRE BMP AREA.
- D. A LICENSED PROFESSIONAL OR DESIGNEE SHOULD BE PRESENT ON THE SITE FOR INSPECTION/FIELD VERIFICATION DURING THE CONSTRUCTION OF THE SUBSURFACE INFILTRATION BEDS.

2. INSPECTIONS

- A. THE BMP SHOULD BE INSPECTED AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS. MOSQUITOS SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING PERIOD WITH RELATIVELY STATIC
- B. INSPECTIONS OF THE BMP SHALL INCLUDE BUT NOT BE LIMITED TO:
- 1.COLLECTION, STORAGE AND RELEASE OF STORMWATER IN ACCORDANCE WITH THE BMP'S DESIGN
- 2.SEDIMENT AND DEBRIS ACCUMULATION 3.CONDITION AND GROWTH OF VEGETATION
- 4.GENERAL SAFETY AND OPERATION
- 5.DEVELOPMENT OF SINKHOLES 6.SIGNS OF WATER CONTAMINATION/SPILLS

NOTE: IF THE BMP DOES NOT DRAIN WITHIN 72 HOURS, OR IF EVIDENCE OF SINKHOLE FORMATION IS DISCOVERED UPON INSPECTION, THE BMP SHALL BE REPLACED. TO REPLACE THE BMP, REMOVE STONE AND GEOTEXTILE. EXCAVATE TO AT LEAST TWO FEET BELOW THE BOTTOM SURFACE ELEVATION. IF EVIDENCE OF SINKHOLE FORMATION IS DISCOVERED, CONTACT THE DESIGN ENGINEER AND ADAMS COUNTY CONSERVATION DISTRICT IMMEDIATELY FOR INSPECTION AND REPAIR RECOMMENDATIONS. REPAIR SINKHOLE IN ACCORDANCE WITH INSTRUCTIONS PROVIDED AT THAT TIME BY DESIGN ENGINEER AND ADAMS COUNTY CONSERVATION DISTRICT REPRESENTATIVE. REPLACE SUBSURFACE SOILS UP TO THE ORIGINAL BOTTOM SURFACE ELEVATION. THE SOIL REPLACEMENT MATERIAL SHOULD HAVE A Ph BETWEEN 5.5 AND 6.5, A CLAY CONTENT LESS THAN 10%, BE FREE OF TOXIC SUBSTANCES AND UNWANTED PLANT MATERIALS, AND HAVE A 5-10% ORGANIC MATTER CONTENT. ADDITIONAL ORGANIC MATTER MAY BE ADDED TO INCREASE THE WATER HOLDING CAPACITY.

1. MAINTENANCE

- A. VEGETATION CONTRIBUTING TO AND ADJACENT TO THE BMP SHALL BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLAN AND IN ACCORDANCE WITH MUNICIPAL ORDINANCES.
- B. THE SURFACE SHALL BE MAINTAINED AS PERVIOUS STONE AND MAY NOT BE PAVED, STONED, OR ALTERED IN ANY FORM WHICH WOULD GENERATE AN IMPERVIOUS SURFACE.
- C. REMOVE ACCUMULATED SEDIMENT AND DEBRIS FROM THE BMP AS REQUIRED. PROPERLY DISPOSE OF SEDIMENT IN ACCORDANCE WITH PADEP REGULATIONS. RESTORE ORIGINAL CROSS-SECTION AND INFILTRATION RATE.
- D. VEHICLES SHOULD NOT BE PARKED OR DRIVEN ON THE BMP.

SURFACE INFILTRATION/DETENTION BASIN (POND 2)

1. SEQUENCE OF CONSTRUCTION

- A. THE DESIGN PROFESSIONAL SHALL BE ON-SITE FOR CONSTRUCTION OF THIS BMP.
- B. PROTECT INFILTRATION AREA FROM COMPACTION PRIOR TO INSTALLATION. C. INSTALL TEMPORARY SEDIMENT CONTROL BMPS WHERE NECESSARY.
- D. EXCAVATE INFILTRATION AREA TO PROPOSED SUBGRADE INVERT DEPTH A MINIMUM OF 12 INCHES BELOW THE PROPOSED SURFACE FLEVATION OF THE BMP. INCLUDING REMOVAL ALL OF SEDIMENT. SCARIFY THE EXISTING SOIL SURFACES. DURING INITIAL EXCAVATION CONSTRUCTION EQUIPMENT SHALL BE LIMITED TO RUBBER—TIRED VEHICLES TO THE FULLEST EXTENT POSSIBLE. DO NOT COMPACT THE SUBGRADE
- E. INSTALL OUTLET STRUCTURE OS-1 TO OS-2.
- F. PLACE PLANTING SOIL MIXTURE AND SPECIFIED SEED MIXTURE THROUGH THE ENTIRE BMP AREA. G. COMPLETE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS AS SPECIFIED ON PLANS.

2. INSPECTIONS

- A. THE INFILTRATION AREA SHOULD BE INSPECTED AFTER RUNOFF EVENTS AND ENSURE THAT RUNOFF DRAINS DOWN WITH 72 HOURS. MOSQUITOES SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONGER TIME
- B. INSPECTIONS OF THE BMP SHALL INCLUDE BUT NOT BE LIMITED TO:
- 1. STRUCTURAL INTEGRITY AND OPERATION OF THE OUTLET STRUCTURE AND APPURTENANCES. 2. COLLECTION, STORAGE, AND RELEASE OF STORMWATER IN ACCORDANCE WITH THE DESIGN OF THE FACILITY.
- 3. SEDIMENT AND DEBRIS ACCUMULATION.
- 4. CONDITION AND GROWTH OF VEGETATION. 5. CONDITION AND FUNCTIONALITY OF SPECIFIED ENGINEERED SOIL MIXTURE.
- 6. GENERAL SAFETY AND OPERATION. 7. DEVELOPMENT OF SINKHOLES.
- 8. SIGNS OF WATER CONTAMINATION/SPILLS. 9. SLOPE STABILITY IN BMP BERMS.

ACCORDANCE WITH MUNICIPAL ORDINANCES.

C. IN THE EVENT THAT A DEFICIENCY IS DISCOVERED DURING THE ABOVE INSPECTIONS, IMMEDIATE REMEDIATION SHOULD OCCUR IN ORDER TO RESTORE THE DEFICIENT BMP IN ACCORDANCE WITH THE APPROVED DESIGN.

3. MAINTENANCE

- A. VEGETATION CONTRIBUTING TO AND ADJACENT TO THE BMP SHALL BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLAN AND IN
- B. REMOVE ACCUMULATED SEDIMENT AND DEBRIS FROM THE BMP AS REQUIRED. PROPERLY DISPOSE OF SEDIMENT IN ACCORDANCE WITH PADEP REGULATIONS. RESTORE ORIGINAL CROSS-SECTION AND INFILTRATION RATES. FLOATABLE DEBRIS THAT MAY IMPACT THE OPERATION OF THE OUTLET STRUCTURE SHALL BE REMOVED IMMEDIATELY.
- C. CATCH BASINS AND INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES PER YEAR AND AFTER RUNOFF EVENTS. D. THE VEGETATION ALONG THE SURFACE OF THIS BMP SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED
- AS SOON AS POSSIBLE.
- E. VEHICLES SHOULD NOT BE PARKED OR DRIVEN ON THE BMP, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS (WHERE MOWING IS APPLICABLE).
- F. MOW ONLY AS APPROPRIATE FOR VEGETATIVE COVER SPECIES.

DRIVEWAY / PARKING AREA SWEEPING PROGRAM

1. SWEEPING PROGRAM

- A. USING A MECHANICAL BROOM MACHINE THAT IS CAPABLE OF PERMANENTLY REMOVING DEBRIS AND SEDIMENT FROM PAVEMENT
- SURFACES, FILTER SWEEP ALL PAVEMENT SURFACES A MINIMUM OF FOUR (4) TIMES PER YEAR. B. PERFORM SWEEPING OPERATIONS AS AN EROSION AND SEDIMENTATION CONTROL FEATURE AS WELL AS AFTER THE SITE IS COMPLETELY
- C. ALL DEBRIS AND SEDIMENT REMOVED DURING SWEEPING OPERATIONS MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED

RE-VEGETATE AND RE-FOREST DISTURBED AREAS, USING NATIVE SPECIES

OF IN ACCORDANCE WITH PADEP REGULATIONS.

1. LANDSCAPING PROGRAM

- A. PRESERVE EXISTING VEGETATION NEAR THE NORTH CORNER OF THE SITE TO THE GREATEST DEGREE POSSIBLE DURING CONSTRUCTION. B. INSTALL ALL PLANTINGS SHOWN ON THE LANDSCAPING PLAN. UTILIZE BEST PLANTING METHODS TO ENSURE LONG-TERM VIABILITY DUE
- TO THE REQUIRED STORMWATER FUNCTION OF THE PLANTINGS.
- C. INSPECT LANDSCAPING EACH SPRING AND FALL. TRIM AND REMOVE BROKEN LIMBS AS NECESSARY. PROVIDE REQUIRED MAINTENANCE TO ENSURE GOOD HEALTH AND LONG—TERM VIABILITY OF PLANTINGS WITH MINIMAL CHEMICAL FERTILIZERS , HERBICIDES AND PESTICIDES. REPLACE ALL DEAD PLANTINGS TO MAINTAIN QUANTITIES SHOWN ON LANDSCAPING PLAN. STORM SYSTEM CONVEYANCE FACILITIES
- 1. STORM SYSTEM CONVEYANCE FACILITIES (INLETS, PIPING, ROOF LEADERS, SWALES, ETC.,) SHOULD BE INSPECTED ANNUALLY FOR PROPER FUNCTION, OPERATION, STRUCTURAL CONDITION, ACCUMULATED SEDIMENT AND DEBRIS. ANY DEFICIENCIES SHALL BE DOCUMENTED AND

PRIOR TO RECORDING THE APPROVED POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN, THE OWNER SHALL ALSO ENTER INTO A STORMWATER FACILITIES AND BMP MAINTENANCE AND MONITORING AGREEMENT WITH THE TOWNSHIP. THE AGREEMENT SHALL OUTLINE PROVISIONS FOR OWNERSHIP, MAINTENANCE AND CONTROL OF FACILITIES AS WELL AS PROVISIONS FOR ACCESS BY TOWNSHIP PERSONNEL FOR INSPECTION OF THE FACILITIES DEEMED CRITICAL TO THE PUBLIC WELFARE ON A REGULAR BASIS AND FOLLOWING MAJOR STORM EVENTS. MAINTENANCE AND OBSERVATION ACTIVITIES SHALL BE DOCUMENTED IN A REPORT AND SHALL BE MADE AVAILABLE FOR THE TOWNSHIP.

STAGING OF MAJOR CONSTRUCTION ACTIVITIES:

THE FOLLOWING IS THE RECOMMENDED STAGING OF MAJOR CONSTRUCTION ACTIVITIES FOR THE PROJECT.

- 1. 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.
- 2. 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
- 3. 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 BY THE LOCAL CONSERVATION DISTRICT AT AN ON-SITE PRECONSTRUCTION MEETING.
- 4. THE LIMITS OF DISTURBANCE (LOD) SHOULD BE MARKED PRIOR TO DISTURBANCE ACTIVITIES (I.E. SURVEY STAKES, POSTS & ROPE, CONSTRUCTION FENCE, ETC.).
- 5. INITIAL EROSION AND SEDIMENTATION CONTROL MEASURES AND BMPS MUST BE CONSTRUCTED, STABILIZED, AND OPERATIONAL BEFORE ANY EARTH DISTURBANCE WHICH IS TRIBUTARY TO THOSE MEASURES BEGINS.
- 6. CLEAR AND GRUB, REMOVE TOPSOIL, PERFORM NECESSARY INITIAL GRADING AND INSTALL THE ROCK CONSTRUCTION ENTRANCE AT THE POINT OF ENTRANCE INTO THE SITE. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROJECT SITE ONTO ADJACENT ROADWAYS.
- 7. INSTALL ALL FILTER SOCK BARRIERS ALONG THE SITE PERIMETER AS SHOWN ON THE PLAN.
- 8. PER NEW NPDES REQUIREMENTS "UPON THE INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT."
- 9. CONDUCT SITE DEMOLITION ACTIVITIES AND REMOVE ALL WASTE FROM THE SITE IN ACCORDANCE WITH THE DEP REGULATIONS.
- 10. CLEAR AND GRUB, REMOVE TOPSOIL, AND PERFORM NECESSARY INITIAL GRADING ONLY WITH THE AREA DESIGNATED SURFACE INFILTRATION/DETENTION BASIN 2 (POND 2) AND CONSTRUCT THE FACILITY AS TEMPORARY SEDIMENT TRAP 1 IN ACCORDANCE WITH THE DESIGN DETAILS PRESENT ON THE PLAN. ANY EXCESS MATERIAL FROM THE BASIN EXCAVATION SHALL BE STOCKPILED IMMEDIATELY UPSLOPE OF THE TEMPORARY SEDIMENT TRAP UNTIL IT IS EITHER NEEDED FOR CONSTRUCTING OTHER INITIAL EROSION CONTROL BMPS OR MASS EARTHWORK ACTIVITIES HAVE COMMENCED ON THE SITE.
- a. INSTALL THE OUTLET AND SPILLWAY SEDIMENT TRAP 1 DESIGN ELEVATIONS. INSTALL THE SPILLWAY AND CLEANOUT MARKER AS SHOWN ON THE PLAN AND DETAILS.
- b. IMMEDIATELY STABILIZE BOTH OF THE FACILITY'S EMBANKMENTS, INTERNAL AND EXTERNAL SLOPES, WITH THE PRESCRIBED TEMPORARY SEED MIX, MULCH, MATTING, AND SLOPE PROTECTION (WHERE APPLICABLE).
- 11. CLEAR AND GRUB THE ENTIRE SITE. STRIP TOPSOIL AND STOCKPILE IN THE DESIGNATED TEMPORARY AREAS AS SHOWN ON THE PLAN. PLACE FILTER SOCK AROUND THE STOCKPILE. APPLY TEMPORARY SEEDING TO THE STOCKPILE.
- 12. PROCEED WITH BULK SITE EXCAVATION AND ROUGH GRADING ACTIVITIES ON THE ENTIRE SITE AND BRING THE SITE AREAS TO SUBGRADE ELEVATIONS WHILE MAINTAINING PERIMETER E&S BMPS. RETAINING WALL SHALL BE CONSTRUCTED AND BACKFILLED IN LIFTS WHILE INSTALLING GEOTECHNICAL TIEBACKS AND MAINTAINING SURROUNDING ELEVATIONS. APPLY EROSION CONTROL MATTING TO THE INDICATED AREAS ON THE PLAN. AS AREAS OF THE SITE REACH SUBGRADE ELEVATION, APPROPRIATE STABILIZATION SHALL BE APPLIED TO FILL SLOPES, LAWN AREAS, ETC. TO MINIMIZE ACCELERATED EROSION.
- 13. AS THE SITE IS BEING BROUGHT TO SUBGRADE ELEVATIONS, INSTALL STORM SEWER CONVEYANCE SYSTEMS AND ROOF DRAIN COLLECTION SYSTEMS BEGINNING AT THE DOWNSTREAM ENDS AND PROCEEDING UPSTREAM. INSTALL TEMPORARY NON-PERFORATED PIPE ACROSS AREA DESIGNATED FOR SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) TO PROTECT AREA FROM SEDIMENT. AFTER EACH INLET IS INSTALLED, IMMEDIATELY INSTALL INLET PROTECTION AROUND THE INLET AND PROP THE INLET TOP UP WITH BRICKS TO ALLOW RUNOFF TO ENTER THE STORM SEWER CONVEYANCE SYSTEM PRIOR TO CURB INSTALLATION AND PAVING OCCURRING. ANY WATER PUMPED FROM STORM SEWER TRENCHES SHALL BE DIRECTED TO A SEDIMENT REMOVAL FACILITY SUCH AS A FILTER BAG OR APPROVED EQUAL. ALL STORM SEWER PIPING AND SEDIMENT TRAP 1 SHALL BE PERIODICALLY FLUSHED TO PREVENT EXCESSIVE SEDIMENT AND DEBRIS ACCUMULATIONS FROM BUILDING UP WITHIN PIPES, CHAMBER, AND STRUCTURES.
- 14. ONCE THE SITE IS BROUGHT TO SUBGRADE ELEVATIONS, CONSTRUCT THE SANITARY SEWER SYSTEMS. ALSO, INSTALL ALL OTHER UTILITY SERVICE LINES AND OTHER RELATED UNDERGROUND WORK AT THIS TIME. ANY WATER PUMPED FROM UTILITY TRENCHES SHALL BE DIRECTED TO A SEDIMENT REMOVAL FACILITY SUCH AS A FILTER BAG OR APPROVED EQUAL.
- 15. ONCE THE BUILDING PAD IS BROUGHT TO SUBGRADE ELEVATION AND THE RETAINING WALL CONSTRUCTION IS COMPLETED. BUILDING CONSTRUCTION MAY COMMENCE AT ANY TIME.
- 16. PLACE SUBBASE MATERIAL TO STABILIZE THE SITE DRIVEWAYS AND PARKING AREAS AS SOON AS PRACTICAL. THIS WILL ELIMINATE THE ROCK CONSTRUCTION ENTRANCE.
- 17. CONTINUE WITH GENERAL BUILDING CONSTRUCTION AND CONSTRUCTION OF OTHER LOCALIZED SITE ITEMS SUCH AS SITE CURBING, SITE LIGHTING, SIDEWALK SYSTEMS, FENCING, UTILITY CONNECTIONS, ETC.
- 18. INSTALL STONE FOR STABILIZATION ON THE SITE DRIVEWAYS AND PARKING AREAS ONCE MAJOR EXTERIOR BUILDING CONSTRUCTION AND ALL UTILITY CONSTRUCTION ARE SUBSTANTIALLY COMPLETED.
- 19. CONDUCT FINE GRADING ACTIVITIES AND PLACE TOPSOIL ON ALL REMAINING AREAS. APPLY PERMANENT SEEDING, SOIL SUPPLEMENTS, MULCHING, AND MATTING WHERE APPLICABLE IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS PRESENTED ON THE PLAN. INSTALL FINAL LANDSCAPING AND PLANTING PER PROJECT REQUIREMENTS AND PROCEDURES PRESENTED ON THE APPROVED PCSM PLAN. IN ORDER TO ENSURE RAPID VEGETATION GROWTH, PLANTING AND SEEDING SHOULD BE DONE ONLY DURING THE GERMINATING SEASON.
- 20. CRITICAL STAGE OF BMP IMPLEMENTATION -INSTALL SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) AS SHOWN ON THE PLAN AND IN THE DETAILS. REMOVE TEMPORARY PIPE ACROSS BED. EXCAVATE TO FINAL BOTTOM ELEVATION, WHILE CAREFULLY PROTECTING THE BOTTOM FROM COMPACTION. INSTALL STONE UP TO PIPE INVERT, AND INSTALL PERFORATED PIPE ACROSS FACILITY. BACKFILL FACILITY TO TOP ELEVATION.
- 21. INSTALL BITUMINOUS BINDER COURSE ON THE SITE DRIVEWAYS AND PARKING AREAS ONCE MAJOR EXTERIOR BUILDING CONSTRUCTION, ALL UTILITY CONSTRUCTION, AND INSTALLATION OF SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) ARE SUBSTANTIALLY
- 22. CRITICAL STAGE OF BMP IMPLEMENTATION CONVERT THE TEMPORARY SEDIMENT TRAP INTO PERMANENT SURFACE INFILTRATION/DETENTION BASIN (POND 2), AS PER THE DETAILS PROVIDED ON THE PCSM PLAN, WHEN THE ENTIRE WATERSHED IS COMPLETELY STABILIZED. ALL SEDIMENT MUST FIRST BE REMOVED FROM THE FACILITY AND DISPOSED OF IN ACCORDANCE WITH DEP REGULATIONS. PERFORM NECESSARY FINAL GRADING AND RE-SHAPE THE BOTTOM OF SURFACE INFILTRATION/DETENTION BASIN (POND 2) TO MATCH PROPOSED ULTIMATE CONTOURS AS SHOWN ON THE GRADING PLAN. EXCAVATE THE BOTTOM FROM THE TEMPORARY ELEVATION OF 572.80 TO THE PERMANENT ELEVATION OF 571.00. ONCE PERMANENT FINISHED GRADE IS ACHIEVED, DO NOT COMPACT THE BOTTOM OR ALLOW SEDIMENT TO ENTER THE BASIN AND DEGRADE THE INFILTRATION CAPACITY OF THE SOILS.ALL DISTURBED SOIL ASSOCIATED WITH FACILITY CONVERSION WORK MUST BE SEEDED, MULCHED, AND MATTED IMMEDIATELY IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS PRESENTED ON THE PLAN. REMOVE THE TEMPORARY RISER AND BAFFLE. INSTALL PROPOSED TOPSOIL MIXTURE, PLANTINGS, AND GRASS SEEDING MIXTURES PER THE PROJECT SPECIFICATIONS.
- 23. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS. THE OWNER AND/OR OPERATORS SHALL CONTACT THE DAUPHIN COUNTY CONSERVATION DISTRICT FOR ANY INSPECTION PRIOR TO REMOVAL OF THE
- 24. ONCE APPROVED BY THE COUNTY CONSERVATION DISTRICT, REMOVE ALL EROSION AND SEDIMENTATION CONTROL MEASURES. PERMANENTLY RE-SEED, MULCH, AND MAT WHERE APPLICABLE ANY REMAINING AREAS WHICH REMAIN DISTURBED OR HAVE NOT BEEN ESTABLISHED FROM PREVIOUS SEEDING APPLICATIONS IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS PRESENTED ON
- 25. INSTALL SITE SIGNAGE, FINAL WEARING COURSE, PAVEMENT MARKINGS, AND OTHER INCIDENTAL CONSTRUCTION ITEMS AS NECESSARY.
- 26. INSTALL TREES AND SHRUBS AS SHOWN ON THE LANDSCAPING PLAN.
- 27. CONTACT THE CONSERVATION DISTRICT IN ORDER TO REQUEST A FINAL SITE INSPECTION AS NECESSARY.
- 28. PER NEW NPDES REQUIREMENTS, "WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE N.O.T. IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSE PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS. COMPLETION CERTIFICATES ARE NEEDED TO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE PERMIT AND THE APPROVED E&S AND PCSM PLANS."

GEOLOGIC SOIL FORMATIONS:

ACCORDING TO THE PENNSYLVANIA GEOLOGIC SURVEY'S GEOLOGIC MAP OF THE STATE OF PENNSYLVANIA, 1980, THE PROJECT SITE IS UNDERLAIN BY THE HAMBURG SEQUENCE ROCKS (GEOLOGIC SYMBOL OH).

ACCORDING TO THE ENGINEERING CHARACTERISTICS OF THE ROCKS OF PENNSYLVANIA, SECOND EDITION, 1982, THIS FORMATION IS COMPOSED OF TRANSPORTED ROCKS OF THE HAMBURG OVERTHRUST; GRAY, GREENISH—GRAY AND MAROON SHALE AND GRAYWACKE, SILTY AND SILICEOUS IN MANY PLACE. THIS FORMATION IS THICK TO MODERATELY WELL BEDDED. FRACTURES IN THIS FORMATION FORM A SEAMY TO PLATY PATTERN, ARE WELL DEVELOPED, HIGHLY ABUNDANT; CLOSE DISTANCE BETWEEN FRACTURES, OPEN AND STEEPLY DIPPING, THE SHALE IN THIS FORMATION IS MODERATELY RESISTANCE TO WEATHER AND IS MODERATELY TO HIGHLY WEATHER TO A DEEP DEPTH, RESULTING IN LOOSE RUBBLE OF PENCIL—LIKE FRAGMENTS TO RECTANGULAR PLATES. EXCAVATION OF THE SHALE BEDROCK OF THE HAMBURG SEQUENCE ROCK IS DESCRIBED AS MODERATELY EASY.

GEOLOGIC FORMATIONS - POLLUTION CONCERNS:

BASED ON AVAILABLE INFORMATION, PROPOSED IMPROVEMENTS ARE NOT LOCATED ON CARBONATE GEOLOGY. NO POTENTIAL POLLUTION CONCERNS RELATED TO GEOLOGIC FORMATIONS HAVE BEEN IDENTIFIED.

POTENTIAL THERMAL IMPACTS:

POTENTIAL THERMAL IMPACTS FROM PROPOSED IMPROVEMENTS WILL BE AVOIDED, MINIMIZED OR MITIGATED THROUGH THE FOLLOWING:

- 1. HEATED STORMWATER RUNOFF FROM PROPOSED PAVED AREAS AND FROM THE BUILDING ROOF AREAS WILL BE COLLECTED AND CONVEYED TO THE PERVIOUS SEDIMENT TRAP DURING CONSTRUCTION AND TO PERVIOUS INFILTRATION/DETENTION BASINS POST CONSTRUCTION. THIS WILL PROMOTE INFILTRATION OF THE INITIAL RUNOFF OR "FIRST FLUSH" WHICH IS MOST AFFECTED BY IHERMAL IMPACTS, AND PREVENT THE AFFECTED RUNOFF FROM ENTERING SURFACE WATERS.
- 2. RUNOFF FROM THE BUILDING ROOFTOP WILL BE COLLECTED, CONVEYED DIRECTLY TO A SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) WITHOUT EXPOSURE TO ELEVATED TEMPERATURES ASSOCIATED WITH PAVEMENT RUNOFF.

THERMAL IMPACT ABATEMENT VEGETATION:

1. INSTALLATION

- a. PLACING OF LANDSCAPE PLANTINGS MUST TAKE PLACE DURING THE NORMAL GROWING SEASON.
- b. REFER TO THE PLANTING SCHEDULE ON THE LANDSCAPING AND LIGHTING PLAN FOR PLANT TYPES TO BE PLACED ON THE
- c. REFER TO THE LANDSCAPING AND LIGHTING PLAN AND CONSTRUCTION DETAILS FOR SPECIFIC PLANT INSTALLATION DETAILS. d. THE ENGINEER SHALL FIELD VERIFY THE TYPE AND LOCATION OF THE PROPOSED PLANTINGS AT THE TIME OF INSTALLATION.

2. MAINTENANCE

WASTES

- a. PLANTS SHALL BE MONITORED REGULARLY FOR GROWTH AND POTENTIAL PROBLEMS.
- b. ALL PLANTS SITEWIDE SERVE AN IMPORTANT FUNCTION FOR STORMWATER CONTROL AND SHALL ME MAINTAINED IN PERPETUITY. ALL DEAD PLANTS SHALL BE REPLACED WITH THE SIZE AND QUANTITIES OF PLANTING AS SHOWN ON THIS PLAN. TREES SHALL BE MAINTAINED, INCLUDING THE REMOVAL OF DEAD BRANCHES. ALL WASTE MATERIALS SHALL BE DISPOSED OF IN A DEP APPROVED FACILITY.
- c. ASSIGN RESPONSIBILITIES FOR WATERING, WEEDING, AND MOWING TO INDIVIDUALS RESPONSIBLE FOR SITE MAINTENANCE. d. APPLICATION OF A CAREFULLY SELECTED HERBICIDE MAY BE NECESSARY TO PROTECT THE PLANTS. THE INITIAL MAINTENANCE
- ROUTINE IS NECESSARY FOR 2 TO 3 YEARS UNTIL TREE GROWTH AND TREE CANOPIES BEGIN TO FORM. e. THE USE OF FERTILIZER AND CHEMICAL-BASED PEST CONTROL PROGRAMS SHALL BE MINIMIZED.

TEMPORARY SEEDING SHALL CONSIST OF 100 PERCENT ANNUAL RYE GRASS AND SHALL CONFORM TO THE REQUIREMENTS OF THE PA DEPARTMENT OF TRANSPORTATION (PADOT) SPECIFICATIONS FOR FORMULA E SEED MIXTURE. SEED SHALL BE APPLIED AT A RATE OF 10 LBS. /1,000 SQ. YDS. SEED SHALL BE APPLIED BETWEEN THE DATES OF MARCH 15TH TO OCTOBER 15TH.

PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING:

- □ LAWN AREAS SEED WITH 20% PERENNIAL RYEGRASS MIXTURE (A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NOT ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT), 30% CREEPING RED FESCUE OR CHEWINGS FESCUE, AND 50% KENTUCKY BLUEGRASS MIXTURE (A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NOT ONE VARIETY EXCEEDING 25% OF THE TOTAL BLUEGRASS COMPONENT). SEED SHALL BE APPLIED AT A RATE OF 21 LBS./1,000 SQ. YDS. SEED SHALL BE APPLIED BETWEEN THE DATES OF MARCH 15TH TO JUNE 1ST AND AUGUST 16TH TO OCTOBER 15TH.
- □ SWM / BMP FACILITIES #1 AND 2 SHALL BE SEEDED WITH ERNST CONSERVATION SEEDS RAIN GARDEN MIX (ERNMX-180) AT A RATE OF 40 LBS./ACRE WITH 30 LBS./ACRE OF WINTER RYE. REFERENCE THE PLANT SCHEDULES FOR THE PLACEMENT OF TREES AND SHRUBS WITHIN THESE FACILITIES.

CRITICAL STAGES OF BMP IMPLEMENTATION:

THERE ARE TWO (2) CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN IN WHICH A LICENSED PROFESSIONAL OR DESIGNEE SHOULD BE PRESENT ON THE SITE FOR INSPECTION/FIELD VERIFICATION. (1) WHEN SUBSURFACE INFILTRATION/DETENTION BASIN (POND 1) IS CONSTRUCTED TO ENSURE PROPER TREATMENT OF SUBGRADE AND PROPER INSTALLATION OF GEOTEXTILE AND STONE. (2) WHEN TEMPORARY SEDIMENT TRAP 1 IS BEING CONVERTED TO AN SURFACE INFILTRATION/DETENTION BASIN (POND 2). THE FINAL GRADING, PROPOSED OUTLET STRUCTURE, PERMANENT SPILLWAY SHOULD BE INSPECTED AS THEY ARE BEING INSTALLED. ALL OTHER STAGES OF IMPLEMENTATION OF THE PCSM PLAN ARE NOT CRITICAL IN RESPECT THAT A LICENSED PROFESSIONAL OR DESIGNEE IS NOT REQUIRED TO BE PRESENT AT THE SITE AT THE TIME OF INSTALLATION.

RECYCLING & DISPOSAL OF WASTES:

- 1. ANTICIPATED CONSTRUCTION WASTES FROM THE PROJECT MAY INCLUDE TYPICAL BUILDING MATERIALS (LUMBER, DRYWALL, INSULATION, VINYL, MASONRY, ROOFING, ASPHALT, CONCRETE, PAINTS, SOLVENTS, ETC.), PLASTIC, CARDBOARD, WASH WATER AND SANITARY
- 2. THE CONTRACTOR SHALL INSPECT THE PROJECT AREA DAILY AND PROPERLY DISPOSE OF ALL CONSTRUCTION WASTES IN ACCORDANCE WITH PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 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 SITE.
- 3. LITTERING BY CONSTRUCTION CREWS WILL BE DISCOURAGED/POLICED, AND HOUSEKEEPING OF ALL PROJECT AREAS WILL BE
- ENCOURAGED. 4. WHENEVER POSSIBLE, REUSABLE WASTES WILL BE SEPARATED FOR RECYCLING.

WITH LOCAL AND STATE RULES AND REGULATIONS FOR WASTE MANAGEMENT.

- 5. ALL RECYCLING AND DISPOSAL OF CONSTRUCTION WASTE, INCLUDING MATERIALS WITH AND FROM THE BMPS SHALL BE IN ACCORDANCE
- 6. MATERIALS WITH AND FROM THE BMPS, EXCESS SOIL AND ROCK, BUILDING MATERIALS, CONCRETE AND CONCRETE WASH WATER, SANITARY WASTE AND ANY OTHER MATERIALS THAT COULD ADVERSELY IMPACT SURFACE OR GROUND WATER QUALITY.

PREPAREDNESS, PREVENTION & CONTINGENCY PLANS:

IF THE POTENTIAL EXISTS FOR CAUSING ACCIDENTAL POLLUTION OF AIR, LAND, OR WATER, OR FOR CAUSING ENDANGERMENT OF PUBLIC HEALTH AND SAFETY THROUGH ACCIDENTAL RELEASE OF TOXIC, HAZARDOUS, OR OTHER POLLUTING MATERIALS, THE PERMITTEE OR CO-PERMITTEE MUST DEVELOP A PREPAREDNESS. PREVENTION AND CONTINGENCY (PPC) PLAN. THE PPC PLAN SHALL BE DEVELOPED IN ACCORDANCE WITH APPLICABLE DEP REGULATIONS. THE PPC PLAN SHALL IDENTIFY AREAS WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WASTE MANAGEMENT AREAS, RAW MATERIAL STORAGE AREAS, TEMPORARY AND PERMANENT SPOILS STORAGE AREAS, MAINTENANCE AREAS, AND ANY OTHER AREAS THAT MAY HAVE THE POTENTIAL TO CAUSE NON-COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE NPDES PERMIT DUE TO THE STORAGE, HANDLING OR DISPOSAL OF ANY TOXIC OR HAZARDOUS SUBSTANCES SUCH AS OIL, GASOLINE, PESTICIDES, HERBICIDES, SOLVENTS, ETC. BMPS SHALL BE DEVELOPED AND IMPLEMENTED FOR EACH IDENTIFIED AREA. THE PPC PLAN SHALL BE MAINTAINED ON SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR REVIEW AT THE DEPARTMENT'S OR AUTHORIZED COUNTY CONSERVATION DISTRICT'S REQUEST.

IMPLICATIONS & RESOLUTIONS OF SOIL TYPES:

- 1. IN GENERAL, THERE ARE NO KNOWN UNUSUAL SITE CHARACTERISTICS THAT ARE UNLIKE THOSE FOUND ELSEWHERE IN THE REGION WHERE SIMILAR SOILS ARE PRESENT.
- 2. ANY ROCK ENCOUNTERED WILL BE RIPPED OR BLASTED AS NECESSARY, AND USED FOR COMPACTED FILL IN OTHER AREAS OR REMOVED FROM THE SITE.
- 3. SLOPE WILL NOT BE AN ADVERSE FACTOR TO CONSTRUCTION. SLOPES WILL BE RE-SHAPED PER THE PROPOSED GRADING PLAN AND TYPICALLY WILL BE 3:1 OR FLATTER. ANY ACCELERATED RUNOFF OR EROSION FROM SLOPES WILL BE HANDLED BY EROSION CONTROL MATTING AND SILT SOCK ON THE SITE.
- 4. DRAINAGE WITHIN THE PROJECT AREA WILL BE ACCOMMODATED BY PROPOSED GRADING, STORM PIPING AND SWALES. THE GROUND SURFACE WILL BE RESHAPED, COMPACTED AND STABILIZED CONSISTENT WITH THE PROPOSED GRADING PLAN
- 5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. 6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED

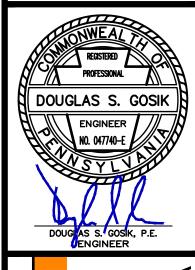
PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE

- 7. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 8. 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.
- 9. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

WITH LOCAL REQUIREMENTS OR CODES.

11. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.



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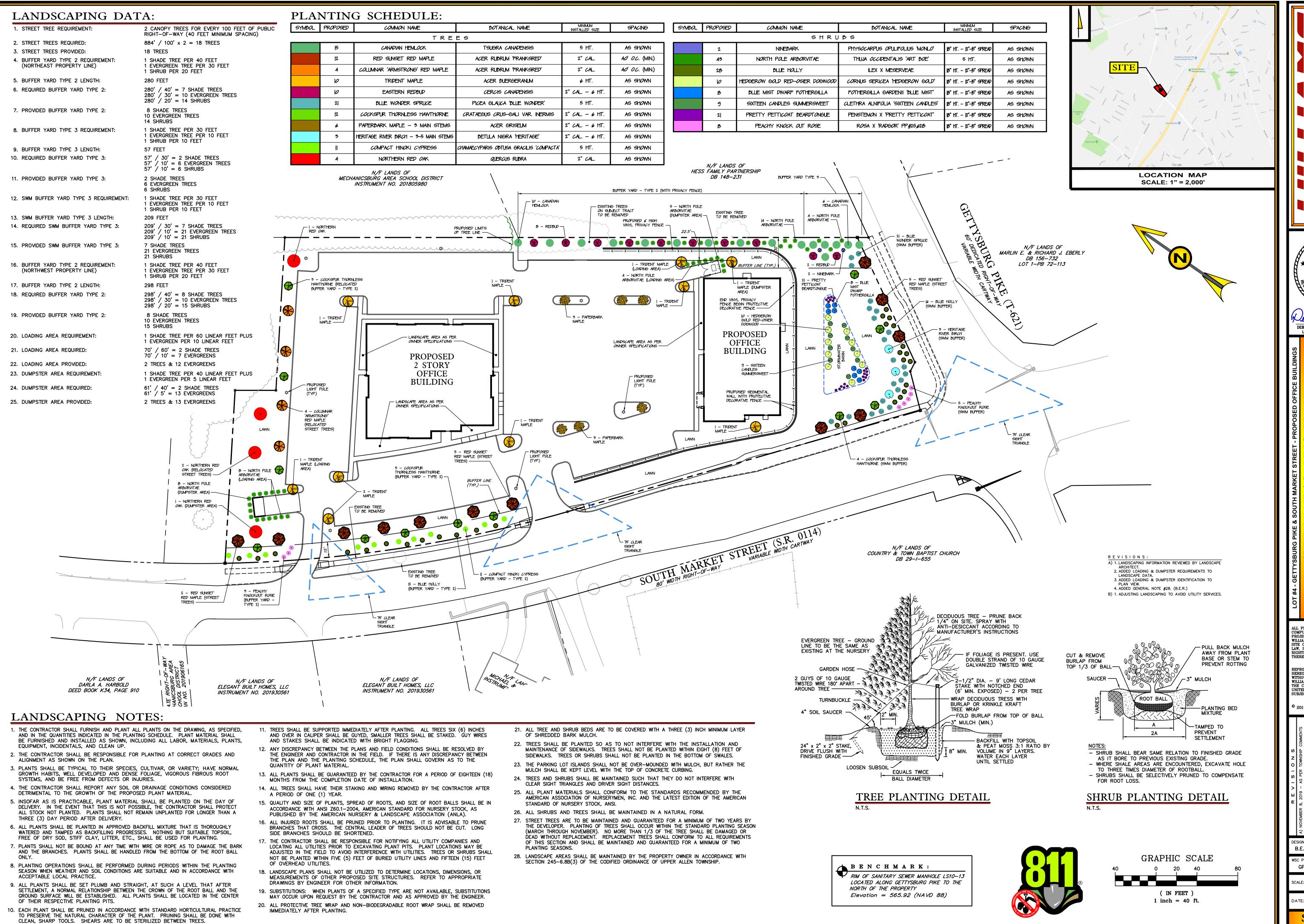
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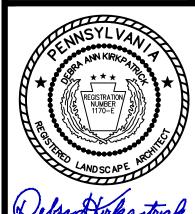
DRAWN BY: CHECKED I B.E.R. G.R.S. D.S.G.

PROJECT NUMBER GPIKE-UA-OFFICE-FINAL

DATE: SEPTEMBER 27, 2019

SCALE: NONE





LANDSCAPE ARCHITECT

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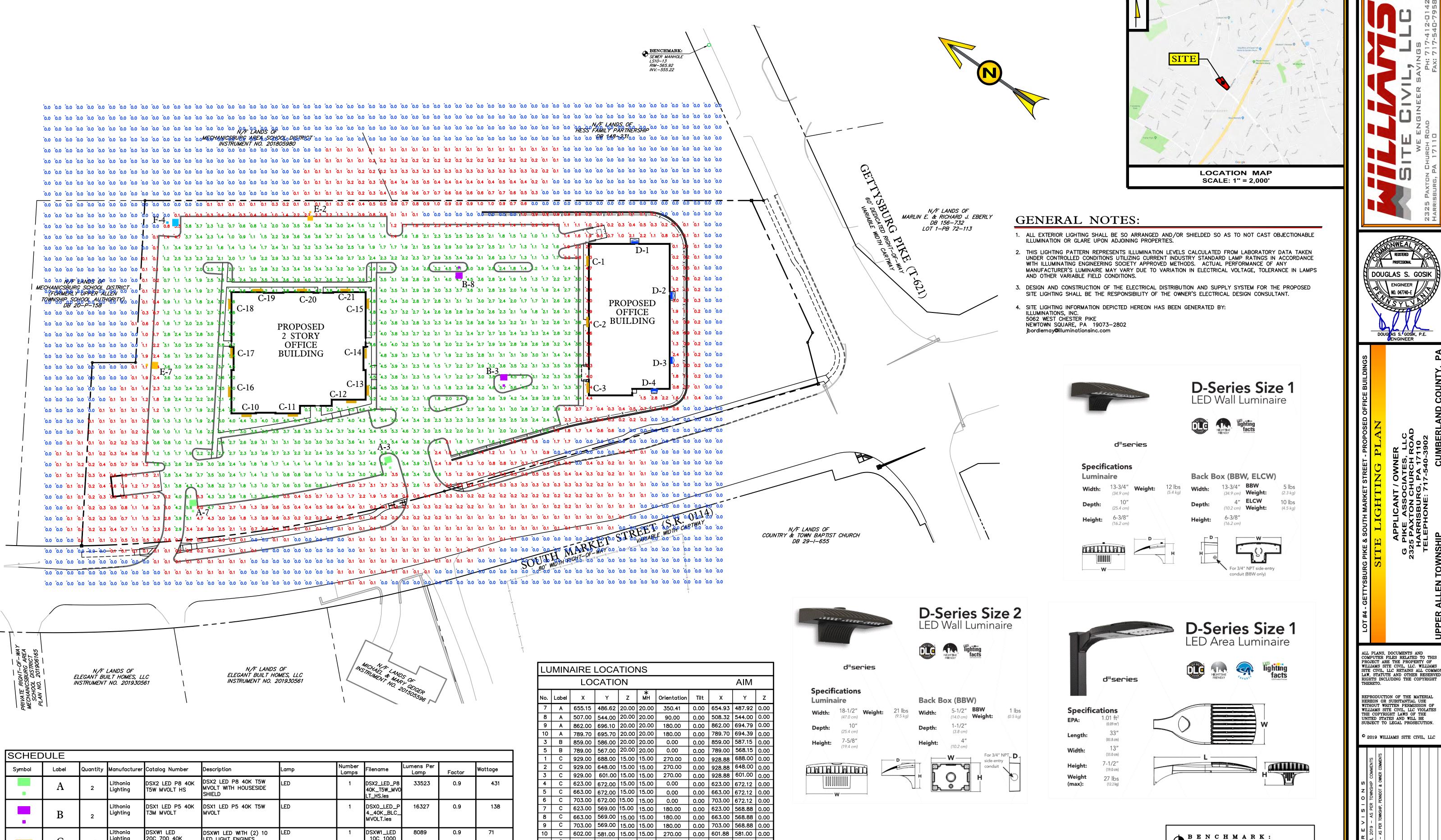
2019 WILLIAMS SITE CIVIL, LLC

DRAWN BY: CHECKED B B.E.R. B.E.R. C PROJECT NUMBER:

GPIKE-UA-OFFICE-FINAL

SCALE: 1'' = 40'

DATE: SEPTEMBER 27, 2019



 11
 C
 602.00
 621.00
 15.00
 15.00
 270.00
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 601.88
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 12
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15 C 724.00 661.00 15.00 15.00 90.00 0.00 724.12 661.00 0.00

1 D 971.00 706.00 7.00 10.00 0.00 971.00 706.12 -3.0

2 D 1013.00 684.00 7.00 10.00 90.00 0.00 1013.12 684.00 -3.0

3 D 1013.00 606.00 7.00 10.00 90.00 0.00 1013.12 606.00 -3.0

4 D 971.60 586.99 7.00 10.00 179.41 0.00 971.60 586.87 -3.0

7 E 523.20 656.70 20.00 20.00 90.00 0.00 524.39 656.70 0.00

3 F 796.00 497.00 20.00 20.00 255.96 0.00 794.89 496.72 0.00

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 528.04
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2 E 670.90 745.80 20.00 20.00 180.00 0.00 670.90 744.61 0.00

_10C_1000_ 40K_T2M_M

DSXW1_LED

DSX0_LED_P

4_40K_T5W_

DSX0_LED_P

4_40K_TFTN

_MVOLT.ies

MVOLT.ies

_20C_700_ 0K_TFTM_N

VOLT.ies

2102

12978

0.9

0.9

19.1

138

VOLT.ies

Lighting

Lighting

Lighting

Lighting

20C 700 40K

74M MVOLT

530mA.

BLC MVOLT

.CCO MVOLT

LED LIGHT ENGINES,

TYPE T4M OPTIC,

4000K, @ 700mÅ.

DSXW1 LED WITH (1) 10 DSXW1 LED WITH (1) 10

LED LIGHT ENGINES, TYPE

DSX1 LED P5 40K DSX1 LED P5 40K BLC

DSX1 LED P5 40K DSX1 LED P5 40K LCCO

YPE T2M OPTIC, 4000K, T2M OPTIC, 4000K, ◎

STATISTICS 0.8 fc 6.0 fc 0.0 fc N/A N/A ENTIRE CALC ZONE 2.8 fc 5.9 fc 0.5 f 11.8:1 5.6:1 PROPERTY LINE + 0.2 fc 0.9 fc 0.0 fc N/A N/A

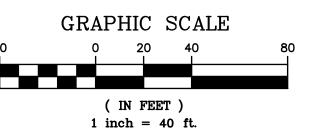
REVISIONS:

A) 1. ADDED MOUNTING HEIGHT RESTRICTIONS UNDER LUMINAIRE LOCATIONS CHART.

B) 1. ADJUSTED LIGHT POLE LOCATIONS. (W.L.G.)

BENCHMARK:

RIM OF SANITARY SEWER MANHOLE 1-203 LOCATED ALONG GETTYSBURG PIKE TO THE NORTH OF THE PROPERTY Elevation = 565.92 (NAVD 88)



SCALE: 1" = 40' DATE: SEPTEMBER 27, 2019

GPIKE-UA-OFFICE-FINAL

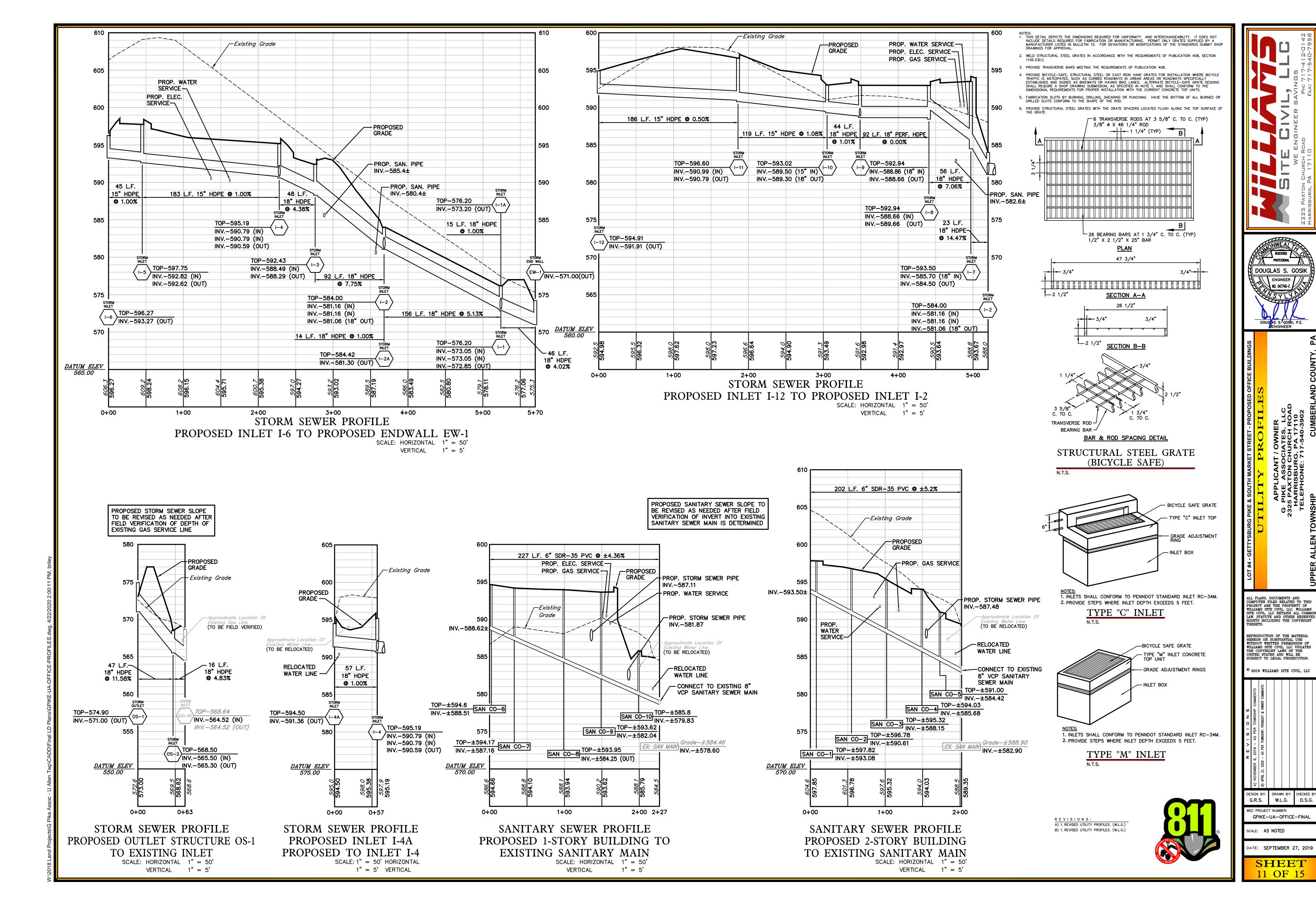
WSC PROJECT NUMBER:

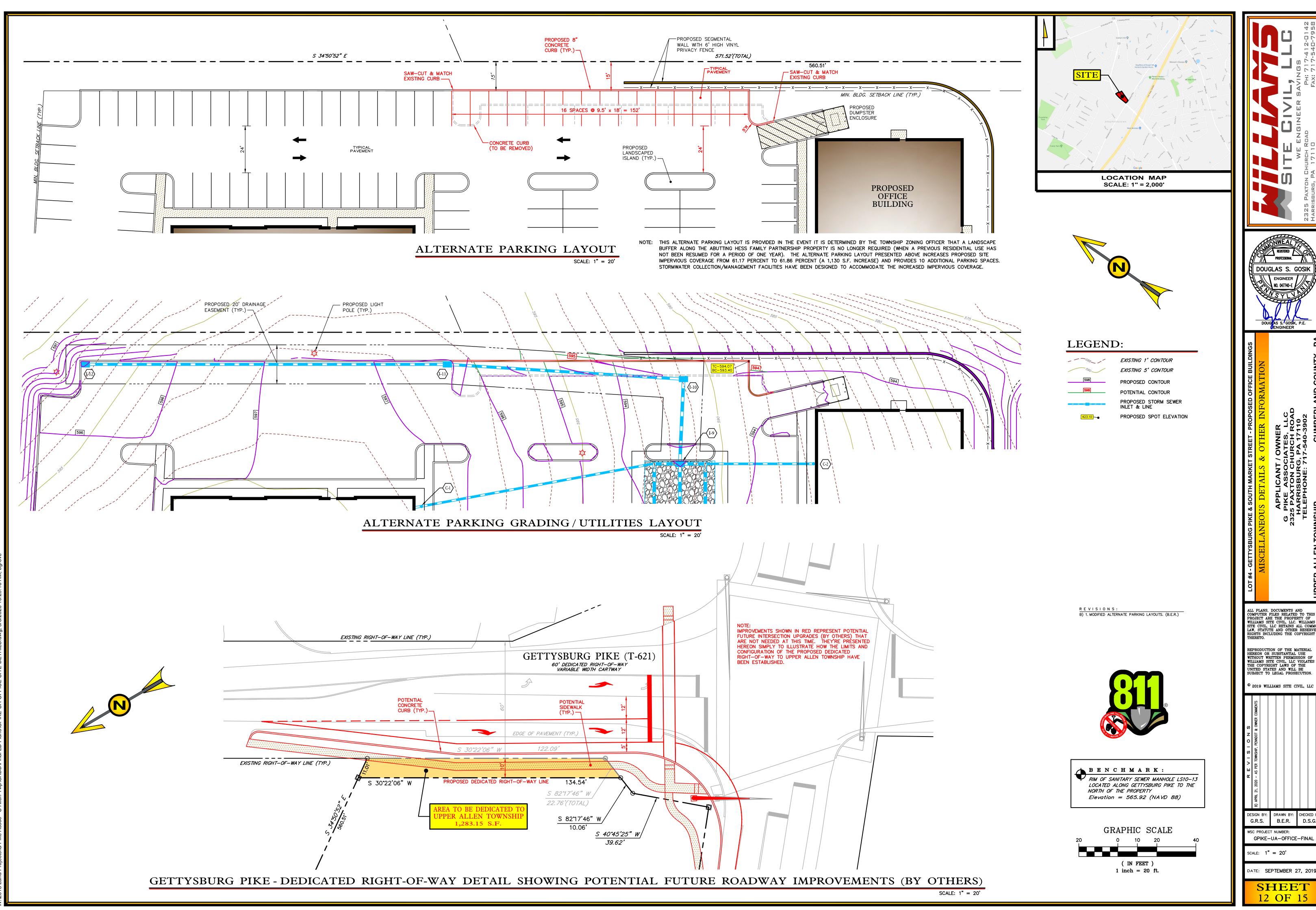
DRAWN BY: CHECKED B

W.L.G. A.S.W.

DOUGLAS S. GOSI

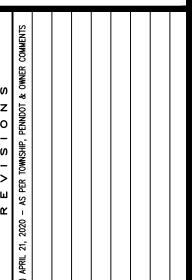
SHEET 10 OF 15





DOUGLAS S. GOSIK

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DESIGN BY: DRAWN BY: CHECKED BY: G.R.S. B.E.R. D.S.G.

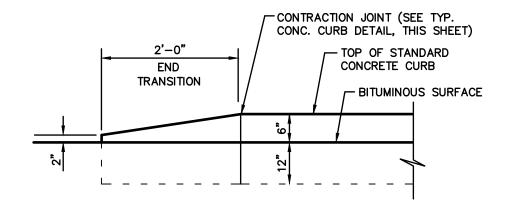
GPIKE-UA-OFFICE-FINAL

DATE: SEPTEMBER 27, 2019

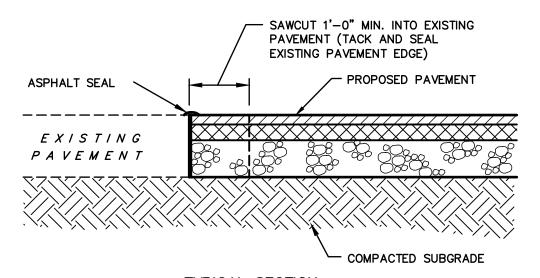
SHEET 12 OF 15

- 1. MAINTAIN 8" CURB REVEAL FOR ALL SITE CURBING EXCEPT FOR FLUSH CURB AND 6" REVEAL ALONG THE FRONT OF BUILDINGS. SITE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL CURBING SHOWN WITHIN THIS PLAN SET. SEE GRADING/UTILITIES PLAN FOR SPOT ELEVATIONS ALONG CURBING.
- 2. PLACE 3/4" THICK PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY, CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

TYPICAL CONCRETE CURB DETAIL

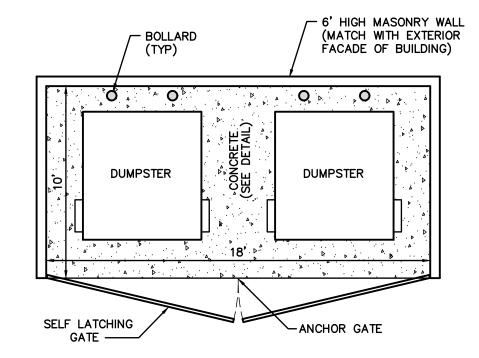


END TRANSITION FOR STANDARD CURBING



TYPICAL SECTION

SAW-CUT/PAVEMENT TIE-IN DETAIL



1. DUMPSTER ENCLOSURE MUST HAVE SELF-LATCHING DOOR OR GATE.

DUMPSTER PAD ENCLOSURE DETAIL

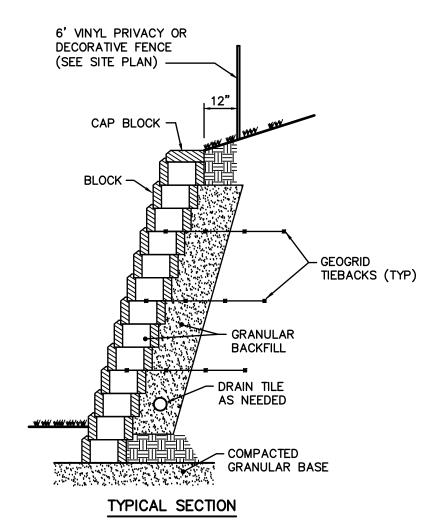
-6" THICK 4500 PSI CONCRETE (CLASS AA) W/ BROOM FINISH

L REINFORCEMENT (SEE NOTE #1) 6" MIN. TAMPED 2A MODIFIED -

1. REINFORCEMENT OPTIONS: A. No. 4, GRADE 60, DEFORMED STEEL REINFORCING BARS, SPACED AT 18 INCHES IN EACH DIRECTION.

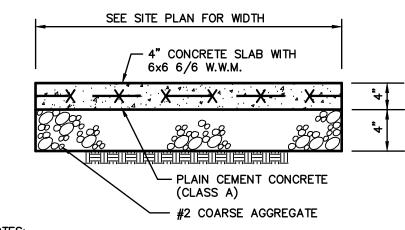
B. No. W4 WELDED WIRE FABRIC SPACED AT 4 INCHES IN EACH DIRECTION (WWF 4x4-W4xW4). 2. SEE SITE PLAN FOR PAD DIMENSION.

DUMPSTER PAD SECTION



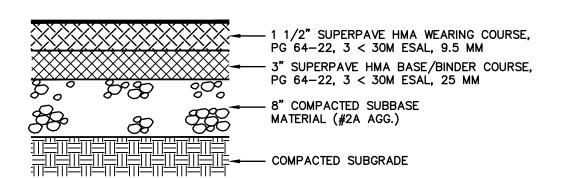
1. SPECIFIC DESIGN AND DETAILS FOR ON-SITE RETAINING WALL SHALL BE PREPARED BY THE MANUFACTURER AND PROVIDED TO THE TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. 2. ALL WALLS IN EXCESS OF 30" IN HEIGHT SHALL INCLUDE PROTECTIVE BARRIERS AT THE TOP.

TYPICAL SEGMENTAL BLOCK RETAINING WALL DETAIL



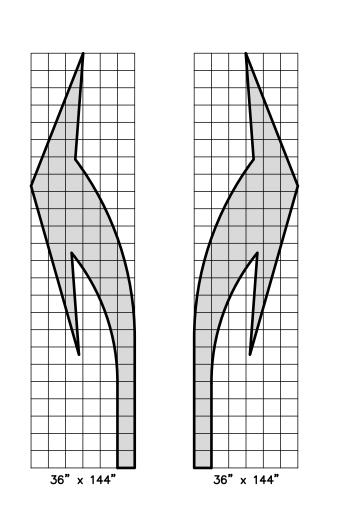
1. CONSTRUCT SIDEWALK IN ACCORDANCE WITH PADOT SPECIFICATIONS 2. PROVIDE TRANSVERSE TOOLED JOINTS @ 5' INTERVALS 3. PROVIDE 1/2" PREMOLDED EXPANSION JOINT MATERIAL @ 20'

TYPICAL CONCRETE SIDEWALK



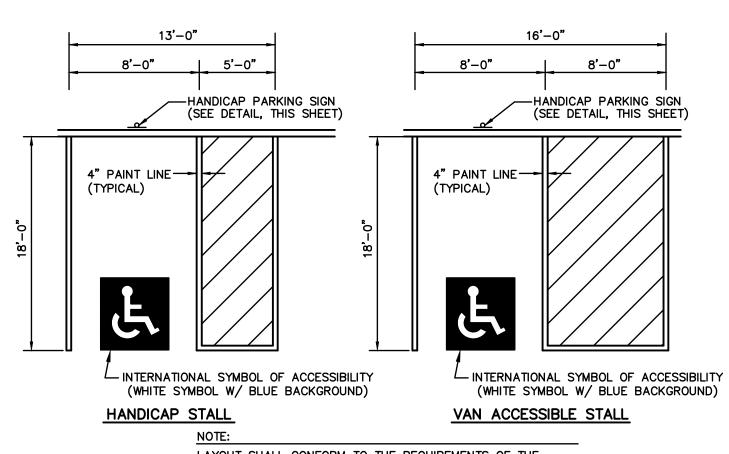
1. ALL COMPONENTS OF THE PAVEMENT STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH PENNDOT SPECIFICATIONS. MATERIALS MUST BE PROVIDED BY A PENNDOT—APPROVED PLANT AND SHALL MEET THE CURRENT REQUIREMENTS APPROVED BY PENNDOT.

TYPICAL SITE PAVEMENT SECTION



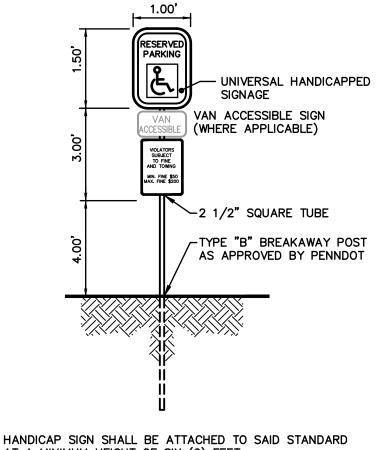
EACH GRID EQUALS 6" X 6" NOTE: ALL PAVEMENT MARKINGS SHOULD BE INLAID PLASTIC (OR SURFACE APPLIED WHERE NECESSARY).

TYPICAL PAVEMENT MARKINGS

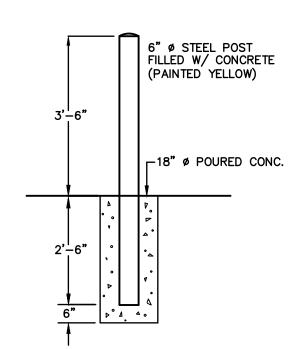


LAYOUT SHALL CONFORM TO THE REQUIREMENTS OF THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS, SECTION 4.30. ALL HANDICAPPED SPACES SHALL NOT EXCEED A 2% SLOPE

IN ALL DIRECTIONS. ADA = FEDERAL ACCESSIBILITY CODES (AMERICAN DISABILITIES

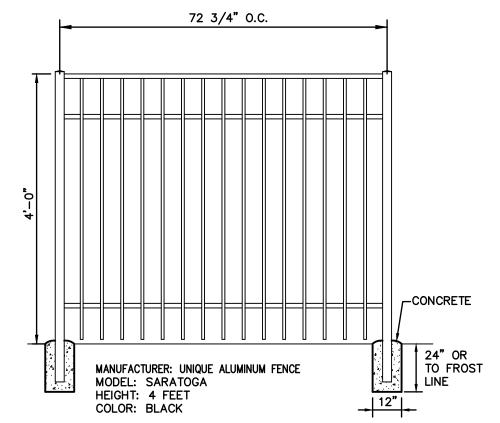


AT A MINIMUM HEIGHT OF SIX (6) FEET. HANDICAP PARKING SIGN



PROTECTIVE **BOLLARD DETAIL**

HANDICAP PARKING STALL DETAIL N.T.S.



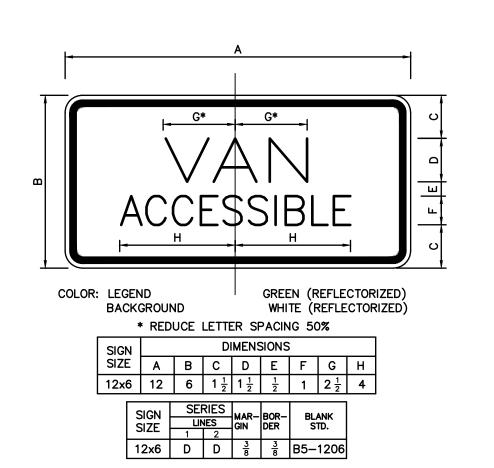
NOTES: 1. PROVIDE FENCE WHERE WALL HEIGHT EXCEEDS 30 INCHES. 2. FENCE MUST COMPLY WITH UPPER ALLEN TOWNSHIP ZONING ORDINANCE AND PA UCC.

18" DIA. CONC. FOOTER W/ SONOTUBE FORM (48" MIN. DEPTH) (TYP.) —

VINYL FENCE DETAIL

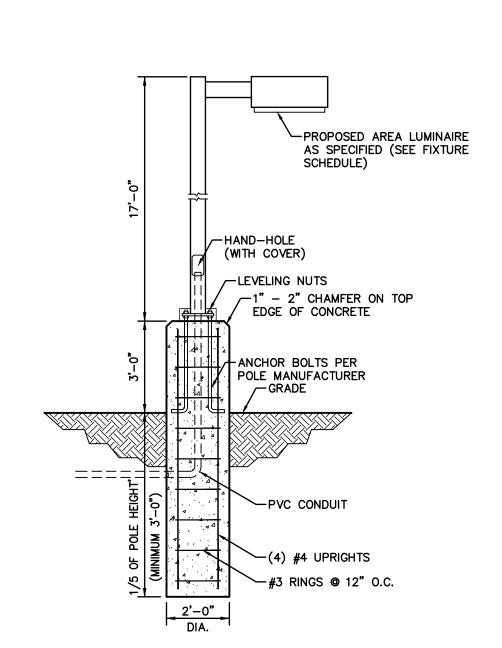
ULTRAGUARD PRIVACY "UNIFORM UPRIGHTS" (OR EQUAL)

- VINYL COATED (COLOR: BY OWNER)

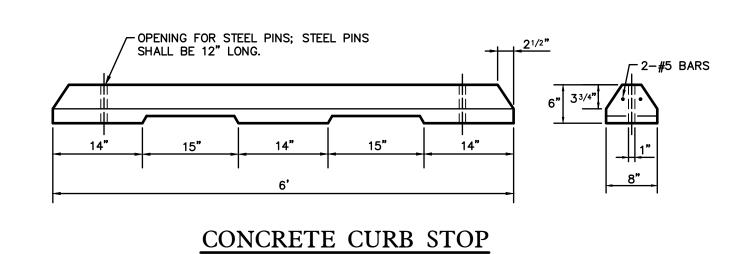


VAN ACCESSIBLE SIGN (PADOT R7-8A)





TYPICAL PARKING LOT LIGHTING STANDARD DETAIL



12'-0" MINIMUM

STOP BAR PAVEMENT MARKING DETAIL



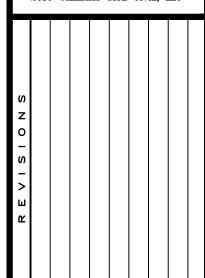




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WSC PROJECT NUMBER: GPIKE-UA-OFFICE-FINAL

SCALE: AS NOTED

DATE: SEPTEMBER 29, 2019

SHEET 13 OF 15 MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

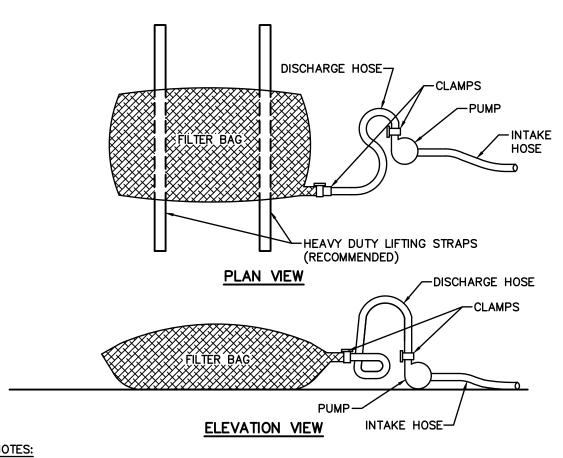
ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-16 FILTER BAG INLET PROTECTION - TYPE M INLET



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 SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSÉ THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

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.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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

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

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

STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

-INLET GRATE IN. REBAR FOR SANDBAG, FILTER LOG, BAG REMOVAL COMPOST SOCK, OR FROM INLET FILTER TUBE -EXPANSION RESTRAINT (1/4 IN. NYLON ROPE) -2 IN X 2 IN. X 3/4 IN. RUBBER BLOCK INSTALLATION DETAIL ISOMETRIC VIEW EXTEND BERM OVER 1 FT. CURB IF RUNOFF IS BYPASSING INLET ON LANDWARD SIDE PLAN VIEW SECTION VIEW

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC

STANDARD CONSTRUCTION DETAIL #4-15 FILTER BAG INLET PROTECTION - TYPE C INLET

SEE PLAN VIEW - THIS SHEET

	Compos		LE 4.1 Minimum Spe	ecifications	
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	6 mil HDPE Multi-Filament Polypropylene (MFPP)	
Material	Photo-	Photo-	Bio-	Photo-	Photo-
Characteristics	degradable	degradable	degradable	degradable	degradable
_		12"	12"	12"	12"
Sock	12"	18"	18"	18"	18"
Diameters	18"	24"	24"	24"	24"
		32"	32"	32"	32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
		Two-pl	y systems		
HDPE biaxial net Continuously wound Inner Containment Netting Fusion-welded junctures 3/4" X 3/4" Max. aperture size				und ctures	
Composite Polypropylene Fabric (Woven layer and non-woven fleece Outer Filtration Mesh 3/16" Max. aperture size					
Sock fabric	s composed o	f burlap may be		ects lasting 6 mont	
		TARIE	4.0		

TA	BLE 4	.2	

Composi	Standards
Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
рН	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION

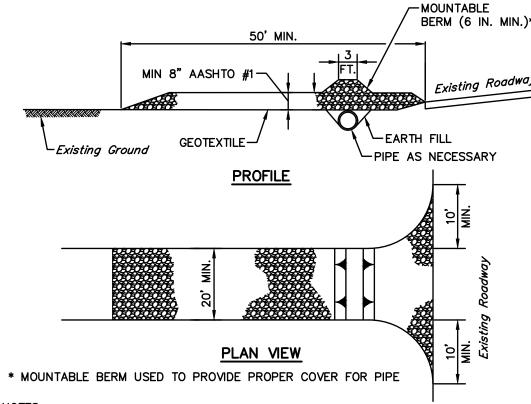
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

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

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER S RECOMMENDATIONS.

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.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK



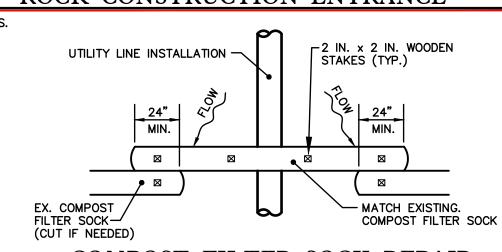
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED

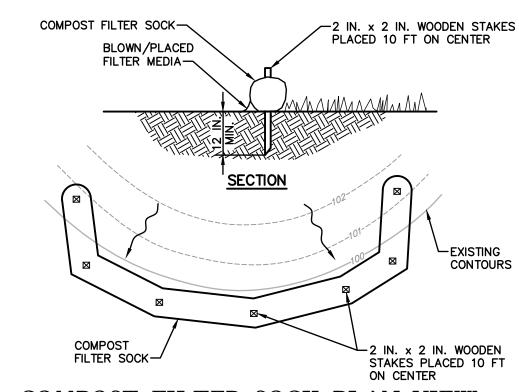
AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

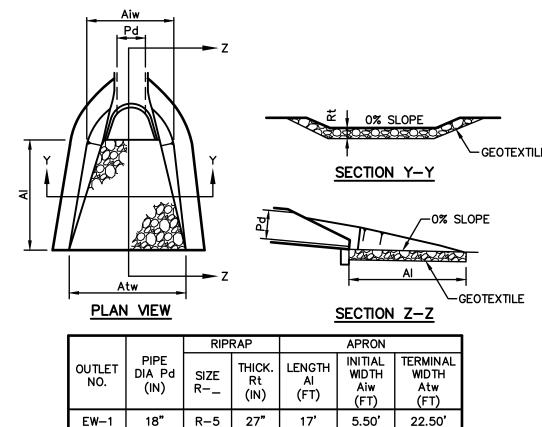


COMPOST FILTER SOCK REPAIR DETAIL (UTILITY CUT)

N.T.S.

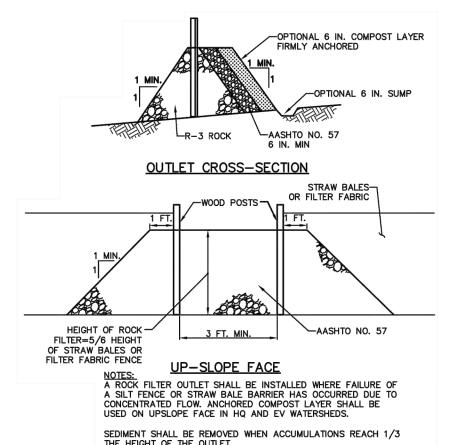


COMPOST FILTER SOCK PLAN VIEW

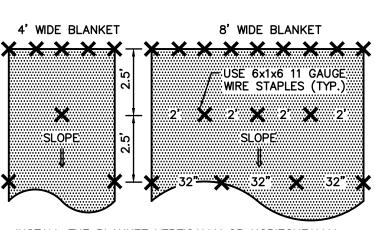


ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY. STANDARD CONSTRUCTION DETAIL #9-1 RIPRAP APRON AT PIPE OUTLET

WITH FLARED END SECTION OR ENDWALL



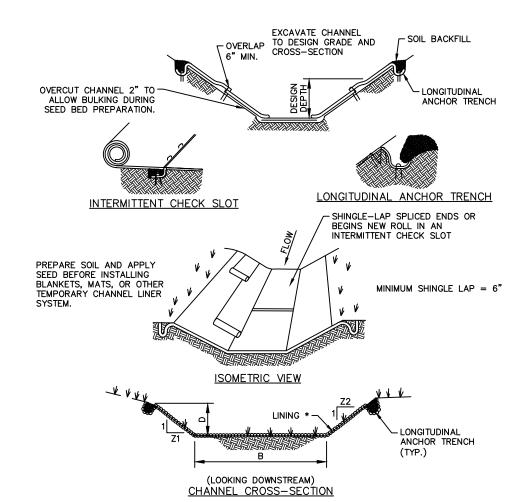
ROCK FILTER OUTLET #4-06



• INSTALL THE BLANKET VERTICALLY OR HORIZONTALLY. • USE 12" STAPLE SPACING ON STARTER ROW. • START BLANKET 3'± OVER GRADE BREAK.

- PRIOR TO INSTALLATION SLOPE AREAS SHALL BE INSPECTED FOR PROPER COMPACTION AND FINE GRADED TO REMOVE RILLS. SLOPES SHALL BE FREE OF OBSTRUCTIONS (SUCH AS TREE ROOTS), PROJECTIONS (SUCH AS STONES) AND OTHER FOREIGN OBJECTS. AFTER THE AREA HAS BEEN PROPERLY SHAPED, SEEDED, FERTILIZED, AND COMPACTED, LOCATE THE START OF THE ROLL, MAKING SURE THE ROLL IS FACING TOWARD THE AREA TO BE COVERED, AND THEN ROLL OUT THI BLANKET. BLANKETS SHALL BE ROLLED OUT FLAT, EVEN, AND SMOOTH WITHOUT STRETCHING THE MATERIAL, THEN ANCHORED
- 2. BLANKETS SHOULD BE INSTALLED IN THE SAME DIRECTION AS THE WATER FLOW; HOWEVER, ON SHORT SLOPES IT MAY BE MORE PRACTICAL TO INSTALL HORIZONTALLY ACROSS THE WIDTH OF THE APPLICATION. IF MORE THAN ONE WIDTH IS REQUIRED, ABUT THE EDGES TOGETHER AND SECURE THE BLANKETS WITH A COMMON ROW OF BIODEGRADABLE STAPLES, STEEL STAPLES, OR STAKES. OVERLAPPING CURLEX BLANKETS IS NOT REQUIRED OR RECOMMENDED. AN EXCEPTION IS WATERWAY SLOPES.
- 3. BLANKETS SHALL BE APPLIED IN A FLAT, EVEN SMOOTH MANNER, WITHOUT STRETCHING. GOOD, CONTINUOUS CONTACT WITH UNDERLYING SOIL SHALL BE PROVIDED THROUGHOUT THE ENTIRE LENGTH OF THE BLANKET. 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 WITHIN 4 CALENDAR DAYS.

CURLEX MATTING INSTALLATION INSTRUCTIONS



* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, AND VEGETATIVE STABILIZATION PECIFICATIONS FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION.

CHANNEL NO.	PERMANENT OR TEMPORARY	BOTTOM WIDTH B (FT)	DEPTH D (FT)	Z1 (FT)	Z2 (FT)	LINING *
NORTH SWALE 1	PERMANENT	1.0	1.0	3.0	3.0	N.A.G. S75
NORTH SWALE 2	PERMANENT	1.0	1.0	3.0	3.0	N.A.G. S75
SOUTH SWALE 1	PERMANENT	1.0	1.0	3.0	3.0	N.A.G. SC250

1. N.A.G. INDICATES A NORTH AMERICAN GREEN PRODUCT AND S75 REPRESENTS THE PRODUCT NAME.

2. ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS

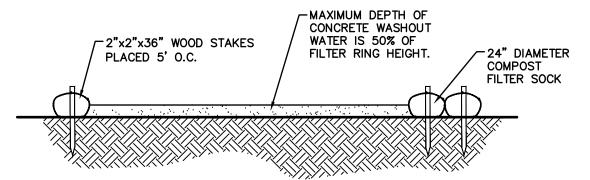
3. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE.

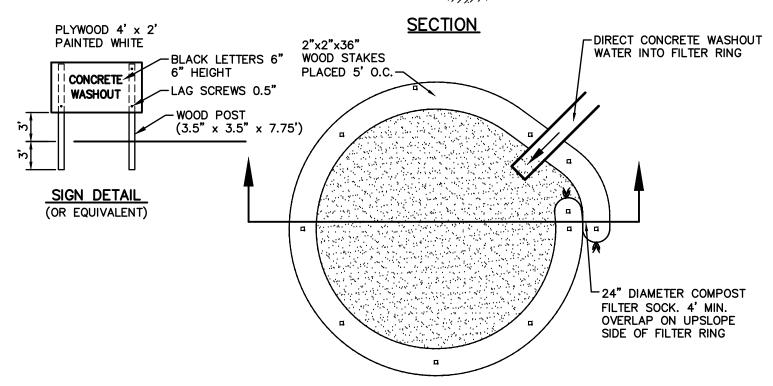
4. NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY. 5. ALL CHANNELS MUST BE KEPT FREE OF OBSTRUCTIONS SUCH AS FILL GROUND. FALLEN LEAVES & WOODY DEBRIS.

ACCUMULATED SEDIMENT, AND CONSTRUCTION MATERIALS/WASTES. CHANNELS SHOULD BE KEPT MOWED AND/OR FREE OF ALL WEEDY, BRUSHY OR WOODY GROWTH. ANY UNDERGROUND UTILITIES RUNNING ACROSS/ THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL(S) REPAIRED AND STABILIZED PER THE CHANNEL CROSS—SECTION DETAIL. 6. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS

THAT WILL IMPEDE NORMAL CHANNEL FLOW AND/OR PREVENT GOOD LINING TO SOIL CONTACT. THE CHANNEL SHALL BE INITIALLY OVER-EXCAVATED TO ALLOW FOR THE PLACEMENT OF TOPSOIL. TEMPORARY & PERMANENT CHANNELS

REVISIONS: B) 1. ADDED TEMPORARY/PERMANENT CHANNELS DETAIL.





1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE. 2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT

3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS. 4. CONCRETE BLOCKS SHALL BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE COMPOST FILTER SOCKS USED FOR A CONCRETE WASHOUT INSTALLED ON A PAVED AREA TO HELP HOLD THE SOCKS IN PLACE. THE BLOCKS SHALL BE INSTALLED AT THE SAME INTERVAL RECOMMENDED FOR THE INSTALLATION OF THE STAKES AS INDICATED ABOVE.

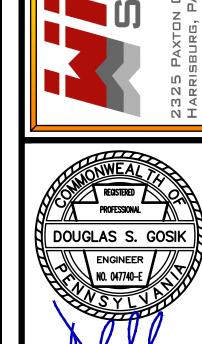
. ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. . ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY. 3. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

CONCRETE WASHOUT DETAIL

N.T.S.







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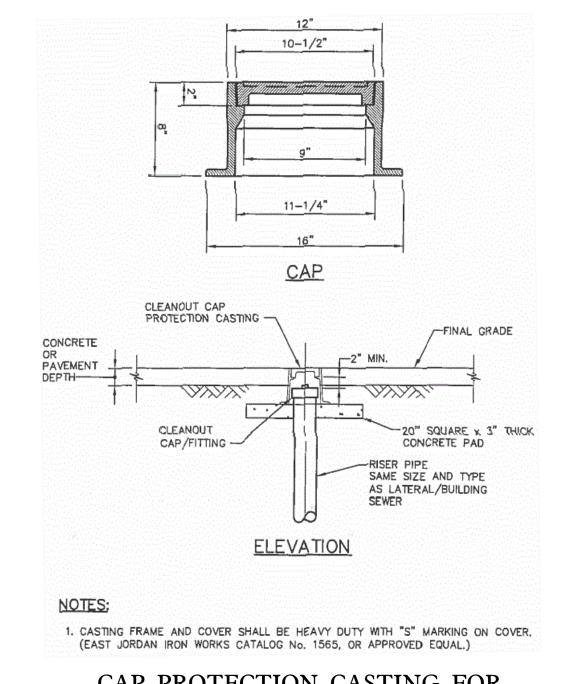
W.L.G. PROJECT NUMBER:

GPIKE-UA-OFFICE-FINAL

CALE: AS NOTED

DATE: SEPTEMBER 27, 2019

SHEET 14 OF 15





TYPE "M" CONCRETE TOP UNIT

1. USE 2' X 4' (INSIDE DIM.) SQUARE RISER ALL WALLS

PROPOSED OUTLET STRUCTURE OS-1

2. THE METAL ORIFICE GUARD AND CONNECTION HARDWARE SHALL BE OF STAINLESS STEEL MATERIAL, AND SHALL BE CONNECTED TO THE STRUCTURE USING 3/8 INCH

SHALL BE SIX (6) INCHES THICK.

DIAMETER ANCHORS.

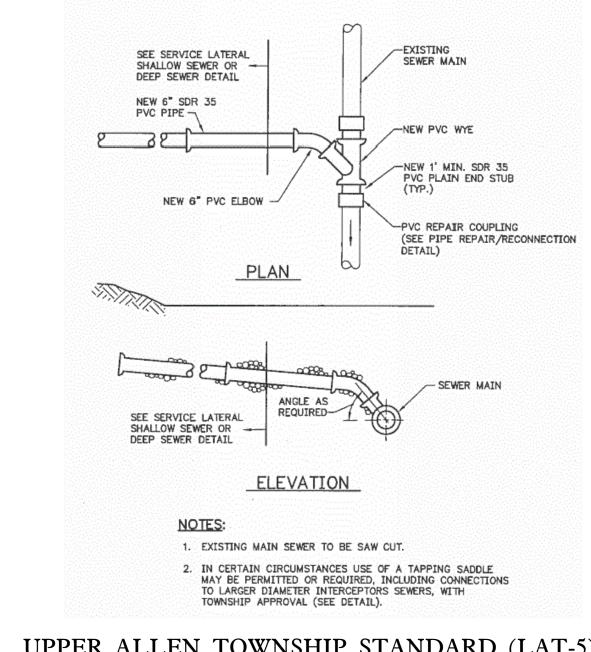
OUTLET STRUCTURE TOP

@ ELEV.-574.90

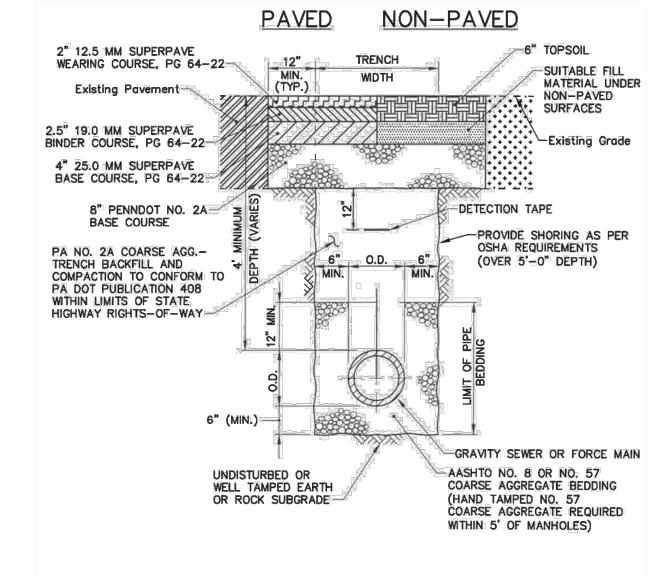
INV. ELEV.-572.80

CONCRETE BASE

-7" ORIFICE

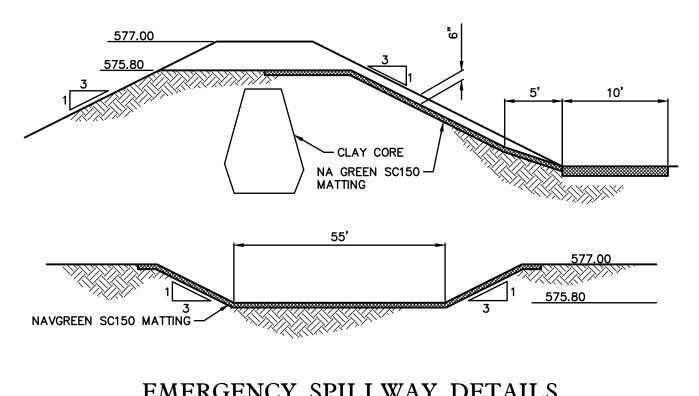


UPPER ALLEN TOWNSHIP STANDARD (LAT-5) SERVICE LATERAL CONNECTION TO EXISTING MAIN

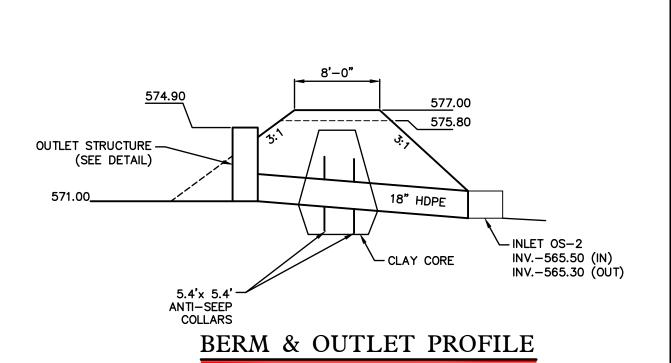


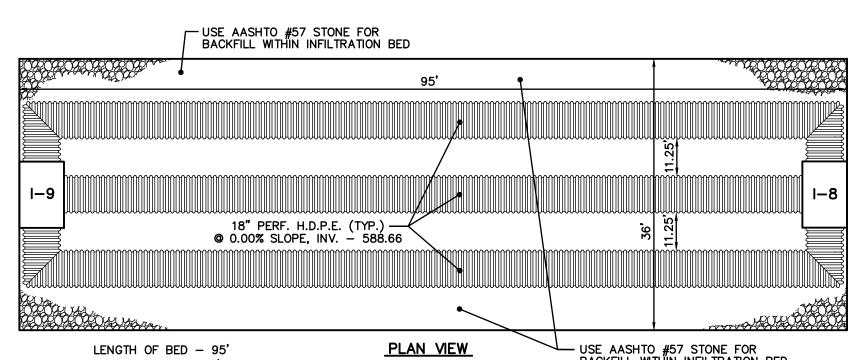
- 1. ALL PAVEMENT TO BE SAW CUT. PG 64-22 SEAL TO BE APPLIED TO VERT. FACE OF SAW CUTS (TYP.)
- 2. JOINTS SHALL BE SEALED WITHIN 24 HRS. AFTER THE APPLICATION OF THE WEARING
- 3. PENN DOT MAY REQUIRE MODIFICATIONS TO THIS TRENCH RESTORATION DETAIL PENDING APPROVAL OF HOP APPLICATION / PERMIT.

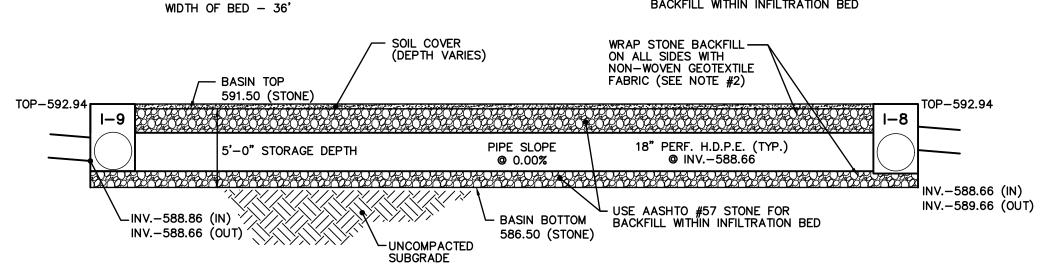
TRENCH RESTORATION DETAIL (TYPICAL S.R. 0114)



EMERGENCY SPILLWAY DETAILS





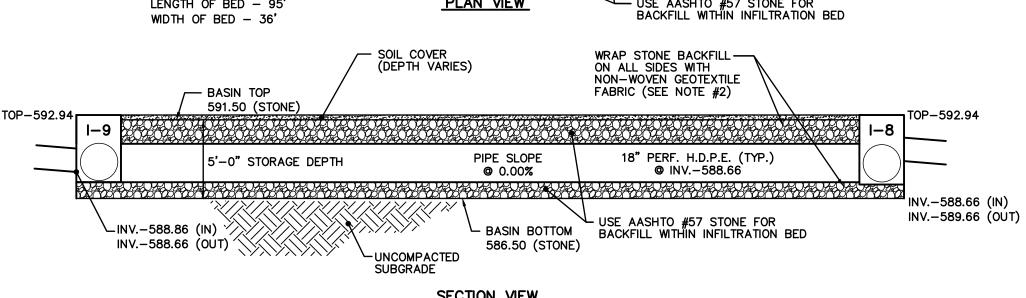


SECTION VIEW

 JUNCTION BOXES SHALL BE STANDARD TYPE 'C' INLETS.
 NON-WOVEN GEOTEXTILE SHALL CONSIST OF NON-WOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES: GRAB TENSILE STRENGTH (ASTM-D4632) 120 LBS

• UV RESISTANCE AFTER 500 HRS (ASTM-D4355) 70% HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED

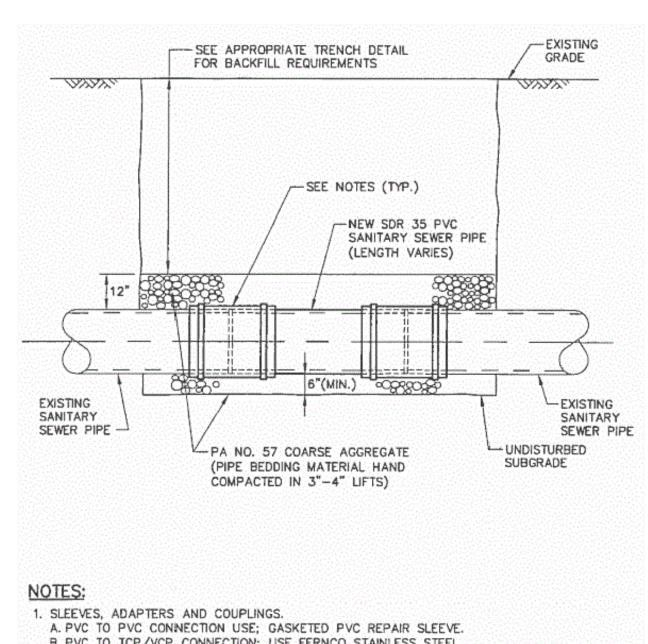
- USE AASHTO #57 STONE FOR BACKFILL WITHIN INFILTRATION BED



NOTES:

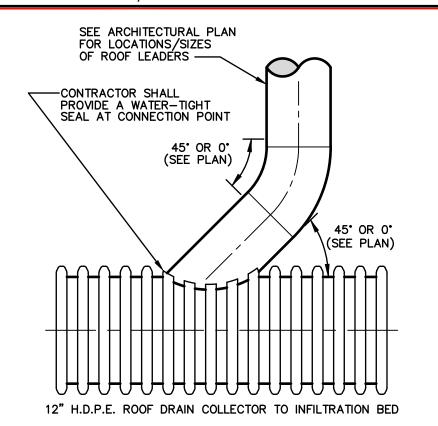
 MULLEN BURST STRENGTH (ASTM-D3786) 225 PSI • FLOW RATE (ASTM-D4491) 95 GAL/MIN/SF

INFILTRATION BED DETAIL



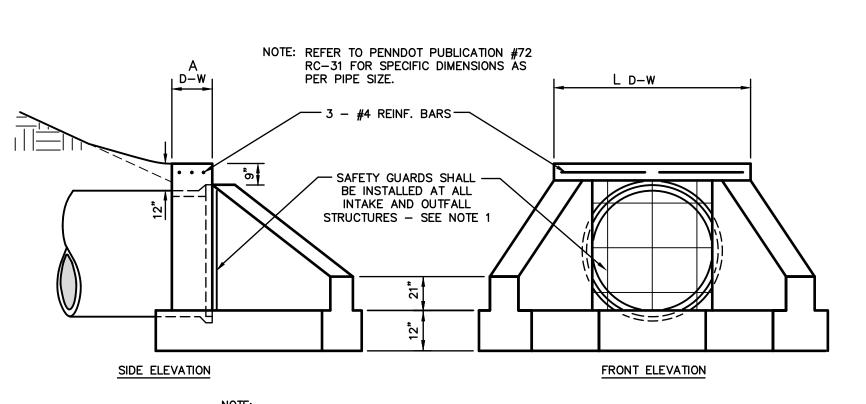
- B. PVC TO TCP/VCP CONNECTION; USE FERNCO STAINLESS STEEL
- ANTI-SHEAR COLLAR RUBBER ADAPTER, OR APPROVED EQUAL C. PVC TO DIP/CIP CONNECTION; USE MECHANICAL JOINT COUPLING. D. PVC/DIP TO ACP CONNECTION; USE MECHANICAL JOINT COUPLING
- OR STAINLESS STEEL ANTI-SHEAR COLLAR RUBBER ADAPTER, AS APPROVED BY TOWNSHIP. E. DIP/CIP TO DIP/CIP CONNECTION; USE MECHANICAL JOINT COUPLING.
- 2. MECHANICAL JOINT COUPLINGS TO BE SMITH-BLAIR, DRESSER, OR
- 3. RECONNECTIONS TO BE AIR TESTED IN ACCORDANCE WITH
- SPECIFICATIONS OR AS DIRECTED BY TOWNSHIP.

UPPER ALLEN TOWNSHIP STANDARD (SEW-2) PIPE REPAIR / RECONNECTION DETAIL



STORM SEWER ROOF LEADER CONNECTION

N.T.S.



ORIFICE GUARD -

(1/2" DIA. GALVANIZED

BARS @ 2" O.C.)

GROUND SURFACE ELEVATION

© ELEV. = 571.00

1. GUARD BARS SHALL BE 1/2" DIAMETER GALVANIZED BARS 6" O.C., ATTACHED TO THE STRUCTURE WITH 3/8" DIAMETER STAINLESS STEEL ANCHORS.

> STANDARD TYPE D-W ENDWALL DETAIL

DOUGLAS S. GOSIK ENGINEER NO. 047740-E

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G.R.S.

VSC PROJECT NUMBER:

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15 OF 15

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