

STECKBECK ENGINEERING & SURVEYING, INC., HEREBY STATES THAT, PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF 1974 AS AMENDED BY ACT 121 OF 2008 OF THE PENNSYLVANIA GENERAL ASSEMBLY, IT HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS REQUIRING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) SHOWN ON THE DRAWINGS:

(1) PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, STECKBECK ENGINEERING & SÚRVEYING, INC. REQUESTED THE LINE AND FACILITY INFORMATION PRESCRIBED BY SECTION 2, CLAUSE (4) FROM A ONE CALL SYSTEM NOT LESS THAN TEN NOR MORE THAN NINETY WORKING DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED.

(2) PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, STECKBECK ENGINEERING & SURVEYING, INC. SHOWN UPON THE DRAWING(S) THE POSITION AND TYPE OF EACH FACILITY OWNERS LINE, DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY SECTION 4, CLAUSE (2), AND THE NAME OF THE FACILITY OWNER, AND THE FACILITY OWNERS DESIGNATED OFFICE ADDRESS AND THE TELEPHONE NUMBER AS SHOWN ON THE LIST REFERRED TO IN SECTION 3.

(3) PURSUANT TO SECTION 4, CLAUSE (4) OF SAID ACT, STECKBECK ENGINEERING & SURVEYING, INC. MADE A REASONABLE EFFORT TO PREPARE THE CONSTRUCTION DRAWING(S) TO AVOID DAMAGE TO AND MINIMIZE INTERFERENCE WITH A FACILITY OWNERS FÁCILITIES IN THE CONSTRUCTION AREA BY MAINTAINING AN EIGHTEEN-INCH CLEARANCE OF THE FACILITY OWNERS FACILITIES WHERE POSSIBLE.

(4) PURSUANT TO SECTION 4, CLAUSE (5) OF SAID ACT, STECKBECK ENGINEERING & SURVEYING, INC., SHALL BE DEEMED TO HAVE MET THE OBLIGATIONS OF CLAUSE (2) BY CALLING A ONE CALL SYSTEM AND SHOWING AS PROOF THE SERIAL NUMBER OF THE ONE CALL NOTICE ON THE DRAWING(S). CORNWALL BOROUGH, LEBANON COUNTY ID NO.

AND STECKBECK ENGINEERING & SURVEYING, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO SAID REQUEST AND AS REFLECTED ON THESE DRAWINGS IS CORRECT OR ACCURATE, BUT STECKBECK ENGINEERING & SURVEYING, INC. IS REFLECTING SAID INFORMATION ON THESE DRAWINGS ONLY DUE TO THE REQUIREMENTS OF THE SAID ACT 187, DECEMBER 19, 1996.

CORNWALL BOROUGH 44 REXMONT ROAD LEBANON, PA 17042 CONTACT - BARB HENRY bhenry@cornwall-pa>com 717-274-3436

FIRSTENERGY CORPORATION 21 S MAIN ST AKRON, OH. 44308 CONTACT – MELLYSSA ADAMS madams@firstenergycorp.com 330-604-4073

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VERIZON PENNSYLVANIA LLC

UGI UTILITIES INC. 1301 AIP DRIVE MIDDLETOWN, PA. 17057 CONTACT — STEVEN BATEMAN sbateman@ugi>com 610—807—3174

CORNWALL BOROUGH BOARD OF SUPERVISORS REVIEW CERTIFICATE AT A MEETING HELD ON, 2024, THE BOARD OF SUPERVISORS OF CORNWALL BOROUGH, LEBANON COUNTY, PENNSYLVANIA APPROVED THE LAND DEVELOPMENT PLAN OF THE PROPERTY AS SHOWN HEREON.	OWNERS CERTIFICATION AND ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA) COUNTY OF DAY OF, 2024, BEFORE ME, A NOTARY PUBLIC _ THE UNDERSIGNED OFFICER, PERSONALLY APPEARED KNOWN TO ME (OR SATISFACTORILY PROVEN) TO BE THE PERSON(S) WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT HE/THEY ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN THEREOF WAS MADE AT		
REVIEWED & APPROVED DATE	HIS/THEIR DIRECTION, THAT HE/THEY ACKNOWLEDGE THE SAME TO BE HIS/THEIR ACT AND PLAN AND DESIRES THE SAME TO BE RECORDED AND THAT ALL STREETS AND OTHER PROPERTY	ENGINEER'S CERTIFICATION	LEBANON COUNTY PLANNING DEPARTMENT
REVIEWED & APPROVED DATE	IDENTIFIED AS PROPOSED PUBLIC PROPERTY (EXCEPTING THOSE AREAS LABELED "NOT FOR DEDICATION") ARE HEREBY DEDICATED TO PUBLIC USE, AND THAT ALL STORM WATER MANAGEMENT FACILITIES ARE TO BE PERMANENT FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY CORNWALL BOROUGH.	I HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, THE STORM WATER MANAGEMENT FACILITIES SHOWN AND DESCRIBED HEREON ARE DESIGNED IN CONFORMANCE WITH THE CORNWALL BOROUGH SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.	THIS PLAN REVIEWED BY THE LEBANON COUNTY PLANNING DEPARTMENT THIS DAY OF
REVIEWED & APPROVED DATE			EXECUTIVE DIRECTOR
	CORNWALL PROPERTIES, LLC DATE	STEPHEN A. SHERK, P.E.	CORNWALL BOROUGH ENGINEER
COMMISSION REVIEW CERTIFICATE			
AT A MEETING HELD ON, 2024, THE CORNWALL BOROUGH PLANNING COMMISSION REVIEWED THIS PLAN.			
		I HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, THAT THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO	REVIEWED
		THE ACCURACY REQUIRED BY THE CORNWALL BOROUGH SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.	RECORDER OF DEEDS
CHAIRMAN SECRETARY	NOTARY PUBLIC	JASON E. CHERNICH, P.L.S. DATE	RECORDED THIS DAY OF, 20, IN THE OFFICE FOR RECORDING OF DEEDS, ETC. IN AND FOR THE COUNTY OF LEBANON, PENNSYLVANIA, IN PLAN BOOK, PAGE



PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

FOR

PRL INDUSTRIES

LOCATED IN CORNWALL BOROUGH LEBANON COUNTY PENNSYLVANIA APRIL 12, 2024

REVISION	DATE	BY





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OWNER

CORNWALL PROPERTIES, LLC

CONTACT: MICHAEL SWANK

LEBANON, PA 17042

118 SPRINGWOOD DRIVE, SUITE 300

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SOURCE OF TITLE

DEED BOOK: 2315 PAGE: 4901

PIN: 12-2348414-340411-0000

OCCUPANT

PRL INDUSTRIES INC. 64 REXMONT ROAD LEBANON, PA 17042

SITE ADDRESS

445 BOYD STREET LEBANON, PA. 17042

SITE AREA: 104.00 AC.

ZONING COMPLIANCE CHART CORNWALL BOROUGH

ZONING DISTRICT: "GI" GENER	AL INDUSTRIAL	
MIN. LOT AREA MIN. LOT WIDTH MAX. LOT COVERAGE	<u>REQUIRED</u> 2 ACRES 250' 20% MAX.	<u>PROVIDED</u> 104.00 ACRES 1000'+ 1.88%.
FRONT YARD SETBACK —BUILDING	100'	100'
SIDE YARD SETBACK -BUILDING	25'	25'
REAR YARD SETBACK –BUILDING	25'	25'
BUILDING HEIGHT	65'	45"

SITE DATA

SITE AREA	104.00 Acres
SITE ZONING	GENERAL INDUSTRIAL (GI)
EXISTING USE	WOODED/QUARRY
PROPOSED USE	MANUFACTURING/OFFICE SPACE
SOURCE OF WATER	ON LOT
SOURCE OF SEWER	ON LOT
SITE ADDRESS	445 BOYD STREET
STORMWATER MANAGEMENT DISTRICT	LEBANON, PA. 17042 LEBANON COUNTY RESIDUAL

OFF-STREET PARKING REQUIREMENTS

REQUIREMENT: MANUFACTURING

- 1 SPACE FOR EVERY 2 EMPLOYEES ON THE LARGEST SHIFT.
 35 EMPLOYEES ON THE LARGEST SHIFT
 18 REQUIRED PARKING SPACES
- 61 PROPOSED PARKING SPACES



GENERAL NOTES:

- 1. ANY REVISION TO THESE PLANS AFTER THE DATE OF PLAN PREPARATION OR LATEST REVISION DATE SHALL NOT BE THE RESPONSIBILITY OF STECKBECK ENGINEERING AND SURVEYING. INC.
- . NO ONE SHALL SCALE FROM THESE PLANS FOR CONSTRUCTION PURPOSES THE APPROVED POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT SHALL BE CONSIDERED A PART OF THIS PLAN AND IS ENFORCEABLE AS IF IT APPEARED IN TOTAL
- HFRFIN 4. NOTHING SHALL BE PLACED, PLANTED, SET, PUT OR MAINTAINED WITHIN THE AREA OF ANY EASEMENT THAT MAY ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR CONFLICT WITH THE PURPOSE OR ARRANGEMENT OF THE EASEMENT, WITH THE EXCEPTION OF THE AREA OF THE EASEMENTS LOCATED WITHIN BUILDING LIMITS.
- 5. THE INFORMATION SHOWN ON THIS DRAWING MAY HAVE ALSO BEEN PROVIDED IN A DIGITAL DRAWING FORMAT. ONCE A DRAWING IS RELEASED FROM STECKBECK ENGINEERING & SURVEYING, INC. IN A DIGITAL FORMAT, WE HAVE NO CONTROL OVER MANIPULATION OR MISUSE OF THE DATA CONTAINED IN THAT FILE. THE VIEWER IS THEREFORE CAUTIONED TO COMPARE ANY SUBSEQUENT REPRODUCTIONS OR MANIPULATIONS OF THIS DATA WITH THE ORIGINAL HARD COPY SEALED PLAN PROVIDED BY STECKBECK ENGINEERING & SURVEYING, INC. THE USER IS ALSO CAUTIONED THAT ANY USE OF THE DATA CONTAINED IN THE DIGITAL FILE THAT IS NOT SHOWN ON THE HARD COPY DRAWING, MUST BE AT THE RISK OF THE USER.
- 6. ALL SITE DEVELOPMENT SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, COUNTY, AND MUNICIPALITY STANDARDS AND REQUIREMENTS. 7. ANY SANITARY SEWER AND WATER MAIN EXTENSIONS AND CONNECTIONS HERETO SHALL BE CONSTRUCTED PER APPROVED DESIGNS IN ACCORDANCE WITH APPLICABLE REGULATIONS AND
- APPROVALS 8. ALL JOINTS WHERE PROPOSED MACADAM MEETS EXISTING MACADAM SHALL BE SAW-CUT AND SEALED WITH PG 64S-22.
- 9. ALL PROPOSED SIGNS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE MUNICIPALITIES
- ORDINANCES 10. CORNWALL BOROUGH SHALL NOT BE RESPONSIBLE FOR THE MAINTENANCE OF ANY AREA THAT IS NOT OFFERED FOR DEDICATION TO PUBLIC USE AND SUCH OFFER ACCEPTED BY CORNWALL BOROUGH. NO ALTERATION TO SWALES, BASINS, OR OTHER DRAINAGE STRUCTURES SHALL BE PERMITTED WITHIN DRAINAGE EASEMENTS.
- 11. UTILITY TYPE AND LOCATION NOTICE: ALL EXISTING UTILITIES ARE SHOWN AS FOUND IN THE FIELD AND/OR ILLUSTRATED ON VARIOUS USER DRAWINGS. TO THE BEST OF OUR KNOWLEDGE THE LOCATIONS AND TYPES ARE CORRECT AND ACCURATE, BUT STECKBECK ENGINEERING & SURVEYING, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE. OR GUARANTEE THE INFORMATION RECEIVED AND REFLECTED ON THESE DRAWINGS IS CORRECT OR ACCURATE. PURSUANT TO SECTION 5 CLAUSE (1) OF ACT 172 AMENDING ACT 287 IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN THE LOCATION AND TYPE OF USERS LINES AT THE CONSTRUCTION SITE, EITHER BY INSPECTION OF THE DESIGNER'S DRAWING OR IF THERE BE NO SUCH DRAWINGS, THEN BY THE SAME MANNER AS THAT PRESCRIBED FOR A DESIGNER IN CLAUSE (1) AND (2) OF SECTION 4. PURSUANT TO SECTION 5 CLAUSE (2) IT WILL BE THE CONTRACTORS RESPONSIBILITY NOT LESS THAN THREE NOR MORE THAN TEN WORKING DAYS PRIOR TO THE DAY OF BEGINNING SUCH WORK, TO NOTIFY EACH USER OF THE CONTRACTOR'S INTENT TO PERFORM SUCH WORK AT ITS SITE OR SITES AND REQUEST THE INFORMATION PRESCRIBED BY [SUBCLAUSES II AND III] OR CLAUSE
- (5) OF SECTION 2, FROM EACH USER'S OFFICE DESIGNATED ON THE DESIGNERS DRAWINGS OR ON THE LIST OF USERS OBTAINED PURSUANT TO CLAUSE (1) OF SECTION 4. 12. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND INCLUDING BUT NOT LIMITED TO TELEPHONE, CABLE, ELECTRIC, GAS, WATER, AND SANITARY SEWER.
- 13. THE COMMONWEALTH OF PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION PERFORMED A SURVEY OF THE SUBJECT SITE IN ACCORDANCE WITH STATE AND FEDERAL LAWS, SPECIFICALLY SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT OF 1966, AND THE IMPLEMENTING REGULATIONS (36 CFR PART 800) OF THE ADVISORY COUNCIL ON HISTORIC PRESERVATION. THE ENVIRONMENTAL RIGHTS AMENDMENT, ARTICLE 1, SECTION 27 OF THE PENNSYLVANIA CONSTITUTION AND THE PENNSYLVANIA HISTORY CODE, 37 PA. CONS. STAT. SECTION 500 ET SEQ. (1988) AND FOUND THERE ARE NO NATIONAL REGISTER ELIGIBLE OR LISTED HISTORIC OR ARCHAEOLOGICAL PROPERTIES IN THE AREA OF THIS PROJECT SITE
- 14. SITE IMPROVEMENTS AND DEVELOPMENTS SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL DETAILS WITHIN THIS PLAN AND THE APPROVED EROSION SEDIMENT CONTROL PLAN.
- 15. ALL DRAINAGE AND UTILITY EASEMENTS OTHER THAN THOSE SHOWN WITHIN THE PROPOSED BUILDINGS AS SHOWN ON THIS PLAN SHALL BE MAINTAINED IN GRASSED OR OTHERWISE IMPROVED CONDITION IN ACCORDANCE WITH THE GRADES AND DESIGNS SHOWN ON THE APPROVED PRELIMINARY/FINAL PLANS. MAINTENANCE OF SUCH EASEMENTS SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNER. DRAINAGE EASEMENTS SHALL ALLOW PASSAGE OF STORM WATER IN UNDERGROUND STORM WATER SEWER PIPING AND ASSOCIATED STRUCTURES, AND/OR ALLOW PASSAGE OF STORM WATER OVER THE SURFACE OF THE GROUND AND SHALL ALLOW ACCESS ACROSS THE AREA FOR PURPOSES OF MAINTENANCE OF THE STORM CONVEYANCE SYSTEMS. EXISTING AND PROPOSED ROADSIDE GUTTERS OR SWALES SHALL NOT BE OBSTRUCTED BY DRIVEWAYS, FILL, OR STRUCTURES. ALL DEEDS FOR THE LOT(S) SHALL INCLUDE A REFERENCE TO THE EASEMENT(S) THAT ARE LOCATED WITHIN THE LOT ALONG WITH ANY RIGHTS AND RESTRICTIONS OF EACH FASEMENT INCLUDING LOT OWNER RESPONSIBILITY FOR OWNERSHIP AND MAINTENANCE OF THE EASEMENT, PIPES AND STRUCTURES WITHIN THE EASEMENT. ALL STORMWATER MAINS AND RELATED STRUCTURES WITHIN THE DEVELOPMENT SHALL BE CONSTRUCTED BY THE DEVELOPER. THE STORM WATER MANAGEMENT FACILITIES (S.W.M.F.) SHALL BE CONSTRUCTED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE. STORM SEWER MAINS SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE (SLCPP) AND SHALL BE CONCRETE ENCASED WHEN COVER IS LESS THAN 12" TO SUBGRADE. INLETS HAVE BEEN CALCULATED AND SHALL BE MANUFACTURED FOR THE INLET GRATE ELEVATIONS TO BE IN A TWO (2) INCH SUMP CONDITION AND ALL INLETS SHALL BE SUPPLIED WITH BICYCLE SAFE GRATES. STORM WATER MAINS WHICH ARE LOCATED WITHIN A PUBLIC RIGHT-OF WAY SHALL BE OWNED AND MAINTAINED BY CORNWALL BOROUGH. STORM SEWER MAINS WHICH ARE LOCATED WITHIN ANY LOTS SHALL BE OWNED AND MAINTAINED BY THE INDIVIDUAL LOT OWNER. MUNICIPALITY OFFICIALS, INCLUDING THE MUNICIPALITIES BOARD OF SUPERVISORS WILL HAVE THE RIGHT TO INSPECT AND/OR CORRECT ANY DEFICIENCIES IN THE STORM WATER COLLECTION SYSTEM WHICH IS LOCATED IN ANY OPEN SPACE OR EASEMENT WITHIN THE DEVELOPMENT AT ANY TIME IF DEEMED NECESSARY
- 16. ALL STORM SEWER PIPING SHALL BE CONSTRUCTED UTILIZING A LASER TO ENSURE PROPER SLOPE 17. TREES AND SHRUBS SHALL NOT BE PLANTED IN SWALES OR WITHIN 5 FEET OF BURIED UTILITY
- LINES. IN DEVELOPMENTS WITH SIDEWALKS, TREES SHALL NOT BE PLANTED WITHIN 8 FEET OF THE SIDEWALK. ANY TREES PLANTED ON LOTS SHALL NOT BE CLOSER THAN 5' TO ANY STREET RIGHT-OF-WAY. INDIVIDUAL TREES SHALL BE ESTABLISHED AT 6' OR GREATER IN HEIGHT AND SHALL BE AT LEAST 2 1/2" CALIBER. 18. MATERIALS AND DETAILS SPECIFIED ON THE APPROVED PLAN SHALL NOT BE ALTERED DURING
- CONSTRUCTION WITHOUT WRITTEN APPROVAL BY CORNWALL BOROUGH 19. ALL PROPOSED LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA, IES LIGHTING HANDBOOK (NEW YORK, NYIES, 1981, AS AMENDED). ALL LIGHTING SHALL BE DESIGNED AND ARRANGED SUCH THAT THE LUX OR FOOTCANDLE VALUES ARE ZERO AT AND BEYOND THE PROPERTY LINES OF THE PROPERTY BEING DEVELOPED, AND ARE ALSO ZERO IN AN UPWARD DIRECTION
- 20. AN AS-BUILT DRAWING SHALL BE PROVIDED TO CORNWALL BOROUGH UPON COMPLETION OF THE SITE IMPROVEMENTS AND PRIOR TO THE FINAL RELEASE OF FINANCIAL SECURITY HELD BY CORNWALL BOROUGH. A PROFESSIONALLY SEALED AS-BUILT CONSTRUCTION REPORT AND PLAN, INCLUDING RELATIVE DATES, NAME(S) OF CONTRACTOR (S), METHODS OF CONSTRUCTION, AND VERIFICATION OF CONFORMANCE TO PLAN SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. SHALL BE PROVIDED TO THE CITY ENGINEER PRIOR TO BOND REDUCTION REQUESTS RELATED TO THE BASIN (S)
- 21. A SIGN PERMIT SHALL BE OBTAINED FROM CORNWALL BOROUGH PRIOR TO THE PLACEMENT OF ANY SIGNS.

GEOLOGICS HAZARDS MITIGATION PLAN

- 1. IF SINKHOLES DEVELOP ON SITE DURING CONSTRUCTION, THE DEVELOPER SHALL EMPLOY THE SERVICES OF A PA REGISTERED PROFESSIONAL GEOLOGIST OR PA REGISTERED PROFESSIONAL ENGINEER SPECIALIZING IN GEOTECHNICAL ENGINEERING. SAID PROFESSIONAL SHALL PROVIDE A PLAN AND PROCEDURE DESIGNED TO MITIGATE ANY POTENTIAL HAZARDS ASSOCIATED WITH SUBSURFACE CONDITIONS.
- 2. DURING CONSTRUCTION, THE GEOLOGIC PROFESSIONAL SHALL PERFORM AN ON-SITE INSPECTION OF THE AREAS DESIGNATED FOR STORMWATER MANAGEMENT FACILITIES TO DOCUMENT THE PRESENCE OF ANY HAZARDS ASSOCIATED WITH THE SUBSURFACE CONDITIONS. THE PROFESSIONAL SHALL PROVIDE A REPORT TO THE DEVELOPER AT THE CONCLUSION OF THE SITE INVESTIGATION THAT DOCUMENTS HIS/HER FINDINGS AND PROVIDES RECOMMENDATIONS FOR THE MITIGATION OF ANY POTENTIAL SUBSURFACE HAZARDS SHOULD THEY EXIST. A COPY OF THIS REPORT SHALL BE MADE AVAILABLE TO CORNWALL BOROUGH FOR REVIEW.
- 3. ALL STORM WATER CONVEYANCE, SANITARY SEWER, AND WATER DISTRIBUTION FACILITIES SHALL BE CONSTRUCTED WITH WATERTIGHT JOINTS ACCORDING TO RECOMMENDED MANUFACTURER PROCEDURE AND SPECIFICATIONS.
- 4. THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT ALL REMEDIAL ACTIONS AS RECOMMENDED BY THE GEOLOGIC PROFESSIONAL.

CONTRACTOR NOTES

- OR INACCURATELY SHOWN.
- CONTRACTOR'S EXPENSE. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS FROM THE
- CONSTRUCTION SHOWN ON THESE PLANS.
- UTILITIES ARE LOCATED ON FILL.

- 10. CONTRACTORS SHALL NOT STORE CONSTRUCTION MATERIALS OR LOCATE TRASH STREETS
- DEDICATED OR UNDEDICATED, SHALL BE CLEANED BY THE BUILDER/CONTRACTOR AT THE END OF FACH WORKDAY.
- ENGINEER, AS SHOWN ON THE UTILITY PLAN SHEETS.
- EARTH MOVING MAY COMMENCE.
- COUNTY CONSERVATION DISTRICT IMMEDIATELY PRIOR TO CONSTRUCTION.
- RUNOFF
- DURING CONSTRUCTION
- E SAME DAY SHALL BE COMPLETED CURRENT REGULATIONS STATE:
- COVERED WITH ONE OF THE FOLLOWING:
- AND SEDIMENTATION. AVAILABLE FROM THE PENN STATE EXTENSION OFFICE. 11. ALL RECYCLING AND DISPOSAL OF CONSTRUCTION WASTE SHALL BE IN ACCORDANCE WITH

FLOODPLAIN NOTE

FLOODPLAIN DOES NOT EXIST ON THE SUBJECT PROPERTY.

BUILDING CODE NOTE

CONSTRUCTION CODE, AS ADOPTED BY THE MUNICIPALITY.

NPDES APPROVAL NPDES PERMIT _____

OPERATIONS STANDARDS NOTE:

THE APPLICANT/OWNER/DEVELOPER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 316 -

PRE-CONSTRUCTION MEETING NOTE

CONSTRUCTION.

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS ON SITE PRIOR TO THE START OF CONSTRUCTION, UNDERGROUND UTILITIES HAVE BEEN SHOWN ACCORDING 1 INFORMATION PROVIDED BY OTHERS AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION EXCAVATION OR BLASTING. THE ACTUAL LOCATIONS OF THESE UTILITIES HAVE NOT BEEN FIELD VERIFIED AND THE LOCATIONS ARE APPROXIMATE. STECKBECK ENGINEERING & SURVEYING INC. (SESI) DOES NOT MAKE ANY REPRESENTATION. WARRANTY ASSURANCE OR GUARANTEE THAT THE UNDERGROUND UTILITY LOCATION INFORMATION PROVIDED BY OTHERS AND REFLECTED ON THESE DRAWINGS IS CORRECT AND ACCURATE. SESI ASSUMES NO LIABILITY FOR ANY DAMAGE INCURRED AS A RESULT OF UNDERGROUND UTILITIES OMITTED

2. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. DAMAGE TO ANY UTILITY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER, UTILITY COMPANY OR AUTHORITY, AT THE

MUNICIPALITY, COUNTY, STATE OR AUTHORITY RELATIVE TO CONSTRUCTION SHOWN ON THIS 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL TESTING AND RECORD DRAWINGS AS MAY BE REQUIRED BY THE MUNICIPALITY AND/OR THE VARIOUS AUTHORITIES RELATIVE TO THE

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRENCH BARRICADING, COVERING, SHEETING AND SHORING, AS THE NEED ARISES. 6. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE GRADING PLAN IS IMPLEMENTED CORRECTLY. THAT A MINIMUM COVER IS MAINTAINED OVER ALL UTILITY PIPES, AND THAT PROPER DRAINAGE IS PROVIDED DURING CONSTRUCTION 7. PROVIDE 95% MODIFIED PROCTOR DENSITY PER ASTMD-698 IN AREAS WHERE PROPOSED

8. WHERE APPLICABLE, ALL TOPS AND INVERTS PROVIDED FOR MANHOLES, INLETS, ETC., ARE FOR THE PURPOSE OF SHOWING GENERAL CONFORMANCE TO DESIGN STANDARDS ONLY. CUT SHEETS SHALL BE PREPARED BY A REGISTERED SURVEYOR PRIOR TO THE ORDERING OF ANY STRUCTURES. ANY DISCREPANCIES SHALL BE RESOLVED PRIOR TO THE START OF 9. THESE PLANS, PREPARED BY SESI, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR, OF ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF STECKBECK ENGINEERING & SURVEYING, INC. (SESI) REGISTERED PROFESSIONAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY OSHA.

RECEPTACLES (DUMPSTERS) ON PAVED CARTWAYS OF DEDICATED AND UNDEDICATED 11. ALL MUD FROM CONSTRUCTION ACTIVITIES THAT GETS TRACKED ONTO STREETS, EITHER

12. DIGGING TEST PITS: IN LOCATIONS WHERE NEW UNDERGROUND UTILITIES ARE TO BE CONNECTED TO EXISTING UNDERGROUND UTILITIES, THE CONTRACTOR WILL NOT BE PERMITTED TO PROCEED WITH THE NEW CONSTRUCTION UNTIL HE HAS DUG TEST PITS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF THE EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR IS ADVISED THAT NO EXCAVATION IS PERMITTED IN THE UNDERGROUND UTILITY LOCATION WITHOUT THE PRESENCE OR WRITTEN APPROVAL OF AN AUTHORIZED REPRESENTATIVE OF THE OWNER OF THE SUBSURFACE UTILITY. DIG SUCH TEST PITS AT THE LOCATIONS AGREED TO BY THE OWNER OF THE SUBSURFACE UTILITY AND THE

EROSION & SEDIMENT POLLUTION CONTROL GUIDELINES

1. A LOGICAL CONSTRUCTION SEQUENCE SHALL BE DEVELOPED THAT INCLUDES THE INSTALLATION OF E&SPC FACILITIES AND BEST MANAGEMENT PRACTICES (BMPS), BEFORE 2. E&SPC FACILITIES AND BMPS SHALL BE CORRECTLY INSTALLED AND MAINTAINED.

MAINTENANCE INFORMATION AND CONSTRUCTION DETAILS MAY BE OBTAINED FROM THE 3. EARTH DISTURBANCE SHALL TAKE PLACE WITHIN A DEFINED LIMIT OF DISTURBANCE AND

4. DEVELOPMENT PLANS SHALL PRESERVE SALIENT NATURAL FEATURES, MINIMIZE LAND CUTS AND FILLS, AND CONFORM TO THE GENERAL TOPOGRAPHY. PLANS SHALL BE DESIGNED AND IMPLEMENTED SO AS TO CREATE THE LEAST POTENTIAL FOR EROSION AND TO ADEQUATELY CONTAIN THE VOLUME AND REDUCE THE VELOCITY OF SURFACE WATER 5. NATURAL VEGETATION SHALL BE RETAINED, PROTECTED, AND SUPPLEMENTED PRIOR TO AND

6. TOPSOIL SHALL BE REMOVED FROM CONSTRUCTION AREAS AND STOCKPILED FOR FINAL GRADING AND SEEDBED PREPARATION. DOWNSLOPE AREAS OF ANY STOCKPILES, CONSTRUCTION. OR BORROW AREAS SHALL BE PROTECTED WITH CORRECTLY INSTALLED AND MAINTAINED SILT FENCE, STRAW BALES, OR SEDIMENT TRAPS PRIOR TO ANY EARTH DISTURBANCE IN ORDER TO MINIMIZE SEDIMENT LADEN RUNOFF. 7. ALL CUTS AND FILLS SHALL BE BROUGHT TO FINAL GRADE EARLY IN THE CONSTRUCTION SEQUENCE AND STABILIZED IMMEDIATELY WITH SEED AND MULCH. 8. ONLY DRIVEWAY EXCAVATIONS THAT CAN BE STABILIZED WITH A CRUSHED STONE BASE

A. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY. THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION. EROSION AND SEDIMENT CONTROL BMPS SHALL BE IMPLEMENTED AND MAINTAINED UNTIL THE PERMANENT STABILIZATION IS COMPLETED. FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREAS SHALL BE a. A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION; AN ACCEPTABLE BMP WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION

10. THE PENN STATE EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND GUIDE OR AGRONOMY GUIDE SHALL BE CONSULTED FOR PERMANENT AND TEMPORARY SEEDING AND MULCHING TYPES AND RATES. STRAW MULCH SHALL BE APPLIED AT A RATE OF AT LEAST 3 TONS PER ACRE OR 5 BALES PER 1000 SQUARE FEET. SLOPES STEEPER THAN 3:1 SHALL BE CORRECTLY LINED WITH APPROPRIATE TURF REINFORCEMENT MATTING. OTHER HELPFUL PUBLICATIONS INCLUDE TURFGRASS ESTABLISHMENT (SPECIAL CIRCULAR 163), TURF SEED AND SEED MIXTURES (EXTENSION CIRCULAR 391), AND PRINCIPALS OF TURFGRASS IRRIGATION (SPECIAL CIRCULAR 158). THE PUBLICATIONS REFERENCED ARE

LOCAL AND STATE RULES AND REGULATIONS FOR WASTE MANAGEMENT. CONSTRUCTION WASTE INCLUDES. BUT IS NOT LIMITED TO: 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.

ACCORDING FEMA FLOOD INSURANCE RATE MAP, MAP NUMBER 42075C0270E EFFECTIVE, 07/08/2020,

ACCORDING TO AN INVESTIGATION PERFORMED BY VORTEX ENVIRONMENTAL ON 01/29/24. WETLANDS ARE LOCATED ON THE SUBJECT TRACT BUT NONE EXIST IN THE AREA OF THE PROPOSED IMPROVEMENTS.

ALL CONSTRUCTION SHALL BE SUBJECT TO THE REQUIREMENTS OF THE PENNSYLVANIA UNIFORM

THE NPDES PERMIT WAS APPROVED ON _____. THE PERMIT WILL EXPIRE ON _____.

OPERATIONS AND PERFORMANCE STANDARDS OF THE ZONING ORDINANCE. COMPLIANCE REGULATIONS INCLUDE BUT NOT LIMITED TO AIR POLLUTION, AIRBORNE EMISSIONS, ODOR, OPEN BURNING, ELECTRICAL, DIESEL, GAS OR OTHER SOURCES OF POWER, FIRE AND EXPLOSIVES, GLARE AND HEAT, MATERIALS AND WASTE STORAGE, HANDLING AND DISPOSAL OF WASTE, NOISE POLLUTION, SEWAGE AND OTHER WASTE DISPOSAL, VIBRATION AND WATER QUALITY.

A PRE-CONSTRUCTION MEETING WILL BE REQUIRED BETWEEN THE DESIGN ENGINEER, BOROUGH ENGINEER, THE LEBANON COUNTY CONSERVATION DISTRICT AND THE CONTRACTOR PRIOR TO

STANDARD STORM WATER NOTES

- 1. ALL STORM WATER MANAGEMENT FACILITIES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED BY THE DEVELOPER IN ACCORDANCE WITH THE DESIGN, CONDITIONS AND SPECIFICATIONS IDENTIFIED OF 'HIS PLAN. OWNERSHIP AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE LANDOWNER, HIS SUCCESSORS AND ASSIGNS, UNLESS SPECIFICALLY IDENTIFIED OTHERWISE HEREIN.
- 2. STORM WATER MANAGEMENT FACILITIES SHALL BE MAINTAINED IN GOOD WORKING CONDITION SO THAT THEY ARE PERFORMING THEIR DESIGN FUNCTION, IN A MANNER ACCEPTABLE TO THE CORNWALL BOROUGH, AS REQUIRED BY THE CORNWALL BOROUGH STORMWATER MANAGEMENT ORDINANCE. MAINTENANCE SHALL INCLUDE PERFORMING ROUTINE MAINTENANCE AND REPAIR OR REPLACEMENT OF DAMAGED FACILITIES. VEGETATION OR STORM WATER AREAS TO CONDITIONS AS SHOWN ON THE APPROVED PLAN AND IN ACCORDANCE WITH THE CORNWALL BOROUGH STORM WATER MANAGEMENT ORDINANCE
- 3. ANY DRAINAGE AND UTILITY EASEMENTS SHOWN ON THE PLAN SHALL BE CONSTRUCTED, OWNED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLAN AND SHALL BE REFERENCED WITHIN THE PROPERTY DEED.
- 4. RUNOFF FROM THE LOT IMPROVEMENTS SHALL BE DIRECTED TO THE STORM WATER MANAGEMENT FACILITIES. STORM WATER RUNOFF FROM EXISTING NATURAL SWALES AND/OR OTHER EXISTING DRAINAGE CONVEYORS SHALL NOT BE DIRECTED TOWARDS OR INTERCEPTED BY THE STORM WATER MANAGEMENT FACILITIES
- 5. MUNICIPAL OFFICIALS AND THEIR AGENTS OR EMPLOYEES HAVE THE RIGHT OF ACCESS FOR INSPECTION AND, IN CASES OF CONSTRUCTION DEFAULT, CONSTRUCTION OF THE STORM WATER MANAGEMENT FACILITIES. THE MAINTENANCE OF ALL SUCH FACILITIES SHALL BE THE RESPONSIBILITY OF THE LOT OWNER ON WHICH THE FACILITIES EXIST. CORNWALL BOROUGH SHALL NOT BE LIABLE FOR MAINTENANCE OF ANY STORM WATER MANAGEMENT FACILITIES NOT CONSTRUCTED AS SHOWN HEREIN. 6. THE MUNICIPAL ENGINEER SHALL INSPECT ALL PHASES OF DEVELOPMENT OF THE SITE. CONTACT
- THE BOROUGH 717-274-3436 FOR INSPECTION OF EACH PHASE OF WORK AT LEAST 5 BUSINESS DAYS PRIOR TO BEGINNING OF EACH PHASE OF WORK. ANY PORTION OF THE WORK WHICH DOES NOT COMPLY WITH THE APPROVED PLAN MUST BE CORRECTED BY THE DEVELOPER
- 7. STONE MUST BE MOUNDED TO PROVIDE A MINIMUM OF 2' COVER OVER THE STORM SEWER PIPING WHERE THE PIPE IS SUBJECT TO ANY VEHICLE CROSSINGS DURING CONSTRUCTION. 8. STORMWATER INLETS, PIPES, CULVERTS AND SWALES (CUMULATIVELY REFERRED TO AS DRAINAGE IMPROVEMENTS) CONSTRUCTED ON THIS PLAN HAVE BEEN DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH REQUIREMENTS OF MUNICIPAL ORDINANCES GOVERNING LAND DEVELOPMENT OF IN ACCORDANCE WITH REGULATIONS OF THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION FOR ANY DRAINAGE IMPROVEMENTS TO STATE HIGHWAYS. THESE ORDINANCES AND REGULATIONS STIPULATE SIZES AND CAPACITIES FOR THESE DRAINAGE IMPROVEMENTS, WHICH SIZES AND CAPACITIES MAY HAVE LIMITED ABILITY TO CARRY AND TRANSFER STORMWATER DRAINAGE FROM CERTAIN SEVERE OR INTENSE STORMS. STECKBECK ENGINEERING & SURVEYING, INC. SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY SURFACE RUN-OFF OR FLOODING FROM STORMS WHICH GENERATE MORE RUNOFF THAN AS REQUIRED TO BE COLLECTED AND CONVEYED BY MUNICIPAL OR PENNDOT REGULATIONS.
- 9. DRAINAGE EASEMENTS SHALL ALLOW PASSAGE OF STORM WATER IN UNDERGROUND STORM WATER SEWER PIPING AND ASSOCIATED STRUCTURES. AND/OR ALLOW PASSAGE OF STORM WATER OVER THE SURFACE OF THE GROUND AND SHALL ALLOW ACCESS ACROSS THE AREA FOR PURPOSES OF MAINTENANCE OF THE STORM CONVEYANCE SYSTEMS. 10. EXISTING AND PROPOSED ROADSIDE GUTTERS OR SWALES SHALL NOT BE OBSTRUCTED BY
- DRIVEWAYS, FILL, OR STRUCTURES. 11. ALL DEEDS FOR THE LOT(S) SHALL INCLUDE A REFERENCE TO THE EASEMENT(S) THAT ARE LOCATED WITHIN THE LOT ALONG WITH ANY RIGHTS AND RESTRICTIONS OF EACH EASEMENT INCLUDING LOT OWNER RESPONSIBILITY FOR OWNERSHIP AND MAINTENANCE OF THE EASEMENT, PIPES AND STRUCTURES WITHIN THE EASEMENT.
- 12. ALL STORMWATER MAINS AND RELATED STRUCTURES WITHIN THE DEVELOPMENT SHALL BE CONSTRUCTED BY THE DEVELOPER. THE STORM WATER MANAGEMENT FACILITIES (S.W.M.F.) SHALL BE CONSTRUCTED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE. 13. SEWER MAINS SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE (SLCPP) AND SHALL BE
- CONCRETE ENCASED WHEN COVER IS LESS THAN 12" TO SUBGRADE. 14. ALL INLETS SHALL BE SUPPLIED WITH BICYCLE SAFE GRATES.
- 15. STORM WATER MAINS WHICH ARE LOCATED WITHIN A PUBLIC RIGHT-OF WAY SHALL BE OWNED AND MAINTAINED BY CORNWALL BOROUGH. STORM SEWER MAINS WHICH ARE LOCATED WITHIN ANY LOTS SHALL BE OWNED AND MAINTAINED BY THE INDIVIDUAL LOT OWNER. BOROUGH OFFICIALS, INCLUDING CORNWALL BOROUGH COUNCIL WILL HAVE THE RIGHT TO INSPECT AND/OR CORRECT ANY DEFICIENCIES IN THE STORM WATER COLLECTION SYSTEM WHICH IS LOCATED ON ANY LOT OR WITHIN AN EASEMENT WITHIN THE DEVELOPMENT AT ANY TIME IF DEFMED NECESSARY 16. ALL NEW CATCH BASINS LOCATED IN BOROUGH RIGHT-OF-WAY MUST BE MARKED WITH A
- MEDALLION THAT STATES "DON'T POLLUTE, FLOWS TO WATERWAYS". THESE MEDALLIONS WILL BE PROVIDED FROM THE BOROUGH OF CORNWALL AT THE EXPENSE OF THE DEVELOPER. THE MEDALLION MUST BE CENTERED ON THE TOP OF CURB OF A TYPE "C" INLET OR ON THE BACK OF THE TOP OF A TYPE 'M' INLET
- 17. NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE OR ALTER STORMWATER MANAGEMENT FACILITIES WHICH MAY HAVE BEEN INSTALLED ON A PROPERTY UNLESS A STORMWATER MANAGEMENT SITE PLAN HAS BEEN APPROVED WHICH AUTHORIZES SUCH MODIFICATIONS. REMOVAL, FILLING, LANDSCAPING OR ALTERATION. NO PERSON SHALL PLACE ANY STRUCTURE, FILL LANDSCAPING OR VEGETATION INTO A STORMWATER MANAGEMENT FACILITY OR WITHIN A DRAINAGE EASEMENT WHICH WILL LIMIT OR ALTER THE FUNCTIONING OF THE FACILITY OR EASEMENT IN ANY MANNER.

BOROUGH INSPECTION NOTES

- A. GENERAL SITE CONSTRUCTION
- 1. UPON COMPLETION OF PRELIMINARY SITE PREPARATION INCLUDING STRIPPING OF VEGETATION. STOCKPILING OF TOPSOIL AND CONSTRUCTION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES.
- 2. UPON COMPLETION OF ROUGH GRADING, BUT PRIOR TO PLACING TOPSOIL, PERMANENT DRAINAGE, OR OTHER SITE DEVELOPMENT IMPROVEMENTS AND GROUND COVERS.
- 3. DURING THE CONSTRUCTION OF PERMANENT STORM WATER MANAGEMENT AND BMP FACILITIES. ALL STORM SEWERS, CULVERTS, ETC. MUST BE INSPECTED PRIOR TO BACKFILLING. 4. DURING CONSTRUCTION OF SANITARY SEWERS AND APPURTENANCES, ALL SANITARY SEWERS
- MUST BE CONSTRUCTED AND INSPECTED IN ACCORDANCE WITH BOROUGH SPECIFICATIONS. 5. UPON THE FINAL COMPLETION OF PERMANENT STORM WATER MANAGEMENT AND BMP FACILITIES,
- INCLUDING THE ESTABLISHMENT OF GROUND COVERS AND PLANTINGS. 6. AFTER REVIEW OF THE AS-BUILT DRAWINGS, REQUIRED BY SECTION 607 OF THIS ORDINANCE, BUT PRIOR TO FINAL RELEASE OF THE FINANCIAL GUARANTEE FOR COMPLETION OF THE FINAL GRADING, VEGETATIVE CONTROLS REQUIRED BY THE BMP STANDARDS, OR OTHER SITE RESTORATION WORK.
- <u>B. STREET CONSTRUCTIO</u> 1. PREPARATION OF ROAD SUBGRADE. AT THE TIME OF THIS INSPECTION, THE SUBGRADE SHOULD BE PROOF ROLLED AND THE PROPOSED CROWN AND GRADE SHOULD BE CHECKED. IT IS RECOMMENDED THAT A DEVELOPER'S/CONTRACTOR'S REPRESENTATIVE ACCOMPANIES THE OBSERVER WHEN THE CROWN AND GRADE ARE CHECKED. PROOF ROLLING SHOULD BE PERFORMED WITH A FULLY LOADED, TANDEM-AXLE DUMP TRUCK. THIS INSPECTION MUST OCCUR
- PRIOR TO ANY STONE SUBBASE BEING PLACED. 2. PLACEMENT AND COMPACTION OF ROAD SUBBASE. AT THE TIME OF THIS INSPECTION, THE DEPTH OF SUBBASE SHOULD BE CHECKED AFTER COMPACTION, THE SUBBASE SHOULD BE PROOF ROLLED IN THE SAME MANNER AS THE SUBGRADE AND THE CROWN AND GRADE SHOULD BE CHECKED AGAIN. THIS INSPECTION MUST OCCUR PRIOR TO ANY BINDER OR BASE COURSE BEING PLACED.
- 3. PLACEMENT AND COMPACTION OF THE BINDER/BASE COURSE. AT THE TIME OF THIS INSPECTION, THE DEPTH OF THE BINDER/BASE COURSE SHOULD BE CHECKED. AMBIENT TEMPERATURE SHOULD BE MONITORED (THIS IS IMPORTANT IN EARLY SPRING AND LATE FALL DAYS WHEN THE TEMPERATURE CAN GO BELOW ACCEPTABLE LIMITS, IN ACCORDANCE WITH PENNDOT SPECIFICATIONS, FORM 408, AS AMENDED), THE TEMPERATURE OF THE BITUMINOUS MATERIAL SHOULD BE CHECKED (IF POSSIBLE), AND IT IS RECOMMENDED THAT COPIES OF THE WEIGHT SLIPS FOR EACH TRUCKLOAD ARE OBTAINED. THE CROWN AND GRADE SHOULD ALSO BE CHECKED AGAIN. THIS INSPECTION MUST OCCUR PRIOR TO THE WEARING COURSE BEING PLACED
- 4. PLACEMENT AND COMPACTION OF THE WEARING COURSE. AT THE TIME OF THIS INSPECTION, THE GUIDELINES FOR THE PLACEMENT AND COMPACTION OF THE BINDER/BASE COURSE SHOULD BE FOLLOWED.
- C. RELEASE OF FINANCIAL SECURITY. 1. IN ADDITION TO THE ABOVE OUTLINED INSPECTIONS, ADDITIONAL INSPECTIONS WILL BE MADE AT THE REQUEST OF THE DEVELOPER FOR REDUCTION OF FINANCIAL SECURITIES. RANDOM INSPECTIONS SHOULD BE MADE AT THE FREQUENCY DESIRED BY THE MUNICIPALITY. AT THE TIME OF ANY OF THE ABOVE LISTED INSPECTIONS, ALL ONGOING CONSTRUCTION (I.E. STORM DRAINAGE, SANITARY SEWER, WATER, EROSION CONTROL, ETC.) SHOULD ALSO BE CHECKED FOR COMPLIANCE WITH THE APPROVED PLANS AND THE FINDINGS REPORTED. SINCE THE ABOVE INSPECTIONS ARE MANDATORY. IT IS RECOMMENDED THAT REQUESTS FOR REDUCTION OF FINANCIAL GUARANTEE BE SUBMITTED TO COINCIDE WITH THE ABOVE INSPECTIONS.

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DATE						
REVISION						
	NOTES	PRELIMINARY/FINAL LAND DEVELOPMENT PLANS		Iocated in CORNWALL BOROUGH	LEBANON County, Pennsylvania	
			Steckbeck Engineering & Surveying Inc. 279 North Zinns Mill Road / Suite A	Lebanon, Pennsyvania 17042 Phone: (717) 272–7110	Fax: (717) 272–7348	
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CONSERVATION PLAN NARRATIVE:

- 1. THE DEVELOPMENT OF THIS SUBDIVISION MEETS THE REQUIREMENTS OF ARTICLE 20 OF THE CORNWALL BOROUGH ORDINANCE.
- APPROXIMATELY 6.46 ACRES OF STEEP SLOPE (EXCEEDING 15%) AREA IS DISTURBED BY THIS PLAN. THE TOTAL STEEP SLOPE AREA ON SITE IS 66.24 ACRES. THEREFORE, ONLY 9.75% OF STEEP SLOPE AREA IS DISTURBED BY THIS PLAN, WHICH IS LESS THAN THE 25% DISTURBANCE ALLOWED BY ARTICLE 20. THE DISTURBANCE OF STEEP SLOPES IS UNAVOIDABLE. HOWEVER, THE DEVELOPMENT WAS DESIGNED TO MINIMIZE STEEP SLOPE DISTURBANCE. THE PROPOSED STORMWATER MANAGEMENT FACILTIES WERE DESIGNED USING EXISTING LOW POINTS TO REDUCE STEEP SLOPE DISTURBANCES. IN ADDITION, MEASURES HAVE BEEN TAKEN TO ENSURE SLOPE STABILITY.
- 3. THERE ARE APPROXIMATELY 3.75 ACRES OF IMPERVIOUS SURFACE IS ADDED BY THIS DEVELOPMENT AND 12.89 ACRES OF DISTURBANCE AS A RESULT OF THE DEVELOPMENT.

ENVIRONMENTAL PROTECTION (EP) NOTE:

ALL REGULATIONS IN ARTICLE 20 OF THE CORNWALL BOROUGH ZONING ORDINANCE SHALL APPLY TO ENVIRONMENTALLY SENSITIVE AREA SUCH AS STEEP SLOPES, WETLANDS, OR SURFACE WATER AS DELINEATED ON THIS PLAN. NO OTHER AREAS DESCRIBED IN ARTICLE 20 ARE PRESENT WITHIN THE AREA AFFECTED BY THIS PLAN.

CONSERVATION NOTES:

- THIS CONSERVATION PLAN IS PREPARED IN ACCORDANCE WITH ARTICLE 20 OF THE CORNWALL BOROUGH ZONING ORDINANCE. SITE ALTERATIONS AND IMPACTS MUST BE ILLUSTRATED AND APPROVED WITHIN A LAND DEVELOPMENT PLAN.
 THIS PLAN DELINEATES ALL STRONGLY SLOPING LAND AND STEEPLY SLOPING LAND.
- 3. VEGETATIVE CONDITIONS SLOPED WITH TREE GROUPINGS.
- 4. GEOLOGIC CONDITIONS SEE GEOLOGICAL REPORT.
 5. A PNDI SEARCH FOR THE PRESENCE OF RARE OR ENDANGERED PLANT AND ANIMAL SPECIES WAS PERFORMED AND FOUND NO KNOWN IMPACTS.
 6. THE IMPROVEMENTS, EARTHMOVING, GRADING OR OTHER CONSTRUCTION ACTIVITIES PROPOSED BY THE LAND DEVELOPMENT PLAN ARE LIMITED TO THE MINIMUM REQUIRED FOR THE
- DEVELOPMENT, ACCESS DRIVES, AND THE ASSOCIATED STORM WATER, SEWAGE AND WATER FACILITIES. 7. THE PROPOSED LAND DEVELOPMENT DISTURBS 5.75% OF THE TOTAL LOT AREA WHERE SLOPES
- EXCEED 15%. 8. WETLANDS ARE NOT LOCATED IN THE PROJECT AREA.











POST CONSTRUCTION STORMWATER MANAGEMENT NARRATIVE CORNWALL PROPERTIES, LLC - PRL INDUSTRIES

THIS NARRATIVE IS INTENDED TO ACCOMPANY THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN FOR THE PROPOSED PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR CORNWALL PROPERTIES, LLC - PRL INDUSTRIES LOCATED BETWEEN BOYD STREET AND SR 0322 IN CORNWALL BOROUGH, LEBANON COUNTY. THIS NARRATIVE SHALL BE CONSIDERED A PART OF THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN.

PROJECT DETAILS

THE TOTAL TRACT OF PROPERTY IN QUESTION IS 104.00 ACRES. THE TOTAL SITE AND EARTH DISTURBANCE AS PART OF THIS PROJECT IS 12.89 ACRES. THE PROJECT SITE MAINLY CONSISTS OF A SURFACE MINING OPERATION WHICH INCLUDES LARGE STONE CUT AREAS AND STOCKPILES OF MINED AGGREGATE MATERIALS ALONG WITH SOME AREAS OF UN-MINED FOREST BASED ON GOOGLE EARTH HISTORICAL IMAGERY, THE MINING ON THE SITE BEGAN BETWEEN 2005 AND 2008. FROM 2008 TO THE EARLY 1990'S. THE SITE HAS WAS FORESTED. THE SITE IS BORDERED TO THE NORTH BY BOYD STREET, TO THE EAST AND SOUTH BY FORESTED AREAS WITHIN THE EXISTING PROPERTY TRACT, AND TO THE WEST BY STATE GAME LANDS 156. PROPOSED IMPROVEMENTS INCLUDE THE CONSTRUCTION OF A 75.000 S.F. MANUFACTURING FACILITY WITH ASSOCIATED OFFICE SPACE. EMPLOYEE PARKING LOT. TRUCK LOADING AREAS, AND ACCESS DRIVE. THE PROJECT WILL BE SERVED BY AN ON-LOT SEPTIC SYSTEM, ON-LOT WELL, AND INCLUDE THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES. THE ANTICIPATED SITE DISTURBANCE SHALL INCLUDE GRADING AS WELL AS ADDITIONAL IMPERVIOUS AREA WHICH WILL BE TREATED ON-SITE BY STORMWATER MANAGEMENT BMPS. ONE (1) ABOVE GROUND INFILTRATION BASIN IS PROPOSED TO MANAGE THE SITE RUNOFF. STORMWATER RUNOFF FROM THE SITE WILL REACH TWO 2) SEPARATE UNT'S TO THE SNITZ CREEK AS IDENTIFIED IN THE WETLAND INVESTIGATION REPORT. THE NEAREST MAPPED DOWNSTREAM SURFACE WATER IS THE SNITZ CREEK WHICH IS DESIGNATED AS A TROUT STOCKED FISHERY (TSF). THE SNITZ CREEK IS IMPAIRED ACCORDING TO CATEGORY 4A OF THE PA INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT FOR AQUATIC LIFE: AGRICULTURE - NUTRIENTS. THE SNITZ CREEK IS ALSO IMPAIRED ACCORDING TO CATEGORY 5 OF THE PA INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT FOR RECREATIONAL: SOURCE UNKNOWN - PATHOGENS.

CALCULATIONS

POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES WERE DESIGNED IN ACCORDANCE WITH THE STANDARDS ESTABLISHED IN THE PENNSYLVANIA STORMWATER MANAGEMENT BMP MANUAL (PA DEP BUREAU OF WATERSHED MANAGEMENT, DECEMBER 2006), AND THE CORNWALL BOROUGH STORMWATER MANAGEMENT ORDINANCE (ORD. 2022-3, 9/12/2022).

HYDROLOGY

A STORMWATER MANAGEMENT CONTROL SYSTEM IS PROPOSED TO MINIMIZE THE ADDITIONAL RUNOFF VOLUME GENERATED BY THE PROPOSED IMPROVEMENTS AND TO CONTROL THE FLOW TO A RATE LESSER THAN OR EQUAL TO THE PRE-DEVELOPMENT RUNOFF. FOLLOWING THE REQUIREMENTS OF THE PA CODE CHAPTER 102.8 AND THE CORNWALL BOROUGH SWM ORDINANCE. IN ORDER TO PROVIDE WATER QUALITY, VOLUME CONTROL, AND RATE CONTROL, THE SITE WILL BE SERVED BY ONE (1) INFILTRATION BASIN FACILITY. THE BASIN IS DESIGNED TO MANAGE THE POST-DEVELOPMENT DISCHARGE RATE TO A RATE EQUAL OR LOWER THAN THE PRE-DEVELOPMENT RATE AND TO MANAGE THE 2-YR 24-HOUR VOLUME INCREASE THROUGH INFILTRATION. THE CURVE NUMBERS ARE TAKEN FROM TR-55. SUPPORTING CALCULATIONS CAN BE SEEN IN THE DEP PCSM SPREADSHEETS.

PER THE CORNWALL BOROUGH SWM MANAGEMENT ORDINANCE, POST-DEVELOPMENT DISCHARGE FLOW RATES MUST MEET THE FOLLOWING CRITERIA

Pre - Developed	Post Developed
2 - year	< or = to 1-yr Pre
5 - year	< or = to 2-yr Pre
10 - year	< or $=$ to 5-yr Pre
25 - year	< or = to 25-yr Pre
100 - year	< or = to 100-yr Pre

THE SCS METHOD WAS USED TO DETERMINE PEAK FLOW RATES FOR BOTH PRE- AND POST-DEVELOPED CONDITIONS. THE RESULTING POST DEVELOPMENT RUNOFF FLOW RATES HAVE BEEN REDUCED TO REQUIRED PRE-DEVELOPMENT RELEASE RATES AS REQUIRED IN THE TABLE ABOVE AND SEEN IN THE FLOW SUMMARY TABLE LATER IN THIS REPORT. HYDROCAD V10.0 SOFTWARE WAS USED TO PERFORM ALL BASIN ROUTING CALCULATIONS.

THIS PCSM PLAN IS DESIGNED TO MINIMIZE ANY INCREASE IN STORMWATER RUNOFF VOLUME AND PREVENT AN INCREASE IN THE RATE OF STORMWATER RUNOFF. IN ORDER TO ANALYZE THE EFFECTIVENESS OF THE PROPOSED STORMWATER MANAGEMENT PLAN THE DRAINAGE PATTERN IS ANALYZED AS FOUR (4) POINTS OF INTEREST.

DP 001 - DISCHARGES DIRECTLY TO AN EXISTING STORMWATER BASIN. OVERFLOW FROM THIS BASIN WILL DISCHARGE NORTH IN EXISTING STORM SEWER BELOW BOYD STREET PRIOR TO DISCHARGING TO AN UNT TO SNITZ CREEK.

DP 002. DP 003. DP 004 - ALL DISCHARGE IN A SHEET FLOW MANNER TO THE WESTERN PROPERTY LINE. RUNOFF LEAVING THESE DISCHARGE POINTS WILL FLOW THROUGH 300' - 500' OF EXISTING FOREST PRIOR TO REACHING AN UNT TO SNITZ CREEK.

THERMAL IMPACTS ANALYSIS

ALL EXISTING RUNOFF DISCHARGING FROM THE SITE TO THE WEST (DISCHARGE POINTS 002 - 004) LEAVES THE SITE UN-DETAINED WITH NO TREATMENT OF THIS RUNDEE IN ANY WAY, EXISTING RUNDEE DISCHARGING FROM THE SITE TO THE NORTH (DISCHARGE POINT 001) IS DETAINED BY AN EXISTING STORMWATER BASIN THAT APPEARS TO HAVE BEEN INSTALLED WHEN THE MINING BEGAN IN THE MID-2000'S. ONE (1) INFILTRATION BASIN IS PROPOSED TO TREAT THE MAJORITY OF THE DISTURBED SITE AND PROPOSED IMPERVIOUS AREAS. RUNOFF REACHING THE INFILTRATION BASIN WILL BE COOLED BY THE NATIVE VEGETATION IN THE BASIN BOTTOM BEFORE BEING INFILTRATED THROUGH THE ENGINEERED SOIL MIX AND INTO THE GROUND. OVERFLOW FROM INFILTRATION BASIN 1 WILL THEN FLOW INTO THE EXISTING STORMWATER BASIN LOCATED ON SITE. SHADE TREES ARE ALSO PROPOSED IN AND AROUND THE PARKING LOTS AND PAVED AREAS TO SHADE THESE AREAS AND PROVIDE ADDITIONAL TEMPERATURE RELIEF FOR RUNOFF THAT FLOWS OVER THE IMPERVIOUS SURFACES.

WATER QUALITY AND NON-DISCHARGE ANALYSIS

THE SITE HAS BEEN DESIGNED TO MEET THE NPDES REQUIREMENTS AS CALCULATED IN THE DEP PCSM SPREADSHEET - QUALITY THROUGH THE IMPLEMENTATION OF AN INFILTRATION BASIN. THE WATER QUALITY REQUIREMENTS HAVE BEEN MET FOR THIS SITE. PLEASE SEE THE STANDARD DEP PCSM SPREADSHEETS FOR A MORE IN-DEPTH DESCRIPTION OF HOW THE REQUIREMENTS ARE MET FOR THIS SITE.

PROPOSED BEST MANAGEMENT PRACTICES

· INFILTRATION BASIN - ONE (1) INFILTRATION BASIN WILL BE UTILIZED TO PROMOTE INFILTRATION, EVAPORATION, AND EVAPOTRANSPIRATION AND CONTROL FLOW AND VOLUME LEAVING THE SITE.

OFFSITE DISCHARGE ANALYSIS

THE FOLLOWING IS AN EXCERPT FROM THE PA DEP FAQ SHEET LABELED CHAPTER 102 OFF-SITE DISCHARGES OF STORMWATER TO NON-SURFACE WATERS (JANUARY 2, 2019). FAQ #2 STATES, "PERSONS PROPOSING TO DISCHARGE MUST HAVE THE LEGAL AUTHORITY TO DISCHARGE THEIR STORMWATER FITHER THROUGH FITHER A COMMON LAW FASEMENT OR AN EXPRESS FASEMENT. FOR SITES THAT DISCHARGE TO EXISTING SWALES, DITCHES, STORM SEWERS OR SIMILAR STRUCTURES WHERE THE NEW ACTIVITIES WILL NOT RESULT IN A CHANGE IN VOLUME OR RATE OF STORMWATER RUNOFF (FOR ALL STORM EVENTS), THE EXISTING COMMON LAW EASEMENT COULD BE RELIED UPON."

THE SITE DISCHARGES TO THE DISCHARGE POINT IN A SIMILAR MANNER AND AT A RATE THAT IS LESS THAN PRE-DEVELOPMENT FOR ALL STORM EVENTS.

CHAPTER 102.8 (B) ANALYSIS

THE DOWNSTREAM CHANNEL IS PROTECTED BY THE FLOW REDUCTION PROVIDED FROM THE PROPOSED STORMWATER MANAGEMENT FACILTIES. THE INFILTRATION BASIN ALLOWS FOR REDUCED FLOW TO THE DISCHARGE POINT. AND THEREFORE THE DOWNSTREAM CHANNEL WILL NOT BE IMPACTED. THE SAME FLOW REDUCTION AND WATER QUALITY BENEFITS PROVIDED BY THE STRUCTURAL BMPS WILL ALSO SERVE TO PROTECT THE EXISTING DRAINAGE FEATURES AND DOWNSTREAM VEGETATION.

SOIL INFORMATION AND GEOLOGY

THE FOLLOWING SOILS ARE FOUND WITHIN OR ADJACENT TO THE AREA TO BE DISTURBED BY EARTH MOVING ACTIVITIES. THESE SOILS CAN ERODE WHEN DISTURBED. EROSION WILL BE CONTROLLED WITH STANDARD EROSION CONTROLS SUCH AS FILTER SOCK, SLOPE AND SWALE MATTING, RIPRAP OUTLET PROTECTION, ROCK FILTER, ROCK CONSTRUCTION ENTRANCE, AND SEDIMENT BASIN.

Map Symbol	Soil Name	Slope	Hydrologic Group
Qu	Quarries	-	-
UoC	Ungers extremely stony loam	8-25%	В

*IF SOILS ARE BOLD THEY ARE DISTURBED DURING CONSTRUCTION ON THIS PROJECT

THE SITE IS UNDERLAIN BY THE HAMMER CREEK FORMATION AND HAMMER CREEK CONGLOMERATE FORMATION WHICH ARE COMPRISED OF SANDSTONE, SILTSTONE, MUDSTONE, AND QUARTZ CONGLOMERATE, THE PA DEP'S EMAPPA DOES NOT IDENTIFY ANY KARST FEATURES ON SITE OR WITHIN THE IMMEDIATE VICINITY OF THE PROJECT AREA. THE GEOTECHNICAL REPORT PREPARED BY ECS MID-ATLANTIC, LLC DOES NOT IDENTIFY ANY KARST CONCERNS ON THE SITE. BASED ON THE AVAILABLE INFORMATION, THE RISK OF KARST ACTIVITY ON THE SITE IS LOW. SHOULD A GEOTECHNICAL HAZARD BE ENCOUNTERED, THE LOCAL CONSERVATION DISTRICT WILL BE IMMEDIATELY CONTACTED AND A GEOTECHNICAL ENGINEER WILL BE REQUIRED TO OVERSEE ANY MITIGATION MEASURES. UNGERS SOILS - THE UNGERS SERIES CONSISTS OF DEEP AND VERY DEEP, WELL DRAINED SOILS FORMED IN RESIDUUM FROM RED SANDSTONE AND SHALE. SLOPES RANGE FROM 0 TO 60 PERCENT. PERMEABILITY IS MODERATE. MEAN ANNUAL PRECIPITATION IS 43 INCHES. MEAN ANNUAL TEMPERATURE IS 52 DEGREES F. UNGERS SOILS MAY BE SUSCEPTIBLE TO CUT BANKS AND CAVE INS. CORROSIVE TO CONCRETE, AND EASILY ERODIBLE. THIS SOIL MAY ALSO BE SUSCEPTIBLE TO LOW STRENGTH/LANDSLIDES, SLOW PERCOLATION, AND FROST ACTION.

SOIL USE LIMITATIONS AND RESOLUTIONS

- CUT-BANK CAVING: ALL APPLICABLE OSHA STANDARDS AND REGULATIONS SHALL BE IMPLEMENTED AT ALL TIMES DURING TRENCHING AND EXCAVATION OPERATIONS.
- CORROSION OF CONCRETE: ALL UNDERGROUND FOUNDATIONS AND STRUCTURES SHALL BE PROPERLY PROTECTED AGAINST CORROSION, WHICH MAY INCLUDE COATING THESE STRUCTURES WITH CORROSION-RESISTANT MATERIAL • EASILY ERODIBLE: EROSION AND SEDIMENT POLLUTION CONTROLS WILL BE IMPLEMENTED TO AVOID THE TRANSPORTATION OF
- SEDIMENT-LADEN WATER OFF-SITE. • LOW STRENGTH/LANDSLIDE PRONE: THE MAXIMUM PROPOSED SLOPE ON THE SITE IS 3:1. THIS WILL REDUCE THE POTENTIAL FOR
- EROSION AND LAND SLIDE ACTION. ALL PROPOSED BERMS SHALL BE COMPACTED FULLY IN ORDER TO PROTECT AGAINST LANDSLIDES, AND SHALL BE STABILIZED IMMEDIATELY. • SLOW PERCOLATION: ADEQUATE PRECAUTIONS WILL BE TAKEN TO ENSURE THAT THE PCSM BMPS INFILTRATE WITHIN THE
- REQUIRED TIME PERIOD, INCLUDING INFILTRATION TESTING AND SOIL MODIFICATION/UNDERDRAIN INSTALLATION, IF NECESSARY. INFILTRATION TESTS PREVIOUSLY PERFORMED INDICATE THAT THE INFILTRATION RATES ARE ADEQUATE. CONSTRUCTION PHASE INFILTRATION TESTING WILL BE PERFORMED TO CONFIRM THE DESIGN RATES UTILIZED
- FROST ACTION: THE PROJECT'S IMPERVIOUS SURFACES SHALL BE GRADED AT A MINIMUM OF 2% IN ONE DIRECTION, SO THAT WATER WILL NOT COLLECT ON THE SURFACE AND CAUSE DAMAGE DURING FREEZE/THAW CYCLES.

- 1. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL NEED TO HAVE APPROPRIATE E&S CONTROLS.
- WITH LOCAL REQUIREMENTS OR CODES
- 3. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 6. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

INFILTRATION TESTING REQUIREMENTS

WILL BE PERFORMED TO VERIFY THE DESIGN INFILTRATION RATE.

OWNERSHIP, OPERATIONS AND MAINTENANCE

SHORT-TERM OWNERSHIP, OPERATIONS AND MAINTENANCE OF THE PCSM BMPS IS THE RESPONSIBILITY OF THE CONTRACTOR (UNKNOWN AT THIS TIME), WHO SHALL BE LISTED AS THE CO-PERMITTEE ON THE NPDES PERMIT. LONG-TERM OWNERSHIP, OPERATIONS AND MAINTENANCE OF THE PCSM BMPS IS THE RESPONSIBILITY OF THE PROPERTY OWNER HEREIN IDENTIFIED AS CORNWALL PROPERTIES, LLC.

INDIVIDUAL BMP DESCRIPTION, CONSTRUCTION SEQUENCE, AND MAINTENANCE GENERAL OVERALL BMP DESCRIPTION

BMP 6.4.2: INFILTRATION BASIN AN INFILTRATION BASIN IS A SHALLOW IMPOUNDMENT THAT STORES AND INFILTRATES RUNOFF OVER A LEVEL, UN-COMPACTED (PREFERABLY UNDISTURBED AREA) WITH RELATIVELY PERMEABLE SOILS.

ONE (1) INFILTRATION BASIN WILL BE LOCATED ON SITE. THE BOTTOM WILL BE CONSTRUCTED WITH AN ENGINEERED SOIL MIXTURE TO ASSIST IN THE WATER QUALITY BENEFITS OF FILTRATION AS WELL AS TO PROMOTE VEGETATION GROWTH AND INFILTRATION. THE INFILTRATION BASIN FACILITY WILL BE PLANTED WITH ERNST CONSERVATION SEEDS "RETENTION BASIN FLOOR MIX - LOW MAINTENANCE" MIX WHICH WILL PROMOTE POLLUTANT REMOVAL. THE PRIMARY FUNCTION OF THE BMP IS TO MANAGE STORMWATER RUNOFF VOLUME AND CONTROL THE PEAK RATE LEAVING THE SITE. PLEASE SEE THE PCSM PLAN AND REPORT FOR DETAILS, SPECIFICATIONS AND CALCULATIONS.

CONSTRUCTION SEQUENCE

- 1. PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION. INLETS AND PIPES.
- 3. INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- NOT COMPACT SUBGRADE. 5. INSTALL OUTLET CONTROL STRUCTURES.
- 6. SEED AND STABILIZE TOPSOIL. (VEGETATE IF APPROPRIATE WITH NATIVE PLANTINGS)

MAINTENANCE

- 1. WHILE VEGETATION IS BEING ESTABLISHED, PRUNING AND WEEDING MAY BE REQUIRED.
- GROWING SEASON.
- 4. DURING PERIODS OF EXTENDED DROUGHT, AREAS MAY REQUIRE WATERING.

MAINTENANCE AND INSPECTION

- PER YEAR AND AFTER MAJOR RUNOFF EVENTS (> 1-INCH RAINFALL DEPTH).
- BARE SPOTS SHALL BE RE-VEGETATED AS SOON AS POSSIBLE.
- COMPACTION BY MOWERS
- PERIOD WITH RELATIVELY STATIC WATER LEVELS.
- RECYCLING FACILITY. MOWING SHALL AVOID ALL PLUG PLANTINGS IN THE BASIN BOTTOM (WHEN APPLICABLE).
- AI TERNATIVE SOLUTIONS
- ALTERNATIVES INCLUDE
- BE REPLACED PER THE PCSM PLAN SPECIFICATIONS
- AUTHORITY AND THE PA DEP.

SWALES

OPERATION & MAINTENANCE

DEPTH)

- (ADDRESS WHEN >3 INCHES AT ANY SPOT OR COVERING VEGETATION).
- DESIGN GRADE.
- RUTTING
- e. INSPECT FOR LITTER; REMOVE PRIOR TO MOWING.
- SITE BY THE PROPERTY OWNER AT ALL TIMES.

2. MAINTENANCE ACTIVITIES TO BE DONE AS NEEDED:

- CHANNELS ARE FORMING
- c. ROTO-TILL AND REPLANT SWALE IF DRAW DOWN TIME IS MORE THAN 48 HOURS.
- ETC.) ARE IDENTIFIED. e. WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY WHEN ABSOLUTELY NECESSARY.
- WITHOUT DISTURBING REMAINING VEGETATION
- AGENTS
- OR AS PRETREATED SALT d. USE SALT-TOLERANT VEGETATION IN SWALES.

OVERALL PCSM CONSTRUCTION SEQUENCE

c. USE NONTOXIC, ORGANIC DEICING AGENTS, APPLIED EITHER AS BLENDED, MAGNESIUM CHLORIDE-BASED LIQUID PRODUCTS

b. IF ROADSIDE OR PARKING LOT RUNOFF IS DIRECTED TO THE SWALE, MULCHING AND/OR SOIL AERATION/MANIPULATION MAY BE REQUIRED IN THE SPRING TO RESTORE STRUCTURE AND MOISTURE CAPACITY AND TO REDUCE THE IMPACTS OF DEICING

a. INSPECT SWALE IMMEDIATELY AFTER SPRING MELT, REMOVE RESIDUALS (E.G. SAND) AND REPLACE DAMAGED VEGETATION

3. WINTER CONDITIONS ALSO NECESSITATE ADDITIONAL MAINTENANCE CONCERNS, WHICH INCLUDE THE FOLLOWING:

d. INSPECT AND CORRECT CHECK DAMS WHEN SIGNS OF ALTERED WATER FLOW (CHANNELIZATION, OBSTRUCTIONS, EROSION,

b. RE-SEED BARE AREAS; INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION

a. PLANT ALTERNATIVE GRASS SPECIES IN THE EVENT OF UNSUCCESSFUL ESTABLISHMENT.

g. INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED. h. WRITTEN REPORTS DOCUMENTING ALL INSPECTIONS, REPAIRS, AND MAINTENANCE ACTIVITIES SHALL BE MAINTAINED ON

f. INSPECT FOR UNIFORMITY IN A CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED.

d. MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID

b. INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED. c. INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO

a. INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION

1. MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 48 HOURS AFTER EVERY MAJOR STORM EVENT (>1-INCH RAINFALL

CONDUCT AN INVESTIGATION BY A QUALIFIED INDIVIDUAL IN ORDER TO DETERMINE THE CAUSE OF FAILURE AND MAKE A DETERMINATION AS TO THE BEST COURSE OF ACTION AS TO RETURN THE SITE TO THE STANDARDS OF THE LOCAL MUNICIPAL

REPLACE THE ENGINEERED SOIL LAYER AND / OR THE UNDERDRAIN SYSTEM THE ENGINEERED SOIL LAYER SHOULD BE REMOVED. THE SOIL LAYER AT THE BOTTOM OF THE ENGINEERED SOIL SHALL BE SCARIFIED. THE ENGINEERED SOIL LAYER SHALL

7. REMOVE ACCUMULATED SEDIMENT FROM BASIN AS REQUIRED. RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE. 8. SHOULD ANY INFILTRATION BASIN FAIL TO DEWATER WITHIN A 72-HOUR TIME PERIOD THE OWNER SHALL INVESTIGATE

6. THE SEED MIXTURE PLANTED IN THE BOTTOM OF THE BASINS SHALL BE MOWED DOWN TO A HEIGHT OF 8-INCHES WHEN IT REACHES A HEIGHT OF 24-INCHES DURING THE FIRST FULL GROWING SEASON ONLY. IN ALL SUBSEQUENT YEARS, ANY MATERIAL STILL STANDING FROM THE PREVIOUS GROWING SEASON SHALL BE MOWED IN EARLY SPRING TO A HEIGHT OF 2-INCHES PRIOR TO THE CURRENT YEAR'S GROWTH REACHING A HEIGHT OF 2-INCHES. THE SEED MIXTURE SHALL NOT BE MOWED AGAIN UNTIL THE FOLLOWING SPRING. IN ALL INSTANCES, CLIPPINGS SHALL BE COMPOSTED OR TAKEN TO AN APPROVED YARD WASTE

5. ALSO INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION CONTROL MEASURES. SIGNS OF WATER CONTAMINATION/SPILLS, AND SLOPE STABILITY IN THE BERMS.

3. VEHICLES SHOULD NOT BE PARKED OR DRIVEN OVER AN INFILTRATION AREA, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE 4. INSPECT THE FACILITY AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS, MOSQUITOES SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING

2. THE VEGETATION ALONG THE SURFACE OF THE INFILTRATION FACILITY SHALL BE MAINTAINED IN GOOD CONDITION, AND ANY

1. CATCH BASINS AND INLETS (UPGRADIENT OF INFILTRATION FACILITY) SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES

2. DETRITUS MAY ALSO NEED TO BE REMOVED EVERY YEAR. PERENNIAL PLANTINGS MAY BE CUT DOWN AT THE END OF THE 3. AREAS SHOULD BE INSPECTED AT LEAST TWO TIMES PER YEAR FOR SEDIMENT BUILDUP, EROSION VEGETATIVE CONDITIONS ETC

7. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

4. IF NECESSARY, EXCAVATE INFILTRATION BASIN BOTTOM TO AN UNCOMPACTED SUBGRADE FREE FROM ROCK AND DEBRIS. DO

2. IF POSSIBLE, INSTALL INFILTRATION BASIN DURING THE LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY. AFTER INSTALLATION, PREVENT SEDIMENT LADEN WATER FROM ENTERING

PREPARED BY ECS MID-ATLANTIC INCLUDED AS AN APPENDIX TO THIS PCSM REPORT. CONSTRUCTION PHASE INFILTRATION TESTING

INFILTRATION TESTING HAS BEEN CONDUCTED AND RESULTS ARE PROVIDED IN THE GEOTECHNICAL ENGINEERING REPORT

5. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS. 7. THE LOCAL CONSERVATION DISTRICT SHALL BE CONTACTED IF SEEPS OR SPRINGS ARE ENCOUNTERED AND THE DESIGNS ARE ALTERED DURING CONSTRUCTION AND THEY SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR

4. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE

2. 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

PRE-CONSTRUCTION MEETING. 2. UPON INSTALLATION OF PERIMETER E&S CONTROLS (SEE CONSTRUCTION SEQUENCE).

3. ALL EARTHMOVING CONTRACTORS MUST BE ADDED AS CO-PERMITTEES TO THE NPDES PERMIT.

FOR INSPECTION BY DEP OR COUNTY CONSERVATION DISTRICT PERSONNEL.

MATERIALS OR WASTES SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED.

MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT.

PERIMETER E&S CONTROLS MAY BE INSTALLED PRIOR TO THE PRE-CONSTRUCTION MEETING.

4. INSTALL THE ROCK CONSTRUCTION ENTRANCE AS SHOWN ON THE ATTACHED PLAN.

PRESENT BEFORE BEGINNING THE FOLLOWING CONSTRUCTION ACTIVITIES:

O OUTLET PIPE, ANTI-SEEP COLLAR, CLAY CORE INSTALLATION

3. INSTALL SEDIMENT BASIN 1.

WITH THE REQUIREMENTS OF PART A.2.A.

4. INSTALL SWALES 1 & 2 AND STORM SEWER. 5. AFTER THE IMPROVEMENTS ARE CONSTRUCTED ADD TOPSOIL TO THE POST-CONSTRUCTION PERVIOUS AREAS TO BE PERMANENTLY STABILIZED.

1. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER

AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS. THE LANDOWNER. ALL APPROPRIATE MUNICIPAL OFFICIALS. THE E&S PLAN

PREPARER, PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF

IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE OF THE COUNTY CONSERVATION DISTRICT TO AN ON-SITE

7. AFTER STABILIZATION OF THE SITE AREA, CONVERT SEDIMENT BASIN 1 TO INFILTRATION BASIN 1 AS SEEN ON THE PCSM PLAN. CARE SHOULD BE TAKEN TO MINIMIZE SOIL COMPACTION IN THESE AREAS BEFORE AND AFTER CONSTRUCTION. SUCCESS HAS BEEN ACHIEVED WITH MINIMAL COMPACTION UTILIZING A "ROCK SLINGER".

COVFRAGE

2. PERMITTEE'S REQUESTING A RENEWAL OF COVERAGE UNDER INDIVIDUAL PERMIT MUST SUBMIT TO THE COUNTY CONSERVATION

4. SITE INSPECTIONS AND MONITORING REPORTS - THE PERMITTEE AND CO-PERMITTEE(S) SHALL COMPLY WITH ALL OF THE

MONITORING AND REPORTING REQUIREMENTS, AS OUTLINED IN PART A.2 OF THE NPDES PERMIT. THE PERMITTEE AND

CO-PERMITTEE(S) SHALL ENSURE THAT SITE INSPECTIONS ARE CONDUCTED AT LEAST WEEKLY AND AFTER EACH MEASURABLE

PRECIPITATION EVENT BY QUALIFIED PERSONNEL. A WRITTEN REPORT SHALL BE KEPT FOR EACH INSPECTION IN ACCORDANCE

5. THE DEP "VISUAL INSPECTION CHECKLIST" SHOULD BE COMPLETED FOR EACH INSPECTION AND SHOULD BE AVAILABLE ON-SITE

6. AFTER ALL EARTHMOVING ACTIVITY HAS CEASED AND THE ENTIRE PERMITTED AREA IS PERMANENTLY STABILIZED, THE

PER REQUIREMENTS OF THE PA DEP A LICENSED PROFESSIONAL OR DESIGNEE MUST BE PRESENT FOR THE INSTALLATION OF ALL

THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES ON OR OFF THE SITE.

THESE BUILDING WASTES INCLUDE, BUT ARE NOT LIMITED TO EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH

WATER, SANITARY WASTES, EXISTING ON-SITE REFUSE, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. ALL BUILDING

MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE

DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING

WASTE MATERIALS WITH OR FROM THE POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) BEST MANAGEMENT PRACTICES

• LITTER CLEANED FROM PCSM BMPS SHALL BE DISPOSED OF IN A TRASH RECEPTACLE FOR PICK UP BY THE LOCAL REFUSE

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES.

CONSTRUCTION OF THE SITE IMPROVEMENTS IS EXPECTED TO BEGIN IN THE SUMMER OF 2024, A COPY OF THE APPROVED EROSION

AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. CONSTRUCTION WILL PROCEED IN A TIMELY

MANNER IN ORDER TO LIMIT THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION. 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 THE POTENTIAL FOR ACCELERATED EROSION

AND/OR SEDIMENT POLLUTION. SHOULD ANY SINKHOLES OR GROUNDWATER SOURCES BE ENCOUNTERED DURING CONSTRUCTION,

THE CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER IMMEDIATELY. 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,

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE

STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. ANY DEVIATION FROM THE FOLLOWING SEQUENCE

1. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE

2. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES

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 OR BY DEP PRIOR TO

5. THE LIMITS OF DISTURBANCE (LOD) SHOULD BE MARKED PRIOR TO DISTURBANCE ACTIVITIES (I.E. SURVEY STAKES, POSTS &

6. LOCATE, STAKE, AND FLAG AREAS MARKED AS INFILTRATION PCSM BMP'S (I.E. INFILTRATION BASIN 1). REFER TO PCSM PLAN FOR

7. INSTALL PERIMETER SILT SOCK ON THE SITE AT LOCATIONS 1-23 AS INDICATED ON THE ATTACHED PLAN. SILT SOCK IS TO BE

INSTALLED ALONG THE CONTOUR WHERE POSSIBLE, AT A LEVEL GRADE. THE SILT SOCK SHOULD BE POSITIONED IN SUCH A WAY

AS TO PREVENT ANY SEDIMENT FROM LEAVING THE SITE. SEDIMENT ACCUMULATING TO HALF THE HEIGHT OF THE SILT SOCK

SHALL BE REMOVED IN ORDER TO RESTORE THE SEDIMENT STORAGE CAPACITY OF THESE AREAS. IN THE CASE OF A FAILURE OF

THE SILT SOCK DUE TO HIGH FLOWS. A NEW SECTION OF SILT SOCK SHALL BE INSTALLED ACROSS THE FAILED PORTION OF THE

SILT SOCK. AT NO POINT SHALL UN-STABILIZED AREA DRAIN OFFSITE UNCONTROLLED. THE SILT SOCK IN LOCATION 24 IS TO

ENSURE SEDIMENTATION OF THE INFILTRATION BASIN BOTTOM AREA DOES NOT OCCUR AND SHOULD BE INSTALLED ONCE THE

8. PER NPDES REQUIREMENTS, "UPON THE INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT

9. INSTALL SEDIMENT BASIN 1 WHICH WILL SERVE AS A SEDIMENT BASIN DURING CONSTRUCTION AND BE CONVERTED TO AN

INFILTRATION BASIN UPON TRIBUTARY STABILIZATION. DISTURB ONLY THE MINIMUM AREA NECESSARY TO INSTALL THE

SEDIMENT BASIN. THE SEDIMENT BASIN MUST BE CONSTRUCTED PRIOR TO ANY MAJOR EARTH DISTURBANCE. STRIPPING. OF

CLEARING. INSTALL THE OUTLET PIPE ALONG WITH THE ASSOCIATED OUTLET STRUCTURE. CONSTRUCT IMPERVIOUS CLAY CORE,

ANTI-SEEP COLLARS, AND BACKFILL EMBANKMENT, COMPACTING TO 95% MAX DRY DENSITY. INSTALL NORTH AMERICAN GREEN

S200 SLOPE PROTECTION AT EMERGENCY SPILLWAY, INSTALL RIPRAP APRON AT THE BASIN OUTFALL, INSTALL SEED IN THE

INTERIOR SLOPES AND BERMS OF BASIN, INSTALL CLEAN OUT STAKE, BAFFLES, AND SKIMMER WITHIN THE BASIN, REFER TO THE

E&S SHEETS FOR ADDITIONAL DETAIL. A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ONSITE DURING SEDIMENT

10. INSTALL SWALES A & B. ENSURE EROSION CONTROL LINING IS INSTALLED IN ACCORDANCE WITH THE PLAN DETAILS. INSTALL

11. IF SOIL IS TAKEN TO OR BORROWED FROM ANOTHER CONSTRUCTION SITE, SAID SITE MUST HAVE AN APPROVED E&SPC PLAN.

12. CLEAR AND STRIP ANY TOPSOIL ACROSS THE AREA OF THE BUILDING PAD AND PAVED AREAS AND PLACE ON THE TOPSOIL

13. ROUGH GRADE THE DISTURBED AREA AS NECESSARY FOR CONSTRUCTION OF THE BUILDING, ACCESS DRIVE, AND PAVED

14 INSTALL WATER SANITARY SEWER STORM SEWER AND ALL OTHER UTILITIES AT THIS TIME. INSTALL IN FT PROTECTION ON ALL

INLETS IDENTIFIED ON THE PLAN. DURING AND FOLLOWING STORM EVENTS PROVIDE A MEANS TO DEWATER PITS AND UTILITY

STOCKPILE AS SHOWN ON THE ATTACHED PLAN AND IN ACCORDANCE WITH PLAN DETAILS. ENSURE THE SILT SOCK BELOW THE

LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE

NO CONSTRUCTION TRAFFIC SHALL OCCUR IN THESE AREAS EXCEPT AS NECESSARY FOR EXCAVATION/GRADING.

SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT."

BASIN EXCAVATION AND INSTALLATION OF THE OUTLET PIPE, ANTI-SEEP COLLARS, AND CLAY CORE.

SEE THE "SOIL LIMITATIONS AND RESOLUTIONS" SECTION OF THIS E&S PLAN FOR FURTHER INFORMATION.

TOPSOIL STOCKPILE IS INSTALLED AS SHOWN ON THE ATTACHED PLAN.

ADDITIONAL INFORMATION AND LOCATION OF PCSM BMP'S. THESE AREAS SHOULD NOT BE COMPACTED DURING CONSTRUCTION.

SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING

CONTRACTOR SHALL INVITE ALL SUB-CONTRACTORS, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE CIVIL

ENGINEER, AND A REPRESENTATIVE OF THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.

COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING. GRUBBING AND TOPSOI

• SEDIMENT DEPOSITED AND ACCUMULATED IN PCSM BMPS SHALL BE REMOVED FROM THE BMP AND DISPOSED OF PROPERLY.

CUTTINGS AND TRIMMINGS FROM PCSM BMPS SHALL BE DISPOSED OF IN A LOCAL COMPOSTING FACILITY.

BMP AND STORMWATER CONTROLS. PLEASE CONTACT THE DESIGN PROFESSIONAL OR ENSURE A LICENSED PROFESSIONAL IS

PERMIT. ALLOWING THE NPDES PERMIT TO EXPIRE IS DETERMINED TO BE A VIOLATION OF THE NPDES PERMIT.

PERMITTEE MUST SUBMIT A NOTICE OF TERMINATION TO THE LOCAL COUNTY CONSERVATION DISTRICT TO CLOSE OUT THE

DISTRICT AN ADMINISTRATIVELY COMPLETE AND ACCEPTABLE NOI, AT LEAST 180 DAYS PRIOR TO THE EXPIRATION DATE OF THE

DISTRICT AN ADMINISTRATIVELY COMPLETE AND ACCEPTABLE NOI, AT LEAST 90 DAYS PRIOR TO THE EXPIRATION DATE OF THE

1. PERMITTEE'S REQUESTING A RENEWAL OF COVERAGE UNDER GENERAL PERMIT MUST SUBMIT TO THE COUNTY CONSERVATION

NPDES PERMIT NOTES

6. APPLY THE SPECIFIED PERMANENT STABILIZATION ACROSS THE SITE.

COVERAGE.

BMP CRITICAL STAGES

INFILTRATION BASIN 1

PROJECT WASTES NOTES

(BMPS):

HAULER.

STAGING OF EARTHMOVING

OVER UNDISTURBED VEGETATED AREAS.

SEQUENCE OF CONSTRUCTION

UNDERGROUND UTILITIES.

ROPE, CONSTRUCTION FENCE, ETC.)

ROCK FILTERS #1 AND #2.

CONVERSION TO AN INFILTRATION BASIN IS COMPLETE.

IMPLEMENTATION.

PERMANENT SITE STABILIZATION

O EXCAVATION/ROUGH GRADING

O CONSTRUCTION PHASE INFILTRATION TESTING

O UNDERDRAIN AND AMENDED SOILS INSTALLATION

TRENCHES. SPOIL MATERIAL FROM EXCAVATION OF THE TRENCHES SHALL BE PLACED ON THE UP-SLOPE SIDE OF THE TRENCH, THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THAT WHICH WILL BE BACKFILLED THE SAME DAY. AND ANY AFFECTED BMP'S SHALL BE IMMEDIATELY STABILIZED AND REPAIRED. THE TOPSOIL EXCAVATED FROM THE TRENCH SHALL BE CAREFULLY REMOVED AND STOCKPILED SEPARATELY FROM THE SUBSOIL. THE TOPSOIL SHALL BE RESTORED TO THE GRADED AREAS TO PRE-CONSTRUCTION CONDITIONS. WATER PUMPED FROM PITS AND TRENCHES SHALL BE FILTERED BY MEANS OF A FILTER BAG. IMMEDIATELY AFTER TRENCHES HAVE BEEN BACKFILLED, FINE-GRADE AREA.

15. INSTALL THE STONE SUB-BASE FOR THE ACCESS DRIVE, PAVED AREAS, AND CONCRETE SLABS PER PLAN REQUIREMENTS.

16. CONSTRUCT THE PROPOSED BUILDING AND ATTACHED UTILITIES (ROOF DRAINS, SANITARY CONNECTIONS, WATER CONNECTIONS, ETC.) IMMEDIATELY UPON COMPLETION OF EARTH DISTURBANCE ACTIVITIES FINAL GRADE AND STABILIZE THE

17. FINE GRADE ANY REMAINING AREAS AS SHOWN ON THE GRADING PLAN. DURING THIS TIME, FRAME EARTH MOVING EQUIPMENT WILL BE EMPLOYED TO REMOVE TOPSOIL AND EXCESS "FILL" MATERIAL, IF ANY EXISTS. SPREAD A MINIMUM OF 6 INCHES OF TOPSOIL ON FRESHLY GRADED AREAS. REFER TO THE TOPSOIL APPLICATION NOTES ON THE PLAN. FINAL PASSES DURING FINE GRADING SHALL BE MADE AT RIGHT ANGLES TO THE SLOPES. PREPARE THE REMAINDER OF THE DISTURBED AREA FOR PERMANENT STABILIZATION. SEEDBED SHALL BE PREPARED IN ACCORDANCE WITH ACCEPTED PRACTICES. EACH SEED MIXTURE SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RATES AND INSTRUCTIONS.

18. 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.

19. PAVE THE REQUIRED AREAS. DO NOT INSTALL SURFACE (WEARING) COURSE UNTIL ALL DOWNSTREAM VEGETATED AREA IS STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS). IF EARTHMOVING ACTIVITIES CEASE FOR FOUR (4) DAYS OR MORE TEMPORARY STABILIZATION SHALL BE APPLIED. SEE "STABILIZATION SPECIFICATIONS" IN THE E&S PLAN FOR FURTHER DETAILS.

20. ALL SEDIMENT DEPOSITED WITHIN STORM SEWER CONVEYANCE PIPES SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT AND PRIOR TO CONVERSION OF THE SEDIMENT BASINS TO INFILTRATION BASINS. ANY WATER PUMPED FROM THE STORMWATER BASIN OR OTHER AREA OF THE SITE SHALL BE PUMPED THROUGH A FILTER BAG AND THE COLLECTED SEDIMENT SHALL BE DISPOSED OF PROPERLY, ALL AREAS DISTURBED DURING THIS PROCESS SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING. THE COUNTY CONSERVATION DISTRICT SHOULD BE CONTACTED PRIOR TO CONVERSION OR REMOVAL OF ANY E&S BMPS AND MAY REQUIRE A SITE INSPECTION. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS) WITH APPROVAL OF THE LOCAL CONSERVATION DISTRICT.

21. UPON STABILIZATION OF ALL TRIBUTARY DISTURBED AREAS, MODIFY SEDIMENT BASIN 1 AS REQUIRED TO INSTALL INFILTRATION BASIN 1 AS SHOWN ON THE PCSM PLAN. THE INFILTRATION BASIN SHALL BE OVER-EXCAVATED AND SCARIFIED IN ACCORDANCE WITH THE PLAN DETAIL. THE EXCAVATOR SHOULD AVOID EXCAVATING TO THE FINAL DESIGN INVERT LINTIL THE ENGINEERED SOIL MIX IS READY TO BE PLACED. THIS WILL MINIMIZE THE EXPOSURE OF SUBGRADE SOIL AND AID IN REDUCING COMPACTION. WHEN EXCAVATING TO FINAL INVERT SUBGRADES UTILIZE A SMOOTH (TOOTHLESS) BLADE BUCKET TO AVOID LOCALIZED COMPACTION. ONCE NATIVE SOILS ARE REACHED DURING EXCAVATION, INFILTRATION TESTING SHALL BE PERFORMED TO VERIFY DESIGN RATES. INSTALL THE UNDERDRAIN SYSTEM IN ACCORDANCE WITH THE PLAN DETAILS. PLACE THE ENGINEERED SOIL MIX TO THE REQUIRED ELEVATION WITHIN THE INFILTRATION BASIN. INSTALL THE SILT SOCK AT LOCATION 24 TO PREVENT ANY POTENTIAL SEDIMENTATION OF THE ENGINEERED SOILS. ANY SOIL COMPACTION SHOULD BE AVOIDED IN THE BASIN BOTTOM. REMOVE THE SEDIMENT BASIN BAFFLES. CLEANOUT STAKE, AND SKIMMERS. WHEN SEEDING THE BASIN MIXES BE SURE TO HAND RAKE THI SEED INTO THE SOIL. A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ONSITE DURING INFILTRATION TESTING, INSTALLATION OF THE UNDERDRAIN SYSTEM, ENGINEERED SOILS, AND FINAL GRADING/SEEDING OF INFILTRATION BASIN 1.

22. THE OPERATOR SHALL REMOVE FROM THE 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., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY DUMP. OR DISCHARGE ANY BUILDING MATERIAL OR WASTES ON OR OFF THE SITE. THESE BUILDING WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.

23. PER 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 IF ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED 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."

CONTRACTOR NOTES

1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY DEP PRIOR TO IMPLEMENTATION.

2 PER NODES REQUIREMENTS "LIDON THE INSTALLATION OF STABILIZATION OF ALL DERIMETER SEDIMENT CONTROL RMPS 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

3. IF SOIL IT IS TAKEN TO OR BORROWED FROM ANOTHER CONSTRUCTION SITE. SAID SITE MUST HAVE AN APPROVED E&SPC PLAN. SEE THE "SOIL LIMITATIONS AND RESOLUTIONS" SECTION OF THIS E&S PLAN FOR FURTHER INFORMATION.

4. 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.

5. ALL SEDIMENT DEPOSITED WITHIN STORM SEWER CONVEYANCE PIPES SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT ANY WATER PUMPED FROM THE STORMWATER BASIN OR OTHER AREA OF THE SITE SHALL BE PUMPED THROUGH A FILTER BAG AND THE COLLECTED SEDIMENT SHALL BE DISPOSED OF PROPERLY. ALL AREAS DISTURBED DURING THIS PROCESS SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING. THE COUNTY CONSERVATION DISTRICT SHOULD BE CONTACTED PRIOR TO CONVERSION OR REMOVAL OF PRIMARY F&S BMPS AND MAY REQUIRE A SITE INSPECTION. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS).

6. THE OPERATOR SHALL REMOVE FROM THE 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., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES ON OR OFF THE SITE. THESE BUILDING WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.

7. PER 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 NOT IF SOONER THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED 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."







SCALE: 1 = 2.5





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	SITE DETAILS	PRELIMINARY/FINAL LAND DEVELOPMENT PLANS		Iocated in CORNWALL BOROUGH	LEBANON County, Pennsylvania	
			Steckbeck Engineering & Surveying Inc. 279 North Zinns Mill Road / Suite A	Lebanon, Pennsyvania 17042 Phone: (717) 272–7110	Fax: (717) 272–7348	
FIE BA DF CF CF SC PF	ELD (ASE M RAWN ESIGN HECKI ATE: CALE: ROJE(CREW MAP: : ED: CT #2	: MOD J C C C C C C C C C C C C C C C C C C	D, JEC EC EDS EDS 5AS (12/24 NOT -23-0	4 ED 01	
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EROSION AND SEDIMENT CONTROL NOTES:

FAILURE TO CORRECTLY INSTALL SEDIMENT CONTROL FACILITIES OR FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE CORRECTIVE ACTIONS TO IMMEDIATELY RESOLVE FAILURES OF SEDIMENT CONTROL FACILITIES MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW OF PENNSYLVANIA. 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.

SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.

THESE PLANS INDICATE CRITICAL AREAS FOR EROSION AND SEDIMENT CONTROL PLACEMENT BUT DO NOT RELIEVE THE CONTRACTOR FROM PROVIDING ADDITIONAL CONTROLS AS SITE CONDITIONS WARRANT. THE ENVIRONMENTAL COMPLIANCE MANAGER FOR THE PROJECT AND OR CONSERVATION DISTRICT MAY DIRECT THE CONTRACTOR TO INSTALL E&S BMPS NOT DEPICTED ON THESE DRAWINGS IN ORDER TO PROTECT DOWN GRADIENT AREAS FROM EROSION AND SEDIMENTATION DURING CONSTRUCTION.

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH MEASURABLE RAINFALL EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. THE VISUAL SITE INSPECTION REPORT FORM (3800-FM-BCW0271d), OR AN EQUIVALENT ELECTRONIC FORM PROVDING THE SAME INFORMATION, MUST BE USED TO DOCUMENT THE REQUIRED SITE INSPECTIONS.

INSPECTION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONDUCTED AND DOCUMENTED BY COMPLETING THE VISUAL SITE INSPECTION REPORT (PA DEP FORM 3800-FM-BCW0271d DATED 12/2019). INSPECTIONS SHALL OCCUR WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT (0.25" DEPTH OR GREATER). SLOPE LINING N.A.G. P300 OR EQUAL ቢ ONTROL C NOI. POLLUT NO SEDIMENT/ LOADING AREA SLOPE LINING N.A.G. P300 OR EQUAL 24" STACKED SILT SOCK LOCATION 5 24" STACKED SILT SOCK DP 004 LOCATION 6

20 OF 23 SHEETS

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GRAPHIC SCALE 1 inch = 50 ft.

EROSION AND SEDIMENT POLLUTION CONTROL NARRATIVE CORNWALL PROPERTIES. LLC - PRL INDUSTRIES

THIS NARRATIVE IS INTENDED TO ACCOMPANY THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR THE PROPOSED PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR CORNWALL PROPERTIES. LLC - PRL INDUSTRIES LOCATED BETWEEN BOYD STREET AND SR 0322 IN CORNWALL BOROUGH, LEBANON COUNTY. THIS NARRATIVE SHALL BE CONSIDERED A PART OF THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN.

PROJECT DESCRIPTION

THE TOTAL TRACT OF PROPERTY IN QUESTION IS 104.00 ACRES. THE TOTAL SITE AND EARTH DISTURBANCE AS PART OF THIS PROJECT IS 12.89 ACRES. THE PROJECT SITE MAINLY CONSISTS OF A SURFACE MINING OPERATION WHICH INCLUDES LARGE STONE CUT AREAS AND STOCKPILES OF MINED AGGREGATE MATERIALS, ALONG WITH SOME AREAS OF UN-MINED FOREST. BASED ON GOOGLE EARTH HISTORICAL IMAGERY, THE MINING ON THE SITE BEGAN BETWEEN 2005 AND 2008, EROM 2008 TO THE EARLY 1990'S THE SITE HAS WAS FORESTED. THE SITE IS BORDERED TO THE NORTH BY BOYD STREET, TO THE EAST AND SOUTH BY FORESTED AREAS WITHIN THE EXISTING PROPERTY TRACT, AND TO THE WEST BY STATE GAME LANDS 156. PROPOSED IMPROVEMENTS INCLUDE THE CONSTRUCTION OF A 75.000 S.F. MANUFACTURING FACILITY WITH ASSOCIATED OFFICE SPACE, EMPLOYEE PARKING LOT. TRUCK LOADING AREAS, AND ACCESS DRIVE. THE PROJECT WILL BE SERVED BY AN ON-LOT SEPTIC SYSTEM. ON-LOT WELL AND INCLUDE THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES. THE ANTICIPATED SITE DISTURBANCE SHALL INCLUDE GRADING AS WELL AS ADDITIONAL IMPERVIOUS AREA WHICH WILL BE TREATED ON-SITE BY STORMWATER MANAGEMENT BMPS. ONE (1) ABOVE GROUND INFILTRATION BASIN IS PROPOSED TO MANAGE THE SITE RUNOFF. STORMWATER RUNOFF FROM THE SITE WILL REACH TWO (2) SEPARATE UNT'S TO THE SNITZ CREEK AS IDENTIFIED IN THE WETLAND INVESTIGATION REPORT. THE NEAREST MAPPED DOWNSTREAM SURFACE WATER IS THE SNITZ CREEK WHICH IS DESIGNATED AS A TROUT STOCKED FISHERY (TSF). THE SNITZ CREEK IS IMPAIRED ACCORDING TO CATEGORY 4A OF THE PA INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT FOR AQUATIC LIFE: AGRICULTURE - NUTRIENTS. THE SNITZ CREEK IS ALSO IMPAIRED ACCORDING TO CATEGORY 5 OF THE PA INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT FOR RECREATIONAL: SOURCE UNKNOWN - PATHOGENS.

FHERMAL IMPACTS ANALYSIS

ALL EXISTING RUNOFF DISCHARGING FROM THE SITE TO THE WEST (DISCHARGE POINTS 002 - 004) LEAVES THE SITE UN-DETAINED WITH NO TREATMENT OF THIS RUNOFF IN ANY WAY. EXISTING RUNOFF DISCHARGING FROM THE SITE TO THE NORTH (DISCHARGE POINT 001) IS DETAINED BY AN EXISTING STORMWATER BASIN THAT APPEARS TO HAVE BEEN INSTALLED WHEN THE MINING BEGAN IN THE MID-2000'S. ONE (1) INFILTRATION BASIN IS PROPOSED TO TREAT THE MAJORITY OF THE DISTURBED SITE AND PROPOSED IMPERVIOUS AREAS. RUNOFF REACHING THE INFILTRATION BASIN WILL BE COOLED BY THE NATIVE VEGETATION IN THE BASIN BOTTOM BEFORE BEING INFILTRATED THROUGH THE ENGINEERED SOIL MIX AND INTO THE GROUND. OVERFLOW FROM INFILTRATION BASIN 1 WILL THEN FLOW INTO THE EXISTING STORMWATER BASIN LOCATED ON SITE. SHADE TREES ARE ALSO PROPOSED IN AND AROUND THE PARKING LOTS AND PAVED AREAS TO SHADE THESE AREAS AND PROVIDE ADDITIONAL TEMPERATURE RELIEF FOR RUNOFF THAT FLOWS OVER THE IMPERVIOUS SURFACES.

DOWNSTREAM WATERCOURSE ANALYSIS

THE FOLLOWING IS AN EXCERPT FROM THE PA DEP FAQ SHEET LABELED CHAPTER 102 OFF-SITE DISCHARGES OF STORMWATER TO VON-SURFACE WATERS (JANUARY 2, 2019). FAQ #2 STATES, "PERSONS PROPOSING TO DISCHARGE MUST HAVE THE LEGAL AUTHORITY TO DISCHARGE THEIR STORMWATER EITHER THROUGH EITHER A COMMON LAW EASEMENT OR AN EXPRESS EASEMENT. FOR SITES THAT DISCHARGE TO EXISTING SWALES, DITCHES, STORM SEWERS OR SIMILAR STRUCTURES WHERE THE NEW ACTIVITIES WILL NOT RESULT IN A CHANGE IN VOLUME OR RATE OF STORMWATER RUNOFF (FOR ALL STORM EVENTS), THE EXISTING COMMON LAW EASEMENT COULD BE RELIED UPON."

THE SITE DISCHARGES TO EACH DISCHARGE POINT IN A SIMILAR MANNER AND AT A RATE THAT IS LESS THAN PRE-DEVELOPMENT FOR ALL STORM EVENTS

DP 001 - DISCHARGES DIRECTLY TO AN EXISTING STORMWATER BASIN. OVERFLOW FROM THIS BASIN WILL DISCHARGE NORTH IN EXISTING STORM SEWER BELOW BOYD STREET PRIOR TO DISCHARGING TO AN UNT TO SNITZ CREEK.

DP 002, DP 003, DP 004 - ALL DISCHARGE IN A SHEET FLOW MANNER TO THE WESTERN PROPERTY LINE. RUNOFF LEAVING THESE DISCHARGE POINTS WILL FLOW THROUGH 300' - 500' OF EXISTING FOREST PRIOR TO REACHING AN UNT TO SNITZ CREEK.

SOIL INFORMATION AND GEOLOGY

THE FOLLOWING SOILS ARE FOUND WITHIN OR ADJACENT TO THE AREA TO BE DISTURBED BY EARTH MOVING ACTIVITIES. THESE SOILS CAN ERODE WHEN DISTURBED. EROSION WILL BE CONTROLLED WITH STANDARD EROSION CONTROLS SUCH AS FILTER SOCK, SLOPE AND SWALE MATTING, RIPRAP OUTLET PROTECTION, ROCK FILTER, ROCK CONSTRUCTION ENTRANCE, AND SEDIMENT BASIN.

Map Symbol	Soil Name	Slope	Hydrologic Group
Qu	Quarries	-	-
UoC	Ungers extremely stony loam	8-25%	В

*IF SOILS ARE BOLD THEY ARE DISTURBED DURING CONSTRUCTION ON THIS PROJECT.

THE SITE IS UNDERLAIN BY THE HAMMER CREEK FORMATION AND HAMMER CREEK CONGLOMERATE FORMATION WHICH ARE COMPRISED OF SANDSTONE, SILTSTONE, MUDSTONE, AND QUARTZ CONGLOMERATE. THE PA DEP'S EMAPPA DOES NOT IDENTIFY ANY KARST FEATURES ON SITE OR WITHIN THE IMMEDIATE VICINITY OF THE PROJECT AREA. THE GEOTECHNICAL REPORT PREPARED BY ECS MID-ATLANTIC, LLC DOES NOT IDENTIFY ANY KARST CONCERNS ON THE SITE. BASED ON THE AVAILABLE INFORMATION, THE RISK OF KARST ACTIVITY ON THE SITE IS LOW. SHOULD A GEOTECHNICAL HAZARD BE ENCOUNTERED, THE LOCAL CONSERVATION DISTRICT WILL BE IMMEDIATELY CONTACTED AND A GEOTECHNICAL ENGINEER WILL BE REQUIRED TO OVERSEE ANY MITIGATION MFASURES

UNGERS SOILS - THE UNGERS SERIES CONSISTS OF DEEP AND VERY DEEP. WELL DRAINED SOILS FORMED IN RESIDUUM FROM RED SANDSTONE AND SHALE. SLOPES RANGE FROM 0 TO 60 PERCENT. PERMEABILITY IS MODERATE. MEAN ANNUAL PRECIPITATION IS 43 INCHES. MEAN ANNUAL TEMPERATURE IS 52 DEGREES F. UNGERS SOILS MAY BE SUSCEPTIBLE TO CUT BANKS AND CAVE INS. CORROSIVE TO CONCRETE, AND EASILY ERODIBLE. THIS SOIL MAY ALSO BE SUSCEPTIBLE TO LOW STRENGTH/LANDSLIDES, SLOW PERCOLATION, AND FROST ACTION.

SOIL USE LIMITATIONS AND RESOLUTIONS

- CUT-BANK CAVING: ALL APPLICABLE OSHA STANDARDS AND REGULATIONS SHALL BE IMPLEMENTED AT ALL TIMES DURING TRENCHING AND EXCAVATION OPERATIONS ON OF CONCRETE: ALL UNDERGROUND FOUNDATIONS AND STRUCTURES SHALL BE PROPERLY PROTECTED AGAINST
- CORROSION, WHICH MAY INCLUDE COATING THESE STRUCTURES WITH CORROSION-RESISTANT MATERIAL. • EASILY ERODIBLE: EROSION AND SEDIMENT POLLUTION CONTROLS WILL BE IMPLEMENTED TO AVOID THE TRANSPORTATION OF
- SEDIMENT-LADEN WATER OFF-SITE. • LOW STRENGTH/LANDSLIDE PRONE: THE MAXIMUM PROPOSED SLOPE ON THE SITE IS 3:1. THIS WILL REDUCE THE POTENTIAL FOR EROSION AND LAND SLIDE ACTION. ALL PROPOSED BERMS SHALL BE COMPACTED FULLY IN ORDER TO PROTECT AGAINST
- LANDSLIDES. AND SHALL BE STABILIZED IMMEDIATELY. • SLOW PERCOLATION: ADEQUATE PRECAUTIONS WILL BE TAKEN TO ENSURE THAT THE PCSM BMPS INFILTRATE WITHIN THE REQUIRED TIME PERIOD. INCLUDING INFILTRATION TESTING AND SOIL MODIFICATION/UNDERDRAIN INSTALLATION. IF NECESSARY. INFILTRATION TESTS PREVIOUSLY PERFORMED INDICATE THAT THE INFILTRATION RATES ARE ADEQUATE.
- CONSTRUCTION PHASE INFILTRATION TESTING WILL BE PERFORMED TO CONFIRM THE DESIGN RATES UTILIZED. • FROST ACTION: THE PROJECT'S IMPERVIOUS SURFACES SHALL BE GRADED AT A MINIMUM OF 2% IN ONE DIRECTION, SO THAT WATER WILL NOT COLLECT ON THE SURFACE AND CAUSE DAMAGE DURING FREEZE/THAW CYCLES.

GENERAL SOIL NOTES

1. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL NEED TO HAVE APPROPRIATE E&S CONTROLS.

- 2. 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
- 3. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 4. 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. 5. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 6. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 7. THE LOCAL CONSERVATION DISTRICT SHALL BE CONTACTED IF SEEPS OR SPRINGS ARE ENCOUNTERED AND THE DESIGNS ARE ALTERED DURING CONSTRUCTION AND THEY SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

CALCULATIONS

TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES WERE DESIGNED IN ACCORDANCE WITH THE STANDARDS ESTABLISHED IN THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (PA DEP BUREAU OF WATERWAYS ENGINEERING AND WETLANDS, MARCH 2012).

CONSERVATION DISTRICT GENERAL E&S NOTES

- 1. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE LOCAL 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.
- 2. 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 LOCAL CONSERVATION DISTRICT.
- 3. 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.
- 4. 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.
- 5. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 6. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED AND FULLY IMPLEMENTED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS

- RE-USE.)

TEMPORARY CONTROL MEASURES

- 1. TOPSOIL STOCKPILE
- MINIMUM
- CONTAINED HEREON.
- c. STOCKPILES SHALL BE LOCATED SO THAT ALL SWALES CAN FUNCTION AS DESIGNED. d. STOCKPILE HEIGHTS MUST NOT EXCEED 35' IN HEIGHT. SIDE SLOPES SHALL BE 2:1 OR FLATTER.
- 2. SEDIMENT BASIN
- THIS REPORT. NOTED ON THE CLEANOUT STAKE FOR THAT BASIN. ALL SEDIMENT REMOVED FROM THE BASIN SHALL BE DISPOSED WITHIN
- 3. SILT SOCK

SEED.

- a. SILT SOCK SHALL BE USED TO INTERCEPT SEDIMENT-LADEN RUNOFF FROM SMALL WATERSHEDS.
- ANGLE TO THE MAIN SOCK ALIGNMENT c. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH ½ THE ABOVE GROUND HEIGHT OF SOCK.
- EXCESSIVE FLOWS, A NEW SECTION OF SILT SOCK SHALL BE INSTALLED.
- 4. INTERIM STABILIZATION / TEMPORARY EROSION CONTROL MATTING EXPOSED AREAS.
- THE E&SPC PLAN.
- SPECIFICATIONS CONTAINED HEREON.
- 5. ALTERNATIVE ROCK CONSTRUCTION ENTRANCE
- EXISTING ROADWAY
- SPECIFICATIONS.

6. SEDIMENT SKIMMER

- a. A ROPE SHALL BE ATTACHED TO THE SKIMMER ARM TO FACILITATE ACCESS TO THE SKIMMER ONCE INSTALLED.
- b. SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
- c. ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION. 10. ANY SEDIMENT REMOVED FROM BMPS DURING CONSTRUCTION WILL BE RETURNED TO UPLAND AREAS ON SITE AND INCORPORATED INTO THE SITE GRADING IN A MANNER THAT WILL NOT CAUSE EROSION OR SEDIMENTATION. ALL AREAS d. ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED TO ALLOW THE SKIMMER TO RESPOND TO DISTURBED DURING THIS PROCESS WILL BE MULCHED AND PERMANENTLY STABILIZED WITH SEED. FI UCTUATING WATER FI EVATIONS
- e. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT CLEAN-OUT STAKE OR THE TOP OF THE LANDING DEVICE. f. A SEMI-CIRCULAR LANDING ZONE MAY BE SUBSTITUTED FOR THE GUIDE RAILS
- 7. INLET FILTER BAGS

- b. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG IS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. C. ACCUMULATED SEDIMENT SHOULD BE DISPOSED OF IN THE APPROVED MANNER. BAGS THAT WILL BE REUSED SHOULD BE RINSED AT A LOCATION WHERE THE RINSE WATER WILL ENTER A SEDIMENT TRAP OR SEDIMENT BASIN.
- d. DAMAGED FILTER BAGS SHOULD BE REPLACED.
- 8. ROCK FILTER a. A RIPRAP BERM SHALL BE PROVIDED WHERE SHOWN ON THE PLAN AND AT ALL LOCATIONS OF CONCENTRATED FLOWS.
- b. A 6" LAYER OF COMPOST SHALL BE ANCHORED TO THE UPSLOPE SIDE OF THE ROCK FILTER.
- c. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE FILTER.
- OR NEW STONE SHALL BE USED TO REBUILD THE FILTER.

PERMANENT CONTROL MEASURES

- 1. PERMANENT GRASS / LEGUME COVER
- ATTACHED E&SPC PLAN. CONTAINED ON THE ATTACHED E&SPC PLAN.

2. RIP - RAP OUTLET PROTECTION

- THE OUTLET PIPE.
- 3. CHANNEL/SLOPE LINING INSTALLATION
- a. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
- THE TRENCH AFTER STAPLING. c. ROLL CENTER BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- APART TO SECURE BLANKETS.
- e. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- STAGGERED PATTERN.
- TRENCH AFTER STAPLING.

STABILIZATION SPECIFICATIONS

- ACTIVITIES.
- CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

7. 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

8. 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".

a. A STOCKPILE SHALL BE USED TO CONTAIN ALL STRIPPED TOPSOIL IN A LIMITED AREA IN ORDER TO KEEP DISTURBANCE TO A b. STOCKPILES SHALL BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATION

a. THE PROPOSED INFILTRATION BASIN WILL SERVE AS A SEDIMENT BASIN DURING THE CONSTRUCTION PHASE. REQUIRED SEDIMENT STORAGE AND DEWATERING VOLUMES ARE SPECIFIED ON THE STANDARD E&S WORKSHEETS PRESENTED LATER IN b. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM EACH FACILITY WHEN IT HAS REACHED THE CLEAN OUT ELEVATION

THE LIMITS OF DISTURBANCE, AWAY FROM STEEP SLOPES, AND IN A MANNER THAT WILL NOT CAUSE EROSION OR SEDIMENTATION. ALL AREAS DISTURBED DURING THIS PROCESS SHALL BE MULCHED AND PERMANENTLY STABILIZED WITH

b. SILT SOCK MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF THE SILT SOCK SHALL EXTEND UP-SLOPE AT A 45-DEGREE

d. ALL AREAS OF CONCENTRATED FLOW AND AT ALL AREAS WHERE THE SILT SOCK HAS COLLAPSED OR UNDERCUT DUE TO

a. TEMPORARY SEEDING/MATTING AND MULCHING SHALL BE APPLIED WHERE INDICATED TO PROVIDE INTERIM STABILIZATION TO

b. TEMPORARY SEEDING/MULCHING/MATTING SHALL BE AS APPLIED AS SPECIFIED ON THE SEEDING SCHEDULE CONTAINED ON

C. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS THAT ARE NOT AT FINISHED GRADE AND WILL BE RE-DISTURBED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATION CONTAINED HEREON. DISTURBED AREAS THAT ARE AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING

a. A STABILIZED PAD OF CRUSHED STONE SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC WILL BE ENTERING AND LEAVING THE SITE. THE ROCK CONSTRUCTION ENTRANCE IS USED TO ELIMINATE THE TRACKING OR FLOWING OF SEDIMENT ONTO THE

b. ROCK CONSTRUCTION ENTRANCE SHALL BE A MINIMUM OF 100'L AND 20'W. REFER TO THE PLAN DETAIL FOR ADDITIONAL

a. INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT GREATER THAN 0.25" IN

d. ROCK FILTERS WILL BE REMOVED WHEN CLOGGED WITH SEDIMENT. THE STONE SHALL BE WASHED FREE OF ALL SEDIMENT

a. ALL DISTURBED AREAS THAT ARE NOT PAVED SHALL BE PERMANENTLY STABILIZED WITH GRASS TO MINIMIZE EROSION. ALL SWALES SHALL BE PERMANENTLY SEEDED AS REQUIRED IN ACCORDANCE WITH THE SEEDING SPECIFICATION SHOWN ON THE

b. PERMANENT GRASS COVER SHALL BE APPLIED AS SPECIFIED IN ACCORDANCE WITH THE SEEDING SCHEDULE AND NOTES

a. RIP-RAP SHALL BE USED AT ALL PIPE OUTLETS TO REDUCE THE OUTFLOW VELOCITY AND MINIMIZE EROSION POTENTIAL AT b. RIP-RAP SHALL BE INSTALLED IN ACCORDANCE WITH THE DIMENSIONS AND MATERIALS SHOWN ON THE ATTACHED PLAN.

b. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT

d. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP, USE A DOUBLE ROW OF STAGGERED STAPLES 4"

f. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (2" FOR C350 MATTING). g. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40-FOOT INTERVALS. USE A ROW

OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A h. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE

1. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE

2. 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

- 3. 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.
- 4. AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES (12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUT-SLOPES SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL.
- 5. LIME AND FERTILIZER SHOULD BE APPLIED IN ACCORDANCE WITH SOIL TEST RECOMMENDATIONS. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY AT LEAST 6 TONS OF AGRICULTURAL GRADE LIMESTONE AND 1000 POUNDS OF 10-20-20 FERTILIZER PER ACRE.
- 6. APPLY SEED AT REQUIRED RATES. IF LEGUMES ARE PLANTED, BE SURE TO INOCULATE THE SEED WITH THE CORRECT LEGUME INOCULANT SEED MAY BE BROADCAST ON THE SURFACE AND A LAYER OF MULCH APPLIED AT THE NECESSARY RATES. HYDROSEEDING IS ANOTHER METHOD OF SEEDING, WHERE THE SEED, FERTILIZER, AND MULCH ARE MIXED WITH WATER TO FORM AN EMULSION. THIS METHOD SHOULD ONLY BE DONE WITH THE CORRECT EQUIPMENT OR BY PROFESSIONALS.
- 7. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 12 INCHES ALONG CONTOUR WHENEVER POSSIBLE PRIOR TO SEEDING.
- 8. 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.
- 9. AN EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL DISTURBED SLOPES STEEPER THAN 3:1, ALL AREAS OF CONCENTRATED FLOWS, AND DISTURBED AREAS WITHIN 50' OF A SURFACE WATER.

MAINTENANCE

- 1. THE APPLICANT/OR HIS DESIGNEE SHALL BE RESPONSIBLE FOR MAINTAINING ALL FACILITATES SHOWN ON THIS PLAN.
- 2. DIVERSIONS, CHANNELS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
- 3. ANY PERMANENTLY SEEDED AREA THAT BECOMES ERODED OR DISTURBED SHALL HAVE THE TOPSOIL REPLACED, THE GRASS RE-SOWN AND MULCH REAPPLIED, OR, AT THE DISCRETION OF THE OWNER, SOD INSTALLED.
- 4. SILT SOCK MUST BE INSTALLED AT LEVEL GRADE ALONG THE CONTOURS. BOTH ENDS OF EACH SILT SOCK SECTION MUST EXTEND AT LEAST 8 FEET UP-SLOPE AT 45-DEGREE ANGLES TO THE MAIN ALIGNMENT. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE SILT SOCK.
- 5. ANY SILT SOCK SECTION THAT HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A NEW SECTION OF SILT SOCK.
- 6. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- 7. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE (1) YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- 8. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER. WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS), TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
- 9. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL BMPS MUST BE MAINTAINED PROPERLY, MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS, ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 11. E&S BMPS SHALL BE INSPECTED FOLLOWING EACH MEASURABLE RAINFALL THROUGH THE DURATION OF THE PROJECT. INSPECTIONS SHALL BE LOGGED ON DEP FORM 3800-FM-BCW0271D (DATED 12/2019) AND SHALL SHOW THE DATES THAT F&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THAT THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO THE COUNTY CONSERVATION DISTRICT OR OTHER REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

STAGING OF EARTHMOVING

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED. CONSTRUCTION OF THE SITE IMPROVEMENTS IS EXPECTED TO BEGIN IN THE SUMMER OF 2024. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. CONSTRUCTION WILL PROCEED IN A TIMELY MANNER IN ORDER TO LIMIT THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLILITION THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION. SHOULD ANY SINKHOLES OR GROUNDWATER SOURCES BE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER IMMEDIATELY. 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.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. ANY DEVIATION FROM THE FOLLOWING SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT

SEQUENCE OF CONSTRUCTION

- 1. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE CONTRACTOR SHALL INVITE ALL SUB-CONTRACTORS, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE CIVIL ENGINEER, AND A REPRESENTATIVE OF THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING. PERIMETER E&S CONTROLS MAY BE INSTALLED PRIOR TO THE PRE-CONSTRUCTION MEETING.
- 2. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- 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 OR BY DEP PRIOR TO IMPLEMENTATION.
- 4. INSTALL THE ROCK CONSTRUCTION ENTRANCE AS SHOWN ON THE ATTACHED PLAN.
- 5. THE LIMITS OF DISTURBANCE (LOD) SHOULD BE MARKED PRIOR TO DISTURBANCE ACTIVITIES (I.E. SURVEY STAKES, POSTS & ROPE, CONSTRUCTION FENCE, ETC.)
- 6. LOCATE, STAKE, AND FLAG AREAS MARKED AS INFILTRATION PCSM BMP'S (I.E. INFILTRATION BASIN 1). REFER TO PCSM PLAN FOR ADDITIONAL INFORMATION AND LOCATION OF PCSM BMP'S. THESE AREAS SHOULD NOT BE COMPACTED DURING CONSTRUCTION. NO CONSTRUCTION TRAFFIC SHALL OCCUR IN THESE AREAS EXCEPT AS NECESSARY FOR EXCAVATION/GRADING.
- 7. INSTALL PERIMETER SILT SOCK ON THE SITE AT LOCATIONS 1-23 AS INDICATED ON THE ATTACHED PLAN. SILT SOCK IS TO BE INSTALLED ALONG THE CONTOUR WHERE POSSIBLE, AT A LEVEL GRADE. THE SILT SOCK SHOULD BE POSITIONED IN SUCH A WAY AS TO PREVENT ANY SEDIMENT FROM LEAVING THE SITE SEDIMENT ACCUMULATING TO HALF THE HEIGHT OF THE SILT SOCK SHALL BE REMOVED IN ORDER TO RESTORE THE SEDIMENT STORAGE CAPACITY OF THESE AREAS. IN THE CASE OF A FAILURE OF THE SILT SOCK DUE TO HIGH FLOWS, A NEW SECTION OF SILT SOCK SHALL BE INSTALLED ACROSS THE FAILED PORTION OF THE SILT SOCK. AT NO POINT SHALL UN-STABILIZED AREA DRAIN OFFSITE UNCONTROLLED. THE SILT SOCK IN LOCATION 24 IS TO ENSURE SEDIMENTATION OF THE INFILTRATION BASIN BOTTOM AREA DOES NOT OCCUR AND SHOULD BE INSTALLED ONCE THE CONVERSION TO AN INFILTRATION BASIN IS COMPLETE.
- 8. PER 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 INSTALL SEDIMENT BASIN 1 WHICH WILL SERVE AS A SEDIMENT BASIN DURING CONSTRUCTION AND BE CONVERTED TO AN INFILTRATION BASIN UPON TRIBUTARY STABILIZATION. DISTURB ONLY THE MINIMUM AREA NECESSARY TO INSTALL THE SEDIMENT BASIN. THE SEDIMENT BASIN MUST BE CONSTRUCTED PRIOR TO ANY MAJOR EARTH DISTURBANCE, STRIPPING, OR CLEARING, INSTALL THE OUTLET PIPE ALONG WITH THE ASSOCIATED OUTLET STRUCTURE, CONSTRUCT IMPERVIOUS CLAY CORE, ANTI-SEEP COLLARS, AND BACKFILL EMBANKMENT, COMPACTING TO 95% MAX DRY DENSITY. INSTALL NORTH AMERICAN GREEN S200 SLOPE PROTECTION AT EMERGENCY SPILLWAY. INSTALL RIPRAP APRON AT THE BASIN OUTFALL. INSTALL SEED IN THE INTERIOR SLOPES AND BERMS OF BASIN. INSTALL CLEAN OUT STAKE, BAFFLES, AND SKIMMER WITHIN THE BASIN. REFER TO THE E&S SHEETS FOR ADDITIONAL DETAIL. A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ONSITE DURING SEDIMENT BASIN EXCAVATION AND INSTALLATION OF THE OUTLET PIPE, ANTI-SEEP COLLARS, AND CLAY CORE. 10. INSTALL SWALES A & B. ENSURE EROSION CONTROL LINING IS INSTALLED IN ACCORDANCE WITH THE PLAN DETAILS. INSTALL

ROCK FILTERS #1 AND #2. 11. IF SOIL IS TAKEN TO OR BORROWED FROM ANOTHER CONSTRUCTION SITE, SAID SITE MUST HAVE AN APPROVED E&SPC PLAN.

SEE THE "SOIL LIMITATIONS AND RESOLUTIONS" SECTION OF THIS E&S PLAN FOR FURTHER INFORMATION.

12. CLEAR AND STRIP ANY TOPSOIL ACROSS THE AREA OF THE BUILDING PAD AND PAVED AREAS AND PLACE ON THE TOPSOIL STOCKPILE AS SHOWN ON THE ATTACHED PLAN AND IN ACCORDANCE WITH PLAN DETAILS. ENSURE THE SILT SOCK BELOW THE TOPSOIL STOCKPILE IS INSTALLED AS SHOWN ON THE ATTACHED PLAN.

13. ROUGH GRADE THE DISTURBED AREA AS NECESSARY FOR CONSTRUCTION OF THE BUILDING, ACCESS DRIVE, AND PAVED

14. INSTALL WATER, SANITARY SEWER, STORM SEWER, AND ALL OTHER UTILITIES AT THIS TIME. INSTALL INLET PROTECTION ON ALL INLETS IDENTIFIED ON THE PLAN. DURING AND FOLLOWING STORM EVENTS PROVIDE A MEANS TO DEWATER PITS AND UTILITY TRENCHES. SPOIL MATERIAL FROM EXCAVATION OF THE TRENCHES SHALL BE PLACED ON THE UP-SLOPE SIDE OF THE TRENCH, THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THAT WHICH WILL BE BACKFILLED THE SAME DAY, AND ANY AFFECTED BMP'S SHALL BE IMMEDIATELY STABILIZED AND REPAIRED. THE TOPSOIL EXCAVATED FROM THE TRENCH SHALL BE CAREFULLY REMOVED AND STOCKPILED SEPARATELY FROM THE SUBSOIL. THE TOPSOIL SHALL BE RESTORED TO THE GRADED AREAS TO PRE-CONSTRUCTION CONDITIONS. WATER PUMPED FROM PITS AND TRENCHES SHALL BE FILTERED BY MEANS OF A FILTER BAG. IMMEDIATELY AFTER TRENCHES HAVE BEEN BACKFILLED, FINE-GRADE AREA.

15. INSTALL THE STONE SUB-BASE FOR THE ACCESS DRIVE, PAVED AREAS, AND CONCRETE SLABS PER PLAN REQUIREMENTS.

16. CONSTRUCT THE PROPOSED BUILDING AND ATTACHED UTILITIES (ROOF DRAINS, SANITARY CONNECTIONS, WATER CONNECTIONS, ETC.) IMMEDIATELY UPON COMPLETION OF EARTH DISTURBANCE ACTIVITIES FINAL GRADE AND STABILIZE THE

17. FINE GRADE ANY REMAINING AREAS AS SHOWN ON THE GRADING PLAN. DURING THIS TIME, FRAME EARTH MOVING EQUIPMENT WILL BE EMPLOYED TO REMOVE TOPSOIL AND EXCESS "FILL" MATERIAL. IF ANY EXISTS, SPREAD A MINIMUM OF 6 INCHES OF TOPSOIL ON FRESHLY GRADED AREAS; REFER TO THE TOPSOIL APPLICATION NOTES ON THE PLAN. FINAL PASSES DURING FINE GRADING SHALL BE MADE AT RIGHT ANGLES TO THE SLOPES. PREPARE THE REMAINDER OF THE DISTURBED AREA FOR PERMANENT STABILIZATION. SEEDBED SHALL BE PREPARED IN ACCORDANCE WITH ACCEPTED PRACTICES. EACH SEED MIXTURE SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RATES AND INSTRUCTIONS.

18. 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.

19. PAVE THE REQUIRED AREAS. DO NOT INSTALL SURFACE (WEARING) COURSE UNTIL ALL DOWNSTREAM VEGETATED AREA IS STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS). IF EARTHMOVING ACTIVITIES CEASE FOR FOUR (4) DAYS OR MORE TEMPORARY STABILIZATION SHALL BE APPLIED. SEE "STABILIZATION SPECIFICATIONS" IN THE E&S PLAN FOR FURTHER DETAILS.

20. ALL SEDIMENT DEPOSITED WITHIN STORM SEWER CONVEYANCE PIPES SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT AND PRIOR TO CONVERSION OF THE SEDIMENT BASINS TO INFILTRATION BASINS. ANY WATER PUMPED FROM THE STORMWATER BASIN OR OTHER AREA OF THE SITE SHALL BE PUMPED THROUGH A FILTER BAG AND THE COLLECTED SEDIMENT SHALL BE DISPOSED OF PROPERLY. ALL AREAS DISTURBED DURING THIS PROCESS SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING. THE COUNTY CONSERVATION DISTRICT SHOULD BE CONTACTED PRIOR TO CONVERSION OR REMOVAL OF ANY E&S BMPS AND MAY REQUIRE A SITE INSPECTION. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS) WITH APPROVAL OF THE LOCAL CONSERVATION DISTRICT.

21. UPON STABILIZATION OF ALL TRIBUTARY DISTURBED AREAS, MODIFY SEDIMENT BASIN 1 AS REQUIRED TO INSTALL INFILTRATION BASIN 1 AS SHOWN ON THE PCSM PLAN. THE INFILTRATION BASIN SHALL BE OVER-EXCAVATED AND SCARIFIED IN ACCORDANCE WITH THE PLAN DETAIL. THE EXCAVATOR SHOULD AVOID EXCAVATING TO THE FINAL DESIGN INVERT UNTIL THE ENGINEERED SOIL MIX IS READY TO BE PLACED. THIS WILL MINIMIZE THE EXPOSURE OF SUBGRADE SOIL AND AID IN REDUCING COMPACTION. WHEN EXCAVATING TO FINAL INVERT SUBGRADES UTILIZE A SMOOTH (TOOTHLESS) BLADE BUCKET TO AVOID LOCALIZED COMPACTION ONCE NATIVE SOILS ARE REACHED DURING EXCAVATION INFILTRATION TESTING SHALL BE PERFORMED TO VERIFY DESIGN RATES. INSTALL THE UNDERDRAIN SYSTEM IN ACCORDANCE WITH THE PLAN DETAILS. PLACE THE ENGINEERED SOIL MIX TO THE REQUIRED ELEVATION WITHIN THE INFILTRATION BASIN. INSTALL THE SILT SOCK AT LOCATION 24 TO PREVENT ANY POTENTIAL SEDIMENTATION OF THE ENGINEERED SOILS ANY SOIL COMPACTION SHOULD B AVOIDED IN THE BASIN BOTTOM. REMOVE THE SEDIMENT BASIN BAFFLES, CLEANOUT STAKE, AND SKIMMERS. WHEN SEEDING THE BASIN MIXES BE SURE TO HAND RAKE THE SEED INTO THE SOIL. A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ONSITE DURING INFILTRATION TESTING, INSTALLATION OF THE UNDERDRAIN SYSTEM, ENGINEERED SOILS, AND FINAL GRADING/SEEDING OF INFILTRATION BASIN 1

22. THE OPERATOR SHALL REMOVE FROM THE 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. AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY DUMP. OR DISCHARGE ANY BUILDING MATERIAL OR WASTES ON OR OFF THE SITE. THESE BUILDING WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.

23. PER 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 NOT IF SOONER. THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED 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."

CONTRACTOR NOTES

- 1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY DEP PRIOR TO IMPLEMENTATION.
- 2. PER 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."
- 3. IF SOIL IT IS TAKEN TO OR BORROWED FROM ANOTHER CONSTRUCTION SITE, SAID SITE MUST HAVE AN APPROVED E&SPC PLAN. SEE THE "SOIL LIMITATIONS AND RESOLUTIONS" SECTION OF THIS E&S PLAN FOR FURTHER INFORMATION.
- 4. 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.
- 5. ALL SEDIMENT DEPOSITED WITHIN STORM SEWER CONVEYANCE PIPES SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT. ANY WATER PUMPED FROM THE STORMWATER BASIN OR OTHER AREA OF THE SITE SHALL BE PUMPED THROUGH A FILTER BAG AND THE COLLECTED SEDIMENT SHALL BE DISPOSED OF PROPERLY. ALL AREAS DISTURBED DURING THIS PROCESS SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING. THE COUNTY CONSERVATION DISTRICT SHOULD BE CONTACTED PRIOR TO CONVERSION OR REMOVAL OF PRIMARY E&S BMPS AND MAY REQUIRE A SITE INSPECTION. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS)
- 6. THE OPERATOR SHALL REMOVE FROM THE 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., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY DUMP. OR DISCHARGE ANY BUILDING MATERIAL OR WASTES ON OR OFF THE SITE. THESE BUILDING WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.
- 7. PER 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 LIPON SUBMISSION OF THE NOT IF SOONER. THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED 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."

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TRASH RACK MAY BE REMOVED AFTER CONVERSION FROM SEDIMENT BASIN TO

ARM ASSEMBLY

- "C" ENCLOSURE

- WATER

	SEDIMENT BASIN/TRAP DESIGN CHART										
BASIN/TRAP NO.	BASIN BOTTOM (FT)	INVERT OF SKIMMER ARM (FT)	TOP OF GRATE (FT)	SPILLWAY ELEVATION (FT)	SIZE OF DISCHARGE PIPE (IN)	(UPSTREAM) INV OF DISCHARGE PIPE (FT)	(DOWNSTREAM) INV OF DISCHARGE PIPE (FT)	PIPE LENGTH (FT)	HEIGHT OF RISER EXT.(FT)	SKIMMER	SILT SOCK BARRIER
BASIN 1	772.00	772.00	774.50	775.00	15	770.50	769.00	103		YES	NO

NO SCALE

PIPE DIA. Do

24

18

15

15

PIPE NO.

EW-18

EW-3

EW-39

EW-1

STORMWATER SWALE DETAIL NO SCALE

- APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
- I. 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 ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ALTERNATE ROCK CONSTRUCTION ENTRANCE NO SCALE

NO SCALE

RIPRAP SIZE	Rt (in)	Al (ft)	Alw (ft)	Atw (ft)
R-6	36	10	6	10
R-6	36	8	5	8
R-4	18	6	4	6
R-4	18	8	4	12

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT OF THE FILTERS. 2. IMMEDIATELY UPON STABILIZATION OF EACH CHANNEL, REMOVE ACCUMULATED SEDIMENT, REMOVE ROCK FILTER, AND STABILIZE DISTURBED AREAS.

NO SCALE

NO SCALE

APPLICATION	SPECIES	% PURE LIVE SEED	APPLICATION RATE	FERTILIZER (LBS/AC)	LIMING RATE	FINAL SEEDING DATE
NURSE CROP	ANNUAL RYEGRASS	98%	64 LBS/AC	50-50-50 N-P2O5-K2O	2000 LBS / AC	OCT. 15
	BIRDSFOOT TREFOIL	98%	P.L.S. IN LBS/AC 10	100-200-200	2000 LBS /	MARCH 15
PERMANENT	CROWN VETCH PLUS	98%	20	N-P2O5-K2O	AC	- OCTOBER 15
	TALL FESCUE	98%	30			

ALL SEEDED AREAS SHALL BE MULCHED WITH HAY OR STRAW APPLIED AT A RATE OF 3 TONS/ACRE. MULCH TO BE ANCHORED WITH WOOD CELLULOSE FIBER AT A RATE OF 750 LBS/ACRE.

STEEP SLOPE SEEDING SPECIFICATIONS NO SCALE

	APPLICATION	SPECIES	APPLICATION RATE ₁ (P.L.S. IN LBS/AC)	FERTILIZER (LBS/AC)	LIMING RATE ₂	FINAL SEEDING DATE		
	TEMPORARY	ANNUAL RYE	174	50-50-50 N-P2O5-K2O	2000 LBS / AC	OCTOBER 30		
		FINE FESCUES	60					
	PERMANENT	KENTUCKY BLUEGRASS	90	100-200-200 12000 LBS / N-P2O5-K2O AC	12000 LBS /	AUGUST 30 -		
		PERENNIAL RYEGRASS	25		OCTOBER 30			
	BASIN BOTTOM ERNST SEEDS RETENTION BASIN FLOOR MIX - LOW MAINTENANCE							
1	 PLS IS PURE LIVE SEED. PLS IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100. TO SECURE THE ACTUAL PLANTING RATE, DIVIDE THI POUNDS PLS BY THE PLS PERCENTAGE AS SHOWN ON THE SEED TAG OR AS PREVIOUSLY DISCUSSED. THUS, IF THE PLS CONTENT OF FINE FESCUES IS 50%, DIVIDE 7 PLS BY 0.50 TO OBTAIN 140 L PS OF SEED ADDE 							

LIMING RATE SHALL BE IN ACCORDANCE WITH SOIL TEST RESULTS. APPLY 6 TONS OF AGRICULTURAL GRADE LIMESTONE PER ACRE OF LAND DISTURBED BY DIVERSIONS AND DAMS.

3. ALL SEEDED AREAS SHALL BE MULCHED WITH HAY OR STRAW APPLIED AT A RATE OF 3 TONS PER ACES. MULCH TO BE ANCHORED WITH WOOD CELLULOSE FIBER AT A RATE OF 750 LBS PER ACRE. 4. ALL DIVERSIONS, CHANNELS, SED TRAPS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.

SEEDING & FERTILIZER SPECIFICATIONS

NO SCALE

