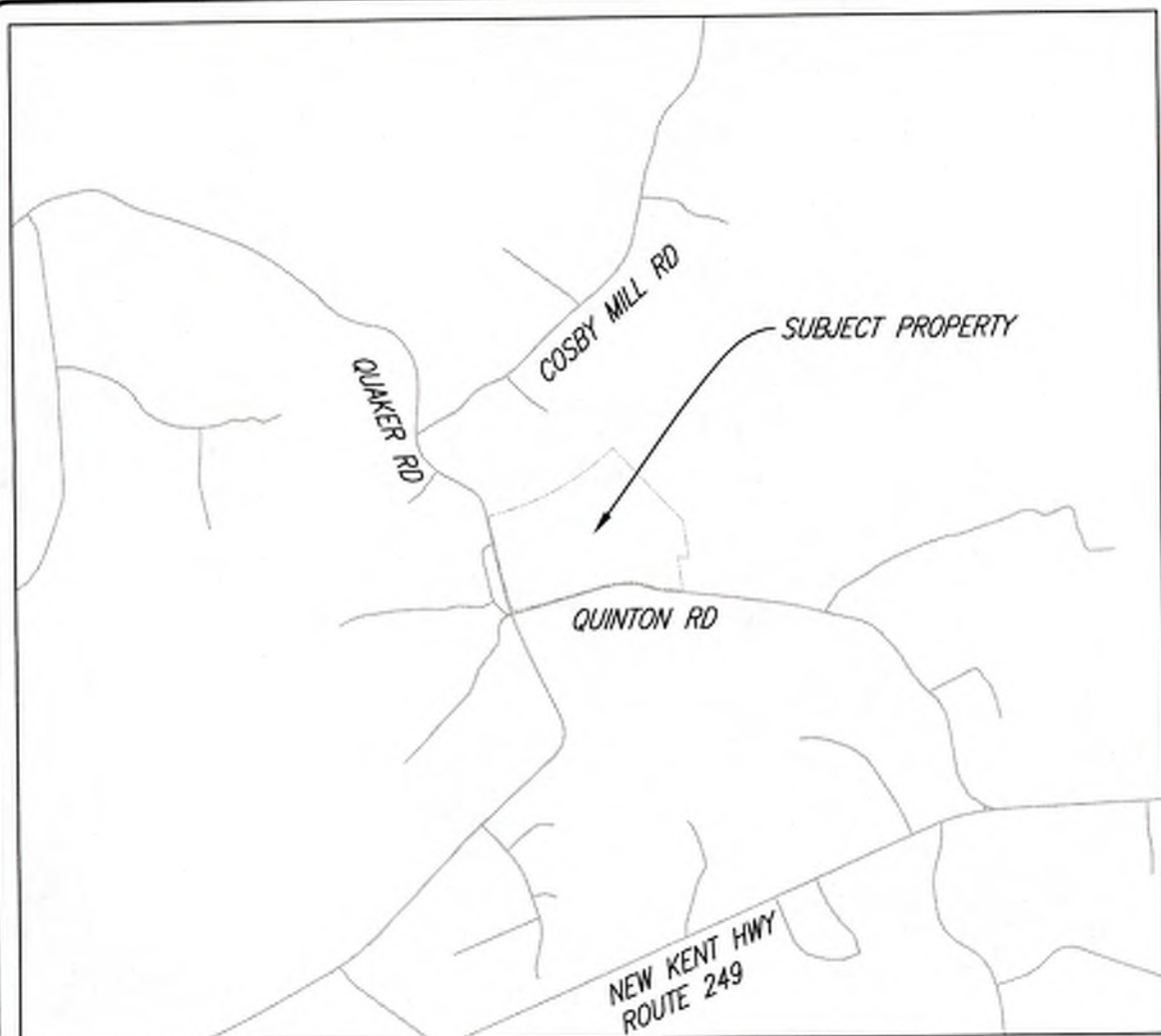




VICINITY MAP

SCALE: 1" = 2000'

THE VICINITY MAP SHOWN WAS PREPARED BY DATA COMPILED FROM RECORDED SUBDIVISION PLATS, PARCEL PLATS, DEEDED DESCRIPTION DATA, AND OTHER RECORDS OWNED BY CHESTERFIELD COUNTY. THE COUNTY ASSUMES NO LEGAL RESPONSIBILITY OR LIABILITY FOR ANY OF THE INFORMATION CONTAINED ON THIS MAP.

EROSION CONTROL QUANTITIES

(FOR BOND PURPOSES ONLY)

1 EA	C-SCM-03	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE
1,035 LF	C-PCM-04	SILT FENCE	SF
2,038 LF	C-ECM-04	TEMPORARY DIVERSION DIKE	DD
1 EA	C-SCM-12	TEMPORARY SEDIMENT BASIN	SB
510 LF	C-PCM-01	SAFETY FENCE	SAF
1 EA	C-ECM-15	OUTLET PROTECTION	OP
11.97 AC	C-SSM-09	TEMPORARY SEEDING	TS

NEW KENT - BROYHILL ESC PLAN

S QUAKER & QUINTON RD
BLACK CREEK MAGISTERIAL DISTRICT
NEW KENT COUNTY, VIRGINIA

SHEET INDEX	
Sheet Number	Sheet Title
C01	COVER
C01.1	GENERAL NOTES
C02	EXISTING CONDITIONS AND DEMOLITION PLAN
C03	EROSION AND SEDIMENT CONTROL PLAN
C04	EROSION AND SEDIMENT CONTROL NOTES
C05	EROSION AND SEDIMENT CONTROL DETAILS
C06	SEDIMENT TRAP CALCULATIONS

TOTAL SHEETS=7

- SITE ADDRESS: S QUAKER & QUINTON RD
QUINTON, VA 23141
- DEVELOPER/OWNER: OLD VIRGINIA LAND AND TIMBER LLC
C/O BROYHILL FOUNDATION, INC.
800 HICKORY BLVD, SW
LENOIR, NC 28645
CONTACT: DOUG BRINKLEY
828-312-4071
DOUG@BROYHILLINVEST.COM
- ENGINEER: BALZER AND ASSOCIATES
15871 CITY VIEW DRIVE, SUITE 200
MIDLOTHIAN, VA 23113
CONTACT: CHRISTOPHER M. SHUST
(804) 794-0571
CHRIS.SHUST@WESTWOODPS.COM
- TAX MAP NUMBER: 9-37
- GPIN: M08-2128-1456
- EXISTING USE: VACANT
PROPOSED USE: SOIL STOCKPILE
- ZONING: A1, AGRICULTURE
- TOTAL ACRES: 922.099 ACRES
DISTURBED AREA: 7.60 ACRES
TOTAL ON-SITE IMPERVIOUS COVER: 0.40 AC (PRE-DEVELOPMENT)
0.40 AC (POST-DEVELOPMENT)
- WATER: N/A
- SEWER: N/A

- CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL, ON HIS INITIATIVE AND AT NO EXTRA COST, HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE OR OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. CONTACT "MISS UTILITY" OF CENTRAL VA TOLL FREE 1-800-552-7001.
- ALL UTILITY LINES SUCH AS ELECTRIC, TELEPHONE, AND CATV, OR OTHER SIMILAR LINES SHALL BE INSTALLED UNDERGROUND. THIS SHALL APPLY TO LINES SERVING INDIVIDUAL SITES AS WELL AS TO UTILITY LINES WITHIN THE PROJECT.
- LANDSCAPE PLANTINGS AT ENTRANCES/EXITS WILL BE INSTALLED AND MAINTAINED SO AS NOT TO INTERFERE WITH SIGHT DISTANCE NEEDS OF DRIVERS IN THE PARKING AREA AND AT ENTRANCE/EXIT LOCATIONS.
- ANY SIGN IN EXCESS OF 8 SQUARE FEET REQUIRES A SEPARATE PERMIT. SIGN PERMITS MAY BE OBTAINED THROUGH THE DEPARTMENT OF BUILDING INSPECTIONS. SIGNAGE IS CONTINGENT UPON APPROVAL THROUGH SIGN PERMIT REVIEW PROCESS.
- THE APPROXIMATE AREA OF THE LIMITS OF CLEARING, GRADING, AND CONSTRUCTION IS 7.60 ACRES.
- STORMWATER COMPLIANCE IS ACHIEVED THROUGH CONSTRUCTION ESC AND STORMWATER CONTROLS. NO PERMANENT DEVELOPMENT IS PROPOSED.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN CONFORMANCE WITH THE LATEST EDITIONS OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS AND ROAD AND BRIDGE STANDARDS.
- NO LANDSCAPING OF ANY TYPE SHALL BE PLACED WITHIN A THREE FOOT RADIUS OF ANY FIRE HYDRANT, FIRE PUMP TEST HEADER, FIRE DEPARTMENT SPRINKLER SYSTEM CONNECTION, FIRE DEPARTMENT STANDPIPE CONNECTION OR FIRE SUPPRESSION CONTROL VALVE. LANDSCAPING IN THE AREA OF FIRE HYDRANTS, FIRE PUMP TEST HEADERS, FIRE DEPARTMENT SPRINKLER SYSTEM CONNECTIONS OR FIRE DEPARTMENT STANDPIPE CONNECTIONS SHALL BE OF THE TYPE THAT WILL NOT ENCROACH ON THE REQUIRED THREE FOOT CLEAR RADIUS ON MATURITY OF LANDSCAPING.
- CONTRACTOR SHALL PROVIDE A MIN. 6" DEPTH OF TOPSOIL IN ALL GREEN AREAS. CONTRACTOR SHALL USE EXISTING TOPSOIL AND/OR PROVIDE NEW TOPSOIL, WHICH IS FERTILE, FRIABLE, NATURAL LOAM SURFACE SOIL, REASONABLY FREE OF FOREIGN MATTER, ROOTS, STUMPS, AND STONES LARGER THAN 2" IN DIAMETER.
- A MEETING WITH THE VDOT INSPECTOR IS REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION WITHIN THE RIGHT-OF-WAY.
- ANYONE SUBMITTING A MAINTENANCE OF TRAFFIC PLAN WHICH IS PART OF A TRAFFIC MAINTENANCE PLAN SHALL ALSO SUBMIT THE ACCREDITATION NUMBER FOR TAKING THE VDOT ADVANCED TRAFFIC CONTROL TRAINING.
- HUC CODE: Y033
- RECEIVING WATERS: BLACK CREEK
- LAT: 37.540679 LONG: -77.163395
- TOTAL RPA IMPACTS: 0 SF
- IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATION 107.14 (A), SPECIAL PROVISION 107D, ALL CONTRACTORS PERFORMING REGULATED LAND DISTURBING ACTIVITIES WITHIN VDOT RIGHT-OF-WAY MUST HAVE AN EMPLOYEE THAT HAS SUCCESSFULLY COMPLETED THE VDOT EROSION & SEDIMENT CONTROL CONTRACTOR CERTIFICATION TRAINING. REGULATED LAND DISTURBING ACTIVITIES ARE DEFINED AS THOSE ACTIVITIES THAT DISTURB 2,500 SQUARE FEET OR GREATER IN TIDEWATER, VIRGINIA OR 10,000 SQUARE FEET OR GREATER IN ALL OTHER AREAS OF THE STATE. THE DEPARTMENT WILL REQUIRE EVIDENCE OF THIS CERTIFICATION WITH ANY LAND USE PERMIT APPLICATION THAT INVOLVES UTILITY AND/OR COMMERCIAL RIGHT-OF-WAY IMPROVEMENT.
- FINAL PAVEMENT SECTIONS SHALL BE BASED ON ACTUAL CBR VALUES FOUND AND THE APPROPRIATE PAVEMENT SECTION DERIVED THEREFROM. CURBS ARE NOT TO BE SET UNTIL THE FINAL PAVEMENT SECTION IS ESTABLISHED BASED ON "IN SITU" CBR DETERMINATIONS.
- THE APPLICANT SHALL RETAIN THE SERVICES OF A LICENSED GEOTECHNICAL ENGINEER TO PERFORM THE REQUIRED INSPECTION AND TESTING.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL DEVICES, SIGNAGE, EQUIPMENT, PERSONNEL, INCLUDING CERTIFIED TRAFFIC CONTROL PERSONNEL, ETC. TO CONTROL TRAFFIC DURING CONSTRUCTION WITHIN VDOT RIGHT OF WAY. ALL TRAFFIC CONTROL SHALL BE IN STRICT ACCORDANCE WITH THE STANDARDS, GUIDELINES, POLICIES AND OBJECTIVES OF THE LATEST EDITION OF THE VIRGINIA WORK AREA PROTECTION MANUAL, MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ALL VDOT PERMITS.
- CONTACT VDOT RICHMOND DISTRICT ASSET MANAGEMENT AT LEAST TWO WEEKS PRIOR TO THE START OF CONSTRUCTION IN ORDER FOR ASSETS TO BE LOCATED IN THE FIELD.

ENVIRONMENTAL

APPROVED

Julia Singh
8/22/25



**BALZER
& ASSOCIATES**
a Westwood Company

Roanoke / Richmond
New River Valley
Shenandoah Valley

balzer.cc | westwoodps.com

15871 City View Drive
Suite 200
Midlothian, VA 23113
804.794.0571



NEW KENT - BROYHILL ESC PLAN

COVER

BLACK CREEK MAGISTERIAL DISTRICT
S QUAKER & QUINTON RD

DRAWN BY ATD
DESIGNED BY ATD
CHECKED BY CMS
DATE 04/18/2025
SCALE NOT TO SCALE
REVISIONS
06-25-2025

SITE PLAN #: SP-000641-2025

C01
PROJECT NO. R0067601.00



Richmond District Land Use
Subdivision and Site Construction Plan General Notes

Effective Date
January 2021

1. All materials and construction within the public right of way shall be in accordance with the latest edition of the *Virginia Department of Transportation's Road and Bridge Specifications, Road and Bridge Standards and Virginia Work Area Protection Manual*.
2. Land Use Permits (LUP) shall be obtained from the Virginia Department of Transportation prior to beginning any construction within the existing state maintained right-of-way (including access).
3. VDOT requires notification 48 hours prior to commencing with initial construction activities. Please contact the appropriate permit office in which your proposed activities are to occur.
4. Approval of a detailed construction sequencing and maintenance of traffic plan for the work zone is a prerequisite for issuance of a Land Use Permit. The plan shall accommodate access to and construction within VDOT maintained right-of-way.
5. Work Zones - Requests for the implementation of temporary lane and shoulder closures on Interstate, Limited Access Primary Routes, and Routes 58 and 460 must be entered into the VDOT Lane Closure Advisory Management System (LCAMS) by 12:00 pm on Thursday the week before the work is to take place for approval. Contact the Work Zone Coordinator at 804-609-5338 for questions and assistance. All lane/shoulder closures requiring LCAMS approval shall be entered into VA Traffic Lane/Shoulder closures on primary and major secondary routes must also be entered in VA Traffic. Major secondary routes are defined as those listed in the Richmond District Recommended Work Hours document. Just prior to the first cone going down, users must contact the TOC at 804-796-4520 to activate the work zone and when the last cone has been picked up to deactivate the work zone.
6. Permittee must notify Virginia Department of Transportation TOC when there is a crash in a work zone at 804-796-4520.
7. Prior to any construction, the contractor shall consult the developer's engineering consultant and verify the approval of the plans by all applicable federal, state and local agencies.
8. Contractor shall verify location and elevation of all underground utilities shown on plans in areas of construction prior to starting work. Contact the developer's engineering consultant immediately if location or elevation is different from that shown on plan. If there appears to be a conflict, or upon discovery of any utility not shown on this plan, call "Miss Utility" at 811. The developer shall be responsible for the relocation of any utility within existing and proposed right of way required by the development.
9. The permittee or their agent must contact the VDOT Customer Service Center at 1-800-367-7623 a minimum of 48 hours prior to initiating any planned excavation within 1,000 feet of a signalized intersection and/or near VDOT ITS infrastructure. Excavation may proceed only after the VDOT regional utility location agent has notified the permittee that the utility marking has been completed. Additional information can be found at: http://www.virginiadot.com/business/permits/TIME/TS-385_Request_For_Marking_VDOT_Utility_Location.pdf "Miss Utility" does not locate VDOT utilities.
10. The contractor shall verify the elevations of all points of connection of proposed work to existing curbs, sanitary lines, water lines, etc., prior to construction.
11. Design changes, specified materials changes and field changes from the approved plans shall be re-submitted to VDOT for approval prior to proceeding with the work. A letter of explanation shall accompany the proposed revision along with drainage calculations when appropriate.

12. VDOT approval of construction plans does not preclude the right to require additional facilities as deemed necessary for acceptance of the roads into the VDOT Secondary Road System based on field conditions or unapproved plan changes.
13. VDOT approval of these plans will expire five (5) years from the date of approval for site plans and subdivision plans if construction has not started.
14. Preliminary design of the pavement structure for all subdivision streets shall be in accordance with the current edition of *The Pavement Design Guide for Subdivision and Secondary Roads in Virginia*. The completed design worksheet appendix IV shall be included with the initial plan submittal for each proposed pavement section utilizing the predicted soil support value shown in Appendix I of *The Pavement Design Guide* or as reported in a geotechnical analysis of the on-site soils.
15. A copy of the complete CBR report shall be submitted to VDOT in conjunction with final pavement designs. All pavement design recommendations shall be performed in accordance with the current edition of *Pavement Design Guide for Subdivision and Secondary Roads in Virginia*.
16. All vegetation and organic material shall be removed from the right of way limits prior to conditioning of the subgrade.
17. Upon discovery of soils that are unsuitable for foundations, subgrades, or other roadway construction purposes, the developer or his designee, which may be the contractor, shall immediately engage a geotechnical engineer and notify VDOT. These areas shall be excavated below plan grade as directed by the geotechnical engineer, backfilled with suitable material and compacted in accordance with current VDOT specifications.
18. The necessity and locations for additional VDOT standard underdrains shall be determined at time of subgrade inspection. Video inspection of accessible outlet locations, mainline longitudinal connections, and longitudinal pipe for all pavement underdrains, cross drains, edge drains and prefabricated geocomposite panel drains shall be conducted in accordance with Section 501 of the *Road and Bridge Specifications and Virginia Test Method 108 - Post Installation Inspection of Underdrains, Crossdrains, and Edge Drains*.
19. VDOT shall have performed the required field inspection (proof roll) prior to placement of the aggregate base course(s). Contact VDOT for subgrade inspection 48 hours prior to scheduling placement of aggregate base course(s).
20. The scheduling of aggregate base installation and subsequent paving activities shall accommodate forecasted weather conditions per Section 315 of *The Road and Bridge Specifications*.
21. VDOT shall have approved the aggregate base course(s) for design, template and performed the required field inspection (proof roll) prior to placement of any asphalt concrete surface course(s). Contact VDOT for inspection of the aggregate base course(s) 48 hours prior to application of the surface course(s).
22. A licensed geotechnical engineer or his designee shall ascertain cause and certify recommended method of repair for all pavement structural failures prior to state acceptance.
23. VDOT shall be provided documentation by a licensed geotechnical engineer, certifying that all in-place pavements meet or exceed the approved pavement design thickness prior to state acceptance of the street. Cores are to be obtained verifying pavement thickness unless otherwise directed by VDOT. The Permit Inspector shall be contacted 24 hours prior to the core samples being taken.
24. All storm sewer design and construction shall be in accordance with latest *VDOT Drainage Manual, Road and Bridge Standards*, and IIMs.
25. All pre-cast units shall be VDOT approved. Certification and VDOT stamp is required on all units.
26. All concrete shall be class A3-A5 (air entrained 3,000 PSI) unless otherwise specified.
27. All roadside ditches shown as paved on plans are to be paved in accordance with the standard typical section as shown on the plans. Any additional paving of the ditches, other than those shown on the road plans will be determined prior to acceptance of the roads into the VDOT secondary road system.
28. Road & Bridge Specifications Section 302, Drainage Structures addresses post installation visual/video camera inspection of storm sewer pipes and pipe culverts. Inspection frequency shall be in accordance with the

- specifications and/or as necessitated by the Engineer. Video inspection shall be conducted in accordance with *Virginia Test Method (VTM) 123, Post Installation Inspection of Buried Storm Sewer Pipe and Pipe Culverts*. A construction entrance shall be installed on each individual lot prior to any lot grading or home construction activities and shall be adequately maintained until all construction traffic areas within the lot have been stabilized.
30. All entrances shall be designed and constructed in accordance with current VDOT standards. Residential lot access shall be provided per the following criteria:
 - All driveway entrances and entrance culverts shall conform to PE-1 private entrance standards unless otherwise approved by VDOT. No entrance culverts are to be installed within five (5) feet of a property corner.
 - VDOT standard CG-9D entrances shall be used when an entrance is required in curb and gutter neighborhoods unless otherwise approved by VDOT.
 31. Dry gutter is not allowed in VDOT right of way except as shown on VDOT's entrance standard details.
 32. The developer shall furnish and install stop signs and stop bars at street intersections and all regulatory signage per the *Manual of Uniform Traffic Control Devices*. All signs must be installed on VDOT standard STP-1 sign posts.
 33. Installation, maintenance and operation of street lighting shall be provided by and at the sole expense of others. VDOT will allow lighting within the right of way by Land Use Permit (LUP) only. Lighting on curb sections shall be placed behind the curb and preferably behind the sidewalk. For shoulder sections, the pole shall be placed a minimum of 10' from edge of pavement and behind the ditch line. All lighting proposed within the right of way must be designed in accordance with the *ASHTO guide for Roadway Lighting* and shall meet the current Illuminating Engineering Society of North America (IESNA) Standards.
 34. Traffic signals require an individual Land Use Permit. The applicant shall be responsible for the design costs of any traffic signal installation or modification of existing signals. Design plans must be prepared and submitted to VDOT by a licensed professional engineer for review and approval. This includes the foundation design and any equipment associated with the completed traffic signal. All equipment must be approved by VDOT. Shop drawings must be submitted for review and approval prior to fabricating any signal structural components. Soil stabilization is required within 7 days for all areas where clearing, grading, excavation or other land disturbing activities have permanently ceased or where land disturbance activities have been temporarily suspended for an anticipated duration of greater than 7 days, or upon completion of grading operations for a specified area. Soil stabilization shall begin as soon as practicable, but not later than the seven days following the day when land disturbing activities temporarily or permanently ceased.
 36. No structure shall be constructed on state maintained right of ways, or on right of ways intended to be maintained by VDOT unless said structures are shown on construction plans approved by VDOT or such structures are covered by a VDOT LUP (or by a letter of intent from the Resident Administrator/Resident Engineer to issue said permit at the time of state acceptance).

CONSTRUCTION SITE PLAN GENERAL NOTES
CONSTRUCTION METHODS

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS, AND LOCAL JURISDICTIONAL STANDARDS AND SPECIFICATIONS, WHERE APPLICABLE.
2. THE LOCATION OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION WORK AND NOTIFY ENGINEER IMMEDIATELY IF LOCATIONS DIFFER FROM PLANS.
3. THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-552-7001 OR 811 PRIOR TO ANY CONSTRUCTION WORK IN THIS AREA.

HANDICAPPED ACCESSIBILITY / ADA COMPLIANCE

1. THE MAXIMUM ALLOWABLE CROSS SLOPE ACROSS ACCESSIBLE PARKING SPACES AND ACCESSIBLE AISLES IS 2%. NO SLOPE IN ANY DIRECTION SHALL EXCEED 2% WITHIN ADA PARKING SPACES OR AISLES.
2. THE MAXIMUM ALLOWABLE LONGITUDINAL SLOPE ALONG ACCESSIBLE ROUTES IS 5%. THE MAXIMUM ALLOWABLE CROSS SLOPE IS 2%.
3. THE CONTRACTOR SHALL VERIFY SLOPES AND GRADES FOR ALL ACCESSIBLE PARKING SPACES AND ACCESS AISLES AFTER STAKING IS COMPLETE AND BOTH BEFORE AND AFTER INSTALLATION.
4. ANY SLOPE DISCREPANCIES DETECTED BY THE SURVEYOR AND/OR CONTRACTOR SHALL BE REPORTED TO THE ENGINEER PRIOR TO INSTALLATION.
5. UNLESS SPECIFICALLY NOTED ON THE SITE PLAN, DETECTABLE WARNING STRIPS ARE REQUIRED AT ALL CURB RAMPS AND FLUSH CURB TRANSITIONS TO PARKING LOTS.
6. HAND RAILS ARE REQUIRED FOR ANY ACCESSIBLE SITE PEDESTRIAN RAMPS WITH LONGITUDINAL SLOPES THAT EXCEED 5% AND / OR 6-INCHES IN RISE.
7. SITE HAND RAILS SHALL BE PER VDOT / ADA / ANSI STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE.
8. SITE HAND RAILS SHALL BE INSTALLED ON BOTH SIDES OF THE SITE SIDEWALKS WHERE HAND RAILS ARE REQUIRED.
9. PER VDOT STANDARDS, THE MAXIMUM PERMISSIBLE CURB RAMP SLOPE IS 12:1.
10. WHEEL STOPS FOR ACCESSIBLE PARKING SPACES SHALL BE INSTALLED 3'-0" OFF THE FACE OF CURB.
11. GUTTER PAN INSTALLED IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% SLOPE.
12. NO VERTICAL TRANSITIONS IN ADA ACCESSIBLE ROUTES SHALL EXCEED 1/4".

CURB AND GUTTER

1. THE CONTRACTOR SHALL USE A MINIMUM OF THREE (3) RUNNING CONSTRUCTION STAKES TO AVOID HARD BREAK LINES IN THE CURB - UNLESS SPECIFICALLY CALLED FOR ON THE PLANS.
2. THE MINIMUM LONGITUDINAL SLOPE FOR GUTTER PAN IS 0.5%, UNLESS OTHERWISE NOTED ON PLANS.
3. A MINIMUM 20-FOOT TRANSITION FROM CG-6 TO CG-7 IS REQUIRED, UNLESS OTHERWISE NOTED ON THE PLANS.
4. ALL CURB AND GUTTER SHOWN ON THE PLANS SHALL BE VDOT CG-6, CG-2, OR CG-7, UNLESS SPECIFICALLY NOTED OTHERWISE.

UNDERGROUND UTILITIES

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LINE AND GRADE FOR ALL DRY UTILITIES PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING DRY UTILITY LINES AND GRADES AGAINST ALL PROPOSED UTILITIES SHOWN ON THE PLANS. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER AS SOON AS POSSIBLE.
3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING TELEPHONE, CABLE, FIBER OPTIC, AND ELECTRICAL SERVICES TO THE PROJECT. CONTACT UTILITY PROVIDERS AS SOON AS POSSIBLE TO BEGIN COORDINATION.
4. THE CONTRACTOR SHALL REVIEW SITE AND BUILDING DRAWINGS TO VERIFY COORDINATION OF UTILITY INVERTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.

VDOT RIGHT OF WAY

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR WORKING IN VDOT RIGHT OF WAY.
2. CONTRACTOR IS RESPONSIBLE FOR HAVING A VDOT CERTIFIED RESPONSIBLE LAND DISTURBER ON SITE IN ACCORDANCE WITH VDOT REQUIREMENTS.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS AND PROVIDING VDOT WITH RECORDS OF REQUIRED INSPECTIONS.
4. CONTRACTOR IS RESPONSIBLE FOR REVIEWING GUARDRAIL REQUIREMENTS WITH THE VDOT INSPECTOR PRIOR TO THE START OF CONSTRUCTION. GUARDRAIL LOCATIONS SHOWN ON THE PLANS ARE PER VDOT STANDARDS, BUT THE VDOT INSPECTOR SHALL HAVE THE ABILITY TO ALTER REQUIREMENTS.
5. CG-12'S MUST BE INSTALLED AT CURB RETURNS WHERE THERE IS AN EXISTING OR POTENTIAL FUTURE SIDEWALK IN THE RIGHT OF WAY ALONG THE PROPERTY FRONTAGE. IF SIDEWALK IS NOT EXISTING OR PROPOSED, CURB MUST BE DEPRESSED TO ACCOMMODATE FUTURE SIDEWALK EXTENSIONS.

SIDEWALKS AND SITE STAIRS

1. ALL SITE STAIRS SHALL BE FURNISHED WITH VDOT HR-1 ON BOTH SIDES OF THE STAIRS.
2. ALL SITE STAIRS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VDOT / ADA / ANSI STANDARDS AND SPECIFICATIONS, UNLESS SPECIFICALLY NOTED OTHERWISE.
3. SIDEWALKS SHALL BE INSTALLED WITH A MAXIMUM 2% CROSS-SLOPE
4. SIDEWALKS SHALL BE BROOM FINISHED, UNLESS NOTED OTHERWISE ON THE PLANS.
5. SIDEWALKS SHALL BE 5-FOOT IN WIDTH, UNLESS NOTED OTHERWISE ON THE PLANS.

ROOF DRAINS AND DOWN SPOUTS

1. ALL DOWNSPOUTS NOT CONNECTED TO STORM SEWER SHALL BE FURNISHED WITH SPLASH BLOCKS.
2. ALL DOWN SPOUTS SHALL BE FURNISHED WITH A DOWNSPOUT/ROOFDRAIN TRANSITION BOOT. STUBBING OF DOWNSPOUT INTO ROOF DRAIN LATERAL WITHOUT A SUITABLE BOOT TRANSITION IS NOT PERMITTED.
3. ALL ROOF DRAIN LATERALS SHALL BE INSTALLED IN ACCORDANCE WITH THE PREVAILING LOCAL JURISDICTIONAL PLUMBING CODE OR THE INTERNATIONAL PLUMBING CODE, WHICHEVER IS MORE STRINGENT.
4. MINIMUM ALLOWABLE SLOPE FOR 4-INCH ROOF DRAIN LATERAL IS 2.08%.
5. MINIMUM ALLOWABLE SLOPE FOR 6-INCH ROOF DRAIN LATERAL IS 1.04%.
6. ROOF DRAIN LATERALS SHALL BE 6-INCH DIAMETER (SMOOTH-WALLED), UNLESS NOTED OTHERWISE ON THE PLANS.

TELEPHONE, FIBER OPTIC, CABLE, AND GAS LINE SERVICES

1. CONTRACTOR SHALL HAVE 'MISS UTILITY' MARK EXISTING UTILITY LINES PRIOR TO START OF CONSTRUCTION AND AS NECESSARY THROUGHOUT CONSTRUCTION.
2. CONTRACTOR SHALL REVIEW PLANS TO VERIFY EXISTING LOCATIONS MARKED IN THE FIELD MATCH THOSE SHOWN ON THE PLANS.
3. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY POTENTIAL DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.
4. CONTRACTOR SHALL POT-HOLE EXISTING UTILITIES AT CRITICAL CROSSING LOCATIONS PRIOR TO THE START OF CONSTRUCTION AND PROVIDE ENGINEER WITH LINE AND GRADE INFORMATION.

BUILDING DOORS AND GRADES

1. A MINIMUM 5'X5' PAD SHALL BE INSTALLED AT ALL BUILDING DOOR LOCATIONS (MAXIMUM 2% SLOPE IN ANY DIRECTION). COMPLY WITH ADA DOOR CLEARANCE REQUIREMENTS FOR PAD POSITIONING OUTSIDE OF THE DOOR.
2. FINISHED GRADE SHALL BE 6-INCHES BELOW FINISHED FLOOR ELEVATION ALONG ALL BUILDING WALLS, IN AREAS WHERE PVIOUS SURFACES ARE PROVIDED, UNLESS OTHERWISE NOTED. FINISHED GRADE FOR AREAS TO BE MULCHED SHALL BE AT TOP OF MULCH. FINISHED GRADE FOR AREAS TO RECEIVE SOD SHALL BE TO TOP OF SOD.
3. ALL PVIOUS SURFACES SHALL BE INSTALLED WITH A MINIMUM OF 2% SLOPE AWAY FROM THE BUILDING (FOR A MINIMUM OF 10-FEET), TO PROVIDE FOR POSITIVE DRAINAGE.
4. CONTRACTOR SHALL COORDINATE LOCATION OF WEEP HOLES ALONG ALL BUILDING WALLS AND VERIFY REQUIRED SEPARATION BETWEEN WEEP HOLES AND FINISHED GRADES.
5. CONTRACTOR SHALL REVIEW GRADING ALONG BUILDINGS WITH STOREFRONTS TO VERIFY REQUIRED SEPARATION IS PROVIDED.

RETAINING WALLS

1. RETAINING WALL LAYOUT AND GRADING DESIGN IS PRELIMINARY. CONTRACTOR/OWNER IS RESPONSIBLE FOR SHOP DRAWINGS AND ACQUIRING ANY REQUIRED BUILDING PERMIT AS WELL AS ANY OTHER JURISDICTIONAL REQUIREMENTS.
2. BUILDING PERMIT IS REQUIRED FOR RETAINING WALLS GREATER THAN 2-FT IN HEIGHT.
3. TW=FINISHED GRADE AT TOP OF WALL (WALL SHALL PROJECT A MINIMUM OF 6-INCHES ABOVE FINISHED GRADE, UNLESS NOTED OTHERWISE).
4. BW=FINISHED GRADE AT BOTTOM FACE OF WALL.
5. WHEN SEGMENTED BLOCK ('STACKED-BLOCK') RETAINING WALLS ARE CALLED FOR ON THE PLANS, ENGINEER SIGNED AND SEALED SHOP DRAWINGS MUST ENSURE THAT GEO-FABRIC IS PROPERLY ANCHORED TO THE WALL IN AREAS WITH VERTICAL PENETRATIONS. UNAPPROVED PENETRATIONS WILL REQUIRE GEOGRID REPLACEMENT AT CONTRACTORS EXPENSE.
6. WHEN SEGMENTED BLOCK ('STACKED-BLOCK') RETAINING WALLS ARE CALLED FOR ON THE PLANS, CONTRACTOR SHALL VERIFY THAT ALL REQUIRED VERTICAL PENETRATIONS THROUGH THE GEO-GRID ARE SPECIFIED ON THE PLANS PRIOR TO START OF CONSTRUCTION.
7. ENGINEER SHALL REVIEW AND APPROVE RETAINING WALL SHOP DRAWINGS PRIOR TO INSTALLATION.

FENCES

1. FENCES TALLER THAN 6-FOOT IN HEIGHT WILL REQUIRE A BUILDING PERMIT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE BUILDING PERMIT AT CONTRACTOR'S EXPENSE.
2. CONSTRUCTION BARRIERS - ALL CONSTRUCTION BARRIERS SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR IN COMPLIANCE WITH IBC CHAPTER 33.
3. THE CONTRACTOR SHALL SUBMIT FOR BUILDING PERMIT FOR CONSTRUCTION BARRIERS AS REQUIRED BY LOCAL CODES.

CONSTRUCTION STANDARDS

ALL CONSTRUCTION METHODS AND MATERIAL SHALL CONFORM TO THESE DRAWINGS, PROJECT SPECIFICATIONS, STANDARDS WITH ALL CURRENT APPLICABLE CODES, AND, UNLESS OTHERWISE SPECIFIED, WITH THE CURRENT EDITIONS AND LATEST REVISIONS OF THE FOLLOWING REFERENCE DOCUMENTS:

- VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD & BRIDGE SPECIFICATIONS
- VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD & BRIDGE STANDARDS
- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- VIRGINIA SUPPLEMENT TO THE MUTCD
- INSTRUCTIONAL AND INFORMATIONAL MEMORANDA (IIM)
- VIRGINIA WORK AREA PROTECTION MANUAL

SPECIFIC STANDARDS AND DETAILS FROM THE CURRENT AND OR REVISED VERSION OF THE 2016 VDOT ROAD AND BRIDGE STANDARDS INCLUDE:

1. ALL SITE STAIRS SHALL BE FURNISHED WITH VDOT HR-1 ON BOTH SIDES OF THE STAIRS.
2. ALL SITE STAIRS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VDOT / ADA / ANSI STANDARDS AND SPECIFICATIONS, UNLESS SPECIFICALLY NOTED OTHERWISE.
3. SIDEWALKS SHALL BE INSTALLED WITH A MAXIMUM 2% CROSS-SLOPE
4. SIDEWALKS SHALL BE BROOM FINISHED, UNLESS NOTED OTHERWISE ON THE PLANS.
5. SIDEWALKS SHALL BE 5-FOOT IN WIDTH, UNLESS NOTED OTHERWISE ON THE PLANS.

LEGEND

-----348-----	EX. INTRMDT. CONTOUR	-----	PROP. INTRMDT. CONTOUR
---345---	EX. INDEX CONTOUR	1320	PROP. INDEX CONTOUR
+33.55	EX. SPOT ELEVATION	35.55	PROP. SPOT ELEVATION
8" WL	EX. WATER LINE	8" WL	PROP. WATER LINE
8" SAN	EX. SANITARY SEWER	8" SAN	PROP. SANITARY SEWER
18"RCP	EX. STORM PIPE	8"	PROP. STORM PIPE
---	EX. EDGE OF PAVEMENT	---	PROP. EDGE OF PAVEMENT
---	EX. BUILDING	---	PROP. BUILDING
---	EX. CONCRETE	---	PROP. CONCRETE
---	EX. PAVEMENT	---	PROP. ASPHALT PAVEMENT (STANDARD/HEAVY DUTY)
---	EX. GRAVEL	---	PROP. GRAVEL
////	PAVEMENT REPLACEMENT	---	PROP. PAVERS
○	EX. POWER POLE	●	PROP. POWER POLE
⊙	EX. SANITARY SEWER MANHOLE	○	PROP. MANHOLE
⊙	EX. STORM SEWER MANHOLE	○	PROP. SIGN
⊙	CLEANOUT	⊙	WATER METER
□	EX. LIGHT POLE	⊙	PROP. GATE VALVE
▷	WATER LINE REDUCER	⊙	BLOW-OFF VALVE
⊙	EX. TELEPHONE	☆	BENCHMARK
G	EX. GAS LINE	G	PROP. GAS LINE
OHU	EX. OVERHEAD CABLE	OHU	PROP. OVERHEAD CABLE
X	EX. FENCE	P	PROP. UNDERGRND POWER LINE
---	EX. TREE LINE	X	PROP. FENCE
---	ADJOINING PROPERTY LINE	---	PROP. TREE LINE
■	EXISTING ROAD MONUMENTS	---	SITE PROPERTY LINE
---X---	WETLAND AREA	⊙	INLET PROTECTION
-----RMA-----	RESOURCE MANAGEMENT AREA	-----RPA-----	RESOURCE PROTECTION AREA

ABBREVIATIONS

AHFH	ARROW HEAD TOP OF	EVCS	END VERT. CURVE STA.	RR	RAILROAD
ASPH	ASPHALT	EW	ENDWALL	RYS	REAR YARD SETBACK
APPROX	APPROXIMATE	EXIST	EXISTING	SAN	SANITARY
FDN	FOUNDATION	FDN	FOUNDATION	SBL	SOUTH BOUND LANE
BC	BACK OF CURB	FF	FINISHED FLOOR	SD	STORM DRAIN
BIT	BITUMINOUS	FG	FINISH GRADE	SECT	SECTION
BLDG	BUILDING	GBE	GRADE BREAK ELEVATION	SE	SLOPE EASEMENT
BLK	BLOCK	GBS	GRADE BREAK STATION	SS	SANITARY SEWER
BM	BENCHMARK	HOA	HOMEOWNERS ASSOCIATION	SSD	STOPPING SIGHT DISTANCE
BS	BOTTOM OF BOTTOM STEP	HPT	HIGH POINT	SSE	SANITARY SEWER EASEMENT
BVC	BEGIN VERT. CURVE ELEV.	HS	HEADLIGHT SIGHT DISTANCE	STA	STATION
BVCS	BEGIN VERT. CURVE STA.	INTX	INTERSECTION	STD	STANDARD
BW	BOTTOM OF WALL	INV	INVERT	STO	STORAGE
CB	CINDER BLOCK	IP	IRON PIN	SYS	SIDE YARD SETBACK
C&G	CURB & GUTTER	LT	LEFT	TBM	TEMPORARY BENCHMARK
CMP	CORRUGATED METAL PIPE	LVC	LENGTH OF VERTICAL CURVE	TBR	TO BE REMOVED
CONC	CONCRETE	MH	MANHOLE	TC	TOP OF CURB
COR	CORNER	MIN	MINIMUM	TEL	TELEPHONE
DBL	DOUBLE	MBL	MINIMUM BUILDING LINE	TRANS	TRANSFORMER
DEFL	DEFLECTION	MON	MONUMENT	TS	TOP OF TOP STEP
DI	DROP INLET	NBL	NORTH BOUND LANE	TW	TOP OF WALL
DIA	DIAMETER	PROP	PROPOSED	TYP	TYPICAL
DE	DRAINAGE EASEMENT	PUE	PUBLIC UTILITY EASEMENT	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
ELEC	ELECTRIC	PVMT	PAVEMENT	VERT	VERTICAL
ELEV	ELEVATION	R	RADIUS	WBL	WEST BOUND LANE
ENTR	ENTRANCE	RT	RIGHT	YD	YARD
EP	EDGE OF PAVEMENT	R.O.W.	RIGHT OF WAY		
EVCE	END VERT. CURVE ELEV.	REQD	REQUIRED		



BALZER & ASSOCIATES
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Midlothian, VA 23113
804.794.0571



NEW KENT - BROYHILL ESC PLAN

GENERAL NOTES

BLACK CREEK MAGISTERIAL DISTRICT
S QUARTER & QUINCY RD

DRAWN BY: ATD
DESIGNED BY: ATD
CHECKED BY: CMS
DATE: 04/18/2025
SCALE: NOT APPLICABLE
REVISIONS:
06-25-2025

NEW KENT - BROYHILL ESC PLAN

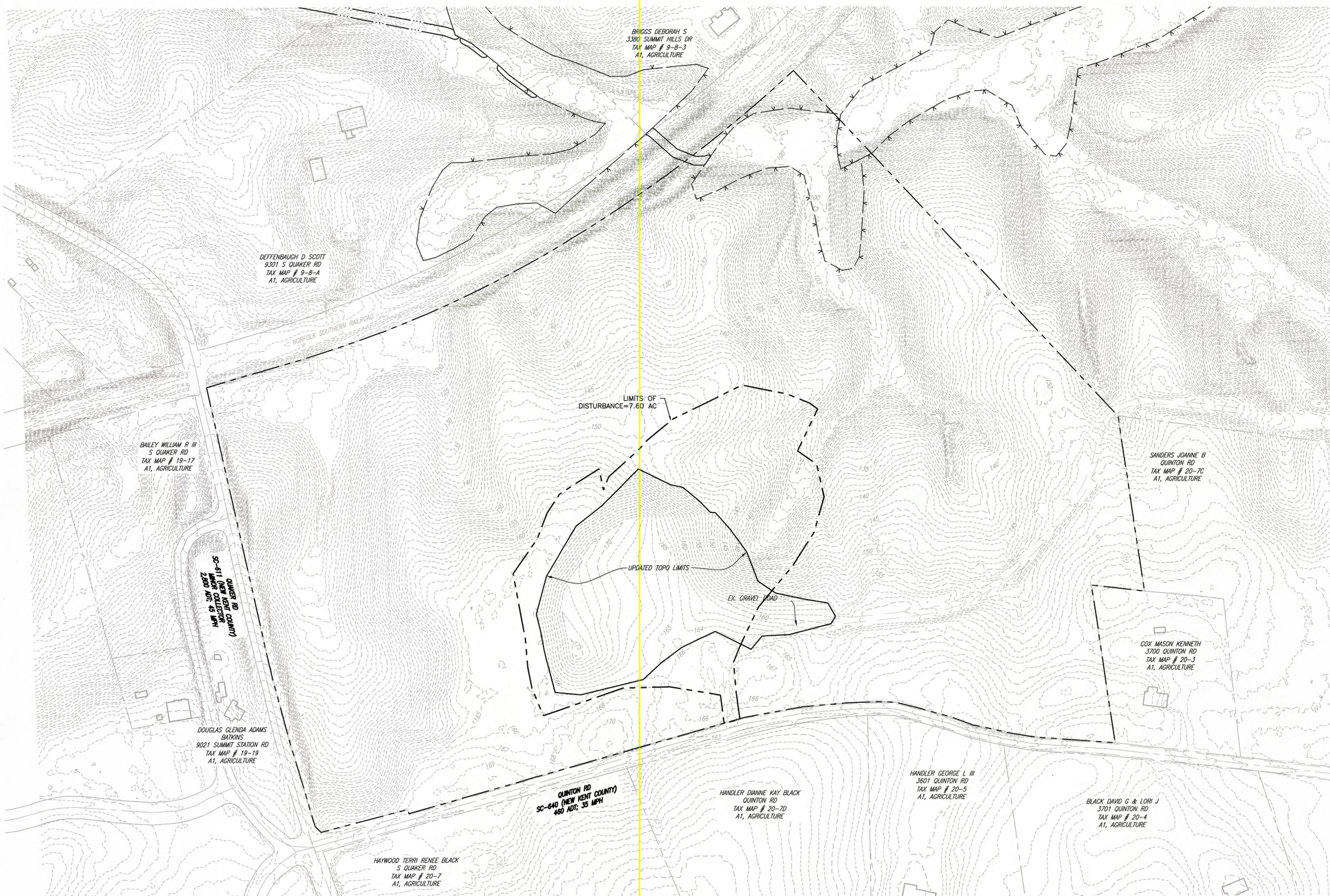
EXISTING CONDITIONS AND DEMOLITION PLAN

BLACK CREEK MAGISTERIAL DISTRICT
S QUAKER & QUINTON RD

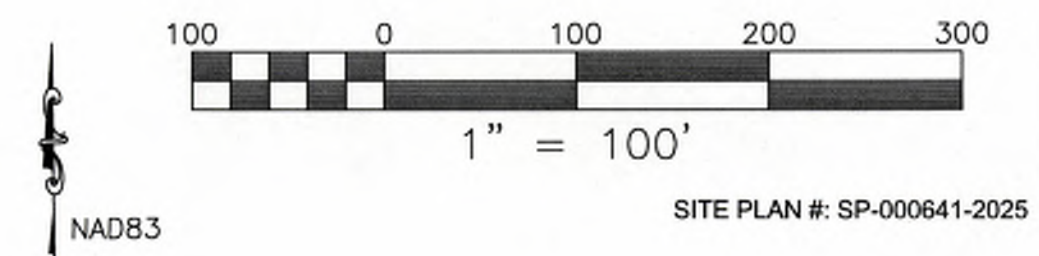
DRAWN BY
DESIGNED BY
CHECKED BY
DATE
SCALE
REVISIONS

ATD
ATD
CMS
04/18/2025
1" = 100'

06-25-2025



NOTE: BOUNDARY METES AND BOUNDS CAN BE FOUND IN D.B. 40, PAGE 100



NAD83

SITE PLAN #: SP-000641-2025

PHASE I CONSTRUCTION NARRATIVE

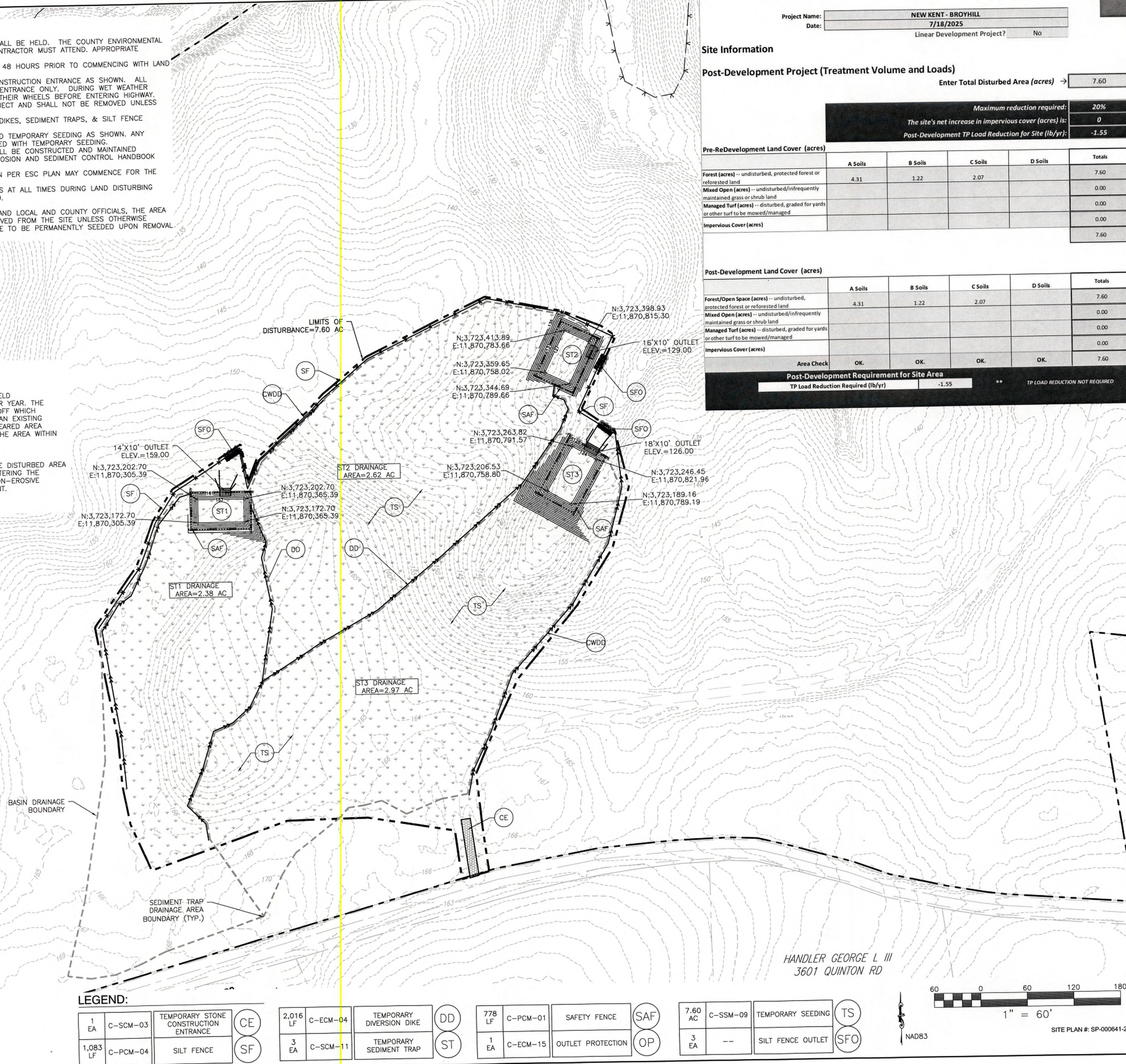
1. PRIOR TO BEGINNING CONSTRUCTION, AN ON SITE PRE-CONSTRUCTION MEETING SHALL BE HELD. THE COUNTY ENVIRONMENTAL INSPECTOR, VSMF CONSTRUCTION ACTIVITY OPERATOR, THE ENGINEER, AND THE CONTRACTOR MUST ATTEND. APPROPRIATE OFFICIALS MUST RECEIVE 48 HOURS NOTICE PRIOR TO SCHEDULING.
2. THE CONTRACTOR IS TO NOTIFY THE COUNTY ENVIRONMENTAL ENGINEERING OFFICE 48 HOURS PRIOR TO COMMENCING WITH LAND DISTURBANCE ACTIVITIES.
3. CLEAR INITIAL AREA FOR TEMP. CONSTRUCTION ENTRANCE AND INSTALL GRAVEL CONSTRUCTION ENTRANCE AS SHOWN. ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE VIA SITE CONSTRUCTION ENTRANCE ONLY. DURING WET WEATHER CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES SHALL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING HIGHWAY. THE CONSTRUCTION ENTRANCE SHALL BE USED FOR THE REMAINDER OF THE PROJECT AND SHALL NOT BE REMOVED UNLESS OTHERWISE SPECIFIED BY THE COUNTY INSPECTOR.
4. PERFORM THE MINIMUM CLEARING NECESSARY TO INSTALL SILT FENCE, DIVERSION DIKES, SEDIMENT TRAPS, & SILT FENCE OUTLETS.
5. INSTALL SILT FENCE, DIVERSION DIKES, SEDIMENT TRAPS, SILT FENCE OUTLETS, AND TEMPORARY SEEDING AS SHOWN. ANY PORTION OF THE SITE NOT DISTURBED FOR MORE THAN 30 DAYS SHALL BE SEEDED WITH TEMPORARY SEEDING.
6. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATION 9 VAC25-840-40.
7. ONCE THE INITIAL ESC MEASURES ARE INSTALLED, ADDITIONAL CLEARING AS SHOWN PER ESC PLAN MAY COMMENCE FOR THE REMAINING SITE AREA.
8. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
9. THE ROADWAYS SHALL BE KEPT FREE OF DEBRIS AT ALL TIMES.
10. UPON COMPLETION OF THE PROJECT AND APPROVAL BY THE PROJECT ENGINEER AND LOCAL AND COUNTY OFFICIALS, THE AREA WILL BE STOCKPILED & STABILIZED IN PLACE. ALL SILT FENCES ARE TO BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LOCAL COUNTY OFFICIAL. ALL AREAS ARE TO BE PERMANENTLY SEEDED UPON REMOVAL OF ESC MEASURES.

STORMWATER NARRATIVE:

EXISTING SITE CONDITIONS:
THE SITE, IN ITS CURRENT (PRE-CONSTRUCTION) STATE, IS AN OPEN FIELD CHARACTERIZED BY LOW VEGETATION THAT IS MAINTAINED 1-2 TIMES PER YEAR. THE CLEARED AREA FEATURES VARYING TOPOGRAPHY, AND STORMWATER RUNOFF WHICH GENERALLY RETURNS TO SHEET FLOW BEFORE LEAVING THE PROPERTY. AN EXISTING DRAINAGE SWALE IS PRESENT ON THE SITE, AND A PORTION OF THE CLEARED AREA DIRECTS WATER INTO THIS SWALE PRIOR TO DISCHARGE. SPECIFICALLY, THE AREA WITHIN THE CONSTRUCTION LIMITS ALLOWS FOR SHEET FLOW.

POST-CONSTRUCTION CONDITIONS:
IN THE POST-CONSTRUCTION SCENARIO, STORMWATER RUNOFF FROM THE DISTURBED AREA WILL RETURN TO SHEET FLOW PRIOR TO EXITING THE PROPERTY OR ENTERING THE DRAINAGE SWALE. THE RUNOFF WILL EXIT THE DISTURBED AREA IN A NON-EROSIVE MANNER, MAINTAINING THE INTEGRITY OF THE SURROUNDING ENVIRONMENT.

- NOTES:**
- UPDATE DIVERSION DIKES AND MAINTAIN DRAINAGE DIVIDES AS STOCKPILE IS RAISED WITH FUTURE FILL
 - SEDIMENT STOCKPILE SIDE SLOPES TO BE NO GREATER THAN 3:1.



Project Name: NEW KENT - BROYHILL
Date: 7/18/2025
Linear Development Project? No

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → 7.60

Maximum reduction required:	20%
The site's net increase in impervious cover (acres) is:	0
Post-Development TP Load Reduction for Site (lb/yr):	-1.55

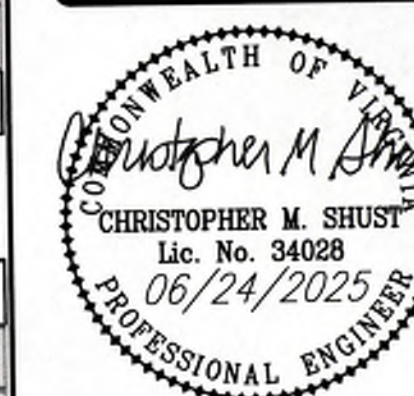
Pre-Development Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Totals
Forest (acres) -- undisturbed, protected forest or reforested land	4.31	1.22	2.07		7.60
Mixed Open (acres) -- undisturbed/inrequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed					0.00
Impervious Cover (acres)					0.00
					7.60

Post-Development Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest or reforested land	4.31	1.22	2.07		7.60
Mixed Open (acres) -- undisturbed/inrequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed					0.00
Impervious Cover (acres)					0.00
					7.60

Area Check	OK.	OK.	OK.	OK.	
Post-Development Requirement for Site Area					
TP Load Reduction Required (lb/yr)					
		-1.55	**		TP LOAD REDUCTION NOT REQUIRED



Roanoke / Richmond
New River Valley
Shenandoah Valley
balzer.cc | westwoodsps.com
15871 City View Drive
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804.794.0571



NEW KENT - BROYHILL ESC PLAN

EROSION AND SEDIMENT CONTROL PLAN

BLACK CREEK MAGISTERIAL DISTRICT
S QUAMER & QUINTON RD

DRAWN BY
DESIGNED BY
CHECKED BY
DATE
SCALE
REVISIONS
06-25-2025

ATD
ATD
CMS
04/18/2025
1" = 60'

C03
PROJECT NO. R0067801.00

e1 | BAI Projects\2656768\08047001 00 new hunt borrow sbs and client\Civil\Draw Sheets\CMS EROSION AND SEDIMENT CONTROL NOTES.dwg PLOTTED: 01/13/2024 3:21:34 PM

- PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPLOPSE LAND DISTURBANCE TAKES PLACE.
5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION
6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
 - A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
 - B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COVERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

-
- Soil Map—New Kent County, Virginia**
- Map Scale: 1:4,930 if printed on A landscape (11" x 8.5") sheet.
- 0 50 100 200 300 Meters
0 20 40 60 80 100 Feet
- Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84
- Natural Resources Conservation Service
- Web Soil Survey National Cooperative Soil Survey
- 3/28/2025 Page 1 of 3

THE E&S INSPECTOR WILL BE NOTIFIED 48 HOURS PRIOR TO ANY CLEARING AND GRADING.

ALL PLANT AREAS WILL BE STABILIZED WITH BASE STONE WITHIN 30 DAYS OF FINAL GRADING.

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

ALL CUT AND FILL SLOPES CHANNELSIDE SLOPES WHICH ARE NOT TO BE PAVED SHALL BE SEEDED UNTIL A GOOD STAND OF GRASS IS OBTAINED IN ACCORDANCE WITH:

- A. 100 LBS. PER 1,000 SQUARE FOOT GROUND LIMESTONE OR EQUIVALENT. NO SOIL TEST REQUIRED FOR INITIAL ESTABLISHMENT.
- B. 20 LBS. OF 10-10-10 FERTILIZER OR EQUIVALENT PER 1,000 SQUARE FOOT.
- C. VARIETIES TO BE SEEDED:
 1. SPRING SEEDING - FEBRUARY 16 - APRIL 30; SPRING OATS 2.5 LBS. PER 1,000 SQUARE FOOT.
 2. SUMMER SEEDING - MAY 1 - AUGUST 31; WEEPING LOVE GRASS AT 2 OZ PER 1,000 SQUARE FOOT MIXED WITH 1 BUSHEL SAWDUST FOR UNIFORM SEEDING.
 3. SEEDING SHALL BE MULCHED WITH STRAW, HAY, OR MULCH.

COUNTY ENGINEER AND OTHER INTERESTED AGENCIES SHALL MAKE A CONTINUING REVIEW AND EVALUATION OF THE METHOD USED FOR THE OVERALL EFFECTIVENESS OF THE EROSION CONTROL PROGRAM. AN APPROVED EROSION AND SEDIMENT CONTROL PLAN MAY BE AMENDED BY THE APPROVING AUTHORITY OF ON SITE INSPECTION INDICATED THAT THE APPROVED CONTROL MEASURES ARE NOT EFFECTIVE IN CONTROLLING EROSION AND SEDIMENTATION OR IF BECAUSE OF CHANGED CIRCUMSTANCES, THE APPROVED PLAN CANNOT BE CARRIED OUT.

CONTRACTOR SHALL LOCATE AND VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" BEFORE BEGINNING ANY EXCAVATION OR UTILITY WORK (1-800-552-7001).

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS, SPECIFICATIONS AND DETAILS OF THE LATEST EDITION OF THE VIRGINIA EROSION CONTROL HANDBOOK (THE HANDBOOK) BY THE VIRGINIA SOIL AND WATER CONSERVATION BOARD.

EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED, SO THAT SEDIMENT CARRYING RUNOFF FROM THE SITE WILL NOT ENTER STORM DRAINAGE FACILITIES.

PROPERTIES AND RIGHT-OF-WAY ADJOINING THE SITE SHALL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE BY VEHICULAR TRAFFIC OR RUNOFF.

ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE VIA THE CONSTRUCTION ENTRANCES.

EXCAVATED MATERIAL FROM TRENCHES SHALL BE PLACED ON THE UPGRADE SITE OF THE TRENCH TO ALLOW MATERIAL TO ERODE INTO THE TRENCH.

THE APPROXIMATE TOTAL AREA OF THE LIMITS OF DISTURBANCE IS 7.60 ACRES.

PROJECT DESCRIPTION: THIS PROJECT PROPOSES AN EROSION AND SEDIMENT CONTROL PLAN FOR A BORROW PIT.

EXISTING SITE CONDITIONS: THE SITE IS CURRENTLY VACANT.

ADJACENT AREAS:

NORTH:	NORFOLK SOUTHERN RAILROAD
SOUTH:	QUINTON ROAD
EAST:	A-1 AGRICULTURE PROPERTY
WEST:	QUAKER ROAD

OFF-SITE AREAS: N/A

SOILS: SEE MAP AND LEGEND BELOW.

CRITICAL AREAS: WETLANDS IN NORTHEAST CORNER OF PROPERTY (OUTSIDE LIMITS OF DISTURBANCE)

EROSION AND SEDIMENT CONTROL MEASURES: SEE EROSION AND SEDIMENT CONTROL PLAN, SHEET C03

PERMANENT STABILIZATION: SEE EROSION AND SEDIMENT CONTROL PLAN C03

STORMWATER RUNOFF CONSIDERATIONS: STORMWATER RUNOFF IS MANAGED BY 3 SEDIMENT TRAPS
TRAP DETAILS CAN BE FOUND ON C06

CALCULATIONS: N/A

MAINTENANCE: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATION AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25-840-40.
- ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AT THE FIRST STEP IN CLEARING.
- ES-4 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR THE REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7 ALL DISTURBED AREAS TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUN-OFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7B	Caroline-Emporia complex, 2 to 6 percent slopes	10.5	9.5%
7C	Caroline-Emporia complex, 6 to 10 percent slopes	3.4	3.1%
10B	Craven loam, 2 to 6 percent slopes	2.0	1.8%
15B	Emporia fine sandy loam, 2 to 6 percent slopes	1.6	1.5%
16A	Johnston mucky loam, 0 to 2 percent slopes, frequently flooded	3.2	2.9%
17B	Kempsville fine sandy loam, 2 to 6 percent slopes	10.7	9.7%
19B	Kempsville-Emporia complex, 2 to 6 percent slopes	2.2	2.0%
20B	Kempsville-Suffolk complex, 2 to 6 percent slopes	0.9	0.8%
26D	Nevarc-Remik complex, 6 to 15 percent slopes	35.6	32.3%
26E	Nevarc-Remik complex, 15 to 25 percent slopes	27.4	24.8%
28B	Norfolk fine sandy loam, 2 to 6 percent slopes	9.4	8.5%
40B	Uchee loamy fine sand, 2 to 6 percent slopes	3.4	3.1%
Totals for Area of Interest		110.4	100.0%

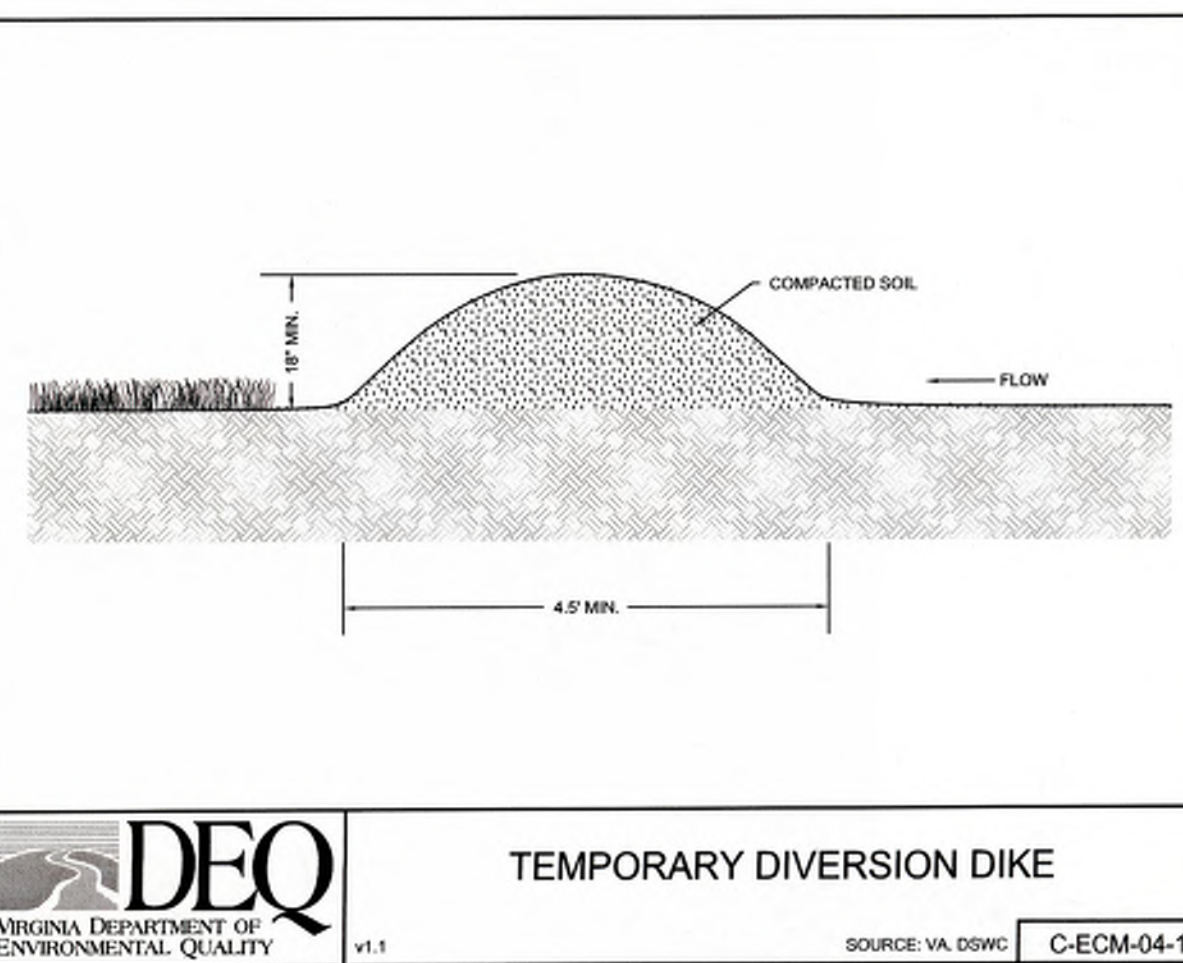
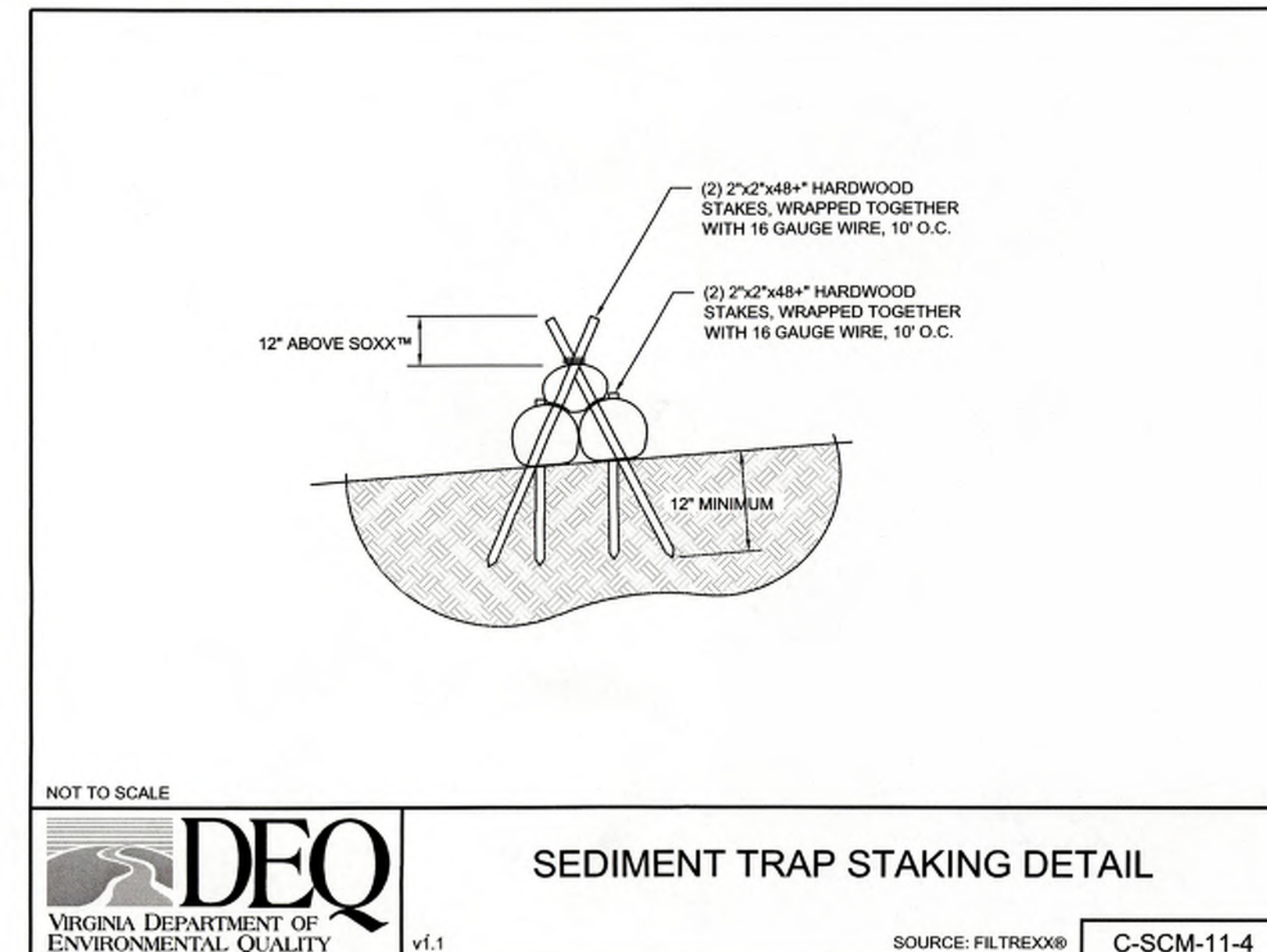
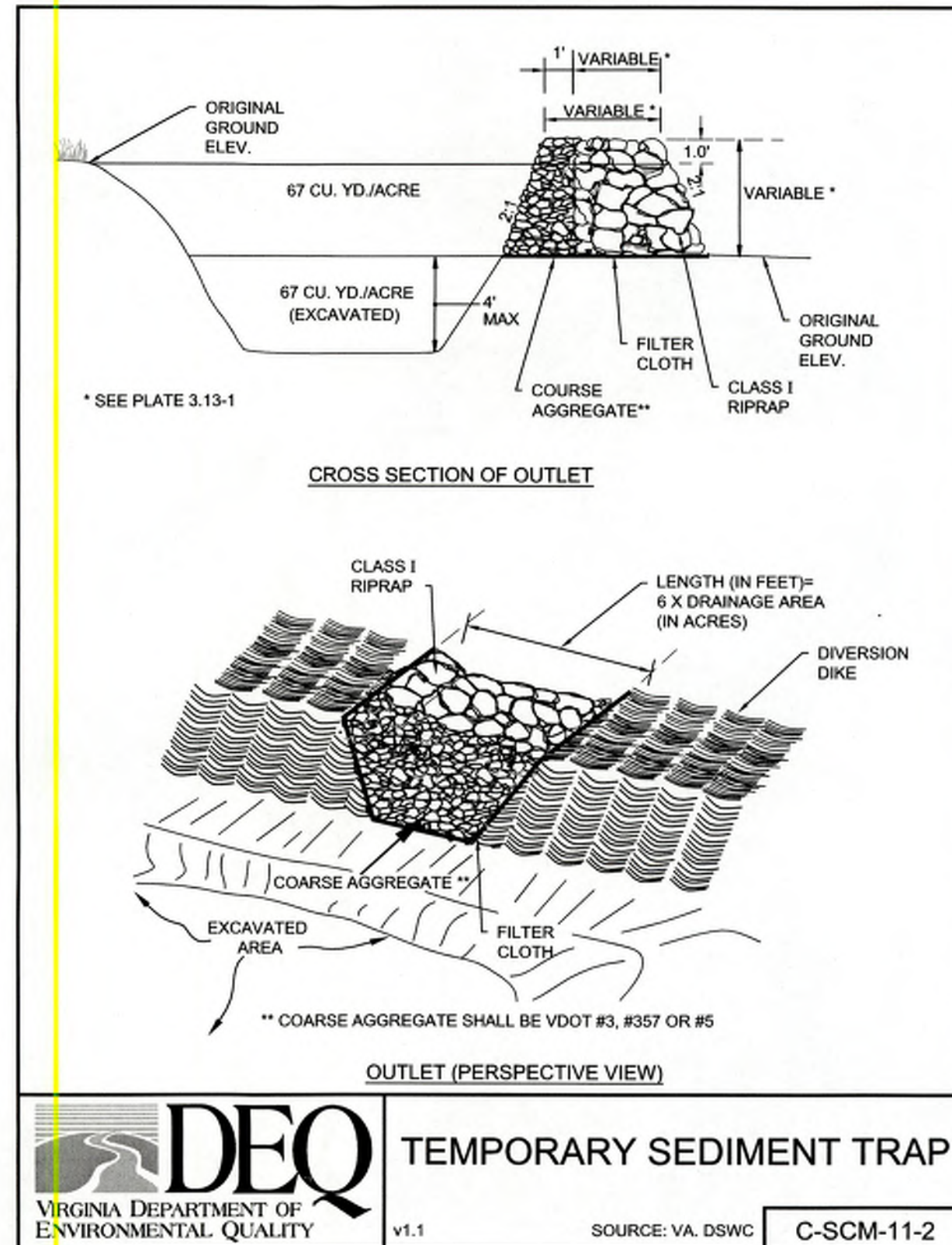
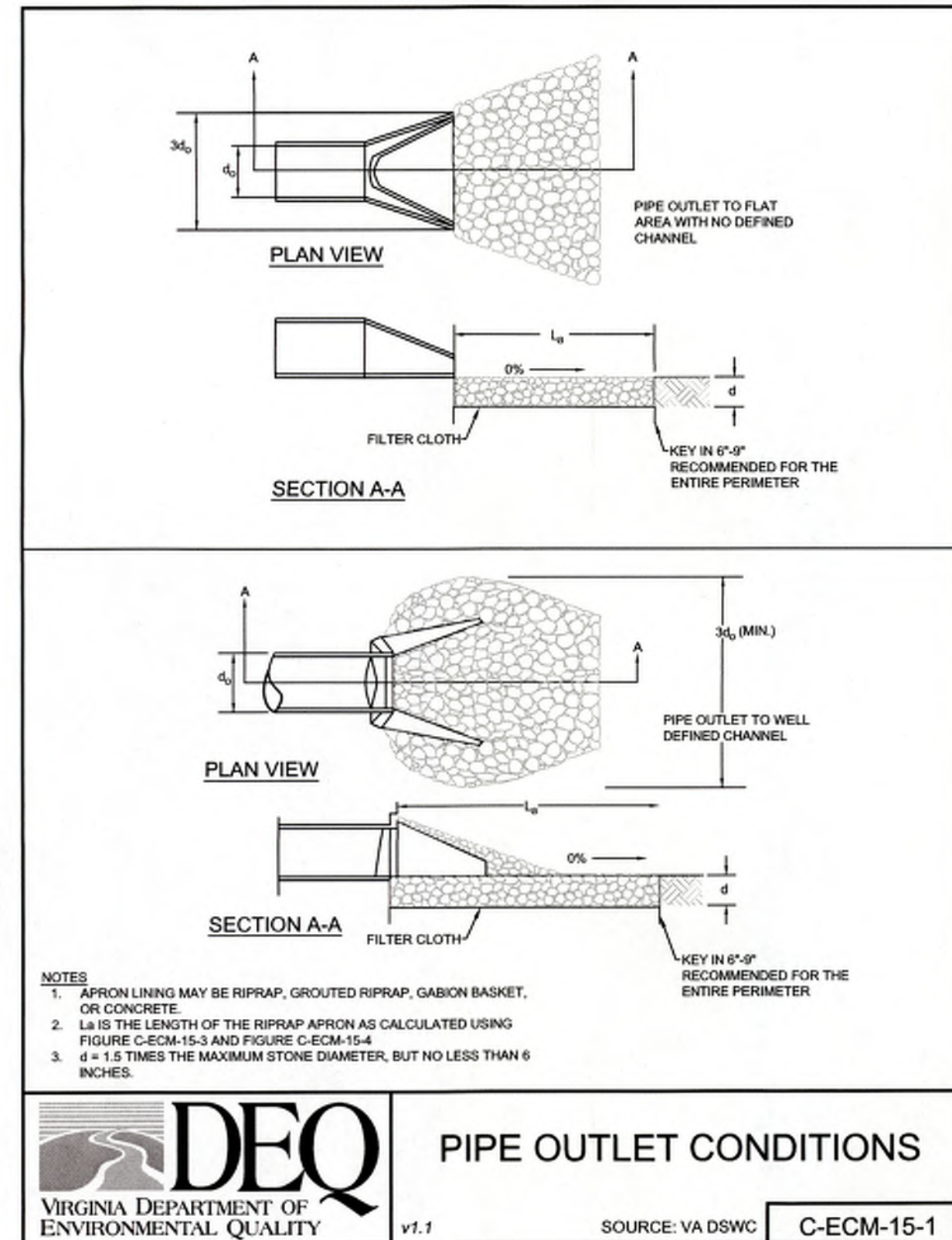
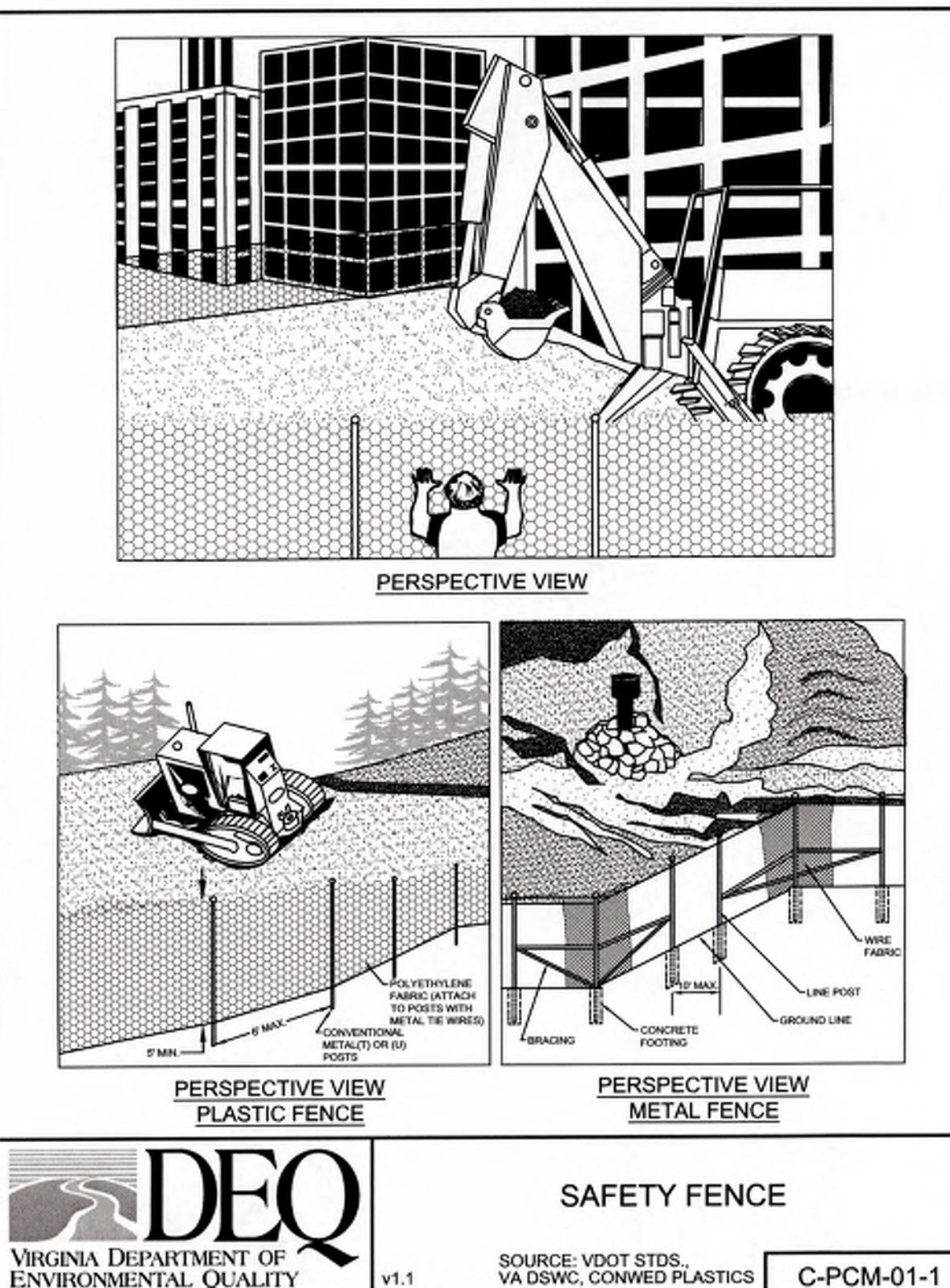
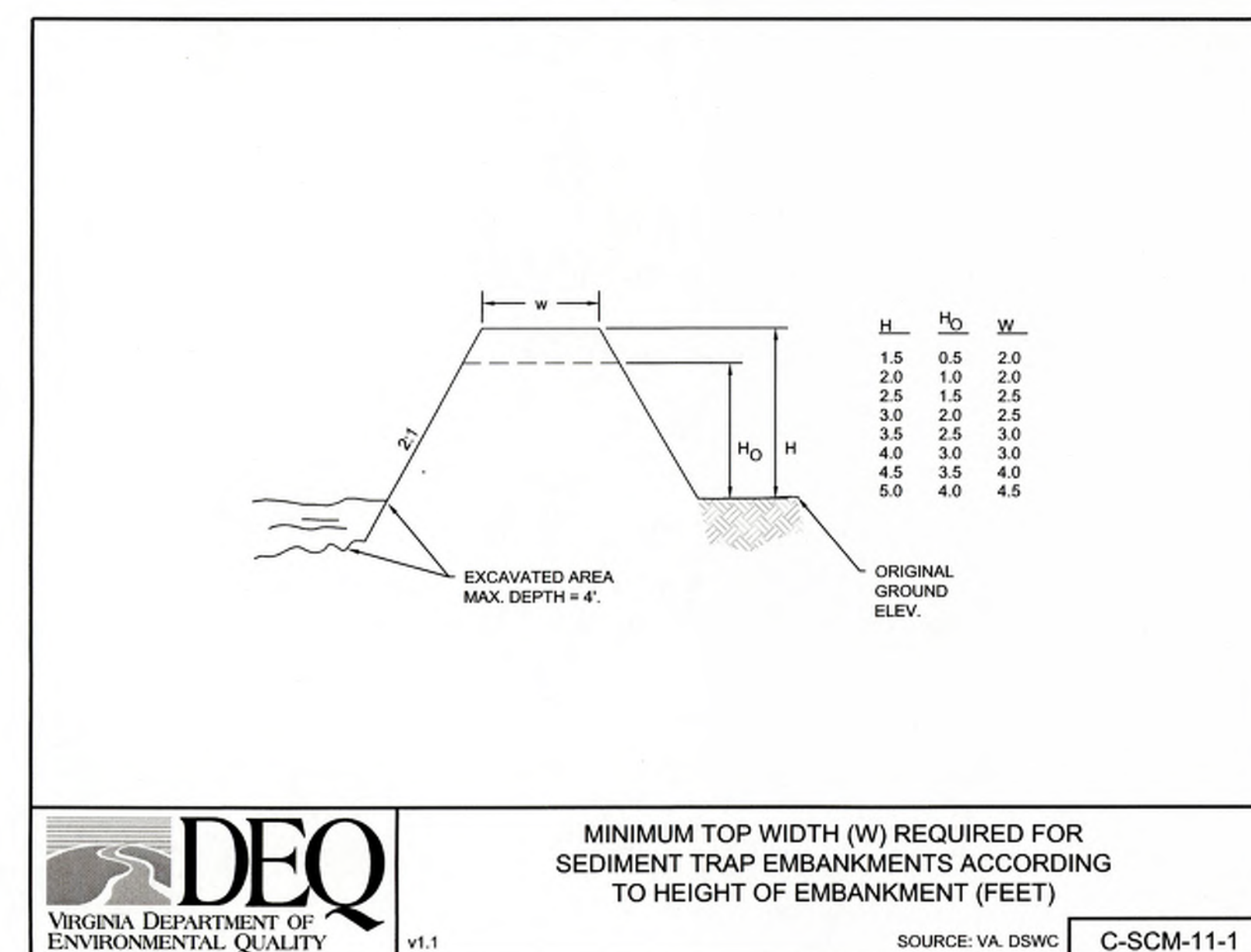
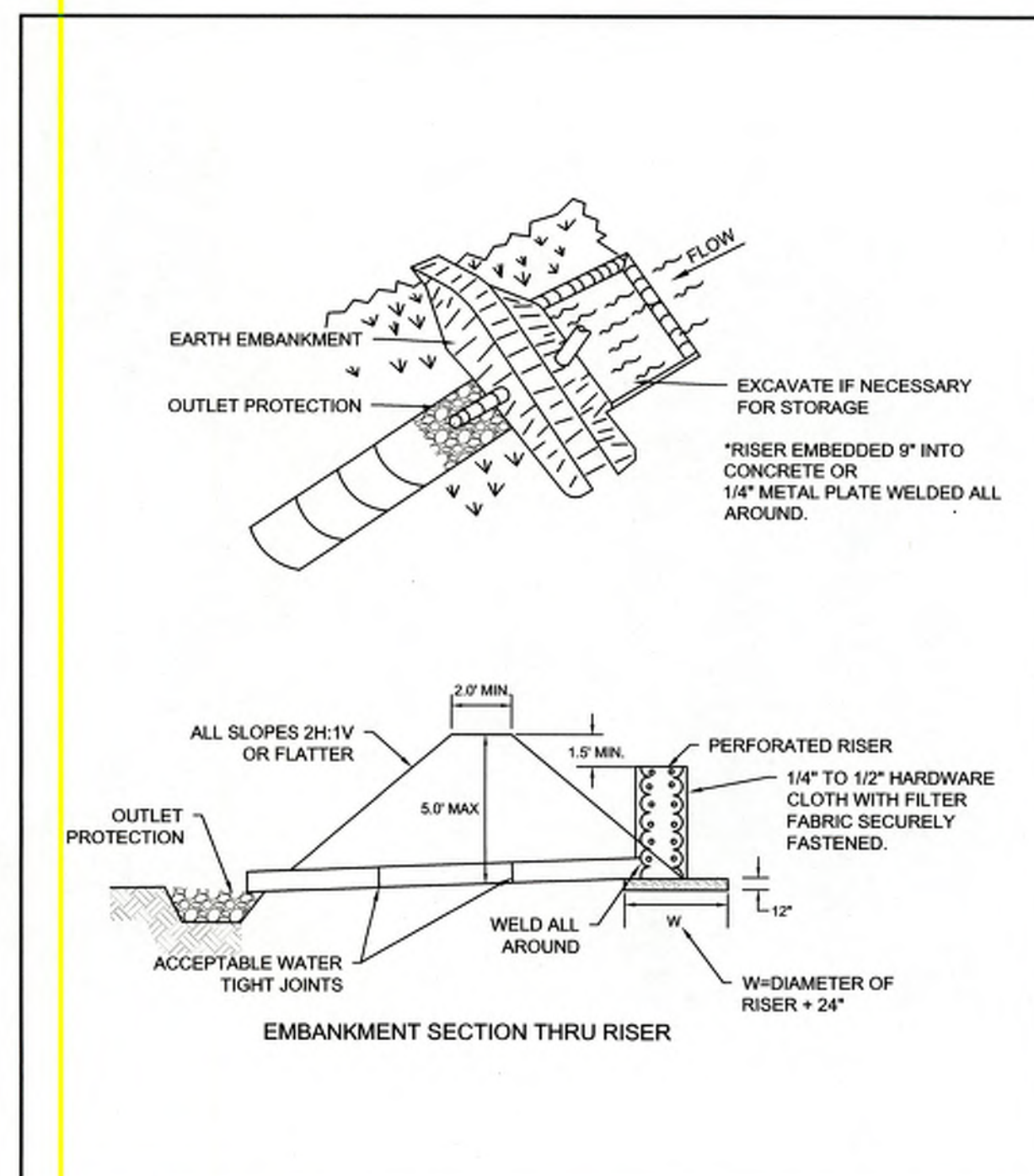
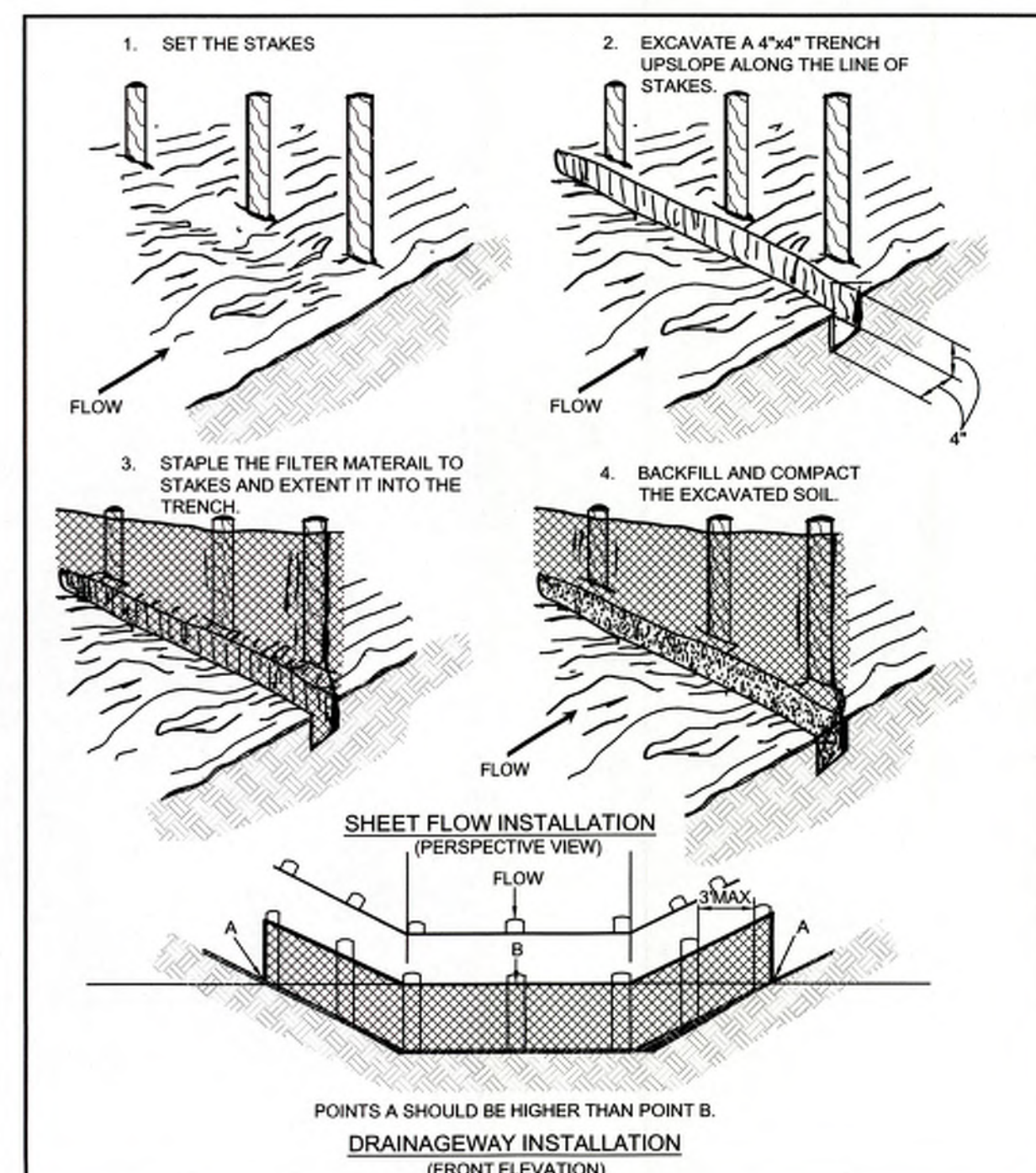
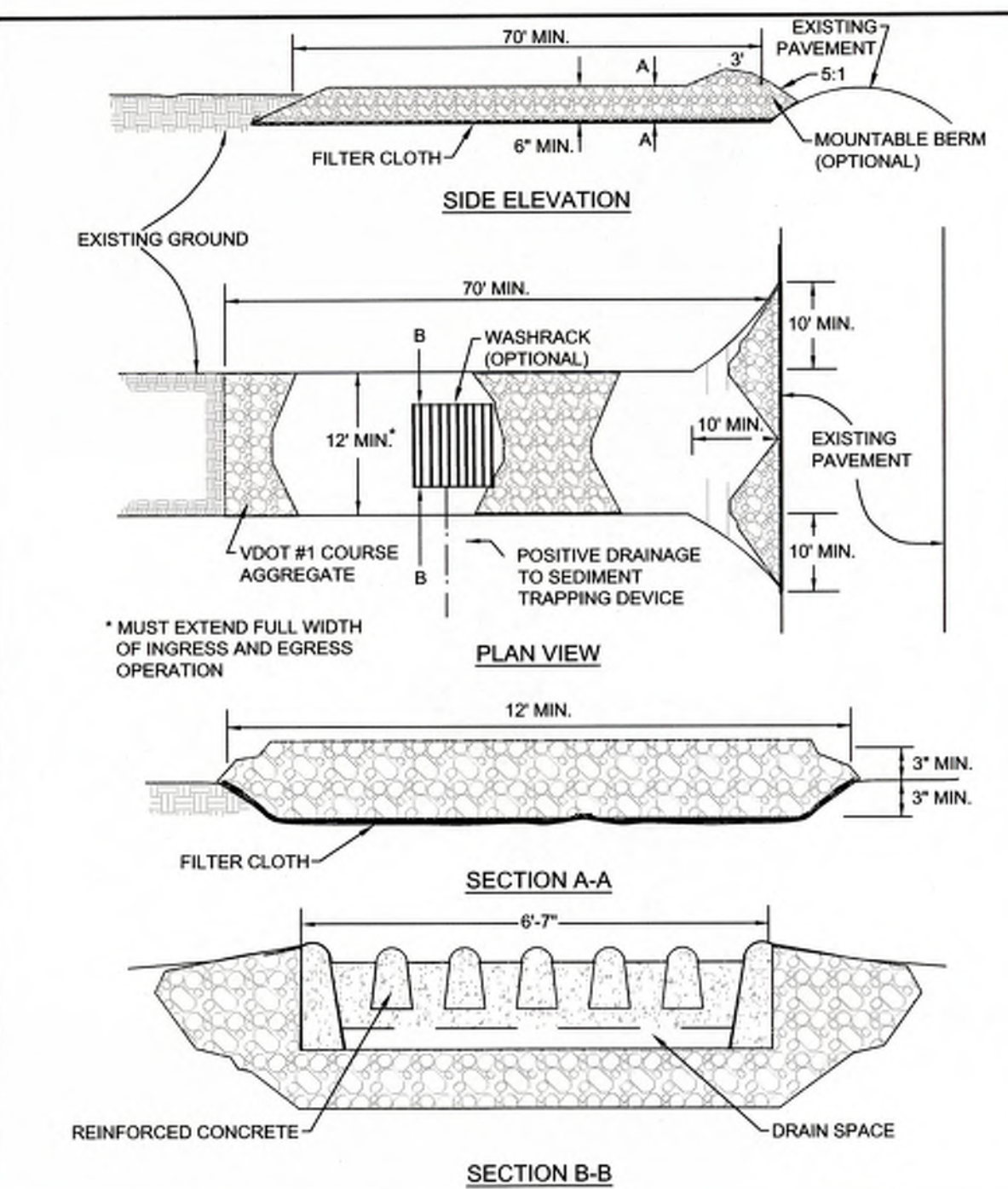
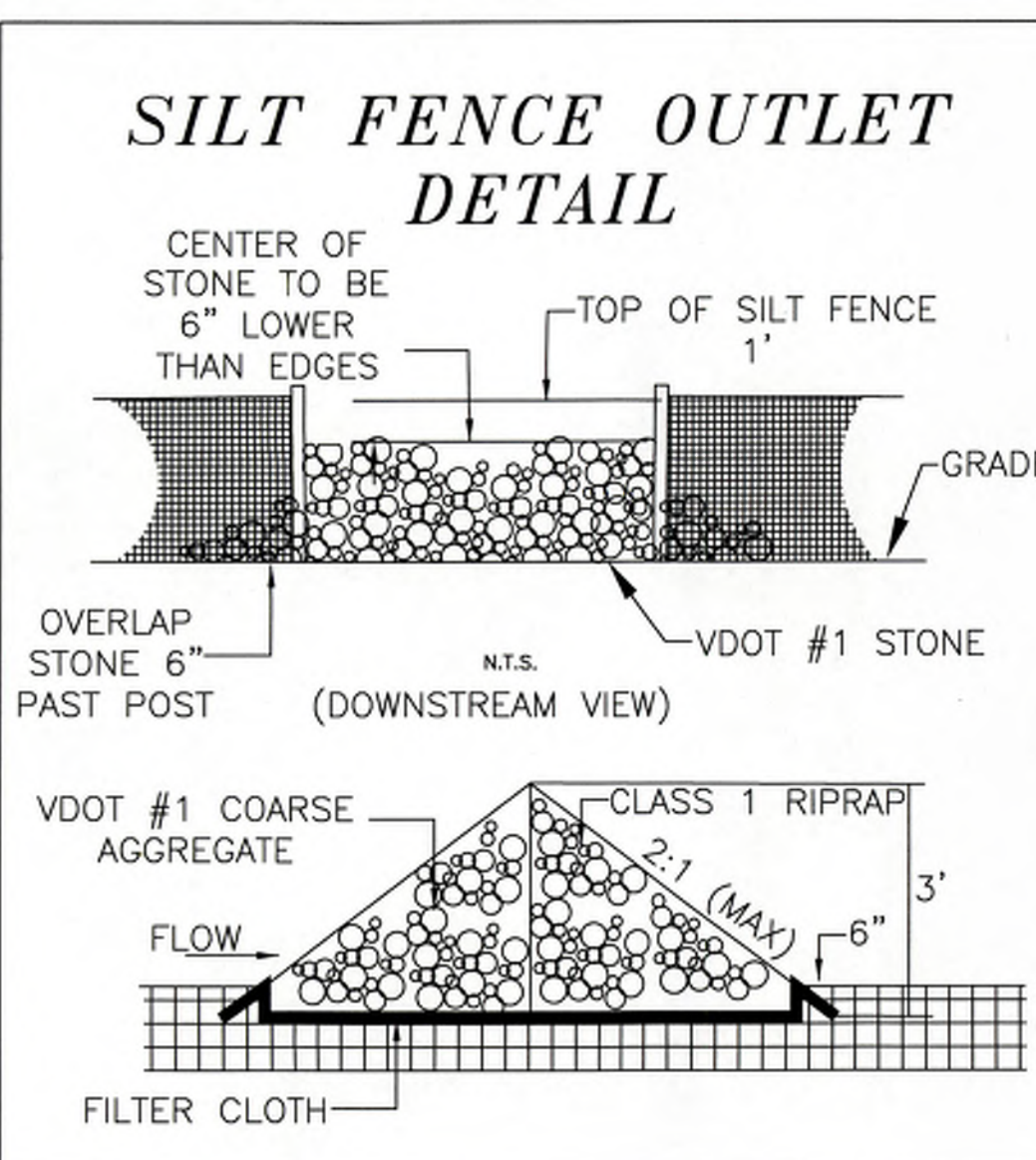


Table C-SSM-09-3 Plant Material for Temporary Seeding

Acceptable Temporary Seeding Plant Materials "Quick Reference for all Regions"

Planting Dates	Species	Rate (pounds per acre)
Sept. 1 - Feb. 15	50/50 Mix of annual ryegrass (<i>Lolium multi-florum</i>) & cereal (winter) rye (<i>Secale cereale</i>)	50 - 100
Feb. 16 - Apr. 30*	Annual ryegrass (<i>Lolium multi-florum</i>)	60 - 100
May 1 - Aug. 31	German millet (<i>Setaria italica</i>)	50

*The shift date for annual rye to German millet should be April 15 for the Piedmont and Coastal Plain, rather than May 1.





BALZER & ASSOCIATES
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New River Valley
Shenandoah Valley

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804.794.0571



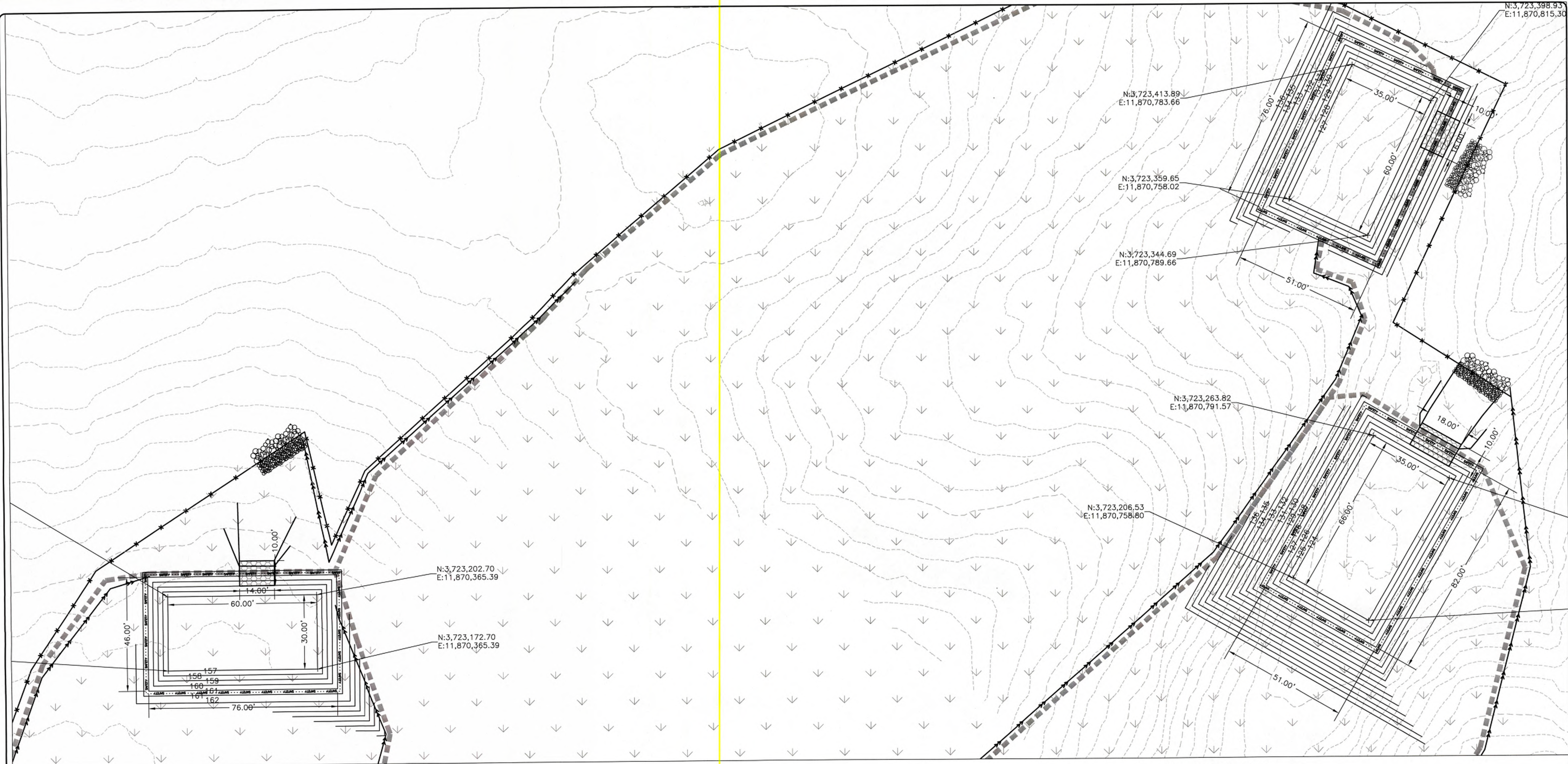
NEW KENT - BROYHILL ESC PLAN

SEDIMENT TRAP CALCULATIONS

BLACK CREEK MAGISTERIAL DISTRICT
S QUAKER & QUINTON RD

DRAWN BY: ATD
DESIGNED BY: ATD
CHECKED BY: CMS
DATE: 04/18/2025
SCALE: 1"=20'
REVISIONS: 06-25-2025

C06
PROJECT NO. R0067601.00

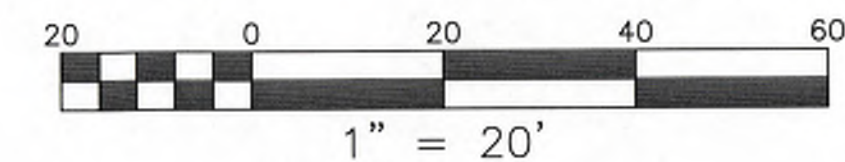


SEDIMENT TRAPS

DIMENSIONS																			
ST#	TOTAL AREA (AC)	TOTAL VOL. (CU YD.) (REQUIRED)	TOTAL VOL. (CU YD.) (CALCULATED)	WET & DRY VOL. (CU YD.) (REQUIRED)	WET VOL. (CU YD.) (CALCULATED)	DRY VOL. (CU.YD.) (CALCULATED)	L _{up} at Dry (FT.)	W _{up} at Dry (FT.)	L _{bottom} (FT.)	W _{bottom} (FT.)	D _{up} (FT.)	D _{dry} (FT.)	D _{total} (FT.)	TOP OF DRY ELEV.	BOTTOM ELEV.	OUTLET ELEV.	OUTLET LENGTH	L to W ratio at wet/dry edge line	
1	2.38	319	386	159	162	225	75.0	46.0	60.0	30.0	2.0	2.0	4.00	161.00	157.00	159.00	14	1.88	
2	2.62	351	377	176	193	184	75.0	51.0	60.0	35.0	2.0	2.0	4.00	131.00	127.00	129.00	16	1.64	
3	2.97	398	475	199	203	272	82.0	51.0	66.0	35.0	2.0	2.0	4.00	128.00	124.00	126.00	18	1.79	

TOTALS 7.97 1068 CY 1238 CY

PER E&S HANDBOOK pg. III-72
 $V_{WET} = 0.85 \cdot A_{WET} \cdot D_{WET}$
 $V_{DRY} = (A_{WET} - A_{DRY}) \cdot D_{DRY}$



SITE PLAN #: SP-000641-2025