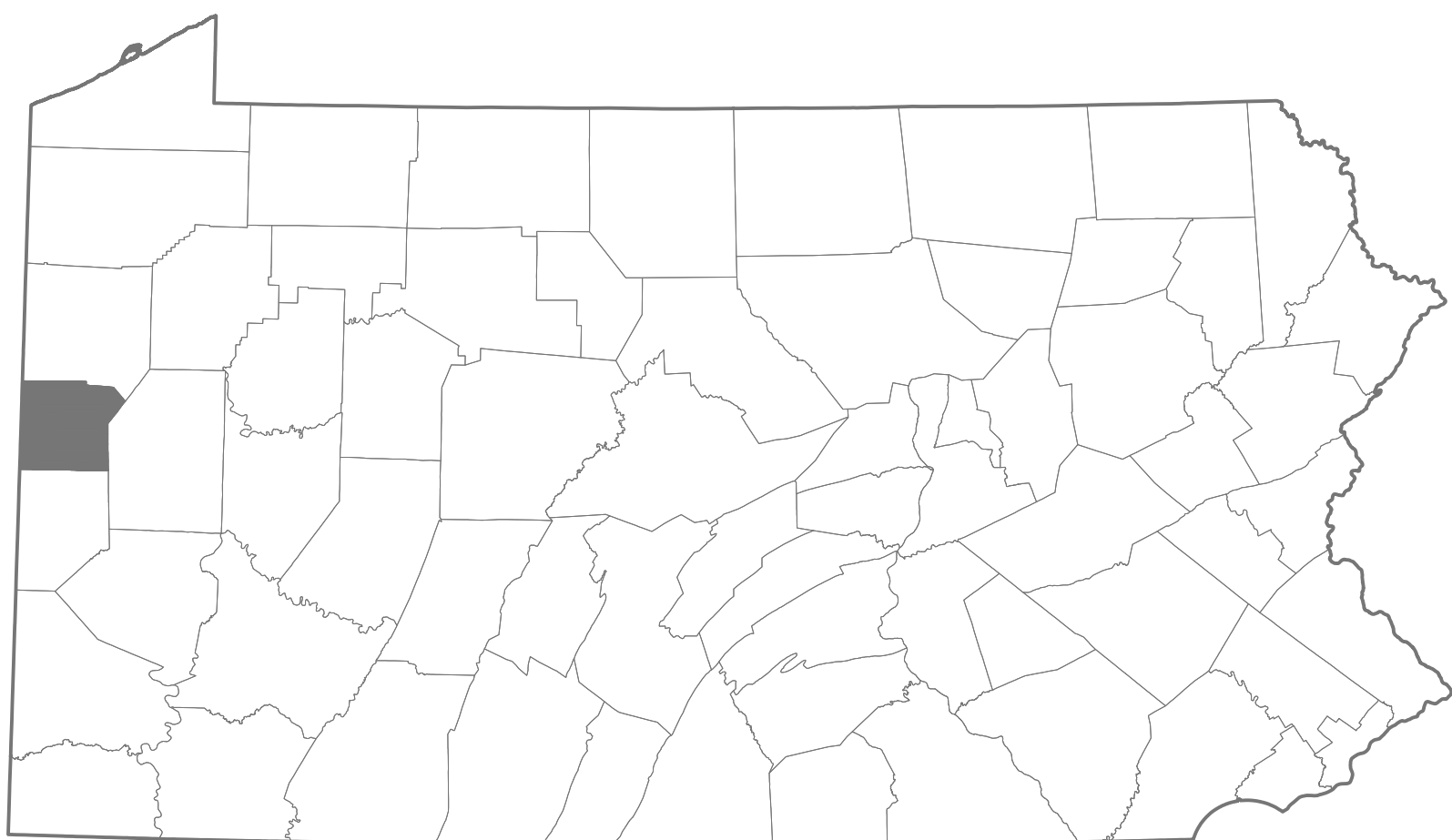


# COUNTY OF LAWRENCE

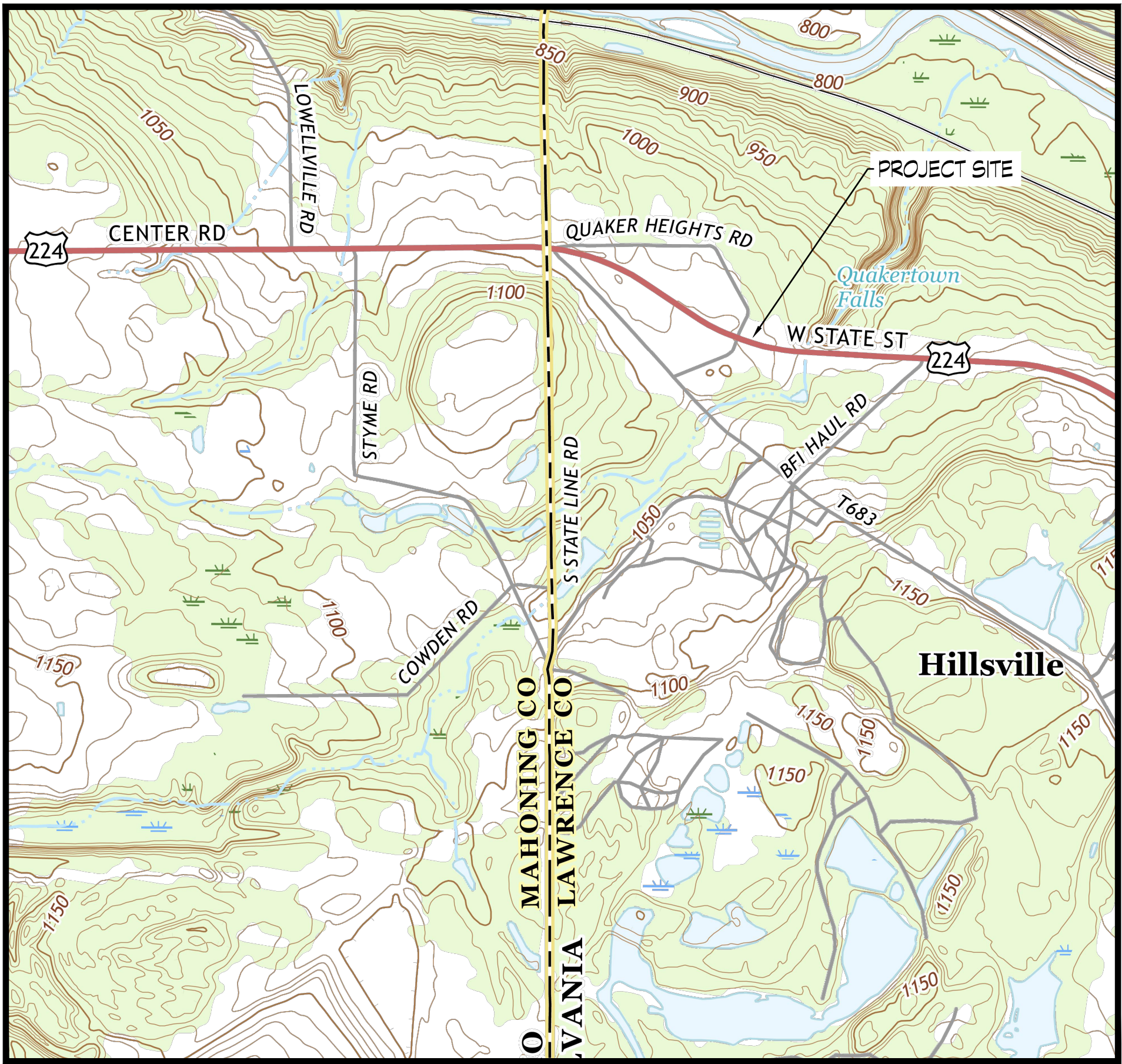
## MAHONING TOWNSHIP

### QUAKER FALLS RECREATION AREA

## PHASE II - OBSERVATION PLATFORMS AND SITE AMENITIES CONSTRUCTION

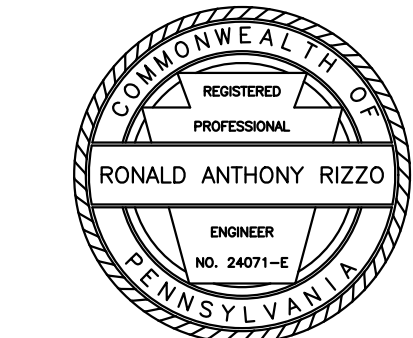


PROJECT LOCATION  
MAHONING TOWNSHIP  
LAWRENCE COUNTY



VICINITY MAP  
SCALE: 1" = 1000'

SHEET INDEX		
SHEET NUMBER	DRAWING NUMBER	DESCRIPTION
		COVER SHEET
2	G-001	GENERAL NOTES, LEGEND, & CONSTRUCTION SEQUENCE
3	G-002	EROSION & SEDIMENT POLLUTION CONTROL PLAN NOTES
4	C-101	EXISTING CONDITIONS & DEMOLITION SITE PLAN
5	C-102	PROPOSED CONDITIONS SITE PLAN
6	C-103	EROSION & SEDIMENT POLLUTION CONTROL PLAN
7	C-501	EROSION & SEDIMENT POLLUTION CONTROL PLAN DETAILS - SHEET 1 OF 2
8	C-502	EROSION & SEDIMENT POLLUTION CONTROL PLAN DETAILS - SHEET 2 OF 2
9	C-503	GENERAL DETAILS
10	S-500	VIEWING PLATFORM - 1, PLAN AND DETAILS
11	S-501	VIEWING PLATFORM - 2, PLAN AND DETAILS
-	-	APPROVED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN SET, 13 SHEETS.



Ronald Anthony Rizzo  
10/2/23

PROTECT YOURSELF  
A PHONE CALL CAN BE YOUR  
INSURANCE POLICY



WHAT YOU DON'T KNOW CAN HURT YOU.  
THE STATE OF PENNSYLVANIA REQUIRES NOTIFICATION OF  
EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.

PREPARED FOR:

COUNTY OF LAWRENCE  
430 COURT STREET  
NEW CASTLE, PA. 16101

PREPARED BY:








R.A.R.   
engineering group, inc.  
1135 butler avenue, new castle, pennsylvania 16101  
telephone: 724.652.1004 fax: 724.652.3814  
website: <https://www.rarengineering.com>

JUNE 2023

REVISIONS	1		
	2		
	3		
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	5		
	6		
	7		
	NUMBER	DATE	DESCRIPTION



**LEGEND (CONTINUED)**

- | CFS   | PROPOSED COMPOST FILTER SOCK SEDIMENT BARRIER      |
|---|--|
|  | PROPOSED PICNIC TABLES                             |
|  | PROPOSED LANDSCAPING                               |
|  | PROPOSED COMPOST SOCK CONCRETE WASHOUT FACILITY    |
|  | PROPOSED ROCK CONSTRUCTION ENTRANCE                |
|  | PROPOSED MATERIAL STOCKPILE                        |
|  | PROPOSED LIMITS OF DISTURBANCE (0.51 ACRES)        |
|  | PROPOSED EROSION CONTROL BLANKET INSTALLATION AREA |

1. NO GEOTECHNICAL INVESTIGATION HAS BEEN PERFORMED BY R.R. ENGINEERING GROUP, INC. R.R. ENGINEERING GROUP, INC. ASSUMES NO RESPONSIBILITY FOR ADDITIONAL WORK ASSOCIATED WITH UNFORESEEN SUBSURFACE CONDITIONS.
2. THE PROPERTY IS SUBJECT TO ANY AND ALL EXISTING RIGHT-OF-WAYS OR EASEMENTS ON RECORD.
3. EXISTING UTILITY LOCATIONS ON THE SITE ARE SHOWN IF KNOWN. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES VIA THE PENNSYLVANIA ONE CALL SYSTEM PRIOR TO PERFORMING ANY EARTH DISTURBANCE ACTIVITIES.
4. FIELD SURVEY PERFORMED BY R.R. ENGINEERING GROUP, INC.
5. IMPERVIOUS AREAS HAVE BEEN MINIMIZED TO THE MAXIMUM EXTENT POSSIBLE.
6. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACTIVITIES IN A MANNER THAT PRESERVES THE INTEGRITY OF TRIBUTARY 35476 TO THE MAHONING RIVER. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE PHYSICAL, BIOLOGICAL, AND CHEMICAL QUALITIES OF THE DOWNSTREAM STORMWATER RECEIVING WATERS DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL MINIMIZE LAND CLEARING, GRUBBING, GRADING, SOIL COMPACTION, AND EXTENT AND DURATION OF OVERALL EARTH DISTURBANCE TO THE MAXIMUM EXTENT POSSIBLE DURING CONSTRUCTION OF THE PROJECT.
8. NATURAL DRAINAGE FEATURES AND ASSOCIATED VEGETATION SHALL BE MAINTAINED BY THE CONTRACTOR TO THE MAXIMUM EXTENT POSSIBLE WITHIN THE LIMITS OF DISTURBANCE.
9. THE CONTRACTOR SHALL FIELD DELINEATE AND STAKE THE LIMITS OF DISTURBANCE PRIOR TO CONSTRUCTION. AREAS OUTSIDE THE LIMITS OF DISTURBANCE SHALL NOT BE DISTURBED AT ANY TIME.
10. THE PROJECT SITE IS CURRENTLY UNDEVELOPED AND IS LOCATED WITHIN THE CONSERVATION AND MIXED USE HIGHWAY ZONING DISTRICTS OF MAHONING TOWNSHIP.
11. WETLANDS ARE PRESENT AT THE SITE, BUT ARE LOCATED OUTSIDE THE LIMITS OF DISTURBANCE FOR THE PROJECT. THE CONTRACTOR SHALL NOT DISTURB ANY WETLANDS AT ANY TIME DURING CONSTRUCTION.
12. ALL DISTURBED AREAS ON SLOPES 3H:1V OR STEEPER OR WITHIN 50 FEET OF A SURFACE WATER (WETLAND OR MAN-MADE DRAINAGE CHANNEL) SHALL HAVE EROSION CONTROL BLANKETS INSTALLED ON ALL SEEDED AREAS.
13. EXCESS SOIL SHALL BE REMOVED FROM THE TIRES AND TRACKS OF ALL CONSTRUCTION VEHICLES PRIOR TO ENTERING ONTO ANY PUBLIC OR PRIVATE ROADWAYS.

ALL CONSTRUCTION SEQUENCES HAVE BEEN DESIGNED TO LIMIT EXPOSED DISTURBANCE AREAS TO THE MAXIMUM EXTENT POSSIBLE. REMOVAL OF EES CONTROL BMPs IS ALSO OUTLINED IN EACH SPECIFIC CONSTRUCTION SEQUENCE. THESE CONSTRUCTION SEQUENCES ARE INTENDED TO PROVIDE A GENERAL COURSE OF ACTION TO SATISFY ALL APPLICABLE REGULATORY AGENCIES' REQUIREMENTS FOR TEMPORARY AND PERMANENT SOIL EES CONTROL. ALL NECESSARY PARTS FOR THE PROPER AND COMPLETE EXECUTION OF WORK, WHETHER SPECIFICALLY MENTIONED OR NOT PERTAINING TO THE EES POLLUTION CONTROL PLAN, ARE TO BE PERFORMED BY THE CONTRACTOR. IT IS NOT INTENDED THAT THE DRAWINGS SHOW EVERY DETAILED PIECE OF MATERIAL OR EQUIPMENT. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS.

1. MOBILIZE ALL NECESSARY CONSTRUCTION EQUIPMENT TO THE PROJECT SITE.
2. DELINEATE ALL PROJECT BOUNDARY LIMITS AND PERFORM A PENNSYLVANIA ONE CALL TO ESTABLISH EXISTING UTILITY LOCATIONS.
3. INSTALL ROCK CONSTRUCTION ENTRANCES AT THE LOCATIONS SHOWN PRIOR TO PERFORMING WORK ON A SEGMENT OF TRAIL BETWEEN TWO PAVED AREAS. LIMIT CONSTRUCTION OF ROCK CONSTRUCTION ENTRANCES TO THE SEGMENT OF TRAIL CURRENTLY BEING CONSTRUCTED. INSTALL OTHER ROCK CONSTRUCTION ENTRANCES WITHIN THE LIMITS OF DISTURBANCE WHERE THE CONTRACTOR DEEMS NECESSARY FOR COMPLETION OF THE WORK. THE CONTRACTOR SHALL NOT ACCESS UNPAVED AREAS FROM PAVED AREAS UNTIL A ROCK CONSTRUCTION ENTRANCE HAS BEEN INSTALLED AND PROPERLY FUNCTIONING.
4. INSTALL COMPOST FILTER SOCKS IN THE LOCATIONS SHOWN PRIOR TO PERFORMING ANY EARTH DISTURBANCE.
5. ONCE THE RESPECTIVE EES POLLUTION CONTROLS ARE INSTALLED AND PROPERLY FUNCTIONING, PERFORM CLEARING AND GRUBBING OPERATIONS, WHERE APPLICABLE, WITHIN THE LIMITS OF DISTURBANCE. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO WHAT IS NECESSARY FOR COMPLETION OF THE WORK. AT NO TIME SHALL CLEARING AND GRUBBING OPERATIONS EXTEND BEYOND THE LIMITS OF DISTURBANCE.
6. ONCE AREAS DESIGNATED FOR CONSTRUCTION ACTIVITIES HAVE BEEN CLEARED AND GRUBBED WITHIN THE SEGMENT CURRENTLY BEING CONSTRUCTED, BEGIN EXCAVATION TO THE DEPTH AND WIDTH SHOWN. ANY REQUIRED STOCKPILING OF SOIL SHALL BE PERFORMED WITHIN A STOCKPILE LOCATION SHOWN AND SHALL HAVE A PROPER DOWNSLOPE PERIMETER BARRIER OF COMPOST FILTER SOCK INSTALLED PRIOR TO UTILIZATION OF THE STOCKPILE AREA. ROADWAY CONSTRUCTION ENTRANCE AND THE CONSTRUCTION OF THE VIEWING PLATFORMS MAY ALL COMMENCE AT THIS TIME WITHOUT RESTRICTION. THE CONTRACTOR SHOULD STAGE EXCAVATION OPERATIONS TO OCCUR ON DAYS IN WHICH INCLEMENT WEATHER IS NOT ANTICIPATED TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION TO OCCUR. THE CONTRACTOR SHALL TAKE EXTREME CAUTION DURING CONSTRUCTION NOT TO DISTURB STREAMS AND WETLANDS OUTSIDE THE LIMITS OF DISTURBANCE.
7. DISTURBED AREAS ADJACENT TO THE CONSTRUCTION ACTIVITIES (NOT INCLUDING POST-CONSTRUCTION STORMWATER MANAGEMENT FACILITIES) THAT HAVE NOT BEEN STABILIZED SHALL BE SOWN WITH TEMPORARY OR PERMANENT VEGETATION SPECIFIED HEREIN WITHIN FOUR (4) DAYS OF EARTH-WORK CESSATION. FOR VEGETATED AREAS TO BE CONSIDERED STABILIZED, THEY SHALL EXHIBIT A MINIMUM UNIFORM TO PERCENT PERENNIAL VEGETATED COVER. LANDSCAPE RESTORATION (MEADOW) AREAS SHALL BE PREPARED AND SOWN AS RECOMMENDED BY THE SEED SUPPLIER AND AS SPECIFIED HEREIN. ALL DISTURBED AREAS 30% OR STEEPER OR WITHIN 50 FEET OF A SURFACE WATER SHALL HAVE EROSION CONTROL BLANKETS INSTALLED.
8. ALL EES POLLUTION CONTROL MEASURES SHALL BE MAINTAINED UNTIL A SUITABLE SURFACE STABILIZATION IS ESTABLISHED THAT IS CAPABLE OF RESISTING ACCELERATED EROSION. ALL COMPOST FILTER SOCKS, AND ROCK FILTERS, SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. AS STATED BEFORE, FOR VEGETATED AREAS TO BE CONSIDERED STABILIZED, THEY SHALL EXHIBIT A MINIMUM UNIFORM TO PERCENT PERENNIAL VEGETATED COVER OR HAVE A COMPACTED GRAVEL SURFACE LAYER PLACED OVER THE AFFECTED AREAS. ONCE THIS COVER IS ESTABLISHED, ALL TRIBUTARY EROSION CONTROL MEASURES SHALL BE REMOVED. IF ANY NEW AREAS ARE DISTURBED DURING THIS PROCESS, THEY SHALL BE RE-GRADED AND RE-VEGETATED.

PROPERTY INFORMATION (SEE SHEET C-101)			
PARCEL IDENTIFIER	N/F OWNER	PARCEL I.D.	DOCUMENT NUMBER
1	COUNTY OF LAWRENCE	24-120200	2018-006663
2	ROMANO, ROBERT A. & FRANCES M.	24-030300	2003-017169
3	MAHONING TOWNSHIP	24-120202	2011-000347
4	RUSO, ANNA	24-031000	2018-002719
5	HILLSVILLE LIMESTONE COMPANY INC.	24-199300	2015-010352
6	GRZYBOWSKI, STANLEY	24-015300	1994-003193

1. PARCEL IDENTIFICATION NUMBERS, OWNERS, AND DEED BOOK PAGE AND VOLUME NUMBERS OR DOCUMENT NUMBERS WERE OBTAINED FROM THE LAWRENCE COUNTY, PENNSYLVANIA ASSESSMENT OFFICE GIS DATA WEBSITE AT:  
[HTTP://CO.LAWRENCE.PA.US/DEPARTMENTS/ASSESSMENT/OFFICE-LAWRENCE\\_COUNTY/LAWRENCE-COUNTY-A-GS-DATA/](http://co.lawrence.pa.us/departments/assessment/office-lawrence_county/lawrence-county-a-gs-data/)  
PROPERTY INFORMATION IS CURRENT AS OF JULY 30, 2019 AND IS SUBJECT TO CHANGE BASED UPON UNFORESEEN SELLING OF PROPERTY, LOT CONSOLIDATIONS, OR SUBDIVISIONS.
2. PROPERTY INFORMATION WAS VERIFIED THROUGH AVAILABLE ONLINE RECORDS FROM THE LAWRENCE COUNTY, PENNSYLVANIA REGISTER OF WILLS AND RECORDER OF DEEDS AT:  
[HTTP://CO.LAWRENCE.PA.US/GOV/REGISTER-OF-WILLS-AND-RECORDER-OF-DEEDS/](http://co.lawrence.pa.us/gov/register-of-wills-and-recorder-of-deeds/)

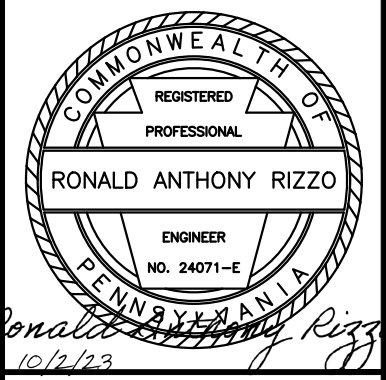
REVISIONS		
NO.	DATE	DESCRIPTION
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COUNTY OF LAWRENCE  
QUAKER FALLS RECREATION AREA  
PROPOSED OVERLOOK & ENHANCEMENTS PROJECT  
PHASE II  
GENERAL NOTES, LEGEND &  
CONSTRUCTION SEQUENCE

PREPARED BY CMS	DATE 05/23/2023
CHECKED BY JAM	DATE 05/23/2023
APPROVED BY RAR	DATE 05/23/2023
DRAWING SCALE: AS SHOWN	



DRAWING NUMBER  
**G-001**



FILE LOCATION: L:\Lawrence County\LawCo\Quaker Falls Drawings\3.4 Design Model\2019-05-05 Site Construction Set\Pln2.dwg PLOT DATE AND TIME: 10/02/2023 12:23 PM

EROSION AND SEDIMENT (E&S) POLLUTION CONTROL PLAN GENERAL NOTES:

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING, AS WELL AS CUTS AND FILLS, SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT (E&S) POLLUTION CONTROL PLAN. A COPY OF THE APPROVED E&S POLLUTION CONTROL PLAN DRAWINGS (STAMPED, SIGNED, AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED E&S POLLUTION CONTROL PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S POLLUTION CONTROL PLAN PREPARER, POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE APPROVED E&S POLLUTION CONTROL PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BEST MANAGEMENT PRACTICES (BMPs) SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THE APPROVED E&S POLLUTION CONTROL PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMITS OF DISTURBANCE BOUNDARIES SHOWN ON THE APPROVED E&S POLLUTION CONTROL PLAN DRAWINGS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE APPROVED E&S POLLUTION CONTROL 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 APPROVED E&S POLLUTION CONTROL PLAN DRAWINGS. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 3:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POISING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE E&S POLLUTION CONTROL BMPs TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE PADEP.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT TITLE 25 ENVIRONMENTAL PROTECTION, ARTICLE VI, HAZARDOUS WASTE MANAGEMENT ET SEQ., ARTICLE VIII, MUNICIPAL WASTE ET SEQ., AND ARTICLE IX, RESIDUAL WASTE MANAGEMENT ET SEQ., OF THE PENNSYLVANIA CODE. NO BUILDING MATERIALS, WASTES, OR UNUSED BUILDING MATERIALS SHALL BE BURIED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN APPROVED E&S POLLUTION CONTROL PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE PADEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON-SITE IS CLEAN FILL. 'FORM FP-001 - CERTIFICATION OF CLEAN FILL' MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE PERFORMED ACCORDING TO THE PROCEDURE DESCRIBED IN THE APPROVED E&S POLLUTION CONTROL PLAN, OVER UNDISTURBED VEGETATED AREAS OR OTHER APPROVED METHODS.
- VEHICLES AND EQUIPMENT MAY ONLY ENTER AND EXIT THE SITE DIRECTLY FROM DESIGNATED AREAS WITH ROCK CONSTRUCTION ENTRANCES.
- UNTIL THE SITE IS STABILIZED, ALL E&S POLLUTION CONTROL BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL E&S POLLUTION CONTROL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS, UNLESS OTHERWISE SPECIFIED. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENITTING MUST BE PERFORMED IMMEDIATELY. IF E&S POLLUTION CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT E&S POLLUTION CONTROL BMPs OR MODIFICATIONS OF THOSE INSTALLED SHALL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S POLLUTION CONTROL BMPs WERE INSPECTED, AS WELL AS, ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON-SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 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 THE APPROVED E&S POLLUTION CONTROL PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER OF THE COMMONWEALTH.
- ALL SEDIMENT REMOVED FROM E&S POLLUTION CONTROL BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE APPROVED E&S POLLUTION CONTROL PLAN DRAWINGS.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES, 6 TO 12 INCHES ON COMPACTED SOILS, PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES OR, IF PREPARED, IN ACCORDANCE WITH THE RECOMMENDATIONS PROVIDED WITHIN THE PROJECT'S GEOTECHNICAL INVESTIGATION REPORT SIGNED AND SEALED BY A LICENSED PROFESSIONAL.
- UNLESS NOTED OTHERWISE, ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH TYPICAL STANDARDS AND SPECIFICATIONS FOR SUBSURFACE DRAINS OR OTHER APPROVED METHODS.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDDED AREAS SHALL BE BLANKETED ON SLOPES 3:1V OR STEEPER, WHEN LOCATED WITHIN 50 FEET OF ANY SURFACE WATER OR WITHIN 100 FEET OF A HIGH QUALITY OR EXCEPTIONAL VALUE SURFACE WATER, WHERE A SUITABLE VEGETATIVE FILTER STRIP DOES NOT EXIST, OR OTHER LOCATIONS SHOWN ON THE APPROVED E&S POLLUTION CONTROL PLAN DRAWINGS.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE CONTRACTOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE APPROVED E&S POLLUTION CONTROL PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN ONE YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN ONE YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- E&S POLLUTION CONTROL BMPs MUST REMAIN FUNCTIONAL, AS SUCH, UNTIL ALL AREAS TRIBUTARY TO THE E&S POLLUTION CONTROL BMPs ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER E&S POLLUTION CONTROL BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE PADEP.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY E&S POLLUTION CONTROL BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST-CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE E&S POLLUTION CONTROL BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVALS OR CONVERSIONS ARE TO BE PERFORMED ONLY DURING THE GERMINATING SEASON.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR CONTRACTOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- FAILURE TO CORRECTLY INSTALL E&S POLLUTION CONTROL BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S POLLUTION CONTROL BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PADEP AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE APPROVED E&S POLLUTION CONTROL PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

DEFINITIONS:

- ENVIRONMENTAL DUE DILIGENCES ARE INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF OWNERSHIP AND USE HISTORY OF PROPERTY, SANBORN WRAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.
- CLEAN FILLS ARE UNCONTAMINATED, NON-WATER-SOLUBLE, NON-DECOMPOSABLE INERT SOLID MATERIAL. CLEAN FILL 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 RECOGNIZABLE AS SUCH. CLEAN FILL DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH, UNLESS OTHERWISE AUTHORIZED.

'CLEAN FILL' DETERMINATION:

- TO DETERMINE WHETHER FILL IS CLEAN OR REGULATED, A PERSON MUST PERFORM ENVIRONMENTAL DUE DILIGENCE.
  - IF DUE DILIGENCE SHOWS NO EVIDENCE OF A RELEASE OF A REGULATED SUBSTANCE, THE MATERIAL MAY BE MANAGED AS CLEAN FILL.
  - IF DUE DILIGENCE SHOWS EVIDENCE OF A RELEASE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. IF TESTING REVEALS THAT THE MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT EXCEED THE REQUIRED LIMITS, THE MATERIAL MUST BE MANAGED AS REGULATED FILL.
- A PERSON MAY NOT BLEND OR MIX MATERIALS TO BECOME CLEAN FILL. MATERIALS THAT CONTAIN REGULATED SUBSTANCES THAT ARE INTENTIONALLY RELEASED MAY NOT BE MANAGED.

E&S MAINTENANCE PROGRAM:

INSPECTION AND MAINTENANCE PROGRAMS SHALL BE IMPLEMENTED BY THE CONTRACTOR, DURING AND AFTER CONSTRUCTION, TO ENSURE THAT EROSION AND SEDIMENT POLLUTION CONTROL MEASURES ARE PROPERLY MAINTAINED. SPECIFICALLY, ALL EROSION AND SEDIMENT POLLUTION CONTROL DEVICES SHALL BE INSPECTED WEEKLY AND AFTER EACH STORM RUNOFF EVENT, UNLESS OTHERWISE SPECIFIED BELOW. REPAIRS AND MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO MAINTAIN THE INTEGRITY OF THE MEASURES AND FACILITIES. ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY UPON IDENTIFICATION OF THE DEFICIENCY. SPECIFIC MAINTENANCE PROGRAMS FOR THE BEST MANAGEMENT PRACTICES (BMPs) ARE DESCRIBED BELOW. ALL INSPECTION AND MAINTENANCE MEASURES SHALL BE THE RESPONSIBILITY OF THE EARTH-MOVING CONTRACTOR(S). THE CONTRACTOR(S) SHALL MAINTAIN WRITTEN DOCUMENTATION OF ALL WEEKLY BMP INSPECTIONS. THE CONTRACTOR(S) SHALL ALSO KEEP A DETAILED LOG BOOK OF ANY/ALL REQUIRED BMP REPAIRS OR REPLACEMENTS ALONG WITH THE CORRECTIVE ACTION(S).

A. ROCK CONSTRUCTION ENTRANCES:

ROCK CONSTRUCTION ENTRANCES SHALL BE INSPECTED DAILY. 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 EXISTING PAVED OR GRAVEL AREAS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON THESE AREAS, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE AREAS OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

B. COMPOST FILTER SOCKS:

DAMAGED FILTER SOCKS SHALL BE REPAIRED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS OF INSTALLATION. PHOTODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER ONE YEAR OF INSTALLATION, AND POLYPROPYLENE FILTER SOCKS SHALL BE REPLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

C. WEIGHTED SEDIMENT FILTER TUBES:

SEDIMENT DEPOSITS SHALL BE CLEANED FROM THE WEIGHTED SEDIMENT FILTER TUBES WHEN IT REACHES HALF THE HEIGHT OF THE FILTER TUBE. DAMAGED WEIGHTED SEDIMENT FILTER TUBES SHALL BE REPLACED WITHIN 24 HOURS OF INSPECTION. A SUPPLY OF WEIGHTED SEDIMENT FILTER TUBES SHALL BE MAINTAINED ON-SITE FOR THIS PURPOSE.

D. COMPOST SOCK SEDIMENT TRAPS:

SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE COMPOST SOCKS. PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN ONE YEAR.

E. ROCK FILTERS:

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

F. EROSION CONTROL BLANKETS:

BLANKETED AREAS SHALL BE INSPECTED UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70 PERCENT PERENNIAL VEGETATIVE COVER THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN FOUR (4) CALENDAR DAYS.

G. PUMPED WATER FILTER BAGS:

PUMPED WATER FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. PUMPED WATER FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.

H. CONCRETE WASHOUT FACILITIES:

CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING WASH-OUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. ACCUMULATED MATERIALS SHALL BE REMOVED WHEN THEY REACH 75 PERCENT CAPACITY. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASH-OUT FACILITY.

I. VEGETATED CHANNEL:

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25 PERCENT AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LININGS SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

J. TEMPORARY STOCKPILES:

MAINTAIN TEMPORARY OR PERMANENT STABILIZATION OF THE TEMPORARY STOCKPILES FOR THE DURATION OF MATERIAL STOCKPILING ON-SITE. RE-SEED AND RE-BLANKET SOIL STOCKPILES AS REQUIRED. DOWNSLOPE COMPOST FILTER SOCK AND EROSION CONTROL BLANKETS SHALL BE MAINTAINED AS SPECIFIED HEREIN.

K. VEGETATIVE STABILIZATION:

MAINTAIN TEMPORARY VEGETATIVE STABILIZATION UNTIL RE-DISTURBED OR REPLACED BY PERMANENT STABILIZATION PRIOR TO PROJECT COMPLETION. MAINTAIN PERMANENT VEGETATIVE STABILIZATION UNTIL A MINIMUM PERENNIAL VEGETATIVE COVER OF 70 PERCENT UNIFORM DENSITY HAS BEEN ESTABLISHED. AFTER SEED EMERGENCE, CHECK FOR VEGETATION DENSITY AND NOTE ANY BARE OR SPARSE AREAS. MONITOR VEGETATION GROWTH DURING THE FIRST 2 TO 5 WEEKS, ESPECIALLY DURING DRY CONDITIONS. IF THE SEED FAILS TO GROW, IMMEDIATELY RESEED AND RE-ESTABLISH TO PROVIDE ADEQUATE EROSION PREVENTION. DOCUMENT ANY AREAS THAT NEED TO BE RE-SEEDDED AND AREAS WHERE UNDESIRABLE VEGETATION IS EMERGING. NOXIOUS WEEDS MAY NEED TO BE CONTROLLED BY MOVING OR SPRAYING.

L. DISPOSAL OF SEDIMENT REMOVED FROM EROSION CONTROL DEVICES:

DISPOSAL OF ALL SEDIMENT TAKEN FROM THE EROSION CONTROL DEVICES SHALL BE BY SPREADING AND DRYING ON-SITE AND STABILIZING BY SEEDING WITHIN 24 HOURS. WHEN NOT FEASIBLE, DISPOSE OF SEDIMENT AT AN APPROVED PROPERLY PERMITTED OFF-SITE DISPOSAL FACILITY.

M. DISPOSAL OF UNSUITABLE MATERIALS:

BUILDING MATERIALS AND OTHER CONSTRUCTION SITE WASTES MUST BE PROPERLY MANAGED AND DISPOSED OF TO REDUCE POTENTIAL FOR POLLUTION TO SURFACE AND GROUND WATERS AS PER 25 PENNSYLVANIA CODE §102.4(b)(5)(X). PROPER TRASH DISPOSAL, RECYCLING OF MATERIALS, PROPER MATERIALS HANDLING, AND SPILL PREVENTION AND CLEAN-UP REDUCE THE POTENTIAL FOR CONSTRUCTION SITE WASTES TO BE SUSPENDED BY STORMWATER RUNOFF AND CONVEYED TO SURFACE WATERS. UNDER NO CIRCUMSTANCES MAY E&S POLLUTION CONTROL BMPs BE USED FOR TEMPORARY STORAGE OF DEMOLITION MATERIALS OR CONSTRUCTION WASTES. WHEREVER HEAVY EQUIPMENT WILL BE USED DURING CONSTRUCTION OF CUTS AND FILLS OR PROPOSED BUILDINGS, A POLLUTION PREVENTION AND CONTINGENCY (PPC) PLAN SHOULD BE AVAILABLE ON SITE. THE CONTRACTOR MUST PREPARE AND IMPLEMENT A PPC PLAN WHEN STORING, USING, OR TRANSPORTING MATERIALS INCLUDING, BUT NOT LIMITED TO, FUELS, CHEMICALS, SOLVENTS, PESTICIDES, FERTILIZERS, LIME, PETROCHEMICALS, WASTEWATER, WASH WATER, CORE DRILLING WASTEWATER, CEMENT, SANITARY WASTES, SOLID WASTES, OR HAZARDOUS MATERIALS ONTO, ON, OR FROM THE PROJECT SITE DURING EARTH DISTURBANCE ACTIVITIES. THE PPC PLAN MUST BE AVAILABLE UPON REQUEST BY THE DEPARTMENT OR LAWRENCE COUNTY CONSERVATION DISTRICT. GUIDANCE FOR DEVELOPMENT OF A PPC PLAN CAN BE FOUND IN "GUIDELINES FOR THE DEVELOPMENT AND IMPLEMENTATION OF ENVIRONMENTAL EMERGENCY RESPONSE PLANS" (DOCUMENT #400-2200-001), WHICH CAN BE FOUND IN THE DEPARTMENTS ELIBRARY AT [HTTP://WWW.DEP.GREENPORT.STATE.PA.US/ELIBRARY/](http://www.dep.greenport.state.pa.us/elibrary/). ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS MUST BE FOLLOWED IN THE USE, HANDLING, AND DISPOSAL OF POTENTIALLY HAZARDOUS MATERIALS.

- CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL OR STONE MATERIALS, CONSTRUCTION WASTES, ETC., WHICH COULD ADVERSELY IMPACT WATER QUALITY OR OTHER ENVIRONMENTAL CONDITIONS.
- THE CONTRACTOR SHALL INSPECT THE PROJECT AREA DAILY AND PROPERLY DISPOSE OF ALL CONSTRUCTION WASTES. MEASURES SHALL BE IMPLEMENTED FOR GOOD HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. ALL WASTE MATERIALS SHALL BE TRANSPORTED OFF-SITE FOR PROPER DISPOSAL AT AN APPROVED PROPERLY PERMITTED DISPOSAL FACILITY. RECYCLING, WHERE FEASIBLE, IS ENCOURAGED.
- SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF BY SPREADING AND DRYING ON-SITE AND STABILIZING BY SEEDING WITHIN 24 HOURS. WHEN NOT FEASIBLE, DISPOSE OF SEDIMENT AT AN APPROVED PROPERLY PERMITTED DISPOSAL FACILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING AN APPROVED EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR ANY OFF-SITE BORROW AREAS OR DISPOSAL FACILITIES REQUIRED TO COMPLETE THE WORK. DISPOSAL LOCATIONS MUST BE VERIFIED WITH THE COUNTY CONSERVATION DISTRICT TO ENSURE COMPLIANCE WITH ALL APPLICABLE REGULATIONS. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR DEVELOPING AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR THE OFF-SITE DISPOSAL FACILITY AND SUBMITTING THE PLAN TO THE COUNTY CONSERVATION DISTRICT FOR APPROVAL PRIOR TO USE OF THE OFF-SITE DISPOSAL FACILITY. THE CONTRACTOR MUST IMMEDIATELY STABILIZE THE DISPOSAL FACILITY UPON COMPLETION OF ANY STAGE FOR PHASE OF EARTH DISTURBANCE ACTIVITY AT THE OFF-SITE DISPOSAL FACILITY.

TEMPORARY SITE STABILIZATION:

IN ACCORDANCE WITH TITLE 25 - ENVIRONMENTAL PROTECTION, CHAPTER 102 - EROSION AND SEDIMENT CONTROL, §102.22(b) OF THE PENNSYLVANIA CODE REGARDING TEMPORARY SITE STABILIZATION:

- 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 SEEDDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
- FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED TEMPORARILY STABILIZED, THE DISTURBED AREAS SHALL BE COVERED WITH ONE OF THE FOLLOWING:
  - A MINIMUM UNIFORM COVERAGE OF MULCH AND SEED, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION.
  - AN ACCEPTABLE BMP WHICH TEMPORARILY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.

PERMANENT SITE STABILIZATION:

IN ACCORDANCE WITH TITLE 25 - ENVIRONMENTAL PROTECTION, CHAPTER 102 - EROSION AND SEDIMENT CONTROL, §102.22(a) OF THE PENNSYLVANIA CODE REGARDING PERMANENT SITE STABILIZATION:

- UPON FINAL COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL IMMEDIATELY HAVE TOPSOIL RESTORED, REPLACED, OR AMENDED, SEEDDED, MULCHED, OR OTHERWISE PERMANENTLY STABILIZED AND PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION.
- E&S BMPs SHALL BE IMPLEMENTED AND MAINTAINED UNTIL THE PERMANENT STABILIZATION IS COMPLETED. ONCE PERMANENT STABILIZATION HAS BEEN ESTABLISHED, THE TEMPORARY E&S BMPs SHALL BE REMOVED. ANY AREAS DISTURBED IN THE ACT OF REMOVING TEMPORARY E&S BMPs SHALL BE PERMANENTLY STABILIZED UPON COMPLETION OF THE TEMPORARY E&S BMP REMOVAL ACTIVITY.
- FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREAS SHALL BE COVERED WITH ONE OF THE FOLLOWING:
  - 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 AND SEDIMENTATION.

TABLE 1 PROJECT SOIL PROPERTIES SUMMARY										
SOIL SERIES NAME	SOIL SYMBOL	SLOPE (%)	HYDROLOGIC SOIL GROUP	SOIL PROPERTIES						HYDRAULIC SOIL WITH INCLUSIONS (%)
				PERMEABILITY	AVAILABLE WATER CAPACITY	RUNOFF CLASS	NATURAL DRAINAGE CLASS	DEPTH TO WATER TABLE (INCHES)	DEPTH TO REELECTRIC FEATURE (INCHES)	
BRACEVILLE LOAM	BsB	3 - 8	C/D	ML - MH	VL	M	MWD	16 - 22	15 - 30	YES (C)
CANFIELD SILT LOAM	CsC	8 - 15	C/D	ML	L	NS	MWD	10 - 21	15 - 30	NO
LOUDONVILLE GRAVELLY SILT LOAM	LsF	25 - 50	C	MH - H	L	H	W	> 80	20 - 40	NO
RAVENNA SILT LOAM	RsB	3 - 8	D	ML	L	NS	SPD	7 - 11	14 - 30	YES (S)
PERMEABILITY NOTES: H = HIGH ML = MODERATELY LOW MH = MODERATELY HIGH NS = NOT SPECIFIED VL = VERY LOW		AVAILABLE WATER CAPACITY NOTES: H = HIGH L = LOW NS = NOT SPECIFIED VL = VERY LOW		RUNOFF CLASS NOTES: H = HIGH L = LOW M = MEDIUM NS = NOT SPECIFIED VH = VERY HIGH VL = VERY LOW			DRAINAGE CLASS NOTES: H = HIGHLY WELL DRAINED SD = SOMEWHAT EXCESSIVELY DRAINED SPD = SOMEWHAT POORLY DRAINED WD = WELL DRAINED			

TABLE 2 PROJECT SOIL LIMITATIONS SUMMARY												
SOIL SERIES NAME	SOIL SYMBOL	SLOPE (%)	SOIL LIMITATIONS									
			CORROSION OF CONCRETE	CORROSION OF STEEL	DEPTH TO SATURATED ZONE	FROST ACTION	DUSTY	LOW STRENGTH	PONDING	DEPTH TO THIN CENTERED PAV	UNSTABLE EXCAVATION WALLS	DENSE LAYER
BRACEVILLE LOAM	BsB	3 - 8	H	H	Y	Y	Y	N	Y	Y	Y	N
CANFIELD SILT LOAM	CsC	8 - 15	M	H	Y	Y	Y	N	N	Y	Y	N
LOUDONVILLE GRAVELLY SILT LOAM	LsF	25 - 50	M	L	N	Y	Y	N	N	N	Y	N
RAVENNA SILT LOAM	RsB	3 - 8	M	H	Y	Y	Y	Y	Y	Y	Y	Y
CORROSION TO CONCRETE/STEEL NOTES: H = HIGH L = LOW M = MODERATE NS = NOT SPECIFIED			SOIL LIMITATION APPLICABILITY NOTES: N = NO NS = NOT SPECIFIED Y = YES									

EROSION & SEDIMENT POLLUTION CONTROL BMPs UTILIZED TO ADDRESS SOIL LIMITATIONS:

- CORROSION TO CONCRETE: DUE TO THE MODERATE CONCRETE CORROSION POTENTIAL, CONCRETE COATINGS OR ADMIXTURES SHOULD BE INVESTIGATED TO REDUCE THE POTENTIAL FOR CONCRETE WEAKENING CAUSED BY SOIL CONDITIONS. IF APPLICABLE, UTILIZING PRECAST CONCRETE STRUCTURES SHOULD MINIMIZE CONCRETE DEGRADATION DURING THE CURING PROCESS. IN LIEU OF CONCRETE PIPE, HIGH-DENSITY POLYETHYLENE (HDPE) OR POLYVINYL CHLORIDE (PVC) PIPING MATERIALS WILL BE INSTALLED FOR INCREASED LONGEVITY.
- CORROSION TO STEEL: DUE TO THE HIGH STEEL CORROSION POTENTIAL, COATED REINFORCEMENT OR CORROSION-INHIBITING ADMIXTURES SHOULD BE INVESTIGATED FOR USE IN ALL CONCRETE PLACEMENTS ON THE SITE TO ENSURE STRUCTURAL INTEGRITY FOR THE LIFE OF THE STRUCTURES. IF APPLICABLE, UTILIZING PRECAST CONCRETE STRUCTURES WILL MINIMIZE DIRECT EXPOSURE OF REINFORCING STEEL TO GROUNDWATER. ALSO, IN LIEU OF STEEL OR DUCTILE IRON STORM PIPING, HDPE OR PVC PIPING MATERIALS WILL BE UTILIZED TO PREVENT UNWANTED CORROSION TO THE STORM SEWER SYSTEMS.
- DEPTH TO SATURATED ZONE/PONDING: WHERE GROUNDWATER OR SURFACE RUNOFF IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, INCLUDING EARTH-WORK AND TRENCHING OPERATIONS, THE AREAS SHALL BE DEWATERED UTILIZING A PUMPING SYSTEM THAT DISCHARGES TO A PUMPED WATER FILTER BAG OVER A WELL VEGETATED, GRASSY AREA OR OTHER APPROVED MEANS AND METHODS THAT DO NOT PRODUCE SEDIMENT-LADEN RUNOFF.
- FROST ACTION: BOTTOMS OF ALL FOUNDATIONS AND STRUCTURES SHOULD BE INSTALLED BENEATH THE LOCAL FROST LINE, DEEPER THAN 42 INCHES, TO PREVENT UNEVEN SETTLEMENT AND SEASONAL MOVEMENTS. UNLESS INSTALLED WITHIN ROCK SOCKETS, PAVEMENTS SHOULD HAVE GRANULAR SUBBASES PROPERLY INSTALLED TO THE DESIGN DEPTHS PRIOR TO SURFACE PAVEMENT PLACEMENTS. SUBGRADE SOILS MAY REQUIRE OVER-EXCAVATIONS TO ENSURE UNSUITABLE SOILS ARE REMOVED TO PREVENT HEAVING OF THE FINISHED PAVEMENT SURFACE.
- DUSTY: WHERE DUST BECOMES A NUISANCE, DUST ABATEMENT CONSTRUCTION TECHNIQUES SHOULD BE IMPLEMENTED TO REDUCE AIRBORNE DUST, INCLUDING WATERING DISTURBED CONSTRUCTION AREAS OR UTILIZING OTHER DUST PALLIATIVES. CHEMICALS TO CONTROL DUST SHALL NOT BE UTILIZED NEAR STREAMS, WETLANDS, OR OTHER SURFACE WATERS.
- LOW STRENGTH: PRECAUTIONS SHOULD BE TAKEN ON LOW STRENGTH SOILS TO PREVENT SLOPE FAILURES DUE TO IMPROPER CONSTRUCTION TECHNIQUES. PRECAUTIONS IN LOW STRENGTH SOILS INCLUDE SHALLOWING SOIL SLOPES, PREVENTION OF OVER-SATURATING SOIL SLOPES, PREVENTION OF OVER-SURCHARGING SOIL SLOPES, AND INSTALLATION OF TEMPORARY LATERAL SUPPORT SYSTEMS, INCLUDING TRENCH BOXES.
- DEPTH TO BEDROCK/DENSE LAYERS: WHERE BEDROCK OR DENSE LAYERS ARE ENCOUNTERED DURING EARTH-WORK OPERATIONS, THE CONTRACTOR MAY BE REQUIRED TO RIP THE MATERIAL OR UTILIZE A HOE RAM OR OTHER SIMILAR EQUIPMENT AT THE SITE. WHERE UNBREAKABLE MATERIAL IS ENCOUNTERED, DRILLING MAY BE REQUIRED. BLASTING IS NOT RECOMMENDED. REMOVED MATERIAL SHALL NOT BE UTILIZED AS BACKFILL AND SHALL BE DISPOSAL OF ON-SITE WHERE APPROVED BY THE OWNER OR THEIR AUTHORIZED REPRESENTATIVE OR OFF-SITE AT A PROPERLY PERMITTED DISPOSAL FACILITY.
- UNSTABLE EXCAVATION WALLS: WHERE DISTURBED SLOPE STABILITY OR LANDSLIDES ARE AN ISSUE, EROSION CONTROL BLANKETS SHALL BE INSTALLED TO PREVENT FURTHER EROSION UNTIL VEGETATION IS ESTABLISHED. SHALLOWING OF EXCAVATION SLOPES SHOULD ALSO BE INVESTIGATED TO ENSURE FUTURE SLOPE FAILURES ARE MINIMIZED. SLOPE FAILURES SHOULD BE RESTORED TO FINISHED GRADE AND STABILIZED. TRENCH BOXES MAY BE UTILIZED DURING TRENCHING OPERATIONS TO ENSURE SAFETY OF WORKERS WITHIN THE TRENCH DURING PIPE LAYING OPERATIONS.

REVISIONS

1	2	3	4	5	6	7	NO.	DATE

COUNTY OF LAWRENCE

QUAKER FALLS RECREATION AREA

PROPOSED OVERLOOK & ENHANCEMENTS PROJECT

PHASE II

EROSION & SEDIMENT POLLUTION CONTROL PLAN NOTES

MAHONING TOWNSHIP

LAWRENCE COUNTY, PA

R.A.R. engineering group, inc.

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telephone: 724.652.1004 fax: 724.652.3814

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CMS

DATE

05/23/2023

CHECKED BY

JAM

DATE

05/23/2023

APPROVED BY

RAR

DATE

05/23/2023

DRAWING SCALE:

AS SHOWN

COMMONWEALTH OF PENNSYLVANIA

REGISTERED PROFESSIONAL

RONALD ANTHONY RIZZO

ENGINEER NO. 24071-E

6/17/13

Ronald Anthony Rizzo

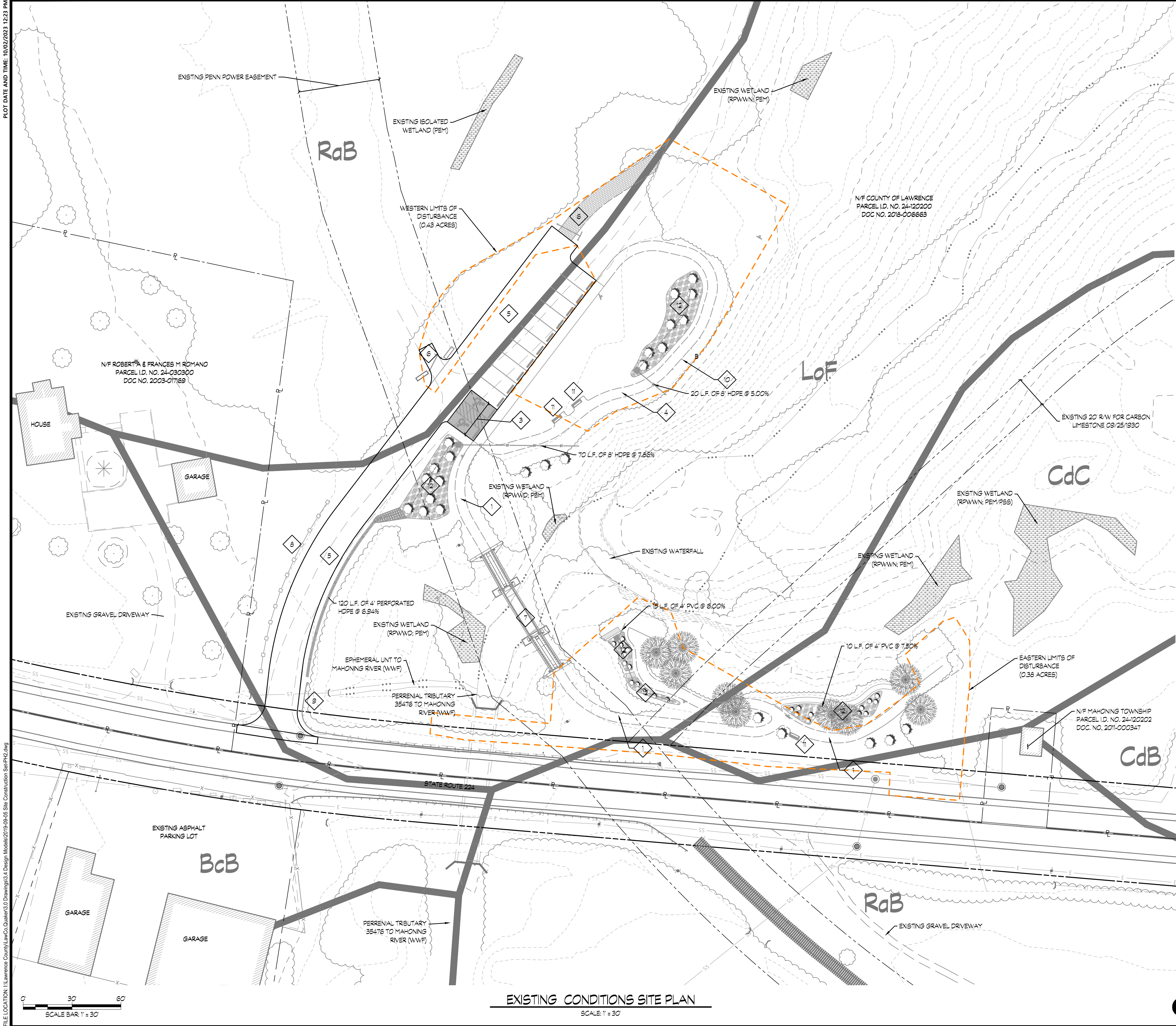
6/17/13

DRAWING NUMBER

G-002



FILE LOCATION: I:\Lawrence County\LawCo\Quaker Falls\Drawings\3.4 Design Models\2019-05-05 Site Construction Set\DWG.dwg  
PLOT DATE AND TIME: 10/02/2023 12:23 PM



NOTES:

1. REFER TO SHEET G-001 FOR LEGEND AND PARCEL INFORMATION
2. CONSTRUCTION OPERATIONS SHALL BE LIMITED TO THE LIMITS OF DISTURBANCE SHOWN. AT NO TIME SHALL THE CONTRACTOR DISTURB AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE WITHOUT PRIOR APPROVAL FROM THE ENGINEER. CONTRACTORS MATERIAL STORAGE AND EQUIPMENT OPERATION SHALL BE LIMITED TO WITHIN THESE LIMITS.
3. THE CONTRACTOR SHALL NOT ENTER OR DISTURB THE STREAM OR THE STREAM FLOODWAY DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL NOT ENTER OR DISTURB ANY WETLANDS AT ANY TIME DURING THE CONSTRUCTION ACTIVITIES. WETLAND LIMITS SHALL BE FIELD DELINEATED AND STAKED PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

EXISTING CONDITIONS LEGEND	
IDENTIFIER	EXISTING 6-FOOT WIDE GRAVEL WALKING TRAIL
1	EXISTING 6-FOOT WIDE GRAVEL WALKING TRAIL
2	EXISTING 6-FOOT WIDE CONCRETE WALK AREA
3	EXISTING CONCRETE ADA PARKING AREA
4	EXISTING USAB COMPLIANT OUTDOOR RECREATION ACCESS ROUTE (ORAR)
5	EXISTING TAR AND CHIP/BITUMINOUS PAVEMENT AREA
6	EXISTING GRAVEL ACCESS ROAD
7	EXISTING STEEL PEDESTRIAN ACCESS BRIDGE
8	EXISTING TYPE II FENCE (68 L.F.) RANIER PRIVACY FENCE, VINYL
9	EXISTING GUIDE RAIL (70 L.F.)
10	EXISTING METAL SAFETY FENCE
11	EXISTING USAB COMPLIANT BENCH
12	EXISTING RAIN GARDEN

REVISIONS

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COUNTY OF LAWRENCE  
QUAKER FALLS RECREATION AREA  
PROPOSED OVERLOOK & ENHANCEMENTS PROJECT  
PHASE II  
EXISTING CONDITIONS AND  
SITE DEMOLITION PLAN

MAHONING TOWNSHIP  
LAWRENCE COUNTY, PA

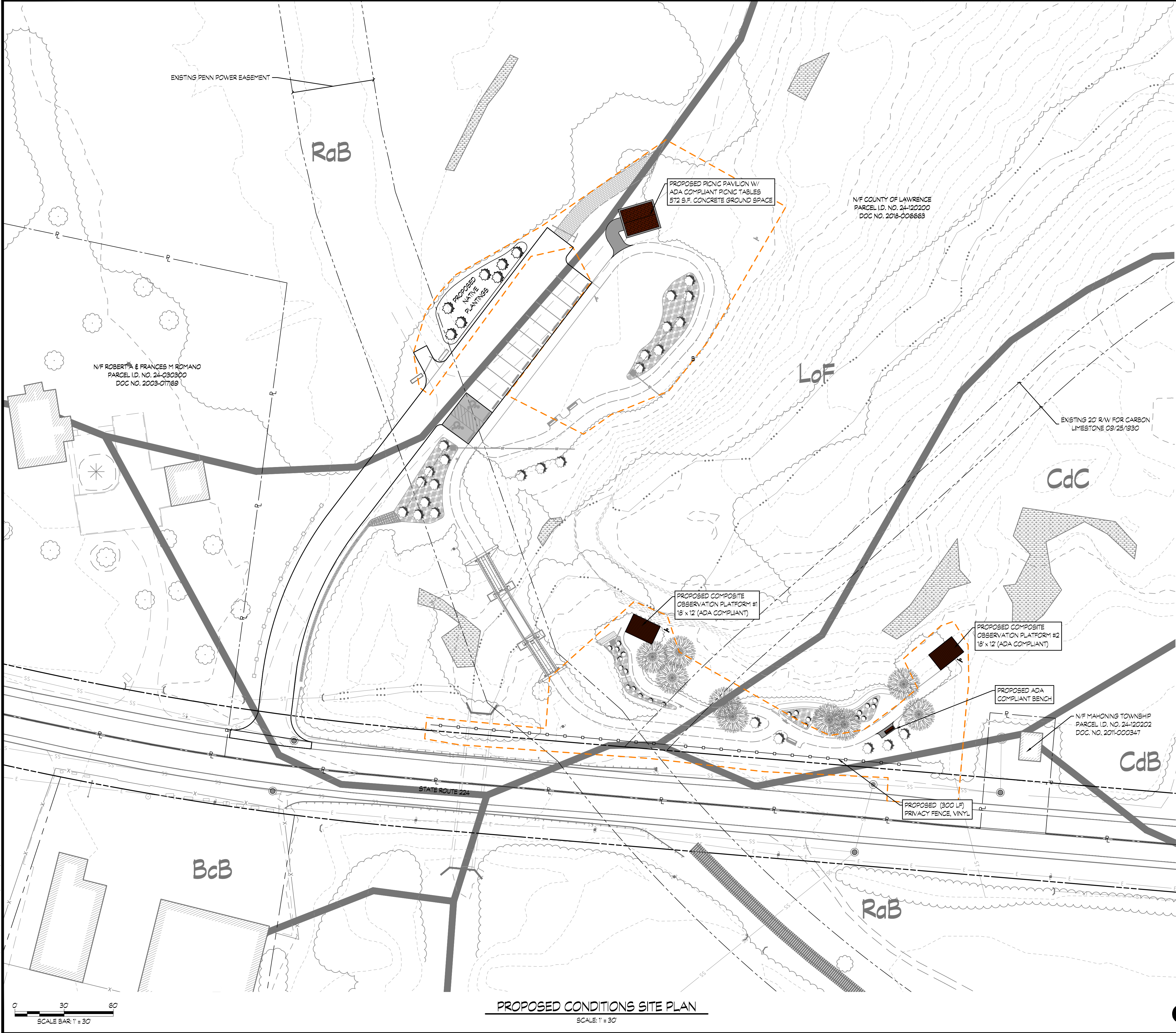
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CHECKED BY: JAM DATE: 05/23/2023  
APPROVED BY: RAR DATE: 05/23/2023  
DRAWING SCALE: AS SHOWN

COMMONWEALTH OF PENNSYLVANIA  
REGISTERED PROFESSIONAL ENGINEER  
RONALD ANTHONY RIZZO  
NO. 24071-E  
10/4/23

DRAWING NUMBER  
C-101



FILE LOCATION: \\Lawrence County\LawCo\Quaker Falls\Drawings\3.4 Design Models\2019-05-05 Site Construction Set\CP12.dwg  
PLOT DATE AND TIME: 10/02/2023 12:23 PM



- NOTES:**
1. REFER TO SHEET G-001 FOR LEGEND AND PARCEL INFORMATION.
  2. FENCE INFORMATION IS AVAILABLE FROM VINYL FENCE WHOLESALER.
  3. REFER TO S-500 SERIES DRAWINGS FOR OBSERVATION PLATFORM INFORMATION.
  4. SEE SHEET C-601 FOR TYPICAL SECTIONS FOR CONCRETE PADS, PICNIC SHELTER AND TABLE DETAILS AND USAB COMPLAINT BENCH DETAILS.

REVISIONS							
NO.	DATE	DESCRIPTION					
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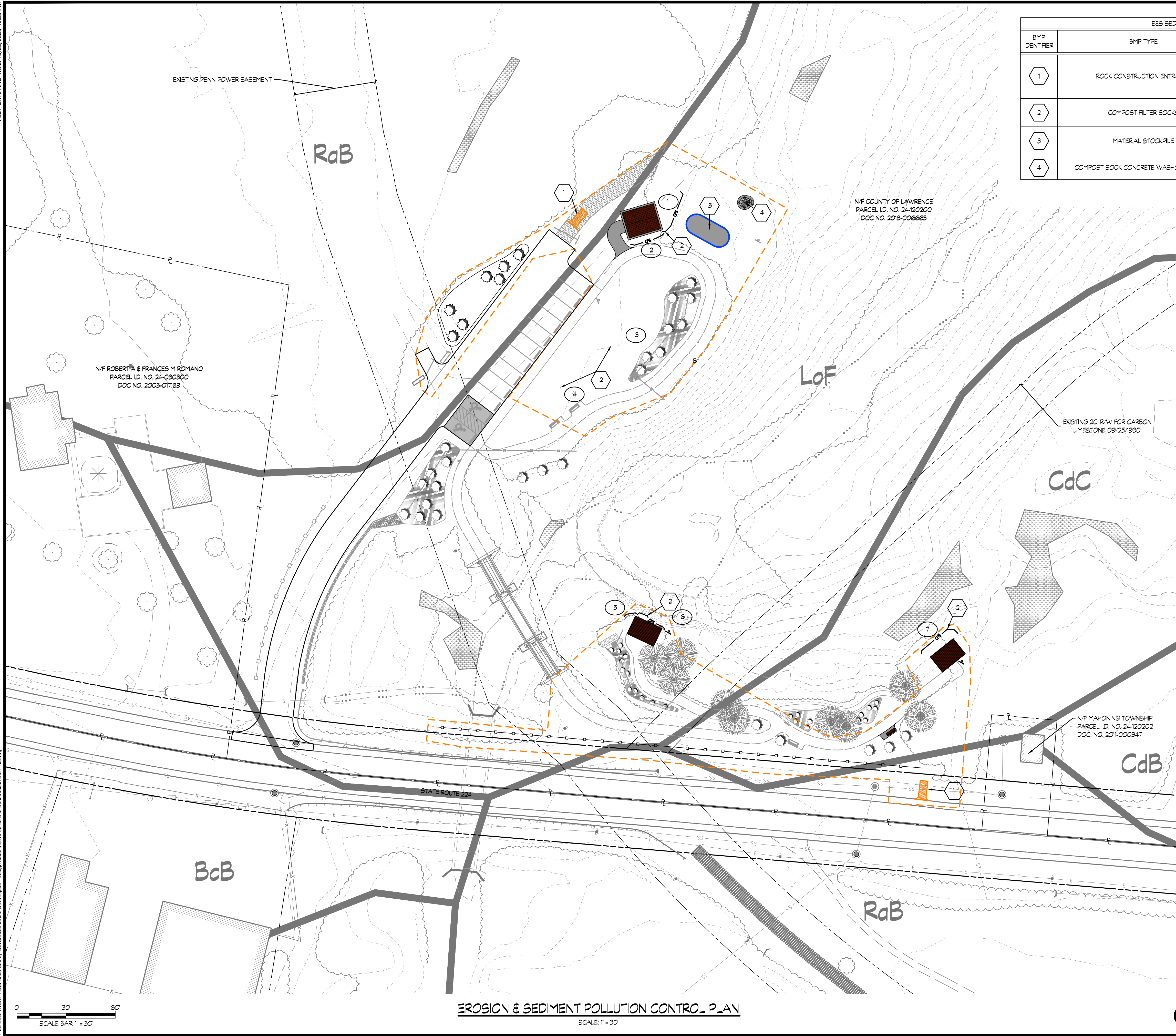
**COUNTY OF LAWRENCE  
QUAKER FALLS RECREATION AREA**  
PROPOSED OVERLOOK & ENHANCEMENTS PROJECT  
PHASE II  
PROPOSED CONDITIONS AND  
SITE CONSTRUCTION PLAN

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DRAWING NUMBER  
**C-102**






EES SEDIMENT POLLUTION CONTROL BMP INSTALLATION SCHEDULE		
BMP IDENTIFIER	BMP TYPE	BMP NOTES
1	ROCK CONSTRUCTION ENTRANCE	REFER TO DETAIL 1 ON SHEET C-501 FOR ROCK CONSTRUCTION ENTRANCE DETAIL. ALL CONSTRUCTION TRAFFIC LEAVING PAVEMENT SHALL UTILIZE A ROCK CONSTRUCTION ENTRANCE. THE CONTRACTOR MAY ADD ROCK CONSTRUCTION ENTRANCES AS REQUIRED FOR SEQUENCING CONSTRUCTION OPERATIONS OR MODIFICATIONS TO SITE TRAFFIC PATTERNS. (TYP. FOR 2)
2	COMPOST FILTER SOCKS	REFER TO DETAIL 2 ON SHEET C-501 FOR COMPOST FILTER SOCK DETAIL. COMPOST FILTER SOCKS SHALL BE INSTALLED PRIOR TO COMMENCING TRIBUTARY EARTH DISTURBANCES (TYP. FOR 22).
3	MATERIAL STOCKPILE	REFER TO DETAIL 3 ON SHEET C-502 FOR MATERIAL STOCKPILE DETAIL. ALL MATERIAL STOCKPILES SHALL BE WITHIN THE LIMITS OF DISTURBANCE IN THE EASTERN PORTION OF THE SITE NEAR THE LOCATION SHOWN. (TYP. FOR 4)
4	COMPOST SOCK CONCRETE WASHOUT FACILITY	REFER TO DETAIL 4 ON SHEET C-502 FOR COMPOST SOCK CONCRETE WASHOUT FACILITY DETAIL. ALL CONCRETE TRUCKS MUST WASHOUT WITHIN THIS FACILITY.

BARRIER IDENTIFIER	BARRIER DESIGNATOR	SIZE	TYPE
1	SB-1	12"Ø	CFS
2	SB-2	12"Ø	CFS
3	SB-3	12"Ø	CFS
4	SB-4	12"Ø	CFS
5	SB-5	12"Ø	CFS
6	SB-6	12"Ø	CFS
7	SB-7	12"Ø	CFS

CFS = COMPOST FILTER SOCK

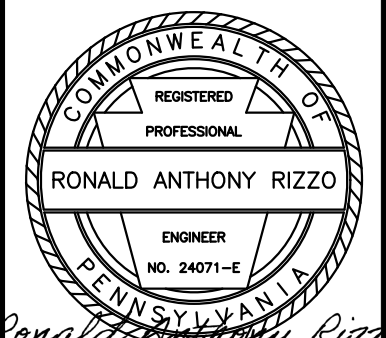
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COUNTY OF LAWRENCE  
QUAKER FALLS RECREATION AREA  
PROPOSED OVERLOOK & ENHANCEMENTS PROJECT  
PHASE II  
EROSION & SEDIMENT  
POLLUTION CONTROL PLAN  
LAWRENCE COUNTY, PA  
WINING TOWNSHIP

PREPARED BY CMS	DATE 05/23/2023
CHECKED BY JAM	DATE 05/23/2023
APPROVED BY RAR	DATE 05/23/2023
DRAWING SCALE: AS SHOWN	



DRAWING NUMBER  
**C-103**





6-  $\frac{1}{2}$ "x4" HEX LAG SCREWS  
(HOT DIP GALVANIZED)  
TYPICAL EACH FACE. PROVIDE WITH  
STANDARD GALVANIZED WASHER



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VIEWING PLATFORM - 1  
PLAN AND DETAILS

Journal Pre-proof

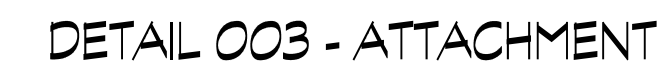
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PREPARED BY	MT	DATE	06/19/2019
CHECKED BY	RAR	DATE	06/19/2019
APPROVED BY	DR	DATE	06/19/2019
DRAWING SCALE:		AS NOTED	



DRAWING NUMBER  
**S-500**





NOTE:  
CONTRACTOR TO VERIFY ALL DIMENSIONS



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NO.	DATE	DESCRIPTION	

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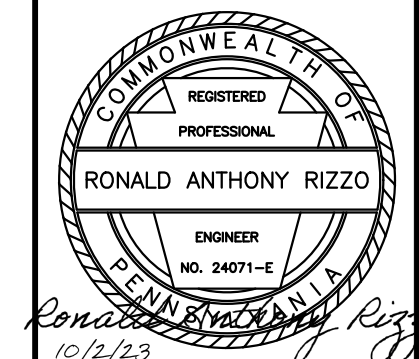
**COUNTY OF LAWRENCE**  
**QUAKER FALLS RECREATION AREA**  
PROPOSED TRAIL AND OVERLOOKS PROJECT

VIEWING PLATFORM - 2  
PLAN AND DETAILS

LAWRENCE COUNTY, PA

MAHONING TOWNSHIP

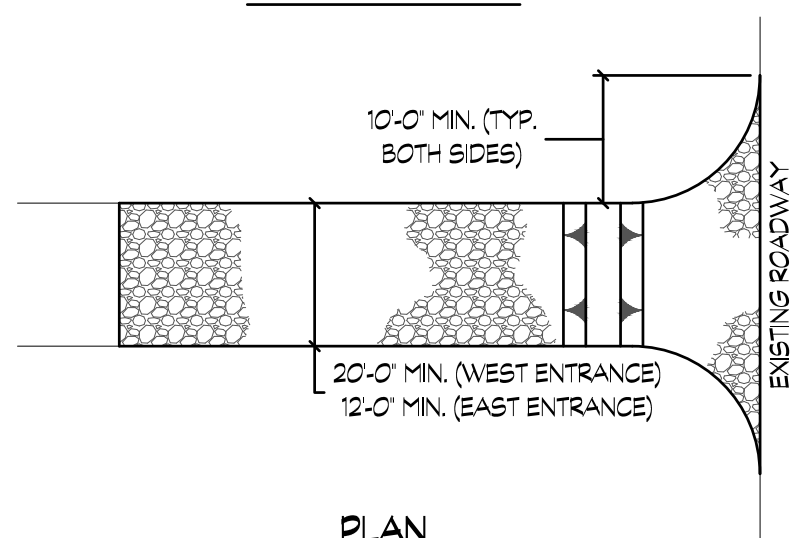
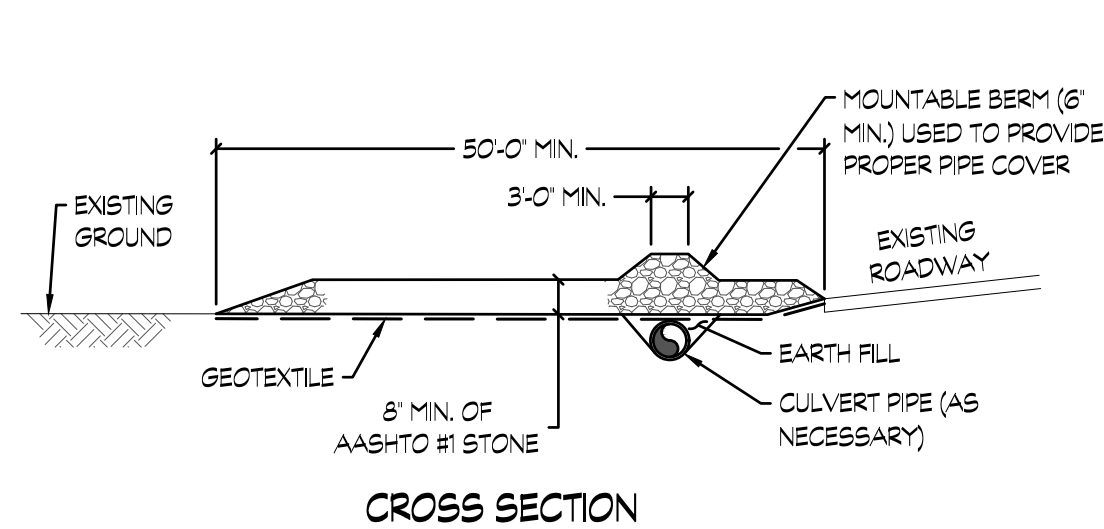
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**S-501**



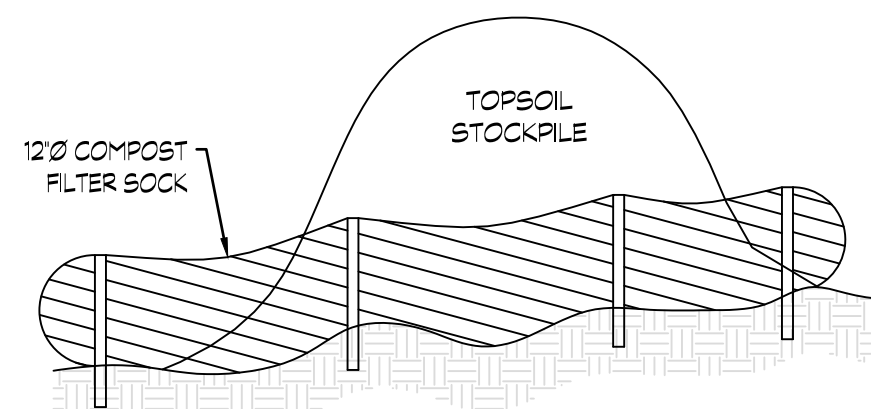


# ROCK CONSTRUCTION ENTRANCE DETAIL

SCALE: NOT TO SCALE

ROCK CONSTRUCTION ENTRANCE NOTES:

1. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
3. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
4. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF PENNDOT PUBLICATION 408 - SPECIFICATIONS, SECTION 735 - GEOTEXTILES, FOR CLASS 4, TYPE A MATERIAL.

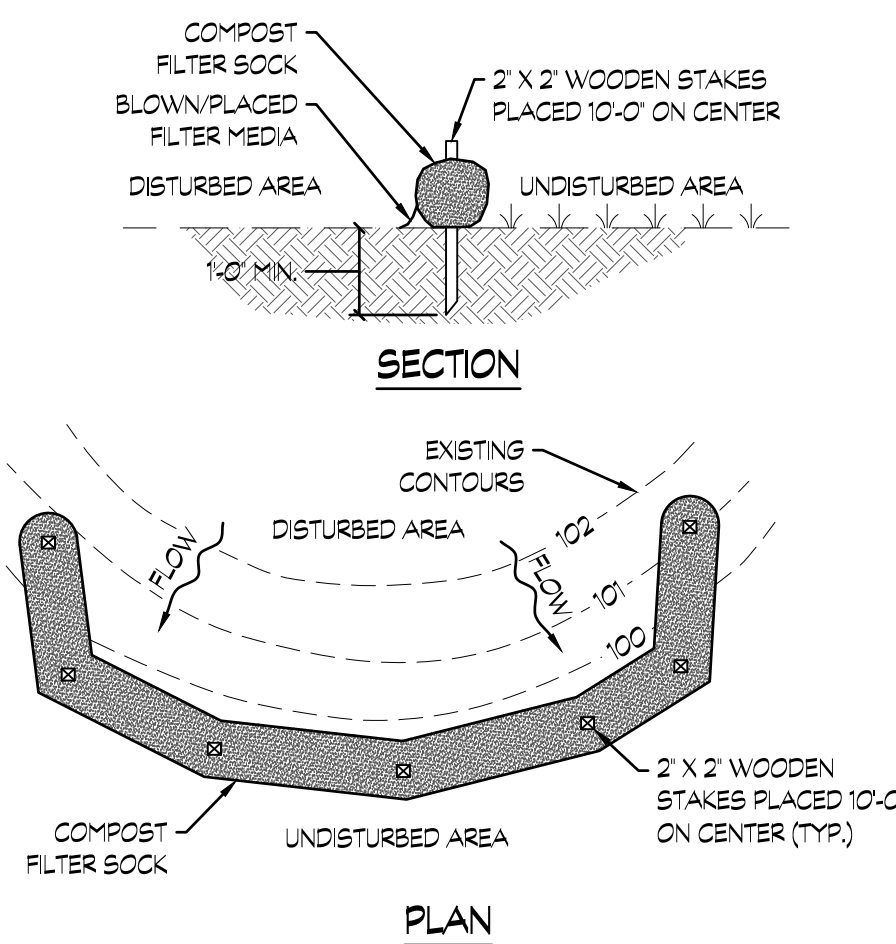


② TYPICAL STOCKPILE DETAIL

SCALE: NOT TO SCALE

**STOCKPILE NOTES:**

1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET.
2. STOCKPILE SLOPES MUST BE 3H:1V OR FLATTER.
3. COMPOST FILTER SOCK SHALL BE INSTALLED ON ALL DOWNSLOPE AREAS OF THE STOCKPILE.



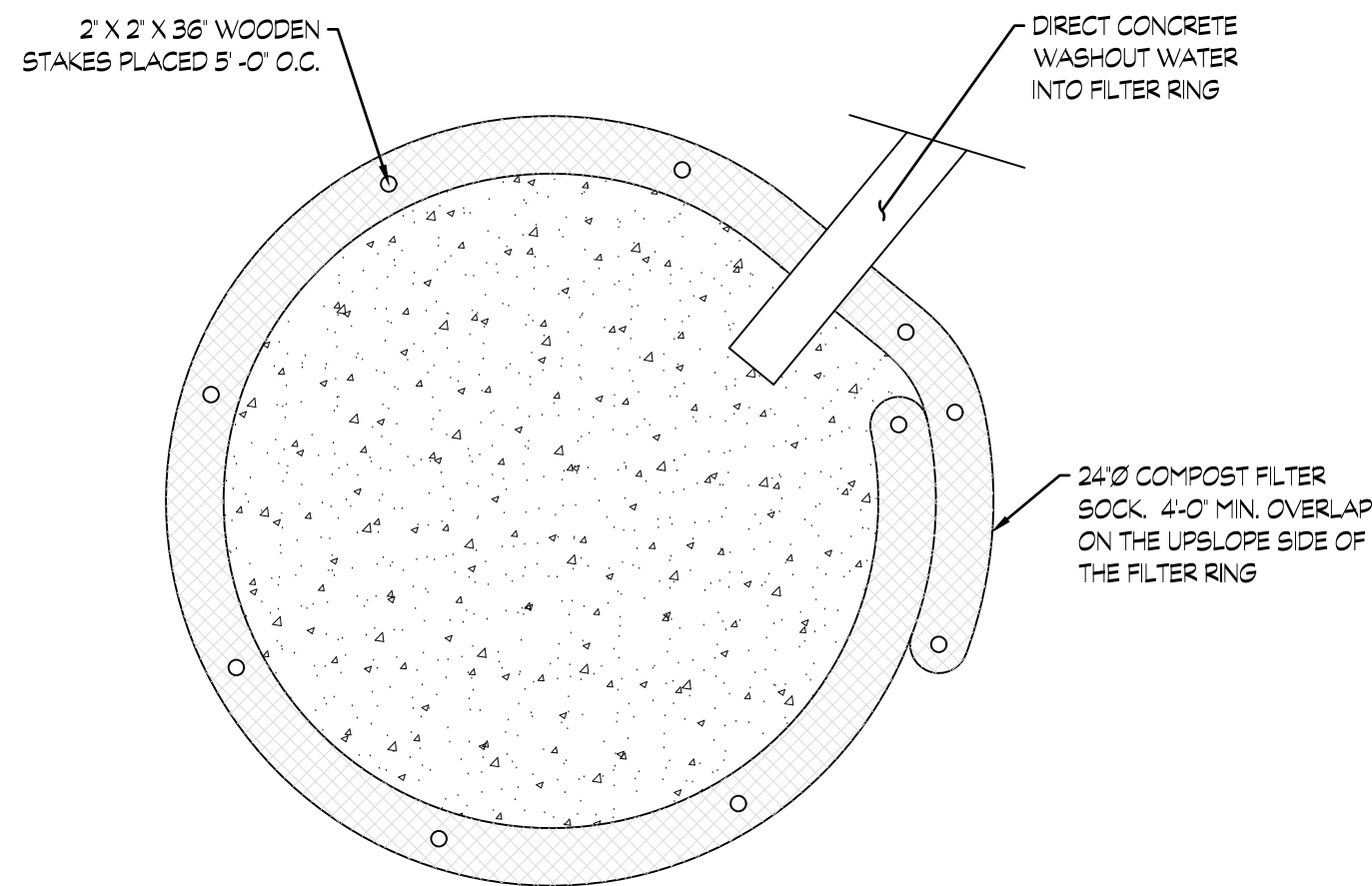
## PLAN

### COMPOST FILTER SOCK DETAIL

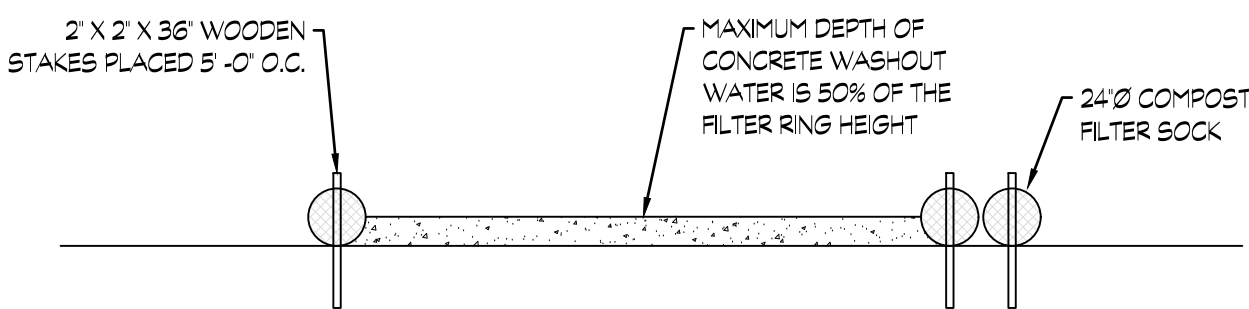
SCALE: NOT TO SCALE

**COMPOST FILTER SOCK NOTES:**

1. COMPOST AND FILTER SOCK MATERIAL SHALL MEET THE REQUIREMENTS OF PENDOT PUBLICATION 408 - SPECIFICATIONS, SECTION 867 - COMPOST FILTER SOCK, AND AS SHOWN IN TABLE 1 MINIMUM COMPOST SOCK FABRIC SPECIFICATIONS; COMPOST SHALL MEET THE STANDARDS OF TABLE 2 MINIMUM COMPOST SPECIFICATIONS;
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
4. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE COMPOST FILTER SOCK, STAKES SHALL BE REMOVED. COMPOST FILTER SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED, IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
5. WHERE COMPOST FILTER SOCKS ARE TO BE INSTALLED ON PAVED SURFACES OR HEAVILY COMPACTED AREAS, CONCRETE BLOCKS SHOULD BE UTILIZED IMMEDIATELY DOWNSLOPE OF THE COMPOST FILTER SOCK (AT THE SAME INTERVALS RECOMMENDED FOR STAKING) TO HOLD THE COMPOST FILTER SOCKS IN PLACE.



## PLAN



### TYPICAL SECTION

## TYPICAL COMPOST SOCK CONCRETE WASHOUT DETAIL

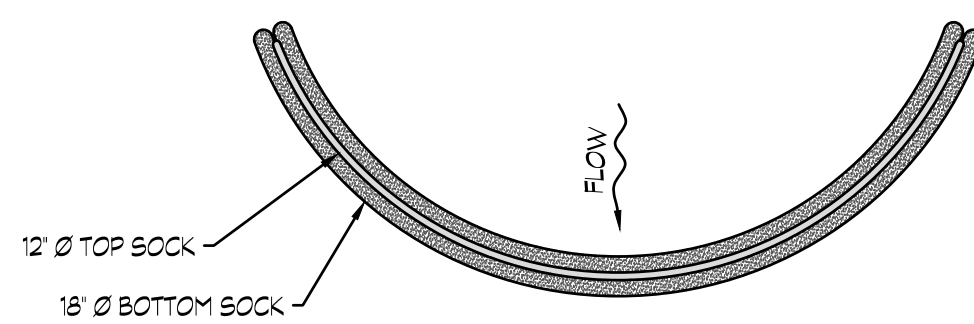
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## COMPOST SOCK CONCRETE WASHOUT NOTES

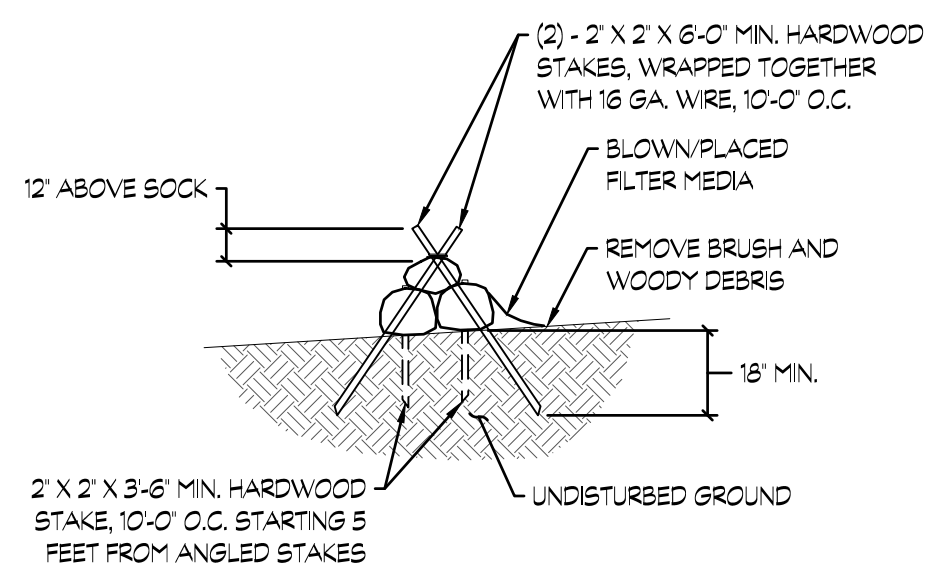
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. AN 18"Ø COMPOST FILTER SOCK MAY BE STACKED ONTO DOUBLE 24"Ø COMPOST FILTER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

TABLE 1 MINIMUM COMPOST SOCK FABRIC SPECIFICATIONS					
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPF)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPF)
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE
SOCK DIAMETERS	12"	12"	12"	12"	12"
	18"	18"	18"	18"	18"
	24"	24"	24"	24"	24"
	32"	32"	32"	32"	32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH	N/A	26 PSI	26 PSI	44 PSI	202 PSI
UV STABILITY, % ORIGINAL STRENGTH (ASTM G155)	23% AT 1,000 HOURS	23% AT 1,000 HOURS	N/A	100% AT 1,000 HOURS	100% AT 1,000 HOURS
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING			HDPE BIAXIAL NET		
			CONTINUOUSLY WOUND		
			FUSION-WELDED JUNCTURES		
			3/4" X 3/4" MAXIMUM APERTURE SIZE		
OUTER FILTRATION MESH			COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)		
			3/16" MAXIMUM APERTURE SIZE		
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					

ORGANIC MATTER CONTENT	25% TO 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
PH	5.5 TO 8.5
MOISTURE CONTENT	30% TO 60% (DRY WEIGHT BASIS)
PARTICLE SIZE	30% TO 80% PASSING 3/8" SIEVE (DRY WEIGHT BASIS)
SOLUBLE SALT CONCENTRATION	5.0 DBM (MMHOS/CM) MAXIMUM
MAN-MADE NERT CONTAMINANTS	LESS THAN 1% (DRY WEIGHT BASIS)



## PLAN



### STAKING DETAIL

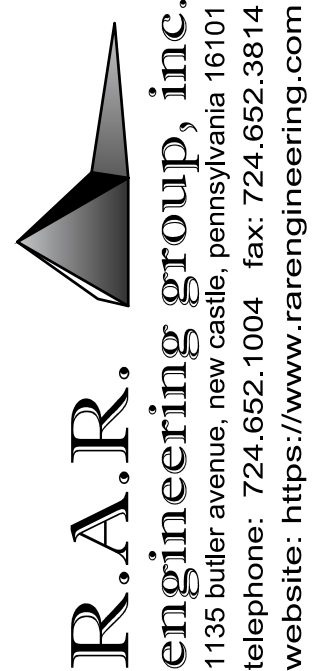
## COMPOST FILTER SOCK SEDIMENT TRAP DETAIL

SCALE: NOT TO SCALE

COMPOST SOCK SEDIMENT TRAP NOTES:

1. COMPOST AND SOCK MATERIAL SHALL MEET THE REQUIREMENTS SHOWN WITHIN TABLES 1 AND 2 ON SHEET C-502 FOR COMPOST FILTER SOCK.
2. COMPOST SOCK SEDIMENT TRAPS SHALL NOT EXCEED THREE SOCKS IN HEIGHT AND SHALL BE STACKED IN PYRAMIDAL FORM AS SHOWN. PROVIDE AN EXCAVATED SUMP 12 INCHES DEEP EXTENDING 12 INCHES UPSLOPE OF THE SOCKS ALONG THE LOWER SIDE OF THE TRAP TO INCREASE TRAP EFFICIENCY.
3. COMPOST SOCK SEDIMENT TRAPS SHALL PROVIDE 2,000 CUBIC FEET STORAGE CAPACITY WITH 12 INCH FREEBOARD FOR EACH TRIBUTARY DRAINAGE ACRE (SEE MANUFACTURER FOR ANTICIPATED SETTLEMENT).
4. THE MAXIMUM TRIBUTARY DRAINAGE AREA IS 5 ACRES. SINCE COMPOST SOCKS ARE "FLOW THROUGH," NO SPILLWAY IS REQUIRED.
5. PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN ONE YEAR.

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**COUNTY OF LAWRENCE  
QUAKER FALLS RECREATION AREA  
PROPOSED OVERLOOK & ENHANCEMENTS PROJECT**

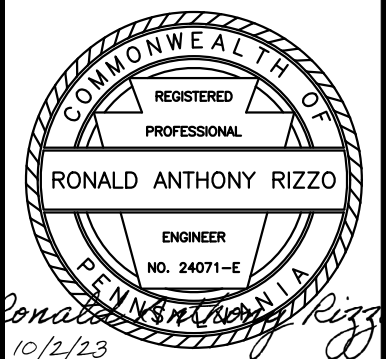
## PHASE II

## EROSION & SEDIMENT POLLUTION

CONTROL PLAN DETAILS - SHEET 1 OF 2

LAWRENCE COUNTY, PA

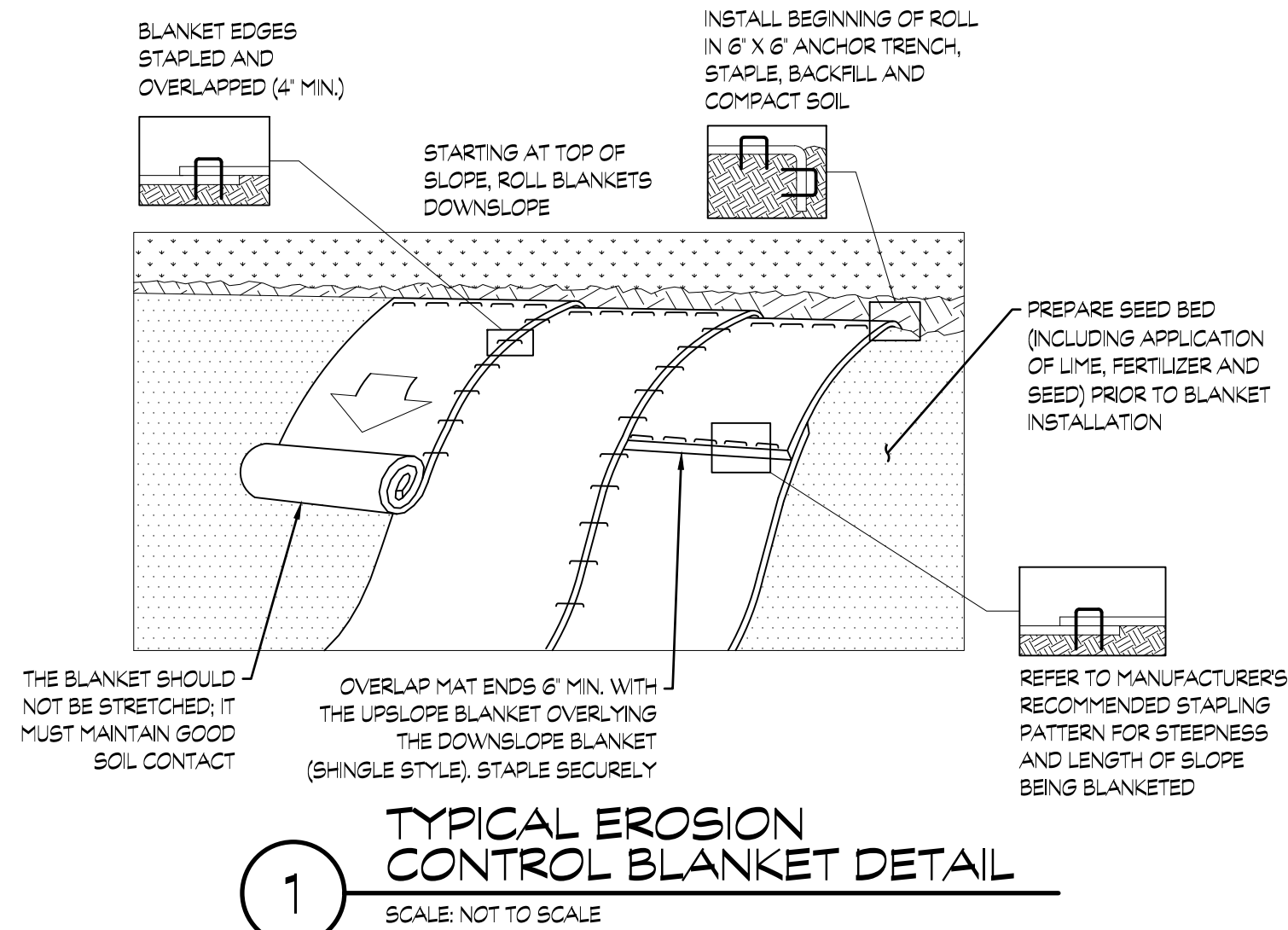
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DRAWING SCALE: AS SHOWN	



**DRAWING NUMBER**

# C-501





NORTH AMERICAN GREEN ERONET S75 (OR APPROVED EQUAL)  
TEMPORARY EROSION CONTROL BLANKET SPECIFICATIONS

SINGLE PHOTODEGRADABLE STRAW FIBER EROSION CONTROL BLANKET

1. MATRIX: 100% AGRICULTURAL STRAW FIBER. MINIMUM WEIGHT OF 0.50 POUNDS PER SQUARE YARD.
2. NETTING: TOP SIDE ONLY: LIGHTWEIGHT PHOTODEGRADABLE POLYPROPYLENE WITH OPENING SIZES OF 1/2 INCH.
3. STITCHING: DEGRADABLE THREAD ON 1-1/2 INCH CENTERS.
4. ERONET S75 EROSION CONTROL BLANKETING IS AVAILABLE WITH THE FOLLOWING PHYSICAL SPECIFICATIONS PER ROLL (ROLL WIDTHS AVAILABLE UPON SPECIAL REQUEST).

WIDTH	6.67 FT.	8.0 FT.	16.0 FT.
LENGTH	108.0 FT.	112.0 FT.	108.0 FT.
WEIGHT ±10%	40.0 LBS.	50.0 LBS.	96.0 LBS.
AREA	80.0 SY	100.0 SY	192.0 SY

EROSION CONTROL BLANKET NOTES:

1. EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN (NAG) ERONET S75 OR APPROVED EQUAL. SPECIFICATIONS HAVE BEEN PROVIDED ON THIS SHEET.
2. SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
3. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
4. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
5. BLANKETS SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH THE BLANKET.
6. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
7. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL DISTURBED SLOPES 3H:1V OR STEEPER AND WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER (STREAM OR WETLAND).

## SEEDING, MULCHING, AND SOIL AMENDMENTS:

AS SOON AS SURFACES REACH FINAL GRADE, THEY MUST BE STABILIZED. AT A MINIMUM (WITHOUT A SITE SPECIFIC SOIL TEST), SEEDING AND MULCHING MATERIALS SHALL BE AS SHOWN ON THIS SHEET.

IN THE ABSENCE OF A SITE SPECIFIC SOIL TEST, ALL SEEDING, MULCHING, AND SOIL AMENDMENTS SHALL BE AS PER PENNDOT PUBLICATION 408 - SPECIFICATIONS, SECTION 804 - SEEDING AND SOIL SUPPLEMENTS AND SECTION 805 - MULCHING, UNLESS OTHERWISE SPECIFIED OR SHOWN. THE FOLLOWING PENNDOT SPECIFICATIONS ARE REPRODUCED BELOW:

TEMPORARY SEEDING SPECIFICATIONS:

LIMESTONE: PULVERIZED AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATE ( $\text{CaCO}_3$ ) (ADJUST PH LEVELS TO 6.5-7.0). APPLY AT A RATE OF 2 TONS PER ACRE.

COMMERCIAL FERTILIZER.

PULVERIZED AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATE ( $\text{CaCO}_3$ ) (ADJUST PH LEVELS TO 6.5-7.0). APPLY AT A RATE OF 2 TONS PER ACRE.

USE DRY FORMULATIONS OF 10-20-20 (N-P-K) ANALYSIS AT 680 POUNDS PER ACRE (15-1/2 POUNDS PER 1,000 SQUARE FEET) MIXED TO SEED BED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

MULCH:

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

SEED MIXTURE:

SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE PENNDOT FORMULA E IN ACCORDANCE WITH PENNDOT PUBLICATION 408 - SPECIFICATIONS, SECTION 804 - SEEDING AND SOI SUPPLEMENTS. APPLY AT A RATE OF 50 POUNDS PER ACRE (1-1/4 POUNDS PER 1,000 SQUARE FEET).

PERMANENT SEEDING SPECIFICATIONS:

PULVERIZED AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATE ( $\text{CaCO}_3$ ) (ADJUST PH LEVELS TO 6.5-7.0). APPLY AT A RATE OF 6 TONS PER ACRE.

COMMERCIAL FERTILIZER:

USE DRY FORMULATIONS OF 10-20-20 (N-P-K) ANALYSIS AT 1,000 POUNDS PER ACRE (23 POUNDS PER 1,000 SQUARE FEET) MIXED TO SEED BED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

INOCULANT:

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

MULCH

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

SEED MIXTURE:

SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE MIXED IN THE PROPORTIONS SPECIFIED IN TABLES 6 THROUGH 8.

### SEED PREPARATION

GRADE AS NECESSARY TO BRING SUBGRADE TO A TRUE SMOOTH SLOPE PARALLEL TO, AND SIX (6) INCHES BELOW, FINISHED GRADE. PLACE TOPSOIL OVER SPECIFIED AREAS TO A DEPTH SUFFICIENTLY GREATER THAN SIX (6) INCHES SO THAT, AFTER SETTLEMENT AND LIGHT ROLLING, THE COMPLETE WORK WILL CONFORM TO THE LINES, GRADES, AND ELEVATIONS SHOWN.

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

COMMON NAME	SCIENTIFIC NAME	% COMPOSITION
Little Bluestem, Camper	<i>Schizachyrium scoparium</i> , Camper	39.80
Virginia Wildrye, PA Ecotype	<i>Elymus virginicus</i> , PA Ecotype	19.00
Round Seed Panicgrass	<i>Panicum sphaerocarpon</i>	17.70
Partridge Pea, PA Ecotype	<i>Chamaecrista fasciculata</i> , PA Ecotype	4.00
Purple Coneflower	<i>Echinacea purpurea</i>	3.50
Blackeyed Susan, Coastal Plain NC Ecotype	<i>Rudbeckia hirta</i> , Coastal Plain NC Ecotype	3.00
Oxeye Sunflower, PA Ecotype	<i>Helopsis helanthoides</i> , PA Ecotype	2.00
Tall White Beardtongue, PA Ecotype	<i>Penstemon digitalis</i> , PA Ecotype	2.00
Bottlebrush Grass, PA Ecotype	<i>Elymus hystrix</i> , PA Ecotype	1.00
Marsh Blazing Star, PA Ecotype	<i>Liatris spicata</i> , PA Ecotype	1.00
Autumn Berggrass, Albany Pine Bush-NY Ecotype	<i>Agrostis perennans</i> , Albany Pine Bush-NY Ecotype	0.50
Butterfly Milkweed	<i>Asclepias tuberosa</i>	0.50
Bigleaf Aster, PA Ecotype	<i>Aster macrophyllus</i> , PA Ecotype	0.50
Zizag Aster, PA Ecotype	<i>Aster prenanthoides</i> , PA Ecotype	0.50
Blue False Indigo, Southern WV Ecotype	<i>Baptisia australis</i> , Southern WV Ecotype	0.50
White Avens, PA Ecotype	<i>Geum canadense</i> , PA Ecotype	0.50
Narrowleaf Mountainmint	<i>Pycnanthemum tenuifolium</i>	0.50
White Goldenrod, PA Ecotype	<i>Solidago bicolor</i> , PA Ecotype	0.50
Ohio Spiderwort, PA Ecotype	<i>Tradescantia ohioensis</i> , PA Ecotype	0.50
Golden Alexanders, PA Ecotype	<i>Zizia aurea</i> , PA Ecotype	0.50
Trindaleweed, PA Ecotype	<i>Anemone virginiana</i> , PA Ecotype	0.40
Smooth Blue Aster, NY Ecotype	<i>Aster laevis</i> , NY Ecotype	0.40
Wild Bergamot, Fort Indiantown Gap-PA Ecotype	<i>Monarda fistulosa</i> , Fort Indiantown Gap-PA Ecotype	0.40
Common Milkweed	<i>Asclepias syriaca</i>	0.30
Early Goldenrod, PA Ecotype	<i>Solidago juncea</i> , PA Ecotype	0.20
Yellow False Indigo, PA Ecotype	<i>Baptisia tritoria</i> , PA Ecotype	0.10
Hairy Beardtongue	<i>Penstemon hirsutus</i>	0.10
Culver's Root, PA Ecotype	<i>Veronicastrum virginicum</i> , PA Ecotype	0.10

SEEDING RATE: 20 POUNDS PER ACRE OR 1/2 POUND PER 1,000 SQUARE FEET.

COMMON NAME	SCIENTIFIC NAME	MINIMUM PERCENT (BY WEIGHT)	MINIMUM PURITY	GERMINATION RATE	SEEDING RATE (POUNDS/ACRE)
KENTUCKY BLUEGRASS	<i>Poa pratensis</i>	40-60%	97%	80%	42
CREEPING RED FESCUE OR CHEWINGS FESCUE	<i>Festuca rubra</i> OR <i>Festuca rubra</i> ssp. <i>Commutata</i>	30 - 40%	97%	85%	61
PERENNIAL RYEGRASS	<i>Lolium perenne</i>	10-20%	97%	90%	102
SEEDING RATE: 205 POUNDS PER ACRE OR 4.7 POUNDS PER 1,000 SQUARE FEET.					

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**COUNTY OF LAWRENCE**  
**QUAKER FALLS RECREATION AREA**  
PROPOSED OVERLOOK & ENHANCEMENTS PROJECT  
PHASE II  
EROSION & SEDIMENT POLLUTION  
CONTROL PLAN DETAILS - SHEET 2 OF 2

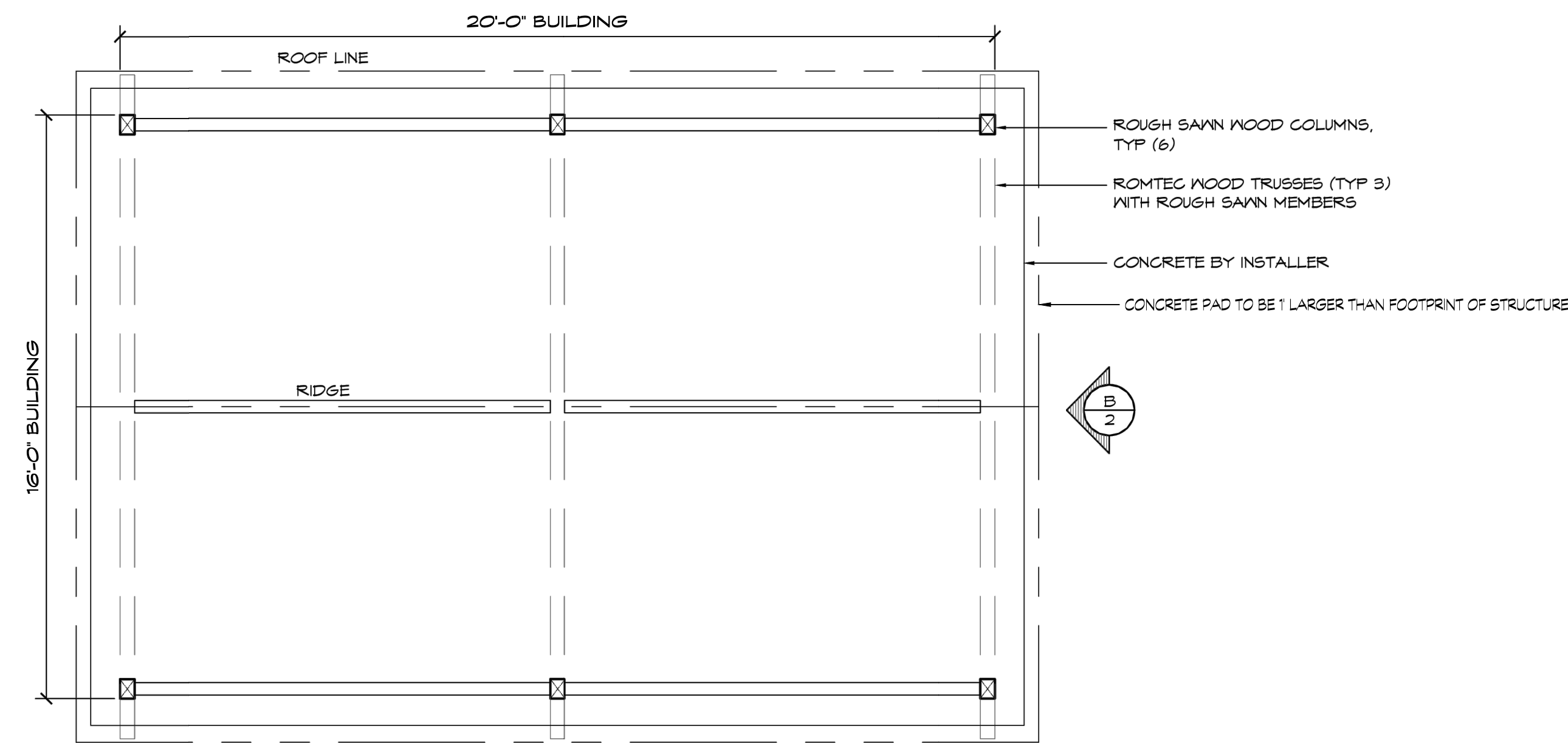
PREPARED BY CMS	DATE 05/23/2023
CHECKED BY JAM	DATE 05/23/2023
APPROVED BY RAR	DATE 05/23/2023
DRAWING SCALE: AS SHOWN	



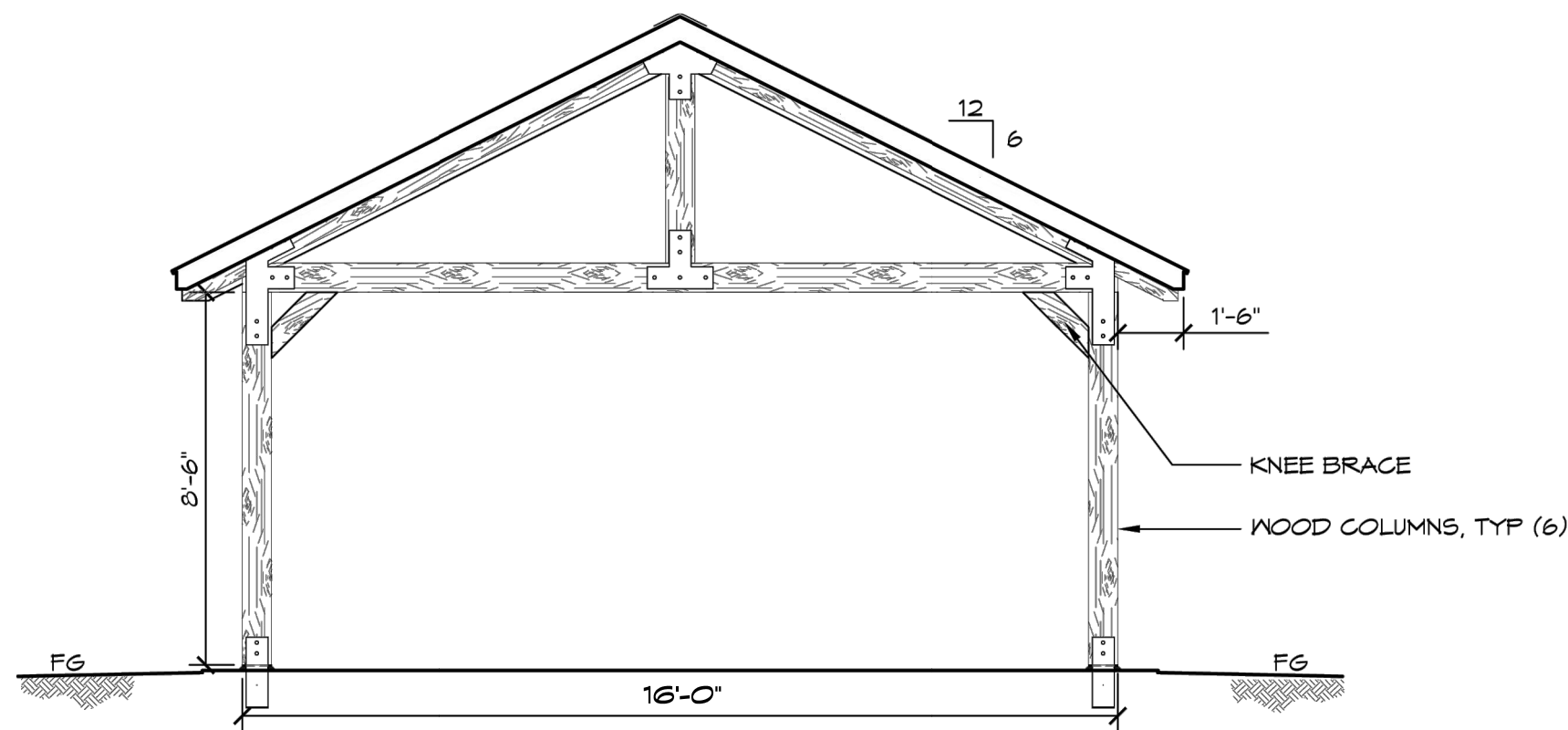
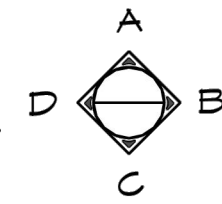
DRAWING NUMBER

# C-502

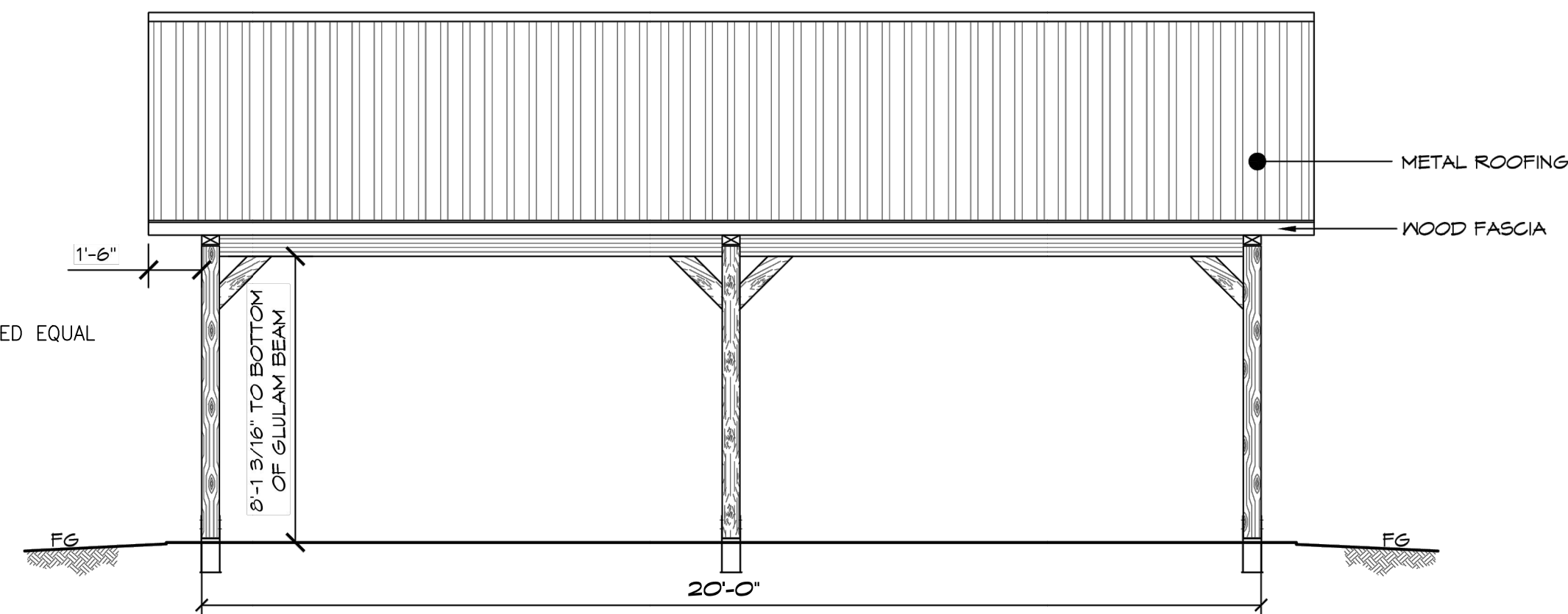




1 FLOOR PLAN  
SCALE: 1/4" = 1'-0"

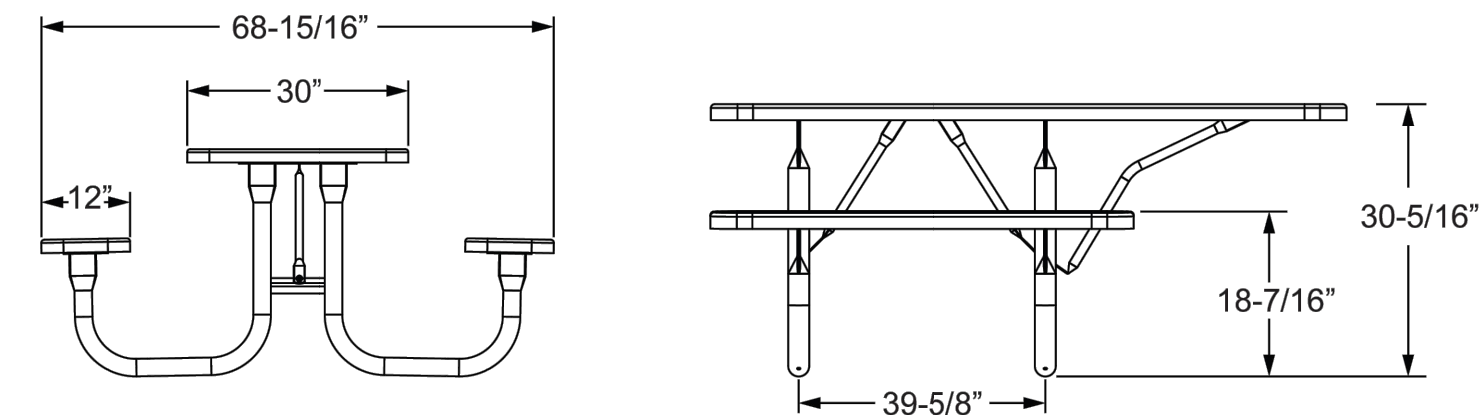


**B** ELEVATION VIEW  
SCALE: 1/4" = 1'-0"

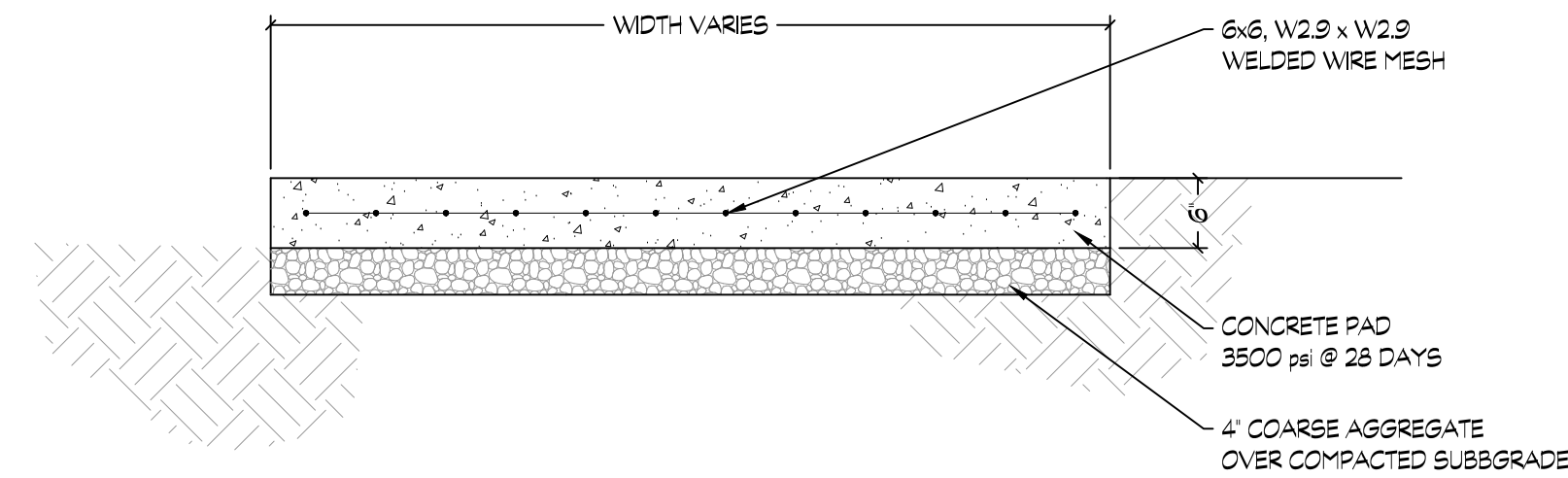


**C ELEVATION VIEW**  
SCALE: 1/4" = 1'-0"

16' x 20' DIMENSIONAL LUMBER PICNIC  
PAVILION  
SCALE: N.T.S.



ADA PICNIC TABLE DETAIL  
SCALE: N.T.S.

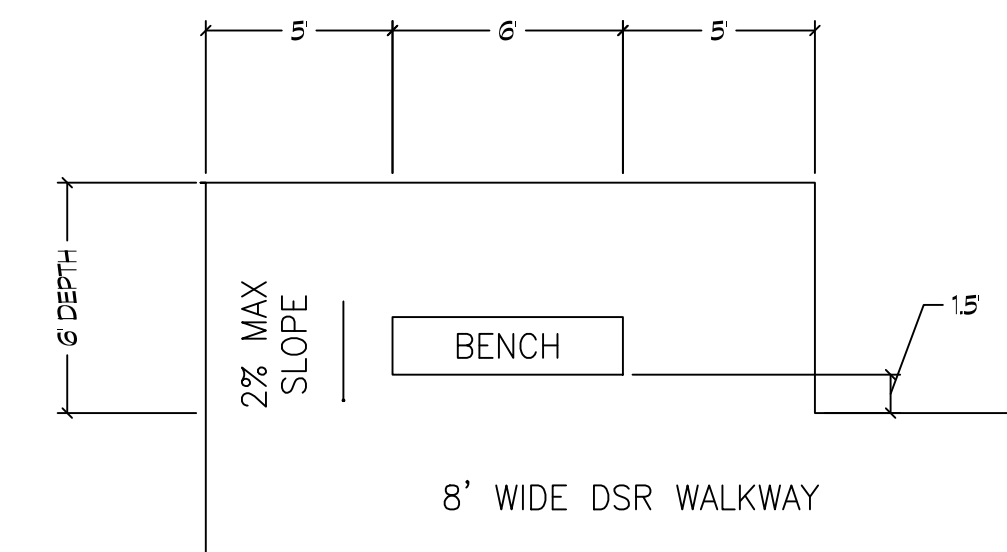


CONCRETE PAD TYPICAL SECTION  
SCALE: N.T.S.

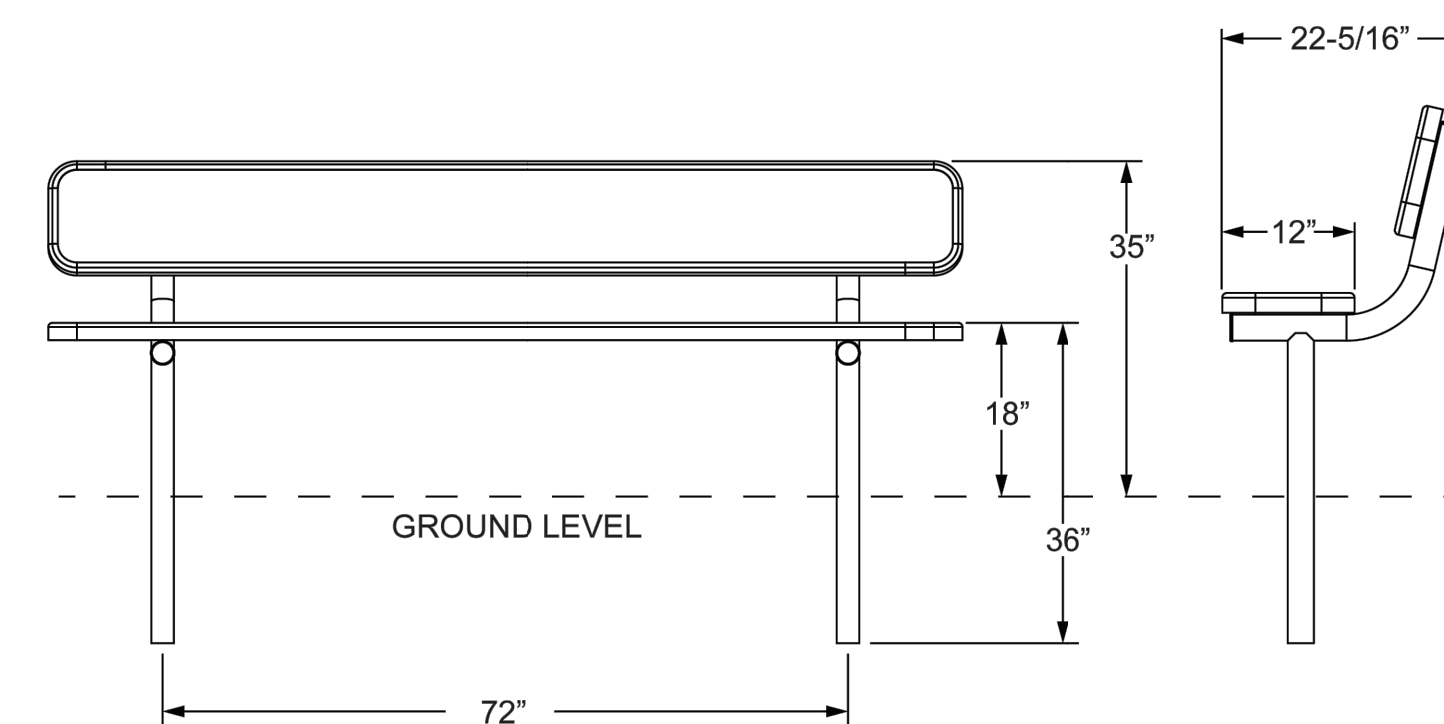
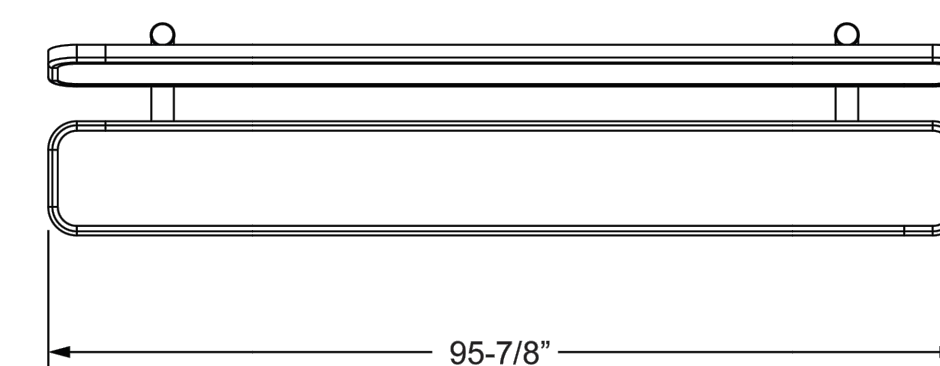


DCNR PROJECT SIGN DETAIL  
SCALE: N.T.S.


- SIGNAGE NOTES:
1. DCNR FUNDING SIGN TO BE INSTALLED AS PER DRAWING.
  2. ALL SIGNS TO BE MOUNTED ON U-CHANNEL POST WITH THE BOTTOM OF THE SIGN 60" MINIMUM FROM THE FINISHED GROUND SURFACE




ADA BENCH AREA DETAIL  
SCALE: N.T.S.



IN GROUND BENCH DETAIL  
SCALE: N.T.S.

COUNTY OF LAWRENCE QUAKER FALLS RECREATION AREA PROPOSED OVERLOOK & ENHANCEMENTS PROJECT PHASE II GENERAL CONSTRUCTION DETAILS		LAWRENCE COUNTY, PA	
MAHONING TOWNSHIP			
PREPARED BY	CMS	DATE	05/23/2023
CHECKED BY	JAM	DATE	05/23/2023
APPROVED BY	RAR	DATE	05/23/2023
DRAWING SCALE:		AS SHOWN	
			
DRAWING NUMBER <h1 style="margin: 0;">C-503</h1>			



R.A.R.

engineering group, inc.

1135 buller avenue, new castle, pennsylvania 16101

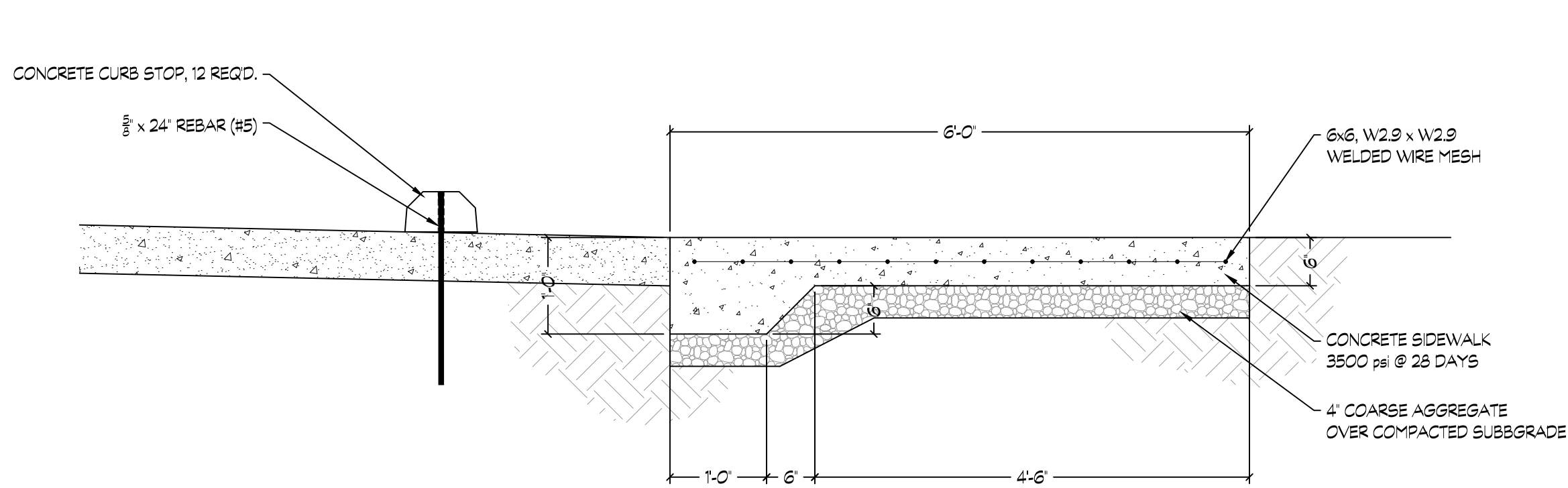
telephone: 724.652.1004 fax: 724.652.3814

website: <https://www.rarengineering.com>

	NO.	DATE	DESCRIPTION
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2			
3			
4			
5			
6			
7			

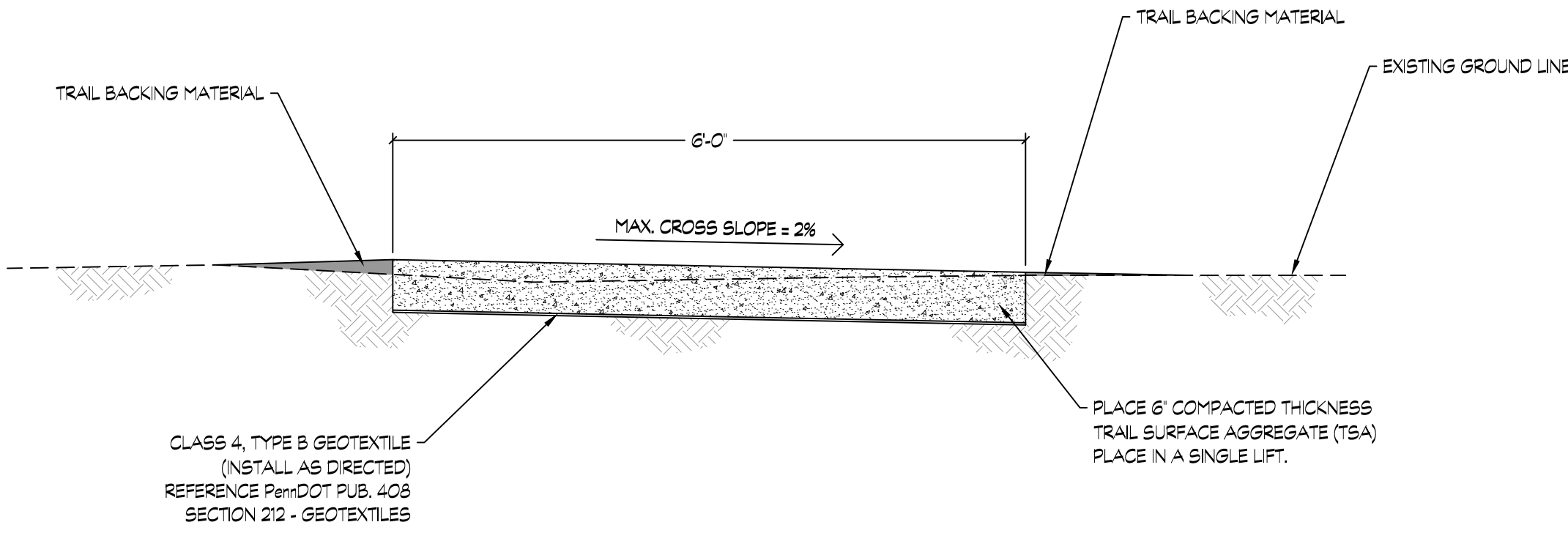


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PLOT DATE AND TIME: 10/02/2023 12:24 PM

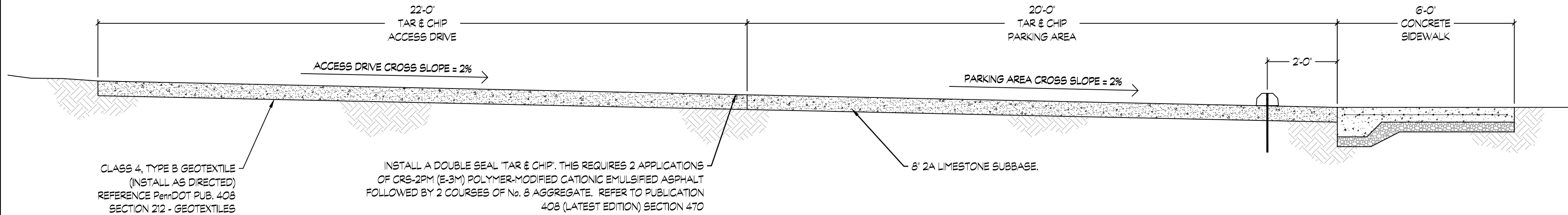


SECTION A-A  
SCALE: 3/4" = 1'-0"

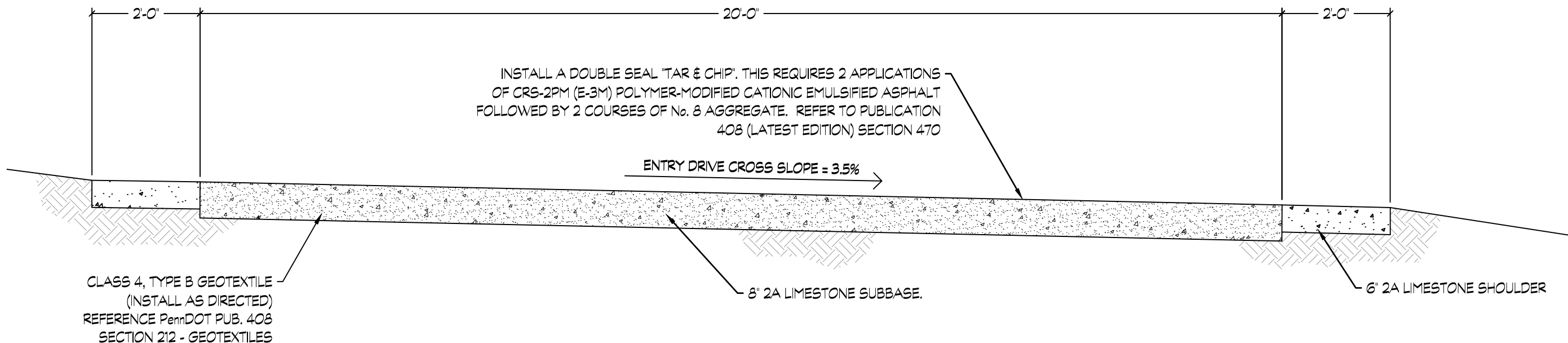
CONCRETE NOTE:  
CONTRACTOR TO PROVIDE A PROTECTIVE COATING FOR ALL CONCRETE SURFACES. REFER TO PennDOT PUBLICATION 408 SECTION 503-PROTECTIVE COATINGS FOR CEMENT CONCRETE PAVEMENT.  
FINISH SHALL BE A BROOM FINISH, INSTALL A TOOLED JOINT EVERY 5 FEET.



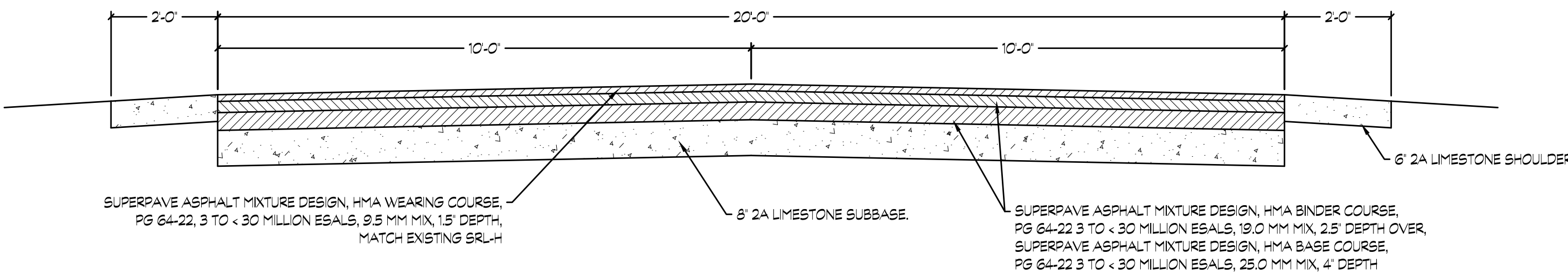
SECTION B-B  
SCALE: 3/4" = 1'-0"



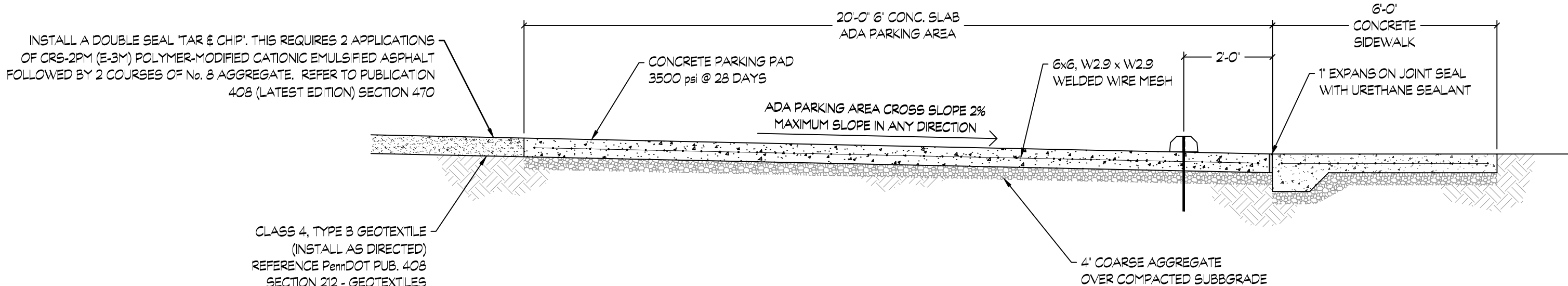
SECTION C-C  
SCALE: 3/8" = 1'-0"



SECTION D-D  
SCALE: 1/2" = 1'-0"



SECTION E-E  
SCALE: 1/2" = 1'-0"



SECTION F-F  
SCALE: 3/8" = 1'-0"

CONCRETE PAVEMENT NOTE:  
CONTRACTOR SHALL PROVIDE A BROOM FINISH, SAW CUT JOINTS TO PROVIDE FOUR EQUAL SECTIONS OF 10 FEET x 12 FEET.  
CONTRACTOR TO PROVIDE A PROTECTIVE COATING FOR ALL CONCRETE SURFACES. REFER TO PennDOT PUBLICATION 408 SECTION 503-PROTECTIVE COATING FOR CEMENT CONCRETE PAVEMENT.

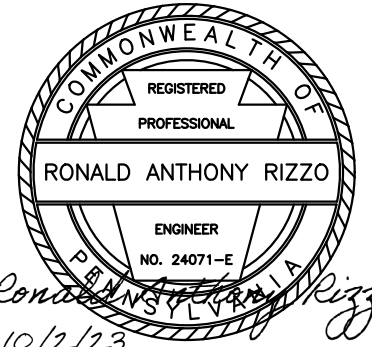
REVISIONS							DESCRIPTION
NO.	DATE	BY	CHKD	APP'D	REASON	REVISION	
1							
2							
3							
4							
5							
6							
7							

**R.A.R.**  
engineering group, inc.  
1135 Butler Avenue, New Castle, Pennsylvania 16101  
telephone: 724.652.1004 fax: 724.652.3814  
website: https://www.rarengineering.com

COUNTY OF LAWRENCE  
QUAKER FALLS RECREATION AREA  
PROPOSED TRAIL & OVERLOOKS PROJECT

MAHONING TOWNSHIP  
SITING SECTIONS  
LAWRENCE COUNTY, PA

PREPARED BY	MT	DATE	10/04/2019
CHECKED BY	RAR	DATE	10/04/2019
APPROVED BY	RAR	DATE	10/07/2019
DRAWING SCALE:	AS NOTED		



DRAWING NUMBER  
**C-504**