P.C.S.W.M. B.M.P. INSPECTION AND MAINTENANCE NOTES

1.) UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL BMPS MUST BE MAINTAINED PROPERLY BY CONTRACTOR. ALL PERMANENT MAINTENANCE PROCEDURES SHALL BE PERFORMED BY THE DESIGNATED HOME OWNERS ASSOCIATION. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

2.) STORM WATER MANAGEMENT BASINS - BASINS SHALL BE INSPECTED FOR LITTER AND SEDIMENT ACCUMULATION ON AN ANNUAL BASIS OR AS DIRECTED BY THE TOWNSHIP ENGINEER. NEEDED MAINTENANCE SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. THE LITTER AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. THE LITTER AND SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

3.) WATER QUALITY (WQ) INLETS - WATER QUALITY INLETS SHALL BE INSPECTED FOR LITTER AND SEDIMENT ACCUMULATION ON AN ANNUAL BASIS OR AS DIRECTED BY THE TOWNSHIP ENGINEER. NEEDED MAINTENANCE SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. THE LITTER AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES AND FILTERING CAPABILITIES. THE LITTER AND SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. SEE MANUFACTURERS SPECIFICATIONS FOR OTHER PERTINENT RECOMMENDATIONS PROVIDED BY THE MANUFACTURER REGARDING MAINTENANCE OF THE DEVICES

4.) SWALES - SWALES SHALL BE INSPECTED FOR EROSION AND/OR SEDIMENT ACCUMULATION ON AN ANNUAL BASIS, AFTER A SIGNIFICANT RUNOFF EVENT OR AS DIRECTED BY THE TOWNSHIP ENGINEER. NEEDED MAINTENANCE SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. AREAS OF EROSION SHALL BE REGRADED AND STABILIZED AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. ANY REMOVED SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. ALL AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

5.) STORM DRAINAGE SYSTEMS - THE STORM WATER MANAGEMENT FACILITIES INCLUDING THE INLETS, STORM WATER PIPING, SWALES, AND BASINS ON THIS SITE SHALL BE MAINTAINED IN PROPER WORKING ORDER IN ACCORDANCE WITH THESE PLANS AND PER THE RECOMMENDATION OF THE STRUCTURE(S) MANUFACTURER(S). MAINTENANCE OF THESE STORM WATER MANAGEMENT FACILITIES, AS NOTED BELOW, SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER(S) UPON WHOSE PROPERTY THE FACILITIES ARE LOCATED.

6.) ALL ON-SITE INLETS, MANHOLES, AND STORM WATER PIPING SHALL BE CLEARED OF DEBRIS EVERY THREE (3) MONTHS OR WHEN ACCUMULATION HINDERS OPERATION OF THE FACILITY.

7.) ALL SEDIMENT/DEBRIS/OIL REMOVED FROM THE STORM WATER MANAGEMENT SYSTEM SHALL BE DISPOSED PER LOCAL, STATE, AND FEDERAL STANDARDS.

8.) SHOULD ON-SITE EROSION OCCUR FROM THE LANDSCAPED AREAS, SOURCE OF EROSION SHALL BE IMMEDIATELY STABILIZED AND THE INLETS, MANHOLES, AND STORM WATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.

GENERAL SEQUENCING NOTES FOR P.C.S.W.M. B.M.P.s

1.) A SITE INSPECTION AND APPROVAL BY THE DELAWARE COUNTY CONSERVATION DISTRICT IS REQUIRED PRIOR TO THE REMOVAL OR CONVERSION OF SEDIMENT BASINS AND TRAPS.

2.) BOHLER ENGINEERING PA, LLC SHALL BE NOTIFIED OF PRE-CONSTRUCTION MEETING DATE AND BMP CONSTRUCTION SCHEDULE.

3.) THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED B.M.P. BOTTOMS.

4.) INFILTRATION TESTING SHALL BE CONDUCTED UPON SEDIMENT BASIN CONVERSION TO ENSURE THE INFILTRATION RATES HAVE NOT BEEN COMPROMISED DURING CONSTRUCTION.

5.) REFER TO THE BMP CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT INFILTRATION/WATER QUALITY BMP'S.

6.) REFER TO THE PCSWM PLAN AND DETAILS FOR SPECIFIC BMP CONSTRUCTION GUIDELINES.

7.) AS-BUILT PLANS OF THE STORMWATER BMPs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL ENGINEER.

8.) A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER BMPs.

SLOW RELEASE SYSTEM INSPECTION AND MAINTENANCE NOTES

SLOW RELEASE SLOW RELEASE SYSTEM - SLOW RELEASE SYSTEMS SHALL BE INSPECTED FOR EROSION AND/OR SEDIMENT ACCUMULATION ON AN ANNUAL BASIS, AFTER A SIGNIFICANT RUNOFF EVENT OR AS DIRECTED BY THE TOWNSHIP ENGINEER. NEEDED MAINTENANCE SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. AREAS OF EROSION SHALL BE REGRADED AND STABILIZED AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. ANY REMOVED SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. ALL AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

CRITICAL STAGES

LISTED BELOW ARE THE CRITICAL STAGES OF CONSTRUCTION. AN IMMEDIATE INSPECTION SHALL BE CONDUCTED BY A QUALIFIED SITE REPRESENTATIVE, WHERE UPON THE BUCKS COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING.

- **CONSTRUCTION SLOW RELEASE BASIN**
- **INSTALLATION ON WATER QUALITY FILTERS**
- **INSTALLATION OF SLOW RELEASE FILTER MEDIA IN UNDERGROUND BASIN OUT STRUCTURES**
- **INSTALLATION OF NATIVE AND ADAPTIVE SPECIES FOR LANDSCAPE RESTORATION BMP**

P.C.S.W.M. SUPPLEMENTAL NOTES

GENERAL PCSM PLANNING AND DESIGN §102.8(B)

1. THE FOLLOWING MEASURES WERE TAKEN TO PRESERVE THE INTEGRITY OF STREAM CHANNELS AND TO MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL, AND CHEMICAL QUALITIES OF THE RECEIVING STREAM:
- DIRECT RUNOFF FROM IMPERVIOUS SURFACES INCLUDING ROADWAYS TO BMPS.
- USE NATIVE SPECIES, WHICH REQUIRE LESS FERTILIZATION AND CHEMICAL APPLICATION THAN NON-NATIVE SPECIES.
- MAINTAIN GENERALLY THE SAME DRAINAGE PATTERNS AS IN THE EXISTING CONDITION
- PERFORM SOIL AMENDMENTS, WHICH RESTORE SOIL POROSITY THROUGH TILLING AND COMPOSTING TO IMPROVE THE SOIL'S CAPACITY FOR INFILTRATION AND POLLUTANT REMOVAL.

2. THE FOLLOWING MEASURES WERE TAKEN TO PREVENT AN INCREASE IN THE RATE OF STORM WATER RUNOFF:
- UTILIZE UNDERGROUND SLOW RELEASE BASIN TO HELP REDUCE RUNOFF RATES.
- MINIMIZE IMPERVIOUS AREAS WHERE PRACTICAL.
- MAINTAIN GENERALLY THE SAME DRAINAGE PATTERNS AS IN THE EXISTING CONDITION

3. THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE ANY INCREASE IN STORM WATER RUNOFF VOLUME:
- UTILIZE UNDERGROUND SLOW RELEASE BASIN TO HELP REDUCE RUNOFF VOLUME.
- PROVIDE LANDSCAPE RESTORATION TO HELP REDUCE RUNOFF VOLUME.
- MINIMIZE IMPERVIOUS AREAS WHERE PRACTICAL.
- MAINTAIN GENERALLY THE SAME DRAINAGE PATTERNS AS IN THE EXISTING CONDITION
- PROVIDE AMENDED SOILS THROUGHOUT THE SITE TO HELP REDUCE RUNOFF VOLUME.

4. THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE IMPERVIOUS AREAS:
- INCREASE IN PERVIOUS AREA WITHIN LIMIT OF DISTURBANCE BY APPROXIMATELY 7%
- ONLY PROVIDE SIDEWALK WHERE REQUIRED BY CODE.
- MAXIMIZE THE NUMBER OF LANDSCAPED ISLAND WITHIN THE SITE.

5. THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE.
- PROTECT WOODLANDS/EXISTING TREES WITH TREE PROTECTION FENCING.
- UTILIZING THE EXISTING CONVEYANCE SYSTEM WITHIN ABERDEEN AVENUE
- MAINTAIN EXISTING FLOW PATH TO POI#2

6. THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE LAND CLEARING AND GRADING:
- PROTECT WOODLANDS/EXISTING TREES WITH TREE PROTECTION FENCING.
- ADJUST ROAD SLOPE AND SITE GRADING SO THERE ARE NO DRASTIC PROPOSED CUTS OR FILLS TO EXISTING GRADES.
- MAINTAIN EXISTING GRADES WITHIN THE SITE WHERE PLAUSIBLE.

7. THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE.
- AS SPECIFIED IN THE CONSTRUCTION SEQUENCE, USE TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS.
- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS.

8. THE FOLLOWING MEASURES WERE TAKEN TO UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMPS THAT PREVENT OR MINIMIZE CHANGES IN STORM WATER RUNOFF:
- DIRECT RUNOFF TO AN ABOVE GROUND STORM WATER BASIN TO CONTROL RUNOFF RATES.
- UTILIZE UNDERGROUND SLOW RELEASE BASIN TO HELP REDUCE RUNOFF VOLUME.
- PROVIDE LANDSCAPE RESTORATION TO HELP REDUCE RUNOFF VOLUME.
- MINIMIZE IMPERVIOUS AREAS WHERE PRACTICAL.

TYPES, DEPTH, SLOPE, LOCATIONS AND LIMITATION OF THE SOILS AND GEOLOGICAL FORMATIONS §102.8(F)(1)

1.) EXISTING SITE COVERAGE INCLUDES BUT IS NOT LIMITED TO ONE-STORY/MASONRY BUILDINGS, GAS CANOPIES WITH FUEL DISPENSERS, ASPHALT DRIVES, SIDEWALK, PARKING AREAS AND AREAS OF SPARSE VEGETATION.

RECEIVING SURFACE WATERS §102.8(F)(5)

1.) THERE ARE NO HQ OR EV WATERSHEDS WITHIN THE SITE.
2.) THERE ARE NO EXISTING WETLANDS ON SITE.
3.) EXISTING & DESIGNATED USES FOR THE ITHAN CREEK ARE CWF & MF.

RECYCLING OR DISPOSAL OF MATERIALS §102.8(F)(11)

1.) ANTICIPATED CONSTRUCTION WASTES INCLUDE BUT ARE NOT LIMITED TO: TWO ONE-STORY BUILDINGS, SIDEWALK AND ASPHALT AREAS.

2.) ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SE., AND 287.1 ET SEQ.,) AND/OR ANY ADDITIONAL LOCAL, STATE, OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WATER MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

GEOLOGIC FORMATIONS OR SOIL CONDITIONS §102.8(F)(12)

1.) THERE ARE NO KNOWN GEOLOGICAL FORMATIONS/SOIL CONDITION ISSUES THAT HAVE THE POTENTIAL TO CAUSE POLLUTION.

POTENTIAL THERMAL IMPACT TO SURFACE WATERS §102.8(F)(13)

A POTENTIAL FOR THERMAL IMPACTS EXISTS IN INSTANCES WHERE SURFACE RUNOFF IS DIRECTLY CONVEYED TO A RECEIVING STREAM WITHOUT ADEQUATE ATTENUATION OR COOLING. TO AVOID THERMAL IMPACTS, THE FOLLOWING HAS BEEN EMPLOYED: UNDERGROUND SLOW RELEASE, AMENDED SOILS, AND LANDSCAPE RESTORATION. ALL OF THESE MEASURES WILL HELP TO CONTROL RUNOFF VOLUME AND RATE AND THEREBY PROVIDE ADDITIONAL COOLING TIME, THEREBY MINIMIZING THERMAL IMPACTS TO THE RECEIVING STREAM.

RIPARIAN FOREST BUFFER MANAGEMENT PLAN §102.8(F)(14)

1.) THERE ARE NO EXISTING/PROPOSED RIPARIAN FOREST BUFFERS SHOWN ON THE PLAN MAPS.
2.) THE FOLLOWING IMPAIRMENTS ARE LISTED FOR THIS PORTION OF THE ITHAN CREEK:
   a. WATER/FLOW VARIABILITY
   b. SILTATION
   c. HABITAT MODIFICATION
   d. PATHOGENS

SEQUENCE OF BMP INSTALLATION AND REMOVAL

§102.8(f)(7)

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE DELAWARE COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.

BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE DELAWARE COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

1. INSTALL CONSTRUCTION ENTRANCE AS DESIGNATED ON THE PLANS.
2. INSTALL ALL PERIMETER COMPOST FILTER SOCKS, SILT FENCE, TREE PROTECTION FENCING, AND INLET PROTECTION WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
3. DEMOLISH EXISTING SITE FEATURES AND UTILITIES PROPOSED TO BE REMOVED. DURING DEMOLITION OF UTILITIES ALL UTILITY SERVICES MUST BE MAINTAINED FOR NEIGHBORING PROPERTIES WHOSE UTILITIES CURRENTLY TRAVERSE THE SITE AND ARE PROPOSED TO BE REROUTED.
4. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE. CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS.
5. **CRITICAL STAGE: INSTALLATION OF BMP 6.4.11 (SLOW RELEASE BASIN)** INITIATE STORM SEWER AND SUBSURFACE SLOW RELEASE BASIN INSTALLATIONS FOR THE FEATURES SHOWN ON THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE**. DO NOT INSTALL THE OUTLET STRUCTURE FILTER MEDIA AT THIS STAGE OF CONSTRUCTION.** INLETS DISCHARGING TO THE BASIN MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE SUBSURFACE SLOW RELEASE BASIN. NO CONSTRUCTION EQUIPMENT, SUCH AS CRANES DURING BUILDING CONSTRUCTION, SHALL BE PARKED ON TOP OF THE SLOW RELEASE BASINS TO AVOID DAMAGING THE BASIN OR OVER-COMPACTING THE SUBSURFACE SOILS. **THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE INSTALLATION OF CRITICAL STAGE AND POST CONSTRUCTION STORMWATER BMPS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF THE POST CONSTRUCTION BMPS SHALL CONDUCT THE OVERSIGHT AND SIGN OFF ON THE NOTICE OF TERMINATION.**
6. CONTINUE WITH THE BALANCE OF EARTHWORK INCLUDING UTILITY INSTALLATION (SANITARY LATERALS, WATER LATERALS, GAS, ELECTRIC, TELEPHONE, AND CABLE) WHERE APPLICABLE.
7. INSTALL CURBING AND INSTALL STONE BASE COURSE IN THE DRIVEWAY AND PARKING AREAS.
8. INITIATE FINAL GRADING AND PLACEMENT OF TOPSOIL IN ALL LANDSCAPE AREAS. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. ALL LANDSCAPE AREAS MUST BE STABILIZED AND PERMANENT SEEDING OR PLACEMENT OF SOD MUST BE APPLIED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. HOWEVER, THE AREA WILL NOT BE CONSIDERED STABILIZED UNTIL A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN. IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
9. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
10. **CRITICAL STAGE: INSTALATION OF BMP6.4.4 WATER QUALITY FILTERS.** INSTALL WATER QUALITY FILTERS IN ALL INLETS ON SITE AS SHOWN ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN AS REQUIRED BY MANUFACTURER SPECIFICATIONS.
11. **CRITICAL STAGE: INSTALLATION OF BMP6.4.11 SLOW RELEASE FILTER MEDIA IN UNDERGROUND BASIN OUTLET STRUCTURE.** INSTALL UNDERDRAINS AND PROPOSED SOIL MEDIA TO DEPTHS DETAILED IN THE OUTLET STRUCTURE DETAIL. SURVEY AS-BUILT SLOW RELEASE BASIN AND PROVIDE ENGINEER OF RECORD WITH AS-BUILT CONDITIONS TO CONFIRM VOLUMES HAVE BEEN CONSTRUCTED TO MEET THE PADEP REQUIREMENTS AND RADNOR TOWNSHIP ORDINANCES.
12. **CRITICAL STAGE: INSTALLATION OF BMP 6.7.2 LANDSCAPE RESTORATION.** INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
13. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION TO AND INSPECTION FROM DELAWARE COUNTY CONSERVATION DISTRICT, REMOVE REMAINING EROSION AND SEDIMENT CONTROL FACILITIES. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
14. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
15. DEMOBILIZE.
16. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE DELAWARE COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PHASE OF THE PROJECT.

BMP	SCHEDULE	INSPECTION TASK	MAINTENANCE	FAILURE INDICATORS
BMP 6.4.11 SUBSURFACE SLOW RELEASE/DETENTION BASIN	AFTER EACH STORM >1"	- INSPECT STRUCTURES - CONFIRM OUTLET STRUCTURE IS FREE OF DEBRIS - CONFIRM OUTLET STRUCTURE ORIFICE IS NOT CLOGGED	NEEDED MAINTENANCE SHOULD BE CONDUCTED IMMEDIATELY AFTER EACH INSPECTION. ACCUMULATED LITTER AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. THE SEDIMENT AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.	FAILURE INDICATORS OF THE UNDERGROUND STORMWATER BASINS INCLUDE WHEN THE BASIN DOES NOT DEWATER OR SURCHARGING OF INLETS UPSTREAM OF THE BASIN OCCURS. A QUALIFIED INDIVIDUAL SUCH AS THE BASIN MANUFACTURER SHALL PERFORM AN INVESTIGATION IN ORDER TO DETERMINE THE CAUSE OF FAILURE. REMEDIATION SHALL BE IN ACCORDANCE WITH THE THE QUALIFIED INDIVIDUAL'S RECOMMENDATIONS BASED ON THEIR INVESTIGATION.
	4 TIMES PER YEAR	- INSPECT STRUCTURES - INSPECT FOR EROSION - INSPECT FOR SEDIMENT ACCUMULATION		
BMP 6.6.4 WATER QUALITY FILTERS	4 TIMES PER YEAR	- INSPECT OPERATION OF DEVICE - INSPECT FOR ACCUMULATION OF COLLECTED MATERIALS	NEEDED MAINTENANCE SHALL BE PERFORMED IMMEDIATELY AFTER THE INSPECTION. ACCUMULATION OF SEDIMENT/DEBRIS SHALL BE REMOVED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS/RECOMMENDATIONS. THE SEDIMENT/DEBRIS SHALL BE REMOVED, RECYCLED OR DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.	SIGNS OF FAILURE INCLUDE SEDIMENT/DEBRIS LADEN RUNOFF FLOWING OUT OF THE FILTER OR STANDING WATER IN THE FILTER. MAINTENANCE SHALL BE PERFORMED IMMEDIATELY IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS.
BMP 6.7.2 LANDSCAPE RESTORATION	ANNUALLY	- INSPECT FOR DYING/DEAD PLANT MATERIAL - INSPECT FOR INVASIVE SPECIES	REMOVE INVASIVE SPECIES AND DISCARD IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. ANY PLANT THAT IS FOUND TO BE DEAD OR IS DYING AND CANNOT BE SAVED SHALL BE REPLACED IN KIND.	FAILURE INDICATORS INCLUDE AN EXCESSIVE GROWTH OF INVASIVE SPECIES AND VEGETATION THAT FAILS TO ESTABLISH OR DIES OFF. UPON OBSERVING A FAILURE INDICATOR A QUALIFIED INDIVIDUAL SUCH AS A LANDSCAPE ARCHITECT OR SOIL SCIENTIST/ENGINEER SHALL BE CONSULTED TO DETERMINE THE EXACT CAUSE OF THE FAILURE. REMEDIATION SHALL BE IN ACCORDANCE WITH THE QUALIFIED INDIVIDUALS RECOMMENDATIONS BASED ON THEIR INVESTIGATION.

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R:\18\PC181016\DRAWINGS\PLAN SETS\LAND DEV\REV-1\PC181016 DETAILS-1---->LAYOUT: 14- PCSWM NOTES

BOHLER ENGINEERING™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING · PROGRAM MANAGEMENT · LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN · PERMITTING SERVICES · TRANSPORTATION SERVICES
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REVISIONS

REV	DATE	COMMENT	BY
1	08/31/2018	PER DOT COMMENTS	MCM

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA1 SYSTEM, INC.
1-800-242-1776

POCS SERIAL NUMBER

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PC181016
DRAWN BY: MCM
CHECKED BY: EAB
DATE: 2018.07.13
SCALE: AS NOTED
CAD I.D.: PC181016 DETAILS-1

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WAYNE PROPERTY ACQUISITION INC.

ROUTE 30 (LANCASTER AVE)
& ABERDEEN AVE
RADNOR TOWNSHIP
DELAWARE COUNTY, PA

BOHLER ENGINEERING
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PENNSYLVANIA LICENSE No. PE074843

SHEET TITLE: POST CONSTRUCTION STORMWATER MANAGEMENT NOTES

SHEET NUMBER:
14
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